

Environmental Character Area Profile for the Minerals Local Plan: 11. Hollywood and Wythall

1. Introduction

- 1.1. Minerals development usually takes place on previously undeveloped land and can therefore result in permanent change to the natural environment and green spaces in Worcestershire. The impacts of both the working and the restoration of mineral sites need to be considered in detail in the development of the Worcestershire Minerals Local Plan (the MLP).
- 1.2. The Council will take a 'green infrastructure' (GI) approach to considering these impacts. The GI approach is a different way of thinking about the green spaces in Worcestershire. It moves beyond solely considering the environmental benefits of green spaces and integrates the consideration of economic, health and social benefits in the planning and management of green spaces. Rather than considering each green space in isolation it looks at the ways in which individual sites and corridors of green space collectively form the distinctive character of Worcestershire that attracts both visitors and business to the County.
- 1.3. The components of GI include biodiversity, landscape, historic environment, access and recreation and water (also known as blue infrastructure). The GI approach requires thinking about the environment as an integrated system of stepping stones or nodes in a wider network¹.

Green infrastructure and mineral workings and restoration

- 1.4. There is significant potential for mineral workings to destroy existing networks of green infrastructure if the nature and character of these networks is not taken into account. However there is also significant potential to contribute positively to green infrastructure through the restoration of mineral workings.
- 1.5. The GI approach extends beyond thinking about designated sites of biodiversity or historic interest. This means that the impact of a mineral working on the wider environment and the integrated system of stepping stones or nodes in a wider network² will need to be considered.

Environmental Character Areas³ and the Minerals Local Plan

- 1.6. The Worcestershire Green Infrastructure Partnership has undertaken an analysis of the landscape character, biodiversity and the historic environment of Worcestershire to identify 30 distinct GI Environmental Character Areas (ECAs).

¹ Green Infrastructure Guidance – Natural England.

² Green Infrastructure Guidance – Natural England.

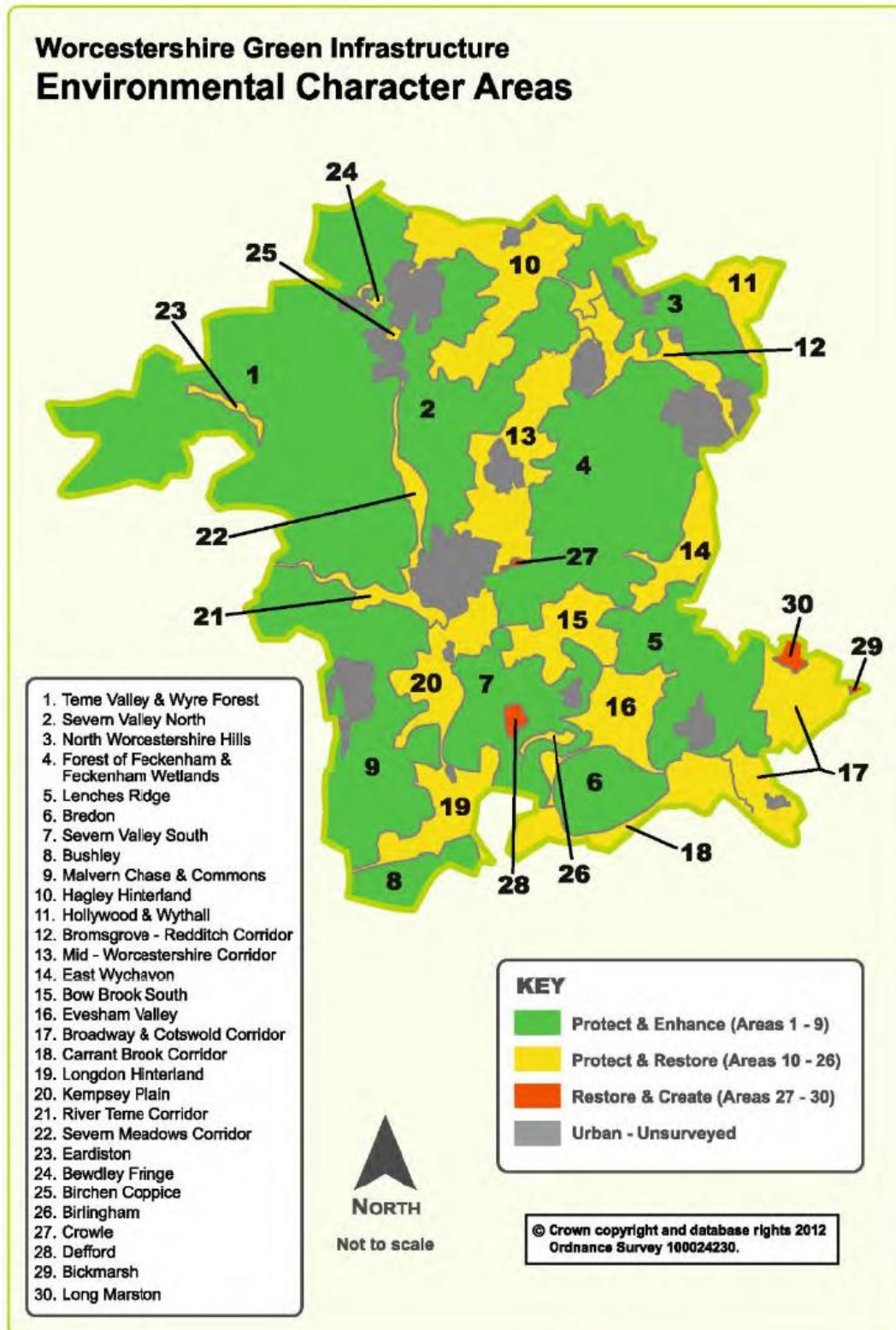
³ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

