

Sustainability Appraisal of the South Worcestershire Development Plan Review

Scoping Report

May 2018



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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Scoping Report

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sustainability effects of the South Worcestershire Development Plan Review and meets the requirements of the SEA Directive. It is not intended to be a substitute for Environmental Impact Assessment (EIA) or Appropriate Assessment (AA).

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Acronyms

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plan
BDA	Biodiversity Delivery Areas
CAMS	Catchment Abstraction Management Strategy
DCLG	Department of Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
EU	European Union
GHG	Greenhouse Gas
GI	Green Infrastructure
GIS	Geographic Information Systems
GWh	GigaWatt hours
HRA	Habitat Regulations Assessment
IMD	Index of Multiple Deprivation
IRZ	Impact Risk Zone
LA	Local Authority
LNR	Local Nature Reserve
LGS	Local Geological Site
LSOA	Lower Layer Super Output Area
LTP	Local Transport Plan
LWS	Local Wildlife Site
MWh	MegaWatt hours
NCA	National Character Area
NNR	National Nature Reserve
NO ₂	Nitrogen Dioxide
NPPF	National Planning Policy Framework
ONS	Office of National Statistics
PM ₁₀	Particulate Matter (10 micrometres)
PPP	Policies, Plans and Programmes
PRoW	Public Rights of Way
RBMP	River Basin Management Plan
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SAM	Scheduled Ancient Monument
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SPA	Special Protection Area

SPZ	Source Protection Zone
SSSI	Sites of Special Scientific Interest
SW	South Worcestershire
SWCs	South Worcestershire Councils
SWDPR	South Worcestershire Development Plan Review
UKCP09	United Kingdom Climate Projections 2009

1 Introduction

1.1 This report

1.1.1 Malvern Hills District Council has commissioned Lepus Consulting to carry out a Sustainability Appraisal (SA) for the South Worcestershire Development Plan Review (SWDPR) on behalf of South Worcestershire Councils (SWCs), which includes Malvern Hills District Council, Worcester City Council and Wychavon District Council.

1.1.2 This Scoping Report has been prepared as the first stage of the SA process in order to inform the environmental assessment of the SWDPR. This report will be published for consultation with the statutory consultation bodies as required by Regulation 12 (5) of The Environmental Assessment of Plans and Programmes Regulations 2004¹ (SEA Regulations). **Figure 1.1** shows the administrative boundaries of Malvern Hills, Worcester City and Wychavon, which encompass the area to which the SWDPR will apply.

1.2 South Worcestershire

1.2.1 South Worcestershire covers roughly 130,000ha with an approximate population of 290,000². It stretches across the southern limit of the West Midlands region, bordering the south-east and south-west regions. The area is predominantly rural, including the districts of Malvern Hills and Wychavon, with the City of Worcester in between them (see **Figure 1.1**).

¹ Environmental Assessment of Plans and Programmes Regulations (2004). Available online at: <http://www.legislation.gov.uk/uksi/2004/1633/contents/made> . Accessed 19/04/18

² Worcestershire County Council (2011) Worcestershire Demographic Report
http://www.swdevelopmentplan.org/wp-content/uploads/2012/02/2011-01-17_Worcs_Demographic_report_S_Worcs_appendix.pdf

- 1.2.2 The City of Worcester is the largest settlement within South Worcestershire, with a population of approximately 100,000. Great Malvern, Droitwich Spa and Evesham are the next largest towns within the SWDPR area.
- 1.2.3 There is a high quality landscape across South Worcestershire, particularly distinguished by the Cotswolds and Malvern Hills Areas of Outstanding Natural Beauty (AONB) and the Special Area of Conservation (SAC) at Bredon Hill.
- 1.2.4 South Worcestershire has good connections through national and regional transport infrastructure, although there are issues with rural accessibility. The area provides approximately 127,000 jobs, of which 65% are within Worcester City and the main towns.

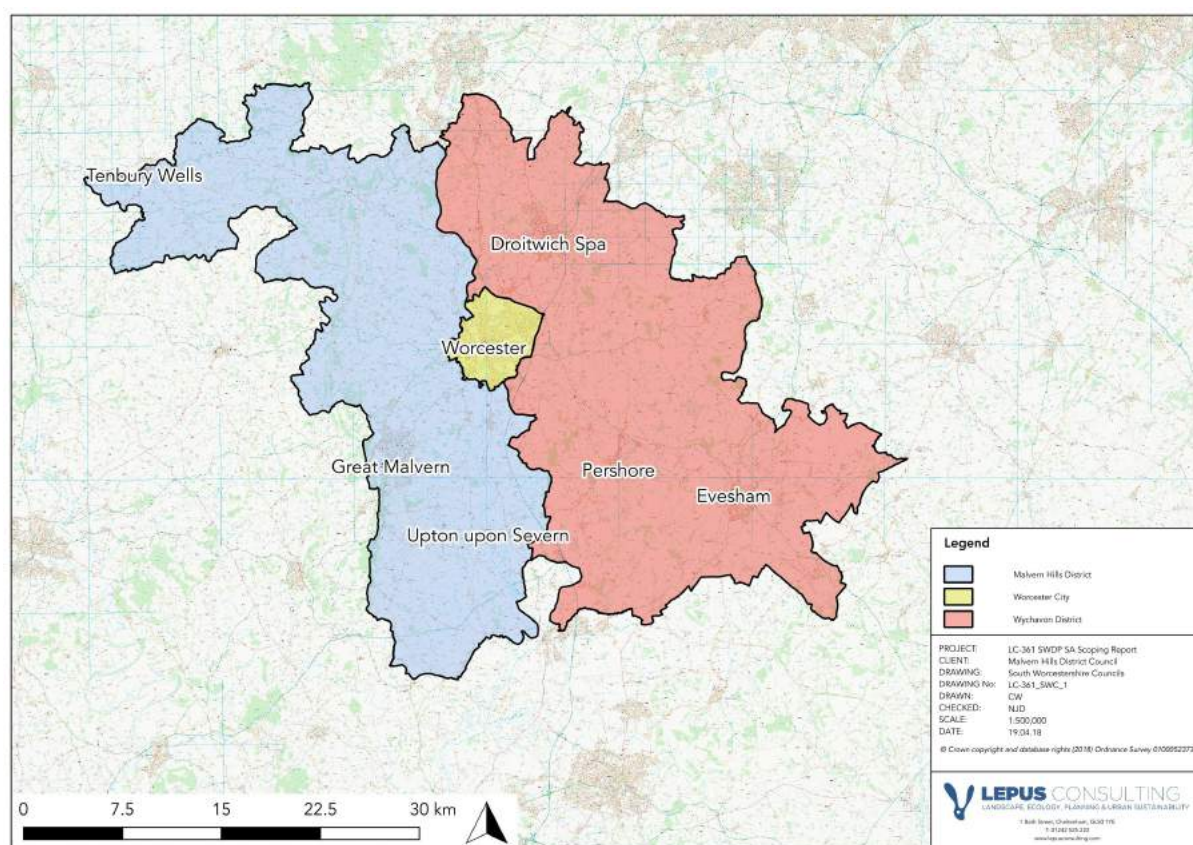


Figure 1.1: Malvern Hills, Worcester City and Wychavon District boundaries.

1.3 Sustainability Appraisal

1.3.1 This document constitutes the sustainability appraisal (SA) Scoping Report for the SWDPR. This represents Stage A of SA, according to the Planning Practice Guidance (2016) Guidance on Sustainability Appraisal³ (see Figure 2.1).

1.3.2 SA is the process of informing local development plans to maximise their sustainability value. SA is a statutory requirement for development plan documents, the key objective of which is to promote sustainable development.

1.4 Integrated approach to SA and SEA

1.4.1 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both obligations using a single appraisal process.

1.4.2 The European Union Directive 2001/42/EC⁴ (SEA Directive) applies to a wide range of public plans and programmes on land use, energy, waste, agriculture, transport etc. (see Article 3(2) of the Directive for other plan or programme types). The Strategic Environmental Assessment (SEA) procedure can be summarised as follows: an environmental report is prepared in which the likely significant effects on the environment and the reasonable alternatives of the proposed plan or programme are identified. The public and the relevant environmental authorities are informed and consulted on the draft plan or programme and the environmental report prepared.

1.4.3 The Directive has been transposed into English law by the SEA Regulations (SI no. 1633). Under the requirements of the SEA Directive and SEA Regulations, specific types of plans that set the framework for the future development consent of projects must be subject to an environmental assessment. Therefore it is a legal requirement for the SWDPR to be subject to SEA throughout its preparation.

³ DCLG (2016) Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> Accessed 19/04/18

⁴ European Commission (2018) SEA. Available online at: ec.europa.eu/environment/eia/sea-legalcontext.htm . Accessed 19/04/18

- 1.4.4 SA is a UK-specific procedure used to appraise the impacts and effects of development plans in the UK. It is required by S19(5) of the Planning and Compulsory Purchase Act 2004⁵ and should be an appraisal of the economic, social and environmental sustainability of development plans. The present statutory requirement for SA resides in The Town and Country Planning (Local Planning) (England) Regulations 2012⁶. SA is a systematic process for evaluating the environmental consequences of proposed plans or programmes to ensure environmental issues are fully integrated and addressed at the earliest appropriate stage of decision-making.

1.5 Best Practice Guidance

- 1.5.1 Government policy recommends that both SA and SEA are undertaken under a single process, which incorporates the requirements of the SEA Directive. This is to be achieved through integrating the requirements of SEA into the SA process. The approach for carrying out an integrated SA and SEA is based on best practice guidance:

- Office of the Deputy Prime Minister (September 2005): A Practical Guide to the SEA Directive⁷; and
- Department for Communities and Local Government (DCLG) updated 2015 Planning Practice Guidance - Strategic environmental assessment and sustainability appraisal; web based guidance to accompany the National Planning Policy Framework (NPPF) including guidance on the SEA/SA process⁸.

⁵ Planning and Compulsory Purchase Act (2004). Available online at:
<https://www.legislation.gov.uk/ukpga/2004/5/contents> . Access 19/04/18

⁶ Town and Country Planning (Local Planning) (England) Regulations (2012). Available online at:
<http://www.legislation.gov.uk/uksi/2012/767/contents/made> . Accessed 19/04/18

⁷ ODPM (2005) A Practical Guide to Strategic Environmental Assessment Objective. Available online at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7657/practicalguidesea.pdf
Accessed 19/04/18

⁸ DCLG (2016) Planning practice guidance. Available at: <https://www.gov.uk/government/collections/planning-practice-guidance> Accessed 19/04/18

1.6 The South Worcestershire Development Plan Review

- 1.6.1 The SWDPR will include the overall strategy for development in the district, including a vision for the future, relevant objectives, site allocations, site based policies and development management policies. Key facts relating to the SWDPR are presented in **Table 1.1**.

Table 1.1: Key facts relating to the SWDPR

Responsible authority	Malvern Hills District Council (on behalf of South Worcestershire Councils)
Title of plan	South Worcestershire Development Plan Review
What prompted the plan (e.g. legislative, regulatory or administrative provision)	The SWDPR is being developed in accordance with the requirements of the Planning and Compulsory Purchase Act 2004 and The Town and Country Planning (Local Development) (England) Regulations 2012.
Area covered by the plan	South Worcestershire boundary (see Figure 1.1).
Purpose and/ or objectives of the plan	The SWDPR will set out the spatial planning strategy for the district, having due regard to other strategies and programmes that form the development framework. The SWDPR will include an overall strategy for how and where development should take place, locations of new homes, services and employment sites and how communities can meet their needs for housing and development. The SWDPR will form the main guide towards future development in the district.
Contact point	South Worcestershire Development Plan Team Civic Centre Queen Elizabeth Drive Pershore WR10 1PT Telephone: 01386 565000 Email: contact@swdevelopmentplan.org

2 Presenting the Sustainability Information

2.1 Introduction

2.1.1 This scoping report represents Stage A of the SA process (see **Figure 2.1**), and presents information in relation to:

- Identifying other relevant plans, programmes and environmental protection objectives;
- Collecting baseline information;
- Identifying sustainability problems and key issues;
- Preparing the SA Framework; and
- Consultation arrangements on the scope of SA with the consultation bodies.

2.1.2 Annex 1(f) of the SEA Directive states the various topics that should be considered in the SEA appraisal process, including:

- Biodiversity, flora and fauna;
- Population;
- Human health;
- Soil;
- Water;
- Air;
- Climatic factors;
- Material assets;
- Cultural heritage (including architectural and archaeological heritage);
- Landscape; and
- The inter-relationship between these factors.

2.1.3 The policy, plan and programme (PPP) review, the baseline data and the other relevant sustainability issues are structured by the topics of Annex 1(f) of the SEA Directive, for which details are presented in **Table 2.1**.

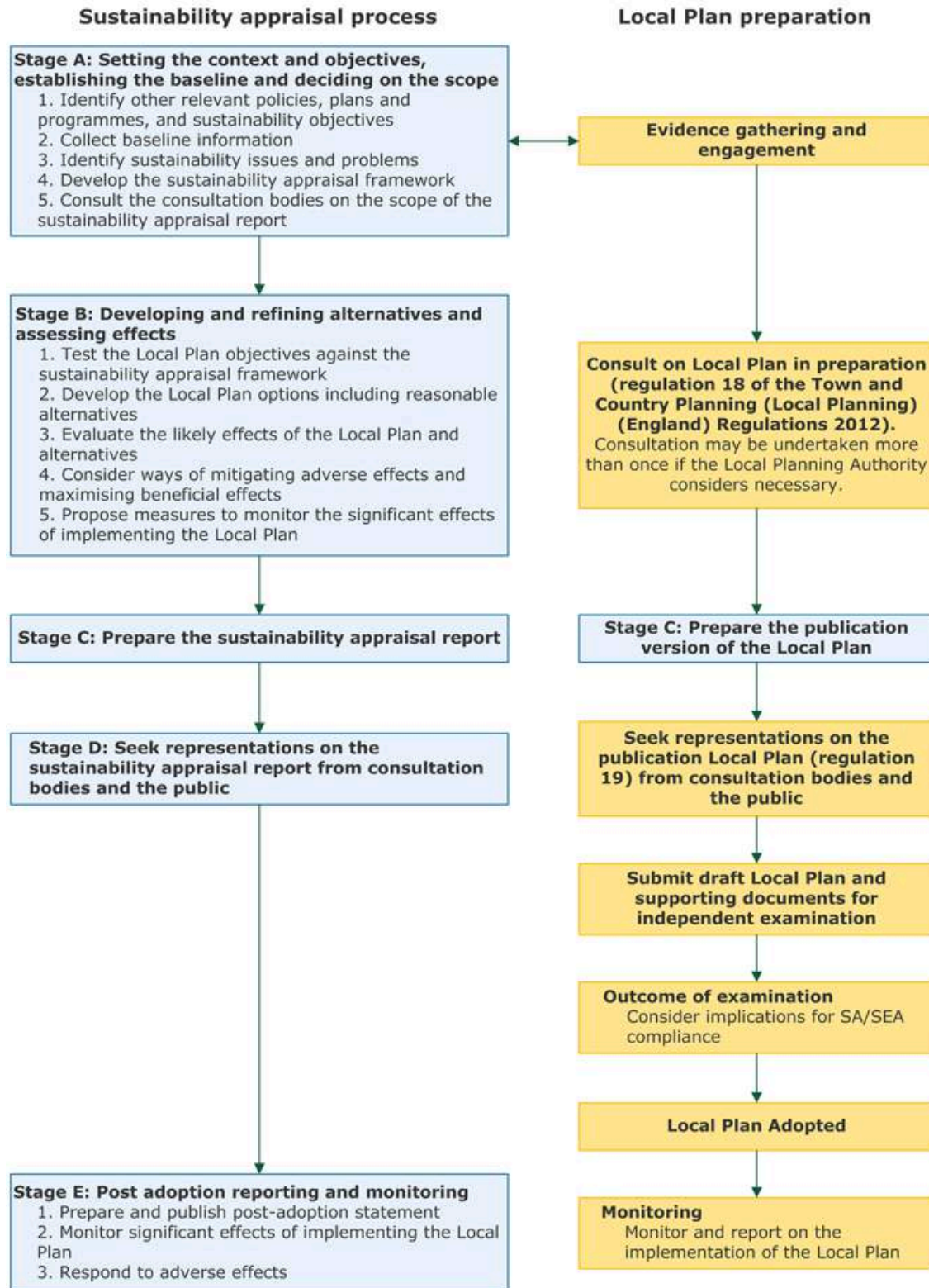


Figure 2.1: Stages in the SA process.

Table 2.1: Sustainability themes

Theme	SEA Directive Annex 1(f) topics	Factors to consider include, but are not limited to...
Accessibility & transport	Material assets and population	Transportation infrastructure; Traffic flows; Walking and cycling; Accessibility.
Air quality	Air	Air pollution sources; Air quality hotspots; Air quality management.
Biodiversity & geodiversity	Biodiversity, flora and fauna	Habitats; Species; Nature conservation designations; Landscape features; Geological features.
Climate change	Climatic factors	Greenhouse gas emissions by source; Greenhouse gas emissions trends; Renewable energy; Energy consumption; Effects of climate change; Climate change adaptation; Flooding.
Economic factors	Material assets	Economic performance; Business start-ups; Employment and earnings; Skills, education and unemployment; Sites and premises.
Health & quality of life	Human health	Health indicators; Healthcare inequalities; Access to essential services and facilities; Sport, fitness and activity levels; Population size and migration; Population density; Age structure; Waste arisings and recycling rates; Crime.
Historic environment	Cultural heritage	Historic development of the town; Designated and non-designated sites and areas; Setting of cultural heritage assets; Historic landscape character assessment; Archaeological assets.
Housing	Population & material assets	House prices and affordability; Housing quality and vacancy rates; Varied housing mix; Homelessness.

Theme	SEA Directive Annex 1(f) topics	Factors to consider include, but are not limited to...
Landscape & townscape	Landscape	Landscape designations; Visual amenity; Landscape/townscape character; Tranquillity.
Natural resources	Soil and water	Soils; Watercourses; Water resources; Water quality; Minerals Contaminated land.

2.2 Policy, plan and programme review

2.2.1 The SWDPR may be influenced in various ways by other policies, plans or programmes (PPPs), or by external sustainability objectives such as those put forward in higher strategies or by legislation. The SA/SEA process will take advantage of potential synergies between these PPPs and address any inconsistencies and constraints.

2.2.2 A summary of the PPP review is presented in **Chapter 3 - Chapter 12** under each sustainability theme. The PPP summaries in each chapter should be read alongside the more detailed information included in **Appendix C**.

2.3 Baseline data collection

2.3.1 **Chapters 3 - Chapter 12** review the current environmental, social and economic conditions relevant to the SWDPR. The purpose of the baseline review is to help define the key sustainability issues for the SWDPR. The baseline data should be informative of local circumstances, be up to date and be fit for purpose.

2.3.2 One of the purposes of consultation on the scoping report is to seek views on whether the selected data is appropriate. The baseline has been constructed utilising a wide range of data sources, with GIS (Geographic Information Systems) data utilised where available. The data has been presented through tables, text and GIS mapping, and all data sources have been referenced as appropriate.

2.3.3 Where data is available at a local scale it has been used to inform the scoping process, if local data is not available, regional information has been used. Where this is the case, it is clearly stated.

2.4 Key sustainability issues

2.4.1 Drawing on the PPP review and the baseline data, **Chapters 3 - 12** set out a series of key sustainability issues relevant for the SWDPR. The identification of these will help the SEA process focus on the key sustainability problems and opportunities, which may be addressed through the SWDPR.

3 Accessibility and Transport

3.1 Summary of policy, plan and programme review

3.1.1 European and UK transport PPPs place an emphasis on modernising transport infrastructure and making transport more sustainable. This includes methods to reduce pollution and congestion, such as by improving access to affordable and frequent sustainable transport modes and improving the local footpath and cycle path network. The PPPs regularly promote the need for a transport network which is sustainable but also supports economic growth.

3.1.2 The transport theme is relevant to a variety of other sustainability themes. For example, improving sustainable transport access would be likely to lead to a reduction in greenhouse gas (GHG) emissions, which is useful for climate change mitigation efforts. If residents are encouraged to cycle or walk, they will be likely to realise health benefits. A reduction in congestion would also be likely to provide an economic boost to the local area, whilst improved air quality is anticipated to benefit any impacted habitats or wildlife sites which are sensitive to air pollutants such as atmospheric nitrogen.

3.1.3 In 2006 the Department for Transport produced the 'Transport's Role in Sustaining the UK's Productivity and Competitiveness'⁹ report. This document encouraged local transport authorities to develop a robust evidence base when planning transport.

⁹ Eddington Transport Study (2006) Transport's Role in Sustaining the UK's Productivity and Competitiveness⁹. Available at: <http://webarchive.nationalarchives.gov.uk/20090115123436/http://www.dft.gov.uk/162259/187604/206711/volume1.pdf>

3.1.4 Regional and local plans focus on appropriate design, location and layout of development, increasing investment in infrastructure, improving the quality, equality and accessibility of public transport, supporting walking and cycling, enhancing road safety and reducing the amount of emissions produced by transportation.

3.1.5 Worcestershire's Local Transport Plan (LTP) 2018-2030¹⁰ sets out issues and priorities for investment in transport infrastructure, technology and services. Along with the South Worcestershire Infrastructure Delivery Plan, the LTP supports the delivery of new transport infrastructure. Some of the main challenges to overcome are identified as the ability to:

- Relieve congestion;
- Enable and promote growth;
- Enhance journey; time reliability;
- Address deteriorated ambient air quality; and
- Improve all aspects of road safety.

3.2 Baseline data

Road Network

3.2.1 A roads span throughout the SWDPR area, such as the A44, A46 and the A449 (see Figure 3.1).

3.2.2 The M5 runs through South Worcestershire, between Upton Warren and Upper Strensham in Wychavon, crossing the border into Malvern Hills for a short stretch. It provides a north – south corridor through South Worcestershire. To the north, the M5 provides good links to Birmingham, and the M6. To the south it provides access to Cheltenham, Bristol and the M4.

¹⁰ Worcestershire County Council (2018) Worcestershire's Local Transport (LTP) 2018-2030. Available at: http://www.worcestershire.gov.uk/downloads/file/9024/worcestershire_s_local_transport_plan_ltp_2018_-_2030

- 3.2.3 The M50 crosses the south of the Malvern Hills District between Upper Strensham and Pendock, which runs to Phocle Green at the edge of the Wye Valley AONB. The A44 and A422 provide an east – west corridor, with links to Royal Leamington Spa. Overall, the roads provide good access to all parts of the Plan area as well as locations throughout the country.
- 3.2.4 There are current congestion issues within Worcester, including along the M5 and A4440, which have highlighted a need for solutions. Delays are typically highest during commuting hours.
- 3.2.5 The number of cars of the roads within Worcestershire increased between 2014 and 2016 (see **Table 3.1**), which is considered to be the likely cause of increased congestion. The traffic count (see **Table 3.2**) of both the M5 and M50 has fluctuated over past years but both have seen an increase since 2012. Traffic along the M5 and M50 are likely to have a significant impact in increasing the overall traffic congestion within South Worcestershire.

Table 3.1: Total traffic in Worcestershire on major roads, in thousand vehicle miles, from 2014 to 2016¹¹.

Year	2014	2015	2016
Pedal Cycles	2,565	2,567	2,568
Motorcycles	13,230	12,759	12,423
Cars	2,250,111	2,269,424	2,294,669
Buses & Coaches	10,047	9,893	9,415
Light Goods Vehicles	405,791	416,077	432,986
All HGVs	251,273	269,717	269,370
All Motor Vehicles	2,930,452	2,977,872	3,018,864

¹¹ Department for Transport (2016) Traffic counts. Available at: <https://www.dft.gov.uk/traffic-counts/area.php?region=West+Midlands&la=Worcestershire> [Date Accessed: 30/04/18]

Table 3.2: Traffic count of all motor vehicles for the M5 at Trotshill and M50 at Ripple for the year 2010 to 2016.

Motorways	M5	M50
2010	105,649	30,135
2011	105,206	30,539
2012	85,409	24,367
2013	97,957	24,899
2014	10,0198	25,412
2015	102,428	26,067
2016	104,106	26,880

Electric vehicles

- 3.2.6 In 2014 around 500 electric cars were registered per month in the UK. In 2017, just under 4,000 electric cars were registered per month. In January 2018, electric cars constituted 2.9% of all new cars sold in the UK, up from 1.3% in January 2016¹². The sale of diesel cars will be banned in the UK by 2040. Road transport associated air pollution may therefore be expected to decrease over time.
- 3.2.7 There are eleven electric vehicle charging locations within Worcester City, primarily in the centre. The availability of charging points in Malvern Hills and Wychavon is more limited as they are highly dispersed and predominantly located in the main towns.

¹² Nextgreencar (2017) Electric car market statistics. Available at: <http://www.nextgreencar.com/electric-cars/statistics/> [Date accessed: 24/04/18]

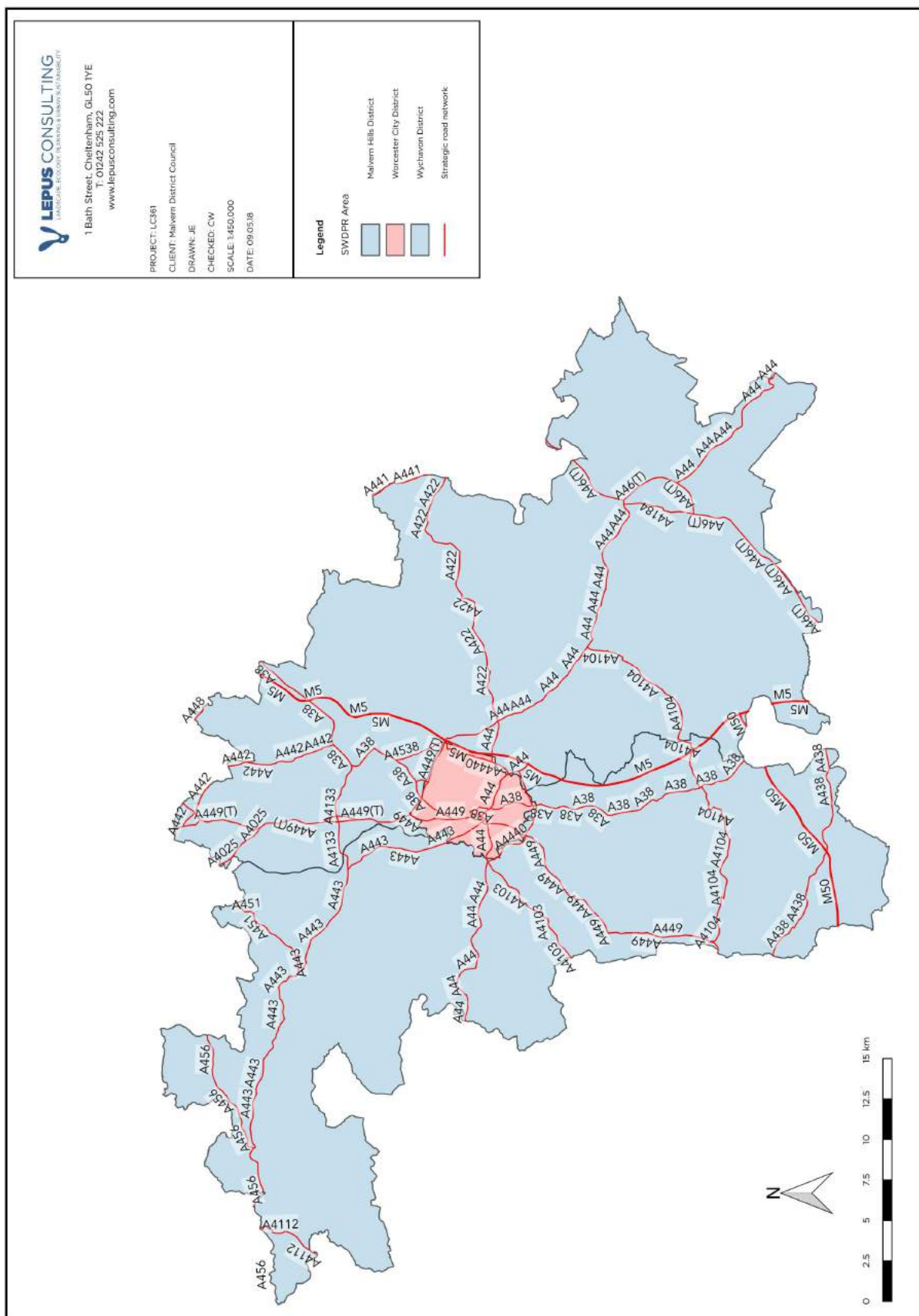


Figure 3.1: The strategic road network in South Worcestershire.

