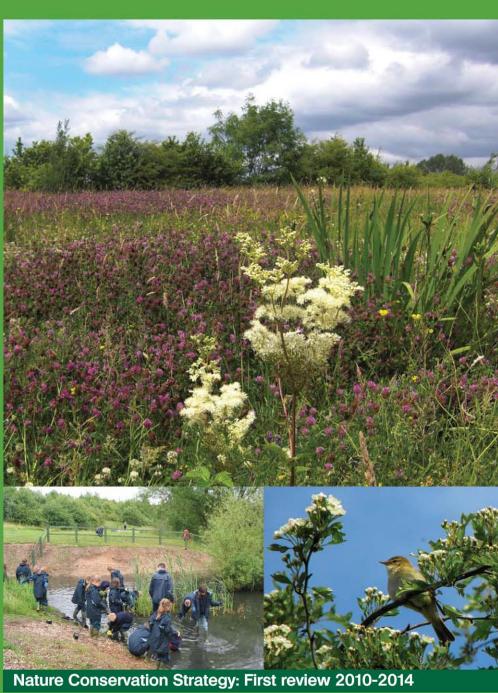


Nature Conservation in Solihull



Solihull Nature Conservation Strategy First Review 1.0 (10 February 2010)

Cover photographs, clockwise from top: Wet meadow at Blythe Valley Country Park Willow warbler Junior park rangers at Babbs Mill

Solihull Nature Conservation Strategy 2010 - 2014

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1. Introduction

1.1 THE VISION

"A SOLIHULL THAT ENJOYS A HIGH QUALITY ENVIRONMENT FOR THE BENEFIT OF BOTH PEOPLE AND WILDLIFE. WHERE BIODIVERSITY AND GEODIVERSITY PLAY AN ACTIVE ROLE IN PLACE-MAKING AND ECONOMIC ACTIVITY, CREATING ROBUST, SELF-SUSTAINING, BIODIVERSITY RICH LANDSCAPES WHICH PROVIDE A RANGE OF ECOSYSTEM SERVICES, RESILIENT TO CLIMATE CHANGE"

1.2 THE COMMITMENT

"THE COUNCIL WILL PROTECT SOLIHULL'S IMPORTANT WILDLIFE AND GEOLOGICAL SITES AND ENSURE THAT ITS DIVERSE NATURAL ASSETS ARE MAINTAINED AND ENHANCED."

Biodiversity is the variety of life on earth and includes all species of plants and animals and the natural systems that support them. Biodiversity is a core component of sustainable development, underpinning economic development and prosperity, and has an important role to play in developing locally distinctive and sustainable communities.

The following document provides guidance for the development of conservation policies to be set out in the forthcoming Local Development Framework documents and to provide guidance on how the authority expects nature conservation to be taken into account in the development control process.

This guidance should be read in conjunction with and consideration of all relevant Development Plan policies.

In order to secure development that meets policy requirements, officers of the Authority are available to discuss the advice set out in this guidance with applicants before they submit a planning application. The early submission of supporting information is recommended and, in some cases, required.

In implementing the policies covered by this guidance the authority will activity consider the use of a number of strategies, including the use of conditions and planning obligations/agreements.

Solihull's Nature Conservation Strategy is based on the following key principles:

- To protect, maintain and enhance the Borough's locally distinctive landscape, biodiversity and geological features.
- To restore and enhance biodiversity in order to repair fragmented habitats and buffer habitats to allow wildlife to adapt and respond to the effects of climate change. Full use will be made of opportunities presented by new developments to do this.

- To promote the sustainable management of the natural environment on both Council owned and privately owned land, and in doing so supporting objectives of Solihull's Climate Change Strategy through adaptation and mitigation.
- To maintain a robust evidence base on which to make sound decisions.
- To take opportunities to contribute to the attainment of regional and national biodiversity targets.
- The provision of access for people to experience wildlife locally, consistent with the protection of habitats and species.
- To encourage people to care for and enjoy biodiversity by engaging them in conservation projects, raising awareness and understanding of the benefits.

The purpose of the strategy is:

- To ensure that the importance of the natural environment is recognised by developers and the general public and policy and legal requirements are complied with.
- To provide a framework for existing and proposed biodiversity initiatives.
- To encourage partnerships with local communities, businesses and voluntary organisations to restore and enhance biodiversity.

The benefits:

- Safeguarding of plants and animals, the habitats in which they live and important geological features.
- · Positive management of the natural environment.
- Provision of an attractive environment and a sense of place and well being.
- · Increase resilience to a changing climate
- Increased public awareness of the natural environment.
- · Access to wildlife and recreational opportunities.
- · Increased physical health and mental well being.
- Increased partnerships between the Council, voluntary organisations and the community.
- Continued provision of ecosystem services including nutrient cycling, soil formation, fresh water, food production, wood, flood regulation, water purification, pollution control, improved air quality, in addition to aesthetic and spiritual benefits.

2. Context

2.1 **POLICY BACKGROUND**

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and came into force in 1982. The principal aims of the Convention were to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix 3. The Convention therefore imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1000 wild animal species.

To implement the Bern Convention in Europe, the European Community adopted Council Directive 79/409/EEC on the Conservation of Wild Birds (the EC Birds Directive) in 1979, and Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (the EC Habitats Directive) in 1992. A key provision of the Directives is the establishment of a European network of protected areas (Natura 2000) through the designation of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

The UK ratified the Bern Convention in 1982 and the Convention was implemented and transposed into national laws by means of the Wildlife and Countryside Act (1981 and as amended) and the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended), known as 'the Habitats Regulations'. In the UK, most SACs on land or freshwater areas are underpinned by notification as Sites of Special Scientific Interest (SSSIs). In the case of SACs that are not notified as SSSI, positive management is promoted by wider countryside measures, while protection relies on the provisions of the Habitats Regulations.

Another important convention was The Convention on Biological Diversity (Biodiversity Convention or CBD) which was adopted at the Earth Summit (United Nations Conference on Environment and Development) held in Rio de Janeiro, Brazil in 1992. This was the first international agreement to view biological diversity as a resource over which nation states have sovereign rights. Biological diversity thus attained the same status as mineral and other natural resources. The treaty provided a legal framework for biodiversity conservation, and the Convention established three main goals:

- the conservation of biological diversity.
- the sustainable use of its components,
- the fair and equitable sharing of the benefits arising from the use of genetic resources.

The Rio Convention served as a catalyst for the development of Biodiversity Action Plans internationally. In the 2001 EU Heads of State and Government undertook to halt the decline of biodiversity in the EU by 2010 and to restore habitats and natural systems. The subsequently-developed EU Biodiversity Action Plan addresses the challenge of integrating biodiversity concerns into other policy sectors in a unified way. The European Commission has undertaken to provide annual reporting on progress in delivery of the Biodiversity Action Plan.

At a national level, the UK ratified the Convention and the UK Government launched the UK Biodiversity Action Plan (UK BAP), a national strategy which identified broad activities for conservation work over the next 20 years, and established fundamental principles for future biodiversity conservation in 1994. This produced lists of threatened and declining species and habitats (amended and updated in 2007) with targets and specific actions for protecting and enhancing their conservation status. To compliment the UK BAP, separate biodiversity strategies for England and Northern Ireland were published to address biodiversity issues at a devolved country level.

The conventions and their subsequent outcomes set the context for nature conservation in the UK. Since the publication of Solihull's first Nature Conservation Strategy in 1999, conservation policy, strategy and legislation has developed at the local, regional and national scale, building on policy initiatives and key legislation, including the previously mentioned Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats &c.) Regulations 1994 (as amended). A key example is the Natural Environment and Rural Communities Act 2006 gives public bodies a conservation duty which is outlined in this section.

Conservation policy and legislation underpinning the implementation of the Nature Conservation Strategy can be found in appendix 3.

ASSETS 2.2

2.2.1 BIODIVERSITY IN SOLIHULL

Urbs in Rure, Solihull's motto literally means 'Town in the Countryside' which describes its essence. The Borough is part of the West Midlands Metropolitan area but has close historical links with Coventry and Warwickshire. Solihull's natural environment, part of the Arden Landscape, is rich in valuable habitats. Once dominated by the oak woodlands of the Forest of Arden, historical changes in land use have resulted in the development of grasslands and farmlands interspersed with remnants of ancient woodlands and hedgerows. These habitats and the associated groups of plants and animals are characteristic of Solihull's natural environment.



UK BAP Priority Habitats and Species

Nationally, the Government has prepared a list of habitats and species of principal importance for biodiversity conservation based on the UK Biodiversity Action Plan priorities. Local Authorities are expected to contribute towards achieving the targets for the listed habitats and species.

Broadbodied chaser

Priority habitats found within Solihull are:

Arable Field Margins Hedgerows* Lowland Meadows* Lowland Mixed Deciduous Woodland* Open Mosaic Habitats on Previously Developed Land New habitat (originally Post-industrial sites) Ponds* Purple Moor Grass and Rush Pastures Reedbeds* Rivers* Traditional Orchards* Wet Woodland* Wood-Pasture & Parkland*

Priority species occurring within Solihull include:

Great Crested Newt Slow-worm Common Toad **Grass Snake** Common Lizard Bats* Otter* Water Vole* West European Hedgehog Song Thrush* Skylark, Bullfinch, Yellowhammer amongst many other farmland birds

Local BAP Priority Habitats and Species

The following additional habitats found within Solihull, have also been identified as local priorities for action in the Warwickshire, Coventry and Solihull Local Biodiversity Action Plan: Scrub & Carr Wood-Pasture, Old Parkland & Veteran Trees Allotments (The) Built Environment Canals Churchyards & Cemeteries Disused Industrial & Railway Land Fen & Swamp Gardens Parks & Public Open Spaces **Quarries & Gravel Pits** Roadside Verges School Grounds

The following additional species found within Solihull, have also been identified as local priorities for action in the Warwickshire, Coventry and Solihull **Local Biodiversity Action Plan:**

Barn Owl Black Poplar Farmland Birds Lapwing Scarce Arable Plants White-Clawed Crayfish

Woodlands

There are two main types of woodland found throughout Solihull; ancient semi-natural and secondary woodlands. Ancient semi-natural woodlands are remnants of the Forest of Arden, dated from 1600 or earlier. Dominant trees are typically oak and birch and ash with small-leafed lime in places. Characteristic ancient woodland ground flora includes vellow archangel, wood anemone and bluebells.



Woodland at Brueton Park

Because of their age, these woodlands may also be of archaeological significance, preserving historic boundary banks, saw pits or evidence of charcoal burning. Good examples of ancient semi-natural woodland can be seen at Millison's Wood and York's Wood which have carpets of bluebells in spring.

Newer secondary woodlands, mostly planted in the 19th Century, have names such as 'covert', 'gorse' and 'spinney'. They typically consist of a mixture of oak, birch, sycamore, beech and ash; for example, Mill Pool Spinney in Solihull and Nappins Covert in Barston.

Woodlands are complex habitats with a rich variety of wildlife. Tree canopies, shrub layer (commonly holly and hazel) and ground flora all provide homes for insects including butterflies, birds such as woodpeckers; and mammals such as foxes and badgers.

The Council runs a Woodland Management Programme which actively manages 26 woodlands supported by the vital help of conservation volunteers. This is guided by a series of Forestry Commission approved Native Woodland Plans (Woodlands North, Woodlands South and Millisons Wood).

Hedgerows form an important part of the Arden landscape giving character to the countryside and distinctiveness to local areas. They also have historical and cultural value. Hedgerows act as wildlife corridors across the Borough linking habitats and allowing movement of animals and colonisation by plants. Hedgerows provide vital habitat, shade, shelter and food for a wide range of insects and butterflies, nesting birds, small mammals and larger mammals including foxes and badgers.

Some hedgerows are old and species rich, with mature oak trees, often remnants of the old Forest of Arden, and provide a stronghold for ancient woodland flora. Other hedgerows give a glimpse of the past, marking field and parish boundaries showing how the land was divided and managed. Newer enclosure hedgerows are typically less diverse, dominated by blackthorn and hawthorn, but these still have high conservation value.

^{*} Indicates habitats also found on the Warwickshire, Coventry and Solihull LBAP

^{*} Indicates species also found on the Warwickshire, Coventry and Solihull LBAP



Grassland at Blythe Valley

Grassland

There are a number of different types of grassland found in Solihull. The value of the grassland for wildlife depends upon a number of factors, in particular the nature of the soil and any previous management. Many pastures have been improved by the use of fertilisers and ploughing as a result of farming activity. These grasslands are typically dominated by rye grass and are relatively species poor. In contrast, species-rich unimproved or semi-improved grasslands have a high conservation value, supporting many colourful butterflies and other insects. Unimproved grassland meadows can have great floral diversity including a variety of grasses, yellow rattle, knapweed, devils-bit scabious, and

cowslips. Good examples can be seen at Shadowbrook Meadows near Hampton in Arden and Monkspath Meadow, both of which are SSSIs.

Amenity grasslands found in formal parkland and public open spaces have lower wildlife value, as they are closely mown and fertilised. However, they can provide foraging areas for birds and small mammals in urban areas. In wet areas, often along rivers and streams, marshy grassland can be found. These can be very species rich with various tussock-forming rushes and sedges, meadowsweet, ragged robin, yellow rattle, marsh marigold and southern marsh orchid. Excellent examples are seen at Bickenhill Meadows and meadows along the River Blythe. Abandoned land can also develop a diverse flora which often supports a wide variety of insects and other invertebrates.

Grassland that has a mosaic of scrub and grassland/wetland can be particularly valuable supporting a wide range of biodiversity.

Farmland

The majority of Solihull's countryside is farmland. Traditionally, Arden pastures and arable farmlands are characterised by small to medium field patterns with old field ponds. Winding narrow lanes and sunken trackways link scattered farms and hamlets. Many fields are bounded by ancient species-rich hedgerows, often with a ditch and bank. Permanent pastures are typically associated with poorer soil, but have a diversity of plants and animals and are good for wildlife, providing feeding grounds for badgers and birds. In contrast, intensively farmed arable land has little value for wildlife. As a result of government policies, major agricultural changes have taken place since the 1940's that have had a significant effect on the value of farmland for wildlife. These include an increase in arable land, at the expense of permanent pastures; the increased use of pesticides and artificial fertilisers which has decreased the variety of wildlife, and polluted streams and rivers; and the removal of important hedgerows and trees. However in recent years, agri-environment schemes such as Countryside Stewardship and now Entry and Higher Level Stewardship have supported land managers to manage their land in a way that enhances its value for nature. Solihull Metropolitan Borough Council (SMBC) has Stewardship agreements at Elmdon Park and Brueton Park. This enables the Council to carry out conservation management to benefit a wide range of biodiversity.