- 1.7. These underlie the distinctive character of Worcestershire and it is the Council's intention that the unique characteristics of each area will drive the restoration strategy for the Minerals Local Plan.
- 1.8. This is one of 30 profile documents which set out the characteristics and priorities for the each ECA. It sets out the mineral resources in the ECA and the GI priorities identified by the Worcestershire GI Partnership. These priorities are structured around biodiversity, historic environment, landscape character, water environment (also known as blue infrastructure) access and recreation and transport. The document is also supplemented by other locally relevant information as appropriate.
- 1.9. Following consultation this information will be used to develop the spatial strategy and restoration priorities for each ECA.
- 1.10. Profiles for each of the following ECAs are available on our website www.worcestershire.gov.uk/mineralsbackground:
- 1.11. The Environmental Character Areas are:

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

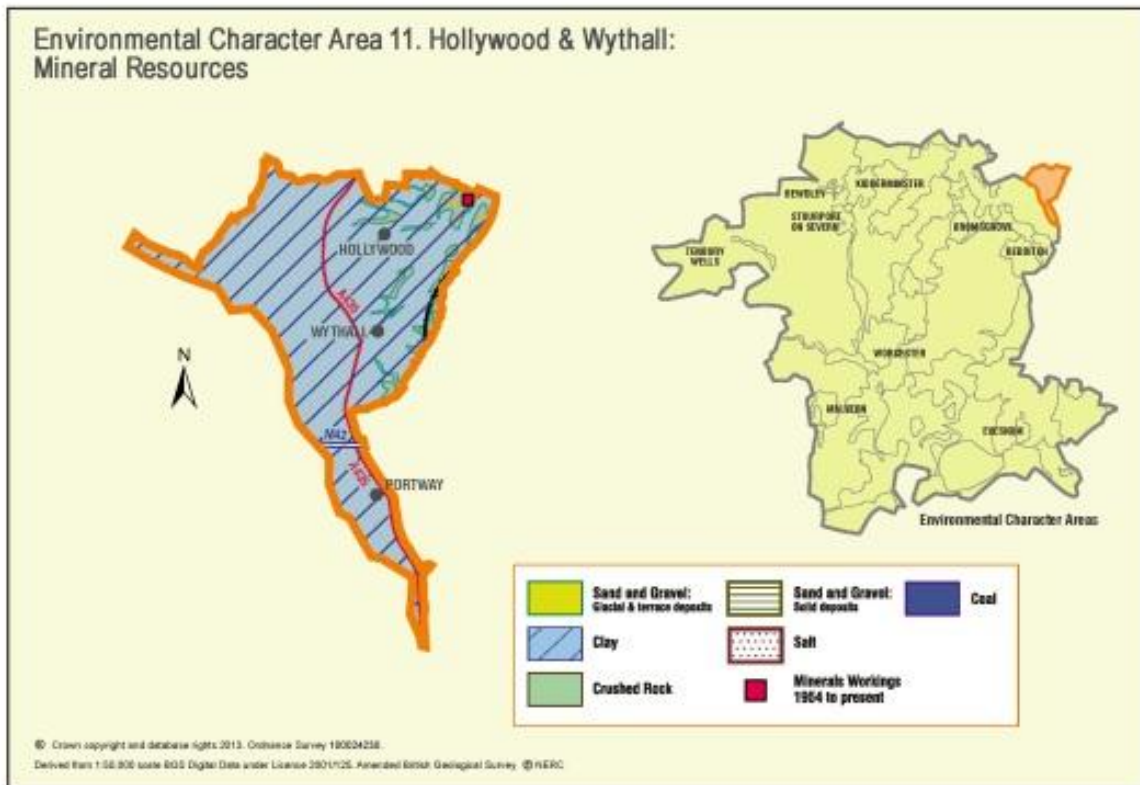
These are illustrated on Figure 1. Environmental Character Areas.