Rail network

- 3.2.8 Worcester City has two railway stations; Worcester Foregate Street Station and Worcester Shrub Hill Station. Malvern Hills District has two main railway stations; Great Malvern Station and Malvern Link Station. Railways stations in Wychavon include; Pershore Station, Evesham Station, Honeybourne Station, Droitwich Spa Station and Hartlebury Station. The majority of Worcester City is within 2.5km of a railway station, however, areas of Wychavon district are not in close proximity to any railway station (see **Figure 3.2**).
- 3.2.9 Access to railway stations is limited in the north and south areas of Malvern Hills District, with the Cotswolds Line from Hereford to Oxford being the only railway line through the district. Wychavon has a greater distribution of railway lines crossing the district, including the Cotswolds Line, and two Birmingham to Worcester Lines, via Kidderminster and via Bromsgrove. All of these lines have main stations within Worcester City, from which there is public transport access to destinations across the country.
- 3.2.10 From the Worcester City stations, services run to Birmingham and Oxford approximately every 30 minutes, with services to Bristol running every two hours. There are also frequent direct services to London from Worcester Shrub Hill Station.
- 3.2.11 Construction has begun on the Worcestershire Parkway Railway Station, which is located to the east of the M5 near Junction 5¹³. With a platform on the North Cotswold Line and two platforms on the Birmingham to Bristol Line, this station will provide residents and commuters with access to areas throughout the country. A 500 space car park and a new roundabout are under construction to provide supporting access to the station. This will be likely to increase the uptake of rail travel, thereby help to reduce road traffic congestion whilst supporting local and regional economic growth.

¹³ Worcestershire County Council (2018) Worcestershire Parkway Station. Available at: http://www.worcestershire.gov.uk/info/20254/major_infrastructure_and_improvement_schemes/995/worcestershire_parkway_rail_station/1 [Date Accessed: 22/05/18]

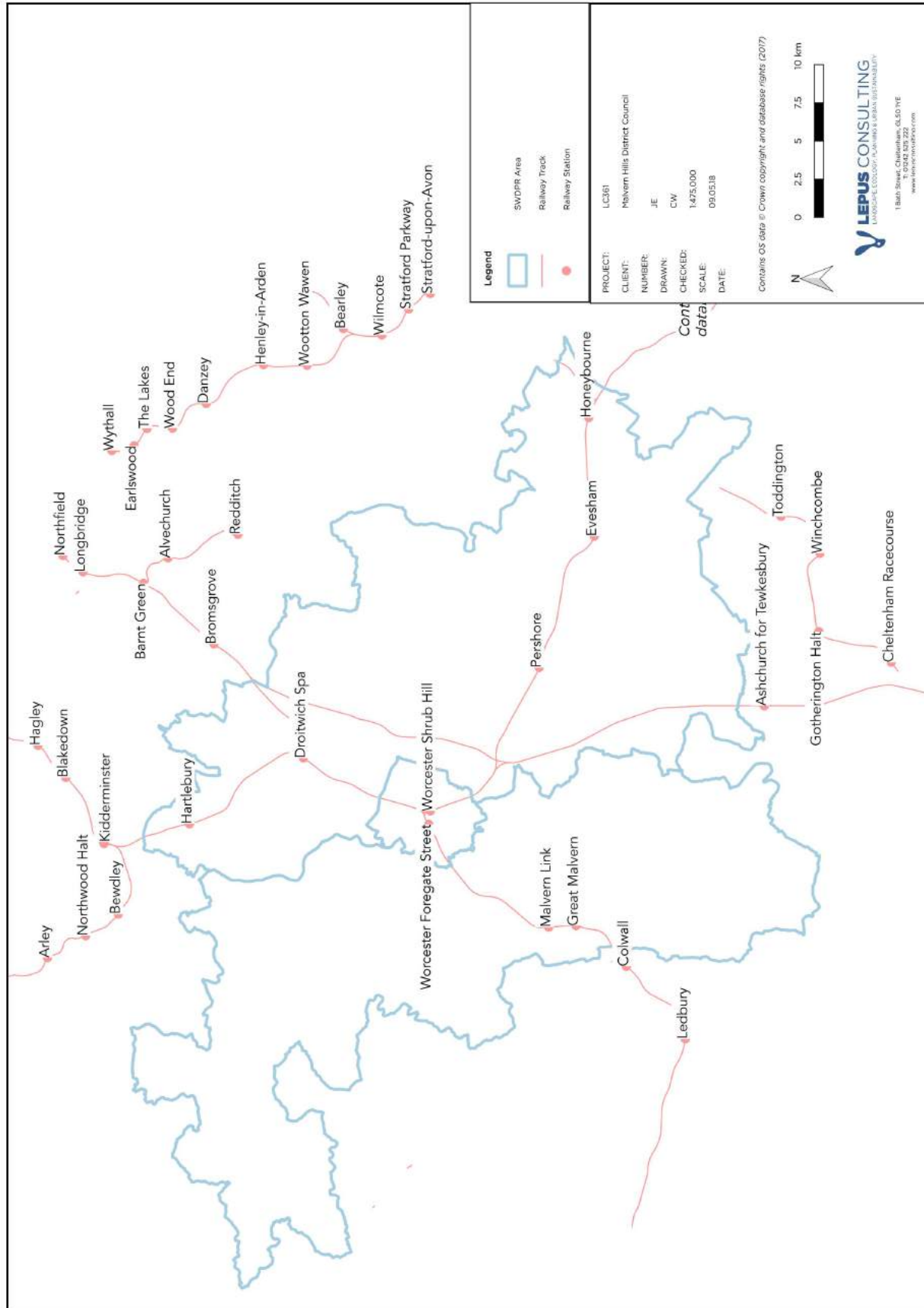


Figure 3.2: Railway station and railway lines in South Worcestershire.

Airports

- 3.2.12 There are no commercial airports within South Worcestershire. The nearest large commercial airport, Birmingham International, is 35km away and an approximate 45 minute journey via car or by public transport from Droitwich Spa, southwest of the airport.
- 3.2.13 Gloucestershire Airport is approximately 20km south of Upton upon Severn, where car travel time is 30 minutes but has restricted public transport routes. This airport offers package holidays and flights from Gloucestershire Airport to the Isle of Man and Jersey, but now focuses on 'pleasure flights', particularly flight training and helicopter experiences.

Public rights of way and cycling

- 3.2.14 There is nearly 3,000 miles of public rights of way (PRoW) within Worcestershire and there is an extensive network particularly in the Malvern Hills District¹⁴. The key issues identified for current PRoW walking and general users are:
- Overgrown/blocked paths;
 - Dog fouling;
 - Poor waymarking;
 - Poor surfaces;
 - Litter;
 - Difficult stiles; and
 - Personal safety concerns.
- 3.2.15 Due to fragmented bridleway networks, traffic-free cycling opportunities are limited. Following a council consultation, 78% of residents have said there was not enough cycling provision in Worcestershire. The Plan area is primarily rural with a large network of minor roads, but within Worcester City, the dense urban landscape means cyclists are at a higher risk.

¹⁴ Worcestershire County Council (2011) Rights of Way Improvement Plan. Available at: http://www.worcestershire.gov.uk/downloads/file/3539/rights_of_way_improvement_plan_rowip

Accessibility and buses

- 3.2.16 Providing access to jobs and essential services is a crucial part of delivering sustainable, economically-led and inclusive communities. The current bus network of the Plan area is focussed within Worcester City, with links from the centre to outlying residential and employment areas.
- 3.2.17 The main towns; Droitwich, Great Malvern, Pershore and Evesham, are served by routes connecting to Worcester and other towns. The network is key to providing access to employment, training and social opportunities whilst providing benefits to maximising the performance of the transport network and meeting economic and environmental objectives.

Travel to work

- 3.2.18 Nearly half of Worcester City's working residents work within the city, with a further 8% working mainly from home. In comparison, a lower percentage of Malvern Hills (32%) and Wychavon (35%) residents travel to work in their home district, but the percentage of home workers is higher (see Table 3.3). Many residents from Malvern Hills and Wychavon travel into Worcester city for work, but from South Worcestershire as a whole, the highest employment outflow is to Birmingham. A number of Malvern Hills residents also commute to Herefordshire, and Wychavon residents travelling to Tewksbury and Cheltenham for work.
- 3.2.19 Table 3.3 shows the most common method of travelling to work in all three districts is by driving by car or van, which accounts for on average 44.83% of residents in South Worcestershire. This rate is higher than the English average, whilst train and bus use, being lower than average. There are also clear differences between the two rural district and Worcester; with an increase of working from home in Malvern Hills and Wychavon, but a significantly higher than average number of residents walking to work in Worcester than the other districts.

Table 3.3: Method of travel to work for residents in Malvern Hills, Worcester and Wychavon¹⁵.

Mode of transport	Malvern Hills (%)	Worcester (%)	Wychavon (%)	England (%)
Work mainly at or from home	7.02	2.9	5.5	3.47
Underground, Metro, Light Rail, Tram	0.07	0.41	0.06	2.64
Train	1.33	1.26	1.06	3.46
Bus, Minibus or Coach	0.9	3.09	1.07	4.85
Taxi	0.11	0.26	0.14	0.34
Motorcycle, Scooter or Moped	0.5	0.54	0.47	0.53
Driving a Car or Van	43.98	42.13	48.4	36.90
Passenger in a Car or Van	2.96	3.95	3.53	3.25
Bicycle	1.14	2.91	1.28	1.91
On Foot	5.74	10.82	6.25	6.5
Other Method of Travel to Work	0.44	0.38	0.4	0.42
Not in Employment	35.79	31.73	31.84	35.28

3.3 Key Sustainability Issues

3.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Access and Transport theme are listed in **Box 3.3**.

Box 3.3: Key Accessibility and Transport Issues for South Worcestershire

- Reliance on car usage is higher than England's average, particularly in Malvern Hills and Wychavon Districts.
- There is a possibility that new development could add pressure onto current transport services.
- Use of train services is lower than on average and there is limited railway access within Malvern Hills.
- Although there are sufficient electric car charging points within Worcester, there is limited access to charging points in Malvern Hills and Wychavon.

¹⁵ 2011 Census data. Available at: <http://www.ukcensusdata.com/worcestershire-e10000034#sthash.jbLZozbS.dpbs> Accessed 23/04/18

3.4 Future Evolution without the Plan

3.4.1 The SEA Directive requires “information on the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme”.

3.4.2 Without the Plan, development would still be likely to occur within the SWDPR area. It is uncertain the extent to which development may occur, what its spatial characteristics may be and whether it meets the needs of local residents. However, based on local and national trend data, the likely evolution of the Accessibility and Transport theme in the SWDPR area is presented in **Box 3.4**.

Box 3.4: Future evolution of the baseline without the SWDPR

- The current condition of the PRoW would be unlikely to be improved and new residents in the SWDPR area may have increasingly limited access to the PRoW.
- Construction of the Worcestershire Parkway Railway Station is underway. This will help to improve the uptake of rail in the SWDP area and thereby help to limit road transport congestion whilst supporting local and regional economic growth.
- Congestion issues around Worcester could potentially be exacerbated due to a rising population.
- There is likely to be an increase in the composition of the road transport fleet which are electric or hybrid vehicles.

4 Air Quality

4.1 Summary of policy, plan and programme review

4.1.1 A number of objectives have been established in relation to air quality at both the European and the UK level (emanating from the 1996 EC Directive). This includes the setting of targets for reducing emissions of specific pollutants to minimise negative impacts on health and the environment.

4.1.2 The Environment Act (1995) requires all local authorities to review and assess the air quality in their area. In areas where the air quality objectives are not anticipated to be met, councils are required to establish Air Quality Management Areas (AQMA's).

4.1.3 In July 2017 the UK government published a new plan to tackle the issue of air pollution throughout the country. This plan focusses on meeting the legal requirements for reducing nitrogen dioxide set out in the Air Quality Standards Regulations 2010.

4.2 Baseline data

4.2.1 There are currently four AQMA's in South Worcestershire, three in Worcester City and one in Wychavon District, in Evesham. The AQMA's were updated in 2014, with Newton Road AQMA in Worcester City being revoked and St. Johns AQMA being declared. All AQMA's within Worcestershire have been declared because of an exceedance on Nitrogen Dioxide annual average air quality objective.

4.2.2 General actions in the Air Quality Action Plan are not AQMAA specific and can be used in more than one scenario and positively impact more than one AQMA. The main agenda is to reduce pollutant levels. The generic actions have been grouped into subcategories:

- Traffic management;
- Lowering emissions;

- Promotions of alternatives;
- Education and information;
- Planning initiatives; and
- Policy and guidance.

- 4.2.3 Specific objectives for each AQMA have also been stated. These are highly specific to the area, such as redesigning monitoring positions or emplacing penalties for vehicles ignoring markings on specific road stretches. Worcestershire County Council is continuously monitoring air quality in the area and has found that air quality is relatively good on the whole for the pollutants which are monitored.
- 4.2.4 As part of the Local Air Quality Management, Worcester City have consulted on the proposal to declare an AQMA for the political boundary of the district¹⁶. The annual mean objective for nitrogen dioxide levels is currently being exceeded.
- 4.2.5 The fraction of mortality thought to be attributable to particulate air pollution is higher in Wychavon, but slightly lower in Malvern Hills and Worcester City (see Table 4.1).

Table 4.1: Fraction of mortality attributable to particulate air pollution¹⁷

Region	Fraction of mortality attributable to particulate air pollution
Malvern Hills	4.3%
Worcester City	4.4%
Wychavon	4.7%
Worcestershire	4.6%
West Midlands	4.8%
England	4.5%

¹⁶ Worcester City Council (2018) Air Quality Publications: Consultations. Available at: <http://www.worcsregservices.gov.uk/pollution/air-quality/worcester-city-council.aspx> [Date Accessed: 09/05/28]

¹⁷ Public Health Outcomes Framework (2017). Available at: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework/data#page/0/gid/1000043/pat/6/par/E12000005/ati/102/are/E10000028> . Accessed 23/04/18

- 4.2.6 Air quality impacts from vehicles are most likely to occur within 200m of the road¹⁸. It is therefore considered to be likely that, where residents are living within 200m of a relatively busy road, they will be exposed to road transport associated emissions have long term health impacts.
- 4.2.7 Air pollution, particularly excessive nitrogen deposition is harmful to the health of functioning of natural habitats. There are numerous SSSIs within 200m of a motorway or primary road, where adverse impacts on ecosystem functions may potentially occur.
- 4.2.8 Malvern Hills and Wychavon are predominantly rural districts, so it can be considered to be likely that the majority of residents will be located in areas where road transport associated air pollution is not a significant concern, especially in Malvern Hills where there are no AQMA's and a low percentage of mortality attributable to particulate air pollution.
- 4.2.9 Development situated within Worcester City is more likely to place residents in areas of higher road transport related air pollution, but the district still has a lower average of mortality attributable to particulate air pollution than England, so impacts are considered likely to be not significant.
- 4.3 **Key Sustainability Issues**
- 4.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Air Quality theme are listed in Box 4.3.

Box 4.3: Key Air Quality Issues for South Worcestershire

- An average of 4.46% of mortality across the three districts is attributable to particulate matter air pollution.
- All new development is likely to increase the impacts of air pollution in the Plan area.

¹⁸ The Highways Agency, Transport Scotland, Welsh Assembly Government, The Department for Regional Development Northern Ireland (2007) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1: Air Quality

- Development proposals must be designed in order to avoid any significant adverse impacts from pollution, including cumulative ones, on any of the following: Human health and wellbeing, Biodiversity, the effective operation of neighbouring land uses, the water environment or an Air Quality Management Area (AQMA).

4.4 Future Evolution without the Plan

- 4.4.1 The likely evolution of the Air Quality theme in the SWDPR area is presented in Box 4.4.

Box 4.4: Future evolution of the baseline without the SWDPR

- Traffic and congestion is likely to increase with population growth, in some locations of the SWDPR are with implications, in particular, for air quality, residents and wildlife within 200m of busy roads.
- The proposal to declare Worcester City district an AQMA shows NO₂ levels are currently increasing. Action plans created following the AQMA declaration will ensure objectives are in place to decrease these levels.
- National trends in the increasing uptake of lower emission vehicle types, such as electric cars, will be likely to help limit road transport associated emissions in the SWDPR area.

5 Biodiversity and Geodiversity

5.1 Summary of policy, plan and programme review

- 5.1.1 The overall objective of the various PPPs is the conservation of biological and geological diversity (including a reversal of the current trend of biodiversity loss) and the protection and monitoring of endangered and vulnerable species and habitats. Policies identify a hierarchy of designations which aim to promote the protection and enhancement of the natural environment. The highest priority is afforded to internationally designated habitats and species (Natura 2000) which are the subject of a specific Habitat Regulations Assessment regime to examine the potential impacts on site or species integrity arising from policies or programmes. Other notable designations include national sites such as SSSIs and National Nature Reserves, as well as Local Nature Reserves (LNR's) being identified locally. The integration of biodiversity considerations into all environmental and socio-economic planning is strongly advocated.
- 5.1.2 The Natural Environment White Paper (HM Government, 2011) focuses on promoting high quality natural environments, expanding multifunctional green infrastructure (GI) networks and initiating landscape scale action to support ecological networks. The White Paper specifically seeks to: protect core areas of high nature conservation value; promote corridors and 'stepping stones' to enable species to move between key areas; and initiate Nature Improvement Areas, where ecological functions and wildlife can be restored.
- 5.1.3 The White Paper is supported by the Biodiversity Strategy for England (DEFRA, 2011). This seeks to halt overall biodiversity loss, support healthy, well-functioning ecosystems and establish coherent ecological networks with more and better places for nature for the benefit of wildlife and people. The Biodiversity Strategy for England also proposes introducing a new designation for Local Green Areas to enable communities to protect places that are important to them.

- 5.1.4 The NPPF includes guidance on promoting the conservation and enhancement of the natural environment. It requires the planning system to contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
- 5.1.5 In line with the NPPF, the Worcestershire Biodiversity Action Plan¹⁹ identified Biodiversity Delivery Areas (BDAs) in 2011, updated in 2016. Worcestershire Green Infrastructure Strategy²⁰ adopts an ecosystem approach to establish Environmental Character Areas in Worcestershire and the supply, potential need and capacity of assets. This strategy rightly recognises the importance of provisioning, regulating, cultural and social ecosystem services.

5.2 Baseline data

Natura 2000

- 5.2.1 Special Areas of Conservation (SACs) are sites of the Natura 2000 network protected under EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora²¹ (the Habitats Directive). Special Protection Areas (SPAs) are also sites of the Natura 2000 network, protected under Directive 2009/147/EC of the European Parliament and of the Council on the Conservation of Wild Birds²² (the Birds Directive). Sites classified as a SPA or designated as a SAC are protected for the habitats and species they support.

¹⁹ Worcestershire County Council (2016) Biodiversity Action Plan. Available at:

http://www.worcestershire.gov.uk/info/20252/environmental_policy/1155/biodiversity_action_plan/1

²⁰ Worcestershire County Council (2014) Green Infrastructure Strategy 2013-2018. Available at:

http://www.worcestershire.gov.uk/downloads/file/3780/worcestershire_gi_strategy_document_2013-2018

²¹ European Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora . Available online at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN>

²² European Directive 2009/147/EC on the conservation of wild birds . Available online at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN>

- 5.2.2 There are two Natura 2000 sites in South Worcestershire (see **Figure 5.1**). Lyppard Grange Ponds SAC is designated for its presence of one of the largest known breeding populations of great crested newts (GCN) (*Triturus cristatus*) in the UK. The priority issue stated in the Site Improvement Plan²³ for the SAC is the changes in GCN population and distribution.
- 5.2.3 Bredon Hill SAC is designated for its lowland calcareous grassland and invertebrate assemblage²⁴. All but one of the 17 SSSI units are in a favourable condition. The site is classed as being under a high risk threat, primarily towards the violet click beetle (*Limoniscus violaceus*) which is vulnerable to disease, air pollution and climate change²⁵, and therefore the SWDPR should seek to avoid.

National designations

- 5.2.4 Natural England designates Sites of Special Scientific Interest (SSSIs) in England under the Wildlife and Countryside Act 1981 (as amended). There are 82 SSSIs within South Worcestershire (see **Figure 5.2**), the majority of which are designated as 'favourable' and 'unfavourable – recovering'. Those with 'unfavourable – no change' or 'unfavourable – declining' condition are shown in **Table 5.1**.

²³ Natural England (2014) Site Improvement Plan Lyppard Grand Ponds SAC. Available at: publications.naturalengland.org.uk/file/5540066784968704

²⁴ Natural England (1994) Designated Sites View Bredon Hill. Available at: <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=s1001495>

²⁵ Natural England (2015) Site Improvement Plan Bredon Hill. Available at: publications.naturalengland.org.uk/file/5656925612015616

Table 5.1: List of SSSIs with unfavourable – declining or unfavourable – no change SSSI units.

SSSI Name	SSSI Unit	Condition	Reason
Ashmoor Common	001	Unfavourable - declining	Losing important wetland interest due to drainage resulting in loss of groundwater.
	002	Favourable	Site remains undisturbed.
River Teme	006	Unfavourable – declining	Inappropriate water levels, inappropriate weir dams and other structures, invasive freshwater species, freshwater pollution, agricultural run-off.
	007, 008, 009, 010, 011	Unfavourable – no change	Inappropriate water levels, inappropriate weir dams and other structures, invasive freshwater species, freshwater pollution, agricultural run-off.
Trench Wood	001	Favourable	Management of woodland is ongoing.
	002	Unfavourable – no change	Lacking shrub species, understory percentage cover is high from coppice regrowth, ground flora sparse.
	003	Unfavourable - recovering	Set objectives are being set. Few seedlings present and evidence of deer grazing high.
Westwood Great Pool	001	Unfavourable – no change	Freshwater pollution, water pollution, agricultural run-off.

5.2.5 Natural England has developed Impact Risk Zones (IRZs) for each SSSI unit in the country. IRZs are a tool for rapid initial assessment of the potential risks to SSSIs posed by development proposals²⁶. As can be seen from **Figure 5.3**, the majority of South Worcestershire falls within IRZs for one or more SSSI units. Development within these IRZs would need to give careful consideration to the potential impacts on risks.

5.2.6 National Nature Reserves (NNRs) were established to protect some of the most important habitats, species and geology in the country and to provide ‘outdoor laboratories’ for research. Two thirds of the country’s NNRs are managed by Natural England, the remainder being managed by organisations approved by Natural England, such as the RSPB, the Forestry Commission, Wildlife Trusts and local authorities. There is one NNR within South Worcestershire, Bredon Hill NNR.

²⁶ Natural England (2017) Natural England’s Impact Risk Zones for Sites of Special Scientific Interest, 04 September 2017. Available online at: http://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf

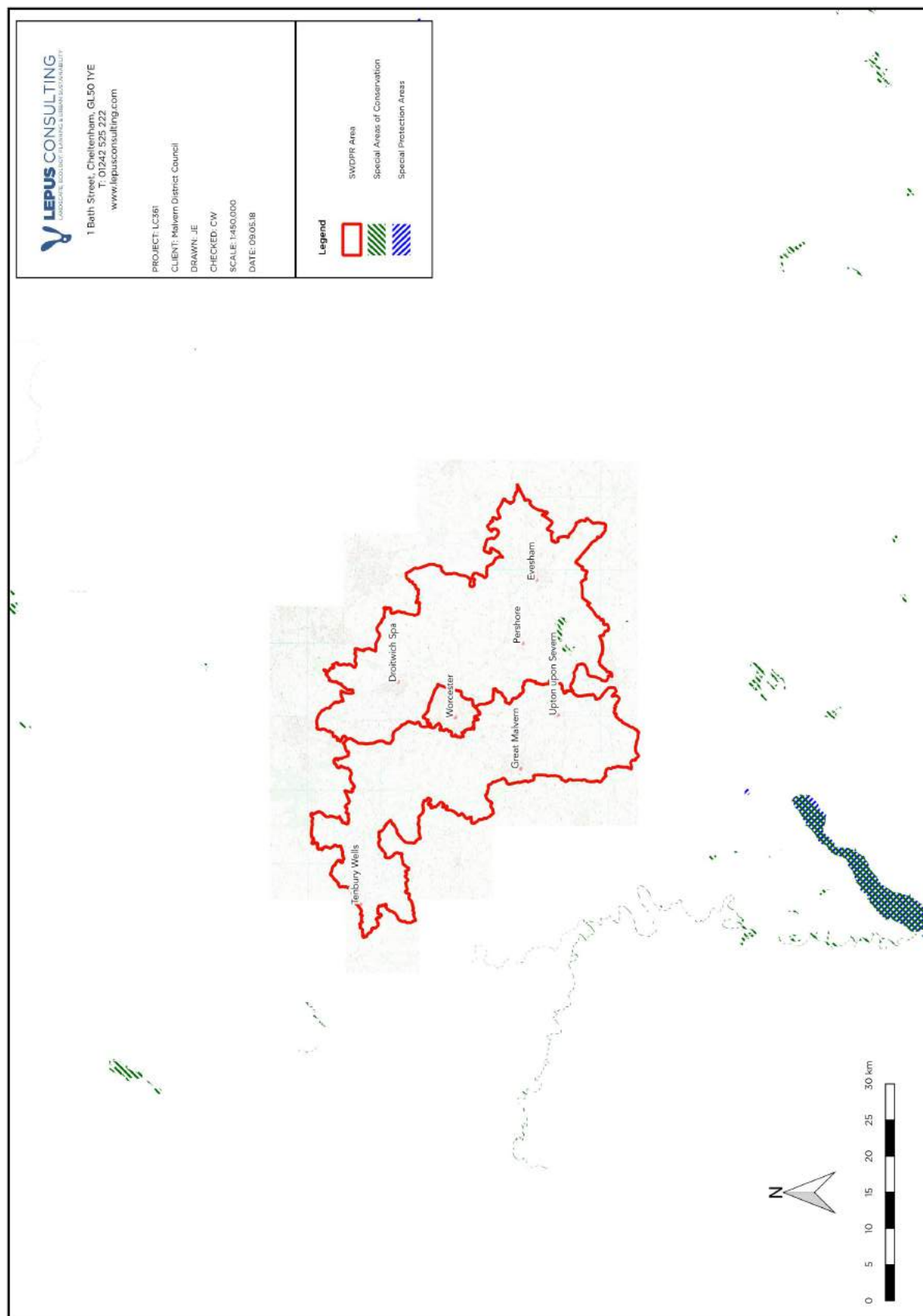


Figure 5.1: The SACs and SPAs in and around South Worcestershire.

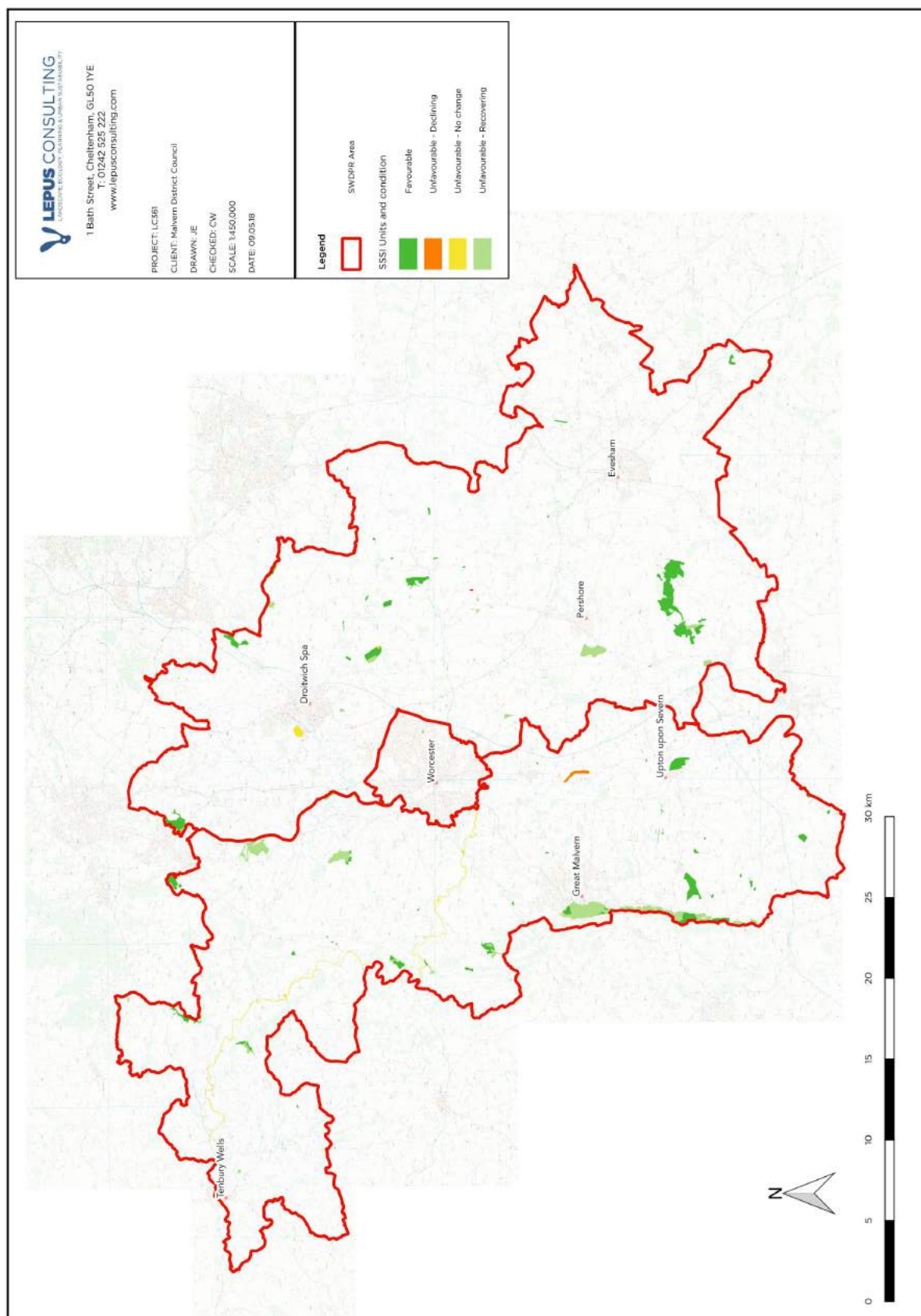


Figure 5.2: The SSSI Units and their conditions in South Worcestershire.