Heathland and Bog

Heathland was once a common feature in Solihull. This is reflected in place names such as Hockley Heath and Elmdon Heath. However, it is now rare in the Borough and declining nationally, due to heath being lost to farmland and urbanisation. Fragments of heathy grassland survive at Packington and Earlswood, which support many insects, birds, amphibians and reptiles. Typical heathland plants, including heather, bilberry, gorse, broom and bracken, are still found along roadside verges and in woodlands and hedgerows.

Bogs are permanently wet habitats where dead plants do not fully decompose but form peat rather than soil, and are characterised by sphagnum moss and sundews. There is only one area of true bog left in Solihull, at Bickenhill Plantation, which is designated as a Local Wildlife Site (LWS).

Wetlands

There are a variety of ponds and lakes found across the Borough providing standing water habitat. Lakes are an important feature of many parks in Solihull, providing a haven for wildfowl and fish. Lakes are also formed at gravel pit extraction sites, for example, Ryton End in Barston and at Cornets End in Meriden. Lakes have a high amenity and recreation value too. Many countryside ponds in Solihull occur in the corner of fields and were traditionally used for livestock to drink. These are becoming gradually overshaded and dried up and sadly, many are being lost.



Swans at sunrise, Elmdon

Others originated as mill ponds and have an additional historic significance. The enhancement of ponds in housing estates and new garden ponds are replacing some of the lost resource. In addition, ponds are often found in woodland clearings, for example, Palmers Rough in Shirley. Ponds are important wildlife habitats which support a wide variety of plants and animals including rare and endangered species. Floating, submerged and marginal aquatic plants provide homes for insects, including dragonflies and damselflies; and wildfowl, such as ducks, moorhens and coots. Ponds are also valuable for amphibians such as frogs, toads and newts. Warwickshire is a stronghold for Great Crested Newts, which are an endangered species, protected by wildlife law.

Canals

There are two canals within Solihull. The Grand Union Canal flows through the centre of the Borough and the Stratford-on-Avon Canal flows through Hockley Heath and Packwood. Canals provide green corridors, bringing wildlife to semi-urban areas and are an important remnant of our industrial heritage. In places, the combination of the water, aquatic plants, bankside vegetation, trees, grassland and embankments provide ideal habitat for fish, wildfowl, dragonflies and damselflies, herons, kingfishers and even water voles and badgers. Woodland trees, hedgerows and wildflowers can be found along canal embankments, for example at Knightsbridge Road Wood in Olton.



Cole Bank LNR

Rivers and Streams

Two main rivers flow through Solihull. The rural River Blythe meanders through the centre of the Borough. The whole of the river is designated as a Site of Special Scientific Interest (SSSI) and a Strategic River Corridor by the Environment Agency and is the finest example of a lowland river on clay in Britain. As such, the aquatic plant and invertebrate communities found are rare. However, the Blythe is currently in 'unfavourable condition' according to Natural England due to agricultural and sewage pollution. The River Cole starts in Worcestershire, flows through Birmingham and North Solihull and joins the Blythe in North Warwickshire. The whole of the urban Cole valley is cared for as a wildlife corridor, with Project Kingfisher,

Kingfisher Country Park looking after a 7mile (11km) stretch in North Solihull, bringing the countryside to urban areas. Although stretches of river are polluted, it still provides a valuable green corridor for wildlife as well as recreation.

Animals found include dragonflies, fish, kingfishers, herons, wildfowl, frogs, toads, newts and various aquatic plants.

There are many streams within Solihull, although some in the urban areas are canalised or culverted and may be polluted. Wherever development occurs on sites containing culverted watercourses, the Council will encourage the opening up of culverts into open channel. In rural areas, streams flow across fields linking wildlife habitats. River corridors often provide additional habitat of ponds, marshy grassland areas and waterside trees of willow and alder, for example at Packhorse Bridge, Hampton in Arden and Shelly Coppice Meadows, near Monkspath, which are important for breeding birds and insects. Natural banks and emergent reed fringes provide suitable water vole habitat, and the otter is also reported to be returning to the Borough.

In recent years otters have re-colonised Solihull and signs of otter activity have been found in the Tame catchment and on the River Blythe. All major watercourses in Solihull are considered by the Environment Agency and SMBC to be ofter positive.

Water vole habitat is present in the form of emergent reed fringes on both the Cole and the Blythe but the North American mink had reduced water vole populations drastically across the country. There are very few water vole records for Solihull.

The white-clawed crayfish live in a diverse variety of clean aquatic and are found on a number of streams and rivers in Solihull. A major threat to the native whiteclawed crayfish is posed by the introduction of non-native species of crayfish, the North American signal crayfish. The introduced species pose a threat not only because some are disease-carriers, but also through predation and competition with white-clawed crayfish. It is only in areas free of disease that white-clawed crayfish are likely to survive in the future.

Natural Corridors

Natural corridors form a network across the Borough, linking different habitat types. There are a variety of different natural corridors including rivers, canals, railways, road verges and hedgerows. By providing continuous links of natural vegetation, wildlife corridors allow the movement of plants and animals, ensuring that populations are able to mix and remain viable. Natural corridors are particularly important wildlife assets in urban areas bringing the countryside into the town. "Green wedges" and "stepping stones" also link green urban spaces with the countryside. An excellent example of a natural corridor is the River Cole along the Cole Valley, Kingfisher Country Park. Natural corridors are also important in increasing Solihull's adaptive capacity to Climate Change. Good habitat connectivity throughout the borough will enable the delivery of SMBC's Climate Change Strategy (2009) and National Indicator 188: Planning to Adapt to Climate Change.

Landscape

The appearance of Solihull's landscape is generally one of rolling countryside with irregular fields defined by thick hedgerows some wooded areas, a network of narrow lanes and a dispersed settlement pattern. It is part of the wider Arden landscape assessed through a joint project by Warwickshire County Council and the Countryside Commission (CC). The landscape assessment identifies seven distinct local landscape types, of which Arden Parklands, Arden Pastures, Ancient Arden, and Arden River Valleys are evident in Solihull.



Dickens Heath

A management strategy and landscape guidelines for each of the local landscapes is included in the Warwickshire Landscapes Guidelines for Arden published in 1993.

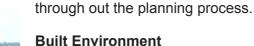
Solihull's countryside generally consists of good to moderate quality agricultural land (mostly grade 3) capable of supporting a healthy mixed farming economy. Whilst the intensification of farming methods has led to some removal of hedgerows and the creation of larger fields, the overall character of the landscape has not been severely damaged. Moreover, Green Belt policy has been effective in limiting development.

Historic Environment

Every place has its distinctive character often determined by its inherited features such as streets, hedges, archaeological sites, buildings or place names. Understanding this character is one of the first steps in deciding a place's future. Solihull's countryside contains many historic and archaeological sites, ranging from early prehistoric occupation and burial sites to defences of the Second World War. Many of Solihull's listed buildings and scheduled ancient monuments are located in the countryside or in rural settlements. All are recorded in detail on the Sites and Monuments Record. Awareness of the significance of sites is growing, with an increasing number, such as Eastcote Hall moat and Temple Balsall Preceptory being recognised as nationally important.

There are few sites of industrial heritage in the countryside, but the two canals in Solihull (the Grand Union Canal and the Stratford-on-Avon Canal) are part of the historic landscape, incorporating features which British Waterways has recorded on its heritage database.

The historic environment is particularly important as a finite and non-renewable resource which is fragile and cannot be recreated. Characterisation offers a constructive approach to heritage and conservation. Its premise is that any regeneration or development is set within an inherited landscape containing the remains of human activity, whether built or not, designed or 'vernacular', and (perhaps even more importantly) connected, whether physically or intangibly, to other parts of the historic environment. A Historic Landscape Characterisation programme for the sub-region was completed in 2009. This project, initiated by English Heritage and run in partnership with County Council Sites and Monuments Records, provides a framework for broadening our understanding of the whole landscape and contributes to decisions affecting tomorrow's landscape. Solihull MBC will incorporate the results of the HLC as part of the emerging Green Infrastructure Strategy and the development of the LDF, to ensure that Scheduled Ancient Monuments, such as Hobbs Moat, and features of the historic environment, such as ridge and furrow fields and ancient lanes are considered



Within the built environment, many other areas support or have the potential to support a wide range of wildlife. Open spaces, churchyards and allotments can all be managed to encourage wildlife. Private gardens can also be valuable, particularly where there are large gardens in otherwise densely developed areas. Planning Policy Statement 3 (PPS3): Housing, states that local authorities should develop design policies that set out the quality of development that will be expected for the



Solihull town centre

local area, by promoting designs and layouts which make efficient and effective use of land, including encouraging innovative approaches to help deliver high quality outcomes. Back land development is often viewed as economic use of land; however PPS3 also states that proposed development should:

- create or enhance a distinctive character that relates well to the surroundings and supports a sense of local pride and civic identity
- provide for the retention or re-establishment of the biodiversity within residential environments.

It is therefore important to balance the economic use of land with the retention of the character of the area and the biodiversity within the built environment. Brownfield sites, though rarely undeveloped for long in Solihull, often develop into valuable wildlife habitats.

Sustainable drainage systems (SUDS) provide an alternative approach to piped systems. Whereas piped systems are characterised by a limited capacity, fast conveyance and no reduction in volume, SUDS mimic natural drainage processes with the characteristics of storage, slow conveyance and some volume reduction. There are a number of techniques that encompass the essential elements of SUDS such as green roofs, porous paving and ponds.

The use of permeable surfaces in front gardens should homeowners wish to increase the amount of hard standing should be promoted to reduce surface water flood risk and support recent changes regarding planning permission.

Living roofs can play a key part in climate change mitigation and adaptation. As well as enhancing biodiversity in urban areas, their benefits include: improved building insulation; improved stormwater management, through reducing the volume and rate of rainwater run-off; reduction of the urban heat island effect; improved air and water quality and a prolonged roof life.

Green Infrastructure

The network of green spaces and natural elements that intersperse and connect, are at the heart of our cities, towns and villages comprise our Green Infrastructure. Green Infrastructure includes open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees and open countryside. Green Infrastructure may be green, brown or blue, such as canals, derelict land, or ploughed fields; it is publicly and privately owned, and it may be semi-natural or man-made in its origins. It may be considered the essence of local character and a sense of place, the very heart of a community, or dear to the hearts of many thousands some distance away. It comprises all environmental resources, and thus a green infrastructure approach also contributes towards sustainable resource management.

Green Infrastructure provides multiple benefits for the economy, the environment and people. It has the clear potential to support address both personal objectives (e.g. an attractive, accessible and meaningful local environment) and wider social and governmental objectives (e.g. promoting healthy living and managing the long term finances of health care for an ageing population), i.e. quality of place, quality of environment and quality of life.

Green Infrastructure may also be seen as part of the life-support system of an area; providing functions and environmental services to a community, such as employment, recreation, physical health and mental well being, social interaction, contact with nature, sustainable drainage systems and enhanced flood alleviation, climate change adaptation and pollution control, improved air quality and providing conditions for biodiversity. These are also known as ecosystem services; biodiversity, through the provision of ecosystem goods and services, supports all of our economic and social development, and is vital to our health and well-being.

Ecosystem Services

Ecosystem services can broadly be broken down into 4 areas: supporting services (nutrient cycling, soil formation etc), provisioning services (fresh water, wood), regulating services (flood regulation, water purification) and cultural services (aesthetic, spiritual, educational and recreational). Truly sustainable development must incorporate all areas of human activity and our interactions with the environment, and therefore requires that social, economic, public health and environmental needs be resolved holistically. In order to fully achieve sustainable progress stakeholders and the wider public must work to integrate a multitude of otherwise distinct disciplines.



Himalayan balsam at Brueton Park

Invasive species

A number of plant species covered either by the Weeds Act 1959 or by the Wildlife and Countryside Act 1981 should be controlled. Under the Weeds Act 1959, although the primary responsibility for weeds covered under this act lies with the landowner, DEFRA can take action if there is a risk that the plants might spread to neighbouring land. It is not actually illegal to have any of the five species growing on plots of land.

These species, known as injurious weeds, are:

- Common ragwort (Senecio jacobaea)
- Broad leaved dock (Rumex obtusifolius)
- Curled dock (Rumex crispus)
- Creeping or field thistle (Cirsium arvense)
- Spear thistle (Cirsium vulgare)

Section 14(2) of the Wildlife and Countryside Act 1981 covers a range of other species, including Japanese Knotweed (Fallopia japonica), Giant Hogweed (Heracleum mantegazzianum) and Rhododendron (Rhododendron ponticum), listed in Schedule 9, Section II. Under this law, "It is an offence for a person to plant or otherwise cause to grow in the wild any plant on Schedule 9 (Part 2)"

Other problem species include numerous pond pests such as (Floating Pennywort (Hydrocotyle ranunculoides), Parrots Feather (Myriophyllum aquaticum) Australian Swamp Stonecrop also called New Zealand Pigmyweed (Crassula helmsii) Water Fern (Azolla filiculoides)) in addition to Himalayan Balsam, mink and signal crayfish. All of which have been introduced either accidentally/deliberately into the UK's ecosystems and have subsequently out competed or have been found to transmit harmful diseases to our native species.

There has been increasing pressure on landowners to take responsibility for the control of invasive species and the Council should be seen to take an active role in promoting a responsible attitude particularly as a significant landowner itself. The Council manages invasive species through measured responses from sightings or complaints, e.g.

- Ragwort is pulled or mown at irregular locations (highway verges and areas of public open space) as necessary and disposed of responsibly
- Japanese Knotweed has been sprayed regularly in 3 woods as well as one off sprays at ad hoc locations
- Himalayan Balsam has been cut and pulled at The Decoy, (Woodlands Cemetery) through volunteers
- Rhododendron has been cut and removed at Elmdon Coppice for a number of years primarily by volunteers.

The Council also has issues of refuse dumping on green spaces and local nature reserves. The result is the spread of garden escapees, the suppression of our native flora and in turn a loss of suitable egg laying sites and feeding sites for our native invertebrates and birds. The council supply green wheelie bins and collects green waste for householders; therefore this is a problem the Council has taken some action to prevent.

2.2.2 GEOLOGY AND GEODIVERSITY

The majority of the underlying rock in Solihull is the Triassic Mercia mudstone formation, consisting of red marls and siltstone. This material has formed the basis of an extensive brick making industry during the 18th and 19th Centuries, a remnant of which can be seen at Nursery Cottage (Arden) Brickworks Local Geological Site (LGS), along the A45, near Stonebridge. There are several outcrops of Arden Sandstone in the south-east of



Arden Brickworks LGS

the Borough, an important building stone in this area in the past. Of particular interest is an outcrop of Lias limestone around Knowle, which accounts for the calcareous nature of some grasslands. Large expanses of the Borough are covered in boulder clay with interesting glacial lake deposits between Cheswick Green and Hockley Heath and south of Balsall Common. In addition there are well developed river terrace deposits on both sides of the River Blythe.