Figure 1. Environmental Character Areas



2. Characteristics and priorities of the Hollywood and Wythall ECA 11

Figure 2. Mineral resources in the Hollywood and Wythall ECA



Mineral Resources

Aggregates

2.1. Details about the aggregate resources in this ECA are given in the background report "Analysis of Mineral Resources in Worcestershire" available on www.worcestershire.gov.uk/mineralsbackground. The following is therefore only a simple summary.

Sand and gravel

2.2. ECA 11 is overlain by complex layers of glacial deposits and of boulder clay which make it difficult to estimate the nature of the resource. 3 former sites were worked to a depth of 10m and other large deposits may exist.

Hard rock

2.3. There is no evidence that suitable strata exist. The geological map shows Bromsgrove Sandstone formerly exposed at the former Longbridge works, just north of the county boundary. This material has been used as a building stone in the Bromsgrove area.

Industrial minerals

Clay

- 2.4. The geological map also shows 3 former brickworks north of the county boundary for this ECA.

Silica sand

- 2.5. There is no evidence that suitable strata exist.

Brine

- 2.6. There is no evidence of brine working in this area.

Future Growth

- 2.7. The key driver for mineral extraction is to provide the raw materials required for the economy to function properly and for homes and infrastructure to be built. Minerals are unevenly distributed. Some of the minerals that we need are not found in Worcestershire and will need to be imported from outside the County. Many minerals are expensive to transport, particularly aggregates as they are a relatively low value and bulky material, and they are likely to be used close to their source, meaning that some local mineral extraction will be needed to support local growth in housing and the associated infrastructure that is required, or to provide raw materials for local industry. On average, about 80 per cent of mineral products are used within 30 miles of the quarry but this section considers the likely levels of development within 10 miles of the ECA.
- 2.8. This ECA is a largely rural area within Bromsgrove District. Bromsgrove District anticipates 4,559 homes, 46.4 ha of employment land and replacement of a retail park in the next 14-18 years⁴.
- 2.9. The ECA incorporates the "large settlement"⁵ of Wythall which is proposed for some development in the Bromsgrove District Council Draft Core Strategy 2.
- 2.10. These and other areas beyond Worcestershire could create further demand for minerals in this Environmental Character Area, particularly the metropolitan areas immediately to the north of this ECA.

⁴ Information gathered by Worcestershire County Council in early 2013. This gives a good indication of the likely levels of development which can be expected, but for the latest figures please refer to the relevant City, District or Borough Council.

⁵ Large settlements are second in the three tier settlement hierarchy set out in the Bromsgrove District Council Draft Core Strategy 2. Suitable development for large settlements is likely to include convenience A1 retail to meet local needs, local services, residential or small scale business/office development.

Green Infrastructure priorities⁶

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

These are:

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

2.12. The category is based on an assessment of the ECAs landscape character, biodiversity and the historic environment characteristics. These characteristics were each attributed a score, with biodiversity being given a greater weighting than landscape and the historic environment, each of which were given equal but lower weightings.