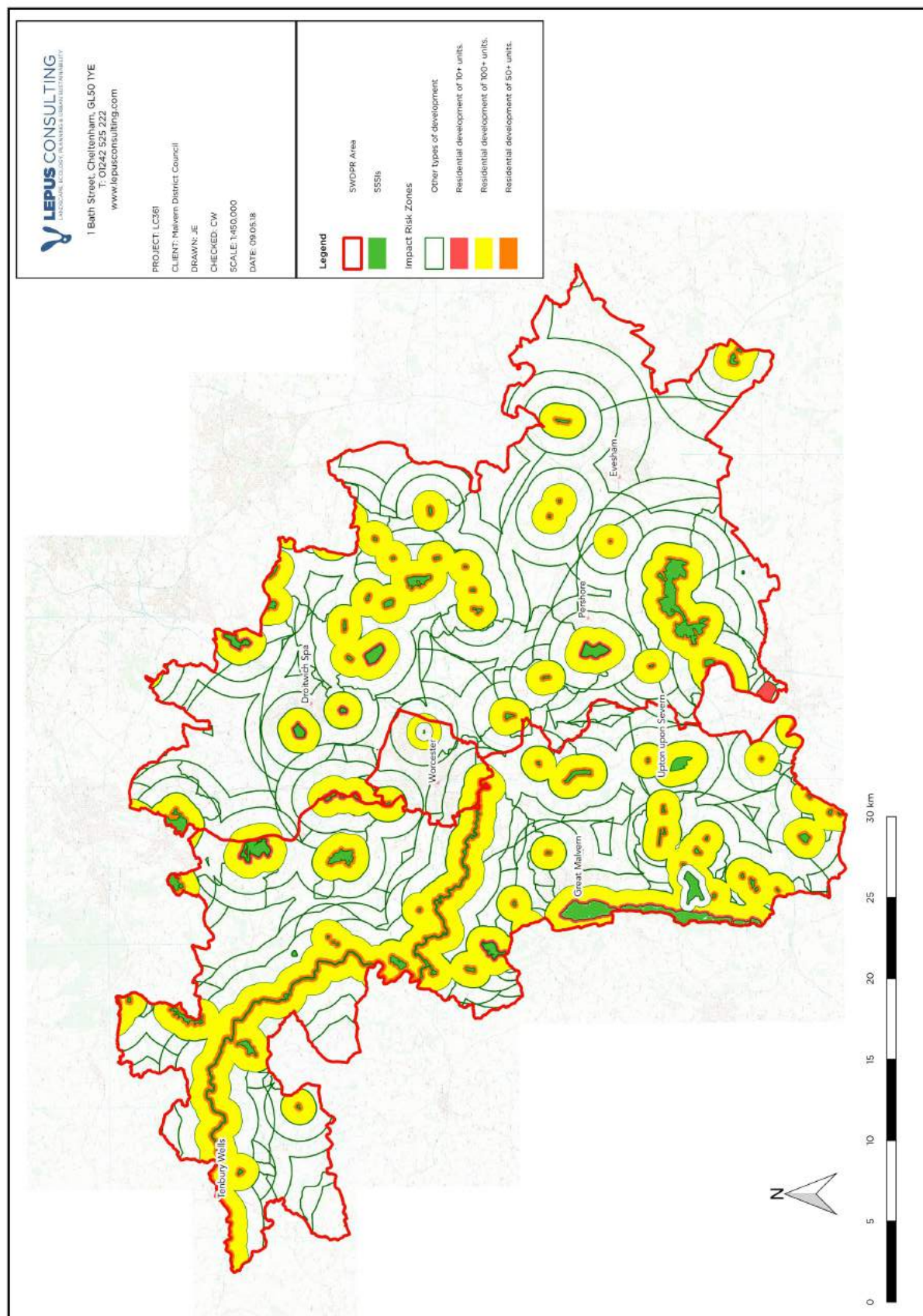


Figure 5.3: The SSSIs and corresponding IRZs in South Worcestershire.

Ancient Woodland

- 5.2.7 Ancient Woodland is an area that has been wooded continuously since at least 1600AD, and includes 'ancient semi-natural woodland' and 'plantations on ancient woodland sites', both of which have equal protection under the NPPF.
- 5.2.8 Paragraph 118.5 of the NPPF states: *"planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland"*.
- 5.2.9 There are multiple areas of Ancient Woodland in South Worcestershire, mostly in the north and east of the Plan area (see **Figure 5.4**).

Local Nature Reserves

- 5.2.10 Natural England encourages local authorities to formally designate appropriate sites as 'Local Nature Reserves' under Section 21 of the National Parks and Access to the Countryside Act 1949. A Local Nature Reserve (LNR) designation demonstrates a commitment by the local authority to manage land for biodiversity, protect it from inappropriate development and provide opportunities for local people to study and enjoy wildlife. There are twelve LNRs within South Worcestershire, eight of which are located in Worcester City:

- Laugherne Brook;
- Cherry Orchard;
- Perry Wood;
- Ronkswood Hill Meadows;
- Gorse Hill Elbury Mount;
- Lyppard Grange;
- Warndon Wood;
- Offerton Lane;
- Ankerdine Common;
- St. Wulstan's;
- Hartlebury Common/ Hilditch Pool; and
- Cleeve Prior Bank.

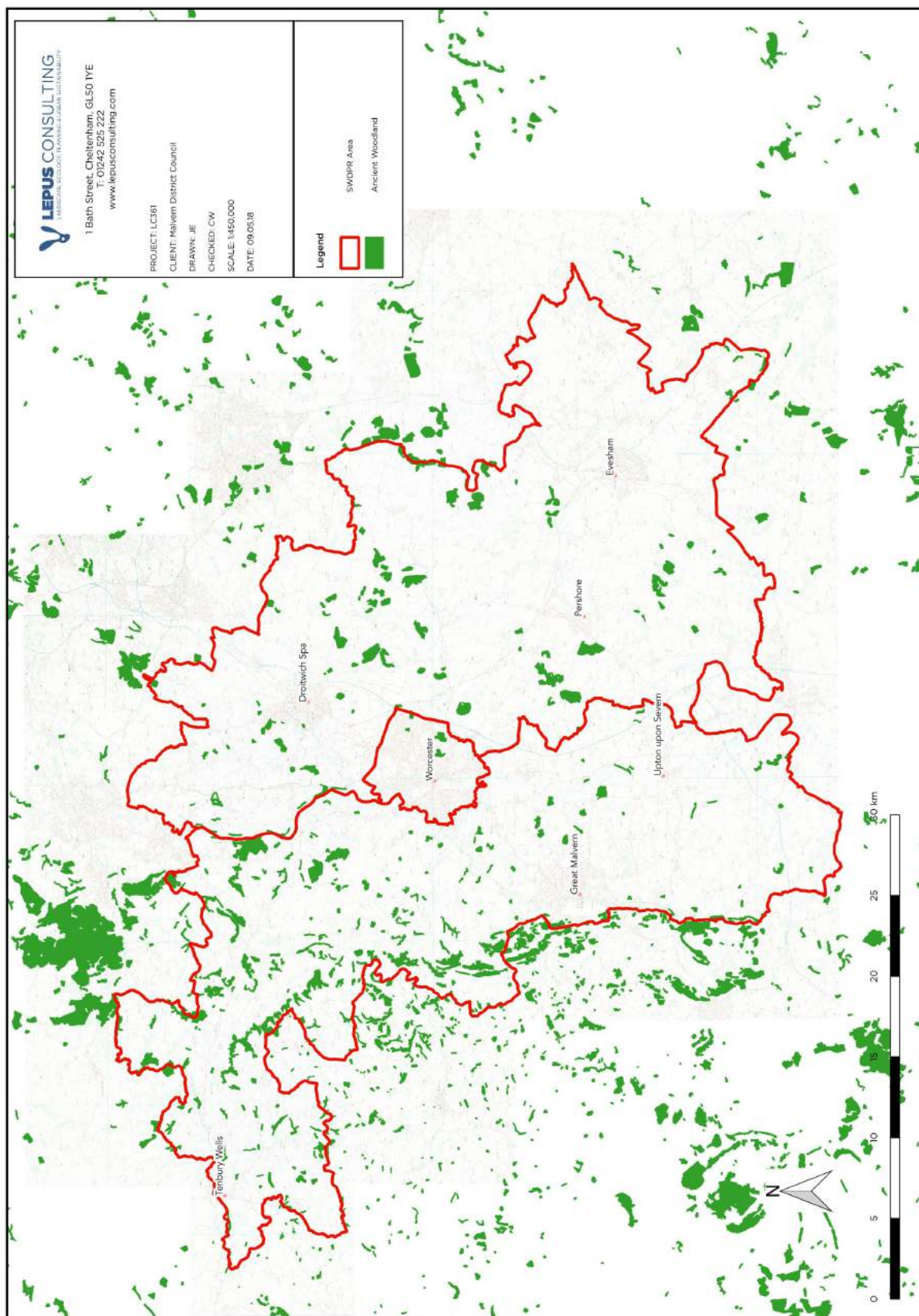


Figure 5.4: Stands of Ancient Woodland within South Worcestershire.

Local Wildlife Sites

- 5.2.11 Local Wildlife Sites (LWSs) are non-statutory designated sites, identified by local authorities in partnership with nature conservation charities, statutory agencies and ecologists, although they are privately owned. There are 530 sites throughout Worcestershire county, covering a total of 8,686ha. Many of them are associated with watercourses, such as the River Sever, which form vital corridors for wildlife (see Figure 5.5).

Habitats and Species

- 5.2.12 The current legislation identified for UK Priority Habitats includes that provided by the NPPF paragraph 117:

'Planning policies should promote the preservation, restoration and re-creation of priority habitats, ecological networks and the recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan.'

- 5.2.13 BDAs were developed by the Worcestershire Biodiversity Partnership in 2011, updated in 2016, to focus the delivery of the county's Biodiversity Action Plans (BAP)²⁷. They have been selected as areas with the greatest potential for delivery of the set BAP targets for species and habitats. There are four biodiversity delivery areas in South Worcestershire:

- Bow Brook
- Forest of Feckham
- Malvern Chase and Laugharne Valley

- 5.2.14 Other priority habitats and species are prevalent throughout the county, especially within rural areas. Detailed ecology surveys would be required for proposals which could potentially contradict planning law in relation to priority habitats and species.

²⁷ Worcestershire County Council (2016) Biodiversity Action Plan. Available at: http://www.worcestershire.gov.uk/info/20252/environmental_policy/1155/biodiversity_action_plan/2 [Date Accessed: 09/05/18]

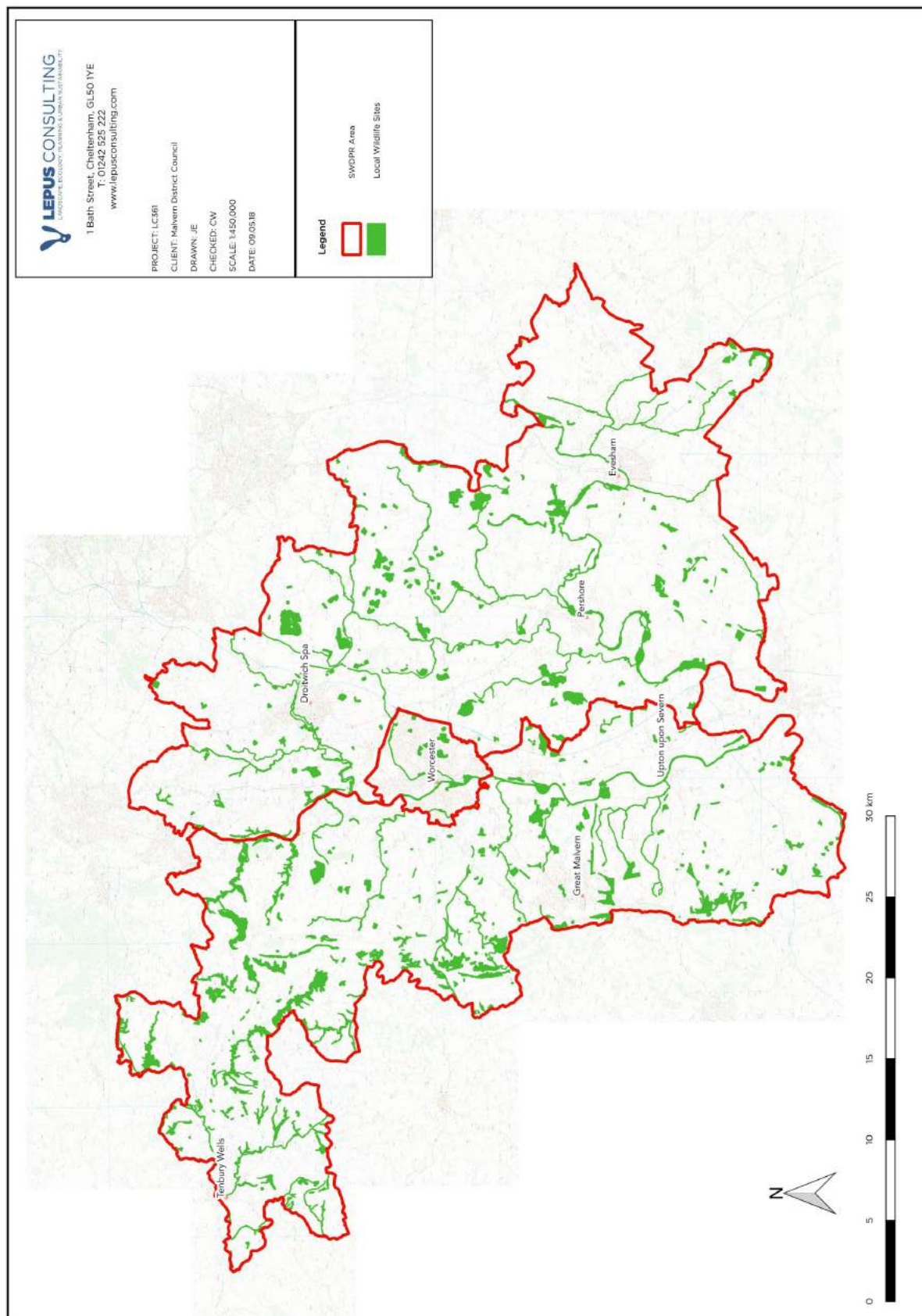


Figure 5.5: Local Wildlife Sites in South Worcestershire.

River ecology

5.2.15 The River Basin Management Plan (RBMP) 2015²⁸ for the Severn basin provides an update on the ecological statuses of the water environment. The water bodies comprising the Severn river basin are presented in Table 5.2. An overview of their ecological status is presented in Table 5.3.

5.2.16 The RBMP presents the following objectives of the Water Framework Directive:

- To prevent deterioration of the status of surface waters and groundwater;
- To achieve objectives and standards for protected areas;
- To aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status;
- To reverse any significant and sustained upward trends in pollutant concentrations in groundwater;
- The cessation of discharges, emissions and losses of priority hazardous substances into surface waters; and
- Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants.

Table 5.2: Water environment of the Severn river basin²⁹.

Water body categories	Natural	Artificial	Heavily modified	Total
Rivers, canals and surface water transfers	560	47	74	681
Lake	14	7	47	68
Coastal	0	0	0	0
Estuarine	1	0	5	6
Groundwater	42	0	0	42
Total	617	54	126	797

²⁸ Defra (2015) River Management Basemap Plans: 2015. Available online at: <https://www.gov.uk/government/collections/river-basin-management-plans-2015#severn-river-basin-district-rbmp:-2015>

²⁹ Environment Agency (2018) Catchment Data Explorer: Severn – Summary. Available at: <http://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/9/Summary>

Table 5.3: Ecological status of Severn river basin surface waterbodies.

Ecological status or potential	Definition of status	No. of water bodies
High	Near natural conditions. No restriction on the beneficial uses of the water body. No impacts on amenity, wildlife or fisheries.	0
Good	Slight change from natural conditions as a result of human activity. No restriction on the beneficial uses of the water body. No impact on amenity or fisheries. Protects all but the most sensitive wildlife.	151
Moderate	Moderate change from natural conditions as a result of human activity. Some restriction on the beneficial uses of the water body. No impact on amenity. Some impact on wildlife and fisheries.	462
Poor	Major change from natural conditions as a result of human activity. Some restrictions on the beneficial uses of the water body. Some impact on amenity. Moderate impact on wildlife and fisheries.	134
Bad	Severe change from natural conditions as a result of human activity. Significant restriction on the beneficial uses of the water body. Major impact on amenity. Major impact on wildlife and fisheries with many species not present.	8

Geodiversity

- 5.2.17 Geodiversity is the collective term describing the geological variety of the Earth's rocks, fossils, minerals, soils and landscapes together with the natural process that form and shape them. Geodiversity underpins biodiversity by providing diversity of habitat and the ecosystem, with the soil being the link between them. It also embraces the built environment by providing the basis for neighbourhood character and local distinctiveness through building stone and material.
- 5.2.18 The Malvern Hills are of hard acidic rock including diorites and granites, as well as metamorphic schists and gneiss. Adjacent valleys are formed of younger sedimentary rocks from the Silurian and Triassic periods.
- 5.2.19 There are nine SSSIs designated for their geological importance. A few include; Beckford Gravel Pit, Woodbury Quarry and Grimley Brick Pits.

- 5.2.20 There are 83 Local Geological Sites (LGSs) in the SWDPR area, the majority of which are in the west and north, and the hills of Malvern (see **Figure 5.6**). LGSs are non-statutory sites that have been identified for their importance by local geoconservation groups. They are designated for their educational, scientific, historical and aesthetic importance to the area. In Worcestershire, these are mainly quarry sites, showing limestone or sandstone formations.

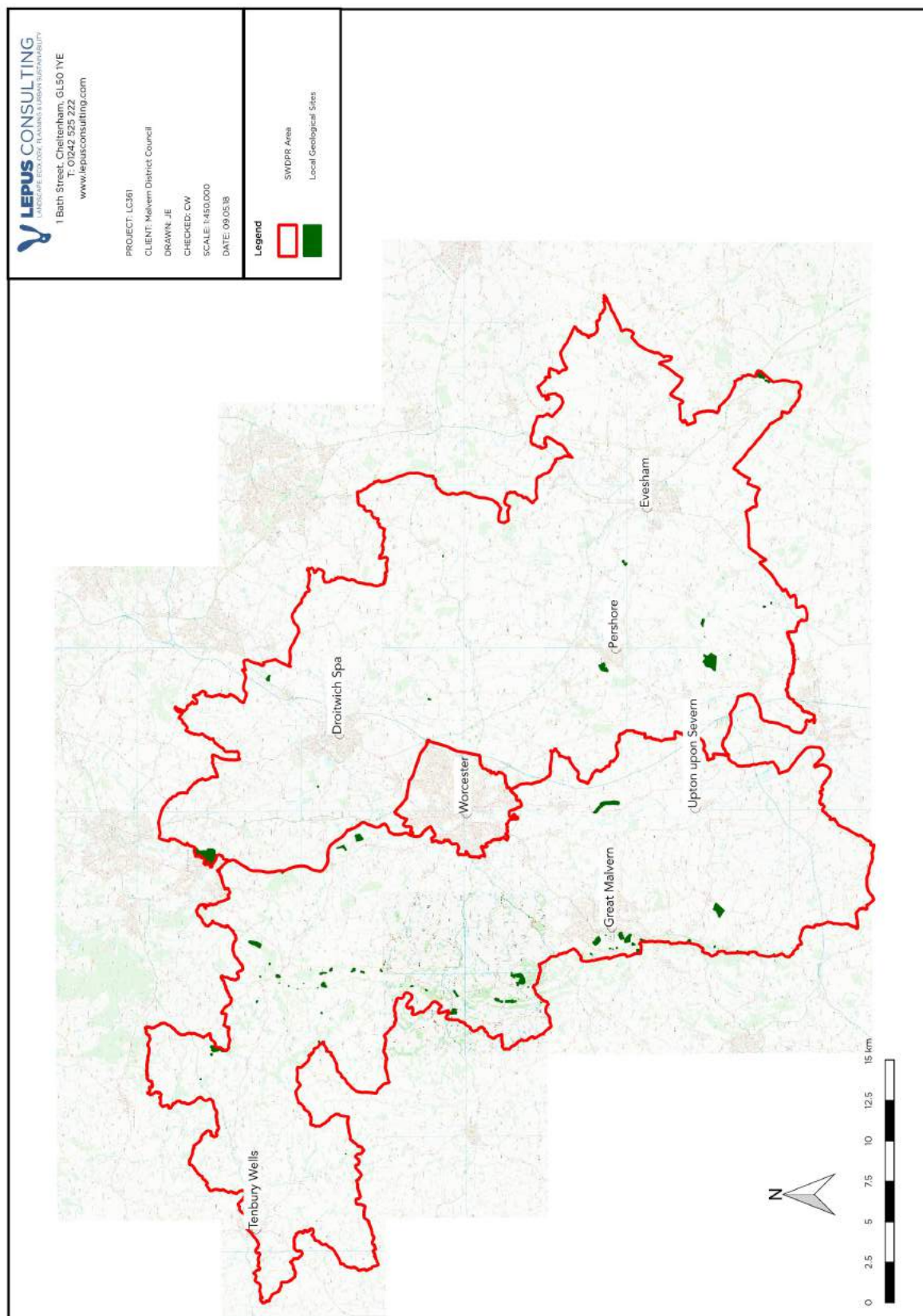


Figure 5.6: Local Geological Sites in South Worcestershire.

5.3 Key Sustainability Issues

- 5.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Biodiversity and Geodiversity theme are listed in Box 5.3.

Box 5.3: Key Biodiversity and Geodiversity Issues for South Worcestershire

- Protection of national assets. Increase proportion of SSSI in a 'favourable' or 'unfavourable – recovering' condition.
- Enhancement of river ecology such as higher river quality watercourses
- Protection of Natura 2000 sites in line with the Habitats Directive.
- Enhancement of all types of ecosystem services.
- The 2006 Natural Environment and Rural Communities (NERC) Act imposes a duty on local planning authorities to have regard to conserving biodiversity in carrying out all of their functions.

5.4 Future Evolution without the Plan

- 5.4.1 The likely evolution of the Biodiversity and Geodiversity theme in the SWDPR area is presented in Box 5.4.

Box 5.4: Future evolution of the baseline without the SWDPR

- Sites designated for their national and international biodiversity and/or geodiversity value will continue to benefit from legislative protection.
- It is uncertain if development will be placed near locally designated sites without the introduction of the Plan. Without the SWDPR, it may be difficult to help ensure that development is not of a type, scale and location could potentially have a major adverse impact on either a biodiversity or geodiversity designation (of international, national or local significance) or on the functioning ecological network of the SWDPR area and the various essential ecosystem services this provides.

6 Climate Change

6.1 Summary of policy, plan and programme review

6.1.1 Climate-related PPPs focus on both mitigating the causes of climate change and adapting to the effects of climate change. Commitments to reduce GHG emissions have been introduced from the international level to the sub-regional level. The PPPs address policy development across all sectors and at all levels, combining both demand management (reduced energy consumption and increased efficiency of use) and supply-side measures (low carbon options including fuel mix and renewables). A number of the PPPs state specific targets to reduce emissions of greenhouse gases. This is led at the national level by the Climate Change Act (2008), which sets a legally binding target of at least a 34% cut in greenhouse gas emissions by 2020 and at least an 80% cut by 2050 against a 1990 baseline.

6.1.2 Climate change and energy efficiency policies, plans and programmes to encourage sustainable development are set out by central government. The national Building Regulations, as updated March 2015, require certain levels of sustainable construction to be met and provide guidance on additional, optional regulations for water and access. The UK Government has outlined, through the Localism Act, the importance of sustainable development and its commitments to reducing carbon emissions and greenhouse gases. The Climate Change Act 2008 should also be considered which sets the national carbon reduction targets along with the UK Renewable Energy Strategy (2009).

6.1.3 Adaptation measures proposed by the PPPs include a presumption against development in flood risk areas, appropriate design of new development, the promotion of new infrastructure such as sustainable urban drainage systems and improved maintenance to help address the changes that are likely to occur as a result of climate change. Through this approach the Government is seeking to ensure that flood risk is taken into account at all stages of the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk.

6.2 Baseline data

Potential effects of climate change

- 6.2.1 Anthropogenic climate change is predominantly the result of greenhouse gas (GHG) emissions. GHGs are emitted from a wide variety of sources, including transport, construction, agriculture and waste. Typically, development leads to an increase in GHG emissions in the local area unless specific efforts are made to help reduce GHG emissions and increase the use of sustainably sourced materials and energy.
- 6.2.2 Emissions could potentially continue to rise should development proposed in the SWDPR not be as low carbon as possible. It will therefore be an important role of the SWDPR to promote sustainable development and construction methods, and to support low carbon energy sources.
- 6.2.3 In June 2009 the outcome of research on the probable effects of climate change in the UK was released by the UK Climate Projections (UKCP09) team³⁰. UKCP09 gives climate information for the UK up to the end of this century and projections of future changes to the climate are provided, based on simulations from climate models. Projections of a probabilistic form illustrate the potential range of changes in temperature and precipitation in the West Midlands region, where South Worcestershire is, by the year 2050 under a medium emissions scenario³¹ (see **Table 6.1**).
- 6.2.4 **Figure 6.1 –6.3** show a series of graphs which illustrate UKCP09 information for the West Midlands region of England over a wider timescale to the end of the century. This is presented in five (10%, 33%, 50%, 67% and 90%) probability levels for each 30-year time period.

³⁰ UK Climate Projections. Available at: <http://ukclimateprojections.defra.gov.uk/> [Date Accessed: 23/04/18]

³¹ UK Climate Projections (2014) 2050s medium emissions scenario. Available at: <http://ukclimateprojections.metoffice.gov.uk/23907?emission=medium> [Date Accessed: 23/04/18]

Table 6.1: Potential range of changes in temperature and precipitation in the West Midlands by the year 2050 under a medium emissions scenario³².

