Planning for a Multifunctional Green Infrastructure Framework in Worcestershire

GREEN INFRASTRUCTURE FRAMEWORK 2



Please note that throughout this paper the term Green Infrastructure (GI) refers to a strategically planned and managed network of green spaces and related environmental features

July 2012







Contents:

Chapter 1: Introduction Background to the Framework 2 Purpose of the Framework 2 The Audience	1 1 1
Chapter 2: Context	3
Chapter 3: Primary Functions Biodiversity Landscape Historic Environment Blue Infrastructure Access & Movement	5 6 6 7 7
Chapter 4: Green Infrastructure Environmental Character Areas	9
Chapter 5: Methodology	12
Appendix 1: Technical Evidence Appendix 2: GI Character Area Objectives	13 54

Chapter 1: Introduction

Preparation of the Green Infrastructure Framework for Worcestershire has been led by the Strategic Planning and Environmental Policy team of Worcestershire County Council (WCC) and has been endorsed by the Worcestershire Green Infrastructure Partnership Group.

The Partnership membership includes The Worcestershire Wildlife Trust, Natural England, The Environment Agency, The Forestry Commission, English Heritage, Woodland Trust, Sustrans, the County and District Councils.

Background to the Framework

The Green Infrastructure Framework 1 *(Technical Research Paper, 2009)* provided an introduction to the concept of Green Infrastructure (GI) and also identified the need for the strategic planning of GI and the policy drivers that support the planning of GI at differing spatial scales.

An approach was suggested to the development of GI in Worcestershire and a series of themes or topics that should be included within the development of GI strategies was identified. The key themes that WCC's Strategic Planning & Environmental Policy and Archaeology teams, Natural England and the Forestry Commission can assist in addressing were also identified, namely Ecological Sustainability, Landscape Character, Biodiversity, Natural Processes and the Historic Environment.

Note:

The Green Infrastructure Framework has benefited from scrutiny and input from stakeholders. It is not a statutory document and holds the status of a guidance paper to provide a framework for the planning of a comprehensive multifunctional green infrastructure throughout Worcestershire.

Purpose of the Framework

GI presents an alternative approach to planning that is proactive, multi-scale and multi-functional. GI presents a co-ordinated interdisciplinary approach to environmental planning and regeneration, comparable to that used in built or 'grey' infrastructure planning. GI can deliver benefits not only to the environment but can also contribute to the development of better places in which to live, work and invest.

This paper is the second in a series of papers towards the development of a Worcestershire GI framework that will enable the strategic planning, coordination, delivery and management of existing and future green spaces that cuts across local authority administrative boundaries.

The Audience

The primary audience of this paper are Local Planning Authorities (LPAs) in Worcestershire. This paper provides the audience with the evidence required to support the development of GI strategies. This paper will also be of interest to the development industry, utility companies, the Local Strategic Partnership and anybody with an interest in how to plan for GI in Worcestershire.

The paper is intended to be a useful tool to policy makers but does not diminish the need for the reader to be alert to both existing and emerging evidence and policy with regard to planning for GI.

Chapter 2: Context

The concept of GI has been developing as an important environment-led planning tool and is now being increasingly and successfully integrated into UK regional and local policies and actions with growing impetus.

GI is often described as multifunctional, providing a range of environmental and social services or 'ecosystem services'.

The ecosystems approach is essentially about shifting the focus of policy-making and delivery away from looking at natural environment policies in separate 'silos' - e.g. air, water, soil, biodiversity - and towards a more holistic or integrated approach based on whole ecosystems¹.

Ecosystem services are the benefits that a healthy environment provides for people, either directly or indirectly and four broad types of ecosystem service are usually recognised:

- **Provisioning services** products obtained from ecosystems, including food, timber, woodfuel, fresh water, biodiversity, genetic resources, biochemicals, natural medicines and pharmaceuticals.
- **Regulating services** benefits obtained from the regulation of natural processes, including: the regulation of air quality, climate, flooding and erosion; water purification; disease and pest control; pollination; and buffering pollution.
- Cultural services the non-material benefits people obtain through spiritual enrichment, cognitive development, reflection, recreation and aesthetic enjoyment.
- **Supporting services** the services that are necessary for the production of all other ecosystem services, including soil formation, photosynthesis, primary production, nutrient cycling and water cycling.

The ecosystem approach means recognising that regardless of its current main use, any area of land has the potential to deliver a very wide range of services (such as flood management, biodiversity or recreation) and it is important that the diversity of these services is recognised in policy and decision making. There is however a limit on the extent to which multifunctionality can be pursued without impairing the delivery of one or more of the services involved. For example, there may be trade-offs to be made between archaeology and diversity of wildlife or flood management.

The GI Environmental Character Areas map in chapter 4 aims to enable the integration of the themes into a cohesive sub-regional GI framework and the trade-offs referred to above may have to be recognised in the discussions ahead. The framework does not present a 'blueprint' for future land use, but will show

¹ Defra (2007) - Securing a healthy natural environment: An action plan for embedding an ecosystems approach.

how future patterns of land use and development might create a landscape which provides a wider range of ecosystem services than at present.

The development of a green infrastructure framework at a sub-regional level is of importance in considering cross-boundary relationships such as connectivity, flooding or the proximity of sites as stepping stones or nodes in a wider network². A co-ordinated response to planning for green infrastructure will be of value in locations of proposed growth particularly where these span administrative boundaries or where there is an existing resource or the potential for creation or expansion.

The data identified in GI Framework 1 is available at a range of spatial scales and covers a range of geographical features (e.g. river catchments and landscape character). The use of GIS can facilitate the bringing together of data from a range of different scales and themes, but these data sets require manipulation to enable their assessment and integration with other data across varying geographical scales and boundaries. By combining the varying tiers of data it will be possible to identify numerous factors that may affect the potential contribution to GI.

The wider sub-regional GI Framework forms the first phase in the adoption of a hierarchical approach in planning for GI in Worcestershire that will differentiate between broad strategic planning at a county level and local GI networks at a district or development scale.

The sub-regional framework will be accompanied by concept statements/plans (for strategic growth locations) that will set out and prioritise the respective GI requirements for an individual site. This approach could be adopted for growth locations and/or any project involving significant land use change e.g. forestry across the county. This will in turn assist local planning authorities in the preparation of Local Development Frameworks (LDF's) in planning for future levels of growth. The potential future inclusion of the GI framework as a material planning consideration in Local Development Documents (LDD's) will mean that planning applications and S106 negotiations can be considered with respect to the creation, improvement and management of green infrastructure.

The framework should not just be viewed as purely a planning document. Green space issues cut across most local authority functions and a sound framework will help achieve corporate objectives for improvement to the environment, recreation, leisure and social regeneration. Strategic joined-up thinking about green space benefits everyone³.

The sub-regional GI Framework can create a comprehensive policy structure for the protection, creation, enhancement and accessibility of green infrastructure. It can also provide a framework for resource allocation that maximises funding to support improvements from internal revenue budgets and external funding opportunities such as developer contributions. The development of a shared vision by politicians, officers, key partners, stakeholders and communities can generate political and inter-departmental support for green infrastructure, establishing clear lines of responsibility.

² Green Infrastructure Guidance – Natural England.

³ Green Space Strategies – A Good Practice Guide. CABE Space (2004)

Chapter 3: Primary Functions

The information in the following chapter provides a summary of the broad strategic analysis and interpretation that has been undertaken by specialist theme leads. Full detailed analysis is available in Appendix 1.

Biodiversity

Biodiversity provides the raw materials and ecosystem services upon which our continued health, prosperity and quality of life depend. Appropriate consideration of biodiversity will therefore be essential if we are to achieve sustainable development and deliver ecologically viable Green Infrastructure.

Sub-regional scale trends in biodiversity value are shown on the *Worcestershire Biodiversity Analysis 2009 Biodiversity Base Map* (Worcestershire County Council) with darker areas having a greater concentration of existing semi-natural habitat than paler ones. The map and the diverse background data used to produce it can be found in Appendix 1 (figure 3). It is founded on the Worcestershire Habitat Inventory analysis of Land Cover Parcels, field by field aerial photograph interpretation, data from the Worcestershire Biological Records Centre and field survey information from partner organisations. It illustrates the biodiversity context for Worcestershire in broad terms, and highlights areas where constraints to development are likely and opportunities for biodiversity enhancement exist at the sub-regional scale.

Headline figures for biodiversity in Worcestershire include:

- 7.4% woodland cover (national average for England is 8%) of which 2.5% is ancient semi-natural woodland and a further 1.1% is plantation on ancient woodland sites
- 20-25% of England's neutral grassland hay meadows
- Stronghold for great crested newt and slow worm
- Large veteran tree resource

Having established this baseline context at a sub-regional scale, biodiversity constraints and opportunities associated with specific strategic development sites must be examined through comprehensive *Ecological Impact Assessment* (EcIA). Assessments must include details concerning integration of proposed development with local features of biodiversity interest, together with likely mitigation, compensation and enhancement measures that will be required to ensure appropriate biodiversity gain; and should be undertaken <u>prior</u> to allocation of sites for development (in accordance with UK Government policies and guidance⁴). Further details of EcIA requirements are given in Appendix 1 (page 13).

Using the background information, supported by details obtained through EcIA, the sub-regional green infrastructure strategy will seek to protect and enhance areas which are already of primary importance for biodiversity. In other parts of the county, the existing biodiversity resource may be more limited, and future

⁴ <u>http://www.ieem.net/</u>

green infrastructure work will concentrate on extending and enhancing the existing resource in addition to protecting the interest that remains, including extending the links between similar habitat areas. In areas of most limited biodiversity interest, the approach will concentrate on protecting any habitat / species interest which may be present and creating additional interest, including linking into the wider biodiversity network.

Landscape

Landscape Character Assessment (LCA) provides a framework for looking at landscape systematically and as such is a robust and defensible decision-making tool to feed into the green infrastructure (GI) process. A key component of LCA is the assessment of landscape condition, which uses aerial photographs of each landscape unit to determine how well-represented its landscape indicators are on the ground today. For the purposes of GI work, the scores of three indicators tree cover pattern, field boundaries and enclosure pattern - have been summed for each unit, giving an overall score which can then be categorised as having a high, medium or low contribution to green infrastructure from a landscape character perspective. These results are displayed in block colour on the accompanying map (see figure 4) together with a hatched overlay which refines the underlying condition information, to indicate the development potential of each unit based on the topography, settlement pattern and planned/ancient character. In terms of geographical trends, the map reveals two corridors of land with generally lower GI condition scores, one running along the north-south axis of the county with Worcester at its centre and one roughly east-west from Evesham to Malvern.

Lower scoring areas may possibly be better able to accommodate new development. However, such development, rather than being seen as a necessarily damaging influence, may also provide the opportunity to *strengthen* green infrastructure and landscape character by ensuring new development is sited and planned with connectivity and character of landscape features in mind.

Historic Environment

The term 'historic environment' is inclusive, acknowledging that all aspects of the environment have a historic component.

The Archives and Archaeology Service is undertaking a number of ongoing strategic assessments aimed at capturing the key character and sensitivities present across all aspects of the historic environment. These studies also aim to identify levels of historic environment survival and potential, and they provide a basis for assessing constraints and opportunities within the context of multifunctional environmental objectives shared with other themes. The Historic Environment Assessment (HEA) for Worcestershire has provided the main interpretative evidence base for this version of the sub-regional green infrastructure framework, although this does interface data from other projects. The HEA is the first attempt to provide a strategic and integrated historic environment assessment for Worcestershire. It is based on information held in the County Historic Environment Record, which includes all types of archaeology and historic buildings. The HEA is a spatial assessment that considers all these

features within their historic landscape context. It also considers the relationships with ancient trees, woodland and historic field patterns.

A Green Infrastructure framework provides opportunities to conserve and promote the historic environment; its features, places and landscapes that define local distinctiveness.

Blue Infrastructure

Water Resource - Catchment Management Abstraction Strategies (CAMS) identify available water for abstraction. In Worcestershire CAMS have identified areas that are judged as being over abstracted (existing abstraction is causing unacceptable environmental impacts at low flows), in the north of the county running down to the centre. A small area on the southern boundary of the county is over licensed (the current actual abstraction is resulting in 'No Water Available' at low flows and if all licences were used to their full allocation they could cause unacceptable damage to the environment during low flow periods).

Water Quality - According to the Water Framework Directive (WFD) results the vast majority of all watercourses in Worcestershire are at risk of failing the WFD requirements. Only one small portion of watercourse just east of Evesham has been assessed as 'probably not at risk' of failing to meet the WFD requirements⁵. No watercourse has a 'no risk' rating overall, which means that they are failing at least one of the WFD requirements.

Flood Risk - Worcestershire has the third highest number of properties at 'high' risk in the West Midlands (*Pers Comm*, Environment Agency, 2008). Parts of Worcestershire are particularly prone to fluvial flooding, including many of our towns and villages. Surface water flooding (pluvial) and flooding from sewers is also another big problem in the county and it is predicted to increase as future development will lead to an increase in the proportion of impermeable surfaces. When considered with the predicted increases in the intensity of rainfall, it is anticipated that more drainage systems will fail to cope.

Opportunities exist to ensure that when flooding does occur in these areas flood attenuation measures could be put in place as part on the Green Infrastructure to enable the recharge of the catchment. Flood attenuation, through the use of SUDS, should be used to hold back water in times of flooding and then release water slowly to recharge groundwater and watercourses, particularly in those areas described above.

Ground water protection sites are largely based in the north of the county and down towards Droitwich and it should be noted that although we encourage the use of SUDS, certain types may not be appropriate in certain areas or under certain conditions, Ground Water Protection Zones being a prime example of this.

Access and Movement

⁵ E.g.: "the UK will have to ensure that there is no deterioration in the status of our water bodies, and that all water bodies achieve good ecological status by 2027"

Worcestershire has a wealth of accessible greenspace and land available for recreation, comprising sites such as Country Parks, formal parks, nature reserves, picnic places and Registered Commons. There is also an extensive network (around 3,000 miles) of Public Rights of Way made up of public footpaths, bridleways, Restricted Byways, Byways Open to All Traffic (BOAT) and canal towpaths.

Proposed new housing growth areas for Worcestershire will need to make available areas for access and recreation and these should ideally be managed countryside and urban greenspace sites that offer facilities to visitors such as those at Country Parks, formal parks and picnic places.

The quality and location of these areas of open space and access networks is integral to the sustainable development of new communities and also can be integrated within existing communities. The character and topography of the landscape is also an essential factor in the design of successful GI and can help to deliver a range of benefits, such as providing attractive routes for walking and cycling along river or woodland corridors whilst also helping to create a sense of place.

The location of any new recreational sites will need to consider:

- Proximity to centres of population
- Public transport provision
- Proximity to integrate with the Rights of Way network, cycle network and recreational way-marked routes.
- Ability to accommodate appropriate facilities necessary for the use and enjoyment of the site.
- Multifunctional benefits that can be delivered through site design and location.

Chapter 4: Environmental Character Areas

The GI Environmental Character Areas map (figure 1) is a strategic level map that provides an interpretation of the Merged Landscape Character Areas, Biodiversity and Historic Environment Base map (Appendix 1). The supporting text and individual theme maps in Appendix 1 provide the critical detail required to interpret the GI Environmental Character Areas map but the following section outlines the main points.

The Environmental Character Areas (ECA's) have been placed into one of three categories based on their overall score for Green Infrastructure. These are:

- 1. Protect and enhance
- 2. Protect and restore
- 3. Restore and create

This is based on the underlying broad set of environmental characteristics relevant to green infrastructure, which are identified in the merged LCA, Biodiversity and Historic Environment Base map. These characteristics were assessed and each attribute scored, with the amalgamated score for all the characteristics being used to determine the category for each ECA. The scores were determined by a weighted sum which gives greater importance to biodiversity as the key component of Green Infrastructure, with landscape and historic environmental character having an equal but lower weighting. The ECA map is based upon currently available data, including 2005 aerial photograph interpretation of the county, supplemented by ground survey information. The quality of data will change over time as new surveys are undertaken and aerial photographs are renewed. Therefore, this map will be subject to change as more detailed / updated data become available. Urban areas of the county are currently classified as un-surveyed, due to the scarcity of data available.