2.13. The strategic GI approach for the Hollywood and Wythall is to *protect and restore*. The overarching principle identified by the GI partnership is to protect and restore historic pattern of small enclosures

Biodiversity and geodiversity

2.14. The landscape character of this area is heavily influenced by its historical development from the medieval Forest of Arden and still reflects this ancient wooded character within its Landscape Type of Timbered Pastures. This is a complex landscape of relic commons and former wood pasture (assarted from woodland), reflected today by an intermixed pattern of irregular fields, small scraps of woodland and scattered farms arising from the assarted areas occurring next to areas of geometric enclosure, straight roads and strings of wayside dwellings typical of the previous commons.

2.15. The most noticeable characteristics are the dense network of minor lanes and the notable tree cover of mature hedgerow oaks giving filtered views through to the small pastoral fields.

2.16. This is an area that has not been subjected to intensive farming and consequently supports a high proportion of wildlife reminiscent of 1950's rural landscapes. In areas undisturbed by agriculture or development, there are some remnant areas of bilberry underneath oak woodland, and wet woodland occurs occasionally on boulder clay.

2.17. There are remnant areas of wet grassland along stream banks and flushes with some oligotrophic grassland along railway banks and golf courses. Notable natural features include small populations of wild daffodils.

⁶ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

- 2.18. The arable weed seed bank is thought to be significant, being derived from medieval/late arable farming which has been dormant in the ground since the later move to grazing.

GI Priorities:

- 2.19. The biodiversity priority identified for the Hollywood and Wythall ECA are⁷:
- Protect and enhance the ancient wooded character including replanting with mixed, native species where appropriate, respecting the characteristic tree cover pattern.
 - Protect and enhance the hedgerow network, retaining or strengthening the organic enclosure pattern. Opportunities should be sought to safeguard or replant hedgerow trees (particularly oaks) to address age structure and density.
 - Encourage the retention of pastoral land use.
 - Protect and enhance existing sites and features of biodiversity interest. Newly created GI features should aim to augment this existing resource concentrating on the main priorities for protection and creation including neutral grassland, ponds and veteran and hedgerow tree connectivity through linking, merging and buffering existing and newly created habitats.

Geodiversity

- 2.20. There are no Local Geological Sites in this ECA.

Historic Environment⁸

- 2.21. The area has been under recorded archaeologically; however the area has potential as indicated by the Scheduled remains of Berry Mound Iron Age Hill Fort and the well preserved medieval landscape. Much of the known assets relate to post medieval industrial remains. Where sandstone hills occur, there is potential for Mesolithic activity.
- 2.22. The historic landscape character is dominated by a substantially intact post-medieval field pattern of small, regular enclosures with mature hedgerows.

GI Priorities:

- 2.23. The historic environment priorities identified for the Hollywood and Wythall ECA are⁹:
- Protect and enhance the locally distinctive and largely intact historic pattern of small regular enclosures; their mature hedgerows and hedgerow trees.
 - Enhance and create linkages with wider historic environment green networks (hedgerows, woodland and relic parkland).

⁷ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

⁸ Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology (R Jackson and H Dalwood et al) (November 2007) *"Archaeology and aggregates in Worcestershire: A resource assessment and research agenda"* Supported by English Heritage through the Aggregates Levy Sustainability Fund.

⁹ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

- Buffer historic landscape features, such as earthwork boundaries, ridge and furrow and abandoned medieval settlement remains.
- Protect historic water features and buffer key sites, such as moats and ponds.

Blue Infrastructure

Flooding

- 2.24. This ECA includes parts of the river River Cole and its tributaries which drain the north-eastern corner of Redditch District, including the villages of Hollywood and Wythall. There are no formal defences on these watercourses, although there are reports of minor flooding along the River Cole and its minor tributaries. This has occurred within the developed areas of Hollywood, and some of the more rural areas of the catchment, due to restrictions in flow from culverts. The area is also underlain with Etruria Marl (a type of clay) which results in rapid runoff from the surrounding landscape and thus exceedance of channel capacity. In addition the River Cole is known to flood at the ford on Houndsfield Lane, where it has been reported to be 6ft deep on occasions.
- 2.25. In Redditch flood risk is not seen as a significant factor for strategic planning in the district.
- 2.26. Groundwater flooding is also not a particular cause for concern within Redditch Borough.
- 2.27. The River Severn Catchment Flood Management Plan makes this a Policy 3 area, where it will "Continue with existing or alternative actions to manage risk at the current level."