	Very unlikely to be less than an increase of	Central estimate increase of	Very unlikely to be more than an increase of
Winter Mean Temperature	1.2 °C	2.1 °C	3.2 °C
Summer Mean Temperature	1.2 °C	2.6 °C	4.4 °C
Summer Mean Daily Maximum Temperature	1.3 °C	3.6 °C	6.5 °C
Summer Mean Daily Minimum Temperature	1.1 °C	2.7 °C	4.8 °C
Annual Mean Precipitation	-5%	0%	6%
Winter Mean Precipitation	2%	13%	27%
Summer Mean Precipitation	-37%	-17%	6%

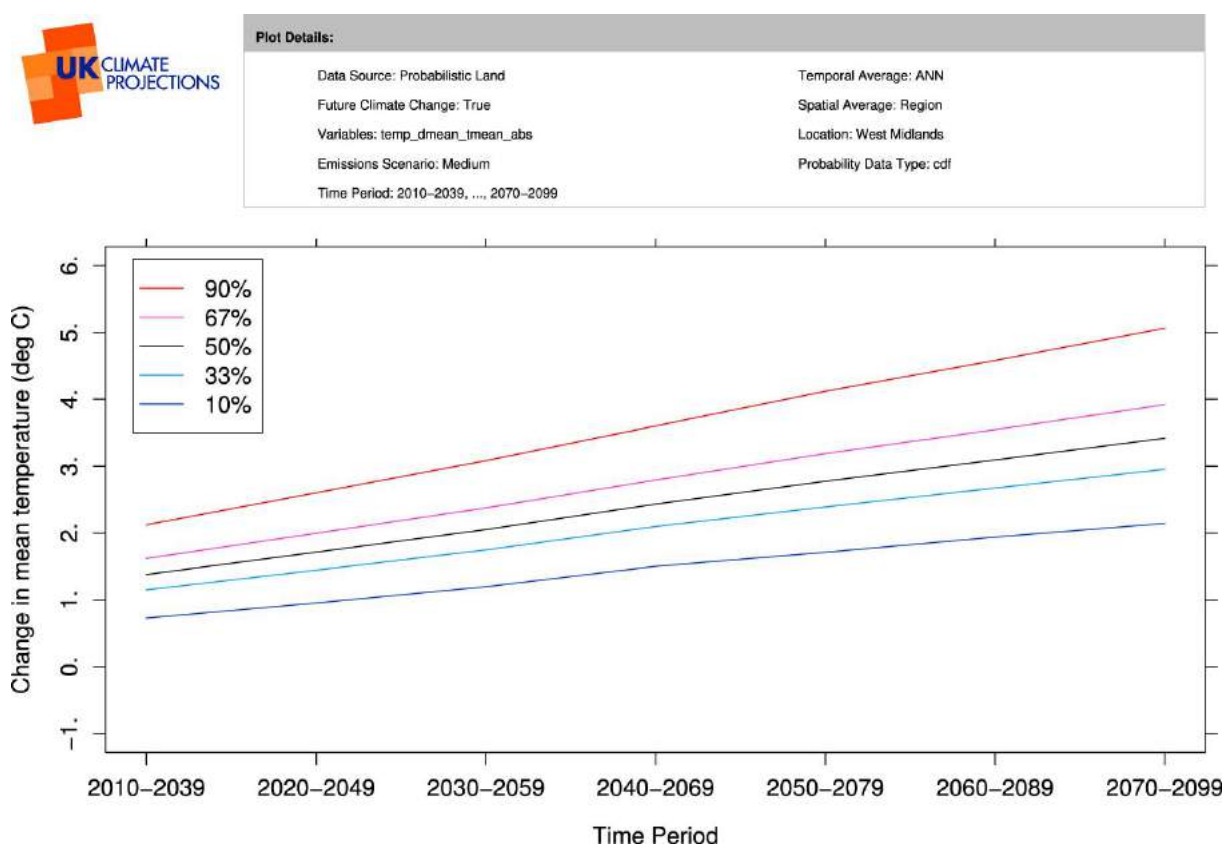


Figure 6.1: Changes in annual mean temperature in the West Midlands to 2099 as a result of a medium emissions scenario.

³² UK Climate Projections (2014) Maps & key findings <http://ukclimateprojections.metoffice.gov.uk/21708> [Date Accessed: 23/04/18]

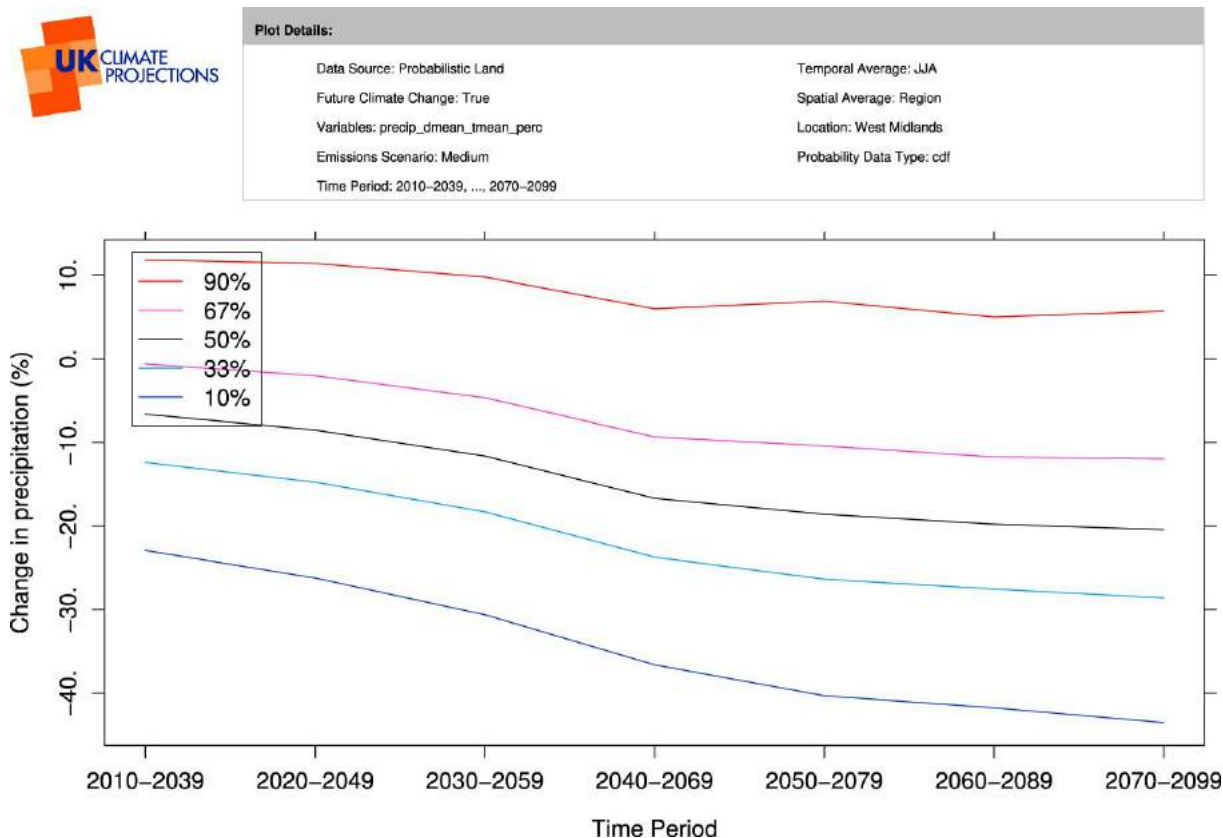


Figure 6.2: Changes in winter mean precipitation in the West Midlands to 2099 as a result of a medium emissions scenario.

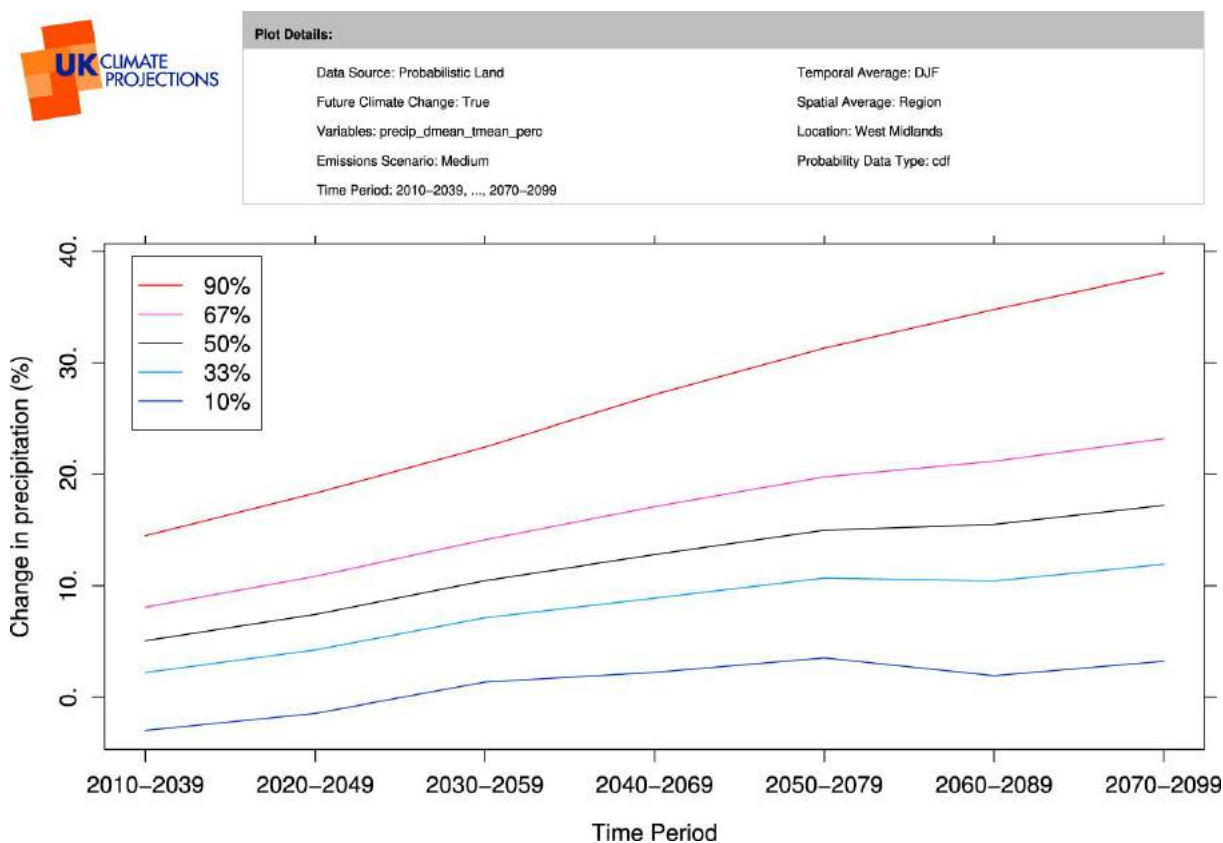


Figure 6.3: Changes in summer mean precipitation in the West Midlands to 2099 as a result of a medium emissions scenario.

Energy consumption

6.2.5 Total energy consumption across the West Midlands, as well as the three districts in South Worcestershire, has fluctuated between 2013 and 2015 (see Table 6.2). Energy consumption in the domestic sector is decreasing across all districts, whereas energy consumption in the transport sector is increasing. In Wychavon, the high level of energy consumption for transport, along with the high GHG emissions due to transport, result in the district having one of the highest levels within the West Midlands.

Table 6.2: Energy consumption in GigaWatt hours (GWh) in the commercial, domestic and transport sectors for the three districts and the West Midlands, as well as total energy consumption, between 2013 and 2015³³.

Energy Consumption (GWh)		Year		
District	Sector	2013	2014	2015
Malvern Hills	Commercial	335.4	360.6	318.46
	Domestic	604.7	581.3	569.3
	Transport	1,002.0	1,022.4	1,045.5
	Total	2,011.0	2,033.1	1,981.2
Worcester City	Commercial	577.6	586.1	528.35
	Domestic	651.4	642.2	625.9
	Transport	345.3	359.2	358.9
	Total	1,583.3	1,587.5	1,537.6
Wychavon	Commercial	1,084.0	1,091.5	1,905.08
	Domestic	897.9	860.8	849.5
	Transport	1,818.8	1,845.8	1,885.3
	Total	3,864.1	3,863.3	3,879.3
West Midlands	Total	123,548.4	123,893.0	123,739.4

³³ Department for Business, Energy and Industrial Strategy (2015) Sub-national total final energy consumption statistics: 2005-2015. Available at: <https://www.gov.uk/government/statistical-data-sets/total-final-energy-consumption-at-regional-and-local-authority-level> [Date Accessed: 03/05/18]

Renewable Energy

6.2.6 All three districts have seen an increase in renewable energy generation between 2014 and 2016 (see Table 6.3). Wychavon has increased its generation by approximately 30,000MWh. Despite this, the total renewable energy generation for the West Midlands has decreased by approximately 1 million MWh over the two years. The majority of the renewable energy is generated by photovoltaics in all three districts. In Worcester, approximately half of the renewable energy is generated from sewage gas, whereas in Wychavon, a large proportion of the renewable energy is generated by landfill gas.

Table 6.3: Total renewable energy generation in MegaWatt hours (MWh) in the three districts and the West Midlands between 2014 and 2016³⁴

Renewable Energy Generation (MWh)	2014	2015	2016
Malvern Hills	5,491	6,244	7,487
Worcester City	4,441	6,559	6,835
Wychavon	59,796	71,611	89,496
West Midlands	2,300,124	2,983,070	1,343,929

Carbon emissions

6.2.7 The requirement to improve the energy efficiency of homes stems from the legal requirements to reduce carbon dioxide (CO₂) emissions set out in the Climate Change Act 2008 and the government's Carbon Plan, published in 2011. The Carbon Plan seeks to reduce greenhouse gas CO₂ emissions by 29% by 2017, 35% by 2022, and 50% by 2027 – for buildings this means a reduction of between 24% and 39% compared to 2009 levels by 2027.

6.2.8 Carbon emissions per capita in the SWDPR area is greatest in Wychavon, over double of the energy consumption in Worcester (see Table 6.4). Wychavon consistently has a higher carbon emissions across all sectors (see Table 6.5).

³⁴ Department for Business, Energy & Industrial Strategy (2016) Renewable electricity by local authority. Available at: <https://www.gov.uk/government/statistics/regional-renewable-statistics> [Date Accessed: 02/05/18]

6.2.9 The significant majority of carbon emissions in Malvern Hills and Wychavon are from the transport sector, whereas for Worcester City the greatest majority of carbon emissions is from the industry and commercial sector (see Table 6.5). The higher transport emissions in Wychavon are primarily due to the M5 running through the district. Total emissions has steadily decreased for each district between 2013 and 2015, apart from transport emissions, which has consistently increased in all three districts.

Table 6.4: Total and per capita emissions in Worcestershire³⁵.

Area	Total emissions (ktCO ₂)	Population estimate	Per capita emissions (tCO ₂)
Bromsgrove	715.3	95,800	7.5
Malvern Hills	566.7	75,700	7.5
Redditch	347.8	84,700	4.1
Worcester	104.2	101,300	3.9
Wychavon	539.3	1,068,500	8.8
Wyre Forest	145.8	99,500	4.4
Worcestershire Total	1,627.7	3,531,600	6.1

Table 6.5: Emissions (CO₂) by sector for each year from 2013-2015

Sector		Industry & commerce (kt CO ₂)	Domestic (kt CO ₂)	Transport (kt CO ₂)	Total (kt CO ₂)
Malvern Hills	2013	131.9	179.8	289.8	607.5
	2014	128.6	152.4	296.1	581.2
	2015	115.1	141.2	306.2	566.7
Worcester	2013	196.5	183.7	101.1	482.4
	2014	180.7	153.8	102.8	438.3
	2015	148.2	143.3	104.2	396.7
Wychavon	2013	369.5	263.5	515.1	1,158.2
	2014	337.0	219.0	523.0	1,087.4
	2015	316.7	204.4	539.3	1,068.5

³⁵ ONS (2017) UK local authority and regional carbon dioxide emissions and national statistics 2005 – 2015.

Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/623016/2005_to_2015_UK_local_and_regional_CO2_emissions_data_tables.xlsx [Date Accessed: 26/04/18]

Flooding

- 6.2.10 Climate change is anticipated to increase the risk of extreme weather events. Of particular concern in the UK is the rising risk of fluvial, pluvial (surface water) and coastal flooding. In 2009 the EA estimated 2.4 million properties in England were susceptible to fluvial and/or coastal flooding, whilst 3.8 million properties in England were susceptible to pluvial flooding. A complex network of waterways course through the SWDPR area, primarily associated with the River Severn and River Avon (see **Figure 6.4**). Associated with these waterways are differing extents of fluvial flood risk (see **Figure 6.5**). The significant majority of the SWDPR area is within Flood Zone 1, where the risk of fluvial flooding each year is less than 0.1%, taking into account the effect of any flood defences in the area.
- 6.2.11 Along the River Severn, large expanses of land are situated in Flood Zone 3. These areas have a risk of fluvial flooding which is greater than 3.3% each year. Approximately 300ha of the west of Worcester City is in Flood Zone 3, and larger expanses in Malvern Hills and Wychavon districts (see **Figure 6.5**). Careful consideration should be given to the level of flood risk new residents are exposed to, as well as the impacts of development on risk.
- 6.2.12 More local potential sources of flooding include groundwater flooding, which is the surcharging of the underground sewer system, the blockage of culverts and gullies (which results in overland flow), and surface water flooding.
- 6.2.13 All levels of surface flood risk is present in all areas of South Worcestershire (see **Figure 6.6**). Flood risk is greater down steep slopes and along valley floors. It is exacerbated by loss of vegetation, soil erosion, extreme weather and urbanisation.

- 6.2.14 It is good practice to make allowances for climate change in flood risk assessments. Allowing for the impacts of climate change help to minimise vulnerability whilst providing greater resilience to flooding by anticipating changes to peak river flows, peak rainfall intensities, sea level rise and offshore wind speeds. Climate change allowances are based on climate change projections under different CO₂ scenarios³⁶.

Green Infrastructure

- 6.2.15 Green Infrastructure (GI) is a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities³⁷. GI has many benefits including human health, climate change adaptation and wildlife value³⁸. GI can play an important role in helping urban areas adapt to climate change, by reducing airborne pollutants, providing shade and local cooling and reducing surface water runoff³⁹.
- 6.2.16 South Worcestershire has an extensive GI network, including LNRs, SSSIs, SPAs, SACs (see **Chapter 5**), allotments, playing fields and parks. GI in the Plan area should be protected and increased where possible. Green corridors along rivers are a particularly effective natural source of flood attenuation and biodiversity value which should be protected as referred to in the Worcestershire Green Infrastructure Strategy⁴⁰.

³⁶ Environment Agency (2016) Flood risk assessments: climate change allowances. Available online at: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

³⁷ DCLG (2012) National Planning Policy Framework. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

³⁸ Forest Research (2010) Benefits of green infrastructure.

³⁹ Landscape Institute (2013) Green Infrastructure: An integrated approach to land use.

⁴⁰ Worcestershire County Council (2014) Green Infrastructure Strategy 2013-2018. Available at:

http://www.worcestershire.gov.uk/downloads/file/3780/worcestershire_gi_strategy_document_2013-2018

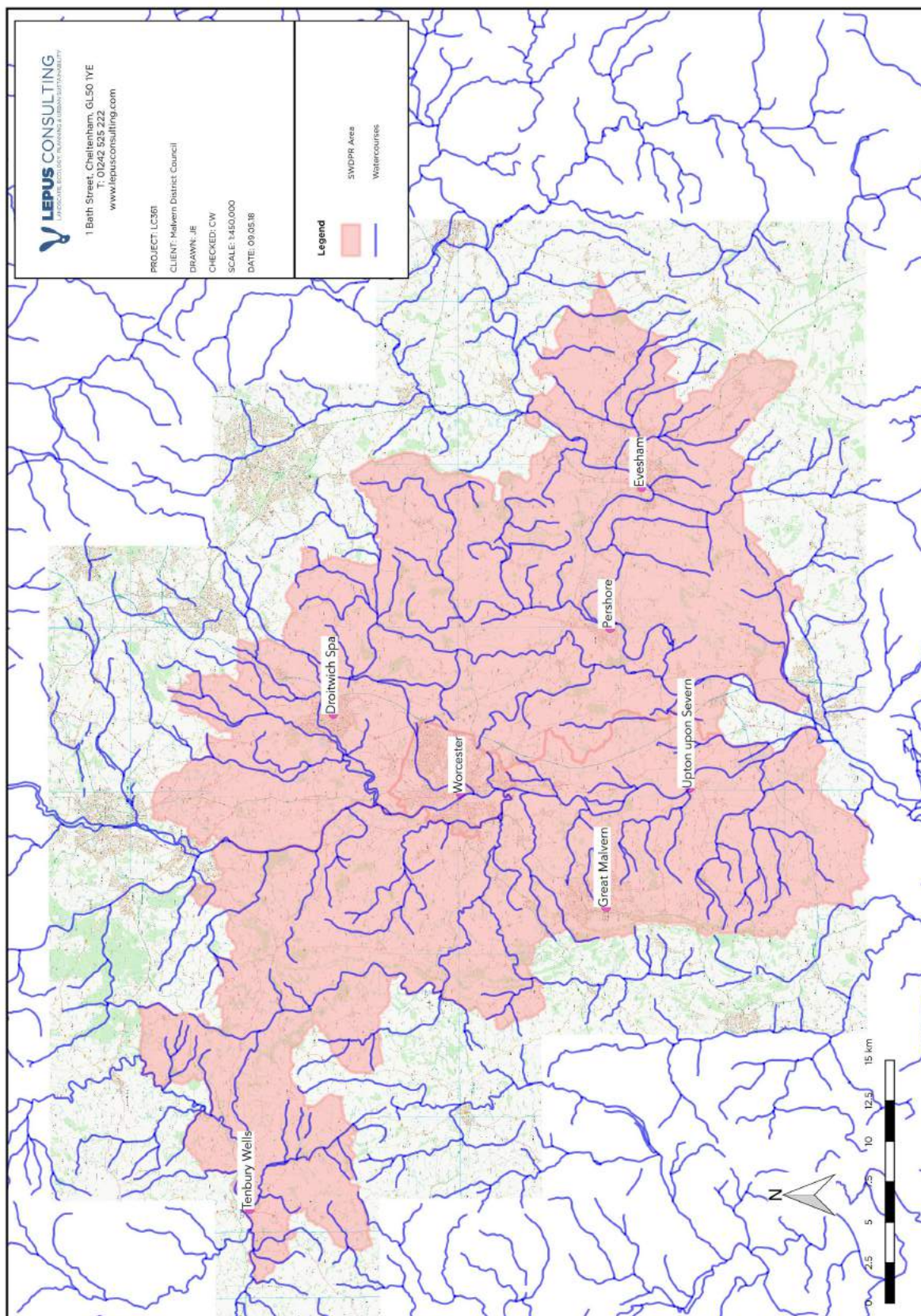


Figure 6.4: Network of waterways in and around South Worcestershire.

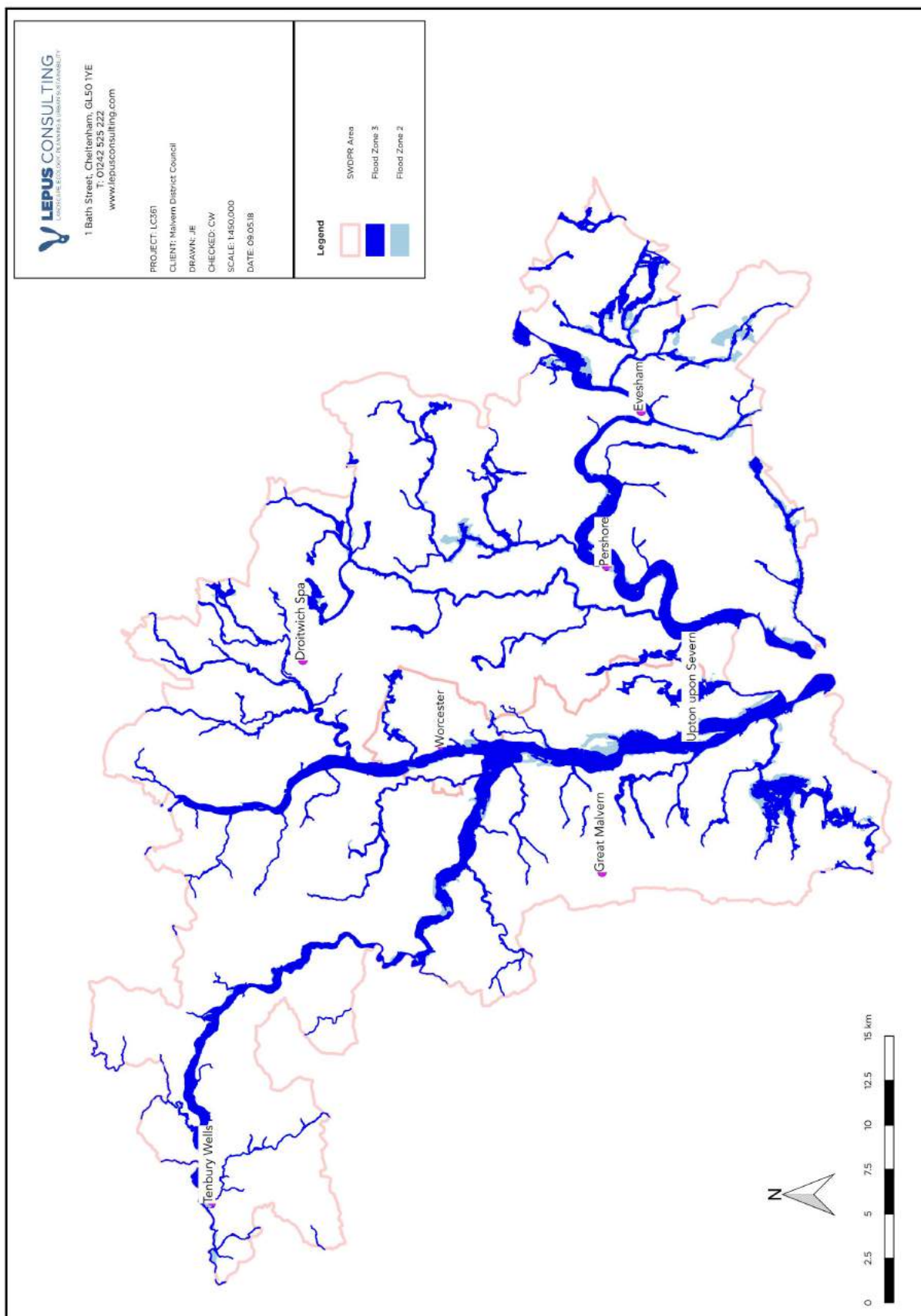


Figure 6.5: Fluvial flood risk zones in South Worcestershire.

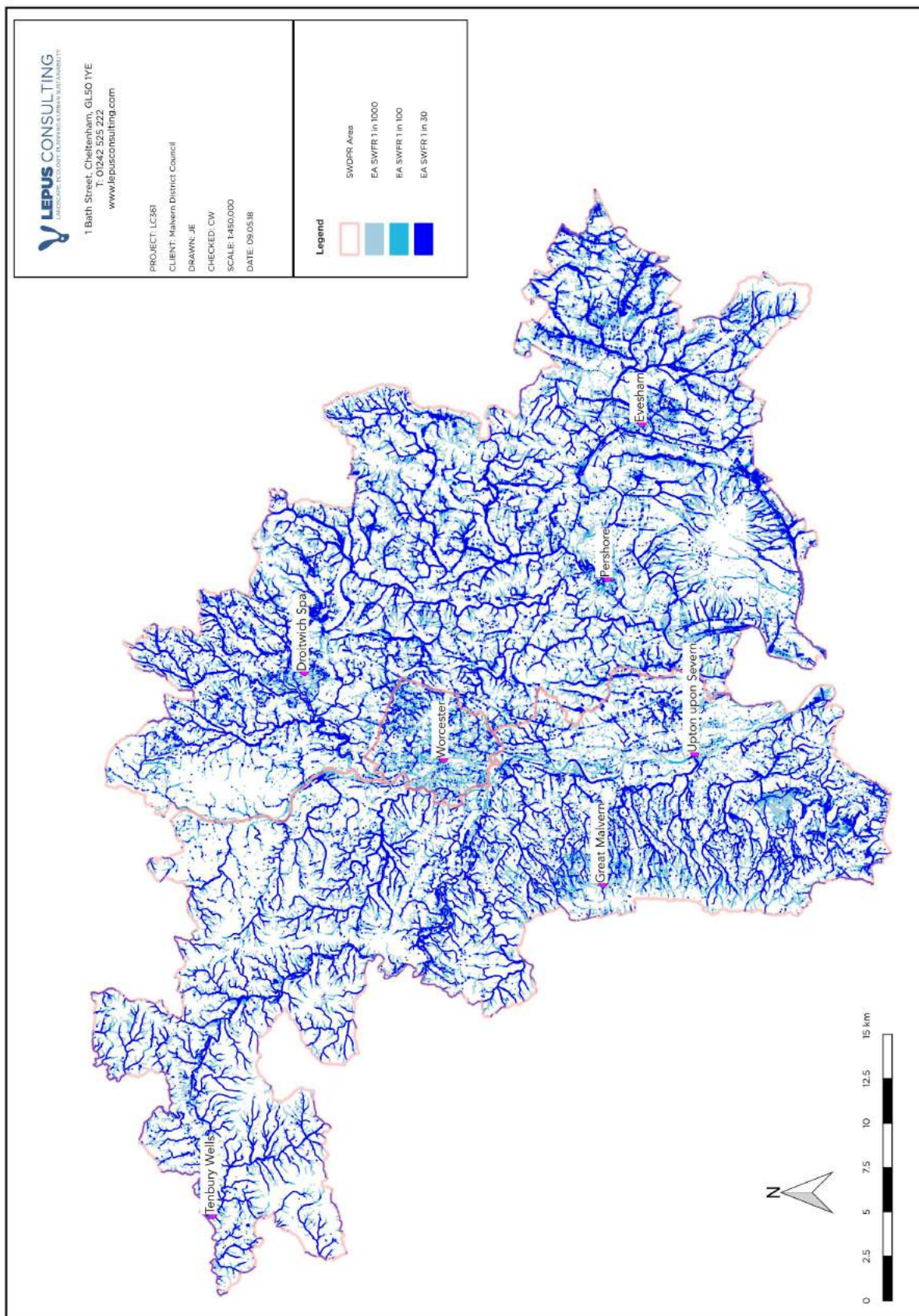


Figure 6.6: Pluvial flood risk in South Worcestershire.