There are 3 LGS in Solihull: Nursery Cottage (Arden) Brickworks, Meriden Hill Cutting and River Blythe Oxbow. The emerging LGAP has identified a number of key issues for Local Geological Sites and geodiversity in the sub-region and set the following objectives:

- to identify and audit the geodiversity resource
- · to conserve and manage the geodiversity resource
- to protect geodiversity through the planning system
- to research geodiversity
- · to increase awareness of geodiversity

2.3 CLIMATE CHANGE

To meet the challenge that climate change presents, the Council must reduce its carbon footprint and increase its adaptive capacity, in addition to communicating the risks, benefits and opportunities presented by climate change and the benefits of taking action and lead action. In terms of biodiversity impacts, the Council needs to ensure good habitat connectivity exists throughout the Borough and that areas do not become isolated or fragmented. This will ensure that our native flora and fauna can adapt to climate change by physically moving. Adjustments to the management of parks, roadside green spaces and gardens may need to be made to ensure the survival of plants sensitive to higher temperature and wetter winter conditions. In addition the Council will need to monitor and control the introduction or spread of non-native flora and fauna that take advantage of the changed conditions.

3. The Strategy

PROTECTION

The Council will protect Solihull's important nature and geological conservation sites and ensure that its diverse natural assets are maintained.

3.1.1 DESIGNATED SITES AND PROTECTED SPECIES



Statutory sites, such as SSSIs and LNRs, and non-statutory sites, such as Local Sites (Wildlife and Geological), are subject to special protection in law and the UDP respectively, because of their contribution to nature conservation, earth heritage and local distinctiveness. However, protection of these sites alone, which cover a small proportion of the Borough's area, will not be sufficient to ensure the survival of Solihull's biodiversity and geological features making it important to protect and enhance the wider green network, particularly to help adaptation to climate change.

Bluebells and Stitchworts

licensing requirements.

Protected Species

Activities are required to be undertaken with due regard for the safeguarding of protected species. Current wildlife legislation in the UK informs both the timing of habitat management in addition to any

In conjunction with Natural England and other partners, the Forestry Commission has prepared a series of good practice guides for different European protected species that are woodland resident and most likely to be affected by woodland management and forestry operations. Woodland managers need to consider the presence of protected species and follow good practice guidance to avoid committing an offence. In some cases management practices may need to be modified or rescheduled to a less sensitive time of year, and where this is not possible or adequate then operators may need to apply for a licence to remain within the law. Most activities will be able to continue without the need for a licence through the following of good practice guidance. The Forestry Commission, nationally through this resource and locally through our network of regional offices, will be able to provide support in relation to the changes and the guidance provided where protected species are present, and will process any applications for licences to carry out work where they are needed.

The RSPB has also published a plain guide to bird protection today listing species on Schedules 1 and 9.

Where a valid justification exists, Natural England's National Licensing Service issues licences under wildlife legislation for activities that would otherwise be

illegal. The purposes depend on the species and the particular legislation, but they commonly include:

- Conservation reasons
- Development projects
- · Preventing or reducing damage
- Protecting public health & safety
- Photography
- · Science and education activities
- Keeping or releasing wildlife.

However, such licences are likely to require mitigation/compensation proposals that benefit the species, such as additional habitat creation and beneficial habitat management. Surveys for protected species should be undertaken at the appropriate time for the species been investigated and utilised to inform management/planning decisions. Solihull's Biodiversity and Geological Conservation Validation Checklist provides landowners and planners details of the types of applications that require ecological surveys before a decision can be made in addition to the time of year to undertake the survey. Details of some of the more familiar protected species likely to be encountered are given below. though this list is not exhaustive.

In England, Scotland and Wales all bat species are fully protected under the Wildlife and Countryside (WCA) Act (1981) as amended, through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way (CRoW) Act (2000), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions and increases penalties. All bats are also included in Schedule 2 of the Conservation (Natural Habitats &c.) Regulations (1994) as amended, which defines 'European protected species of animals.' In summary it is a criminal offence (subject to certain specific exceptions) to:

- capture or kill a bat
- · disturb a bat whilst in a place of shelter or rest
- damage or destroy a bat roost

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording in the legislation is 'any structure or place which any wild animal...uses for shelter or protection' (WCA) or 'breeding site or resting place' (Habitats Regulations).

Nesting Birds

All birds, their nests and eggs, are protected by law to some degree and it is therefore an offence, with certain exemptions, to:

- · intentionally kill, injure or take any wild bird
- intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built
- intentionally (or recklessly, in England and Wales only (CRoW 2000)) disturb any wild bird listed on Schedule 1 while it is nest building, or at (or near) a nest containing eggs or young, or disturb the dependent young of such a bird.

A wild bird is defined as 'any bird of a kind which is resident in or a visitor to Great Britain in a wild state. (Game birds however are not included in this definition. They are covered by the Game Acts, which fully protect them during the close season.)

Badgers

Badger legislation has been combined under one act, the Protection of Badgers Act (1992) which makes it illegal for any person to kill, injure or take a Badger. It is an offence to cruelly ill-treat a Badger, to dig for or to snare a Badger. Under the 1992 Act it is now illegal to damage a badger sett or cause a dog to enter a sett. It is also an offence to attempt any of these actions or recklessly allow a dog to enter a sett.

Great Crested Newts

In England, great crested newts (GCNs) are protected under the Wildlife & Countryside Act (1981) and the Conservation (Natural Habitats, &c.) Regulations (1994). The legislation prevents intentional killing or injury to individual newts and the deliberate damage or disturbance to their habitat. It is generally taken that terrestrial habitat within 500 metres of a pond will function as habitat for the animals and as a result is covered by the legislative framework.

Priority habitats and species

Section 74(3) of the Countryside and Rights of Way (CRoW) Act 2000 and section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 requires the Secretary of State, to publish a list of species and habitats which are of principal importance for the conservation of biodiversity in England. The list of species and habitats (drawn up in consultation with Natural England) are those which have already been identified as priorities under the UK BAP. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, which requires every public body in the exercising of its functions to 'have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. In particular:

- Local Planning Authorities will use it to identify the species and habitats that should be afforded priority when applying the requirements of Planning Policy Statement 9 (PPS9) to maintain, restore and enhance species and habitats.
- Local Planning Authorities will use it to identify the species and habitats that
 require specific consideration in dealing with planning and development
 control, recognising that under PPS9 the aim of planning decisions should be
 to avoid harm to all biodiversity.
- All Public Bodies will use it to identify species or habitats that should be given priority when implementing the NERC Section 40 duty.

Integrating the needs of England's priority species into habitat management

There has been a shift to a more integrated approach to biodiversity conservation with the aim of recovering habitats and species as well as the 'ecosystem services' that they underpin. New approaches to Biodiversity Action Plan delivery across the UK are placing greater emphasis on achieving our biodiversity targets through habitat-based delivery. Natural England has published a Research Report on integrating the needs of priority species into habitat management. The report concludes that for species conservation to be effectively integrated into a habitat-based approach a much greater emphasis should be placed on creating the component niches and resources required by BAP species, rather than managing habitats generically. For example, structural variation within and between habitats is often an important factor, both because different species require different structural states and because many species rely on many different states to complete their life cycles.

For wetlands, hydrology, water quality and the transitional zone between aquatic and terrestrial habitats are all critical components of priority species requirements.



The Slow worm is protected under European and UK law.

3.1.2 THE WIDER ENVIRONMENT

Protection of the natural environment in the wider countryside, in addition to natural corridors and stepping stones in urban areas is crucial for wildlife survival. These features (sometimes called Green Infrastructure) link sites of biodiversity importance and provide routes for the migration, dispersal and genetic exchange of species in the wider environment.

The protection of the natural environment is also important to maintain and develop a functional and resilient landscape, which in turn provides the vital ecosystem services (the processes by which the environment produces resources utilised by humans such as clean air, water, food and materials) we rely upon and support our social and economic well-being.

The UDP provides some protection from harmful development outside of designated sites through ENV10. Important trees and woodlands are protected through ENV14 and the Hedgerow Regulations 1997 help protect ancient and or species rich hedgerows in the wider countryside. PPS9 directs planning authorities to include policies to protect networks of habitats. Through the protection of its natural environment will contribute to building sustainable communities by creating quality places that are healthier, safer, stronger and more prosperous.

Furthermore the Council will deliver regional biodiversity targets, support initiatives such as the Landscapes for Living Project and other agendas, such as healthy living.

WHAT THE COUNCIL WILL DO:

- Fulfil its statutory duties in relation to the protection of SSSIs, LNRs and protected species in the Borough.
- Fulfil its statutory obligations in relation to s40 of the NERC Act.
- Protect sites of local biodiversity and geological interest, ensuring important sites are considered for designation as Local Sites or SSSIs where appropriate.
- Designate Local Nature Reserves at appropriate sites.
- Protect the green infrastructure of the borough i.e. networks of natural habitats such as nature reserves, Local Sites, LBAP priority habitats, woodlands, hedgerows, disused railways, allotments, river and canal corridors.
- Utilise sustainability appraisals to ensure that climate change mitigation is addressed in all relevant council strategy, policy documents and major projects.
- Protect and enhance biodiversity by supporting the implementation of LBAPs through Council operations and continuing to support the LBAP Partnership.
- Liaise with the Forestry Commission over Forestry Act felling licence applications that include TPOd trees or woodlands, or that are within Conservation Areas. In these cases the Forestry Commission will take account of any comments made during consultation, and will make the decision on whether felling is to be permitted, and what conditions are to be put in place as mitigation.
- Continue to implement tree preservation order (TPO) regulations where necessary to safeguard important trees and woodlands that contribute to the amenity quality of the built and rural environment where trees are protected and/or threatened.
- Continue to handle individual and group tree work where TPOs or a Conservation Area exists, and where Forestry Act exemptions apply.
- · Enforce the Hedgerow Regulations.
- Conserve and enhance the Blythe Valley Strategic River Corridor.
- Ensure compliance with all other relevant wildlife and environmental law.
- Acquire, maintain and exchange quality species and habitat data with the Warwickshire Biological Record Centre, Wildlife Sites and HBA Partnerships to inform accurate decision making.

CREATION AND ENHANCEMENT

The Council will encourage habitat creation and the enhancement and restoration of fragmented habitats to maintain a biodiversity resource that is resilient in the face of climate change and which contributes to local, regional and national BAP targets.

3.2.1 FRAGMENTED AND DAMAGED HABITATS



Planting Hacket's Hedge, Brueton Park LNR

Pressures for development and intensive agriculture have placed enormous strains on Solihull's natural environment. The Council will support regional and sub-regional partnerships that identify potential biodiversity and geodiversity assets and encourage the sensitive management of these assets. Linking known sites and creating a functional resilient landscape adaptable to climate change and other potential environmental impacts.

3.2.2 AREAS OF WILDLIFE SCARCITY

There is substantial evidence that poor quality environments are strongly correlated with indices of multiple deprivation including poor health and economic attainment. This is evident within the Borough. for example, marked inequalities in health exist between the wards in the north and those in the south of the Borough. This is demonstrated most forcefully by the 9.7 year gap in life expectancy between the ward (Chelmsley Wood) with the lowest and the ward (St Alphage) with the highest life expectancy 1. Alarmingly, this gap is not narrowing, but widening, as people in the south of the borough get healthier. A similar pattern of inequalities is also seen with regard to long term limiting illness. The underlying causes of health inequalities are related to income, housing, education and the environment.

Research published in the Lancet ² shows that access to green spaces, such as parks and river corridors reduces health inequality. The health gap between richer and poorer residents in areas with access to green spaces was half of that in areas where such access was not possible. Links were revealed between the levels of income and access to green space, in relation to deaths from all causes, but particularly circulatory causes, such as heart disease. Researchers surmise that access to green spaces encourages activity and exercise, whilst other studies have linked access to green spaces to stress levels. This study demonstrates that differences in health inequality can exist between populations exposed to the same welfare state, health service and income, but living in different types of physical environment; with access or not to green areas. The report recommended that the impact of the physical environment on health inequality be taken into account in urban planning and development.

Creation and enhancement will therefore be important not only to make wildlife accessible for people in deprived areas, but to support social and economic development overall. Certain habitat types that would have once been relatively widespread are particularly scarce; the Council will look for opportunities to restore these LBAP habitats.

WHAT THE COUNCIL WILL DO:

- Provide a green infrastructure strategy, highlighting designated and important assets (e.g. habitats and corridors) and identify opportunities for future habitat restoration and creation.
- Integrate the green infrastructure into all relevant development plan documents and use the strategy to focus developer contributions to potential areas in need of habitat creation and restoration.
- Show the existing and planned wildlife network in relevant development plan, strategies and policy documents.
- Continue to protect, manage and enhance the River Cole Valley for the benefit of both people and wildlife
- · Allow habitats to regenerate naturally and create new adaptable habitats in accordance with the Arden Landscape Character Guidelines, LBAP habitat and species action plans that are resilient and adaptable to the implications of climate change.
- · Identify existing and potential sites of biodiversity in Solihull and explore the potential for habitat creation and restoration.
- Require developers to contribute to the provision and maintenance of green infrastructure in accordance with RSS Policy SR2.
- Encourage farmers, landowners and the public to create and enhance habitats.
- · Identify existing and potential sites of biodiversity/geodiversity value that could be expanded, buffered or linked to others.
- Use locally collected seed and plants for habitat creation, wherever possible.
- Identify locations where flood attenuation ponds or wetland areas could be developed with associated habitats improvement or creation. The success of this will be reported on through NI 189 3.
- Work with aggregate companies and the mineral and waste authorities to prepare a plan identifying current and future opportunities to create restoration that benefits both wildlife and flood risk management. The success of this will be reported on through NI 189 4.
- Create good quality environments that are rich in biodiversity to support social and economic development through all regeneration and development.

Solihull NHS Care Trust (2007)Health and Well-being in Solihull: Setting the Scene

² Mitchell, R. and Popham, F. (2008). Effect of exposure to natural environment on health inequalities: an observational population study. The Lancet. 372(9650): 1655-1660.

National Local Government Performance Indicator 189 (NI 189): Flood and coastal erosion risk management)

National Local Government Performance Indicator 189 (NI 189): Flood and coastal erosion risk management)

3.3 MANAGEMENT

The Council recognises that sympathetic management of the natural environment is essential to increase its value for both people and wildlife.