The boundaries shown on the map are intended to be soft edged and indicative and do not define firm boundaries on the ground. Further sub regional, district and local level green infrastructure planning work will be required to extract the local level of detail required for implementation at the district, local or neighbourhood scale.

The GI ECA's are of strategic importance as they provide an opportunity to maintain and enhance the connectivity of Green Infrastructure between the individual Districts / Boroughs, and link with adjacent areas at a sub-regional scale. This will in future enable the development of a GI spatial framework that will identify a network of strategic and local biodiversity and human movement corridors. A series of strategic objectives and high level interventions have been indentified for each of the areas shown on the ECA map.

The individual character areas and their over-arching objectives are summarised in the table below:

Character Area	Name	Objective
1	Teme Valley & Wyre Forest	Protect and enhance
2	Severn Valley North	Protect and enhance
3	North Worcestershire Hills	Protect and enhance
4	Forest of Feckenham & Feckenham Wetlands	Protect and enhance
5	Lenches Ridge	Protect and enhance
6	Bredon	Protect and enhance
7	Severn Valley South	Protect and enhance
8	Bushley	Protect and enhance
9	Malvern Chase & Commons	Protect and enhance
10	Hagley Hinterland	Protect and restore
11	Hollywood & Wythall	Protect and restore
12	Bromsgrove - Redditch Corridor	Protect and restore
13	Mid - Worcestershire Corridor	Protect and restore
14	East Wychavon	Protect and restore
15	Bow Brook South	Protect and restore
16	Evesham Valley	Protect and restore
17	Broadway & Cotswold Corridor	Protect and restore
18	Carrant Brook Corridor	Protect and restore
19	Longdon Hinterland	Protect and restore
20	Kempsey Plain	Protect and restore
21	River Teme Corridor	Protect and restore
22	Severn Meadows Corridor	Protect and restore
23	Eardiston	Protect and restore
24	Bewdley Fringe	Protect and restore
25	Birchen Coppice	Protect and restore
26	Birlingham	Protect and restore
27	Crowle	Restore and create
28	Defford	Restore and create
29	Bickmarsh	Restore and create
30	Long Marston	Restore and create

 Table 1 – Worcestershire GI Environmental Character Areas

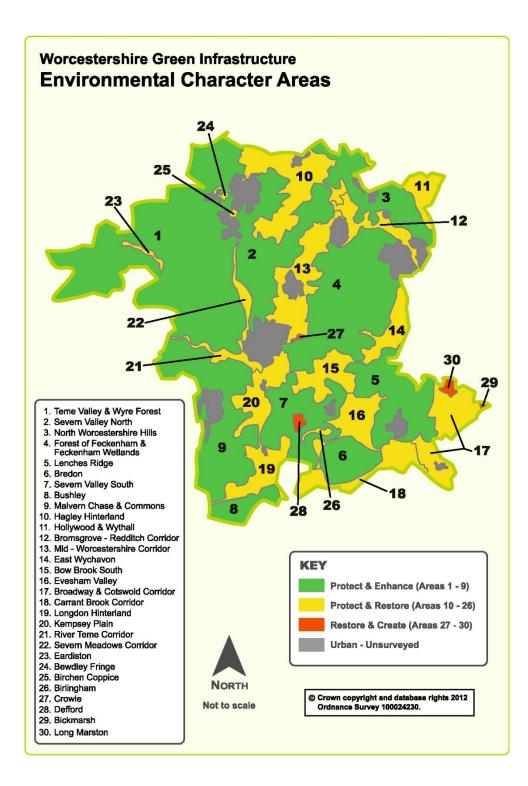


Figure 1 - Worcestershire GI Environmental Character Areas Map

Chapter 5: Methodology

Green Infrastructure Framework 1 (*Technical Research Paper, 2009*) – gave a brief introduction to the concept of Green Infrastructure (GI) and also identified the need for the strategic planning of GI and the policy drivers that support the planning of GI at differing spatial scales.

Green Infrastructure Framework 2 – this paper includes a review (by theme leads) of baseline data and the analysis of GI assets and objectives to inform the identification of areas of strategic intervention within the GI Environmental Character Areas map.

Green Infrastructure Framework 3 & 4 – the next stages envisaged in the development of a Worcestershire GI framework include:

- Look at the relationship between health, climate change, economy and green infrastructure
- Assess informal recreation provision in the county and its contribution to green infrastructure

Next Steps:

- GI Strategy for the county
- Draw together socio-economic research in order to map the public benefits of GI and how we can develop its multifunctionality
- Links to other strategies
- Explore viability and deliverability of green infrastructure

This work will be progressed alongside other ongoing projects related to the planning of GI at both a strategic and local level including the development of GI concept plans for development sites.

Appendix 1 – Technical evidence

Biodiversity

Appropriate consideration of biodiversity will be essential if we are to achieve sustainable development and ecologically viable Green Infrastructure. Biodiversity, within fully functioning and robust ecosystems, provides the raw materials and ecosystem services upon which our continued health, prosperity and quality of life depend.

This paper aims to describe the landscape-scale patterns in Worcestershire's biodiversity and, in broad terms, the likely levels of constraint and opportunity that are associated with discrete areas of the county, as illustrated by the *Worcestershire Biodiversity Analysis 2009 Biodiversity Base Map* (Worcestershire County Council). The units of landscape used are Land Cover Parcels (LCP); further information on the derivation of these and other landscape divisions is available from Worcestershire County Council's *Landscape Character Assessment* website⁶.

The nature and scale of the actual biodiversity constraints and opportunities associated with specific strategic development sites should be ascertained through comprehensive Ecological Impact Assessment (EcIA) of the development sites and their surroundings, within their landscape context. The EcIA should include exploration of the likely mitigation, compensation and enhancement measures that will be required to ensure appropriate biodiversity gain; and should be undertaken <u>prior</u> to allocation of sites for development (in accordance with UK Government policies and guidance). The EcIAs are likely to require the following elements:

- *Extended Phase One Survey* and assessment of the potential development site and of areas outside of the site which are within the predicted zone of influence.
- Protected and *notable*¹ habitat and species surveys and assessments.
- Assessment and discussion of the site in a landscape ecological context; including identification of existing ecological networks and of new networks that will be required to maintain and enhance landscape scale ecological function.

¹ Notable habitats and species are those listed within one or more of the following:

- The Natural Environment and Rural Communities Act (2006) Section 41 list of species that are of principal importance for nature conservation in England.
- UK Biodiversity Action Plan (UKBAP).
- Worcestershire (Local) Biodiversity Action Plan (LBAP)

A Worcestershire context

Worcestershire sits on a glacial outwash zone; a zone of material deposited by glaciers during and after the last ice age. The county has a complex mixture of topography, solid geology and drift deposits, overlain with similarly complex 'confusion' of soils. This wealth of variety has in turn provided conditions for the

⁶ <u>http://www.worcestershire.gov.uk/cms/landscape-character-assessment.aspx</u>

development of a rich variety of habitats and corresponding richness of botanical diversity. Superimposed upon this natural vegetation are the patterns that human activity has imposed on the landscape. Worcestershire has examples of both ancient and planned countryside (please refer to the Landscape Character section for further information). In some areas and localities many components of the natural vegetation remain, albeit in an altered form, whereas in others the natural vegetation has been almost completely, and sometimes utterly, eradicated.

In a national context the percentage of woodland cover in Worcestershire is just below the national average (7.4% where the national average is 8%). However the county has a relatively high proportion of ancient woodland cover; Ancient Semi-Natural Woodland (ASNW) covers around 2.5% of the county (the national average is around 1%). The county also has 1.1% cover of Planted Ancient Woodland (PAWS - ancient woodlands that have been felled and re-planted as plantations). PAWS frequently retain considerable ancient woodland interest, for example in their ground flora, mycology and soils, and they are generally restorable to semi-natural condition.

In addition to the blocks of ancient woodland, large areas of Worcestershire have retained considerable swathes of ancient countryside. In these areas ancient woodland blocks are supported by a robust framework of other ancient woodland elements, for example ancient hedgerows, shelter belts, ravine sides, wooded watercourses, steep slopes and banks, green lanes, hollow-ways, road verges and ancient trees, that were retained as people created clearings (assarts) in the original post-glacial woodland, or 'wildwood', for their crops and livestock.

In Worcestershire clearance of the wildwood happened comparatively slowly and incrementally. Significant areas of the original natural woodland remained in Worcestershire long after it had been all but eradicated from other areas; indeed, at the time of the Doomsday Book (1086) Worcestershire had retained a higher proportion of woodland and wood pasture cover than any other English county; around 40% cover compared to 15% nationally.

The degree to which ancient woodland and ancient woodland features have survived varies considerably within the county. For example the areas of relatively intact ancient countryside west of the Severn and Stour have retained far more ancient woodland elements and character than the 'planned countryside' of the Vale of Evesham, where very little evidence of ancient woodland has survived.

The fields within this woodland framework fall into two main categories. The first is intensive agricultural land, where modern agriculture has eradicated much or all of the semi-natural habitat elements and replaced them with, for example, arable cultivation, commercial bush orchards, re-seeded and chemically improved grasslands and market gardening. The second category contains the remaining semi-natural habitats, for example, less-improved and unimproved grassland, wetland, heathland and traditional orchards, which contain variously rich communities of plants and animals that have developed over millennia.

Worcestershire is believed to have between 20% and 25% of England's remaining traditional wildflower-rich hay meadows; is a stronghold of European

importance for great crested newts; has a veteran tree resource that may be of national importance; has large swathes of relatively intact pond networks; and has surviving populations of some very rare invertebrates, for example noble chafer (traditional orchards) violet click beetle and stag beetle (ancient trees) wood white and pearl bordered fritillary butterfly (ancient woodland), high brown fritillary butterfly (grassland and bracken mosaic), hornet robberfly (acid pasture), club tail dragonfly (rivers) and brown hairstreak butterfly (hedgerows). The continued existence of these habitats and species, particularly in the face of climate change, is dependent on the conservation and enhancement of the surviving framework of semi-natural habitats. As such it is essential that we understand and safeguard our semi-natural habitat networks and wherever and whenever possible, seek to reduce their isolation and fragmentation.

The Biodiversity Base Map

The Biodiversity Base Map (2009) at figure 3 shows the current biodiversity importance of each LCP according to multiple measures. The primary data utilised for the biodiversity base map was derived from the Worcestershire Habitat Inventory, Worcestershire Biological Records Centre (WBRC) species data, the Landscape Character Assessment (LCA) and Landscape Description Unit Ecological Profiles. Watercourses and their floodplains have been overlaid whatever their current level of biodiversity importance; this is for a variety of reasons, but principally watercourses and their floodplains are:

- Largely unsuitable for development;
- Geographically fixed (i.e. immoveable) features that, according to international and domestic legislation, should not be developed, should be protected from the impacts of development and require biodiversity enhancement;
- Contain considerable areas of farmland that is marginal, as a result of high water tables and increasingly frequent flooding, and therefore provide considerable potential for restoration to semi-natural habitat and GI opportunities;
- Provide considerable ecosystem function benefits, such as water cycling and flood amelioration, which can be further enhanced by restoration to semi-natural condition.
- Provide considerable opportunities and potential for multiple GI benefits.

Landscape Scale Patterns of Biodiversity

Distinct patterns can be clearly seen in the Biodiversity Base Map (2009). The following text attempts to describe these patterns:

West Worcestershire (west of the rivers Stour and Severn) contains large areas of relatively intact ancient countryside, much of which is of high biodiversity importance. When considered in a wider landscape context, this swathe of countryside is likely to form a critical element of a nationally important ecological network that stretches from the south west via the Severn corridor and Forest of Dean, through west Gloucestershire, east Herefordshire and west Worcestershire, and on into Shropshire and Cheshire. A significant exception in west Worcestershire is the Longdon Basin at the southern end of Malvern Hills district. The impacts of agricultural intensification and particularly of drainage have been considerable here. As such, the area offers considerable restoration potential, particularly for wetland habitats.

The southern and central River Severn flood plain and terraces form the central spine of the county. These areas have suffered greatly from modern agricultural intensification, but offer considerable potential for semi-natural habitat restoration and re-creation.

To the north of Worcester the Severn Valley becomes considerably more interesting, with areas of biodiverse countryside, largely associated with river valley sides, interspersed with large areas of intensive cultivation. As the valley narrows, it becomes more biodiverse.

Also north of Worcester there is an east-west zone of a more diverse nature, with the River Salwarpe at its centre, that links the ancient countryside of west Worcestershire with another relatively intact area of ancient countryside, the historic Forest of Feckenham, which forms much of central east Worcestershire.

The Forest of Feckenham is encircled (in clockwise order) by the City of Worcester, Droitwich, Bromsgrove, Redditch, the Warwickshire boundary zone and the Avon Vale ⁷. The ancient countryside of the Forest of Feckenham contains a nationally important stronghold of traditional, wildflower-rich neutral (with calcareous influence) hay meadows. These are frequently isolated fields, within a framework of ancient hedges, and small ancient woodlands. The area also has a considerable, but largely un-surveyed, old grassland resource, and many old marl pits on the mudstones, with consequent high likelihood of healthy great crested newt meta-populations. The Forest of Feckenham can be broadly divided north and south. The north is an area of relatively intact ancient countryside with a strong ancient wooded character provided by many ancient woodland blocks and intact ancient hedgerow networks. The south, around North Piddle, Kington and Naunton Beauchamp, is less well wooded and more impacted by modern intensive agriculture.

The Severn Valley swathe of relatively denuded countryside creeps intermittently away from the river around the eastern edge of Worcester and, after the Salwarpe zone of relatively higher biodiversity interest, continues and fans out across the Bromsgrove sandstones, to fill much of the gap between the Stour Valley and Bromsgrove, until it reaches the Clent/Lickey Hills.

A significant exception to this pattern is the Chaddesley/Dodford area; a swathe of relatively intact ancient countryside to the west and northwest of Bromsgrove, which is of particular importance for ancient woodlands and traditional grasslands.

⁷ The boundary has been determined and adopted by the local and regional biodiversity partnerships for the purpose of confirming priority landscape areas. It should be noted that the boundary is a historical reference to this part of the county and not a true reflection of the boundary of the ancient forest.

The Kinver and Habberley area, to the northwest of Kidderminster and Stourport, is well wooded. It features significant heathland and wooded heath remnants on nutrient poor, acidic soils over varied topography. These habitats and remnant features provide local strongholds for several nationally-rare plants. The Kinver area is more geologically complex, providing additional semi-natural habitat and botanical interest.

The Kidderminster sandlands have been considerably impacted by intensive agriculture, but there remain some excellent examples of nutrient-poor acidic pastures, which have unusual plant communities and provide habitat for the nationally-notable hornet robberfly.

The Clent, Waseley and Lickey ridge of hills is dominated by semi-natural habitats. The area is of particular importance for acidic grasslands, heaths and wetland/watercourse microfeatures. Past tree planting has had a considerable detrimental impact.

The far north east (Alvechurch to Wythall) contains some interesting pockets of ancient countryside. Ancient woodland is sparse, although well represented in boundary features, hollow ways, byways and marl pits, all of which are frequent.

The hills around Redditch contain a significant ancient woodland resource. Fluvial-glacial sand and gravel deposits provide interesting areas of acidic flora amongst otherwise largely neutral habitats on the lower lying mudstones. There are many old marl pits on the mudstones, with consequent high likelihood of healthy great crested newt populations.

The countryside to the east of the Forest of Feckenam Priority Landscape Area towards the Warwickshire border generally becomes more intensively farmed and correspondingly less biodiverse.

The Lenches, at the intersection of the Warwickshire border country and the Vale of Evesham, are a topographically interesting area of ancient countryside. They have significant ancient woodland cover, traditional orchards and much old grassland, including areas of calcareous flora. The area also has much seminatural habitat interest in its road verges and a relatively intact ancient hedgerow network.

With several notable exceptions, the southeast quarter of the county largely comprises planned (rather than ancient) countryside and contains some of Worcestershire's least biodiverse countryside. The Vale of Evesham in particular has a long history of intensive cultivation which, together with 20th century agricultural intensification has left little room for semi-natural habitat. It is important to note however that the Evesham area does contain important concentrations of traditional orchards and orchard fragments, as well as scattered and largely isolated areas of old grassland, some of which are botanically rich.