Water Quality

- 2.28. In terms of Chemical and Biological Quality, all the watercourses score 'Fairly Good.' The whole ECA is nonetheless categorised as having water company and other point source pollution pressures.

Water supply

- 2.29. The whole of Bromsgrove District is under pressure with regards to water availability. Due to its location in the headwaters of catchments and containing the large aquifer, problems with water availability within Bromsgrove District extent far beyond its borders and can have negative impacts on sites much further downstream. It is therefore essential that appropriate measures are taken not to over abstract the sources groundwater and surface water sources within its administrative area.

GI Priorities:

- 2.30. The blue infrastructure priorities identified for the Hollywood and Wythall ECA are¹⁰:
- Reduce dependence on raised flood defences, by taking opportunities to restore sustainable natural storage of floodwater on undeveloped floodplains.
 - Make more space for rivers through urban areas via 'blue corridors' (i.e. Restoring access for floodwater onto key strips of floodplain. This may require redevelopment to be limited to flood-compatible land-uses e.g. parkland).
 - Some designated 'aquatic conservation' sites are in unfavourable condition. Activities that affect these sites must be changed to improve their condition. Ensure that the run-off from all proposed development is minimised. For example, SUDS must be encouraged and targeted within planning approvals.
 - Encourage the retro-fitting of SUDS where surface water flooding is already a problem.
 - Support ecological improvements. Examples of this include Severn & Avon Wetlands Project; Natural England's three fluvial SSSIs.
 - Reduce the levels of nutrients and sediments entering watercourses and take actions to improve the management of water resources.

Access, informal recreation and tourism

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

2.32. Tourist attractions in this ECA include the Transport Museum at Wythall.

GI Priorities:

- 2.33. The access and recreation priorities identified for the Hollywood and Wythall ECA are¹¹:
- Consider the proximity to and ability to integrate with the rights of way network, recreational way-marked routes and the cycle network;
 - Accommodate associated facilities necessary for the use and enjoyment of the site in a manner that is appropriate and able to integrate with the landscape character, wildlife and cultural interests.
 - Act as a greenway from town into the countryside and utilise existing canal, former railway lines, river corridors and wherever possible link with public transport routes.

¹⁰ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

¹¹ Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

- Adopt minimum quality standards, (commensurate with its location and scale) that sites and routes should be expected to achieve will be those from the Green Flag Award Programme, and the Country Parks Accreditation Scheme, as appropriate.

Transport

Road

- 2.34. The M42 crosses the southern end of the ECA with Junction 3 linking with the A435 in the ECA. The A435 runs north-south through the ECA to link Birmingham with Redditch. Other roads in this Environmental Character Area are more minor.
- 2.35. The Worcestershire Advisory Lorry Route Map does not show any low bridges which would restrict the movement of vehicles over 16'3" (4.95m) on the lorry route network. Local roads may have further restrictions and will need further assessment if they are to be used for accessing mineral resources.

Rail

- 2.36. The Stratford Line runs along the north eastern boundary of this ECA, connecting Worcester and Evesham, and Wythall Station is within the ECA and Whitlock's End Station just beyond the boundary into Solihull.

Water

- 2.37. The Worcester and Birmingham Canal crosses the western end of the ECA where it forms a tunnel between Hopwood and King's Norton.

GI Priorities:

- 2.38. The GI transport priorities identified for the Hollywood and Wythall ECA are¹²:
- Opportunities should be sought to protect, enhance and create green infrastructure that promotes sustainable movement by walking and cycling, reducing the need to travel by car by providing pleasant environments that promote sustainable transport as a means to minimise the impact of transport on the natural environment and mitigate the impacts of climate change.