3.3.1 DESIGNATED SITES



Hedge laying at Lavender Hall LNR

Solihull has a number of nature reserves, parks country parks and farms which are managed by a variety of organisations (with essential support from volunteers) to improve their biodiversity value. A specific project exists to deliver Woodland Management in two of Solihull's principal parks (Elmdon and Brueton), which are under ten year Countryside Stewardship Management agreements. Natural England provides management prescriptions for SSSIs which farmers and landowners are required to adopt. The Council will work towards achieving the targets for LAA NI197 by ensuring that all land in its ownership will meet the targets and encouraging the achievement of positive conservation management on land in private ownership through support of the Wildlife Sites Partnership.

3.3.2 THE WIDER ENVIRONMENT

Solihull Council is a major land and property owner owning parks, public woodlands (managed by the Council with help from local conservation volunteers), playing fields, cemeteries, school grounds, golf courses and roadside verges, in addition to buildings and the built environment. The Cole Valley, an important wildlife corridor linking urban Birmingham with the North Warwickshire Countryside, is managed as a Country Park by Project Kingfisher, a joint project with Birmingham City Council. Private landowners and managers need encouragement and assistance to manage their land. The Council will promote initiatives encouraging sensitive management such as agri-environment schemes, and provide advice and assistance to farmers and landowners, wherever possible. Work with Community/Friends of Groups to promote, manage and enhance their natural environment parks and public open spaces.

WHAT THE COUNCIL WILL DO:

- Review the nature conservation value and management of its own land and property (estate) and promote opportunities for biodiversity enhancement and adaptation to climate change. The success of this will be reported on through NI 197 ¹, KLOE 3.1² and internal monitoring programmes.
- Resource and implement the Woodland Management Project and the delivery of the Forestry Commission adopted Native Woodland Plans.
- Continue to support and develop Project Kingfisher, Kingfisher Country Park and pursue its extension along the Kingshurst Brook and investigate and promote opportunities to create green corridors along other watercourses.
- Manage conserve, enhance and restore the quality, diversity and distinctiveness of the characteristic Arden landscape features and key habitats.
- Implement appropriate and feasible measures to control specific invasive species where they pose a threat to native flora and fauna.
- Review, prepare and monitor management plans and interpretation materials for its green spaces including principal parks, woodlands and Local Nature Reserves and make adjustments where required.
- Ensure that green space and park management is prepared for the local impact of climate change on planting and growing seasons.
- Encourage farmers and landowners to manage LWS and other sites sensitively and take advantage of land management grants. The success of this will be reported on through NI 197³.
- Promote the use of agri-environment schemes and Forestry Commission Woodland Grant Schemes by farmers and landowners.
- Work with Community/Friends of Groups to promote, manage and enhance their natural environment parks and public open spaces.
- Ensure appropriate aftercare and appropriate monitoring is built into any habitat mitigation as part of development.

National Local Government Performance Indicator 197 (NI 197): Improved Local Biodiversity

² Key Line Of Enquiry (KLOE) 3.1: Use of Resources (Part of the Comprehensive Area Assessment, CAA)

National Local Government Performance Indicator 197 (NI 197): Improved Local Biodiversity

IMPACT OF DEVELOPMENT

The Council will ensure that the biodiversity and geodiversity of the Borough is both protected and enhanced through the forward planning and development control process.

3.4.1 SUSTAINABLE DEVELOPMENT



Sustainable development is development which meets social and economic needs without undermining the quality of the natural environment. The Local Development Framework (LDF) plays a critical role in integrating these needs. During its development, the Council will carry out a full Sustainability Appraisal of all Development Plan Documents.

As well as taking into consideration existing habitat and species, all new development has the potential to enhance the Borough's biodiversity. It can do this by incorporating features of value to wildlife such as habitat corridors into landscape and built design or by providing compensatory Lavender Hall LNR features e.g. through offsite works. However in some instances, adequate mitigation may not be

possible or compensation will not be justified such as where networks of habitat or favourable conservation status of species may be affected by the loss of one particular piece of habitat or where habitats are not readily recreated.

WHAT THE COUNCIL WILL DO:

- Support good quality, sustainable development that respects and where possible enhances landscape character, local species, wildlife habitats and natural resources for the benefit of all.
- · Take full account of biodiversity and geodiversity issues in the development of the LDF and incorporate a set of appropriate biodiversity indicators.
- · Provide a green infrastructure strategy, highlighting designated and important habitats and corridors and identify opportunities for future habitat restoration and creation.
- Integrate the green infrastructure into relevant development plan documents and use the strategy to focus developer contributions to potential areas in need of habitat creation and restoration.
- · Prepare Supplementary Planning Documentation on biodiversity and geological conservation.
- Develop and adopt a Green Infrastructure strategy and implementation plan.
- Incorporate nature conservation and geological considerations into a Planning Obligations SPD.
- Use the Community Infrastructure Levy to help fund large scale landscape and habitat restoration in areas of fragmented and degraded habitats/landscapes.

- Ensure compliance with all relevant wildlife and environmental law.
- Implement PPS9 and the NERC Act 2006 fully in consideration of any development proposals.
- Screen all development proposals for potential impacts on biodiversity and geodiversity to ensure they are fully considered and to prevent delays in determining planning applications. Incorporate local biodiversity requirements into the standard on-line application process and prepare supporting information for developers and planners with regard to the safeguarding and enhancement of the local biodiversity, geodiversity, landscape and natural environment. Apply the SPD: Biodiversity and Geological Conservation Validation Checklist.
- Ensure that Environmental Assessments and species and habitat surveys prepared to support planning applications reflect the importance of the natural environment and are prepared to a high quality, in line with relevant guidelines.
- Seek opportunities to enhance existing and create new habitats associated with new development proposals in line with LBAP targets and the Arden Landscape Guidelines.
- Seek to work in partnership with the development and regeneration sectors to find means of delivering quality development which contributes to environmental protection and enhancement.
- Encourage the incorporation of sustainable drainage systems into development designs, including living roofs, porous paving and ponds, with associated habitat development.
- Encourage the safeguarding of priority LBAP habitats, including mature gardens where they provide key green corridors.
- Revise and improve the standard conditions for biodiversity and protected species to reflect their importance.
- · Set minimum environmental sustainability standards for all new development on council land and all council owned/led development. This would build on the requirement that all development as part of the North Solihull regeneration programme reaches level 3 on the Code for Sustainable Homes.
- Ensure natural floodplains, on both designated main rivers and ordinary watercourses, are enhanced and protected through policies in the LDF and ensure no development which would increase flood risk is approved contrary to EA advice, in order to safeguard Flood Zone 3 (1 in 100 year floodplain).
- Encourage the opening up of culverts into open channel, whenever development occurs on sites containing culverted watercourse.
- Seek opportunities to enhance watercourses and surrounding riparian habitat wherever possible, ensuring sufficient buffers are included to protect important wildlife corridors, whenever development occurs on sites containing watercourses
- · Continue to work with Birmingham International Airport with regard to the consideration of Aerodrome Safeguarding with respect to biodiversity enhancements.

3.5 ACCESS

The Council will ensure that accessible natural green spaces are retained and protected throughout Solihull for the benefit of both people and wildlife.

3.5.1 GREEN SPACE



Signage at Malvern and Brueton LNR

The provision and maintenance of a healthy, sustainable and attractive natural environment is an essential element in ensuring continuing economic prosperity as it contributes to quality of life. The natural environment is a public health asset and helps foster favourable perceptions of the Borough as a place in which to live and invest. It's also good for biodiversity.

The Green Spaces Strategy (2006) for the Borough aims to help deliver networks of accessible, high quality and sustainable green spaces that meet local needs and are valued by the community. Woodlands, river walkways, meadows, canals, nature reserves and parks are just some of the places where people can experience nature close at hand.

Current provision is assessed in the Council's Green Spaces Strategy against local standards in order to set priorities and provide a clear framework for future investment and management action. The Green Space Strategy has identified Zone Action Plans and some parts of Solihull have few accessible natural spaces. The Green Spaces Strategy has set targets to address this. However in some cases access to fragile habitats may have to be restricted and not all nature conservation areas are on publicly owned land.

WHAT THE COUNCIL WILL DO:

- Aim to give people access to a natural green space in accordance with the SMBC's Green Spaces Strategy targets and enhance access for those with special needs.
- Adopt Natural England's Accessible Natural Greenspace Standards
- Require developers to contribute to the provision and maintenance of natural greenspace
- Provide access for as many users, all ages, able bodied and disabled as possible
- Publish information on where natural green spaces can be found.
- · Improve interpretation at existing nature reserves.
- Increase the number of Local Nature Reserves by two a year for the next five years.
- · Ensure that access provision is integral to the future management and maintenance of the site
- · Use Green Flag to promote biodiversity initiatives
- · Improve access to natural green spaces for people with disabilities, wheelchairs and pushchairs.
- Aim to increase the number of Green Flag parks by one every year (baseline 07/08 is 4).
- · Carry out a Green Infrastructure study as part of the evidence base for the

PROMOTION, EDUCATION AND PARTNERSHIPS

The Council will encourage people to care for and enjoy wildlife by raising public awareness and understanding of the benefits of the natural environment and developing partnerships.

3.6.1 PROMOTION



Junior park rangers planting reeds, at Babbs Mill

Initiatives such as Project Kingfisher help raise the profile of Solihull's natural environment. Kingfisher Country Park has almost 405 ha of open space and wildlife following the River Cole valley as it runs through east Birmingham and North Solihull. Project Kingfisher was established in 1985 to care for 7 miles (11km) of the Cole Valley and as such was a pioneer of its time and one of the first landscape-scale conservation projects in the UK. The Country Park is managed by Birmingham City Council and Solihull MBC, supported by a partnership involving the Environment Agency, Natural England, local Wildlife Trusts and the Friends of Kingfisher Country Park.

The Council promotes and undertakes activities at various environmental events and activities during the year such as the Oaks and Shires woodland event held every autumn. The Council's LNR Officer and the ranger service play an important role in this and the rangers have developed a series of leaflets for park users explaining their value for biodiversity. The Council is committed to the designation of Local Nature Reserves for conservation, education and amenity.

3.6.2 EDUCATION

The Council supports initiatives that contribute towards biodiversity conservation such as eco-schools through its Education for Sustainable Development programme. Partnerships have been established with groups throughout Solihull, Coventry, Warwickshire and the sub-region, including the Warwickshire Wildlife Trust and Warwickshire County Council (WCC) to promote environmental education. The Council supports the Forest Schools initiative with forest schools at a number of Council owned woods. WCC (through the Ecology Unit) has established the Solihull, Coventry and Warwickshire Environmental Education Meetings (SCWEEM) to share best practice and carry out gap analysis of where certain communities are not being served

3.6.3 PARTNERSHIPS

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The Council recognises that other organisations, including the private sector, have a major part to play in the implementation of this strategy. All public bodies now have a duty to have regard to the purpose of conserving biodiversity under the NERC Act 2006. Many of these such as the police and Primary Care Trust are members of the Local Strategic Partnership responsible for the Sustainable Communities Strategy along with SMBC.

Involvement of the community is at the heart of nature conservation management of areas for wildlife. Local conservation volunteers help the Council with the management of public woodlands and other nature conservation sites and 'Friends of' groups have been set up to care for accessible natural green spaces.

Partnerships such as the Local BAP Partnership for Warwickshire, Coventry and Solihull and Project Kingfisher and Kingfisher Country Park Partnership demonstrate what can be achieved through working with other Local Authorities, Statutory Bodies and NGOs.

WHAT THE COUNCIL WILL DO:

- Encourage communities to manage local natural habitats.
- · Provide information and interpretation at nature reserves.
- Play a full and active role in partnerships with the Local Strategic Partnership, other Local Authorities, Statutory Agencies, businesses and NGOs.
- · Continue its involvement in environmental education and its support for Project Kingfisher.
- · Continue our support and involvement with the Wildlife Sites Partnership
- Develop links with the Police to prevent wildlife offences.
- · Promote nature conservation by farmers and landowners.
- · Continue to support volunteers involved in woodland management and other conservation work.
- Increase public awareness of the presence of local biodiversity action plan species and habitats and other protected species on council owned land where appropriate.
- Publicise the need for conservation and monitoring and how the public can help by contributing records to the local biological record centre.
- · Ensure the public are aware of threats to protected species and habitats and the risks of spreading invasive species/diseases.

INFORMATION, AUDITING AND MONITORING

The Council recognises that accurate, comprehensive and up-to-date information about Solihull's natural environment is essential if wildlife is to be protected, managed and enhanced. This is also a requirement of planning policy.

3.7.1 HABITAT BIODIVERSITY AUDIT

The Council is a partner in the Warwickshire, Coventry and Solihull Habitat Biodiversity Audit (HBA), managed by the Warwickshire Wildlife Trust, which surveys all habitats throughout the sub-region on a rolling programme. In 2008 it was recognised by the European Committee of Regions as best practice for monitoring biodiversity. The sub-regional Wildlife Sites Partnership reviews/ monitors Local Wildlife Sites (formerly known as SINCs) in Solihull. Locally important habitats and species that need to be included in Local Biodiversity Action Plans and progress on their protection can be identified more readily with Borough-wide data on species and habitats. The habitat information enables an accurate assessment of the land use change, which assists strategic decision making in relation to the natural environment. It is also vital for the development of the LDF and in determining planning applications. The information, augmented by species and site data identify meaningful indicators of progress towards a more sustainable Borough.

3.7.2 LOCAL AREA AGREEMENT - NATIONAL INDICATOR 197

A local area agreement (LAA) is a three-year agreement between a local area and central government. The LAA describes how local priorities will be met by delivering local solutions. From the government's perspective, the introduction of local area agreements forms part of a wider overhaul of the national performance framework. The 2008/11 national performance framework involves a new national indicator set (NIS) of 198 indicators, intended to cover the full range of public services. While data on all 198 indicators continues to be collected and reported by local councils, up to 35 of these are selected as 'improvement targets' in each LAA.

National Indicator 197 (Improved Local Biodiversity) measures the proportion of Local Sites (both geological and wildlife) where positive conservation management has occurred within the last five years of the reporting year. It aims to measure the performance of local authorities for biodiversity by assessing implementation of active management of Local Sites and has been adopted as an improvement target by Solihull MBC. Local Sites in Warwickshire are referred to as Local Wildlife Sites (formerly Sites of Importance for Nature Conservation or SINCs) or Local Geological Sites (formerly Regionally Important Geological Sites or RIGS) and are regarded as being of county importance. The sites are designated by a panel against approved criteria. The Local Wildlife Sites panel comprises of Natural England (NE), Warwickshire County Council Ecologist, Warwickshire Wildlife Trust (WWT), an independent ecological consultant and a local LA representative (optional). The Local Geological Sites panel comprises of Natural England (NE), the Warwickshire Geological Conservation Group and the Keeper of Geology for the Warwickshire Museum.

3.7.3 ANNUAL MONITORING REPORT

Change in areas of biodiversity importance is one of the Core Output Indicators specified by CLG in 'Regional Spatial Strategy and Local Development Framework: Core Output Indicators - Update 2/2008' published 10 July 2008. The Council therefore also monitors biodiversity through this mechanism.