6.3 Key Sustainability Issues

- 6.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Climate Change theme are listed in Box 6.3.

Box 6.3: Key Climate Change Issues for South Worcestershire

- Climate change has the potential to increase the risk of fluvial and surface water flooding
- Carbon emissions from transport across South Worcestershire has increased between 2013 and 2015. In order to accord with national targets, reductions in local GHG emissions are necessary. The greatest gains could potentially be achieved in the industry and transport sectors in Wychavon.
- Large areas of South Worcestershire are within fluvial Flood Zone 3. Careful consideration is needed for the levels of flood risk new residents may be exposed to.
- Almost all of the SWDPR area is within pluvial flood risk zones.
- Green Infrastructure should be conserved and enhanced in line with the GI strategy

6.4 Future Evolution without the Plan

- 6.4.1 The likely evolution of the Climate Change theme in the SWDPR area is presented in Box 6.4.

Box 6.4: Future evolution of the baseline without the SWDPR

- The risk of flooding will be likely to increase over time due to the changing climate increasing the occurrence of extreme weather events as well as the increasing urbanisation of the SWDPR area.
- Total carbon emissions are expected to continue to decrease over time without the Plan as renewable energy becomes an increasingly competitive force in the UK energy market.
- CO₂ emissions in the transport sector may be likely to rise in line with local trends. An increasing uptake of electric vehicles, a trend seen across the UK, may help to alleviate this issues. Emissions from the transport sector in Wychavon will be likely to continue to be significantly greater than all other emissions in the SWDPR area.

7 Economic Factors

7.1 Summary of policy, plan and programme review

7.1.1 The improvement and maintenance of high and stable levels of economic growth and employment are key aims of the strategies at UK and European levels. Other objectives include improvements to the education system to increase the skill levels of both children and adults, as well as improved productivity and innovation, particularly with regards to technology.

7.1.2 At a regional and local level, emphasis is placed on community cohesion and regeneration; building business and enterprise, developing skills and employment, supporting strategic infrastructure requirements and promoting investment.

7.2 Baseline data

Employment

7.2.1 A greater proportion of the population of Worcester is of working age (16 – 64) than in Great Britain as a whole (see **Table 7.1**), but lower proportions are seen in Malvern Hills and Wychavon districts. Wychavon has a greater proportion of the population that are self-employed compared to UK average, whereas Malvern Hills and Worcester are lower than average. The proportion of people unemployed across South Worcestershire is lower than the average for Great Britain. Of the 25.8% of the population within Malvern Hills which is economically inactive, approximately 8% of the population are retired.

7.2.2 Worcestershire's population is aging, leading to an increased demand on services used by the elderly and having implications for the proportion of the population that is of working age⁴¹.

⁴¹ Worcestershire County Council (2010) Worcestershire County Economic Assessment 2010-2011. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2011/09/wcc_economic_assessment.pdf

7.2.3 There is a higher proportion of the population of South Worcestershire in professional occupations than for the whole of Great Britain (see Table 7.2). A greater proportion of the population in Malvern Hills and Wychavon are in manager, director or senior positions than Great Britain, whereas the percentage in Worcester is lower.

Table 7.1: Percentage of the population of working people (16-64) which are employed, self-employed or unemployed⁴².

Area	Malvern Hills (%)	Worcester (%)	Wychavon (%)	Great Britain (%)
Working population	74.2	81.4	78.1	78.4
Employees	60.3	71.2	61.1	64.0
Self Employed	8.8	7.3	14.0	10.6
Unemployed	4.2	3.9	3.7	4.4

Table 7.2: Job profiles according to 2011 census data.

Area	Malvern Hills (%)	Worcester (%)	Wychavon (%)	Great Britain (%)
Managers, directors and senior officials	13.6	8.8	15.0	10.9
Professional occupations	29.1	25.0	20.5	20.3
Associate profession and tech occupations	N/A	9.4	13.0	14.4
Administrative and secretarial occupations	11.9	8.3	N/A	10.3
Skilled trades occupations	N/A	11.0	12.9	10.3
Caring, leisure and other service	N/A	7.6	11.7	9.1
Sales and customer service occupations	N/A	7.0	N/A	7.5
Process, plant and machine operatives	11.0	8.9	N/A	6.3
Elementary occupations	N/A	14.0	9.7	10.5

⁴² nomis (2017) Labour market profile – Malvern Hills. Available at: <https://www.nomisweb.co.uk/reports/lmp/la/1946157194/report.aspx?c1=1946157196&c2=1946157197#tabempo> cc [Date Accessed: 30/04/18]

7.2.4 The highest proportion of jobs within Malvern Hills and Wychavon are in the wholesale and retail trade. Within Malvern Hills, this is approximately the same as the average for the UK, but is significantly higher than average in Wychavon. In Worcester, the greatest percentage of jobs are within the human health and social work industry, which is significantly higher than the national average.

7.2.5 In 2017, a total of 13,790 of business enterprises were operating within South Worcestershire, 6,430 of which were in Wychavon.

Employment Land

7.2.6 South Worcestershire provides over 127,00 jobs, with Worcester City and Wychavon accounting for 50,000 each and Malvern Hills 27,000. The Employment Land Review⁴³ (which is being updated as part of the SWDPR) shows that Malvern Hills and Worcester City have undergone increases in employment growth over the past ten years, which could reveal a high demand in the future. The Review concluded that South Worcestershire's indicative long-term requirement between 2006 and 2026 was 244ha of employment land, 108ha to be in Worcester City, 92ha in Wychavon and 44ha in Malvern Hills. As of 2010, 183ha across South Worcestershire remained to meet the long-term target.

Education

7.2.7 The majority of Worcester City has good access to primary school facilities. Primary schools across Malvern Hills and Wychavon are sparsely distributed with most schools in the major towns of Malvern, Pershore, Evesham and Droitwich Spa. The majority of larger villages also have good access to primary schools. Residents situated in some of the more rural areas of the districts may have to travel relatively far or rely on personal car usage to reach primary schools.

7.2.8 There are 14 secondary schools across South Worcestershire. Worcester City provides residents with excellent access to a range of secondary schools.

⁴³ Tym & Partners (2011) South Worcestershire Employment Land Review. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2011/09/Final_Report.pdf

7.2.9 Secondary schools in Wychavon are all located in urban areas, including Droitwich Spa, Pershore and Evesham. In Malvern Hills, there are two secondary schools in Malvern town and one in Tenbury Wells. The other two secondary schools in the district are in Martley and Hanley Castle. Residents situated in some of the more rural areas of Malvern Hills and Wychavon districts may have to travel relatively far or rely on personal car usage to reach secondary schools.

7.2.10 Table 7.3 shows that the percentage of residents with NVQ qualifications in Malvern Hills and Worcester City districts are higher than the national percentages. Qualification levels are generally slightly worse than the UK average and other areas of South Worcestershire.

Table 7.3: Qualification levels in South Worcestershire.

Qualification	Malvern Hills (%)	Worcester (%)	Wychavon (%)	Great Britain (%)
NVQ4 and above	45.9	40.2	36.7	38.6
NVQ3 and above	64.7	55.2	53.7	57.2
NVQ2 and above	82.2	75.7	72.9	74.7
NVQ1 and above	88.0	83.2	79.8	85.4
No Qualifications	8.9	8.2	10.6	7.7

7.3 Key Sustainability Issues

7.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Economy theme are listed in Box 7.3.

Box 7.3: Key Economic factors Issues for South Worcestershire

- The proportion of the population in active employment is lower in Malvern Hills than the national average.
- The number of people out of work in Worcestershire is expected to rise.
- Rural communities in South Worcestershire have more limited access to primary and secondary education facilities and in many cases local residents' only option for getting there is via personal car use.
- NVC qualifications in Wychavon district are lower than Malvern Hills and Worcester and also the national average.
- The SWDPR should seek to contribute towards building a strong, responsive and competitive south Worcestershire economy by identifying and coordinating development requirements, including the provision of infrastructure, ensuring that sufficient land of the right type is available in the right locations and at the right time to support economic and social growth and innovation as well as by promoting accessibility to everyday facilities for all, especially those without a car.

7.4 Future Evolution without the Plan

- 7.4.1 The likely evolution of the Economy theme in the SWDPR area is presented in Box 7.4.

Box 7.4: Future evolution of the baseline without the SWDPR

- It is expected the number of businesses within South Worcestershire to continue to increase without the Plan.
- Access to schools in rural communities is unlikely to change without the Plan.
- In accordance with the Employment Land Review⁴⁴, South Worcestershire is likely to meet long-term employment land targets.

⁴⁴ Tym & Partners (2011) South Worcestershire Employment Land Review. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2011/09/Final_Report.pdf

8 Health and Quality of Life

8.1 Summary of policy, plan and programme review

- 8.1.1 Health related PPPs focus on delivering healthier developments, particularly age-friendly environments for the elderly, encouraging healthier food choices and active travel. Improving rates of infant mortality and life expectancy; reducing work related illness and accidents; significantly improving levels of sport and physical activity, ; improving accessibility to healthcare and leisure/recreational facilities; and reducing health inequalities are also key issues. Reports on Green Infrastructure, sports facilities and open spaces support this.

8.2 Baseline data

Population size

- 8.2.1 South Worcestershire has an approximate population of 301,600. This is split into 76,600 in Malvern Hills, 101,900 in Worcester City and 123,100 in Wychavon.
- 8.2.2 Worcester City has the highest percentage of resident aged between 16 and 64, at 65.1%. This is higher than the average for Worcestershire (60.4%) and Great Britain (63.1%). Malvern Hills and Wychavon are slightly lower at 56.8% and 58.8%.
- 8.2.3 Population projections for Malvern Hills and Wychavon suggest that the proportion of people above 70 in the districts is likely to increase, whilst the proportion of the population under the age of 30 is likely to decrease over time (see **Table 8.1**). In Worcester City, the population is expected to increase for all age ranges.

Table 8.1: The population projections for Malvern Hills, Worcester City and Wychavon⁴⁵.

District	Year	0-14	15-29	30-49	50-69	70-89	90+
Malvern Hills	2014	11,000	11,000	17,000	23,000	13,000	1,000
	2020	12,000	11,000	16,000	23,000	16,000	1,000
	2025	12,000	10,000	16,000	24,000	18,000	2,000
	2030	12,000	10,000	17,000	23,000	19,000	2,000
Worcester City	2014	18,000	22,000	28,000	22,000	10,000	1,000
	2020	18,000	23,000	26,000	24,000	12,000	1,000
	2025	19,000	23,000	27,000	24,000	14,000	1,000
	2030	19,000	23,000	28,000	24,000	15,000	1,000
Wychavon	2014	19,000	18,000	29,000	35,000	18,000	1,000
	2020	20,000	17,000	27,000	36,000	22,000	2,000
	2025	20,000	17,000	27,000	37,000	25,000	2,000
	2030	20,000	17,000	28,000	36,000	27,000	3,000

Health and Well-being

8.2.4 The health and wellbeing of residents in South Worcestershire is generally very good, with the Plan area performing better on average than England for several key health indicators. The number of physically active adults within South Worcestershire is similar to England's average as well as the percentage of obese children (Year 6) being lower across all districts.

8.2.5 Rates of diabetes and infant mortality in Wychavon are higher than the national average. A summary of the Public Health Profiles are shown in **Table 8.2**, with a Health Summary for each district shown in detail in **Appendix A**.

⁴⁵ ONS (2016) Subnational population projections. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2> [Date Accessed 03/05/18]

Table 8.2: Health statistics for Malvern Hills⁴⁶, Worcester⁴⁷ and Wychavon⁴⁸ in comparison with the England average.

	Deprivation score (IMD) (2015)	Male life expectancy (yrs)	Female life expectancy (yrs)	Suicide rate (per 100,000)	Physically active adults (%)	Adults of excess weight (%)
Malvern Hills	16.1	80.4	83.4	N/A	58.1	62.6
Worcester	19.9	78.6	83.4	8.9	56.5	66.0
Wychavon	16.0	81.3	84.6	10.4	60.2	66.2
England	21.8	79.5	83.1	10.1	57	64.8

Poverty

8.2.6 Over 6% of people in Worcestershire lived in households with a median income less than £17,400 per annum in 2010⁴⁹. It is shown that deprivation in rural areas tend to be more dispersed than in urban areas and is consequently harder to measure.

8.2.7 No Lower Layer Super Output Areas (LSOAs) of South Worcestershire are in the most deprived top ten percent nationally ⁵⁰. The higher IMD average rank number relates to more deprived areas. The most deprived LSOA is given the rank 32,844, and the three districts in South Worcestershire have significantly lower ranks (see Table 8.3). Worcester City is the most deprived area of the three districts.

Table 8.3: The IMD average rank of the three districts.

District	IMD average rank
Malvern Hills	13,912.49
Worcester City	15,144.68
Wychavon	13,847.95

* Average Rank = population weighted average of the combined ranks for the LSOAs in a larger area

⁴⁶ Public Health England (2017) Malvern Hills District. Available at: <http://fingertipsreports.phe.org.uk/health-profiles/2017/e07000235.pdf>

⁴⁷ Public Health Profile (2017) Worcester District. Available at: <http://fingertipsreports.phe.org.uk/health-profiles/2017/e07000237.pdf>

⁴⁸ Public Health Profile (2017) Wychavon District. Available at: <http://fingertipsreports.phe.org.uk/health-profiles/2017/e07000238.pdf>

⁴⁹ Worcestershire County Council (2010) Worcestershire County Economic Assessment 2010-2011. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2011/09/wcc_economic_assessment.pdf

⁵⁰ Ministry of Housing, Communities and Local Government (2015) English Indices of Deprivation. Available at: <https://www.gov.uk/government/collections/english-indices-of-deprivation>

- 8.2.8 Fuel poverty is defined by the Warm Homes and Energy Conservation Act as being someone living on a lower income in a home which cannot be kept warm at a reasonable cost. The proportion of fuel poor households in Worcester City and Wychavon is lower than the proportion for the West Midlands overall, whereas Malvern Hills is higher (see Table 8.4).

Table 8.4: Fuel poverty in the three district in comparison to the West Midlands⁵¹

Area	Number of households	Number of fuel poor households	Proportion of households fuel poor (%)
Malvern Hills	32,795	5,100	15.6
Worcester City	42,792	5,181	12.1
Wychavon	50,362	6,398	12.7
West Midlands	2,336,127	315,987	13.5

Crime

- 8.2.9 Crime is becoming increasingly frequent in South Worcestershire. In the twelve months leading up to 31st December 2017, the police recorded a total of 21,348 crimes in the area (see Table 8.5). These figures are higher than nearby districts.

⁵¹ Department for Business, Energy and Industrial Strategy (2017) Sub-regional fuel poverty data 2017. Available at: <https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2017> Date Accessed: 25/04/18]

Table 8.5: Notable offences recorded by the police in South Worcestershire (total counts for twelve months prior to 31/12/17)⁵²

Crime	Total Count
All other theft offences	2188
Bicycle theft	400
Criminal damage and arson	2674
Domestic burglary	0
Drug offences	1207
Fraud offences	524
Homicide	6
Miscellaneous crimes against society	398
Non-domestic burglary	684
Possession of weapons offences	155
Public order offences	1409
Robbery	146
Sexual offences	888
Shoplifting	2109
Stalking or harassment	1497
Theft from the person	237
Vehicle offences	1483
Violence with injury	2497
Violence without injury	2846
Total	21,348

Waste generation and recycling

8.2.10 The average waste production per person per year was 406kg in 2005, rising to 412kg in 2016⁵³. Net household waste generation and recycling rates for the SWDPR area are in **Table 8.6**. These suggest a minor or negligible increase in waste generation between 2014 and 2016. The increase in waste generation is greater than the increase in waste recycling rates. This data also shows that household waste comprises the significant majority of waste collected for each authority.

⁵² ONS (2017) Notifiable Offences Recorded by the Police. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/datasets/recordedcrimedatatacommunitysafetypartnershiplocalauthoritylevel> [Date Accessed: 25/04/18]

⁵³ DEFRA (2017) Local Authority Collected Waste Management Statistics. Available at: <https://data.gov.uk/dataset/5aea1caf-3e38-4d57-b321-ba34eb762b6e/local-authority-collected-waste-management-statistics> [Date Accessed: 27/04/18]

Table 8.6: Household waste and recycling percentages for the three districts for the financial years 2014-15 and 2015-16.

Local Authority	Financial Year	Total Local Authority collected waste (tonnes)	Household total waste (tonnes)	Household waste sent for recycling/ composting/ reuse (tonnes)	Percentage of household waste being recycled
Malvern Hills	2014-15	25,810	24,640	9,398	38.14%
	2015-16	26,194	24,711	9,458	38.27%
Worcester City	2014-15	33,438	30,977	11,647	37.6%
	2015-16	34,157	31,715	11,849	37.36%
Wychavon	2014-15	45,099	42,863	18,430	43%
	2015-16	47,161	44,685	19,617	43.9%
Worcestershire	2014-15	288,772	264,163	107,821	40.82%
	2015-16	298,987	271,742	112,396	41.36%

GP surgeries and NHS hospitals

- 8.2.11 It is important that residents have access to GP surgeries and NHS hospitals. Ideally, residents should be able to walk to their nearest GP surgery within approximately ten minutes, whilst a hospital within 8km would be considered to be accessible. Where distances to important health services are long, sustainable transport modes such as frequent and affordable bus routes should be available to residents.
- 8.2.12 There is only one hospital with an A&E within South Worcestershire, Worcestershire Royal Hospital, located in Worcester City, where all residents in the district are within 8km of the hospital (see **Figure 8.1**). There is poor access to emergency care across Malvern Hills and Wychavon, with only community hospital located in the southern region of these districts.
- 8.2.13 Whilst there are a large number of GP surgeries throughout South Worcestershire (28 GP surgeries), given the nature of the local area and the dispersed pattern of settlements, rural communities have more limited access to GP surgeries.

Greenspaces and natural habitats

- 8.2.14 Exposure to a diverse range of natural habitats is significantly beneficial for physical and mental health and well-being. Good access to green/recreational areas can reduce stress, fatigue, anxiety and depression⁵⁴. Good access to greenspaces is associated with healthy foetal growth in pregnant women, higher birth weights, healthy microbiomes in babies and reduced rates of obesity and Type 2 diabetes. Impacts of access to the natural environment are particularly significant for lower socio-economic groups.
- 8.2.15 Providing residents with sustainable access to a diverse range of natural habitats is an effective means of reducing health inequalities in the area. The extensive PRoW network in South Worcestershire offers residents with access into the countryside, which provides an open and rural landscape of natural habitats. Given the rural character of Malvern Hills and Wychavon, residents are likely to have good pedestrian access to the surrounding countryside and a good range of natural habitats.
- 8.2.16 In addition to this, there are a wide variety of public greenspaces in South Worcestershire (see **Figure 8.2**), including parks, golf courses, allotments and playgrounds. Worcester City has a higher density of greenspaces in comparison to Malvern Hills and Wychavon due to its urbanised landscape. The development of greenspaces within the city are essential to ensure access to natural habitats for residents for physical and mental health and well-being.
- 8.2.17 There are numerous LWSs and other designated biodiversity assets across South Worcestershire supporting natural habitats which local residents can visit. Worcester City has a lower quantity of natural habitats. There is one NNR and several LNRs.

⁵⁴ Houlden. V., Weich. S. and Jarvis. S. (2017) A cross-sectional analysis of green space prevalence and mental wellbeing in England

Leisure Centres

- 8.2.18 It is generally considered that being within 2km of a leisure centre is adequate to allow frequent use of the leisure facilities. There are several leisure centres within Worcester City. In Wychavon the leisure centres are few in numbers and widely distributed, with one in Pershore, Evesham and Droitwich Spa. In Malvern Hills there are a few leisure centres located in Great Malvern, Tenbury Wells, and other towns within the district. In Wychavon and Malvern Hills, residents situated in rural communities away from the larger towns may have limited access to leisure centres and may rely on personal car usage to reach these facilities.

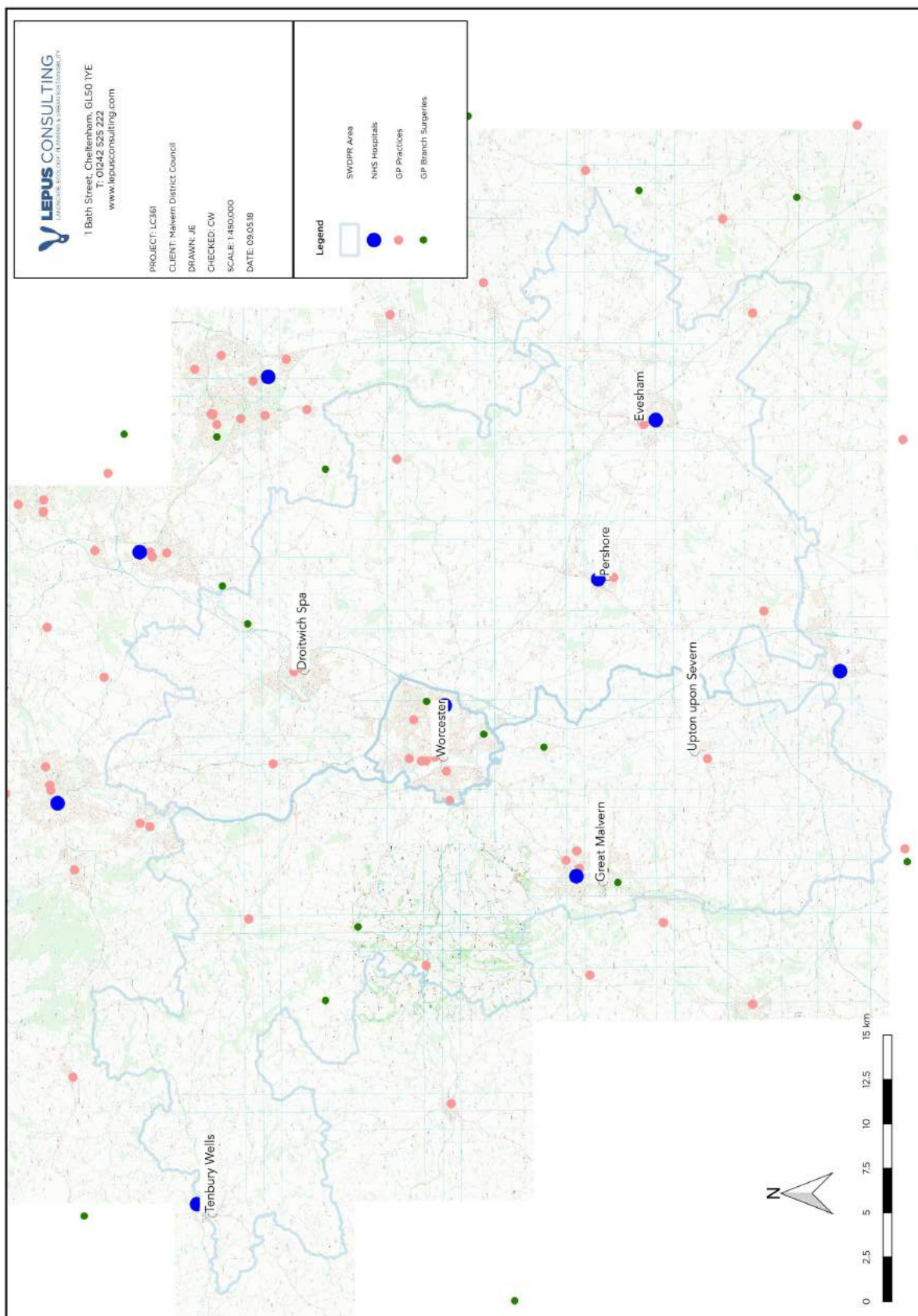


Figure 8.1: Location of NHS hospitals and GP surgeries in South Worcestershire.

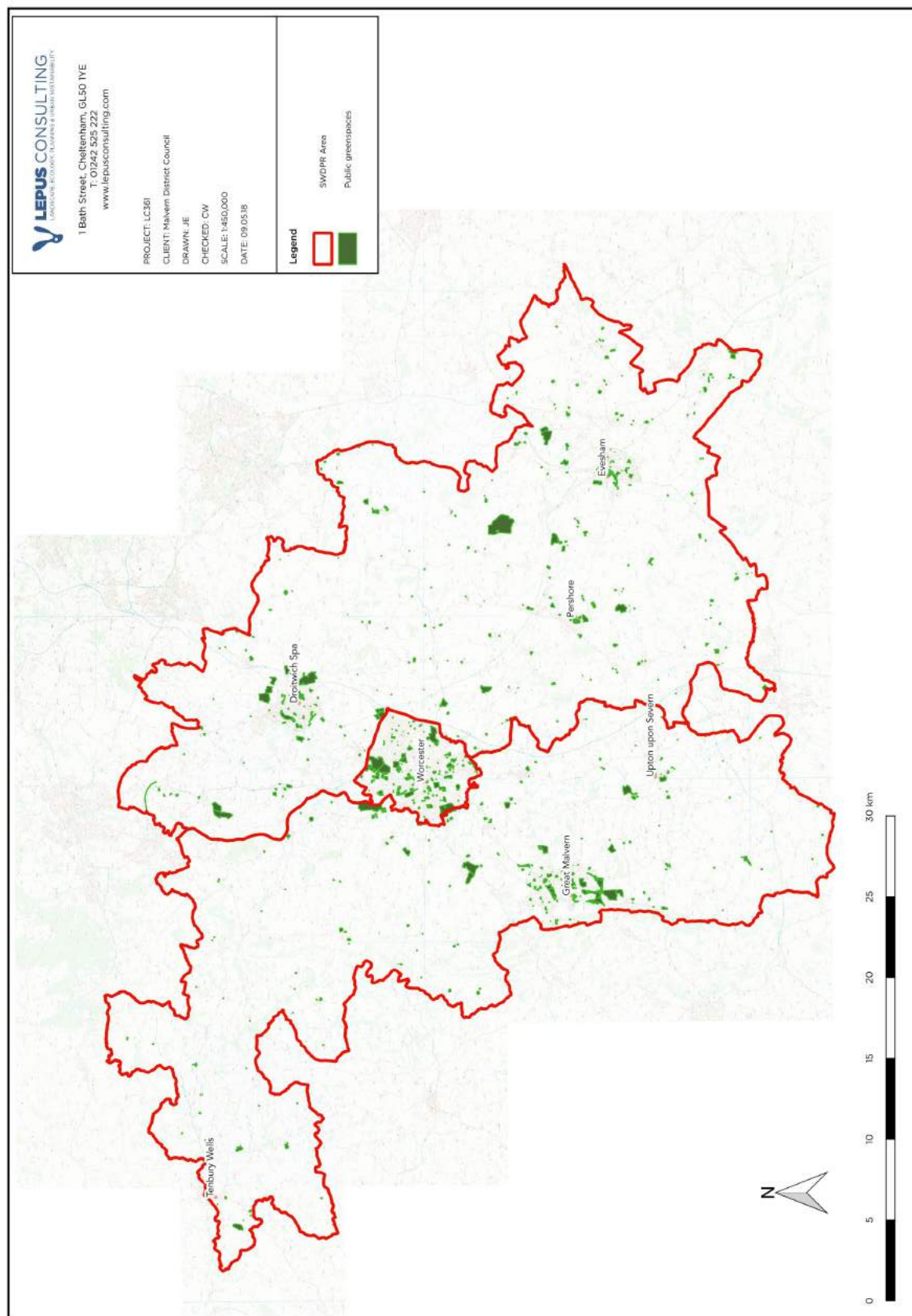


Figure 8.2: Public greenspaces in South Worcestershire.

8.3 Key Sustainability Issues

- 8.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Health and Quality of Life theme are listed in Box 8.3.