Intensive agriculture has considerably impacted the River Avon Vale, which is generally of low biodiversity importance in a county context. Little wetland survives outside of the immediate river corridor. The river itself is a SSSI and has botanically rich aquatic and bank vegetation. On the lower terraces, some ancient relic river channel features have survived and these frequently retain wetland and wet woodland. Little semi-improved or unimproved floodplain grassland and grazing marsh has survived. However a considerable old grassland resource remains, and this offers wet grassland and wetland restoration potential. Restoration of old grassland and of arable land that is marginal, as a result of increased frequency of flooding, would bring benefits for biodiversity and for flood attenuation.

The Pebworth and Honeybourne area appears to be of relatively low biodiversity importance in a county context, but the area has a considerable amount of old grassland that requires survey.

Notable exceptions in the south east quarter of the county are Bredon Hill and the Cotswold Scarp and their hinterlands, both of which have considerable biodiversity importance, as reflected by their statutory nature conservation and AONB status.

Biodiversity Action Plan

The Worcestershire Biodiversity Action Plan (BAP) 2008-17 contains Action Plans for nineteen of Worcestershire's key wildlife habitats and twenty five species. The definition of Biodiversity Action Plan quality habitat is given by the UK BAP. LBAP species have been selected because of their threatened status or because important national strongholds occur in Worcestershire, or both. In addition three Generic Action Plans are presented for common themes that permeate most aspects of biodiversity conservation in the county. The Worcestershire BAP can be found at

http://www.worcestershire.gov.uk/cms/biodiversity.aspx.

The Worcestershire Biodiversity Partnership has confirmed a suite of Priority Landscape Areas within the county (see map at figure 2). These areas are those within which the Partnership believes the most benefit to biodiversity conservation can be delivered over the five year period (2010-15) given the available or predicted resources. Five Priority Landscape Areas have been identified for immediate delivery activity, along with a further selection of landscapes where more long-term opportunity may exist.

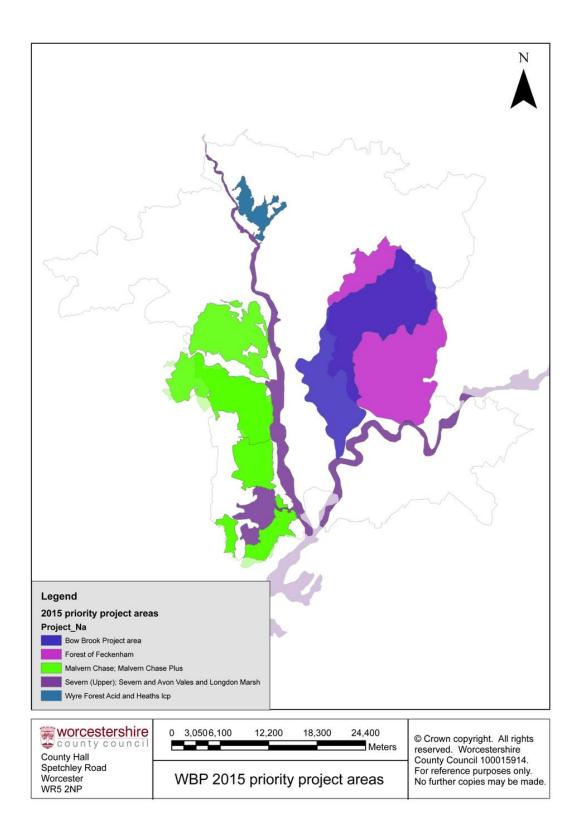


Figure 2 - Worcestershire Biodiversity Partnership, priority Landscape Areas

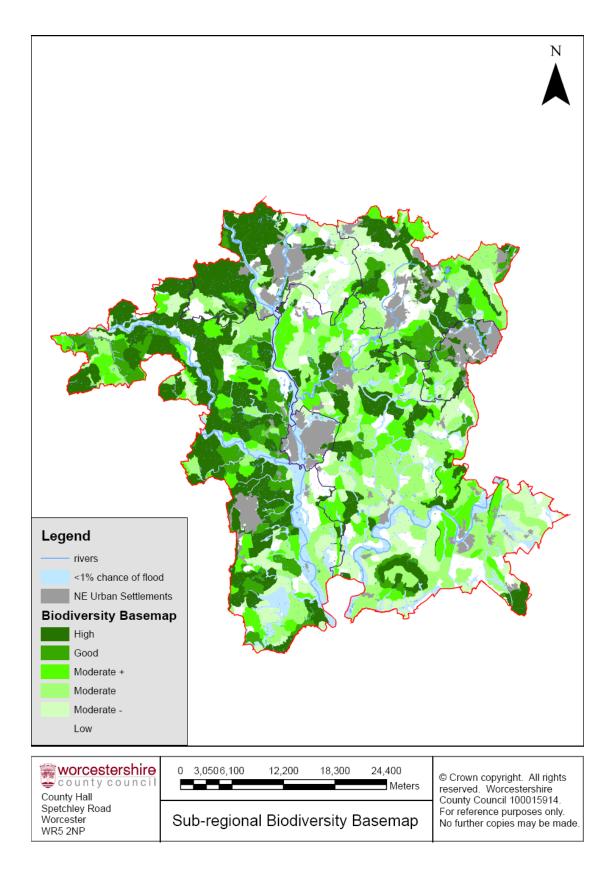


Figure 3 - Worcestershire Biodiversity Analysis 2009 Biodiversity Base Map

Landscape

Landscape provides the spatial context and basic framework for green infrastructure. Landscape Character Assessment (LCA) is the tool now widely used to look at landscapes systematically and objectively. LCA is a two-phase process which:

- (i) identifies landscape units and classifies these into areas of similar character known as Landscape Types, according to a number of landscape indicators, and
- (ii) performs subsequent analyses that ultimately determine the sensitivity of different landscapes to change.

This allows LCA to be used as a robust and defensible strategic decision-making tool.

Landscape Condition

A key component of the second evaluative phase of LCA is the assessment of landscape condition. This process uses desktop interpretation of recent aerial photographs of each landscape unit to determine how well-represented each of its landscape indicators is on the ground today. There are three landscape indicators – tree cover pattern, field boundaries and enclosure pattern – that best provide an indication of the landscape contribution to green infrastructure. The scores for these indicators have been summed for each unit, giving an overall score which can then be categorised as having a high, medium or low contribution to green infrastructure from a landscape character perspective. These results are displayed in block colour on the accompanying map. (The methodology of condition assessment is explained in greater detail in the LCA technical handbook, available for download from the WCC website http://www.worcestershire.gov.uk/cms/landscape-character-assessment.aspx)

Development Potential

The accompanying map also includes a hatched overlay intended to refine the underlying condition information from the perspective of those seeking opportunities for built development. Whilst it is implicit in the landscape green infrastructure condition categorisation that areas of high condition are generally less appropriate for built development and areas of low condition may be better able to accommodate it, there are additional aspects of landscape character that must be considered and that contribute to different landscapes' generic ability to accommodate change. We have defined three categories of general potential for medium/large-scale residential development based on the 23 Landscape Types present in Worcestershire:

- 'Restricted' includes those landscapes that are unsettled or have a very dispersed settlement pattern in which large-scale residential development would be highly disruptive and uncharacteristic.
- 'Limited' includes those landscapes that are of ancient character, and/or which have a scattered settlement pattern, which are intimate and smallscale, or whose topography may pose limits to medium/large-scale residential development.

• 'Preferred' includes those landscapes with a planned character or which have a nucleated or clustered settlement pattern in which residential development would be more consistent with the character and thus better accommodated.

NB When considering green infrastructure in the context of new development, these two layers of information – GI condition and development opportunities – must be used in concert. The condition of landscape green infrastructure should be the guiding factor, with the development opportunities overlay used as a means of subsequently focusing attention. Note also that the latter provides only a broad-brush generic guide based on the characteristics of each Landscape Type. Neither considers the visual impact of development which also becomes a dominant consideration when a specific development is planned.

Geographical Trends in Landscape Green Infrastructure

As is evident from the map, there are broadly two bands of land across the county whose landscape units fall into the lower categories of landscape green infrastructure condition. The first is seen as a corridor that, loosely, links the major settlements on the north-south axis of the county, with Worcester at its centre. The second is seen as the swathe of land that runs horizontally from Malvern in the west to Evesham in the east. It is clear that condition of the green infrastructure landscape indicators in these bands is more disrupted (attrition of landscape characteristics may be connected to the intrusion/expansion of settlement and associated infrastructure but is also commonly associated with changes in agricultural practices) and thus possibly better able to accommodate new development. However, such development, rather than being seen as a necessarily damaging influence, may also provide the opportunity to strengthen green infrastructure and landscape character in these areas by ensuring new development is sited and planned with connectivity and character of landscape features in mind.

Advice sheets which detail opportunities for landscape gain that may be associated with development in different Landscape Types are available for download from the WCC website.

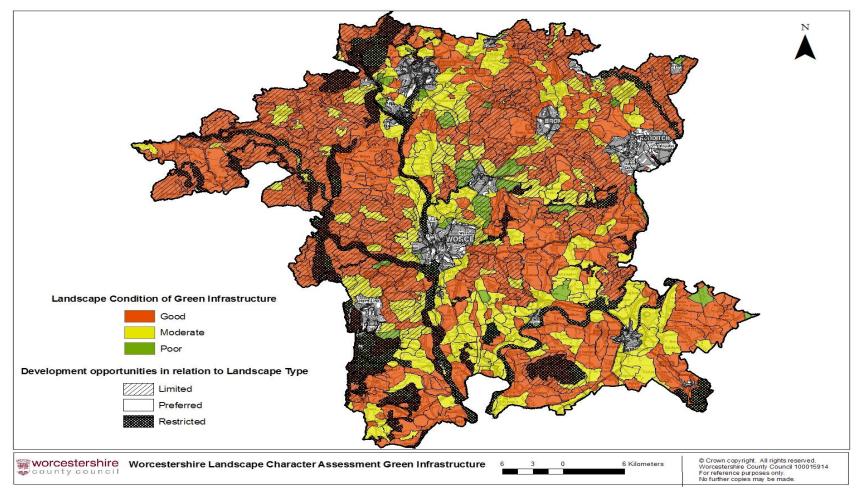


Figure 4 - Landscape Condition of Green Infrastructure

Historic Environment

The two historic environment maps (*sensitivity to change* and *amenity*) were generated from the Historic Environment Assessment produced for the South Worcestershire Joint Core Strategy [what is now the South Worcestershire Development Plan]. Historic Environment Assessment takes an integrated approach towards identifying and assessing key character, setting, sensitivity and potential, and opportunities for conservation and promotion at a sub-regional scale. The driver for this project was the need to assess the potential impact of medium to large-scale development on all aspects of the historic environment. One hundred and twenty eight Historic Environment Character Zones (HECZ) have been identified and assessed across seven themes:

- Survival based on current records, land-use and impact of existing development
- Potential assessment of the likelihood for the presence of additional historic environment features
- Documentation the level of previous investigation, field survey, research and historic documentation
- Diversity assesses the range of assets by date/period, or evidence type
- Group value identifies patterns of coherence by date/period or evidence type
- Amenity value identifies the potential to promote the historic environment as part of Green Infrastructure provision
- Sensitivity to change identifies sensitivity based on the impact of medium to large-scale development

Two theme maps, *sensitivity to change* and *amenity* are presented at figures 5 & 6.

Historic Environment: sensitivity to change map

This map has been generated from an assessment of the impact of medium to large-scale development on the historic environment of each character zone. The types of sensitivity present vary with each zone. Each zone is scored between 1 and 3, with 3 being the highest value.

- 3 (High) Medium to large-scale development will have a significant impact on the historic environment.
- 2 (Medium) Medium to large-scale development will have a considerable impact on the historic environment.
- 1 (Low/Unknown) The historic environment could accommodate medium to large-scale development although specific assets may suffer adverse effects.

At a strategic scale, there are some notable patterns in the distribution and range of sensitivity. Some of the zones that have rated high for sensitivity are, perhaps, obvious. For example, Worcester and all of the towns have scored highly. This is largely due to a high density of historic environment features; including multiperiod historic buildings and diverse, deeply stratified below ground archaeology. Similarly, it is easy to appreciate how the zones representing the Malvern Hills, on the western border, and Bredon Hill, in the south, which have very evident prehistoric settlement remains set within highly distinctive historic landscapes, are highly sensitive to change. Other zones with high sensitivity perhaps require more explanation, given that the reasons for high sensitivity may not be immediately apparent.

High sensitivity in the Severn corridor is largely the result of extensive prehistoric and Romano-British settlement remains located on the lower gravel terraces. These sites are all preserved as below ground remains with very little surface evidence, in the form of artefact scatters and seasonal cropmarks, alluding to their presence. However, decades of mapping, survey and targeted excavation have built up an evidence base indicating that these now largely arable landscapes were densely populated by farming settlements for well over a millennium.

In the south-east of Worcestershire, there is distinctive high sensitivity in the area occupied by 'the Lenches'. Set on a plateau of rolling topography is a landscape defined by a pattern of dispersed settlements with medieval origins. These settlements are set within a landscape of diverse field patterns dating from the high medieval period to the 19th century. The boundaries and hedgerows of these fields were set out over earlier medieval open-fields with their distinctive ridge and furrow form. In many parts of this area, ridge and furrow has survived due to the high ratio of land under permanent pasture. In some places the extent of survival has resulted in the preservation of whole parts of the medieval field systems. These alone are highly sensitive to change.

Historic Environment: amenity map

This map has been generated from an assessment of the actual and/or potential value of the historic environment to contribute towards GI design in each zone. The assessment has considered uniqueness, key historic environment landmarks, public access and the potential for promoting the historic environment for the benefit of public interest, educational value and place making. Again, each zone is scored between 1 and 3, with 3 being the highest value.

- 3 (High)–The historic environment contributes, or could contribute towards sense of place and GI.
- 2 (Medium) There are elements of the historic environment that could contribute towards sense of place and GI.
- 1 (Low/Unknown) The historic environment does not currently contribute towards sense of place and GI, however, the full potential may be unknown and there is, therefore, scope for enhancement.

The map clearly demonstrates that some potential for promotion and conservation exists across the entire assessment area. Individual zones and zone groups that have a high amenity value score are reasonably dispersed throughout the assessment area. In some cases, such as the Malvern Hills, Bredon Hill and Broadway, this is a result of the coexistence between high value, high density historic assets and equally high value landscapes. However, in other zones, such as parts of the former Feckenham Forest area in the east of Worcestershire, the high score reflects a perhaps less obvious value, which is the result of greater diversity in the range of historic environment assets and landscape types.

It is important to note that zones with a low score are not necessarily devoid of historic environment interest, nor are they degraded landscapes without other environmental potential, although areas of degraded landscape will, of course, influence scoring. In some cases these are zones where the historic environment is not well recorded. In others they reflect heavy arable land-use, for example, in the south-east of Worcestershire.

Deficiencies, needs and opportunities

The most obvious area of weakness in the Historic Environment Assessment is the effect of 'weighting' in the scoring caused by a bias in the density of records held in the Historic Environment Record. The primary source of data in the Historic Environment Record is drawn from investigations linked to planning conditions; the upgrade, or installation of major utility services and other major infrastructure developments, such as road building, and aggregates extraction. This results in higher densities of records in urban centres and areas of suburban expansion, along major infrastructure routes and in areas of quarrying; for example, the lower Severn Valley in Worcestershire.

There are pockets, or areas of high record density elsewhere, however, they tend to be isolated and often the result of independent research and field investigation. The opposite situation of a low density in records often occurs in areas of the county that are more remote and less densely populated that have not historically been affected by major developmental impacts.

The bias in record density is a factor that affects all Historic Environment Records across the country. The direct effect on the HEA is clearly demonstrated at both ends of the density scale; for example, urban areas and places where quarrying is taking place all score highly. The high score may not accurately represent the level of survival. Equally, where the score is low this can be the result of a lack of previous investigations and does not necessarily indicate a lack of historic environment features. This underpins the need for site masterplanning to ensure detailed investigations are undertaken in order to establish fully the intricate variables that will be present on any site. Investigations should measure loss and survival and should identify potential and therefore opportunities for conservation and enhancement.