3.7.4 WARWICKSHIRE BIOLOGICAL RECORDS CENTRE

The Council supports the Warwickshire Biological Records Centre as a 'one stop shop' for species and habitat data. The Warwickshire Biological Records Centre is the most comprehensive database of species and habitat records in the County; all wildlife records for Warwickshire, Coventry and Solihull have been collected and filed here since 1974. Information on habitats and species is collated from many sources including local enthusiasts and the public. The WBRC also publishes county distribution atlases for all flora and fauna. The WBRC can be visited by appointment, and can be useful for research students, teachers, site managers and others with an interest in wildlife habitats and species. Access is free to the public but on a charge basis to those with a commercial enquiry.

WHAT THE COUNCIL WILL DO:

- · Ensure through effective surveying and monitoring that we have up to date knowledge of Solihull's biodiversity by playing a full and active role in the Habitat Biodiversity Audit partnership.
- Review LWS using the agreed criteria as part of the Wildlife Sites Project.
- Through the LBAP process, identify characteristic species and habitats for use as indicators of change.
- Monitor changes in Solihull's wildlife resource and report through the Annual Monitoring Report
- Encourage farmers and landowners to manage LWS and other sites sensitively and take advantage of land management grants. The success of this will be reported on through NI 197.
- Prepare and maintain a GIS site alert map showing the distribution of known Wildlife Sites (LWS), potential LWS (pLWS) and Geological Sites (LGS)
- Support the Warwickshire Biological Records Centre.
- Monitor the effective use of natural resources through KLOE 3.1 as part of the Comprehensive Area Assessment.

3.8 RESOURCES

The Council will provide resources and support towards the initiatives in the action plan and will seek support from a variety of sources and partners.

The Council is committed to implementing this strategy and will provide funding and staff resources to enable progress. However, existing budgets for environmental enhancement are insufficient. The Council aims to maximise the benefit derived from its resources by seeking complimentary funding from other sources.

WHAT THE COUNCIL WILL DO:

- Allocate funding and staff annually towards delivering the Nature Conservation Strategy.
- Encourage all service areas within the Council to allocate resources to fund biodiversity protection and enhancement in line with the s40 of the NERC Act 2006.
- Attain the UK Woodland Assurance Standard (UKWAS) (the UK's Certification for Sustainable Forest Management) which will unlock other funding streams such as EWGS Management Grant and give Solihull's woodland direction through short term management planning.
- Maximise opportunities for grant-aiding from environmental agencies and funding from other sources such as the private sector.
- Require developers to incorporate features to protect and enhance biodiversity within new developments using planning obligations and conditions where appropriate.
- Use the Community Infrastructure Levy where appropriate for strategic large scale Green Infrastructure projects.
- Encourage and support community funding bids for conservation projects.
- Encourage farmers and landowners to apply for grants to fund positive conservation management of locally important wildlife sites.
- Require developers to make contributions to biodiversity and geodiversity enhancements through a Planning Obligations SPD.



Appendicies

Appendix 1: Glossary

Access (public)	Refers to woodland and its associated land open to the public for recreational or educational use (sometimes subject to charges). Does not detract from any legal rights.
Agri-environment schemes	National (or local) schemes that pay farmers to farm in an environmentally sensitive way.
Ancient woodland	A classification for woodland which has been in continuous existence from before AD 1600 in England, Wales and Northern Ireland, and from before AD 1750 in Scotland.
Arden	An area of former wood pasture and ancient farmlands lying on the eastern side of the Birmingham plateau. Traditionally regarded as the land between the river Tame and the river Avon in Warwickshire.
Biodiversity	The variety of life on earth; includes all species of plants and animals, the genetic variation within them and the natural systems that support them.
Biodiversity Action Plan	The UK plan setting proposals and targets for conserving and enhancing biodiversity.
Broadleaves	Broad-leaved trees and woodlands. In the UK most have laminar leaves. Although often referred to as 'hardwoods' not all produce hardwood timber. In UK most are deciduous.
Buffer zone	An area of other land-use of sufficient width to protect a semi-natural habitat from significant invasion by seed from a nearby non-native source.
Climate Change	Long-term significant change in the temperature, precipitation and other weather that a given region experiences attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.
Colonisation	Natural regeneration on previously un-utilised sites.
Community woodland	Local woodlands for people to enjoy, where the needs and wishes of local people are important in planning and management.
Compartment	A distinct sub-division of the woodland suitable as a basis for long-term management and record keeping.
Conifers	Coniferous trees and woodlands. In the UK, conifer trees all have needles or scale-like leaves. With the exception of larches all are evergreen. Sometimes referred to as 'softwoods' because (along with some broad-leaved trees) they produce softwood timber.
Conservation	Protection and management of natural resources that ensures their continuing availability to future generations.
Conservation agencies	Statutory nature conservation agencies: Natural England and the Environment Agency. Non-statutory conservation agencies: Forestry Commission and Warwickshire Wildlife Trust.
Coppice system	Management based on regeneration by regrowth from cut stumps (coppice stools). The same stool is used through several cycles of cutting and regrowth.
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Coppice with standards	Coppice with a scatter of trees of seedling or coppice origin, grown on a long rotation to produce larger sized timber and to regenerate new seedlings to replace worn out stools. (Compare with Shelterwood, see below.)
Countryside character (map)	A zonation of the countryside by its natural and cultural characteristics.
Cultivation	Any method of soil disturbance to aid the establishment of newly planted habitats.
Cultural boundaries	Boundaries of territory or units of specific land-use such as banks, walls and ditches. Some of these features may date back hundreds of years.
Cultural features	Archaeological sites, historic buildings and heritage landscapes including ancient woodlands.
Cultural landscape	An area of countryside whose character is predominantly the result of the patterns of human activity, often built up over long periods of time.
Designed landscape	A pleasure ground, park or large garden laid out with the primary purpose of creating an aesthetically pleasing scene or sequence of vistas.
Development	Change of land-use from forestry or agriculture authorised by the planning authorities, usually for building and urbanisation.
Drainage	An operation to remove excess water from an area in a controlled way.
Ecology	Originally the scientific study of the relationship between living organisms and their environment, the term is now generally used to describe the relationship between a living organism and its environment.
Ecosystem	The interaction of communities of plants and animals (including humans) with each other and the non-living environment. Balanced ecosystems are stable when considered over the long term (hundreds of years in the case of woodland).
Environmental Impact Assessment (EIA)	Procedure to require assessment of potential environmental impacts that may be initiated under European Union Directives.
Environmental Statement	Statement required where an Environmental Impact Assessment is called for.
EU Birds Directive	European Union Directive for the protection of rare or endangered bird habitats and species. Requires designation of Special Protection Areas (SPA).
EU Habitats and Species Directive	European Union law requiring protection of habitats and species which are rare or endangered across the EU. Requires designations of Special Areas of Conservation (SAC) and Special Protection Areas (SPA), and other measures.
Felling (clear)	Cutting down of an area of woodland (typically greater than 0.25 hectares if within a larger area of woodland). Sometimes a scatter or clumps of trees may be left standing within the felled area.
Felling (group)	As clearfelling, but in smaller areas (typically less than 0.25 hectares) where microclimate is strongly influenced by the remaining woodland.
Forest	See forestry. Note that forest is a term which can have quite different meanings in other legal and land-use contexts.
Forest values	The marketable (cash) resource and the environmental and social benefits, such as landscape enrichment and conservation. The environmental and social benefits
Forestry	The management of predominantly tree covered land (woodland) whether in large tracts (generally called forests) or smaller units (known by a variety of terms such as woods, copses and shelterbelts).
Forestry Commission (FC)	Government department responsible for implementing forestry policy and regulations in England, Scotland and Wales.

Forestry practice	The techniques used in forestry planning and forest operations to produce all types of forest benefit.
Geodiversity	The variety of rocks, fossils, minerals, landforms and soil along with the natural processes that shape the landscape.
GIS (Geographic Information System)	An organised collection of computer hardware, software, geographic data, and personnel designed to efficiently capture, store, update, manipulate, integrate, analyse, and display all forms of geographically referenced information.
Glade	A small area of open ground which forms an integral part of a woodland.
Green infrastructure	An ecological network, both natural and engineered, that acts as natural infrastructure; includes canals, ditches, gardens, green roofs, parks, open space, trees, rivers, reservoirs and wetlands.
Habitat	A place in which a particular plant of animal lives, often used in a wider sense, referring to major assemblages of plants and animals found together.
Habitat Biodiversity Audit (HBA)	The Habitat Biodiversity Audit (HBA) was established in October 1995 to provide accurate, up-to-date and readily accessible ecological data to all the project partners. It incorporates a detailed Phase 1 survey of Warwickshire which has been transferred onto GIS; the Wildlife Sites Project, identifying potential Wildlife Sites/Sites of Interest for Nature Conservation (SINCs); and provides a basis for local biodiversity action plans.
High Forest	Woodland comprising trees grown from plants, cuttings or seedlings (as opposed to coppice). In practice, broad-leaved High Forest often includes trees of coppice origin.
Key Line of Enquiry (KLOE) 3.1: Effective Use of Resources	The aspect of the Comprehensive Area Assessment will investigate whether the Council understands and can quantify its use of natural resources and can identify the main influencing factors; manages performance to reduce its impact on the environment; and manages the environmental risks it faces, working effectively with partners.
Landscaper Character	The distinct and recognisable pattern of elements that occur consistently in a particular type of landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement.
Local Agenda 21	An action plan towards the 21st century providing a blueprint for print for global partnership to achieve sustainable development, endorsed by 179 nations at the Earth Summit in Rio de Janeiro in 1992.
Local Area Agreement	A three year agreement, based on local Sustainable Community Strategies, that sets out the priorities for a local area agreed between Central Government, represented by the Government Office (GO), and a local area, represented by the local authority and other key partners through Local Strategic Partnerships (LSPs).
Local authority	Local government planning authority.
Local Biodiversity Action Plans (LBAP)	A non-statutory plan prepared for a locality or region. A means to implement the UK Biodiversity Action Plan, to conserve and enhance biodiversity at a local level. Identifying where actions are required, targets and delivery mechanisms for species and habitats under threat.

Local Development Framework (LDF)	The Local Development Framework (LDF) is a non-statutory term used to describe a folder of documents, which includes all the local planning authority's local development documents. An LDF is comprised of: • Development Plan Documents (which form part of the statutory bdevelopment plan). • Supplementary Planning Documents. The local development framework will also comprise of: • the Statement of Community Involvement. • the Local Development Scheme. • the Annual Monitoring Report. • any Local Development Orders or Simplified Planning Zones that may have been added.
Local Nature Reserves (LNR)	Statutory Reserves designated by the Local Authority in consultation with Natural England, with special amenity value locally for education and amenity for the community.
Local Site/ Local Geological Site (LGS)	Non-statutory designated sites within a county, with geological or geomorphical features worthy of protection for their educational, research, historical or aesthetic importance.
Local Site/ Local Wildlife Site (LWS)	Non-statutory, locally valued wildlife sites which seek to raise awareness of the importance of protecting sites of local nature conservation value, and to formalise non-statutory site systems in order to bring them into line with the requirements of Planning Policy Guidance Note 9.
Local Strategic Partnership	An overall partnership of people that brings together organisations from the public, private, community and voluntary sector within a local authority area, with the objective of improving people's quality of life.
Minimum intervention	Management with only the basic inputs required to protect the habitat from external forces or to ensure succession of key habitats and species.
National Vegetation Classification (NVC)	A comprehensive classification of vegetation in the UK which is used to describe and assist in the evaluation of habitats.
Native species	Species which have arrived and inhabited an area naturally, without deliberate assistance by man. For trees and shrubs in the UK usually taken to mean those present after post-glacial recolonisation and before historic times. Some species are only native in particular regions. Differences in characteristics and adaptation to conditions occur more locally – hence 'locally native'.
Native woodland	Woods mainly or entirely composed of locally native species.
Natural Corridors	A network linking different habitat types including rivers, canals, railways, road verges and hedgerows.
Natural environment	Includes communities of plants, animal and where they live; and physical and geological features that surround us.
Natural regeneration	Plants growing on a site as a result of natural seed fall or suckering. The term is also used to describe the silvicultural practices used to encourage natural seeding and successful growth of the seedlings.
Natural resources	Materials (renewable and non-renewable) supplied by nature, including soil, air, water and light.
Naturalised	A species long introduced to an area, which is capable of completing its life cycle there without human intervention.
New native woodland	New woodland especially designed and managed to develop a natural character by using communities of locally native trees and shrubs.

NI 188	National Local Government Performance Indicator 188 (NI 188): Planning to Adapt to Climate Change. This indicator measures progress on assessing and managing climate risks and opportunities, and incorporating appropriate action into local authority and partners' strategic planning.
NI 189	National Local Government Performance Indicator 189 (NI 189): Flood and coastal erosion rick management. This indicator records the progress of Local Authorities in delivering agreed actions to implement long term flood and coastal risk management (FCERM) plans.
NI 197	National Local Government Performance Indicator 197 (NI 197): Improved Local Biodiversity. This indicator assesses the proportion (%) of the total number of Local Sites under positive conservation management.
Permissive (use)	Use by permission, whether written or implied, rather than by Right.
Plantation	A woodland where the current trees have been planted. Often includes naturally regenerating trees as well. Includes former semi-natural woodlands restocked by planting
Potential Site of Importance for Nature Conservation (pSINC)	A site which has been identified as having the potential to become a SINC, but has not yet been surveyed to assess its true value. Now known as potential Local Wildlife Sites.
Primary Care Trust	A local health organisation responsible for managing local health services
Principal Parks	Areas of unrestricted public access of over 8 ha within 2km of all settlements of over 500 people. These may contain formal gardens, informal horticultural features, nature conservation areas, equipped children's playgrounds, skate parks or other provision for young people and formal sports facilities. They should be linked by, and contribute towards, the traffic-free network of routes for walking and cycling.
Productivity	The capacity to produce goods and services. Usually applied to site conditions rather than to environmental and social benefits, such as landscape and conservation, although these are an essential component of sustainable development.
Project Kingfisher	Project Kingfisher was formally declared Kingfisher Country Park in July, 2004. It is associated with an 11km stretch of the River Cole running from the Coventry Road (A45) at Small Heath as far as the M6 at Chelmsley Wood. Inaugurated in 1985, it is a joint project sponsored by both Birmingham City Council and Solihull MBC together with English Nature, The Environment Agency, Warwickshire Wildlife Trust and the Wildlife Trust for Birmingham and the Black Country. Its overall aim is to care for the valley of the River Cole, improving it both for people and wildlife. Kingfisher Country Park has been designated under the 'Man and the Biosphere' programme.
Protected habitats or species	Those protected by the EU Birds Directive, EU Habitats and Species Directive, Wildlife and Countryside Act 1981 (as amended), Countryside and Rights of Way (CRoW) Act (2000), and Conservation (Natural Habitats &c.) Regulations (1994) as amended.
Protection	Measures intended to reduce damage (or the risk of damage) to habitats by pests, diseases, livestock, fire and people.
Provenance	Location of plant species from which seed or cuttings is collected. The term is often confused with 'origin' which is the original natural genetic source.