LTP Priorities:

- 2.39. The LTP 3 transport priorities identified for the Hollywood and Wythall ECA are:
- **Wythall station enhancement scheme** – this scheme would involve the refurbishment of station buildings and facilities, together with the provision of a small car park at the station, and is likely to be progressed in the short term.
 - **A435 Redditch to Maypole Roundabout interurban corridor maintenance and improvement scheme** - a programme of improvements to transport infrastructure on this route, which is

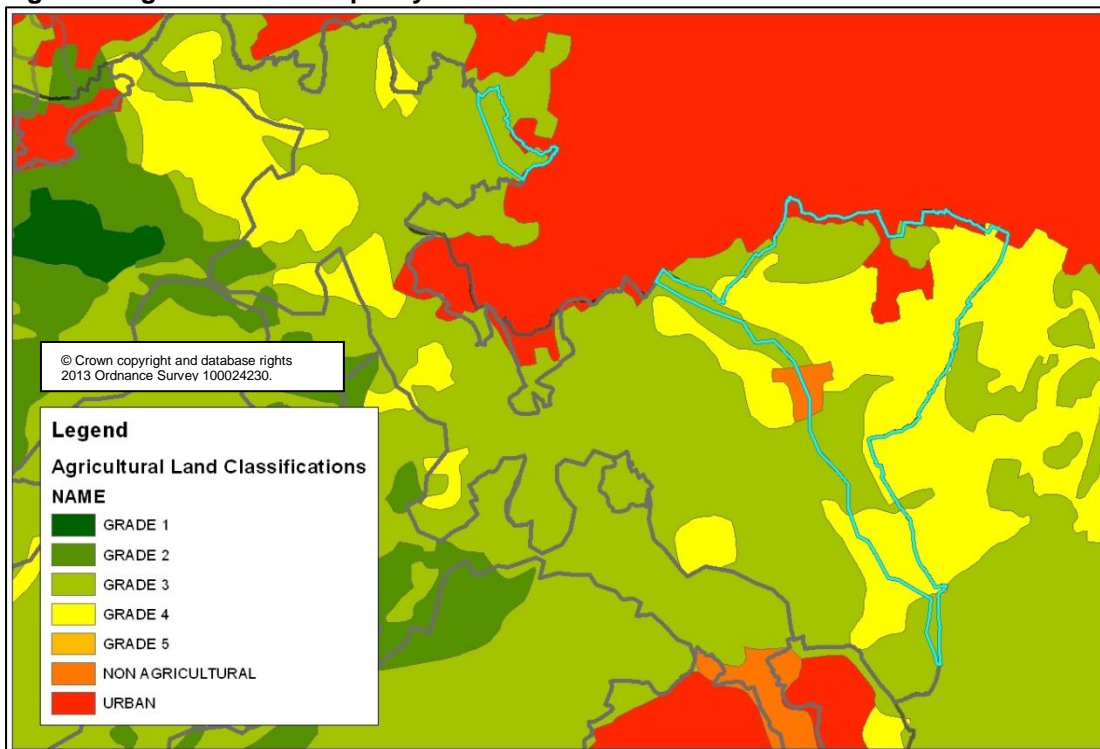
¹² Worcestershire County Council (July 2012) *Planning for a Multifunctional Green Infrastructure Framework in Worcestershire: Green Infrastructure Framework 2*

likely to be progressed in the medium term and will include junction enhancements, street furniture decluttering, replacement and enhancement.

Agriculture/Forestry

2.40. The agricultural land use in this ECA is dominated by pastoral land. Agricultural land quality varies across the area, but is dominated by grade 3 and lower quality grade 4 land. There are also pockets of non-agricultural and urban land in the ECA, as shown in Figure 3.

Figure 3. Agricultural land quality



2.41. The forestry commission's woodland opportunity maps show that the majority of this ECA is listed as priority 1 for woodland creation which could benefit landscape character, biodiversity, cultural heritage and/or public access (Figure 4). They also show that only the outcrop of the ECA to the north of Longbridge is an ancient woodland landscape but this is not prioritised for woodland restoration (Figure 5).