Across all zones, diverse types of historic environment features and landscape attributes are subject to the same level of impact from development. By contrast, the opportunities for mitigation and conservation are more intricate, requiring detailed assessment and understanding during site masterplanning.

The development of opportunities to conserve historic environment features and landscapes and promote their contribution towards defining identity and a sense of place should be a key objective in Green Infrastructure provision. Specific groups of historic environment features, and their relationship with GI themes, can be defined as follows:

- Green Infrastructure historic environment networks: hedgerows, green lanes, canals, disused railway lines
- Green Infrastructure historic environment open space/green space: orchards, designed landscape (e.g. parkland), permanent pasture with earthworks (e.g. ridge and furrow), land with extensive below ground archaeology, ancient semi-natural and ancient replanted woodlands.
- Green Infrastructure historic environment water features: ponds, water filled quarries and clay pits, canals, bogs, palaeochannels and alluvial soils

The amenity map provides a basis with which to explore how areas of high value can be linked through the development and enhancement of GI networks. There is also a need to develop networks that may enhance the amenity value of moderate and low scoring zones through the provision of enhanced access, conservation and promotion of the historic environment. These opportunities will become clear through an integrated approach to GI Framework, and the subsequent development of a strategy, that should identify and develop areas where valued historic environment features, habitats, landscape, blue infrastructure and access coexist. A detailed study set in the context of the existing evidence base will ensure that GI design can both enhance the historic environment and develop an appropriate mitigation strategy where different environmental themes conflict in terms of their conservation requirements.

Selected glossary

Cropmarks: The visible effect on the development of arable crops caused by the presence of below ground historic environment features

HEA: Historic Environment Assessment

HECZ: Historic Environment Character Zones

Palaeochannels: ancient silted up river channels, or other watercourses that are often associated with well-preserved organic remains and historic environment features

Ridge and furrow: large-scale earthworks associated with former medieval and post-medieval open-field communal farming that appear as a distinctive corrugated surface

Palaeolithic	-500000 BC to -10001 BC
Mesolithic	-10000 BC to -4001 BC
Neolithic	-4000 BC to -2351 BC
Bronze Age	-2350 BC to -701 BC
Iron Age	-800 BC to 42 AD
Romano-British	43 AD to 409 AD
Post-roman (Early medieval)	410 AD to 1065 AD
Medieval	1066 AD to 1539 AD
Post- medieval	1540 AD to 1900 AD
Modern	1901 AD to 2050 AD

General periods for the historic environment

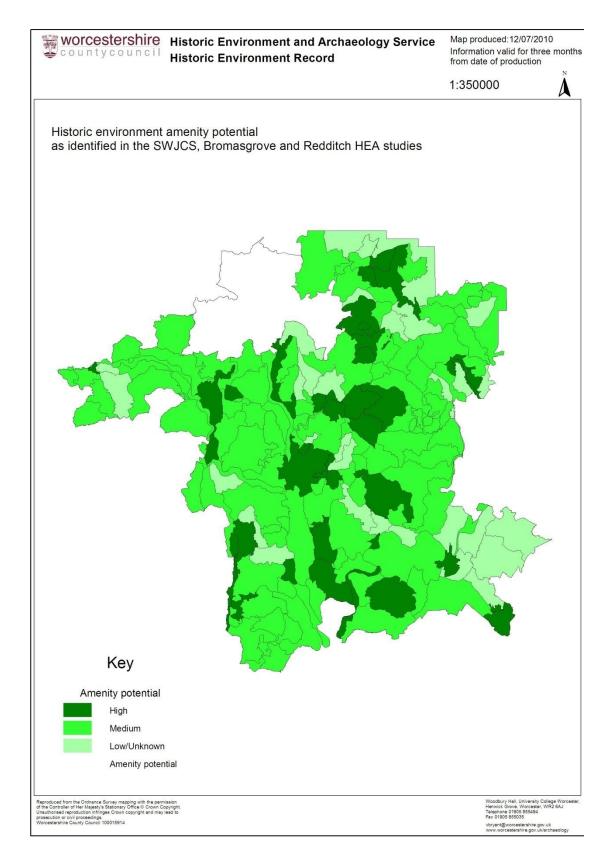


Figure 5 - Historic Environment Amenity Potential

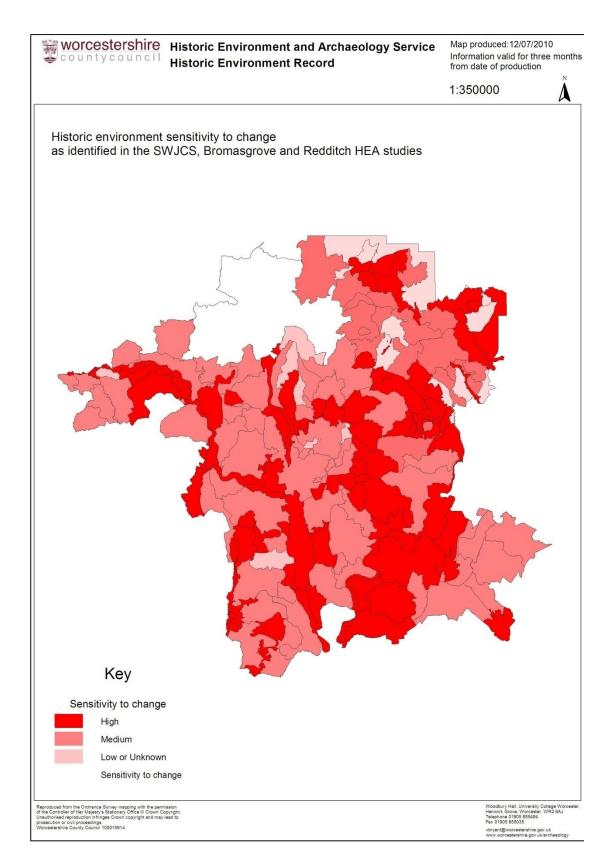


Figure 6 - Historic Environment Sensitivity to Change

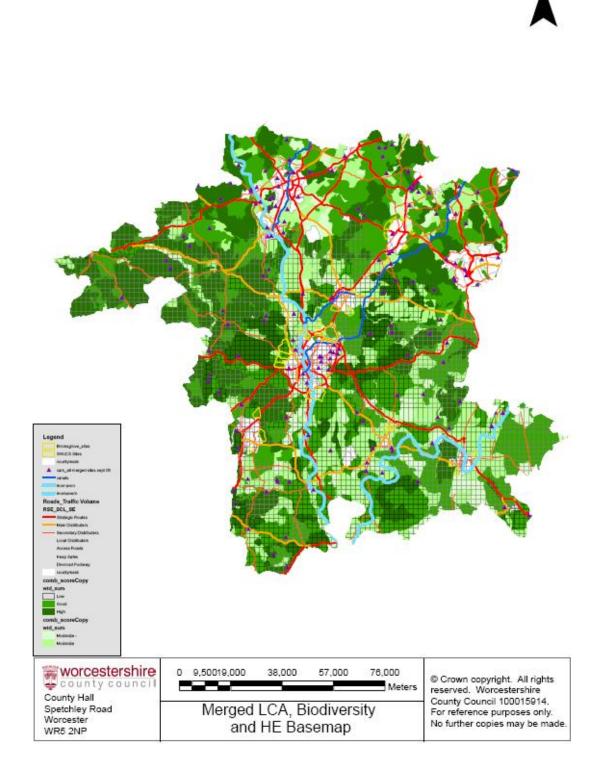


Figure 7 - The Merged Landscape Character Assessment, Biodiversity and Historic Environment base map

N

The LCA, Biodiversity and Historic Environment Base Map merges the data sets (discussed above) for the primary environmental functions of biodiversity, landscape character and historic environment. This merging is the second stage in the development of the Environmental Character Area map discussed in chapter 4.

Access and Movement

Transport infrastructure incorporates a huge quantity of associated green infrastructure. This green infrastructure is invariably integrated with the functions of the grey elements and this generally means that for health and safety reasons much of the green infrastructure is not accessible to the public other than in a visual sense. However the habitat resource that this green infrastructure offers is immense. The Highways Agency at a national level claims to be responsible for some 30,000 Ha of green infrastructure, 14,000 Ha of which is planted with trees and shrubs⁸.

The many duties imposed on Local Authorities, including the development of Local Transport Plans, provide the stimulus to allow green infrastructure to be more comprehensively integrated with road infrastructure at a local level.

The propensity to walk or cycle may be influenced by the quality of the experience, i.e. where surroundings are more attractive, safe and stimulating. In designing routes consideration should be given to a variety of factors including passive surveillance (through sight lines or appropriate lighting) as well as landscaping such as the use of indigenous species in planting or the creation of habitats.

New planting can be integrated into layout and building designs, softening the street scene, improving air quality and providing other benefits to pedestrians and cyclists, such as the provision of shading in hotter temperatures.

Existing trees and other green infrastructure may already occupy a substantial part of a development site and will influence the design and layout of sustainable transport routes, especially if they are protected by Tree Preservation Orders.

Parks, woodlands, river corridors and gardens should form a hierarchy of different types, sizes and scales of public spaces within new developments. This network of green spaces should be linked via safe and attractive routes that connect to the surrounding pattern of streets and encourage people to travel to work and school or to access local services on foot or by bicycle.

⁸ Developing an outline strategy for linking green and grey infrastructure – Natural Economy Northwest.

Recreation Provision in Worcestershire

The quality and location of areas of open space and access networks are critical to the sustainable development of new communities, and can be integrated within existing communities. Different types of green space are appropriate in different settings, from the urban core to the rural fringe. The identification and consideration of areas of recreational and amenity green space within the sub regional framework will provide an opportunity to assess what type of space should go where.

Planning for the provision of open or natural space will in part be determined by a variety of green space standards and many of these standards are often incorporated into local development plans as targets. A selection of the standards is outlined below:

- The Active Recreation Standards, set out by the National Playing Fields Association, call for local authorities to provide a minimum level of space and facilities for sports for adults and youths, and play for children.
- The Accessible Natural Greenspace Standards (Angst) developed by English Nature, relate to the accessibility (on foot) and size of areas that have been naturally colonised by plants and animals.
- The Green Flag Award, the national standard for parks and green spaces, is used by 70 per cent of councils in England⁹. An awarded site can be used as a local benchmark against which the quality of management and maintenance of a range of sites can be measured using the criteria.
- Natural England's Country Park Accreditation Scheme includes a set of criteria that a site must demonstrate to be eligible for Accredited Status.
- For green spaces in or around housing, Building for Life and CABE has developed a series of qualitative standards.

The character and topography of the landscape will be an essential factor in the design of successful green spaces. Natural features such as rivers, streams, woodlands, trees, hedges, wetlands, hills and slopes should be protected and integrated into designs. These can help to deliver a range of benefits, such as providing attractive routes for walking and cycling along river or woodland corridors whilst also helping to create a sense of place.

Larger areas of open space may enable communities to escape the intensity of urban life to a space where the urban edge is not apparent, and where they can enjoy being immersed in nature. Well-designed parks, woodland, grasslands and wetlands at the edge of urban areas can help to structure development in a way that links the urban area to the surrounding countryside.

⁹ CABE – Start with the Park: Creating Sustainable Urban Green Spaces in Areas of Housing Growth and Renewal. <u>http://www.cabe.org.uk/files/start-with-the-park.pdf</u>

Current Provision

A 2001 audit of accessible greenspace provision identified over 5,500 hectares of land as available for recreation in Worcestershire. This is made up of sites such as Country Parks, formal parks, nature reserves, picnic places and Registered Commons. It is now thought that this figure is likely to under-represent the area available for recreation as more sites have become accessible in recent years through legislation such as the CROW Act (2000) and new elements of access created through agri-environment schemes.

There is also an extensive network (around 3,000 miles) of Public Rights of Way made up of public footpaths, bridleways, Restricted Byways and Byways Open to All Traffic (BOAT). Only a few sites or routes cater for horse riding or cycling.

Provision and Deficiency by Area

South-East Worcestershire - There are striking deficiencies in opportunities for access and recreation in this area, particularly in the Vale of Evesham. Here the Rights of Way network is less dense than in any other area of the County. There is also an absence of sites such as Country Parks, picnic places and Registered Commons. Few nature reserves exist although there are a number of smaller community sites such as Village Greens and Millennium Greens. With the proposed housing growth in Evesham, Pershore and some larger villages, a greater provision of accessible greenspace is required.

South-West Worcestershire - The Rights of Way network here is relatively dense and there is also a large amount of accessible greenspace such as Registered Commons and the land owned and managed by the Malvern Hills Conservators. There are also numerous smaller sites such as village greens and nature reserves. Malvern itself has numerous greenspaces within and immediately adjacent to it and there is a proposal to create a new community woodland along the north eastern edge of the town.

West and North-West Worcestershire - Although the Rights of Way network here is very dense, there are fewer sites for public access such as Registered Commons and Country Parks. Sites tend to be of a smaller size and are mainly community sites such as Village Greens, Millennium Greens or Doorstep Greens. There are several nature reserves and picnic places. There is a need to create significant accessible greenspace directly to the west of Worcester City where there is currently little provision either inside the city boundary or into Malvern Hills district, particularly as this is one of the identified growth areas for housing.

North Worcestershire - There is a relatively dense Rights of Way Network and a good provision of accessible greenspace in the form of larger sites adjacent to areas of population, such as Clent Hills, Waseley Hills Country Park, Lickey Hills Country Park and Arrow Valley Country Park. There are a good number of nature reserves and formal parks in all three district/borough areas of Wyre Forest, Bromsgrove and Redditch.

East Worcestershire - The eastern half of Worcester City has good provision of accessible greenspace in Worcester Woods Country Park, Perry Wood, Tolladine Wood, Warndon Wood and the other natural greenspaces and formal parks

within the City boundary. Beyond the City boundary into Wychavon District, smaller sites such as Village Greens, Millennium Greens and Doorstep Greens exist, as well as a number of nature reserves and picnic places. With the proposed housing growth in Pershore and some larger villages, a greater provision of accessible greenspace is required.

Summary

In general, with the proposed new housing growth areas for Worcestershire, significant new areas of land need to be made available for access and recreation and these should ideally be managed countryside and urban greenspace sites that offer facilities to visitors such as those at Country Parks, formal parks and picnic places.

The location of any new recreational sites will need to consider:

- Proximity to centres of population
- Public transport provision
- Proximity to integrate to the Rights of Way network, cycle network and recreational way marked routes.
- Ability to accommodate appropriate facilities necessary for the use and enjoyment of the site.

Access and Recreation Map

The accompanying map (figure 8) has been produced jointly by Worcestershire County Council and Natural England and illustrates sites that are an element of the County's green infrastructure and which offer an opportunity for public access and recreation.

The map shows the more informal outdoor access and recreation opportunities available in Worcestershire. The sites and routes are all managed by communities or partner organisations within the Parks and Countryside Task Group, which is part of the Worcestershire Partnership. All the opportunities shown on the map are free at the point of entry. It should be noted that many privately-managed sites and routes exist that are not shown on the map and that the extensive Rights of Way network is not shown in full as this cannot be reproduced at this scale of mapping.

The map at figure 9 is based on ANGst analysis of accessibility to natural greenspace by Lower Super Output Area, based on the county ANGst analysis. ANGsT is based on physical distance from natural greenspace, and the map illustrates that some communities are outside of the realistic travel distance (walking, cycling or by car) to natural greenspace. ANGst analysis is based on linear distances and does not take into account additional blockages such main road, railways or river which can add to distances and prevent communities accessing open space.