Public Register	Public listing (for a period of four weeks) by the FC of planting and felling proposals to allow public comment.
Public Right of Way	Legally defined route for defined categories of public access which landowners must not obstruct or divert without due legal process.
Red Data Book	The Red Data Book comprises catalogues listing species which are rare or in danger of becoming extinct nationally or locally. (Details are available from the conservation agencies.)
Regeneration	Renewal of woodland through sowing, planting or natural regeneration.
Regionally Important Geological Sites (RIGS)	Non-statutory designated sites within a county, with geological or geomorphical features worthy of protection for their educational, research, historical or aesthetic importance.
Ride	Permanent unsurfaced access route through woodland.
Scarifying	Methods of shallow cultivation designed to create suitable positions for planting or a seed bed for natural regeneration.
Semi-natural woodland	Woodland composed of mainly locally native trees and shrubs which derive from natural seedfall or coppice rather than from planting. Ancient and seminatural woodlands are defined as those known to be continuously present since 1600 AD
Shelterwood system	Felling of a proportion of the trees within an area leaving some trees as a seed source and shelter for natural regeneration. The seed trees are subsequently removed.
Silt trap	Pits designed to catch silt before drainage water reaches a watercourse.
Siltation	Deposition of waterborne particles within a watercourse, other body of water, or wetland.
Silviculture	The techniques of tending and regenerating woodlands, and harvesting their physical products.
Site of Special Scientific Interest (SSSI)	Nationally important sites notified by Natural England under the Wildlife and Countryside Act (1981) and protected because of their special interest for flora, fauna, habitats, geological or physiographical features.
Site plan	Detailed work-site plan for operations carried out within the framework of the management plan.
Sites of Importance for Nature Conservation (SINC)	Non-statutory, locally valued wildlife sites which seek to raise awareness of the importance of protecting sites of local nature conservation value, and to formalise non-statutory site systems in order to bring them into line with the requirements of Planning Policy Guidance Note 9. Now known as Local Wildlife Sites.
Species	A taxonomic group of organisms associated with one another according to attributes or characteristics, which can interbreed under natural conditions to produce fertile offspring.
Structural diversity	Degree of variation in the spatial distribution of trees both horizontally (by distribution over area) and vertically (by the combined effect of different contribution of growth rates and ages of trees, and presence of other layers of vegetation).
Sustainability Appraisal	In United Kingdom Planning Law a Sustainability Appraisal is an appraisal of the economic, environmental and social effects of a local development document from the outset of the preparation process to allow decisions to be made that accord with sustainable development. Since 2001, Sustainability Appraisals have had to be in conformity with the Strategic Environmental Assessment EU directive.

	Following the publication of the Local Government White Paper, 'Strong
Sustainable Communities Strategy	and Prosperous Communities,' Local Authorities have a responsibility to prepare a Sustainable Community Strategy (SCS). This describes the LA's understanding of the needs, concerns and aspirations of local people and sets out a number of priorities and areas for action to address these needs.
Sustainable development	Development which meets social and economic needs without undermining the quality of the natural environment.
Sustainable drainage systems (SUDS)	Sustainable Drainage Systems use techniques to control surface water run- off as close to its origin as possible, before it enters a watercourse. They mimic natural drainage processes with the characteristics of storage, slow conveyance and some volume reduction. There are a number of techniques that encompass the essential elements of SUDS such as living roofs, porous paving and ponds.
Thinning	A temporary reduction in standing volume made after canopy closure to promote growth and greater value in the remaining trees.
UDP	Plan produced by the borough council concerned with the use of land and containing policies on housing, the economy, transportation, leisure and recreation, green belt and the environment, for example. Soon to be replaced by the LDF.
Warwickshire Biological Records Centre	WBRC contains information on species distribution and ecological sites in Warwickshire, Coventry and Solihull for which it is the most comprehensive data bank of species and habitat records in the County.
Watercourse	Streams and rivers. (When people refer to the management of the land adjacent to watercourses they usually also mean the land adjacent to ponds, lakes, etc.)
Wildlife	Living organisms that are neither human nor domesticated.
Wildlife Sites Partnership	Oversees the project to develop and maintain a formalised Local Wildlife Sites (LWS) system for Warwickshire, Coventry and Solihull.
Windthrow	Uprooting of trees by the wind.
Windthrow risk	A technical assessment of risk based on local climate, topography, site conditions and tree height.
Wood pasture	Areas of historical, cultural and ecological interest, where grazing is managed in combination with a proportion of open tree canopy cover.
Woodland	The part of woods and forests where the ecological condition is, or will be, strongly influenced by the tree canopy. In terms of land cover statistics (in UK), woodland is currently defined as land with trees where the mature trees would cover more than 20% by area.

Appendix 2: Policy background

NATIONAL POLICY, STRATEGY AND LEGISLATION

No Charge? Valuing the Natural Environment (Natural England, 2009)

The debate about environmental policies still tends to be underpinned by a strong fear of the 'harm' that efforts to improve the natural environment can do to competitiveness and the economy. This Natural England publication dispels the notion of an inherent trade-off between nature on the one hand and future economic growth and prosperity on the other. In the current economic climate, restoring growth, financial stability and creating jobs are critical short-term goals; Natural England explain how this can be achieved in such as way as to prepare us for the future challenges that lie ahead.

Water for people and the environment: Water Resources Strategy for England and Wales (EA, 2009)

This strategy sets out how the Environment Agency believes water resources should be managed throughout England and Wales to 2050 and beyond to ensure that there will be enough water for people and the environment. With the growing pressures on water resources and the water environment, careful planning is essential to ensure there is sufficient water for society and the economy, as well as the environment. This document identifies the actions we believe are necessary, and in particular those that are needed to deal with the serious challenges of growth and climate change.

Securing Biodiversity (Natural England, 2008)

Securing Biodiversity - A new framework for delivering priority habitats and species in England aims to halt, and then reverse biodiversity loss. It states an integrated approach is required, with a renewed focus on delivery for whole ecosystems, and at a landscape scale. The framework retains and builds upon some of the strengths of the UK Biodiversity Action Plan process, including the target-based approach and strong partnerships. The framework is a renewed call to action and it emphasises the need for clearer accountabilities for delivery. It states that regional and local biodiversity partnerships are a critical component of the framework for delivery.

Future Water (HMG, 2008)

Future Water is the Government's water strategy for England. It recognises healthy water resources are necessary for a high-quality natural environment. It states the government's vision for water policy and management is one where. by 2030 at the latest, we have improved the quality of our water environment and the ecology that it supports. It aims to achieve healthy rivers, lakes, estuaries, coasts and groundwaters that provide maximum resilience to climate change and sustain biodiversity.

Guidance for Local Authorities on Implementing the Biodiversity Duty (Defra, 2007)

This document provides guidance for Local Authorities and emphasises that all departments and functions of local authorities have a vital role to play in the conservation of biodiversity. In particular, the following aspects are highlighted as essential to integrate biodiversity into local authority services:

- A. Fulfilling statutory obligations for the protection and enhancement of biodiversity within the forward planning and development control processes.
- B. Incorporating the conservation of biodiversity and its benefits into relevant strategies of the local authority. These include Corporate Strategies. sustainable development strategies, procurement strategies, asset

- management plans, economic development plans and environmental management systems.
- C. Having regard to biodiversity within partnership arrangements such as Community Strategies and Local Area Agreements.
- D. Taking account of the links between biodiversity and other environmental programmes such as waste management, energy conservation and response to climate change.
- E. Delivering the key principles for biodiversity set out in national planning guidance.
- F. Participating in local biodiversity partnerships and helping to deliver objectives of Local Biodiversity Action Plans (and where appropriate UK Biodiversity Action Plans) within relevant local authority services.
- G. Working in partnership with other organisations to promote beneficial land management for biodiversity.
- H. Protecting and enhancing biodiversity on the local authority estate.
- I. Identifying policy drivers and ensuring up-to-date biodiversity data is available to the local authority including support to Local Record Centres.
- Identifying Local Sites of importance for biodiversity and managing systems, in partnership with others, to take these into account within the planning and land management processes.
- K. Using the benefits of access to biodiversity in the delivery of services to the public such as social care, community development, health, and recreation.
- L. Supporting appropriate access to nature and understanding of the natural world within schools, community engagement, education programmes and raising awareness of biodiversity to the public.

Planning Policy Statement: Planning and Climate Change - Supplement to Planning Policy Statement 1 (DCLG, 2007)

This Planning Policy Statement on climate change supplements PPS1 by setting out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. It sets out how planning, in providing for the new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and resilient to the climate change now accepted as inevitable.

Natural Environment and Rural Communities Act (2006)

The Natural Environment and Rural Communities Act (NERC Act) created Natural England. Under s.40 local authorities have a duty to have regard for the conservation of biodiversity in the exercise of all of their functions. Reference is made in s.41 to a list of habitats and species maintained by Defra which are of principal importance for the conservation of biodiversity or priority species and habitats. These are the UK BAP habitats and species.

Strong and Prosperous Communities (DCLG, 2006)

A new Local Government Performance Framework for monitoring and regulating local government was set out in Chapter 6 of this White Paper. Key elements of the new framework include Local Strategic Partnerships, Local Area Agreements. National Indicators and Comprehensive Area Assessments. Solihull MBC has responded to this by the formation of the Solihull Strategic Partnership, the production of Solihull's Sustainable Community Strategy, adopting National Indicator 197 as part of a suite of Local Area Agreements and reporting on biodiversity as part of the Comprehensive Area Assessment under Key Line of Enquiry (KLOE) 3.1: the Use of Resources (further details on these given in 2.1.3).

Local Sites Guidance (Defra, 2006)

Defra's Local Sites Guidance was produced in 2006 recognising the importance of Local Site Partnerships and the selection of robustly defendable locally important wildlife and geological sites.

Planning Policy Statement 9: Biodiversity and Geological Conservation (ODPM, 2005)

Planning Policy Statement 9 on Biodiversity and Geological Conservation and the accompanying best practice guide lays out a set of principles that Local Authorities should follow to ensure that biodiversity and geological heritage are fully considered in the decision making process. The accompanying ODPM circular 06/2005 Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system gives guidance on how the legal provisions for site and species protection and local authority duties for nature conservation need to be taken into account.

Government Circular: Biodiversity And Geological Conservation – Statutory Obligations And Their Impact Within The Planning System (ODPM, 2005)

ODPM Circular 06/2005 (paragraph 91) makes specific reference to the conservation and enhancement of ancient semi-natural woodland and veteran trees: 'veteran and other substantial trees and many types of woodland, especially ancient semi-natural woodland, can be of importance for biodiversity conservation. When considering whether particular trees or woodlands merit a TPO in the interests of amenity, local planning authorities should, where appropriate, include consideration of their nature conservation value. Furthermore, paragraph 90 states that 'when granting planning permission for any development, local planning authorities are under a duty, where appropriate, to impose planning conditions to ensure adequate provision is made for the protection or planting of trees, and to make Tree Preservation Orders (TPOs) as appear necessary in the circumstances.'

Planning Policy Statement 1: Sustainable Development and Planning (ODPM, 2005)

Planning Policy Statement 1 sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. Its states development plans should:

- ensure that sustainable development is pursued in an integrated manner; in line with the principles for sustainable development set out in the UK strategy.
- promote outcomes in which environmental, economic and social objectives are achieved together over time.
- · contribute to global sustainability by addressing the causes and potential impacts of climate change.
- Planning policies should seek to protect and enhance the quality, character and amenity value of the countryside and urban areas as a whole. A high level of protection should be given to most valued townscapes and landscapes. wildlife habitats and natural resources.

Securing the Future- delivering UK sustainable development strategy (HMG. 2005)

In 1994, the UK became the first country to publish a national sustainable development strategy: Sustainable Development, the UK Strategy, following the Rio Earth Summit in 1992. A revised strategy, A Better Quality of Life was published in 1999; whilst the current strategy, Securing the Future – delivering UK sustainable development strategy was published in 2005. The strategy has

stronger international and societal dimensions building on the 1999 strategy. It develops five principles with a more explicit focus on environmental limits and agrees four priorities: sustainable consumption and production, climate change, natural resource protection, and sustainable communities; in addition to a new indicator set, which is more outcome focused.

National Character Areas (Natural England, 2005)

England has been divided into areas with similar landscape character, which are called National Character Areas (NCAs); previously known as Joint Character Areas (JCAs).

The Character of England Landscape, Wildlife and Cultural Features Map produced in 2005 by Natural England's with support from English Heritage, was an update to the 1996 map. This map subdivides England into 159 NCAs, it provides a picture of the differences in landscape character at the national scale.

A set of eight regional volumes were published describing the 159 NCAs. These character descriptions of each NCA highlight the influences which determine the character of the landscape, for example land cover and buildings and settlement; they can be downloaded from our website or ordered from our publications section.

The NCAs are a widely recognised national spatial framework, used for a range of applications. NCAs form part of the data gathered for a Landscape Character Assessment (LCA). LCAs provide more detailed descriptions at a local level within NCAs.

Making Space for Water (Defra, 2005)

Making Space for Water was the government's programme for delivering its strategy for flood and coastal erosion risk management which aimed to contribute to sustainable development, combining the delivery of social and environmental benefits with the protection of economic assets. It aimed to ensure an understanding of the future risks of river and coastal flooding is fully embedded into the spatial planning system, including planning for new settlements and other new developments and that consistent and holistic management of urban flood risk, with strategic planning, partnerships of responsible bodies and clear understanding of various flood risk responsibilities

Planning Policy Statement 7: Sustainable Development in Rural Areas (ODPM, 2004)

The national planning policy framework provides considerable encouragement to Local Authorities involved in promoting initiatives such as the Forest of Arden. The Government's Objectives for rural areas are outlined in Planning Policy Statement 7: Sustainable Development in Rural Areas and include raising 'the quality of life and the environment in rural areas through the promotion of good quality, sustainable development that respects and, where possible, enhances local distinctiveness and the intrinsic qualities of the countryside.'