Figure 4. Woodland creation for landscape, biodiversity, heritage and public access

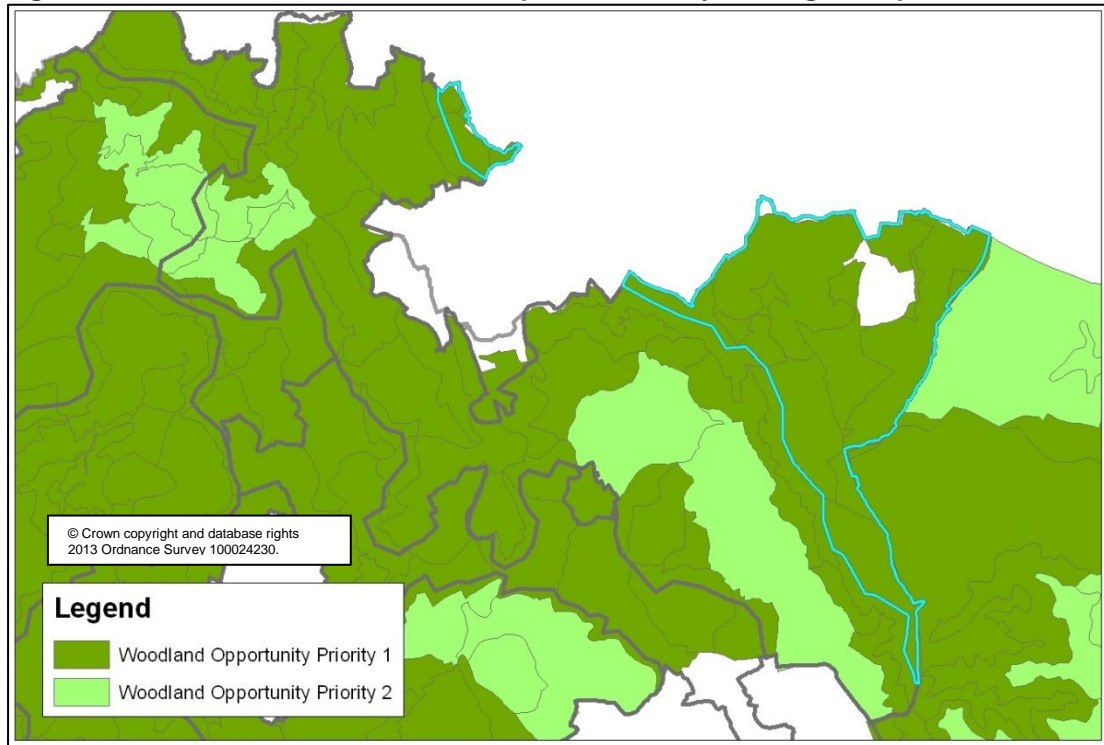
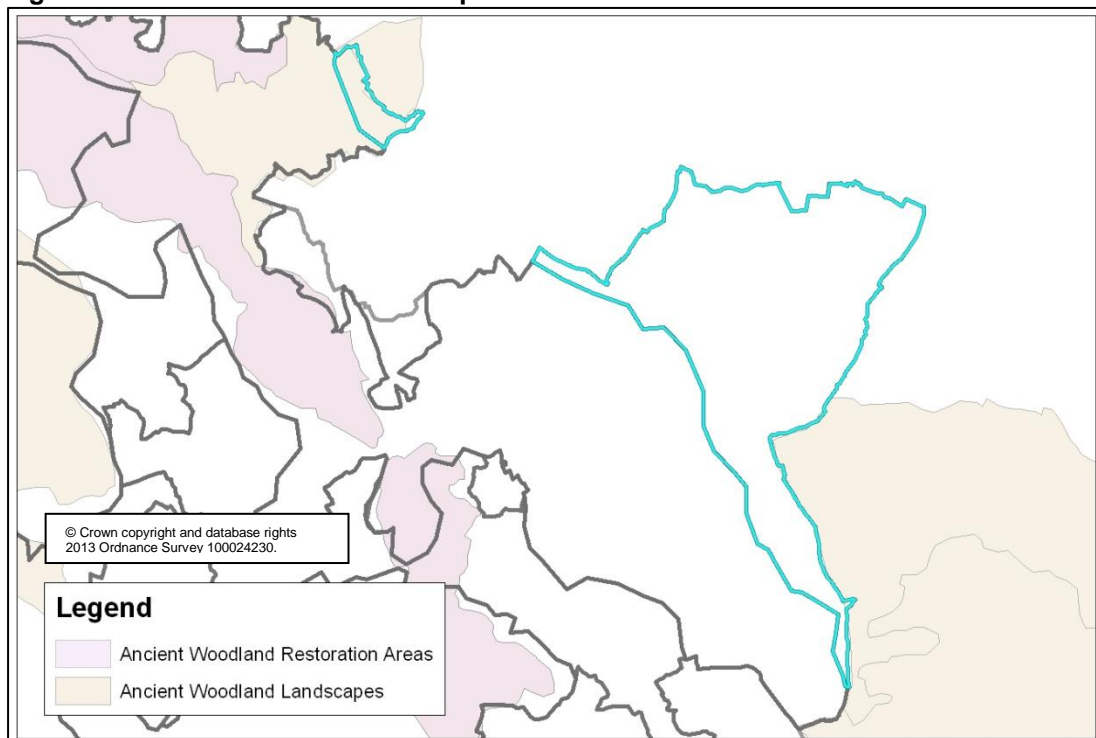