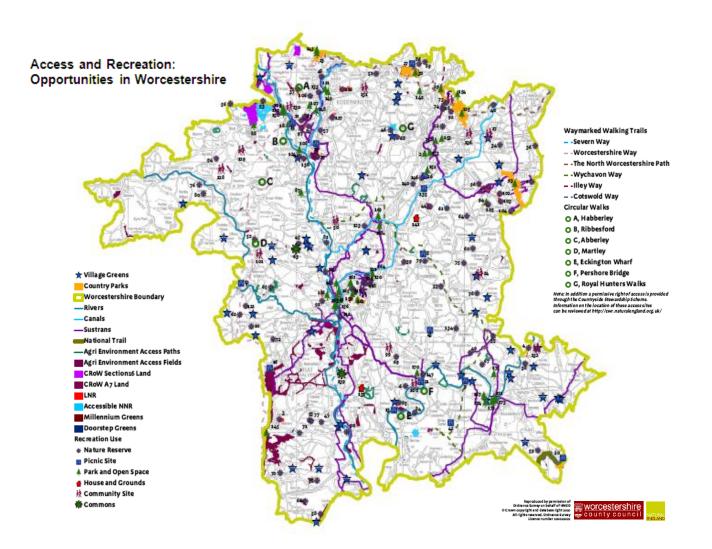
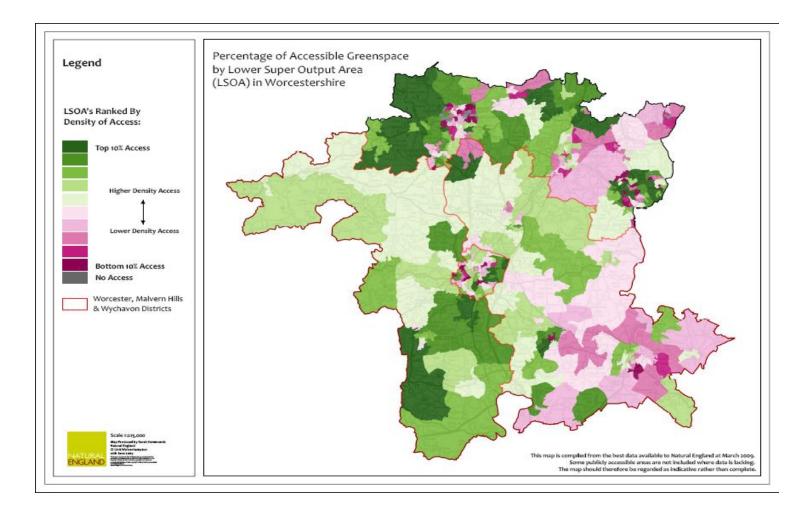


Figure 8 - Access and Recreation opportunities in Worcestershire – extract from the Access & Informal Recreation Strategy (AIRS)





Blue Infrastructure

Under the Water Framework Directive (WFD) legislation the UK will have to ensure that there is no deterioration in the status of our water bodies, and that all water bodies achieve good ecological status by 2027. The Environment Agency is producing River Basin Management Plans (RBMP) for each of the eleven River Basin Districts (RBD) covering England and Wales. These plans will set out the practical actions needed to enable the UK to meet our obligations under the WFD.

Whilst it is the Environment Agency's responsibility to write the RBMPs it will be the responsibility of other organisations, including the Local Authorities, to achieve the targets set out in the Plans. Local Authorities will have a duty to have regard to the plans once they are formally adopted (s17 of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003).

Water Supply and Quality

Groundwater levels vary in response to rainfall, amounts abstracted and aquifer characteristics. The map at figure 10 identifies where the groundwater protection sites are present. Ground water protection sites are largely based in the north of the county and down towards Droitwich. The shape and size of a groundwater source protection zone depends on the condition of the ground, how the groundwater is removed, and other environmental factors. When the Environment Agency define a zone they find out how the groundwater behaves in that area, what constructions there are to get the water out into the public water supply, and the process for doing this. From that information they can develop a model of the groundwater levels could indicate an impact of climate change or changes in abstraction policy and licensing.

The map at figure 11 shows the available water for abstraction in the county, through Catchment Abstraction Management Strategies (CAMS).

CAMS have shown areas in Worcestershire that are over-abstracted (existing abstraction is causing unacceptable environmental impacts at low flows), in the north of the county running down to the centre. A small area on the southern boundary of the county is over-licensed (the current actual abstraction is resulting in 'No Water Available' at low flows and if all licences were used to their full allocation they could cause unacceptable damage to the environment during low flow periods). Opportunities should exist to ensure that when flooding does occur in these areas flood attention measures could be put in place as part of the Green Infrastructure to enable the recharge of the CAMS. Flood attenuation, through the use of SUDS, should be used to hold back the water in times of flooding and then release it slowly to recharge the watercourses, particularly in those areas described above. However, where groundwater protection sites are present the use of SUDS may not be appropriate if they could potentially lead to the pollution of the groundwater protection zones.

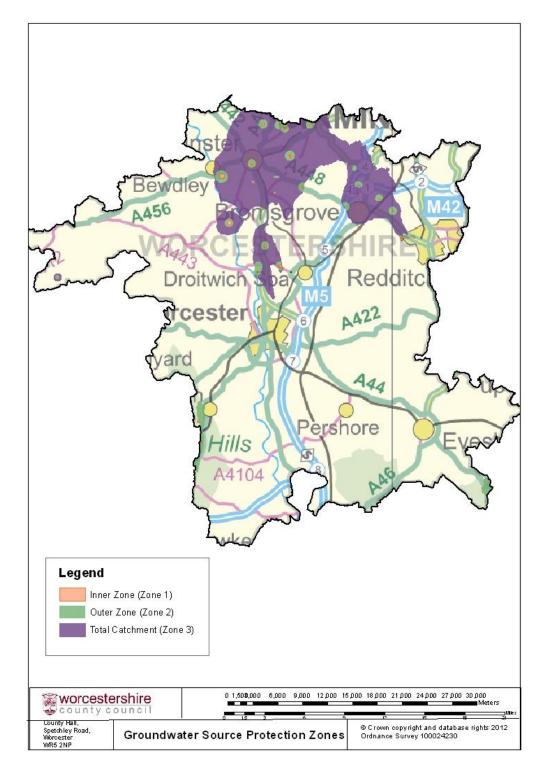


Figure 10 – Groundwater Source Protection Zones in Worcestershire

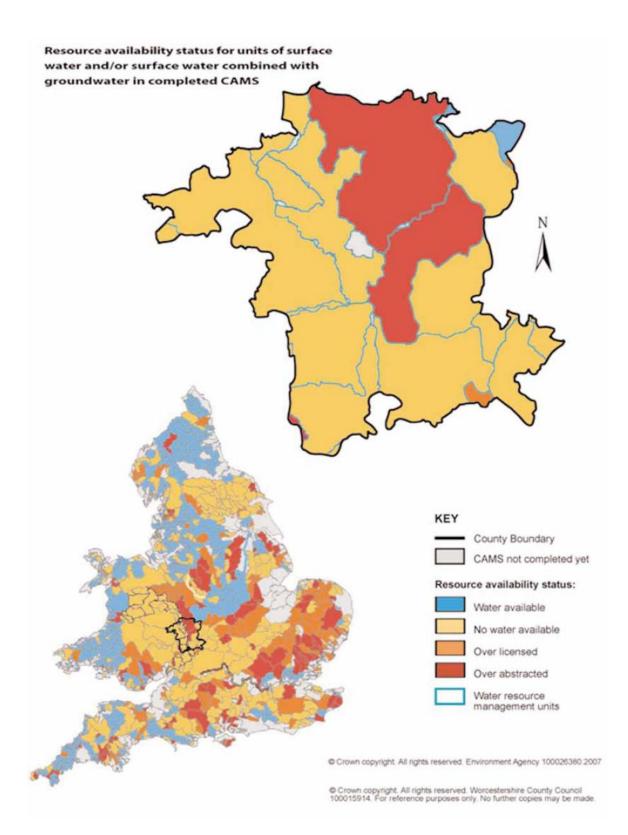


Figure 11 - Coverage of Catchment Abstraction Management Strategy within the Severn River Basin District

The Restoring Sustainable Abstraction Programme identifies sites where unsustainable abstraction could be having an impact on the environment. The programme investigates the sites and then identifies potential options that are appraised to implement a solution to remove the risk of potential future damage to the environment in Worcestershire.

The WFD has set a target that all surface and ground waters should aim to reach 'good status' by 2015. According to the Water Framework Directive (WFD) results, the vast majority of all watercourses across the region are at risk of failing the WFD requirements. As with the regional result, the results from Worcestershire for surface water bodies, such as rivers, lakes and canals show that the vast majority of them are at risk of not meeting this target, as their 'Overall Status' is either 'moderate' 'poor' or 'bad', in that order. A few water courses in Worcestershire do have a 'good' status and these are located in the districts of Wyre Forest, Malvern Hills and Wychavon. The maps and accompanying tables below show the current status for both surface and ground water quality and the supporting tables show what each water body is failing against. The Groundwater Overall Status across the majority of the county is 'good'. As can be seen in the tables accompanying the maps, there are areas where groundwater quality is 'poor'. This is in the north of the county, predominantly in the district of Wyre Forest, but spreading down into both Malvern Hills and Wychavon.

Flooding and Sustainable Urban Drainage (SUDS)

Worcestershire has the third highest number of properties at 'high' risk in the West Midlands (Pers Comm, Environment Agency, 2008). Parts of Worcestershire are particularly prone to river flooding. Many of our towns and villages, for example Stourport, Kidderminster, Tenbury, Worcester, Bewdley, Upton, Pershore and Evesham are built on the banks of large rivers with a long history of flooding. Figure 12 shows Floods Zones 2 and 3 across the County.

The flood amelioration benefits of semi-natural habitats and wild places have been largely overlooked and undervalued in the past. Land that previously absorbed and slowly released rain and floodwater has been replaced with less permeable intensive agricultural land-use and impermeable urban surfaces. As a consequence rain and flood water tends to be quickly diverted into artificial channels and highly modified and constrained watercourses, which have limited capacity to cope with severe rainfall and flood events.

Conventional drainage systems, i.e. pipes and sewers, are designed to take surface water quickly away from properties and roads, discharging it to watercourses and sewers. However during intense or prolonged rainfall, drainage systems can become overwhelmed by surface run-off and discharge into water courses, resulting in a greater risk of fluvial flooding down-stream, or flooding of properties with sewage.

Future growth within the county will increase the proportion of impermeable surfaces, coupled with predicted increases in the intensity of rainfall and this will lead to more drainage systems failing to cope. Surface run-off from urban areas carries a range of pollutants from roads and roofs. Misconnections of foul sewage to the surface water drainage system can also result in pollution of watercourses. These pollutants affect water quality, amenity and biodiversity and are very difficult to remove.

Sustainable drainage systems mimic natural drainage, managing more water above-ground, close to the source. This reduces the volume of water from storms flowing into sewers and watercourses, providing a more sustainable approach to draining surface water.

The nature of SUDS with their 'soft engineering', low velocities and storage characteristics means that normal and extreme levels of rainfall can be better managed, and pollutants can be retained and where possible broken down within the system, improving water quality. There are a wide range of SUDS techniques, including permeable paving (including roads), swales, ponds and wetlands, which can create attractive multi-functional green spaces in urban areas.

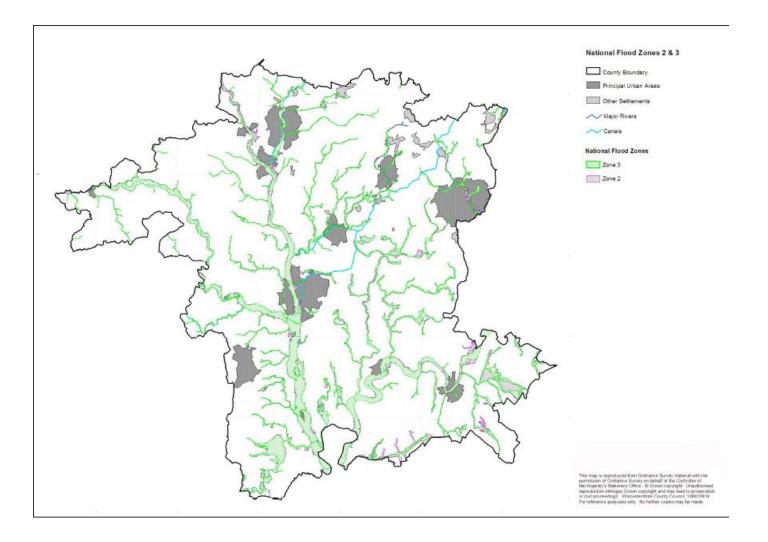


Figure 12 - National Flood Zones 2 & 3

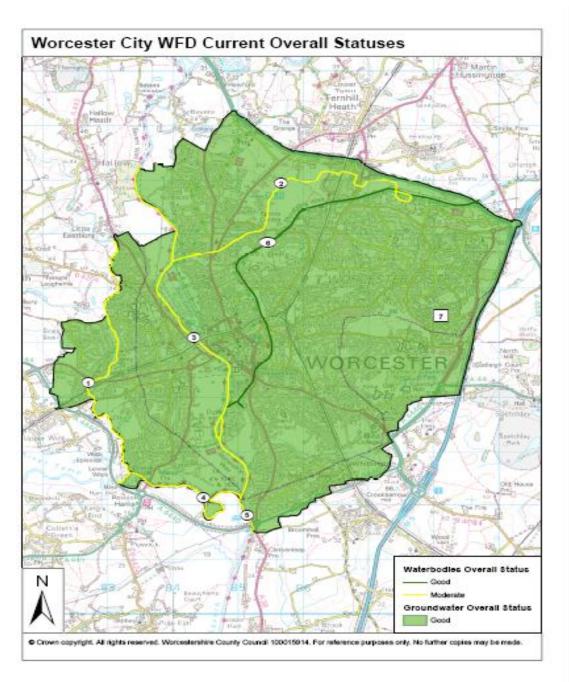


Figure 13 - Worcester City Water Framework Directive status

Number	Current Status	Areas Failing	
Worces	Worcester City - WATERCOURSES (circles)		
1	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels	
2, 3	Moderate	High Dissolved O ₂ , pH and Temperature. Moderate Fish and Invertebrate Levels. Poor Phosphate Levels.	
4	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants	
5	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Invertebrate and Phosphate Levels.	
CANAL	CANALS (ovals)		
6	Good	High Ammonia, pH, Temperature, Specific Pollutants and Phosphate Levels	
GROUNDWATER ZONES (squares)			
7	Good	No issues	

Table 2 - Worcester City Water Framework Directive status

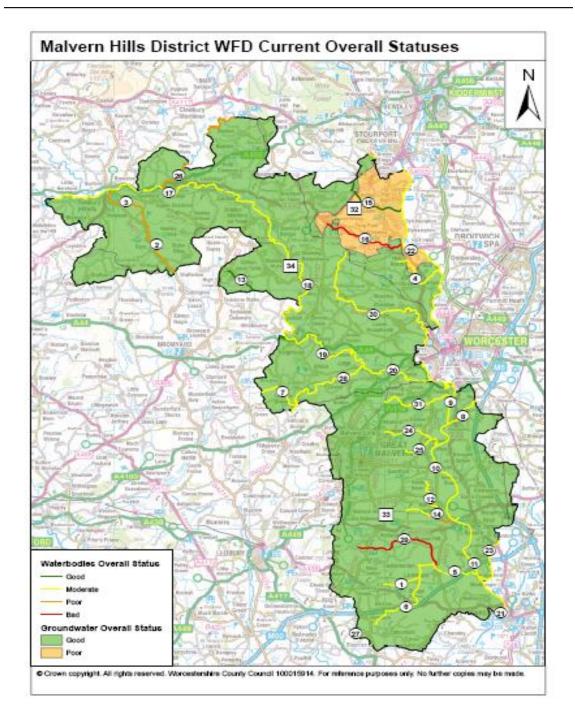


Figure 14 - Malvern Hills District Water Framework Directive status

Number	Current Status	Areas Failing	
Malvern	Malvern Hills - WATERCOURSES (circles)		
1, 6	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ . Poor Phosphate Levels	
2, 3	Poor	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Fish Levels	
4, 27, 30	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels	
5	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ and Fish Levels. Poor Phosphate Levels	
7, 24, 25, 28, 31	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Moderate Phosphate Levels	
8, 9, 10, 11, 21	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate and Invertebrate Levels	
12	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Moderate Invertebrate and Poor Phosphate Levels	
13, 15	Good	No issues	
14	Moderate / Poor	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Moderate and Poor Invertebrate Levels	
16	Bad	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Bad Invertebrate Levels	
17, 18, 19, 20	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants	
22	Moderate	High Dissolved O ₂ , pH and Temperature. Moderate Fish and Invertebrate Levels. Poor Phosphate Levels.	
23	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Phosphate Levels	
26	Poor	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ . Poor Fish Levels	
29	Bad	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Bad Photobenthos Levels	
GROUN	GROUNDWATER ZONES (squares)		
32	Poor	Poor Water Balance and Chemical Test results. Poor Water Level, Surface Water and Wetlands Impact	
33, 34	Good	No issues	