Box 8.3: Key Health and Quality of Life Issues for South Worcestershire

- The health of residents is generally very good in comparison with national averages.
- Residents in Malvern Hills and Wychavon have excellent access to the countryside and surrounding natural habitats. Residents in Worcester City have more restricted access to natural habitats. Protecting and enhancing the provision of public greenspaces for residents of Worcester City is particularly important.
- Access to health facilities for some residents is potentially relatively limited due to their distance from the facilities and the scarcity of public transport options.
- The population is expected to increase in the future across all three districts
- There are high levels of violent crime and criminal damage across the SWDPR area.
- Less than 50% of household waste is sent to recycling.
- The SWDPR should seek to support strong, vibrant and healthy communities in south Worcestershire by:
 - Providing the supply of housing required to meet the needs of present and future generations;
 - Creating a high-quality built environment, with accessible local services that reflect a community's needs and support its health and social and cultural well-being;
 - Creating a strong sense of place by strengthening the distinctive and cultural qualities of towns and villages; and
 - Creating safe and accessible environments where crime, disorder and the fear of crime do not undermine quality of life or community cohesion.

8.4 Future Evolution without the Plan

- 8.4.1 The likely evolution of the Health and Quality of Life theme in the SWDPR area is presented in Box 8.4.

Box 8.4: Future evolution of the baseline without the SWDPR

- The population across the three districts are expected to continue to increase. This is likely to place greater pressure on the capacity of key services and amenities, including health and leisure facilities and housing.
- The life expectancy of men and women is anticipated to rise over time.
- Some residents will continue to need to travel relatively far, likely by driving, to reach important health facilities and services.
- Access to natural habitats for residents in Malvern Hills and Wychavon is likely to remain good, and access for residents in Worcester City remain poor.
- There could potentially be a rise in the number of homelessness due to an unmet housing need.

9 Historic Environment

9.1 Summary of policy, plan and programme review

- 9.1.1 Historic environment priorities from the international to the local level seek to address a range of issues. These include protecting designated resources and their settings (such as listed buildings, conservation areas, scheduled monuments, and registered parks and gardens); recognising the cultural aspects of landscape and establishing mechanisms for their protection against inappropriate development; recognising the potential value of unknown and undesignated resources; and conserving/enhancing sites and landscapes of archaeological and heritage interest so that they may be enjoyed by both present and future generations.

9.2 Summary of baseline data

Designated features

- 9.2.1 South Worcestershire has a wide range of designated statutory and non-statutory heritage assets, including Listed Buildings, Registered Parks and Gardens, Scheduled Ancient Monuments (SAMs), Conservation Areas and archaeological sites (see **Figures 9.1 – 9.4**). These important heritage assets are protected through the planning system via conditions imposed on developers and other mechanisms. Historic England is the statutory consultee for certain categories of listed building consent and all applications for scheduled monument consent, as well as statutory consultee in the SEA and Local Plans processes.
- 9.2.2 Listed Buildings are those that have been placed on the Statutory List of Buildings of Special Architectural or Historic Interest. There are approximately 5,000 Listed Buildings across South Worcestershire. Grade I Listed Buildings are rare, with approximately 100 across the three districts.

- 9.2.3 The Register of Parks and Gardens of Special Historic Interest was first published by English Heritage in 1988. Although inclusion on the Register brings no additional statutory controls, registration is a material consideration in planning terms. Parks and gardens are registered as: Grade I, which are parks and gardens deemed to be of international importance; Grade II*, which are parks and gardens deemed to be of exceptional significance; and Grade II, which are deemed to be of sufficiently high level of interest to merit a national designation.
- 9.2.4 There is one Grade I Registered Park and Garden, Croome Court in Malvern Hills, surrounded by parkland. Grade II* and II Parks and Gardens in South Worcestershire include:
- Hartlebury Castle;
 - Kyre Park;
 - Madresfield Court;
 - Spetchly Park;
 - Westwood Park;
 - Witley Court;
 - Abberley Court;
 - Pirton Park;
 - Gheluvelt Park;
 - Hanbury Hall;
 - Overbury Court; and
 - Rous Lench Court.
- 9.2.5 There are 145 SAMs across South Worcestershire, the majority of which are located in southern Wychavon.
- 9.2.6 Conservation areas are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance. Each local authority has the power to designate conservation areas in any area of 'special architectural or historic interest' whose character or appearance is worth protecting or enhancing. This is judged against local and regional criteria, rather than national importance as is the case with listing. Conservation Area designations increase the planning authority's control over demolition of buildings and over certain alterations to residential properties that would normally be classed as 'permitted development' and not require planning permission.

9.2.7 There are 101 Conservation Areas across South Worcestershire. The largest of these include the Malvern Hills as well as a large proportion of the centre of Worcester City known as the 'Riverside'. There is a higher number of Conservation Areas located in Wychavon, scattered predominantly to the south of the district.

9.2.8 Since 2008, Historic England has released an annual Heritage at Risk Register. The Heritage at Risk Register highlights the Grade I and Grade II* Listed Buildings, SAMs, Conservation Areas, wreck sites and Registered Parks And Gardens in England deemed to be 'at risk'. In South Worcestershire, this is considered to include 34 Listed Buildings, Scheduled Monuments and Conservation Areas⁵⁵:

Non-designated features

9.2.9 It should be noted that not all of South Worcestershire's historic environment resource and heritage assets are subject to statutory designations; non-designated features comprise a significant aspect of heritage, which is often experienced on a daily basis by many people – whether at home, work or leisure. Whilst not listed, many buildings and other features are of historic interest. Likewise, not all nationally important archaeological remains are scheduled. There may be unrecorded archaeological artefacts in the area, which have not yet been discovered.

9.2.10 The Archaeology Data Service shows 4,140 records of physical archaeological evidence in Worcestershire⁵⁶. This includes records of known features as well as digs and excavations, some of which resulted in archaeological finds.

⁵⁵ Historic England (2018) Heritage at Risk Register. Available at: <https://historicengland.org.uk/advice/heritage-at-risk/search-register/> [Date Accessed: 08/05/18]

⁵⁶ Archaeology Data Service (2016) ARCHSEARCH. Available at: <http://archaeologydataservice.ac.uk/> [Date Accessed 08/05/18]

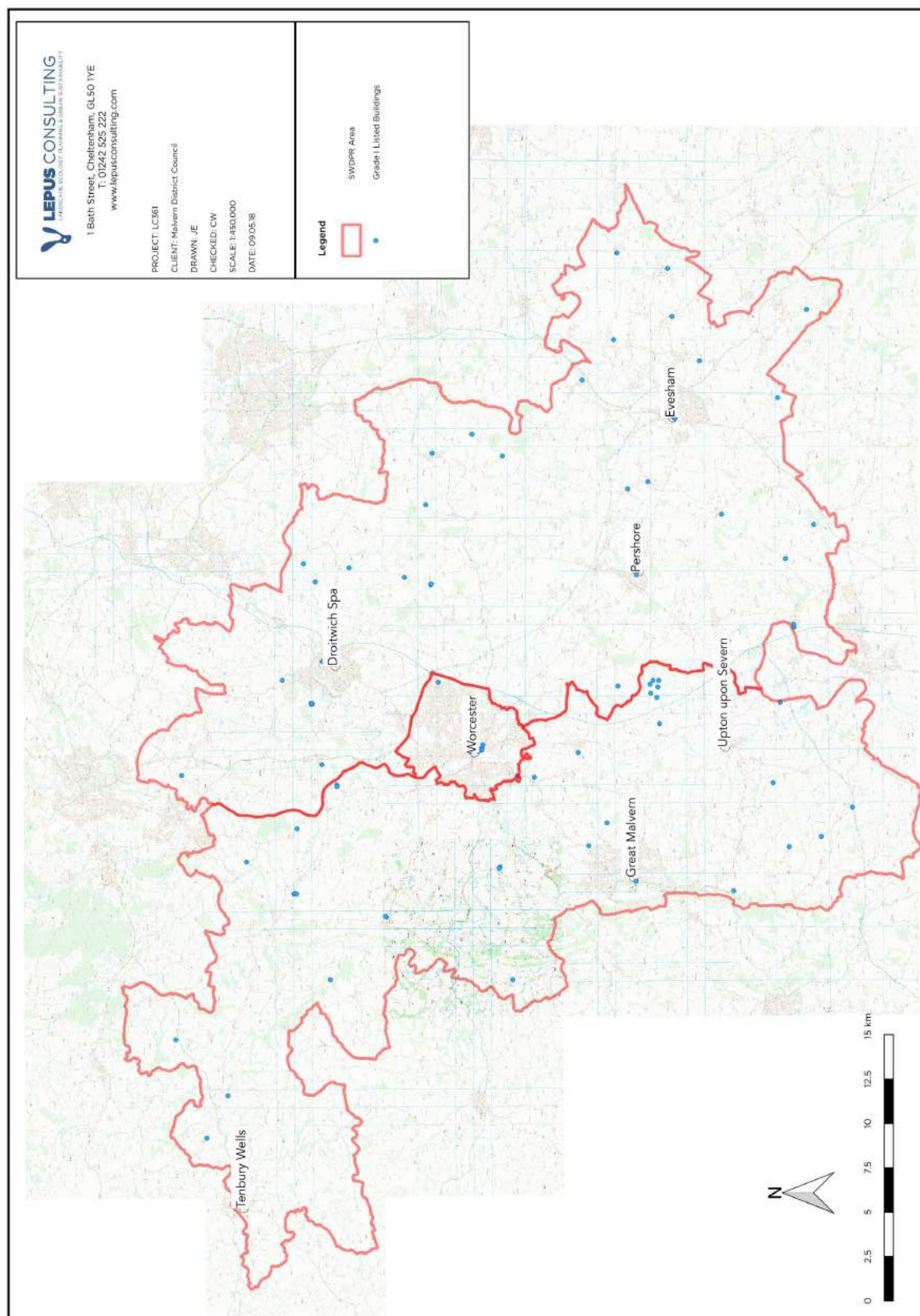


Figure 9.1: Grade I Listed Buildings in South Worcestershire.

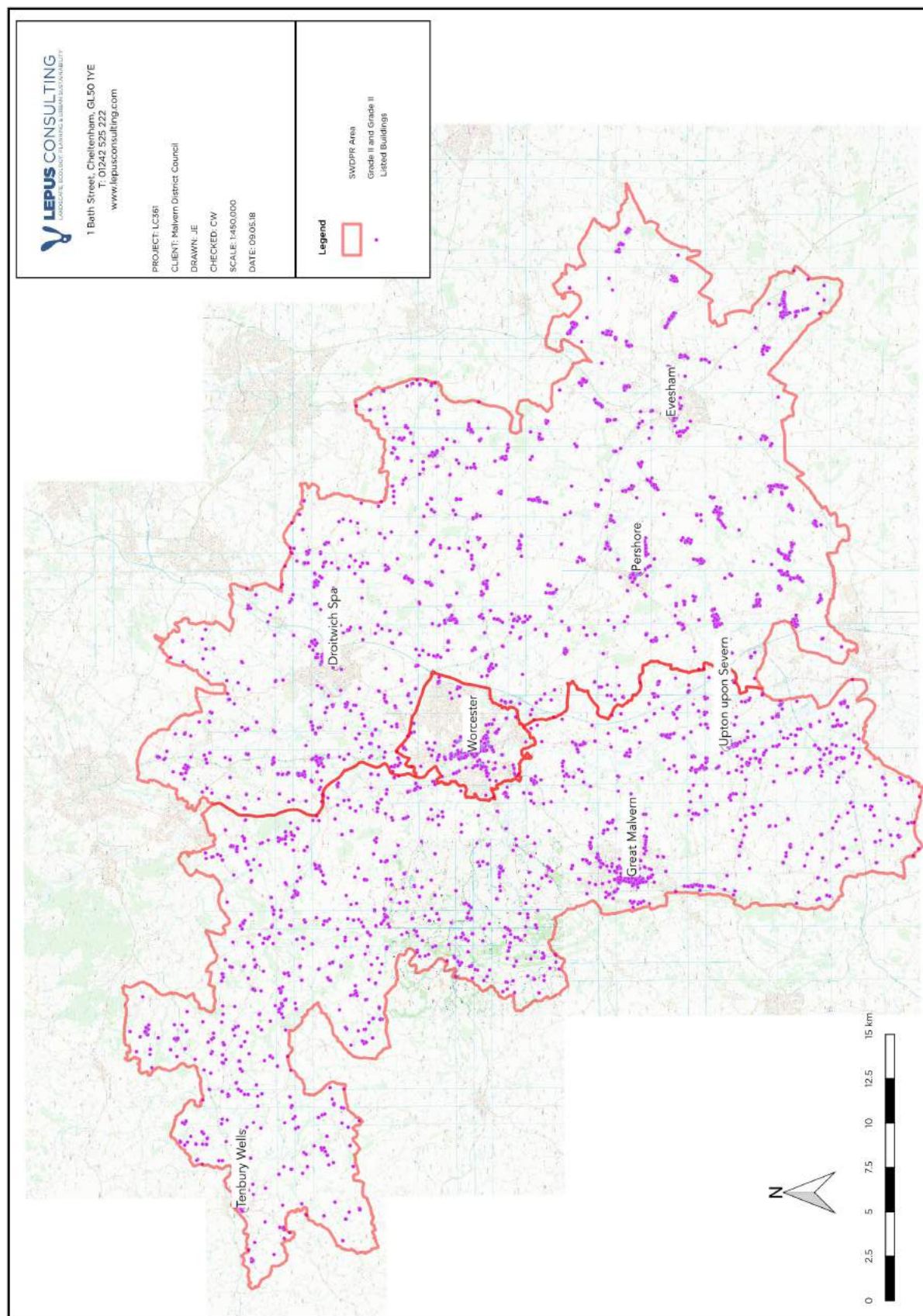


Figure 9.2: Grade II and Grade II* Listed Buildings in South Worcestershire.

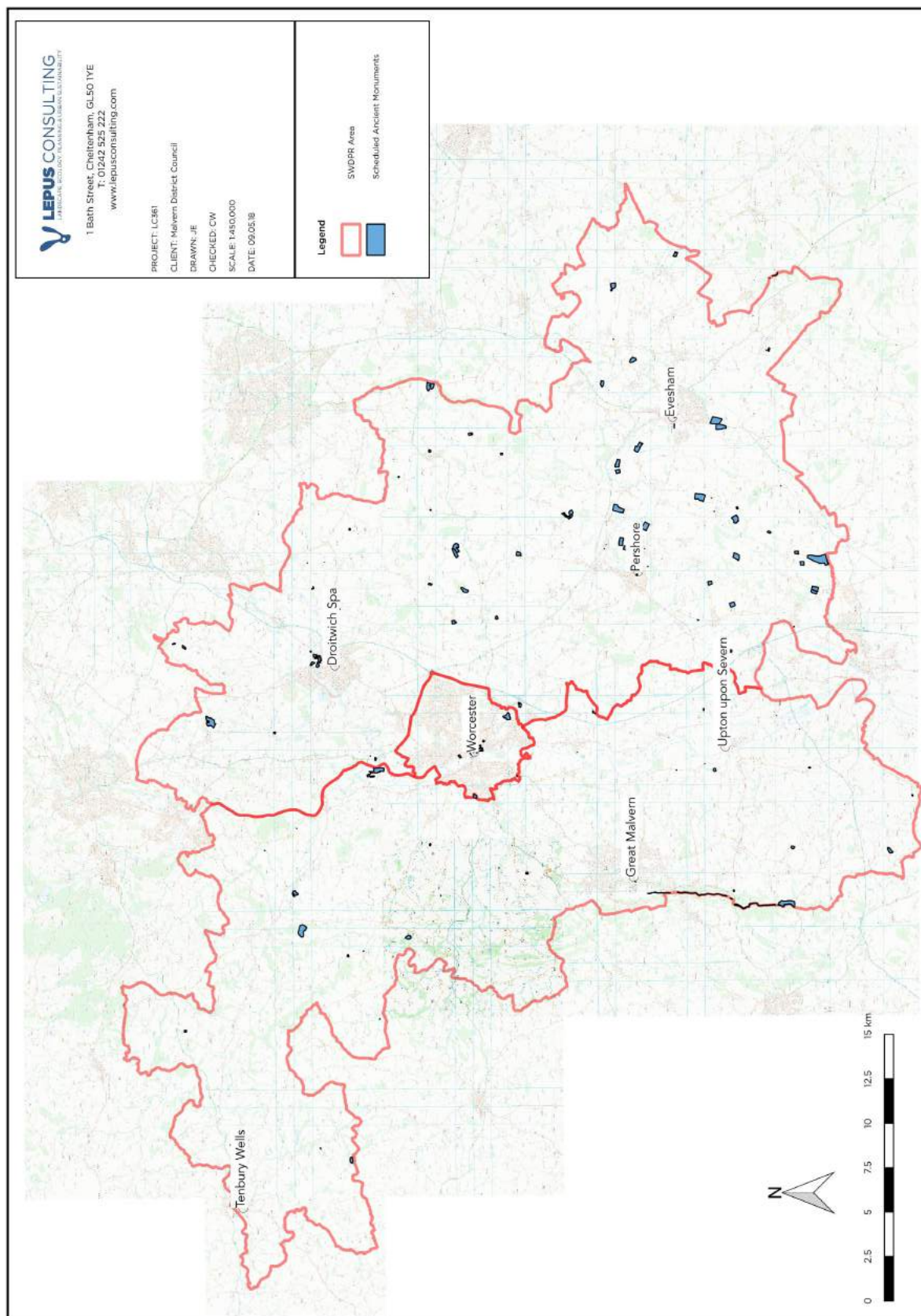


Figure 9.3: Scheduled Ancient Monuments in South Worcestershire.

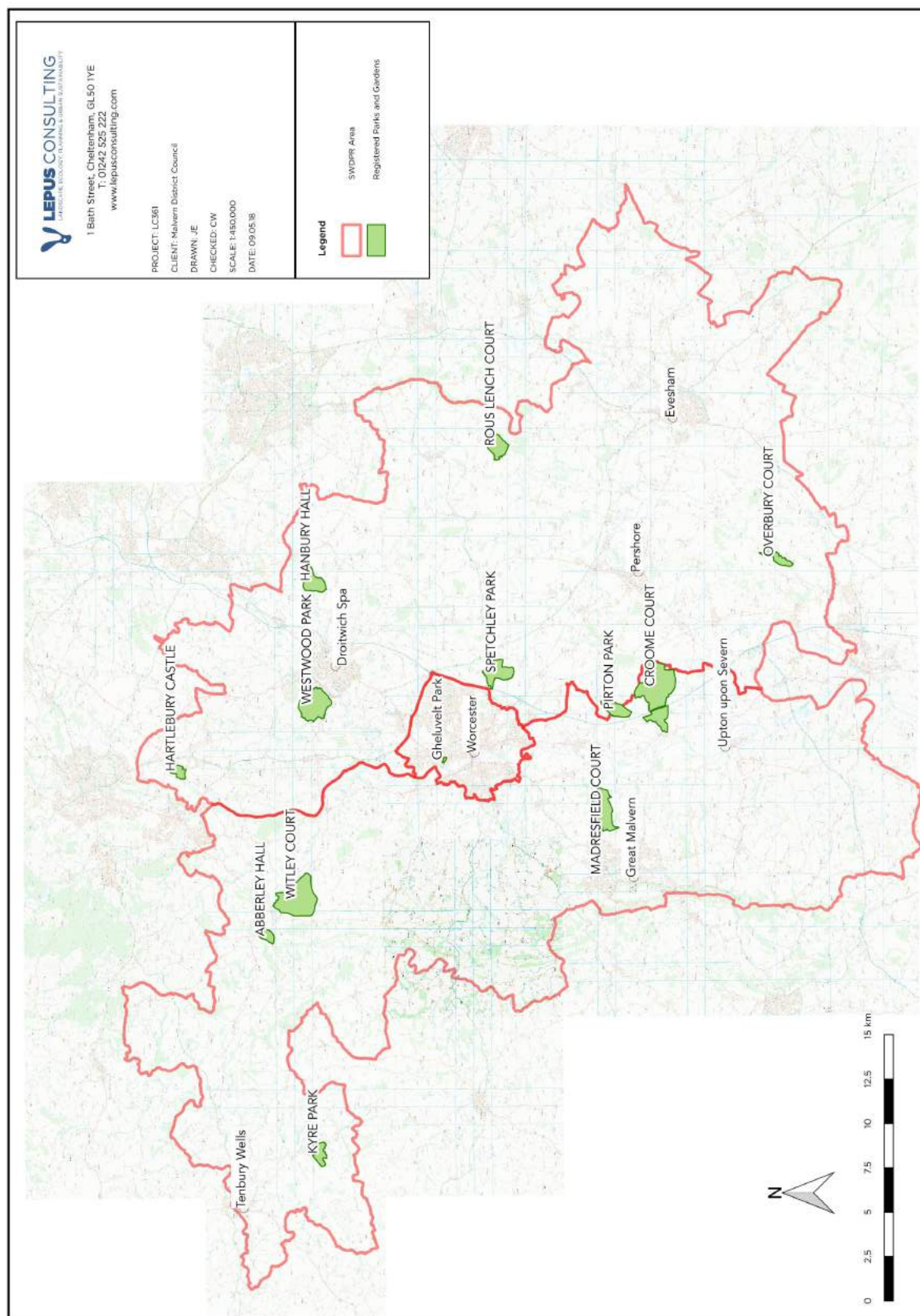


Figure 9.4: Registered Parks and Gardens in South Worcestershire.

9.3 Key Sustainability Issues

- 9.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Historic Environment theme are listed in **Box 9.3**.

Box 9.3: Key Historic Environment Issues for South Worcestershire

- Development in the districts may have the potential to lead to effects on historic landscapes and cause direct damage to archaeological sites, monuments and buildings and / or their settings.
- Archaeological remains, both seen and unseen could potentially be affected by new development areas.
- There is a high number of historic assets in South Worcestershire on the Heritage at Risk Register.
- Protecting important historic buildings, monuments, sites of archaeological significance and the integrity of local planning designations.

9.4 Future Evolution without the Plan

- 9.4.1 The likely evolution of the Historic Environment theme in the SWDPR area is presented in **Box 9.4**.

Box 9.4: Future evolution of the baseline without the SWDPR

- Nationally designated heritage assets will continue to benefit from legislative protection.
- It is uncertain how the historic assets on the Heritage at Risk Register will be affected without the Plan and if more may be added to the list.
- Further heritage assets are likely to be identified in the future, with or without the Plan.

10 Housing

10.1 Summary of policy, plan and programme review

10.1.1 National and sub-regional objectives for housing include improvements in housing affordability; high quality housing; a more stable housing market; improved choice; location of housing supply which supports accessibility and patterns of economic development; and an adequate supply of affordable housing.

10.1.2 Plans and strategies focus on the affordability of housing, the location and types of housing required, the quality of housing, access to services, and meeting the specific housing needs of all residents, including those of vulnerable people. The housing needs of older people, disabled people and Gypsies, Travellers and Travelling showpeople in particular are considered by relevant policies.

10.2 Baseline data

Housing stock

10.2.1 The total housing stock in Worcestershire in 2012 was 249,730 dwellings. Malvern Hills contained over 33,960, Worcester City containing 43,740 and Wychavon the highest at approximately 52,120⁵⁷. Between 2001 and 2011 approximately 17,580 new dwellings have been built across the county, Malvern Hills delivering the least (2,350) and Wychavon the most (3,329). The adopted SWDP⁵⁸ states a 28,400 housing provision by 2030⁵⁹.

⁵⁷ Worcestershire County Council (2014) Worcestershire Strategic Housing Market Assessment Monitoring 2012/2013. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2015/02/Worcs_HMA_Monitoring_Report_2012_13.pdf

⁵⁸ South Worcestershire Conty (2016) South Worcestershire Development Plan. Available at: <http://www.swdevelopmentplan.org/wp-content/uploads/2016/06/The-Adopted-SWDP-February-2016.pdf>

⁵⁹ South Worcestershire Councils (2016) South Worcestershire Development Plan. Available at: <http://www.swdevelopmentplan.org/wp-content/uploads/2016/06/The-Adopted-SWDP-February-2016.pdf>

10.2.2 The greatest proportion of dwellings in Malvern Hills and Wychavon are detached properties, whereas in Worcester City this is semi-detached dwellings⁶⁰ (see Table 10.1). Across all three districts, the most common number of bedrooms per dwelling is three (see Table 10.2). Malvern Hills and Wychavon have a higher percentage of dwellings with five or more bedrooms than the Worcestershire average.

Table 10.1: Housing stock type by district in 2011

Type of Dwelling	Detached	Semi-detached	Terraced	Flats/Other
Malvern Hills	44.2%	31.2%	11.0%	13.6%
Worcester City	22.2%	35.1%	23.1%	19.6%
Wychavon	41.5%	30.1%	16.9%	11.4%
Worcestershire	33.7%	33.5%	18.7%	14.2%

Table 10.2: Percentage of bedrooms per dwelling by district in 2011

No. of Bedrooms	0 Bedrooms	1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5+ Bedrooms
Malvern Hills	0.1%	8.4%	24.8%	39.1%	20.2%	7.4%
Worcester City	0.2%	12.0%	25.2%	44.4%	14.6%	3.6%
Wychavon	0.2%	8.3%	23.2%	39.5%	22.2%	6.5%
Worcestershire	0.2%	9.5%	23.1%	43.6%	18.4%	5.2%

House prices

10.2.3 The average UK house price was £225,000 as of February 2018⁶¹, with house prices in the West Midlands increasing by 7.3% in the year to February 2018. Both Malvern Hills and Wychavon housing prices were greater than the UK average in 2011, and can be assumed to be a greater difference in 2018 (see Table 10.3).

⁶⁰ Worcestershire County Council (2014) Worcestershire Strategic Housing Market Assessment Monitoring 2012/2013. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2015/02/Worcs_HMA_Monitoring_Report_2012_13.pdf

⁶¹ Office for National Statistics (2018) UK House Price Index: February 2018. Available at: <https://www.ons.gov.uk/economy/inflationandpriceindices/bulletins/housepriceindex/february2018> [Date Accessed: 08/05/18]

- 10.2.4 On average, full-time workers could expect to pay around 7.8 times their annual workplace-based earnings on purchasing a home in England and Wales in 2017⁶².

Table 10.3: Average sales prices by district for the years 2011/2012 and 2012/2013

Average Sales Price	2011/2012	2012/2013
Malvern Hills	£241,224	£234,215
Worcester City	£177,575	£178,432
Wychavon	£235,989	£231,816
Worcestershire	£204,973	£204,903

Affordable housing

- 10.2.5 Affordable housing is “social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market”⁶³. Between 2001 and 2011, affordable housing stock increased from 33,978 to 35,526 in Worcestershire, accounting for 14.8% of the total housing stock (see Table 10.4). In 2011, Malvern Hills had the lowest percentage of affordable housing. It was estimated that Worcestershire would need to provide approximately 1,800 affordable homes per annum to provide for the current need.
- 10.2.6 In 2011, the proportion of households that are under-occupied is 80.3% and 4.8% overcrowded. Although under-occupation has decreased, the percentage in Malvern Hills (84.0%) and Wychavon (83.1%) are still higher than the county average. Overcrowding increased in all three district between 2001 and 2011, but Worcester City is a higher than Worcestershire’s average percentage, at 6.9%.

⁶² Office for National Statistics (2018) Housing affordability in England and Wales: 2017. Available at: <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/bulletins/housingaffordabilityinenglandandwales/2017> [Date Accessed: 08/05/18]

⁶³ Worcestershire County Council (2014) Worcestershire Strategic Housing Market Assessment Monitoring 2012/2013. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2015/02/Worcs_HMA_Monitoring_Report_2012_13.pdf

Table 10.4: Affordable housing number and percentage by district from the 2001 and 2011 census'

Affordable Housing	2001 Census		2011 Census	
	Number	%	Number	%
Malvern Hills	4,140	13.8	4,547	14.1
Worcester City	6,002	15.4	6,438	15.3
Wychavon	6,972	14.9	7,166	14.5
Worcestershire	33,978	15.2	35,526	14.8

10.3 Key Sustainability Issues

10.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Housing theme are listed in **Box 10.3**.

Box 10.3: Key Housing Issues for South Worcestershire

- The house prices in Malvern Hills and Wychavon are likely to be inhibitive to first time buyers, and small private rental and affordable housing sectors means finding a suitable home within these districts can be difficult for many.
- The high proportion of larger properties means under-occupation of existing stock is common, and there is a distinct lack of smaller options available for those looking to downsize or join the housing ladder.
- The rapidly ageing population has created a substantial need for specialist and supported housing both now, and in the future
- Under-occupation percentages in Malvern Hills and Wychavon are high.
- In line with the Duty to Co-Operate, due consideration should be given through the SWDPR, where appropriate, to the housing needs of other local planning authorities.

10.4 Future Evolution without the Plan

10.4.1 The likely evolution of the Housing theme in the SWDPR area is presented in Box 10.4.

Box 10.4: Future evolution of the baseline without the SWDPR

- House prices are expected to increase.
- Without the SWDPR, it is uncertain if future housing provision would satisfy local needs in terms of type cost and location.
- Less control over location of future housing which may result in increased quantity of development being placed in areas of open countryside.
- Less opportunity to enhance community benefits associated with plan-led housing proposals.
- Less ability to refine the housing stock to meet the changing demands of existing residents such as the provision of elderly specific housing accommodation.