Figure 5. Ancient woodland landscape and restoration



Climate Change

- 2.42. Some effects of climate change will be similar across the whole county and many of the issues which can be addressed are likely to be common to all ECAs, such as:

- Improving air quality
- Providing flood risk management solutions
- Preventing water and soils pollution as a result of climate change related extreme weather conditions
- Promoting energy efficient and low carbon solutions
- Contributing to renewable energy production

Opportunities and issues

- 2.43. Green Infrastructure features such as buffering of watercourses provide a way of minimising fluvial flooding. Planned landscaping incorporating flood defences could provide both short term benefits and sustainable drainage schemes (SUDS) are a mechanism for managing both fluvial and pluvial flood risk.
- 2.44. Agricultural and horticultural businesses could face damaging water shortages in the coming decades as a result of climate change. In many parts of Worcestershire, water resources are under severe pressure. The majority of catchments in which horticultural production is concentrated have been defined by the Environment Agency as being either over-licensed and/or over-abstracted. Well executed water storage facilities could not only provide water supply for the business in the dry periods but a wide range of green infrastructure benefits such as biodiversity or landscape and opportunities for increased physical activity and exposure to nature.
- 2.45. The soil types in most of this ECA are inherently at risk of subsidence and heave. It is possible that changes in weather patterns as a result of climate change may worsen these tendencies.
- 2.46. Locally significant areas of heathland, bracken and conifer woodland in this ECA are amongst the habitats most at risk from fire as a result of climate change.

Socio-economic considerations

- 2.47. The analysis of the socio-economic situation in Worcestershire in this strategy considers the economy and health & well-being at a high level. It is not intended to draw a full picture of the economy or health and well-being in the county, instead it focuses only on the indicators which are of most relevance to green infrastructure:
- **Economy:** unemployment, household income and deprivation levels.
 - **Health and well-being:** health deprivation, heart diseases, obesity, mental health problems and respiratory conditions.
 - **Access to sites for informal recreation:** considers links between informal recreation opportunities and mental and physical well-being.
- 2.48. There is thought to be a link between green infrastructure and some aspects of health. The issues of obesity, respiratory conditions, mental health, heart disease and health deprivation have been considered in this context.

- 2.49. 26% (120,000) of the Worcestershire's adult population is obese and another 40% is overweight. The adult obesity levels in Worcestershire are higher than the national average. The level of childhood obesity is around the national average, at 10% of five year olds and 18% of eleven year olds. In terms of land cover, most of the Worcestershire area has some problems with obesity. This ECA is however amongst the better performing areas in the county.
- 2.50. Obesity and respiratory problems in this county generally follow the same geographical pattern. Mental health problems, by contrast, tend to be found in the and around major settlements. Although mortality rates from cardiovascular diseases are significantly lower than the national rate, patterns of heart diseases are more dispersed than the other health indicators assessed and poor performance is found across the county. Contrary to other health indicators, heart diseases are least prevalent in some of the urban areas.
- 2.51. The overarching principles identified by the GI partnership regarding socio-economic matters for this ECA are:
- Primary focus on reduction in the incidence of health problems related to heart disease.