Table 3 - Malvern Hills District Water Framework Directive Status

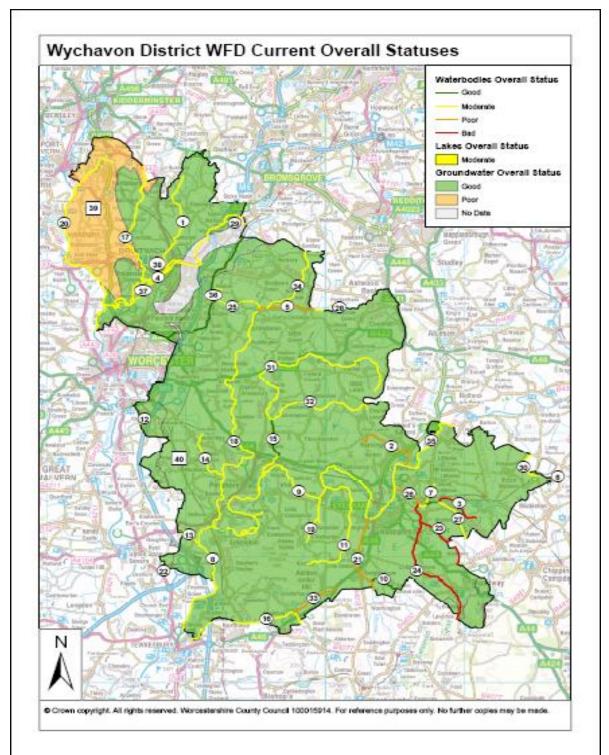


Figure 15 - Wychavon District Council Water Framework Directive status

Number	Current Status	Areas Failing	
Wychav	Wychavon - WATERCOURSES (circles)		
1, 6	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ . Poor Phosphate Levels	
2, 3	Poor	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Fish Levels	
4, 27, 30	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels	
5	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ and Fish Levels. Poor Phosphate Levels	
7, 24, 25, 28, 31	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Moderate Phosphate Levels	
8, 9, 10, 11, 21	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate and Invertebrate Levels	
12	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Moderate Invertebrate and Poor Phosphate Levels	
13, 15	Good	No issues	
14	Moderate / Poor	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Moderate and Poor Invertebrate Levels	
16	Bad	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Bad Invertebrate Levels	
17, 18, 19, 20	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants	
22	Moderate	High Dissolved O ₂ , pH and Temperature. Moderate Fish and Invertebrate Levels. Poor Phosphate Levels.	
23	Moderate	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Phosphate Levels	
26	Poor	High Ammonia, pH, Temperature and Specific Pollutants. Moderate Dissolved O ₂ . Poor Fish Levels	
29	Bad	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels. Bad Photobenthos Levels	
GROUN	GROUNDWATER ZONES (squares)		
32	Poor	Poor Water Balance and Chemical Test results. Poor Water Level, Surface Water and Wetlands Impact	
33, 34	Good	No issues	

Table 4 - Wychavon District Council Water Framework Directive status

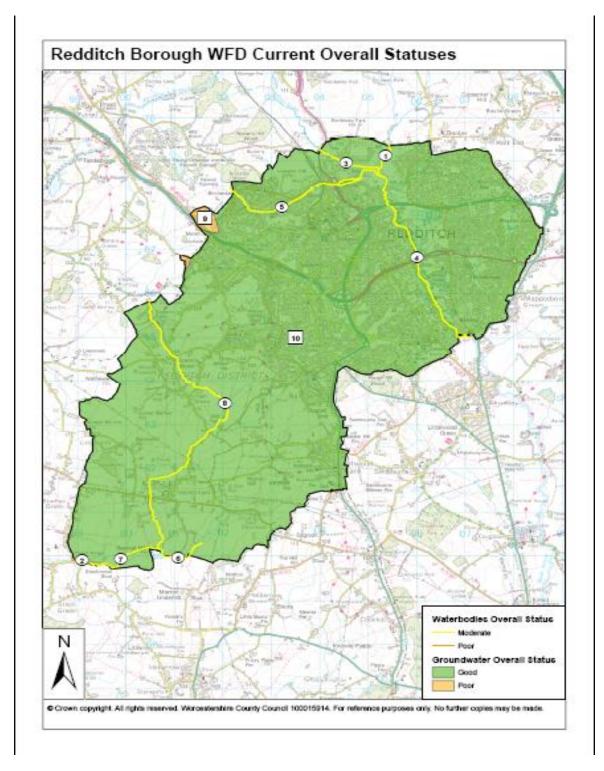


Figure 16 - Redditch Borough Water Framework Directive status

Number	Current Status	Areas Failing	
Redditc	Redditch - WATERCOURSES (circles)		
1, 5, 6, 7, 8	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Poor Phosphate Levels	
2	Poor	High Ammonia, Dissolved O ₂ , pH and Specific Pollutants. Moderate Fish and Poor Phosphate Levels.	
3, 4	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Moderate Invertebrate and Poor Phosphate Levels	
GROUN	GROUNDWATER ZONES (squares)		
9	Poor	Poor Water Balance and Surface Water Impact	
10	Good	No issues	

 Table 5 - Redditch Borough Water Framework Directive status

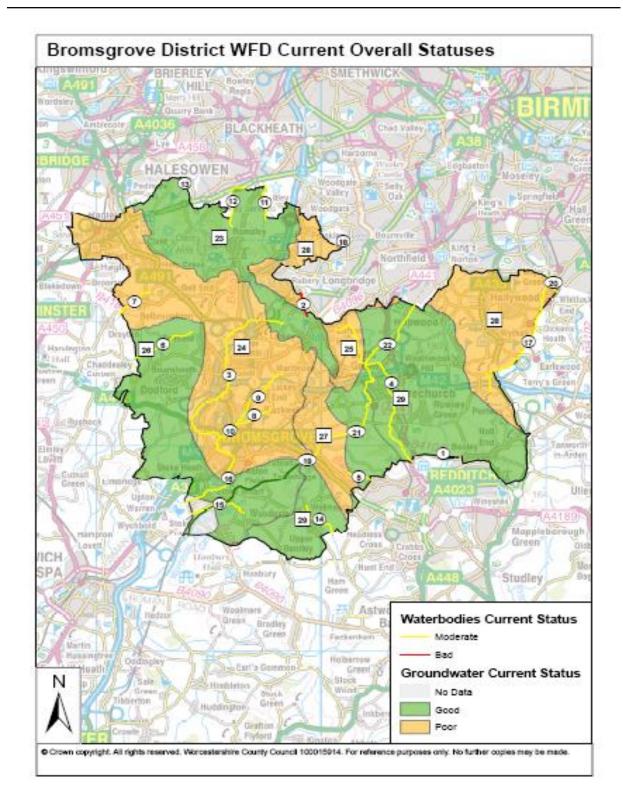


Figure 17 - Bromsgrove District Water Framework Directive status

Number	Current Status	Areas Failing	
Bromsg	Bromsgrove - WATERCOURSES (circles)		
1, 14	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Phosphate Levels: Poor	
2	Bad	High pH and Temperature. Moderate Ammonia, Dissolved O ₂ , Phosphate Levels and Specific Pollutants. Invertebrate Levels: Bad	
3, 7	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Phosphate Levels: Moderate	
4	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Phosphate Levels: Poor. Invertebrate Levels: Moderate	
5, 6	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Phosphate Levels: Poor.	
8, 9, 10	Moderate	High Ammonia, Dissolved O ₂ , pH, Temperature and Specific Pollutants. Invertebrate Levels: Moderate	
11, 12, 13	Moderate	High Dissolved O ₂ , pH and Temperature. Invertebrate Levels: Poor	
15, 16	Moderate	High Dissolved O ₂ , pH and Temperature. Phosphate Levels: Bad. Phytobenthos Levels: Moderate	
17	Moderate	High pH, Moderate Dissolved O ₂ and Phosphate Levels	
18	Moderate	High pH and Temperature, Moderate Ammonia, Dissolved O ₂ and Specific Pollutants and Phosphate Levels. Invertebrate Levels: Poor	
CANAL	S (ovals)		
19	Good	High Ammonia, Dissolved O ₂ , pH, Temperature, Specific Pollutants and Phosphate Levels	
20	Moderate	High pH, and Temperature	
21, 22	Moderate	High Ammonia, , pH, Temperature, Specific Pollutants	
GROUN	GROUNDWATER ZONES (squares)		
23, 26, 29	Good	No issues	
24	Poor	Poor Chemical Test results. Poor Impact on Water Levels, Surface Water and Wetlands	
25, 27	Poor	Poor Chemical Test results. Poor Impact on Surface Water and Wetlands	
28	Poor	Chemical Status: Fail	