11 Landscape and Townscape

11.1 Summary of policy, plan and programme review

11.1.1 At the European, national, regional and local levels emphasis is placed on the protection of landscape as an essential component of people's surroundings and sense of place. The PPPs seek to increase recognition of the linkages and interplay between the different aspects and roles of landscape, including: local distinctiveness; the historic environment; natural resources; farming, forestry and food; educational, leisure and recreation opportunities; transport and infrastructure; settlements and nature conservation.

11.1.2 The link between landscapes and a range of other aspects is provided with a close focus by the PPPs' focus on GI provision. In this respect policies advocate the provision of open space, green networks and woodland as opportunities for sport and recreation, creating healthier communities as well as supporting and enhancing biodiversity. There is also a strong focus on the two AONB's in the Plan area.

11.2 Baseline data

National Character Areas

11.2.1 Natural England has divided England into 159 distinct natural areas called National Character Areas (NCAs). Each is defined by a unique combination of landscape, biodiversity, geodiversity, history and cultural and economic activity. Their boundaries follow natural lines in the landscape. South Worcestershire coincides with seven NCAs (see **Figure 11.1**):

- Severn and Avon Vales NCA (covers the majority of South Worcestershire);
- Malvern Hills NCA;
- Hertfordshire Plateau NCA (west of Malvern Hills district);
- Herefordshire Lowland NCA (corners of west Malvern Hills district);
- Teme Valley NCA (north of Malvern Hills district);
- Mid Severn Sandstone Plateau NCA (north tip of South Worcestershire); and
- Arden NCA (east corner of Wychavon district).

11.2.2 Some of the key characteristics of the Severn and Avon Vales NCA include⁶⁴:

- Diverse range of flat and gently undulating landscapes;
- Prominent oolitic limestone outliers;
- Sparsely distributed woodland across the landscape, along with frequent hedgerows trees, parkland and traditional orchards;
- Pasture and stock rearing predominate on the floodplain and on steeper slopes;
- Unimproved neutral grassland around Feckham Forest and Malvern Chase
- River Severn flows broadly and deeply between high banks, north to south;
- Main rivers regularly flood at times of peak rainfall;
- Strong historic timeline visible within the landscape; and
- Ancient market towns and villages located along the rivers with their churches standing as prominent features.

⁶⁴ Natural England (2014) NCA Profile: 106 Severn and Avon Vales (NE336) Available at:
<http://publications.naturalengland.org.uk/publication/1831421>

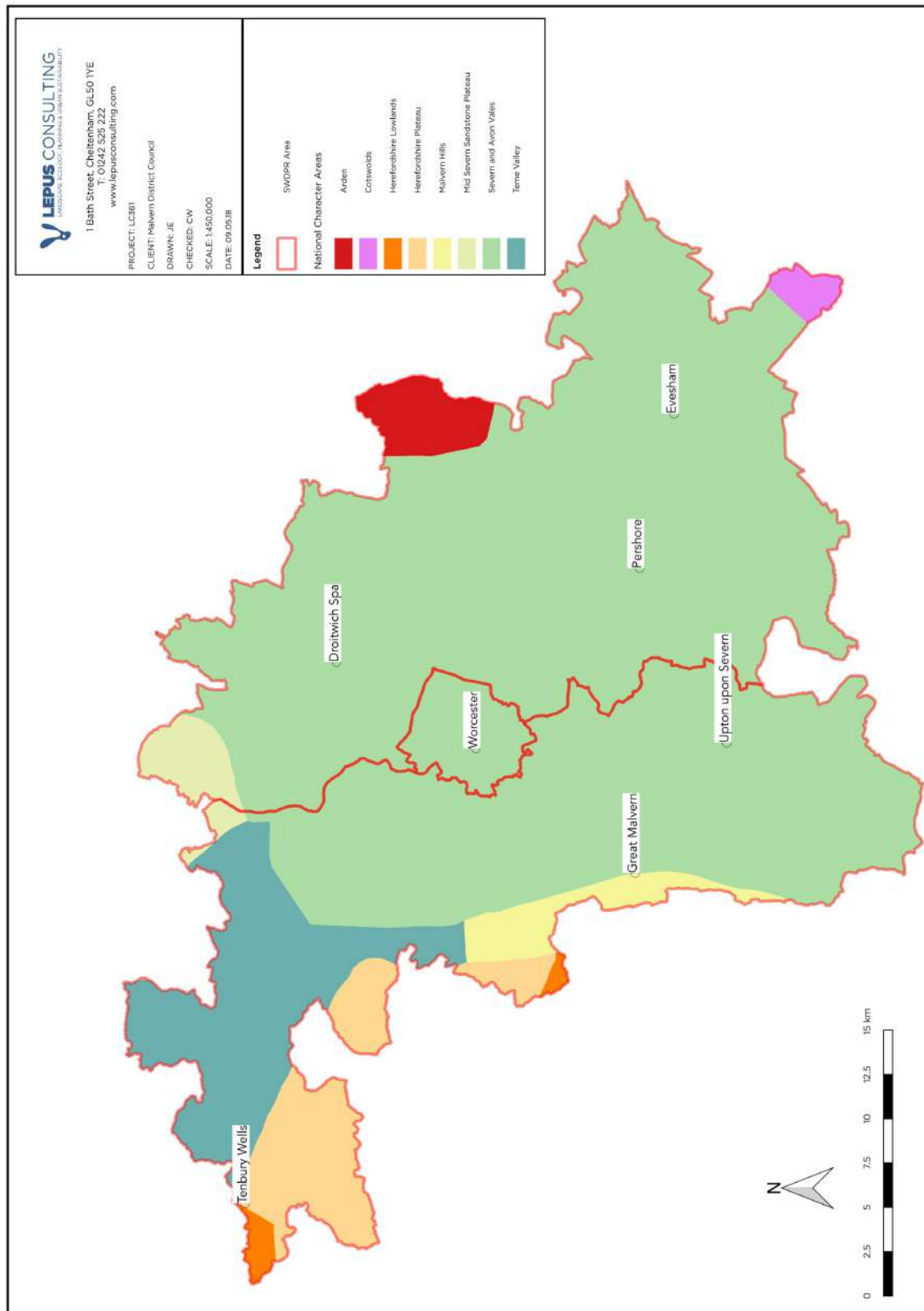


Figure 11.1: National Character Areas across South Worcestershire.

Landscape character

11.2.3 There are 22 landscape character types identified and described by Worcestershire County Council⁶⁵. Within South Worcestershire there are 18 landscape character types (see Table 11.1 and Figure 11.2).

Table 11.1: Landscape character types of South Worcestershire.

Landscape Character Type	Key Characteristics
Enclosed Commons	- Hedgerow boundaries to fields - Planned enclosure pattern of straight boundaries and roads
Estate Farmlands	- Hedgerow boundaries to fields - Planned woodland character
High Hills and Slopes	- Prominent, steeply sloping highland topography - Hard rock geology with localised prominent rocky outcrops - Unsettled landscape with few signs of human habitation - Wide views over surrounding, lower lying farmland - Shallow mineral soils supporting extensive areas of acid grassland and heath - Unenclosed landscape
Limestone Estatelands	- Upstanding rolling plateau, capped by oolitic limestone - Thin, stony soils with characteristic orange colouring - Large rectilinear fields defined by drystone walling - Dominant use of local stone for building - Woodland of planned character - estate plantations and belts of trees
Principle Settled Farmlands	- Hedgerow boundaries to fields - Moderate-to-high density settlement pattern of farmsteads and rural dwellings dispersed throughout the area
Principle Timbered Farmlands	- Notable pattern of hedgerow trees, predominantly oak - Hedgerow boundaries to fields - Ancient wooded character
Principle Village Farmlands	- Nucleated pattern of expanded rural villages - Arable/cropping land use - cereals and field vegetables on fertile, free-draining soils
Principle Wooded Hills	- Varied, often steeply sloping, topography - Large, often interconnecting, blocks of ancient woodland
Riverside Meadows	- Flat, low-lying topography - Pastoral land use, including seasonal grazing meadows

⁶⁵ Worcestershire County Council (2011) Landscape Character Assessment Supplementary Guidance. Available at: http://www.swdevelopmentplan.org/wp-content/uploads/2013/05/Landscape_Character_Assessment_Nov2011.pdf

Landscape Character Type	Key Characteristics
	• Tree cover character of individual trees rather than woodland • Tree cover pattern of linear tree belts along ditches, watercourses and in hedgerows
Sandstone Estatelands	• Arable land use • Hedgerow boundaries to fields • Planned enclosure pattern - straight roads and field boundaries
Settled Farmlands on River Terrace	• Cropping/horticultural land use • Landscape of medium scale • Gently rolling lowland topography • Sandy brown soils
Settled Farmlands with Pastoral Land Use	• Pastoral land use • Small-scale landscape defined by prominent pattern of hedged fields • Tree cover character of individual trees rather than woodland
Timbered Plateau Farmlands	• Upstanding plateau of rolling topography dissected by broad valleys • Filtered medium/long distance views • Woodland of ancient character • Mixed hedges with scattered hedgerow oaks
Unenclosed Commons	• Unenclosed land • Rough grazing land use
Village Claylands	• Hedgerow boundaries to fields
Village Farmlands with Orchards	• Extensive apple and plum orchards on south facing slopes
Wet Pasture Meadows	• Flat low-lying topography • Pastoral land use with patches of wet grassland • Tree cover character of individual trees as opposed to woodland • Tree cover pattern of linear tree belts along ditches and watercourses - particularly lines of alder and willow
Wooded Estatelands	• Large discrete blocks of irregularly shaped woodland • Mixed farming land use
Wooded Hills and Farmlands	• Prominent sloping topography • Hedgerow field boundaries are an important element in defining landscape scale • Tree cover pattern of large, discrete woodland blocks

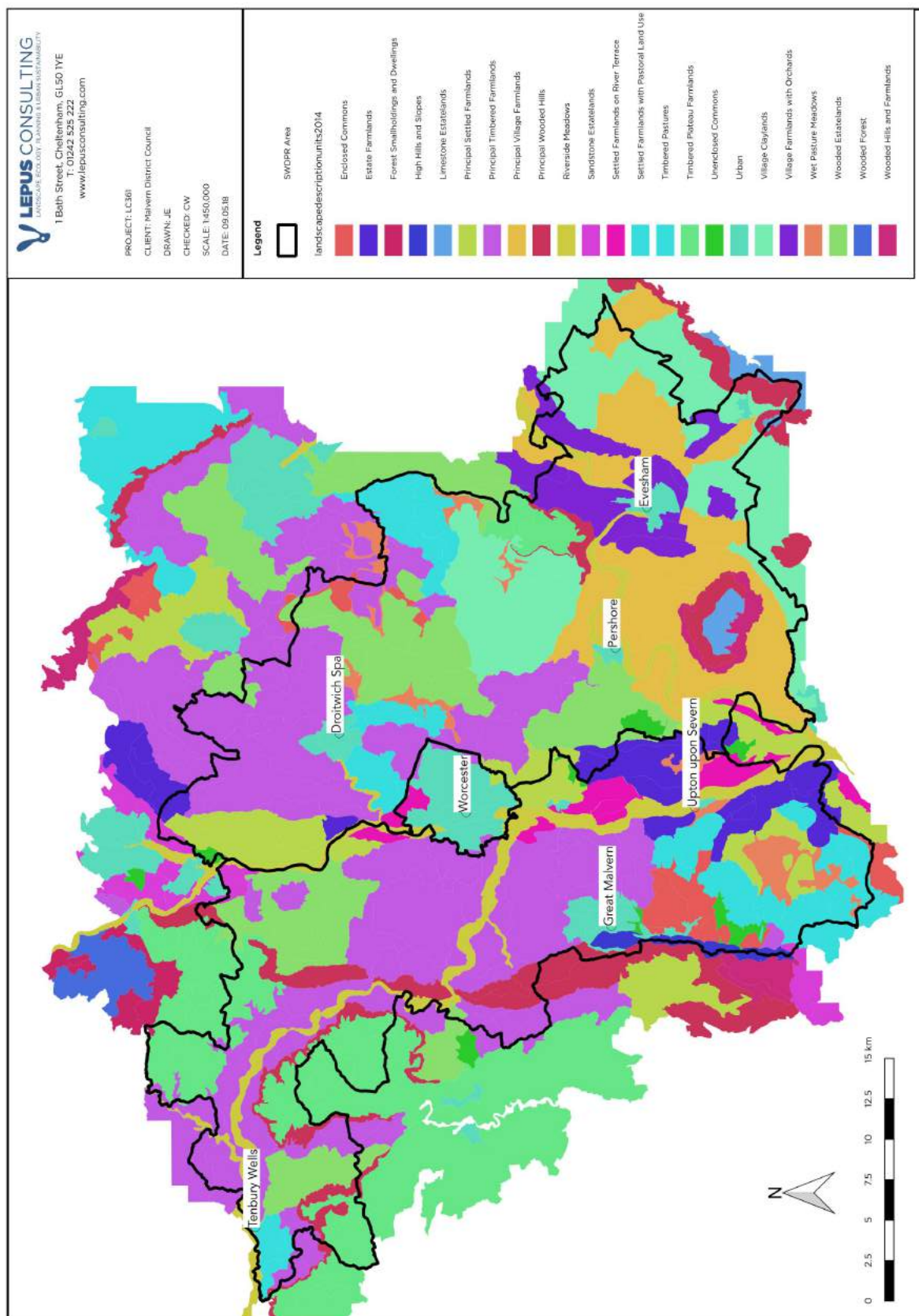


Figure 11.2: Landscape Character Types across South Worcestershire.

Priority Landscape Areas

- 11.2.4 There priority landscape areas with South Worcestershire assemble the five 'biodiversity delivery areas' developed by the Worcestershire Biodiversity Partnership in 2011. See Chapter 5 for further details.

Tranquillity

- 11.2.5 New employment, residential and retail growth can have significant effects on landscape quality, including through impacts of noise pollution, light pollution and broader effects on people's perceptions of tranquillity.

Areas of Outstanding Natural Beauty

- 11.2.6 South Worcestershire coincides with the Malvern Hills and Cotswolds Areas of Outstanding Natural Beauty (AONB) (see Figure 11.3). AONBs are statutory designations confirmed under the Countryside and Rights of Way (CROW) Act 2000. The CROW Act places a responsibility upon public bodies to:

"Have regard to the purpose of conserving and enhancing the natural beauty of the area of outstanding natural beauty."

- 11.2.7 Malvern Hills AONB was designated in 1959 and its 10,500ha includes parts of Herefordshire, Gloucestershire and Worcestershire⁶⁶.

- 11.2.8 Special qualities of the Malvern Hills AONB include:
- high, dramatic ridge that is visible from the Severn Vale and from the rolling hills and valleys to the west;
 - A distinctive and varied geology, with a variety of different rock types including granites, diorites, volcanic lavas, limestones, sandstones, mudstones and shales;
 - A wide variety of landscape types in a relatively small area, with woodland and grassland the prominent features;

⁶⁶ Malvern Hills AONB Partnership (2015) Malvern Hills AONB Management Plan 2014-2019. Available at: <http://www.malvernhillsaonb.org.uk/wp-content/uploads/2015/02/FinalLowResManPlan2014-19.pdf>

- A distinctive combination of landscape elements that include orchards, parklands, ridgelines, ponds, quarries, hedgerows and watercourses.
- A wide variety of wildlife habitats and species, many of which are nationally rare;
- An historic landscape of ancient unenclosed commons, varied field boundary patterns and designed parks and gardens;
- A rich and distinctive historic environment including Bronze Age burial grounds, Iron Age hill forts, moated sites and industrial architecture;
- Distinctive villagescapes, including conservation areas, listed buildings and local features that define a 'spirit of place' in the settlements;
- Thriving and active communities with a low deprivation index that reflects the area's prosperity and the availability of employment;
- A history of recreation and tourism that continues today, with people coming to enjoy the hills, spas and the tranquillity of the rural landscapes; and
- Open access in many places over the hills and commons.

11.2.9 The Cotswolds AONB was designated in 1966 and was extended in area in 1990⁶⁷. It is the largest AONB in England, at 203,800ha.

11.2.10 Special qualities of the Cotswolds AONB include:

- The unifying character of the limestone geology – its visible presence in the landscape and use as a building material;
- The Cotswold escarpment, including views from and to the AONB;
- The high wolds – a large open, elevated predominately arable landscape with commons, 'big' skies and long-distance views;
- River valleys, the majority forming the headwaters of the Thames, with high-quality water;
- Distinctive dry stone walls;
- Internationally important flower-rich grasslands, particularly limestone grasslands;
- Internationally important ancient broadleaved woodland, particularly along the crest of the escarpment;
- Variations in the colour of the stone from one part of the AONB to another which add a vital element of local distinctiveness;
- The tranquillity of the area;

⁶⁷ Cotswolds Conservation Board (2018) Draft Cotswolds AONB Management Plan 2018-2023. Available at: <http://www.cotswoldsaonb.org.uk/planning/cotswolds-aonb-management-plan/> [Date Accessed: 08/05/18]

- Dark sky areas;
- Distinctive settlements, developed in the Cotswold vernacular, high architectural quality and integrity;
- An accessible landscape for quiet recreation for both rural and urban users, with numerous walking and riding routes;
- Historic associations dating back 6,000 years, and characterised by significant legacies such as those of the medieval wool churches and historic trails; and
- Cultural associations such as the arts and crafts movement of the 19th and 20th centuries, famous composers and authors and traditional events such as the Cotswolds olympicks, cheese rolling and woolsack races.

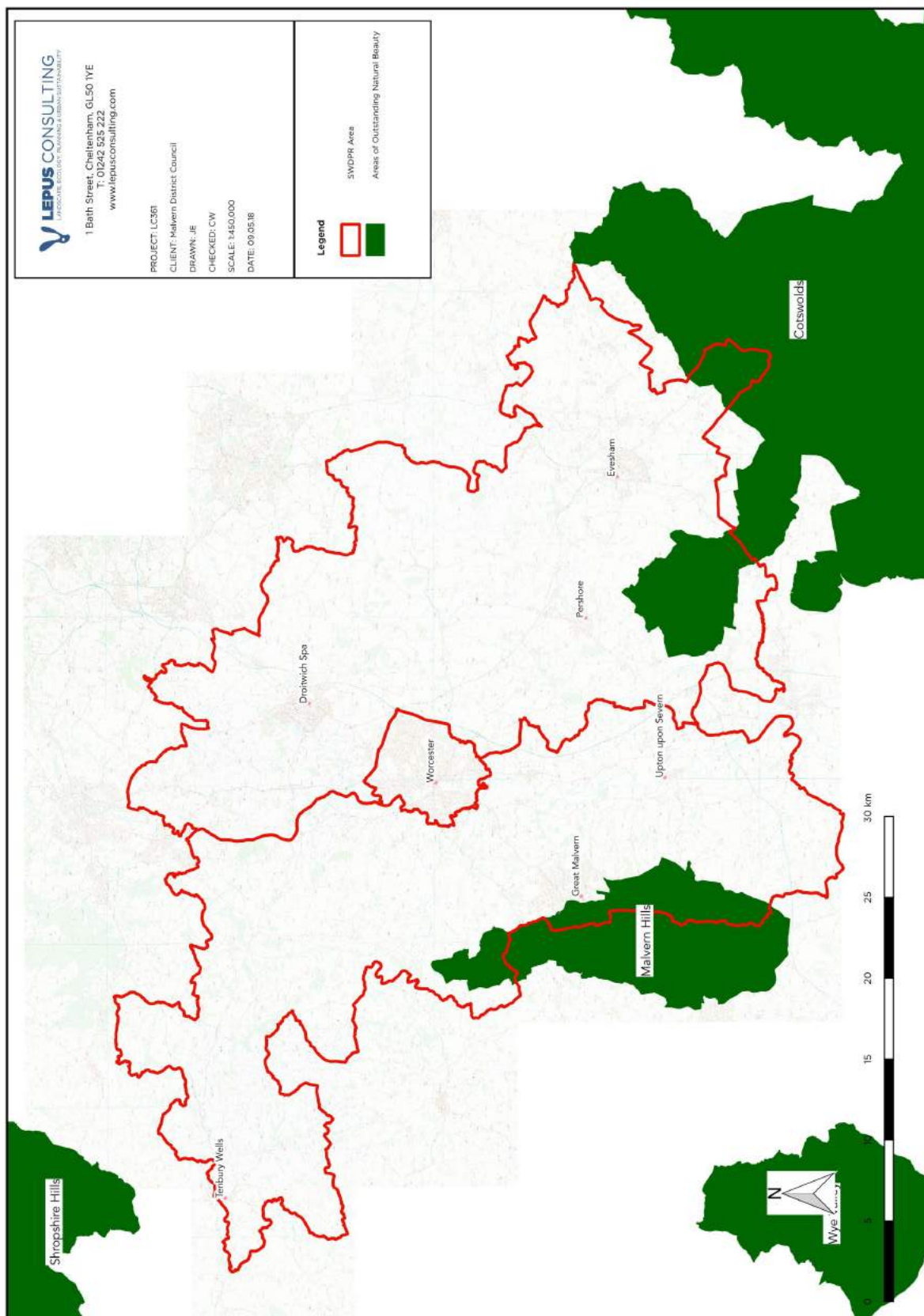


Figure 11.3: AONBs in and around South Worcestershire.

11.3 Key Sustainability Issues

- 11.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Landscape and Townscape theme are listed in **Box 11.3**.

Box 11.3: Key Landscape and Townscape Issues for South Worcestershire

- There are two nationally designated AONB's within the SWDPR area.
- Development should seek to be in accordance with the Malvern Hills AONB and Cotswolds AONB management plans.
- The Malvern Hills and Wychavon are predominantly rural districts, new developments at smaller villages could potentially increase the risk of encroachment on the open countryside.

11.4 Future Evolution without the Plan

- 11.4.1 The likely evolution of the Landscape and Townscape theme in the SWDPR area is presented in **Box 11.4**.

Box 11.4: Future evolution of the baseline without the SWDPR

- Malvern Hills AONB and Cotswolds AONB will continue to benefit from legislative protection.
- The districts of Malvern Hills and Wychavon will continue to remain predominantly rural and agricultural landscapes.
- Pressure is likely to increase for development on the open countryside without the Plan. The quality and distinctiveness of some rural views and landscape features may potential be compromised in the absence of Plan led development.
- It is uncertain the extent to which development would seek to conserve and enhance the character of local landscape and townscapes. In the absence of Plan led development, there could potentially be a rise in the quantity of new development which discords the local character by altering the style,, scale or rural/urban divide.

12 Natural Resources

12.1 Summary of policy, plan and programme review

- 12.1.1 National water policies are primarily driven by the aims of the EU Water Framework Directive 2000/60/EC, as translated into national law by the Water Framework Regulations 2003. Key objectives include improving the quality of rivers and other water bodies to 'good ecological status' by 2027; considering flood risk at all stages of the plan and development process in order to reduce future damage to property and loss of life; and incorporating water efficiency measures into new developments.
- 12.1.2 National and regional strategies also have a focus on maintaining and protecting the availability of water. Water supply and use is guided by Environment Agency's Catchment Abstraction Management Strategies (CAMS). Setting out how water quality can be improved, the Severn River Basin District River Basin Management Plan (2015)⁶⁸ has also been prepared by the Environment Agency under the Water Framework Directive.
- 12.1.3 The NPPF seeks to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas of highest risk.
- 12.1.4 National and regional policies and strategies on soil seek to: prevent soil pollution; reduce soil erosion from wind and water; maintain soil diversity; improve the quality of soil, including through promoting an increase in organic matter in soil and increase the resilience of soils to a changing climate.
- 12.1.5 The PPPs also have a focus on protecting the quality and availability of agricultural land, through reducing soil degradation and maintaining soil productivity

⁶⁸ Environment Agency (2015) Part 1: Severn River Basin District: River Basin Management Plan. Available at: <https://www.gov.uk/government/publications/severn-river-basin-district-river-basin-management-plan>

12.2 Baseline data

Soil

- 12.2.1 Soil is an essential and non-renewable resource that provides a wide range of ecosystem services. It filters air, stores and cycles water and nutrients, decomposes and cycles organic matter, supports plant growth and provides medicines. It is also one of the most important natural carbon sinks available and is vital in efforts to mitigate climate change.
- 12.2.2 It is therefore important for decision makers to make best efforts to preserve soil resources. Development such as that proposed in the Local Plan can potentially adversely impact on soil stocks, such as by direct loss of soil (e.g. excavating), contamination, increased erosion, breakdown of structure and loss of nutrients. In late modernity soils in the UK have rapidly degraded, predominantly due to intensive agricultural production and industrial pollution. The UK's soil continues to face three main threats⁶⁹:
- Soil erosion by wind and rain (it is estimated that the UK loses 2.2 million tonnes of topsoil every year due to wind and water erosion⁷⁰);
 - Compaction; and
 - Organic matter decline.
- 12.2.3 Construction on land has the potential to exacerbate compaction of soils and the decline in organic matter, whilst all three are expected to be exacerbated by climate change.
- 12.2.4 Soils in South Worcestershire are varied (see Table 12.1). Most of the areas support arable and grassland habitats. The carbon storage of all soils in the area is low, whilst the permeability (which impacts surface water run-off) is primarily impeded.

⁶⁹ Department for Environment, Food and Rural Affairs (2009) Safeguarding our soils – A strategy for England. Defra, September 2009

Table 12.1: Most prominent/common soils in South Worcestershire⁷¹

Soil	Texture	Permeability	Fertility	Carbon storage	Landcover
Freely draining slightly acid loamy soils	Loamy	Freely draining	Low	Low	Arable and grassland
Slightly acid loamy and clayey soils	Loamy, some clayey	Impeded drainage	Moderate to high	Low	Arable and grassland
Lime-rich loamy and clayey soils	Clayey, some loamy	Slightly impeded drainage	High	Low	Arable, some grasslands
Seasonally wet slightly acidic but base-rich loamy and clayey soils	Loamy and clayey	Impeded drainage	Moderate	Low	Grassland and arable, some woodland

12.2.5 In accordance with paragraph 118 of the NPPF, development can have an irreversible adverse (cumulative) impact on the finite national and local stock of best and most versatile (BMV) land. Avoiding the loss of BMV land is a priority as mitigation is rarely possible. BMV is usually indicated by Agricultural Land Classification (ALC) Grade 1, with ALC Grade 5 the least valuable. Approximately 110,578ha of land in South Worcestershire is ALC Grade 3⁷² (see **Figure 12.1**). This could potentially be Grade 3a, which are versatile and productive soils, or Grade 3b, which are less versatile and productive. Approximately 4,834ha of ALC Grade 1 soils can be found in the north and south of Wychavon.