Working with the grain of nature: A biodiversity strategy for England (Defra. 2002)

The Biodiversity Strategy for England aims to ensure that biodiversity considerations become embedded in all the main sectors of economic activity, public and private. It establishes the changes necessary to conserve, enhance and work with the grain of nature and ecosystems rather than against them. It takes account of climate change as one of the most important factors affecting

biodiversity and influencing our policies. It also sets out a series of actions that will be taken by the Government and its partners to make biodiversity a fundamental consideration in agriculture, water, woodland, marine and coastal management and urban areas. Furthermore the Strategy looks at ways of engaging society as a whole in understanding the needs of biodiversity and what can be done by everyone to help conserve and enhance it.

Planning and Compulsory Purchase Act (2004)

The Planning and Compulsory Purchase Act 2004 introduced statutory spatial planning through the production of Local Development Frameworks and, for the first time, incorporated sustainable development at the core of the planning process. This sustainability principle is backed up by Planning Policy Statement (PPS) 1 'Sustainable Development and Planning.'

Climate Change: The UK Programme (2000)

The UK's Climate Change Programme was published in November 2000. It detailed how the UK plans to deliver its Kyoto target to cut its greenhouse gas emissions by 12.5%, and move towards its domestic goal to cut carbon dioxide emissions by 20% below 1990 levels by 2010. A review was launched in September 2004. The UK already has policies in place which are consistent with its responsibilities under the United Nations Framework Convention on Climate Change to protect and enhance carbon sinks, such as forests. The Government is exploring ways of encouraging renewable energy generated from energy crops such as short rotation coppice and miscanthus, and from forest residues and wood fuel. Biomass from forests and woods can also be used as a substitute for fossil fuels. Energy generation from wood has no effect on the overall carbon dioxide balance, provided it comes from sustainably managed woods and forests.

Countryside and Rights of Way Act (2000)

The Countryside and Rights of Way (CRoW) Act 2000 amended the 1981 Wildlife and Countryside Act, giving greater protection to SSSIs and included within Section 74, lists of habitats and species (taken from the UKBAP) as being of principal importance for the conservation of biodiversity in England.

Our Countryside: The Future (2000)

Our Countryside: The Future - A Fair Deal for Rural England was produced in 2000 and sought to sustain and enhance the distinctive environment, economy and social fabric of the English countryside for the benefit of all. It aimed to reduce development pressure through policies and by targeting development on brownfield sites; strengthen countryside management; develop a more holistic approach, taking account of all landscapes in national best practice guidance; and reverse the decline in farmland birds, restore threatened habitats, and increase funding to maintain biodiversity.

Water Framework Directive 2000/60/EC

The Water Framework Directive (WFD) is designed to improve and integrate the way water bodies are managed throughout Europe. Member States must aim to reach good chemical and ecological status in inland and coastal waters by 2015. In the UK the Environment Agency must ensure that River Basin Management Plans are developed through consultation with stakeholders in each river basin district and that the measures in the plans are delivered. This requirement for integrated river basin planning and management will help deliver the necessary collaborative approach and achieve improved water quality. The WFD requires that all polluters of the water environment should pay, and that implementation

of the directive is achieved in a fair and proportionate way across all sectors. The Polluter Pays Principle (PPP) is difficult to apply in practice, particularly in the case of agriculture where farmers' activities have both positive (producing necessary food) and negative (contributing to diffuse water pollution) effects.

Waterways for Tomorrow (2000)

Waterways for Tomorrow aims to promote the waterways, encouraging a modern, integrated and sustainable approach to their use. This involves conserving the waterways, while at the same time maximising the opportunities they offer for leisure and recreation, urban and rural regeneration, the environment, and for freight transport.

Hedgerow Regulations (1997)

The Hedgerow Regulations 1997 gave statutory protection to most countryside hedgerows.

Joint Character Areas (1996)

The Character of England Map was produced by the former Countryside Commission and English Nature with support from English Heritage in 1996. This map provides a picture of the differences in landscape character at the national scale resulting in 159 Joint Character Areas (JCAs) for the whole of England. It is accompanied by character descriptions of each JCA showing the influences that determine the character of the landscape. The JCAs are a widely recognised national spatial framework and are part of the data gathered for a Landscape Character Assessment. JCAs provide guidance on what is important in terms of existing nature conservation value. These are now known as National Character Areas.

Accessible Natural Greenspace Standard (ANGSt) (1995)

Natural England's policy on accessible natural green space states that everyone should live within 300m of 2 ha of accessible green space. Solihull Council produced its own Green Space Strategy in 2006 which included natural green space provision as an important feature.

Biodiversity: The UK Action Plan (1994)

Emerging from Rio was The UK Biodiversity Action Plan (Biodiversity: The UK Action Plan) published in 1994. This produced lists of threatened and declining species and habitats (amended and updated in 2007) with targets and specific actions for protecting and enhancing their conservation status. The aim of the convention and the subsequent strategies was halting biodiversity loss by 2010.

Conservation (Natural Habitats & c.) Regulations (1994)

The Regulations came into force on 30 October 1994, and have been subsequently amended in 1997, 2000 (England only) and in 2007. The Regulations provide for the designation and protection of European sites, the protection of European protected species, and the adaptation of planning and other controls for the protection of European Sites. Under the Regulations, local authorities have a general duty, in the exercise of any of their functions, to have regard to the EC Habitats Directive.

Protection of Badgers Act (1992)

The Protection of Badgers Act 1992 consolidates and improved previous legislation (including the Badgers (Further Protection) Act 1991). Under this act it is a serious offence to kill, injure or take a badger, or to damage or interfere with a sett unless a licence is obtained from a statutory authority.

Agenda 21 (1992)

Agenda 21 was one of the outcomes of the "Earth Summit" held in Rio de Janeiro in 1992. Since then "sustainable development" has become a key objective in the policy and work of both national and local government in the UK. This lead to the UK committing to working towards national strategies for the protection of our local, national and global environment. The four UK official strategies were published simultaneously: "Sustainable development", "Biodiversity", "Climate Change" and "Sustainable Forestry".

Wildlife and Countryside Act (1981)

The Wildlife and Countryside Act 1981 remains one of the most important pieces of wildlife legislation in Great Britain, and is divided into four parts.

- Part I is concerned with the protection of wildlife (prohibiting certain methods of killing or taking wild animals, amending the law relating to protection of certain mammals, restricting the introduction of certain animals and plants and amending the Endangered Species (Import & Export) Act 1976)
- Part II relates to the countryside and national parks and the designation of protected areas (amending the law relating to nature conservation, the countryside and National Parks)
- Part III covers public rights of way (amending the law relating to public rights of way)
- Part IV deals with miscellaneous provisions of the Act.

There have been various amendments to the text of the Act, most significantly through the Countryside and Rights of Way (CRoW) Act 2000 (in England and Wales). It is also the means by which the Convention on the Conservation of European Wildlife and Natural Habitats (the 'Bern Convention') and the European Union Directives on the Conservation of Wild Birds (79/409/EEC) and Natural Habitats and Wild Fauna and Flora (92/43/FFC) are implemented in Great Britain.

REGIONAL POLICY AND STRATEGY

Securing biodiversity in the West Midlands: The West Midlands Regional Biodiversity Delivery Plan 2010 – 2015

The West Midlands Biodiversity Delivery Plan sets out the priorities for delivery within the region taking account of national priorities. It seeks to guide future delivery by all partners and to assist funding organisations on the regional priorities; focus on those habitats considered to be a priority for landscape scale enhancement; identify delivery issues and mechanisms and identify the landscapes scale projects particular those that require urgent action to meet the delivery gaps identified on an annual basis.

The WM Regional Biodiversity Delivery Plan outlines the regional biodiversity targets to 2015, which are a sub-set of the new revised targets to 2016 developed as part of the RSS review. The targets have been used to develop a list of regional priority habitats for landscape scale restoration. A 50 year 'Biodiversity Vision and Opportunity Map' describes the locations across the region that are considered the best opportunity to enhance biodiversity at a landscape scale over the next 50 years. These include 30 landscape areas, 7 Strategic River corridors, Urban Areas, 9 Growth Points. The delivery plan provides a robust framework for delivering biodiversity within the West Midlands region.

Putting the Historic Environment to Work: A Strategy for the West Midlands 2010-2015

This strategy sets the overall direction for the historic environment sector in the region. It will be a tool, for planning, decision making, setting targets and actions, and will be implemented by many different partners, for the benefit of all throughout the region. The strategy will help guide the day to day activities of the organisations represented on the Historic Environment Forum.

Regional Spatial Strategy (RSS) for the West Midlands (WMRA, 2008)

The Regional Spatial Strategy (RSS) for the West Midlands is currently under revision following it's publication in 2004. Phase one of the revision has been completed and was published in January 2008. WM RSS policies relevant to this quidance are:

UR1: Implementing Urban Renaissance - the MUAs

UR4: Social Infrastructure

RR2: The Rural Regeneration Zone

CF3: Levels and distribution of housing development

PA1: Prosperity for All

PA3: High-Technology Corridors

PA6: Development related to Higher/Further Education and Research

Establishments

and incubator units

PA10: Tourism and Culture

PA14: Economic Development and the Rural Economy

PA15: Agriculture and Farm Diversification

QE1: Conserving and Enhancing the Environment

QE2: Restoring degraded areas and managing and creating high quality new environments

QE3: Creating a high quality built environment for all

QE4: Greenery, Urban Greenspace and Public Spaces

QE5: Protection and enhancement of the Historic Environment

QE6: The conservation, enhancement and restoration of the Region's landscape

QE7: Protecting, managing and enhancing the Region's Biodiversity and Nature Conservation Resources

QE8: Forestry and Woodlands QE9: The Water Environment

M1: Mineral Working for Non-Energy Minerals

T11: Airports

At the time of publication of this document a phase two draft has been prepared and been through an Examination in Public, although not yet published; in addition consultation has been completed on Options for Phase 3, specifically addressing the Quality of the Environment section. Phase 3 will not be published although the emerging work will be used to inform preparation of the new single Regional Strategy. Additional emerging relevant policies from the phase two revision include:

SR1: Climate Change

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SR2: Creating and Maintaining Sustainable Communities

SR3: Sustainable Design and Construction

SR4: Improving Air Quality for Sensitive Ecosystems

QE9A: Water Management and Water Cycle Studies

QE9B: Development and Flood Risk

The RSS for the West Midlands (2008) Policy QE7 'Protecting, Managing and enhancing the Regions Biodiversity and Nature Conservation resources' makes clear the priority Natural Conservation assets that are important at the strategic level, including:

- Species and habitats of international, national and sub-regional importance as identified in the West Midlands Regional Biodiversity Audit, Local Biodiversity Action Plans (LBAPs) and other BAPs
- Those that receive statutory protection and:
- The biodiversity enhancement areas or BEAs (see below)

The importance of the Blythe catchment as a regional and nationally important landscape and biodiversity feature is recognised by the identification in the RSS of a 'Biodiversity Enhancement Zone'. BEAs are identified by the RSS as 'some of the best prospects for retaining environments with a rich and resilient biodiversity resource.' In support of this, the Council has a policy to conserve and enhance the Blythe in Solihull's Unitary Development Plan (UDP): Policy ENV12.

River Trent Catchment Flood Management Plan (EA, 2008)

The River Trent Catchment Flood Management Plan provides a scientific approach to understand and describe how the catchment behaves and what the most sustainable flood risk management policies may be over the next 50 to 100 years. This understanding will be used to plan the most acceptable measures to manage flood risk for the long-term. Relevant policy units include 6 and 10.

Policy unit 6 covers Mid-Staffordshire and the Lower Tame. The overarching objective of Policy 6 is to keep water on the land for longer and to encourage areas which would naturally be wet, to become wet again. To achieve this at a meaningful scale, the EA states a wide range of measures and actions will be required over a significant length of time. The intention is to encourage land use change (i.e. changes in farming practice and increased areas of wetland), more sustainable river maintenance and management (i.e. river restoration) and development control, to create a landscape and river system that slows down the response to rainfall and does not to allow widespread unmanaged and damaging flooding to occur.

Whilst policy unit 10 covers Birmingham and the Black Country, it is important to note that flood risk within Birmingham is complex and is the result of flooding from a wide range of sources, including the main river Tame, smaller tributaries which run through the city, surface water run-off, storm water drainage and sewer overflow. The CMFP suggests one key aspect of reducing flood risk within the city will be development control, and applying the 'making space for water' approach to urban growth and urban re-generation; working with professional partners to manage flood risk in a coordinated way, not just relying on flood defences.

Enhancing Biodiversity across the West Midlands (WMBP, 2008)

The maintenance and enhancement of biodiversity is of fundamental importance because it is an integral part of sustainable development; an essential component of improving quality of life; critical to our future health and well being; important for economic development and regeneration; an expectation of government policy; and a statutory obligation. This regional guidance sets out to demonstrate, to local planning authorities, how Local Opportunity Mapping for biodiversity in the West Midlands will make a major contribution to achieving national and regional policy objectives and statutory requirements for enhancing biodiversity.

Biodiversity and adaptation to climate change (WMBP, 2008)

This advisory note explains why adaptation is an important issue for local authorities, and will become increasingly so, alongside the already urgent mitigation agenda. It provides a concise explanation of the potential impacts of climate change on biodiversity. It sets out the drivers for action and includes a set of adaptation principles to address the impacts of climate change on biodiversity. It also highlights further resources to develop truly sustainable strategies to deal with biodiversity under the impacts of climate change.

Growing our future: West Midlands Regional Forestry Framework Delivery Plan 2008-2011

This delivery plan sets out detailed actions, targets and success indicators with regard to delivering Trees, Woods and Forestry to benefit those living in, working in and visiting the West Midlands.

Landscapes for Living Project (WMBP, 2007)

To support the West Midlands Regional Biodiversity Strategy second objective, the West Midlands Biodiversity Partnership manages the Landscapes for Living Project (funded primarily by the West Midlands Wildlife Trusts). The project seeks to develop a 50-year vision, including a regional biodiversity map showing the areas containing where the region's most precious biodiversity resource is currently concentrated. Solihull lies in the Arden character area, for which a Character description is included in the Countryside Agency's 'Countryside Character – West Midlands Volume'. The predominant character of the Borough is Ancient Arden – an area of former wood pasture and heath, characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks. It is these areas which will need to be expanded and linked to provide the kind of landscape scale approach which will benefit both people and wildlife.

West Midlands Regional Climate Change Action Plan (GOWM, 2007)

The West Midlands Regional Climate Change Action Plan sets out the actions that the regional organisations can take over the next three years to move towards a position where all regional policy addresses the causes and impacts of climate change as a central objective. The Action Plan contains 30 actions covering six regional climate change priorities:-

- Planning and environment
- Economy
- Implementation
- Leadership

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- Communication
- Targets and monitoring

Delivery of the Action Plan is managed through the Climate Change Office. a body comprising representatives from five key regional partners - the Government Office for the West Midlands, Advantage West Midlands, the West Midlands Regional Assembly, the Environment Agency and Natural England. The delivery of the Action Plan is overseen by a Climate Change Panel comprising Chief Executives and Directors of the five key partner organisations, who report to the Regional Minister.