Table 6 - Bromsgrove District Water Framework Directive status

Environmental Character Area: One	Teme Valley and Wyre Forest
Strategic GI Approach	Protect and Enhance
Primary Objectives:	
Overarching principles	Enhance stream and river corridors Protect ancient countryside character Protect and enhance the ancient woodland habitats of the Wyre Forest Enhance and expand acid grassland habitats
Biodiversity	Priority to protect and enhance existing site and biodiversity interest. Implementation and Delivery to be directed to existing site management and buffering as a first principle. Linking of networks to be applied where practicable. Restore functional stream corridors, in particular in the Wyre Forest and Laugherne Brook catchments.
Historic Environment	Protect and enhance the diverse historic field boundary patterns and hedgerows that are associated with medieval assarting, post-medieval reorganisation and traditional orchards. Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned prehistoric and medieval settlement remains. Protect historic water features and buffer key sites, such as moats, fishponds, millponds and leats. Explore opportunities to protect below ground archaeology associated with multi-period settlements throughout the area, and particularly, adjacent to existing rural settlements.
Landscape Character	Protect and enhance ancient woodland cover, including replanting with mixed, native species where appropriate, respecting the characteristic tree cover pattern – discrete blocks in the Estatelands; linear, interconnecting woods along streams and dingles in the Wooded Hills and Plateau Farmlands); scattered hedgerow trees (Timbered Farmlands, Forest Smallholdings). Protect and enhance the hedgerow network, respecting the characteristic enclosure pattern of each Landscape Type (organic in the dominating Timbered Farmlands and Wooded Hills; sub-regular/variable in the Wooded Estates and Forest Smallholdings) including safeguarding or replanting of hedgerow trees to address age structure and density.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition (for example Teme SSSI). Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project and Natural England's three fluvial SSSIs. Tackle issues of diffuse pollution in the catchment through the provision of advice to farmers under the England Catchment Sensitive Farming Delivery Initiative.
Access & Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Two	Severn Valley North
Strategic GI Approach	Protect and Enhance.
Primary Objectives:	
Overarching principles	Restoration of the Severn floodplain
Biodiversity	Links should be made with existing site management, in order to achieve site expansion and buffer the key priorities including wet woodlands and grasslands. Where sites are closely associated buffering should be merged to form direct links. In the case of the River Severn corridor the link is already in place but augmentation of this in the floodplain will be critical for a number of GI aspirations, in conjunction with enhancements to the blue infrastructure.
Historic Environment	Explore opportunities to protect prehistoric and Romano-British settlement on the river terraces and other sites with below ground archaeology adjacent to existing rural settlements. Protect and enhance historic parkland character. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland and common). Enhance historic hedgerow pattern to strengthen broad historic landscape character.
Landscape Character	 Protect and enhance the composition and pattern (planned in the estate landscapes; organic in the farmland landscapes) of hedgerows through management and replanting. Protect and enhance the tree cover pattern through new planting of watercourse, highway and hedgerow trees to address density and age structure; and, in the Timbered Farmlands, through creation of new woodland, with consideration for patterns of relic ancient woodland and existing woodland fragments. Seek opportunities to protect and create areas of permanent pasture, particularly in the Settled Farmlands and Riverside Meadows landscapes. NB This ECA also contains localised patches of Unenclosed Commons which is a (largely) unsettled, unenclosed and unwooded Landscape Type; here opportunities should be sought to retain rough grazing land use and management regimens which the support unwooded and unenclosed.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Three	North Worcestershire Hills
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Maintain wooded character, linking and buffering existing sites
Biodiversity	Links should be made with existing site management, in order to achieve site expansion and creation, merge and buffer the key features including the Lickey and Clent Hills. Restore, enhance and link neutral grassland and woodland corridors and pond corridors. Restore parkland and veteran trees.
Historic Environment	Protect and buffer historic water management features and ponds. Protect earthwork features associated with medieval settlement and land division. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland and common). Enhance historic hedgerow pattern to strengthen broad historic landscape character.
Landscape Character	Protect and enhance the ancient wooded/treed character through management and/or re-planting as appropriate to the characteristic tree cover patterns of the different wooded Landscape Types of this area: large, discrete blocks in the Wooded Hills and Farmlands; interconnecting irregularly- shaped woods in the Principal Wooded Hills; linear/streamside woods in the Timbered Plateau Farmlands; scattered hedgerow trees (oaks) of the Timbered Pastures. Seek opportunities to strengthen the hedgerow network bringing attention to composition (predominantly mixed) and enclosure pattern (organic/variable).
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements. Develop Surface Water Management Plans for the Bromsgrove, Droitwich and Kidderminster areas. Reduce the levels of nutrients and sediments entering watercourses and take actions to improve the management of water resources.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Four	Forest of Feckenham and Feckenham Wetlands
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Protect the traditional field patterns, boundaries and small woodlands. Enhance stream corridors.
Biodiversity	Links should be made with existing site management, in order to achieve site expansion, merge and buffer the key priorities. Priority to protect, buffer and enhance existing sites to create linked networks of habitat where possible. Restore and enhance neutral grasslands, orchards, woodland, wet woodland, stream corridors and hedgerow boundaries and restore habitat connectivity. Enhance and create traditional field boundaries. Enhance stream corridors and associated wetland habitats. Conserve parkland and associated veteran trees.
Historic Environment	Protect historic environment diversity present across the Forest of Feckenham area characterised by a patchwork of: medieval cultivation earthworks and moated settlement sites; multi-period, multi-scale field patterns associated with medieval assarting and enclosed open heath and small, irregular woodlands. Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned prehistoric, Romano-British and medieval settlement remains. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Enhance historic hedgerow pattern to strengthen broad historic landscape character. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland and common).
Landscape Character	Protect and enhance the ancient wooded character through management and/or re-planting as appropriate to the characteristic (and contrasting) tree cover patterns of the different Landscape Types of this area: scattered hedgerow and watercourse trees of the Timbered and Settled Farmlands; large, discrete woodland blocks of the Wooded Estatelands; and linear tree belts (predominantly alder and willow) of the Wet Pasture Meadows. Seek opportunities to strengthen the hedgerow network, respecting the characteristic patterns of enclosure (organic in the Timbered Farmlands, regular/semi-regular in the Wooded Estates, Wet Pasture Meadows, Settled Farmlands and Village Claylands. In particular opportunities should be sought to create and/or protect permanent pasture in the Settled Farmlands with Pastoral Land Use, and particularly in the Village Claylands to protect the characteristic ridge and furrow patterns.
Blue Infrastructure	 Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Address poor status of designated 'aquatic conservation' sites. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. SUDS must be encouraged and targeted within planning approvals and retrofitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs. Reduce the levels of nutrients and sediments entering watercourses and take actions to improve the management of water resources.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Five	Lenches Ridge
Strategic GI Approach	Protect and enhance.
Primary Objectives:	
Overarching principles	Enhance the functionality and habitats of the Avon floodplain.
Biodiversity	Link with existing site management, site expansion and buffer the key priorities. Where sites are closely associated buffering should be merged to form links. In the case of the River Avon corridor the link is already in place but augmentation of this in the floodplain will be critical for a number of GI aspirations.
Historic Environment	Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned prehistoric, Romano-British and medieval settlement remains. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Conserve and enhance diverse multi-period historic field patterns and hedgerows. Explore opportunities to conserve below ground settlement sites on arable land bordering Evesham through open-space provision. Conserve historic common edges.
Landscape Character	 Enhance and protect the hedgerow field boundaries, respecting the characteristic local enclosure pattern (planned or regular in the Village landscapes, organic in the Plateau Farmlands). Enhance the tree cover pattern through new planting of tree groups associated with settlement and planting of watercourse and hedgerow trees to address density and age structure. Orchards and fruit trees are a particular feature of the Village landscapes which dominate here and opportunities should be sought to retain and re/create them; new planting should consider traditional local varieties. Seek opportunities to create and/or protect permanent pasture in the Settled Farmlands with Pastoral Land Use, and particularly in the Village Claylands to protect the characteristic ridge and furrow patterns.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. SUDS must be encouraged and targeted within planning approvals and retrofitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs; Cotswold AONB. Reduce the levels of nutrients and sediments entering watercourses and take action to improve the management of water resources.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Six	Bredon
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Protect and enhance Bredon Hill National Nature Reserve
Biodiversity	Priority to protect, buffer and enhance existing sites to create linked networks of habitat where possible. Restore and enhance calcareous grassland. Protect and enhance parkland, veteran trees and scrub habitat. Maintain traditional field boundaries including hedges to aid habitat connectivity.
Historic Environment	Conserve the HE diversity of Bredon Hill and its hinterland: extensive below ground prehistoric and Romano-British settlement on the southern slops and Carrant Brook corridor; upland character grazing with dry stone walling on the northern and western slopes with prehistoric and Romano-British settlement on the northern lowlands adjacent to the Avon.
Landscape Character	Protect the historic pattern of field enclosure (rectilinear drystone walls in the Limestone Estatelands; organic pattern of hedgerows in the Wooded Hills of the north scarp; large hedged fields on the south scarp); protect and enhance tree cover pattern (linear tree belts and small estate plantations in the Limestone Estatelands; large, interlocking native woodland in the Wooded Hills of the north scarp; large, discrete woodland blocks on the south scarp); address the balance and intensity of land use as appropriate in each of the Landscape Types, where possible seeking opportunities to restore permanent pasture.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs; Cotswold AONB.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Seven	Severn Valley South
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Protect and enhance the Severn Valley floodplain and its functionality
Biodiversity	Links should be made with existing site management, in order to achieve site expansion, buffer and link the key priorities including wet grassland, wet woodland, reedbed and functional flood plain habitats and sites. In the case of the River Severn corridor the link is already in place but augmentation of this in the floodplain will be critical for a number of GI aspirations, in conjunction with enhancements to the blue infrastructure. Protect and enhance neutral grassland networks. Protect veteran trees.
Historic Environment	Protect extensive below ground prehistoric and Romano-British settlement on river terraces and sensitive prehistoric ritual sites in alluvial clays adjacent to the Severn and other watercourses. Protect sensitive below ground palaeoenvironmental deposits contained in palaeochannels adjacent to the Severn. Protect and enhance historic parkland character associated with the more extensive historic Croome estate lands.
Landscape Character	Enhance and protect the woodland character according to the guidelines for each Landscape Type (predominantly hedgerow and streamside trees in the Settled/Timbered Farmlands and the Meadows Landscape Types; small geometric plantations and tree belts in the Estate Farmlands). Enhance the pattern and composition of hedgerows through management and replanting. Seek opportunities to retain and encourage pastoral land use in the Meadows landscapes. NB This ECA also contains localised patches of Unenclosed Commons which is a (largely) unsettled, unenclosed and unwooded Landscape Type; here opportunities should be sought to retain rough grazing land use and management regimens which the support unwooded and unenclosed character.
Blue Infrastructure	Reduce dependence on raised flood defences, as this is not sustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Seek opportunities to improve watercourses where it would benefit fisheries (especially salmon).
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Eight	Bushley
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Protect and enhance the irregular field pattern, boundary hedges and orchard habitats.
Biodiversity	Priority to protect, buffer and enhance existing sites to create linked networks of habitat where possible. Protect and enhance networks of neutral grassland and traditional orchards. Conserve parkland and veteran trees. Maintain traditional field boundaries including hedges to aid habitat connectivity.
Historic Environment	Buffer historic common edge landscapes and parkland character around Eldersfield. Protect and enhance diverse multi-period historic field patterns and hedgerows associated with enclosure of historic heath and woodland. Protect historic water features and buffer key sites, such as moats, fishponds. Protect below ground deposits of high palaeoenvironmental potential associated with above ground features pertaining to historic water meadows and irrigation.
Landscape Character	Protect and enhance field boundaries and characteristic enclosure patterns (sub-/irregular); protect and enhance tree cover (small estate plantations, tree belts, parkland and ornamental trees in the Estatelands; hedgerow and watercourse trees in the Settled Farmlands, watercourse treebelts in the Wet Pasture Meadows); protect permanent pasture/maintain pastoral land use in the Settled Farmlands and Pasture Meadows.
Blue Infrastructure	Reduce dependence on raised flood defences, as this is not sustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Seek opportunities to improve watercourses where it would benefit fisheries (especially salmon).
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Nine	Malvern Chase and Commons
Strategic GI Approach	Protect and enhance
Primary Objectives:	
Overarching principles	Protect and enhance acid and neutral grassland habitats and wooded landscape of orchards, woodlands and scrub.
Biodiversity	Priority to protect, buffer and enhance existing sites to create linked networks of habitat where possible. Protect and enhance grassland habitats (acid and neutral) and the wooded landscape including orchards, woodlands and scrub. Conserve parkland and veteran trees. Maintain traditional field boundaries including hedges, where appropriate to aid habitat connectivity.
Historic Environment	Protect nationally significant and extensive below ground archaeology associated with the Roman and medieval ceramic industries north and east of Malvern. Enhance upland un-enclosed acid grassland to strengthen Historic Landscape Character and ensure conservation of prehistoric settlement and land boundary features. Protect and enhance common-edge landscapes and field patterns. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland, parkland and common).
Landscape Character	Protect grassland habitats on uplands, commons and verges through appropriate grazing/management regimes. Enhance and protect the planned enclosure pattern and woodland character (discrete blocks) in the Enclosed Commons whilst retaining the unenclosed, unwooded (and unsettled) nature of the uplands and Unenclosed Commons through appropriate grazing/management strategies. Elsewhere in the Timbered and Settled Farmlands and Wet Pasture Meadows, opportunities should be sought to strengthen the patterns of field enclosure and tree cover through the planting of watercourse and hedgerow trees to address density and age structure. Protect permanent pasture/maintain pastoral land use in the Settled Farmlands and Wet Pasture Meadows.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition (for example Teme SSSI). Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project and Natural England's three fluvial SSSIs. Tackle issues of diffuse pollution in the catchment through the provision of advice to farmers under the England Catchment Sensitive Farming Delivery Initiative.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Ten	Hagley Hinterland
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Maintain and restore habitat connectivity. Protect and restore acid grassland and wooded habitats.
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for protection and creation including acid grassland and veteran tree connectivity through linking, merging and buffering existing and newly created habitats. Hedgerows and small woodlands provide important connectivity through the landscape.
Historic Environment	Protect the setting of Hagley Park, enhance and create linkages with wider historic environment green networks (hedgerows and woodland). Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Conserve and enhance diverse multi-period historic field patterns and hedgerows.
Landscape Character	Enhance and protect the hedgerow field boundaries respecting the characteristic enclosure pattern of each Landscape Type (planned or semi-regular in the Estate landscapes; organic or irregular in the Timbered and Settled Farmlands). Seek opportunities to protect and strengthen the woodland character and pattern (planned, discrete plantations and tree belts in the Estate landscapes; ancient, scattered hedgerow trees Settled and Timbered Farmlands, with some small woods in the latter).
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements. Develop Surface Water Management Plans for the Bromsgrove, Droitwich and Kidderminster areas. Reduce the levels of nutrients and sediments entering watercourses and take actions to improve the management of water resources.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Eleven	Hollywood and Wythall
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore historic pattern of small enclosures
Biodiversity	Protect and enhance existing sites and features of biodiversity interest. Newly created GI features should aim to augment this existing resource concentrating on the main priorities for protection and creation including neutral grassland, ponds and veteran and hedgerow tree connectivity through linking, merging and buffering existing and newly created habitats.
Historic Environment	Protect and enhance the locally distinctive and largely intact historic pattern of small regular enclosures; their mature hedgerows and hedgerow trees. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland and relic parkland). Buffer historic landscape features, such as earthwork boundaries, ridge and furrow and abandoned medieval settlement remains. Protect historic water features and buffer key sites, such as moats and ponds.
Landscape Character	Protect and enhance the ancient wooded character including replanting with mixed, native species where appropriate, respecting the characteristic tree cover pattern: linear cover often associated with streamside habitats ('dingle' woodlands are particularly characteristic). Protect and enhance the hedgerow network, retaining or strengthening the organic enclosure pattern. Opportunities should be sought to safeguard or replant hedgerow trees (particularly oaks) to address age structure and density. Encourage the retention of pastoral land use to maintain a balance of mixed farming within this landscape.
Blue Infrastructure	 Reduce dependence on raised flood defences, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This may require redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs. Reduce the levels of nutrients and sediments entering watercourses and take actions to improve the management of water resources.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twelve	Bromsgrove-Redditch Corridor
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore the ancient countryside character.
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle, particularly links between networks to be augmented. Significant development to provide green infrastructure enhancements where appropriate.
Historic Environment	Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned medieval settlement remains. Protect and enhance the setting of Bordesley Abbey. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Protect below ground deposits of high palaeoenvironmental potential associated with alluvial deposits in the River Arrow corridor.
Landscape Character	Protect and enhance the ancient wooded character through management and/or re-planting to address composition and age structure, as appropriate to the characteristic (and contrasting) tree cover patterns of the different Landscape Types of this area: large, discrete woodland blocks of the Wooded Estatelands; scattered hedgerow and streamside trees of the Settled and Timbered Farmlands. Enhance the hedgerow network, respecting the characteristic patterns of field enclosure, predominantly irregular in the Settled Farmlands and semi-regular in the Wooded Estates, but organic in the Timbered Farmlands.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Thirteen	Mid Worcestershire Corridor
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore neutral grasslands, orchards and semi-natural ancient woodland, wet woodland and stream corridors.
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management to achieve site expansion, merge and buffer sites and features of existing importance for biodiversity, particularly around Worcester Technology Corridor. Restore and enhance neutral grasslands, orchards and semi-natural ancient woodland, wet woodland and stream corridors. Enhance and create traditional field boundaries.
Historic Environment	Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned medieval settlement remains. Explore opportunities to protect below ground archaeology associated with extensive Romano-British settlement in the Droitwich hinterland. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Protect below ground deposits of high palaeoenvironmental potential associated with the River Salwarpe corridor. Protect and enhance historic field boundary patterns and hedgerow network. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland, parkland and common).
Landscape Character	Seek opportunities to enhance and restore the ancient woodland cover, including replanting with mixed, native species where appropriate, respecting the characteristic tree cover pattern: discrete blocks in the Estatelands, scattered hedgerow and watercourse trees – which should be safeguarded or replanted to address age structure and density – in the Timbered and Settled Farmlands. Alongside this, seek opportunities to enhance the composition and pattern of hedgerows through management and replanting, respecting the characteristic pattern of each Landscape Type (organic in the dominating Timbered Farmlands; sub/semi-regular in the Settled Farmlands and Wooded Estates). Seek opportunities to protect and create areas of permanent pasture, particularly in the Settled Farmlands and Pasture Meadows landscapes.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements. Develop Surface Water Management Plans for the Bromsgrove, Droitwich and Kidderminster areas.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Fourteen	East Wychavon
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore hedges and field boundaries and the hedge, ditch and watercourse trees.
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Existing hedgerow networks to be enhanced and expanded.
Historic Environment	 Buffer historic landscape features, such as earthwork boundaries, ridge and furrow, abandoned multi-period settlement remains. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Conserve and enhance diverse multi-period historic field patterns and hedgerows associated with medieval assarting and late enclosure of historic open heath and medieval open-fields. Buffer landscapes with historic parkland character and enhance and create linkages with wider historic environment green networks (hedgerows, woodland, parkland and wetlands).
Landscape Character	Protect and enhance the hedgerow field boundaries and characteristic enclosure patterns (sub-regular in the Farmlands and Claylands, regular in the Pasture Meadows). Protect and enhance the characteristic tree cover of hedgerow, ditch and watercourse trees in the Settled Farmlands, watercourse treebelts in the Wet Pasture Meadows. Seek opportunities to protect and enhance areas of permanent pasture in these pastoral landscapes.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs. Reduce the impacts of abstraction on the environment as part of the Restoring Sustainable Abstraction programme.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Fifteen	Bow Brook South
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Enhance the Bow Brook, its water quality and valley.
Biodiversity	Links should be made with existing site management, in order to achieve site expansion, merge and buffer the key priorities. Restore and enhance neutral grasslands, orchards and semi-natural ancient woodland, wet woodland and the Bow Brook corridor.
Historic Environment	Buffer historic landscape features, such as earthwork boundaries, ridge and furrow and abandoned medieval settlement remains. Protect the setting of the extensive relic medieval landscapes surrounding Naunton Beauchamp. Protect historic water features and buffer key sites, such as moats, fishponds and millponds. Protect and enhance diverse multi-period historic field patterns and hedgerows. Explore opportunities to conserve below ground settlement sites on arable land bordering White Ladies Aston and the terraces above the Bow Brook. Protect below ground deposits of high palaeoenvironmental potential associated with the Bow Brook corridor.
Landscape Character	Protect and enhance the tree cover character through management and/or re-planting as appropriate to the characteristic (and contrasting) tree cover patterns of the different Landscape Types of this area: scattered hedgerow and watercourse trees of the Timbered Farmlands and Village Claylands; large, discrete woodland blocks of the Wooded Estatelands. Seek opportunities to strengthen the hedgerow network, respecting the characteristic (and again, contrasting) patterns of enclosure (organic in the Timbered Farmlands, semi-regular in the Village Claylands and Wooded Estates). In particular opportunities should be sought to create and/or protect permanent pasture in the Village Claylands to protect the characteristic ridge and furrow patterns.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Sixteen	Evesham Valley
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore the River Avon corridor and functional floodplain habitats.
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Newly created green infrastructure should augment the existing resource, and link priorities habitats including neutral grassland, field boundaries and traditional orchards. Maintain the River Avon corridor as a key green infrastructure link and augmentation the floodplain will be critical for a number of GI aspirations.
Historic Environment	Explore opportunities to protect below ground archaeology associated with extensive prehistoric and Romano-British settlement in the Evesham hinterland. Protect below ground archaeology and deposits of high palaeoenvironmental potential associated with the Avon corridor. Buffer historic landscape features, such as earthwork boundaries, ridge and furrow and medieval settlement remains. Protect historic water features and buffer key sites, such as fishponds and millponds along tributaries of the Avon. Protect and enhance the historic field pattern and hedgerow network associated with enclosure of medieval open-fields, market gardening allotments and traditional orchard enclosures.
Landscape Character	Enhance and protect the hedgerow field boundaries with a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses in the Meadows, or the tree cover associated with dwellings in the Village Farmlands. In the unsettled Riverside Meadows opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. In contrast, the cropping horticultural land use of the Village Farmlands is particularly characteristic, and localised domestic orchards and lines of fruit trees (often damson) are notable features to be protected or enhanced where appropriate.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs. Reduce the impacts of abstraction on the environment as part of the Restoring Sustainable Abstraction programme.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Seventeen	Broadway and Cotswold Corridor
Strategic GI Approach Primary Objectives:	Protect and restore
Overarching principles	Protect and restore the characteristic Cotswold landscape and its key features including neutral and calcareous grasslands and field boundaries.
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for protection and creation including neutral and calcareous grassland, field boundaries, traditional orchard connectivity through linking, merging and buffering existing and newly created habitats.
Historic Environment	Explore opportunities to protect below ground archaeology associated with extensive prehistoric and Romano-British settlement in the low hinterland surrounding Broadway. Buffer historic landscape features, such as earthwork boundaries, ridge and furrow and relic parkland landscapes. Protect and enhance diverse multi- period historic field patterns and hedgerows that distinguish the historic landscapes of lowland farming around Broadway and the rising slopes of the Cotswold upland. Enhance and create linkages with the irregular historic woodland that populate the rising slopes of Cotswold upland.
Landscape Character	Enhance and protect the hedgerow field boundaries which vary considerably across the multiple Landscape Types here in character and pattern: from the planned enclosure pattern of drystone walls in the Limestone Estates and planned enclosure pattern of hedgerows defining medium-to-large fields in the Village landscapes (sub-regular in the Claylands) to the organic pattern of hedges in the Wooded Hills. Woodland character, too, should be enhanced and protected – from the large interconnecting irregularly shaped blocks of the Wooded Hills and the estate plantations of the Limestone Estates to the unwooded, treed Village landscapes. In the latter, hedgerow and watercourse trees should be protected and/or replanted to address density and age structure where relevant and notably the extensive apple and plum orchards and hedgerow fruit trees of the Farmlands with Orchards should be protected or enhanced where appropriate. In the unsettled Riverside Meadows opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs; Cotswold AONB. Reduce the impacts of abstraction on the environment as part of the Restoring Sustainable Abstraction programme.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

Environmental Character Area: Eighteen	Carrant Brook Corridor
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and enhance the Carrant Brook, its water quality and stream side habitats.
Biodiversity	Protect, enhance and link the key features of interest with measures designed to improve the biodiversity and quality of the brook, and new features in the landscape to create biodiversity stepping stones between Bredon Hill and the Cotswolds.
Historic Environment	Explore opportunities to protect and reduce the erosion risk to below ground archaeology associated with extensive prehistoric and Romano-British settlement on the lower slopes of Bredon Hill and the gravel terraces of the Carrant Brook.
	Protect below ground deposits of high palaeoenvironmental potential associated with alluvial soils adjacent to the Carrant Brook.
Landscape Character	Enhance and protect the hedgerow field boundaries in a planned (or semi-regular in the Claylands) enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses in the Meadows or more scattered hedgerow and streamline trees in the Claylands. In the Village Farmlands, hedgerow elms are particularly characteristic and re-planting should be encouraged. Cropping land use here is characteristic with (often domestic) orchards and lines of fruit trees (mostly damson) forming notable features which should be retained and enhanced.
	Elsewhere, opportunities should be sought to retain pastoral land use that offers protection to the characteristic Ridge and Furrow in the Village Claylands and that supports natural river and flood plain function in the Riverside Meadows.
Blue Infrastructure	Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland).
	Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals.
	Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs; Cotswold AONB.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests.
	Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Nineteen	Longdon Hinterland
Strategic GI Approach	Protect and restore.
Primary Objectives:	
Overarching principles	Protect and restore the Longdon and Bushley Brook corridors.
Biodiversity	Protect, buffer and enhance existing sites and features, especially functional wetlands, including reedbeds, wet grassland and ponds. Conserve parkland and veteran trees.
Historic Environment	Explore opportunities to protect below ground archaeology associated with extensive multi-period settlement on the terraces and higher land surrounding Longdon Marsh. Protect historic water features and water courses and buffer key sites, such as moats and fishponds. Protect and buffer features associated with above the extensive historic water meadow and irrigation system surrounding Upton upon Severn. Protect below ground deposits of high palaeoenvironmental potential associated with Longdon Brook, Bushley Brook and their tributaries. Protect and enhance the diverse historic field pattern and hedgerow network.
Landscape Character	Protect and enhance the hedgerow field boundaries respecting the characteristic enclosure pattern of each Landscape Type – planned in the Riverside Meadows and Estate Farmlands, sub-regular in the Settled Farmlands on River Terraces; irregular and organic in the Principal Settled and Timbered Farmlands, respectively. Tree cover is typically provided by linear belts along hedgerows, ditches and watercourses in the Meadows, or trees associated with settlement in the River Terrace Farmlands; watercourse and hedgerow trees in the Settled and Timbered Farmlands and small plantations in the Estates. Seek opportunities to protect and enhance these characteristic, contrasting tree cover patterns to address density and age structure where necessary. Opportunities should also be sought to retain pastoral land use where it is the characteristic dominant land use, particularly the unsettled Riverside Meadows where management regimens should be encouraged that support natural river and flood plain function.
Blue Infrastructure	Reduce dependence on raised flood defences, as this is not sustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Seek opportunities to improve watercourses where it would benefit fisheries.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty	Kempsey Plain
Strategic GI Approach	Protect and restore.
Primary Objectives:	
Overarching principles	Protect and restore neutral grassland habitats and traditional field boundaries.
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for protection and creation including wetland and floodplain habitats in the river corridors. Create and enhance existing neutral grassland habitats and traditional field boundaries to aid connectivity and landscape permeability.
Historic Environment	Explore opportunities to protect below ground archaeology associated with extensive prehistoric and Romano-British settlement and ritual sites throughout the area and medieval archaeology adjacent to Kempsey. Protect sensitive below ground palaeoenvironmental deposits contained in palaeochannels adjacent to the Severn.
Landscape Character	Enhance and protect the hedgerow field boundaries respecting the characteristic enclosure pattern of each Landscape Type – planned in the Riverside Meadows, sub-regular in the Settled Farmlands on River Terraces, moving to irregular and organic in the Settled and Timbered Farmlands, respectively. Tree cover is typically provided by linear belts along hedgerows, ditches and watercourses in the Meadows, or trees associated with settlement or watercourses in the River Terrace Farmland; watercourse and hedgerow trees in the Settled and Timbered Farmlands. Opportunities should be sought for protecting and enhancing characteristic but contrasting tree cover to address density and age structure as appropriate. Opportunities should be sought to retain pastoral land use and management regimens in the Riverside Meadows that support natural river and flood plain function.
Blue Infrastructure	Reduce dependence on raised flood defences, as this is not sustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Seek opportunities to improve watercourses where it would benefit fisheries.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty One	River Teme Corridor
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore multi-functional river valley corridor and floodplain.
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for protection and creation including wetland and floodplain habitats in the river corridors. Create and enhance existing neutral grassland habitats and traditional field boundaries to aid connectivity and landscape permeability.
Historic Environment	Protect and enhance field boundaries and hedgerows associated with historic hay meadows on the Teme floodplain. Protect historic water features and buffer key sites, such as moats, fishponds and mills. Protect below ground deposits of high palaeoenvironmental potential associated with alluvial soils in the Teme corridor. Protect and buffer earthworks representing abandoned medieval settlement and land division.
Landscape Character	Composed predominantly of the unsettled Riverside Meadows Landscape Type where opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. Protect and enhance the hedgerow field boundaries in a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses. The surrounding landscapes are composed of the smaller-scale Principal Timbered Farmlands with a contrasting organic enclosure pattern – protect and enhance this where possible, also safeguarding and/or managing/re-planting hedgerow oaks to address density and age structure.
Blue Infrastructure	 Reduce dependence on raised flood defences, as this is not sustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Seek opportunities to improve watercourses where it would benefit fisheries (especially salmon). Reduce dependence on raised flood defences, as this is unsustainable in the long term, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This requires redevelopment to be limited to flood-compatible land-uses e.g. parkland). Some designated 'aquatic conservation' sites are in unfavourable condition (for example Teme SSSI). Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. SUDS must be encouraged and targeted within planning approvals. Encourage the retro-fitting of SUDS where surface water flooding is already a problem. Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs. Tackle issues of diffuse pollution in the catchment through the provision of advice to farmers under the England Catchment Sensitive Farming Delivery Initiative.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Two	Severn Meadows Corridor
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and enhance multi-functional Severn river corridor.
Biodiversity	Priority to protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Linking of networks to be applied where practicable. Restore functional stream corridors, and re-link flood plain corridors in particular wet and floodplain grassland, reedbed and wet woodland.
Historic Environment	 Explore opportunities to protect below ground archaeology associated with extensive prehistoric, Romano-British and medieval settlement adjacent to and east of the A443. Protect and restore historic hedgerows. Enhance and create linkages with wider historic environment green networks (hedgerows, woodland, parkland and river meadows) and protect the setting of the Hallow parkland landscape. Protect historic water features and buffer key sites, such as moats and fishponds. Protect features and watercourses associated with the extensive historic water meadows east and south-east of Grimley.
Landscape Character	Composed entirely of the unsettled Riverside Meadows Landscape Type where opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. Protect and enhance the hedgerow field boundaries in a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Three	Eardiston
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore networks and connectivity to the wider Teme Valley landscape
Biodiversity	Priority to protect and enhance existing site and biodiversity interest. Implementation and Delivery to be directed to existing site management and buffering as a first principle. Linking of networks to be applied where practicable.
Historic Environment	Protect and create linkages with wider historic environment green networks (hedgerows, woodland, parkland and river meadows) and protect the setting of Castle Tump near Eastham Bridge.
Landscape Character	Composed entirely of the unsettled Riverside Meadows Landscape Type where opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. Protect and enhance the hedgerow field boundaries in a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Four	Bewdley Fringe
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and enhance multi-functional Severn river corridor.
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for protection and creation including acid grassland and veteran tree, hedge and small woodland connectivity through linking, merging and buffering existing and newly created habitats. Implementation and delivery to be directed to existing site management and buffering as a first principle. Linking of networks to be applied where practicable. Restore functional stream corridors, and re-link flood plain corridors in particular wet and floodplain grassland, reedbed and wet woodland.
Historic Environment	Protect and restore locally distinctive historic hedgerows and field boundary patterns associated with piecemeal enclosure of former woodland and heath landscapes. Protect and restore the setting of Spring Grove Park and the setting of historic farmsteads north of Catchems End. Explore opportunities to restore heathland landscapes employing methods sensitive to historic asset conservation
Landscape Character	In these urban fringe areas, seek opportunities to restore the characteristic features of the three distinct Landscape Types that comprise this ECA - Riverside Meadows to the south, Sandstone Estatelands to the east and Principal Timbered Farmlands to the north. Where possible seek opportunities to address the characteristic (and contrasting) enclosure and tree cover patterns, particularly the hedgerows and scattered oaks in the Timbered Farmlands and linear watercourse tree belts in the Riverside Meadows. The varied (and uncharacteristic) land uses in the Sandstone Estatelands to the west, have disrupted the field boundary pattern and condition. Opportunities to address this could be sought as well as scrub/woodland management options to restore heathland character.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Five	Birchen Coppice
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore networks and connectivity to the wider Teme Valley and Wyre Forest landscape
Biodiversity	Priority to protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Linking of networks to be applied where practicable. Restore functional stream corridors, and re-link flood plain corridors in particular wet and floodplain grassland, reedbed and wet woodland.
Historic Environment	Explore opportunities to restore heathland landscapes employing methods sensitive to historic asset conservation; notably: historic field boundaries and potential prehistoric artefact scatters.
Landscape Character	Composed entirely of the Sandstone Estatelands Landscape Type. Seek opportunities to restore the inherent tree cover pattern where possible: tree belts and/or linear watercourse tree cover would be most appropriate (given the size of this small ECA), to retain the otherwise open feel of the Estatelands. The planned, geometric pattern (field boundaries and roads) should convey a sense of visual unity.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Six	Birlingham
Strategic GI Approach	Protect and restore
Primary Objectives:	
Overarching principles	Protect and restore the River Avon corridor and functional floodplain habitats.
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Newly created green infrastructure should augment the existing resource, and link priorities habitats including neutral grassland, field boundaries and traditional orchards. Maintain the River Avon corridor as a key green infrastructure link and augmentation the floodplain will be critical for a number of GI aspirations.
Historic Environment	Protect areas of Romano-British and early medieval settlement surviving as below ground remains. Protect medieval ridge and furrow earthworks. Protect and restore locally distinctive historic hedgerows and field boundary patterns associated with piecemeal enclosure of former open-field landscapes.
Landscape Character	Composed entirely of the Principal Village Farmlands Landscape Type. Enhance and protect the hedgerow field boundaries with a planned enclosure pattern of medium-to-large fields. Seek opportunities to protect or enhance tree cover associated with dwellings The cropping horticultural land use of the Village Farmlands is particularly characteristic, and localised domestic orchards and lines of fruit trees (often damson) are notable features to be protected or enhanced where appropriate.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	 Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Seven	Crowle
Strategic GI Approach	Restore and create
Primary Objectives:	
Overarching principles	Restore and create wet pasture and marshland
Biodiversity	Protect and enhance existing site and biodiversity interest. Implementation and delivery to be directed to existing site management and buffering as a first principle. Newly created green infrastructure should augment the existing resource, and link priorities habitats including hedges. Priorities for restoration are wet meadows and marsh habitats.
Historic Environment	Protect and buffer the line of the Roman road which is located to the east of the A4538 on a north-south alignment. Restore historic hedgerow field pattern.
Landscape Character	Composed entirely of the Wet Pasture Meadows Landscape Type in moderate condition. Restore and protect the hedge and ditch field boundaries and regular enclosure pattern. Restore the characteristic linear tree belts alongside ditches and watercourses. Seek every opportunity to retain areas of permanent pasture in this pastoral landscape.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Eight	Defford
Strategic GI Approach	Restore and create
Primary Objectives:	
Overarching principles	Restore and create landscape links and connectivity to estate farmlands landscape
Biodiversity	Information on the biodiversity of this site is limited. Links should be made with adjacent site management, in order to achieve site expansion, buffer and link the key priorities including the grassland network, hedges and small woodlands of the neighbouring estate farmlands.
Historic Environment	Defford Airfield was created directly from the former area of Defford Common. Protect and buffer surviving surface features associated with the former RAF airfield. The area has not been affected by modern agricultural practice and therefore the is a high potential for shallow surface archaeological deposits and artefact. Avoid significant ground disturbance in order to protect below ground archaeology.
Landscape Character	The majority of the site is composed of the Unenclosed Commons Landscape Type, with the Wooded Estatelands appearing to the northwest. While there have been localised high impacts of the former airfield which has given rise to scrub encroachment and fences in the Unclosed Commons to the north east, otherwise the area remains treeless and relatively open and this should be retained and enhanced where possible. In the Wooded Estatelands in the northwest portion, opportunities should be sought to restore and protect the field boundaries and representation of woodland in its characteristic forms – large discrete blocks (which may extend from beyond the site).
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Twenty Nine	Bickmarsh
Strategic GI Approach	Restore and create.
Primary Objectives:	
Overarching principles	Maintain traditional orchards, restore connectivity
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for restoration and creation including neutral and calcareous grassland, field boundaries, traditional orchard connectivity through linking, merging and buffering existing and newly created habitats.
Historic Environment	Restore locally distinctive historic hedgerows and field boundary patterns associated with piecemeal enclosure of former heath and marsh. Protect and buffer the Roman road (Honeybourne Road).
Landscape Character	Composed predominantly of the unsettled Riverside Meadows Landscape Type where opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. Protect and enhance the hedgerow field boundaries in a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses. The surrounding landscapes are composed of the smaller-scale Principal Timbered Farmlands with a contrasting organic enclosure pattern – protect and enhance this where possible, also safeguarding and/or managing/re-planting hedgerow oaks to address density and age structure.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change

Environmental Character Area: Thirty	Long Marston
Strategic GI Approach	Restore and create
Primary Objectives:	
Overarching principles	Maintain traditional orchards, restore connectivity
Biodiversity	Newly created GI features should aim to augment the existing resource concentrating on the main priorities for restoration and creation including neutral and calcareous grassland, field boundaries, traditional orchard connectivity through linking, merging and buffering existing and newly created habitats
Historic Environment	Restore locally distinctive historic hedgerows and field boundary patterns associated with the piecemeal enclosure of former open-field farming. Protect sensitive medieval ridge and furrow earthworks currently under pasture.
Landscape Character	Composed entirely of the unsettled Riverside Meadows Landscape Type where opportunities should be sought to retain pastoral land use and management regimens that support natural river and flood plain function. Protect and enhance the hedgerow field boundaries in a planned enclosure pattern of medium-to-large fields. Seek opportunities to address density and age structure in linear tree belts along hedgerows, ditches and watercourses.
Blue Infrastructure	Manage areas of low, moderate or high flood risk and take action where necessary to keep pace with climate change. Explore opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains. Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain by limiting redevelopment to flood-compatible land-uses e.g. parkland). Seek ecological improvements.
Access and Recreation	Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network; Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests. Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes. Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.
Transport	Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change