Green Infrastructure: A Prospectus for the West Midlands Region (WMRA, 2007)

The Forestry Commission, on behalf of the Assembly's Regional Environment Partnership, commissioned the production of the West Midlands Green Infrastructure Prospectus and accompanying technical report. The prospectus is

designed to inform regional, sub regional and local policy and practice, sets out the regional vision for green infrastructure and has the following five aims:

- To ensure politicians, policy developers and decision makers throughout the West Midlands are aware of the vital roles of Green Infrastructure.
- To advocate grater investment in, and improved management of, the Region's existing Green Infrastructure.
- To ensure Green Infrastructure is appreciated as an essential element of delivering sustainable communities, underpinning growth and regeneration.
- To promote a robust and systematic approach to Green Infrastructure assessment, planning and investment by local, sub regional and regional planning bodies.
- To ensure Green Infrastructure is proactively planned from the earliest stages of strategic plan preparation through to concept and design stages of all future developments in the Region.

West Midlands Regional Economic Strategy: Connecting to Success (Advantage WM, 2007)

Connecting to Success is described as the first low carbon RES, and includes sustainable communities and sustainable living amongst its strategic objectives. It recognises the need for the more efficient use of resources and changes to patterns of consumption and demand. It also recognises environmental technologies have potential for job and wealth creation, particularly in rural areas. Importantly, the WMES also acknowledges the links between poor environment and deprivation. Together with the latest version of the RSS, this will make up the new Regional Strategy as of April 2010.

West Midlands Regional Biodiversity Strategy (WMBP, 2005)

The West Midlands Regional Biodiversity Strategy published in 2005 outlines the following 5 five key challenges for the region:

- 1. Maintaining and improving the condition of habitats, species and ecosystems.
- 2. Developing an area based approach to restoring wildlife.
- 3. Monitoring the condition of habitats, species and ecosystems.
- 4. Re-connecting and integrating action for biodiversity with other environmental, social and economic activity.
- 5. Coping with the impacts of climate change.

West Midlands Regional Forestry Framework: Growing Our Future (FC, 2004)

The West Midlands Regional Forestry Framework: Growing Our Future was first published by The Forestry Commission in October 2004, setting out the vision for woodland and forestry in the West Midlands. Since then, Delivery Plans are published annually.

Countryside Character – Volume 5: West Midlands, Character Area 97 Arden

Solihull lies in the Arden character area, for which a character description is included in the Countryside Agency's 'Countryside Character – West Midlands Volume'. The region known as Arden is an area of former wood pasture and ancient farmlands lying on the eastern side of the Birmingham plateau. Traditionally regarded as the land between the river Tame and the river Avon in Warwickshire, Arden type landscapes also extend into north Worcestershire.

Although there are few dramatic physical features, the Arden countryside has an intimate, historic character with a strong sense on unity. Brick and timber are

the chief building materials throughout the area and the many farmsteads and hamlets blend subtly with their surroundings. This is Shakespeare's 'Forest of Arden', historically a region of woodlands and 'waste', which remains today one of the more wooded parts of the Midlands.

Arden is characterised by a wide range of historical and ecological features, which create a landscape of intimacy and a strong 'sense of place'. Most significantly it remains a wooded landscape with mature hedgerow oaks, ancient woodlands and historic parklands. The association with former common and heath imparts a strong sense of unity and is reflected in the widespread occurrence of heathy vegetation, particularly roadside bracken. A number of remnant commons still survive but most of the larger areas have been enclosed and are today characterised by a geometric pattern of roads and small fields. The landscape retains many ancient features, in particular a pattern of irregular fields defined by thick hedgerows; a network of narrow, winding and often sunken lanes and trackways; a dispersed settlement pattern of farmsteads and hamlets; and a wealth of antiquities. These features are woven within a farmed landscape, which in places still remains a strong rural character.

The key characteristics of the Arden countryside are:

- Well-wooded farmland landscape with rolling landform.
- Ancient landscape pattern of small fields, winding lanes and dispersed, isolated hamlets.
- Contrasting patterns of well-hedged, irregular fields and small woodlands interspersed with larger semi-regular fields on former deer parks and estates, and a geometric pattern on former commons.
- Numerous areas of former wood-pasture with large, old oak trees, often associated with heathland remnants.

LOCAL POLICY AND STRATEGY

Warwickshire Local Geodiversity Action Plan (draft)

The Local Geodiversity Action Plans (LGAP) set out actions to conserve and enhance the geodiversity of Warwickshire, Coventry and Solihull. They aim to:

- identify and audit the geodiversity resource
- conserve and manage Warwickshire's geodiversity
- protect Warwickshire's geodiversity through the planning system
- research Warwickshire's geodiversity
- · increase awareness of Warwickshire's geodiversity with reference to professional bodies, conservation practitioners, landowners, the education sector, and the general public

Woodland Strategy: First Review (SMBC, 2010)

The Council has adopted a Woodland Strategy (2010) which has the overall aim of protecting, managing and enhancing Solihull's woodlands for the benefit of Solihull residents, recreation, nature conservation and visual amenity.

Warwickshire Historic Landscape Characterisation Project (English Heritage, 2009) Historic Landscape Characterisation (HLC) is a GIS-based archaeological method for defining the historic and archaeological dimension of the present-day landscape. It can explain how and why the landscape looks as it does, identify landscape's 'time-depth' and facilitate sustainable management.

The Historic Landscape Characterisation programme initiated by English Heritage and run in partnership with County Council Sites and Monuments Records provides a framework for broadening our understanding of the whole landscape and contributes to decisions affecting tomorrow's landscape.

Historic landscape characterisation is concerned with recognising the many ways in which the present countryside reflects how people have exploited and changed their physical environment, and adapted to it through time. It considers this with respect to different social, economic, technological and cultural aspects of life, and the varied underlying influences of geography, history and tradition (Countryside Commission 1993; 1997; Fairclough et al. 1999). It seeks to identify patterns of change and important relics of past change, and to analyse how and why patterns consistently vary from one place to another. The core premise of historic landscape characterisation and its application in planning and conservation is that relationships between people and their environment are dynamic and ever changing. The key policy issue is how society can influence the direction and pace of future change whilst still maintaining links with the past in a way that enriches the present.

Climate Change Strategy (SMBC, 2009)

Solihull Council acknowledges that climate change is occurring and that it will have far reaching effects on people and places within the borough, the economy, society and the environment. To meet the challenge, the Council must involve every council department, officer and elected member in reducing its carbon footprint and ensuring it is able to cope with a changing UK climate. Two of the key strategic aims are of particular importance to this strategy:

Key Aim 1: Reduce the Council's carbon, waste and water footprint and supporting action 'Explore the potential for the production of biomass energy from waste or wood fuel derived from Council owned woodlands through sustainable woodland management practices.'

Key Aim 2: Understand the impact climate change may have on Council buildings, land and services and identify how they can be adapted to ensure future risk is minimised and supporting action 'Consider the need to take account of adaptation to climate change when undertaking habitat creation and management.'

The policies and strategies will be taken forward into the developing Local Development Framework.

Biodiversity and Geological Conservation Validation Checklist (SMBC, 2008)

Solihull's Biodiversity and Geological Conservation Validation Checklist provides landowners and planners details of the types of applications that require ecological surveys before a decision can be made in addition to the time of year to undertake the survey. This tool will ensure that applications are not validated if information on biodiversity impacts are missing and ensure that landowners are aware of and adhere to relevant wildlife legislation, in addition to reducing planning administration costs.

National Local Government Performance Indicator 197 (NI 197): Improved Local Biodiversity (2008-11)

Solihull Council has adopted NI 197 as part of its Local Area Agreement. The indicator measures the performance of LAs for biodiversity by assessing the implementation of positive conservation management of Local Sites (LWS).

The indicator relates to the influence LAs have on Local Site systems and the measures and procedures involved in ensuring effective conservation management is introduced to, and acted upon by Local Site owners and managers.

Solihull's Sustainable Community Strategy: One Borough: an equal chance for all (Solihull Partnership, 2008)

Solihull's Sustainable Community Strategy (2008) identifies key issues for Solihull and sets out the scene for planning and service delivery. One of the central themes is entitled 'A Place to Be' with the priority 'Living within our means - natural resources.' This includes the following outcome 'Ensure that all new development, and existing activities, where appropriate, include measures to conserve and enhance natural resources (soil, air, water and light); manage flood risk, reduce congestion, protect, link and enhance biodiversity and reduce consumption and waste.' Supporting people is key to this strategy, which aims to enhance our quality for life through actions to improve the economic, social and environmental well being of the Borough.

Solihull Strategic Flood Risk Assessment (Halcrow, 2008)

Solihull's Strategic Flood Risk Assessment (SFRA) was produced in accordance with Planning Policy Statement 25 (PPS 25) to enable the Council to effectively manage flood risk through each stage of the spatial planning process

Place Making in North Solihull: Design Code (Regenerating North Solihull, 2007)

The design code is a document that provides guidance to developers and planners on the future development in North Solihull. The code adds to the information contained in the Strategic Framework adopted as SPG, 2005.

Solihull's Unitary Development Plan (SMBC, 2006)

Solihull's UDP was published in March 2006. UDP policy ENV10 'Important Nature Conservation Sites' has been included to protect statutory designated sites such as the 5 SSSIs in the Borough (including Clowes Wood, and over 15 Local Nature Reserves (approximately 50% are predominantly woodland LNRs) designated under the National Parks and Access to the Countryside Act 1949. ENV 10 also protects non-statutory sites in the borough or Local Wildlife Sites (LWS, formerly known as Sites of Importance for Nature Conservation or SINCs) and Local Geological sites (LGS, formerly known as Regionally Important Geological Sites or RIGS). Sites are selected on the basis of 'Guidance for the Selection of Non-Statutory Sites of importance for Nature Conservation in Warwickshire', produced by the Wildlife Sites Partnership in May 1998 and adopted by the Council. LWSs are selected on the basis of their being of 'substantive' nature conservation value.

Designated sites alone cannot maintain the Borough's overall biodiversity value. Policy ENV11 'Conservation of Biodiversity' states that the Council will seek to conserve and enhance natural corridors, networks of natural habitats and habitats identified in the Warwickshire, Coventry and Solihull LBAP which contains 24 habitat action plans. The UDP contains policies to protect, manage and enhance the River Cole Valley for the benefit of both people and wildlife by supporting Project Kingfisher and promoting the extension of the project along the Kingshurst Brook to link the Cole with Meriden Park and Alcott Wood (LNR).

Species protection through the protection of designated sites (Policy ENV12 River Blythe Catchment Area) may help protect rare and protected species but many are found outside of such sites. Local policies such as ENV13 'Wildlife Species' in the UDP are designed to prevent harm to rare and protected species and LBAP species and their associated habitats.

To protect and enhance the Borough's important trees and woodlands, the Council has adopted Policy ENV 14 of the UDP which states that, 'the Council will safeguard important trees, hedgerows and woodlands, encourage new and replacement tree and hedgerow planting and will identify areas that may be suitable for the creation of new woodlands by natural regeneration or planting. The Council will protect and seek to enhance those woodlands that are seminatural because of their great variety and important natural characteristics.'

Solihull's Green Spaces Strategy (SMBC, 2006)

The Green Spaces Strategy aims to encompass both space for people and for wildlife, taking into account the landscape and local character of different parts of Solihull. It developed proposals to reflect the many functions of the 6 zones identified. This was supported by a green infrastructure plan and put forward some local standards in addition to action and implementation plans.

North Solihull Strategic Framework (Regenerating North Solihull, 2005)

The Strategic Framework sets out a vision and regeneration objectives for North Solihull and a comprehensive plan for development and change with in the wards of Smith's Wood, Kingshurst and Fordbridge and Chelmsley Wood and contains a population of approximately 38,700 people. The Regeneration Area is based on the 'East Birmingham and North Solihull Regeneration Zone 'as defined in planning guidance and the Regional Economic Strategy (2007).

Solihull's Urban Forestry Strategy (SMBC, 2004)

Solihull's Urban Forestry Strategy concentrates on the protection of the Borough's treescape. In addition the Council owns and manages 26 native woodlands, a number of which are ancient semi-natural woodland (PPS 9 directs Local Planning Authorities to have policies to protect Ancient woodland and veteran trees). This strategy is currently under review.

Solihull's Countryside Strategy (SMBC, 2000)

The Strategy for Solihull's countryside has been divided into 8 key strands, which state the council will:

- maintain its open and rural character.
- encourage the sensitive and sustainable management to protect its character.
- conserve and enhance the natural environment and its assets.
- encourage greater use providing such activities do not harm its natural qualities, character and openness.
- · maintain existing settlements as attractive and distinct places and ensure that any new development is sympathetic to its local character
- encourage people to care for and enjoy the countryside in a responsible way by raising public awareness and understanding of countryside issues.
- develop new and existing partnerships and involve the community.
- provide resources and support towards the initiatives in the Strategy.

This strategy is currently under review.

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

The Warwickshire Coventry and Solihull Local Biodiversity Action Plan outlines how landowners, land-managers and policy makers will protect the characteristic wildlife and landscapes of our sub-region. The plan contains 26 Species Action Plans for our threatened plants and animals. There are 24 Habitat Action Plans including traditional orchards, woodlands, and wood-pasture, old parkland and veteran trees.

Habitat Biodiversity Audit (HBA)

The PPS9 Key Principles state that planning decisions should be based on up-to-date information on biodiversity and geological resources. The Council is a partner in the Warwickshire, Coventry and Solihull Habitat Biodiversity Audit (HBA) which has surveyed all the natural habitats in the area and continues to up date the information on a rolling programme. The habitat data will be used as a sustainability indicator and will enable more accurate assessment of the consequences of proposed development.

Warwickshire Landscapes Guidelines – Arden (1993)

Landscape Guidelines for Arden have been produced by Warwickshire County Council and the Countryside Agency and are adopted by the Council.

The 'Warwickshire Landscape Guidelines: Arden' provides a comprehensive landscape assessment, dividing Arden into seven distinct landscape types, and sets out a series of management strategies and landscape guidelines to guide new development and land management practices.

This document provides a detailed landscape character assessment for Solihull, showing on a map the different sub-areas, such as the 'Arden Parklands' area around Hampton-in-Arden, the 'Ancient Arden' landscapes around Meriden, and the 'Wooded Estatelands' around Dorridge. The document provides specific landscape policy guidance for each part of the Arden landscape, and these have in turn become incorporated into UDP policies and other strategies and plans of Solihull.

Nature Conservation Strategy: First review 2010 – 2014

Solihull MBC PO Box 19 Council House Solihull B91 9QT

Telephone: 0121 704 8000

www.solihull.gov.uk