⁷¹ Cranfield Soil and Agrifood Institute (2018) Soilscales, available at: <http://www.landis.org.uk/soilscales/>

⁷² Worcestershire County Council (2011) Planning for Soils in Worcestershire. Available at: <http://www.swdevelopmentplan.org/wp-content/uploads/2014/11/CD-141-Planning-for-Soils-in-Worcestershire.pdf>

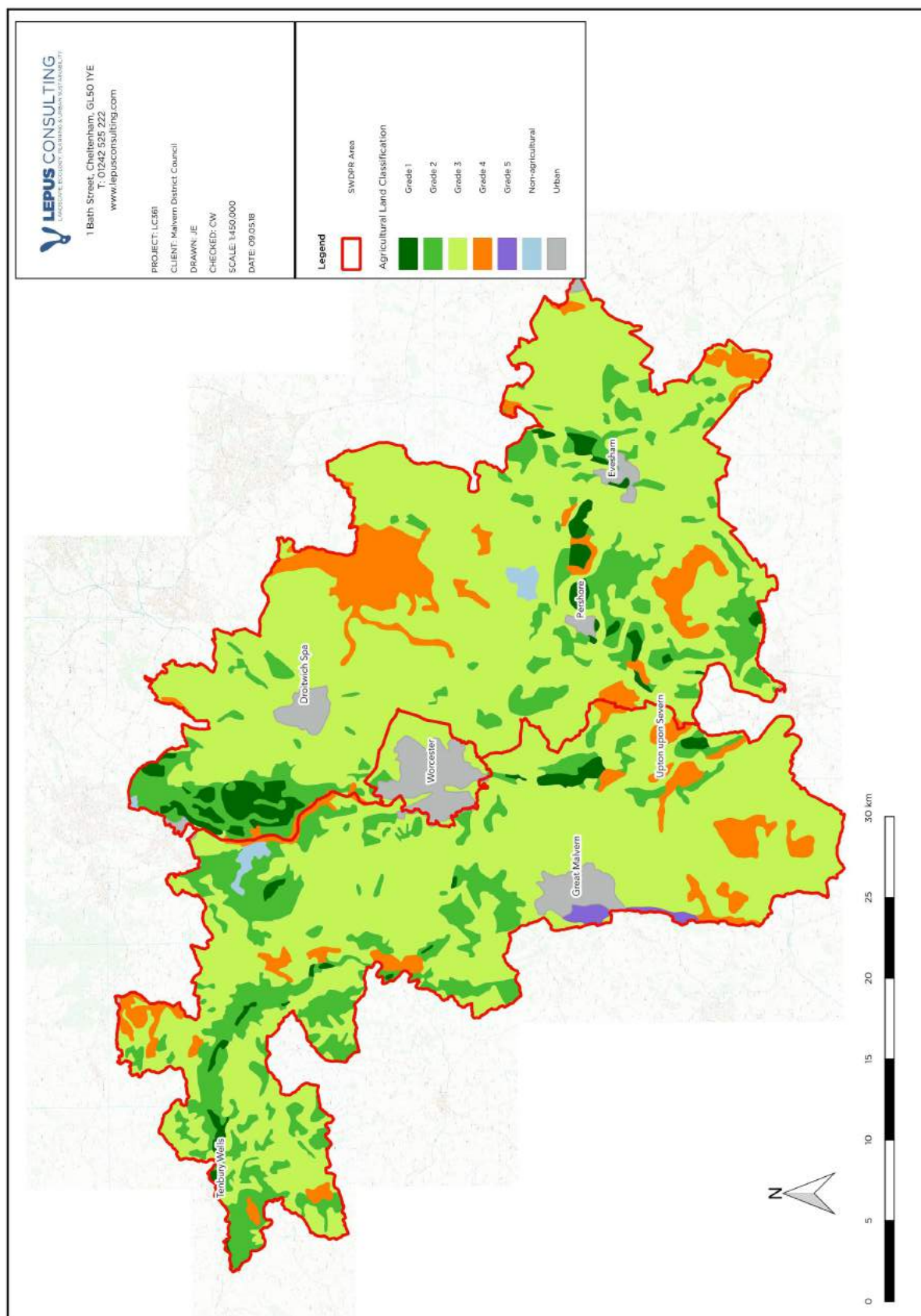


Figure 12.1: Agricultural Land Class in South Worcestershire.

Water resources

- 12.2.6 South Worcestershire is a “*water scarce region with ‘no water available’ or ‘over-abstracted’ categories*”⁷³. Daily water consumption in Worcestershire in 2011 was approximately 130-149 litres per capita⁷⁴. The main water service provider for South Worcestershire is Severn Trent Water⁷⁵. Severn Trent Water provides water to 8 million people. The Water Resources Management Plan (WRMP) estimates future water demands and plans how these levels will be achieved. Worcestershire falls within Severn Trent Water’s ‘Water Resource Zone 3’. Severn Trent predicts water demand pressure in this zone to increase in the future.
- 12.2.7 Severn Trent Water WRMP state challenges that must be faced in order to maintain reliable water supplies include:
- Replacing approximately 85 million litres per day of licensed water abstraction that is no longer environmentally sustainable;
 - Meeting the demand for water from the additional 1.6 million people expected to be living in the region;
 - Coping with potential lower river flows during dry periods as a result of climate change; and
 - Ensuring that we invest at an appropriate rate to address asset deterioration as our network ages.
- 12.2.8 The volume of waste water will increase following development. Waste water treatment plants will need to ensure there is the capability to withstand the additional capacity and be expanded if necessary prior to development taking place.

⁷³ JBA (2013) South Worcestershire Water Cycle Study 2012 Update. Available at:

http://www.swdevelopmentplan.org/wp-content/uploads/2016/12/Water_Cycle_Study2013.pdf

⁷⁴ Worcestershire County Council (2011) Planning for Water in Worcestershire. Available at:

http://www.swdevelopmentplan.org/wp-content/uploads/2014/11/Planning_for_Water_Dec2011.pdf

⁷⁵ Severn Trent Water (2014) Waste Resources Management Plan 2014. Available at:

<https://www.severntrent.com/content/dam/stw-plc/water-resource-zones/STW-SEA-ER-Secure-02.02.18.pdf>

- 12.2.9 Catchment Area Management Strategies (CAMS) are six-year strategies developed by the Environment Agency for managing water resources at the local level. CAMS are to be produced for every river catchment area in England and Wales. All new licences within a CAMS area have a common end date (CED) so they can be reviewed simultaneously.
- 12.2.10 The SWDPR area is affected by the Severn Corridor⁷⁶ and Teme⁷⁷ abstraction licensing strategies, with the River Teme being a tributary of the River Severn. The strategy sets out how water resources are used in the area, indicating areas where water is available for further abstraction. Surface water flow is assessed at 13 assessment points in the Severn Corridor and 15 point in the Teme catchment, all of which have restricted water available for licensing.
- 12.2.11 There are no principal aquifers within the Teme CAMS area and the area is classed as 'exempt' whereby abstraction from groundwater does not require a licence (see Table 12.2). Seven of the groundwater management units within the Severn Corridor are closed to further abstraction.

Table 12.2: The ground and surface water availability of the Severn and Teme (CAMS)

Abstraction Management Strategy	Groundwater Availability	Approximate number of days per annum surface water abstraction is available.
Severn	3x restricted water available 7x water not available	328
Teme	Area classed as 'exempt'	292 or 310

⁷⁶ EA (2013) Severn Corridor Abstraction Licensing Strategy. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/291406/LIT_7848_c0b50e.pdf

⁷⁷ EA (2013) Teme Abstraction Licensing Strategy. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/291396/LIT_7850_7f5c56.pdf

12.2.12 The Water Cycle Study⁷⁸ identified no “show stoppers” to development in terms of water quality. It also states that:

“Water Cycle Studies should be treated as a ‘dynamic document’ that is periodically reviewed as further information becomes available. This will provide a better understanding of the impact of the developments on the water supply, wastewater infrastructure and water quality.”

Water quality

12.2.13 The vulnerability of groundwater to pollution is determined by the physical, chemical and biological properties of the soil and rocks, which control the ease with which an unprotected hazard can affect groundwater. Groundwater Source Protection Zones (SPZs) indicate the risk to groundwater supplies from potentially polluting activities and accidental releases of pollutants.

12.2.14 There are three SPZs⁷⁹:

- SPZ1 – Inner Protection Zone: the 50 day travel time from any point below the water table to the source;
- SPZ2 – Outer Protection Zone: the 400 day travel time from a point below the water table, with a minimum radius of 250-500m; and
- SPZ3 – Source Catchment Protection Zone: area around source within which all groundwater recharge is discharged at the source.

12.2.15 Designed to protect individual groundwater sources, these zones show the risk of contamination from any activities that might cause pollution in the area. In this context they are used to inform pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluting activities nearby. SPZs are present in the north of South Worcestershire, which is predominantly SPZ3, and along the Malvern Hills AONB which is predominantly SPZ2.

⁷⁸ JBA (2013) South Worcestershire Water Cycle Study 2012 Update. Available at:
http://www.swdevelopmentplan.org/wp-content/uploads/2016/12/Water_Cycle_Study2013.pdf

⁷⁹ Environment Agency (2009) Groundwater Source Protection Zones – Review of Methods, August 2009

Flooding

- 12.2.16 The topic of flooding is relevant to the themes of soil, water and climate change. Flooding has been addressed under climate change in **Chapter 6**.

River ecology

- 12.2.17 The topic of river ecology is relevant to the themes of biodiversity, water and soil. River ecology has been addressed under biodiversity in **Chapter 5**.

12.3 Key Sustainability Issues

- 12.3.1 Based on the PPP review and baseline data presented in this Chapter, key sustainability issues for the Natural Resources theme are listed in **Box 12.3**.

Box 12.3: Key Natural Resources Issues for South Worcestershire

- Soils in South Worcestershire often have impeded drainage due to poor structure from erosion and compaction, which increases the risk and severity of surface water flooding.
- There are some water abstraction restrictions in place and the SWDPR could potentially place further pressure on water resources. The Severn Trent WRMP takes into consideration population growth in the local area and has developed a strategy to accommodate this through sustainable water management measures.
- There are areas of groundwater source protection zones in the SWDPR area. Careful consideration should be given to the potential impacts of development on water quality through pollution and contamination.
- The SWDPR will need to give close consideration to the impacts of development proposals on wastewater treatment in the local area, and the capacity of treatment works, as well as the consequences of new waste water generation for local water quality and the ecological status of ground and surface water bodies.
- Encourage the effective use and re-use of accessible, available and environmentally acceptable brownfield land.
- Most forms of development reduce the amount of rainfall that is intercepted by vegetation on the ground. Culverted watercourses have the potential to become blocked by debris during periods of heavy or sustained rainfall. They also offer little biodiversity or recreational interest relative to more natural watercourses. Even very small scale development can have detrimental implications for surface water run-off. In such cases, environmental and water quality benefits can be secured at minimal cost.

12.4 Future Evolution without the Plan

- 12.4.1 The likely evolution of the Natural Resources theme in the SWDPR area is presented in Box 12.4.

Box 12.4: Future evolution of the baseline without the SWDPR

- Rates of soil erosion and loss of soil fertility will be likely to continue to rise due to the impacts of agriculture and climate change.
- The population in the SWDPR area will be likely to rise and water demand will subsequently be likely to rise also. In the absence of plan led development, the efficiency and sustainability of water consumption may be unlikely to improve.
- In the absence of the SWDPR, there could potentially be new developments that result in over-capacity issues at wastewater treatment works (either cumulatively or individually).
- Water abstraction, consumption and treatment in the local area will continue to be managed by the Environment Agency and water companies through the RBMP, WRMP and CAMS in line with the EU Water Framework Directive.

13 SA Framework

13.1 The purpose of the SA Framework

13.1.1 The SWDPR will be assessed through an SA Framework of objectives, decision-making criteria and indicators. The full SA Framework for the SWDPR is presented in **Appendix B**.

13.1.2 The SA Framework provides a way in which sustainability effects can be described, analysed and compared. The SA Framework consists of SA Objectives, the achievement of which (where practicable), is measurable using indicators. SA Objectives and indicators can be revised as further baseline information is collected and sustainability issues and challenges are identified, and are used in monitoring the implementation of the SWDPR.

13.1.3 To expand on the central focus of each SA Objective (as they are high-level and potentially open-ended) the SA Framework includes a series of questions or 'decision making criteria' for use when applying the SA Framework to the assessment of proposed policies.

13.2 Sustainability Appraisal objectives

13.2.1 The purpose of the SA Objectives is to provide a way of ensuring the proposed policies consider the needs of South Worcestershire in terms of the environmental, social and economic effects. The SA topics identified in Annex I (f) of the SEA Directive are one of the key determinants when considering which SA Objectives should be used for the environmental criteria. Consequently, the SA Objectives seek to reflect all subject areas to ensure the assessment process is transparent, robust and thorough.

13.2.2 The SA Objectives have drawn on the baseline information, the key issues and other plans and programmes of particular interest discussed earlier in this Scoping Report (see **Chapters 3 - 12**). It should be noted that the ordering of the SA Objectives do not infer any prioritisation.

13.2.3 A summary of the SA Objectives for the SWDPR is presented in Table 13.1.

Table 13.1: SA Objectives for the SWDPR

	SA Objective	SEA Directive topics (Annex 1f)
1	Climate Change Mitigation: Minimise SW's contribution to climate change	Climate change.
2	Climate Change Adaptation: Plan for the anticipated impacts of climate change	Climate change, soil, water.
3	Biodiversity and Geodiversity: Protect, enhance and manage the flora, fauna, biodiversity and geodiversity assets of SW.	Biodiversity, flora, fauna and geodiversity.
4	Landscape and Townscape: Conserve, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening its distinctiveness.	Landscape and historic environment.
5	Pollution and Waste: Reduce waste generation, increase the reuse and recycling of materials whilst minimizing the extent and impacts of water, air and noise pollution.	Air, water, soil and human health.
6	Natural Resources: Protect, enhance and ensure the efficient use of SW's land, soils and water.	Soil and water.
7	Housing: Provide a range of housing to meet the needs of the community.	Housing, population and quality of life.
8	Health: Safeguard and improve physical and mental health of residents.	Population, quality of life and health.
9	Cultural Heritage: Conserve, enhance and manage sites, features and areas of historic and cultural importance..	Historic environment.
10	Transport and Accessibility: Improve choice and efficiency of sustainable transport in SW and reduce the need to travel.	Accessibility, climate change and material assets.
11	Education: Improve education, skills and qualifications in SW.	Population and economic factors.
12	Economy and Employment: Support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.	Material assets, air, soil, water.

14 Subsequent stages to be carried out

14.1 Background

14.1.1 This chapter summarises the stages of, and approach to, the processes that will be carried out for the SWDPR following consultation at the scoping stage. Where appropriate, the assessment methods to be used have been included.

14.2 Refining options and assessing effects

14.2.1 The assessment of options (or alternatives) is an important requirement of the SEA Directive, which requires that the Environmental Report includes the following information about reasonable alternatives:

“an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information”

14.2.2 Reasonable alternatives will be assessed through the SA process, and the assessment of alternatives will take place following consultation on the Scoping Report. This will enable options for the SWDPR to be explored. Whilst this report would not be a requisite of the SEA Directive, a report of this nature can help demonstrate iteration between the plan making process and the SA, and provide a coherent story of the SWDPR's evolution and choice of options.

14.3 Sustainability Appraisal and Publication/Submission

14.3.1 The next stage of the SA will involve assessing successive drafts of the SWDPR. In terms of the assessment methodology, an assessment of all policies and proposals presented in the SWDPR will be undertaken. Findings from the assessment will be presented in a single-line matrix format. The high-level matrix is not a conclusive tool or model. Its main function is to identify at a strategic level whether or not the assessment requires a more detailed examination or whether satisfactory conclusions may be drawn from the high-level assessment without the need for further (time consuming) detailed analysis of a particular policy.

14.3.2 The assessment of policies and options will include:

- A description of the predicted effect;
- The duration of the effect: whether the effect is long, medium or short term;
- The frequency of the effect;
- Whether the effect is temporary or permanent;
- The geographic significance: whether the effect is of localised, regional, national or international significance;
- The magnitude of effect;
- The severity of significance; and
- Whether mitigation is required/possible to reduce the effect.

14.3.3 As required by the SEA Directive, cumulative, indirect and synergistic effects will also be identified and evaluated during the assessment. An explanation of these is as follows:

- Cumulative effects arise where several developments each have insignificant effects but together have a significant effect, or where several individual effects of the SWDPR have a combined effect.
- Indirect effects are effects that are not a direct result of the SWDPR, but occur away from the original effect or as a result of a complex pathway.
- Synergistic effects interact to produce a total effect greater than the sum of the individual effects.

14.3.4 The assessment of these effects will be presented in tabular format and show where the different effects arise when two or more draft policies operate together.

- 14.3.5 Wherever possible, throughout the appraisal process, GIS (Geographic Information Systems) will be used as an analytical tool to examine the spatial distribution of identified effects.
- 14.3.6 Following consultation on the SA Report, any amendments that are made to the SWDPR will be appraised before preparing the final version of the SA Report to accompany the Submission version of the SWDPR.

15 Consultation on the Scoping Report

15.1 Purpose of Consultation

15.1.1 The SEA Regulations state that a Scoping Report shall be prepared which will be the subject of consultation with statutory consultation bodies for a minimum period of five weeks.

15.1.2 Public involvement through consultation is a key element of the SA process. The SEA Regulations require consultation with statutory consultation bodies but not full consultation with the public at the scoping stage. Regulation 12 (5) of the Environmental Assessment of Plans and Programmes Regulations 2004 (SI 1633) states that:

“When deciding on the scope and level of detail of the information that must be included in the report the responsible authority shall consult the consultation bodies.”

15.1.3 This report is due to be consulted on with the statutory bodies; Historic England, the Environment Agency and Natural England. Their responses will be presented in **Appendix D**.

15.2 Consultation Details

15.2.1 This Scoping Report will be published by the Council for consultation. All responses on this consultation exercise should be sent to:

South Worcestershire Development Plan Team,
Civic Centre,
Queen Elizabeth Drive,
Persore,
WR10 1PT
Tel: 01386 565000
Email: contact@swdevelopmentplan.org

Appendix A: Health Summaries

Health summary for Malvern Hills

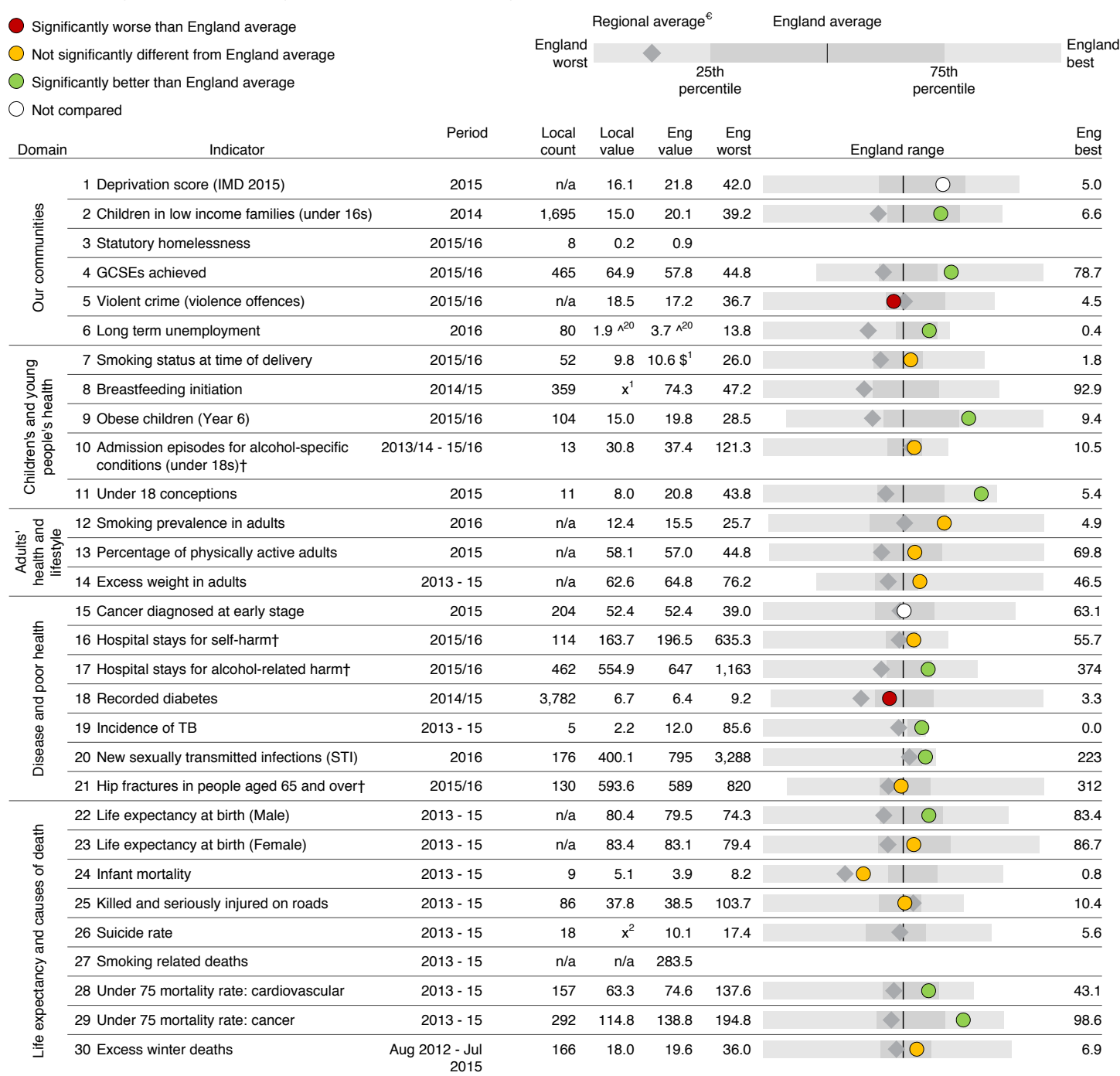
The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

● Significantly worse than England average

● Not significantly different from England average

● Significantly better than England average

○ Not compared



Indicator notes

¹ Index of Multiple Deprivation (IMD) 2015 ² % children (under 16) in low income families ³ Eligible homeless people not in priority need, crude rate per 1,000 households ⁴ 5 A*-C including English & Maths, % pupils at end of key stage 4 resident in local authority ⁵ Recorded violence against the person crimes, crude rate per 1,000 population ⁶ Crude rate per 1,000 population aged 16-64 ⁷ % of women who smoke at time of delivery ⁸ % of all mothers who breastfed their babies in the first 48hrs after delivery ⁹ % school children in Year 6 (age 10-11) ¹⁰ Persons under 18 admitted to hospital due to alcohol-specific conditions, crude rate per 100,000 population ¹¹ Under-18 conception rate per 1,000 females aged 15 to 17 (crude rate) ¹² Current smokers (aged 18 and over), Annual Population Survey ¹³ % adults (aged 16 and over) achieving at least 150 mins physical activity per week, Active People Survey ¹⁴ % adults (aged 16 and over) classified as overweight or obese, Active People Survey ¹⁵ Experimental statistics - % of cancers diagnosed at stage 1 or 2 ¹⁶ Directly age sex standardised rate per 100,000 population ¹⁷ Admissions involving an alcohol-related primary diagnosis or an alcohol-related external cause (narrow definition), directly age standardised rate per 100,000 population ¹⁸ % people (aged 17 and over) on GP registers with a recorded diagnosis of diabetes ¹⁹ Crude rate per 100,000 population ²⁰ All new diagnoses (excluding chlamydia under age 25), crude rate per 100,000 population aged 15 to 64 ²¹ Directly age-sex standardised rate of emergency admissions, per 100,000 population aged 65 and over ^{22, 23} The average number of years a person would expect to live based on contemporary mortality rates ²⁴ Rate of deaths in infants aged under 1 year per 1,000 live births ²⁵ Rate per 100,000 population ²⁶ Directly age standardised mortality rate from suicide and injury of undetermined intent per 100,000 population (aged 10 and over) ²⁷ Directly age standardised rate per 100,000 population aged 35 and over ²⁸ Directly age standardised rate per 100,000 population aged under 75 ²⁹ Directly age standardised rate per 100,000 population aged under 75 ³⁰ Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths (three years)

† Indicator has had methodological changes so is not directly comparable with previously released values. € "Regional" refers to the former government regions.

^{Λ20} Value based on an average of monthly counts ^{x¹} Value not published for data quality reasons ^{x²} Value cannot be calculated as number of cases is too small ^{\$¹} There is a data quality issue with this value

If 25% or more of areas have no data then the England range is not displayed.

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Health summary for Worcester

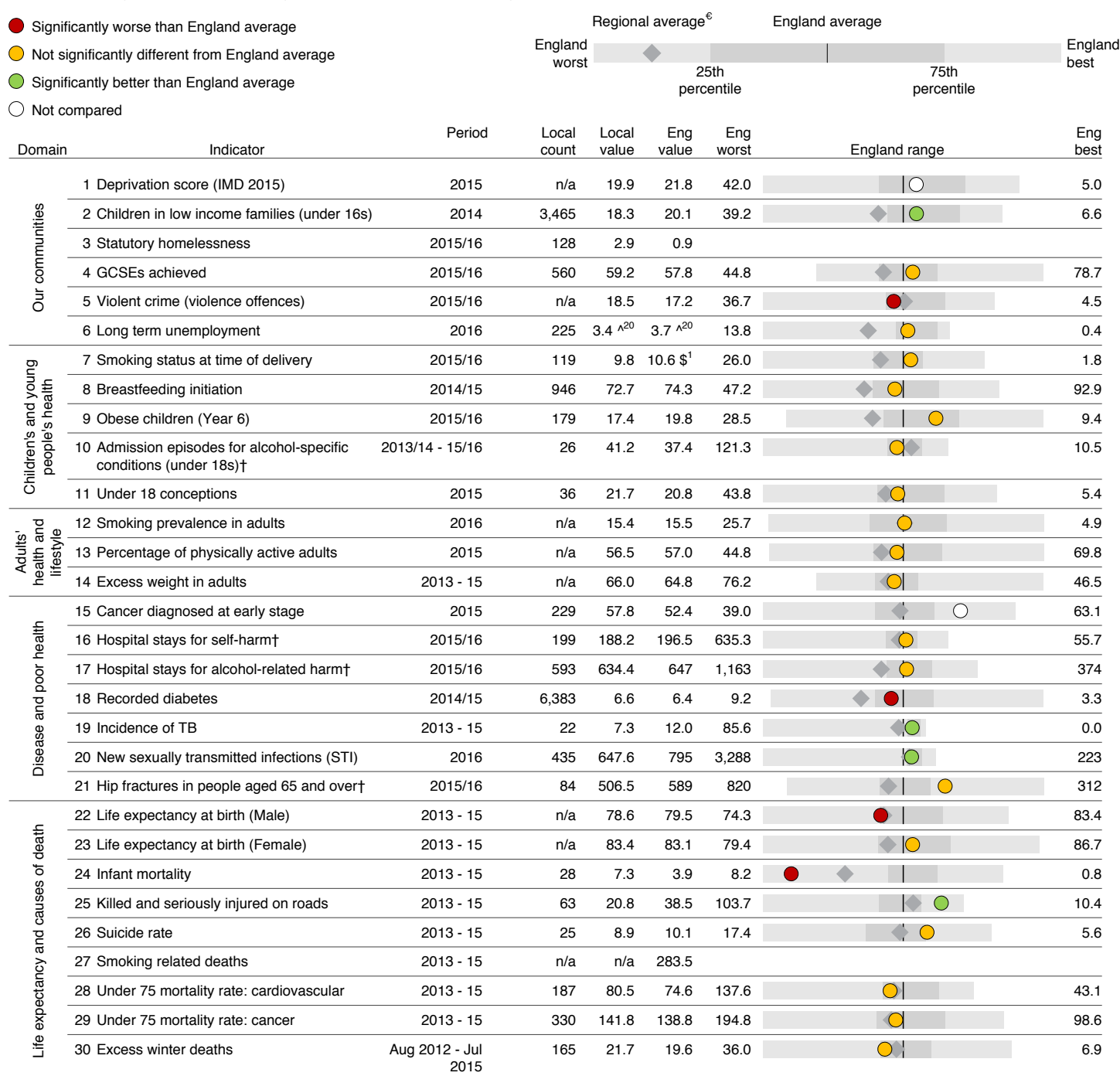
The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

● Significantly worse than England average

● Not significantly different from England average

● Significantly better than England average

○ Not compared



Indicator notes

1 Index of Multiple Deprivation (IMD) 2015 **2** % children (under 16) in low income families **3** Eligible homeless people not in priority need, crude rate per 1,000 households **4** 5 A*-C including English & Maths, % pupils at end of key stage 4 resident in local authority **5** Recorded violence against the person crimes, crude rate per 1,000 population **6** Crude rate per 1,000 population aged 16-64 **7** % of women who smoke at time of delivery **8** % of all mothers who breastfeed their babies in the first 48hrs after delivery **9** % school children in Year 6 (age 10-11) **10** Persons under 18 admitted to hospital due to alcohol-specific conditions, crude rate per 100,000 population **11** Under-18 conception rate per 1,000 females aged 15 to 17 (crude rate) **12** Current smokers (aged 18 and over), Annual Population Survey **13** % adults (aged 16 and over) achieving at least 150 mins physical activity per week, Active People Survey **14** % adults (aged 16 and over) classified as overweight or obese, Active People Survey **15** Experimental statistics - % of cancers diagnosed at stage 1 or 2 **16** Directly age sex standardised rate per 100,000 population **17** Admissions involving an alcohol-related primary diagnosis or an alcohol-related external cause (narrow definition), directly age standardised rate per 100,000 population **18** % people (aged 17 and over) on GP registers with a recorded diagnosis of diabetes **19** Crude rate per 100,000 population **20** All new diagnoses (excluding chlamydia under age 25), crude rate per 100,000 population aged 15 to 64 **21** Directly age-sex standardised rate of emergency admissions, per 100,000 population aged 65 and over **22, 23** The average number of years a person would expect to live based on contemporary mortality rates **24** Rate of deaths in infants aged under 1 year per 1,000 live births **25** Rate per 100,000 population **26** Directly age standardised mortality rate from suicide and injury of undetermined intent per 100,000 population (aged 10 and over) **27** Directly age standardised rate per 100,000 population aged 35 and over **28** Directly age standardised rate per 100,000 population aged under 75 **29** Directly age standardised rate per 100,000 population aged under 75 **30** Ratio of excess winter deaths (observed winter deaths minus expected deaths based on non-winter deaths) to average non-winter deaths (three years)

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^{Λ20} Value based on an average of monthly counts ^{\$1} There is a data quality issue with this value

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Health summary for Wychavon

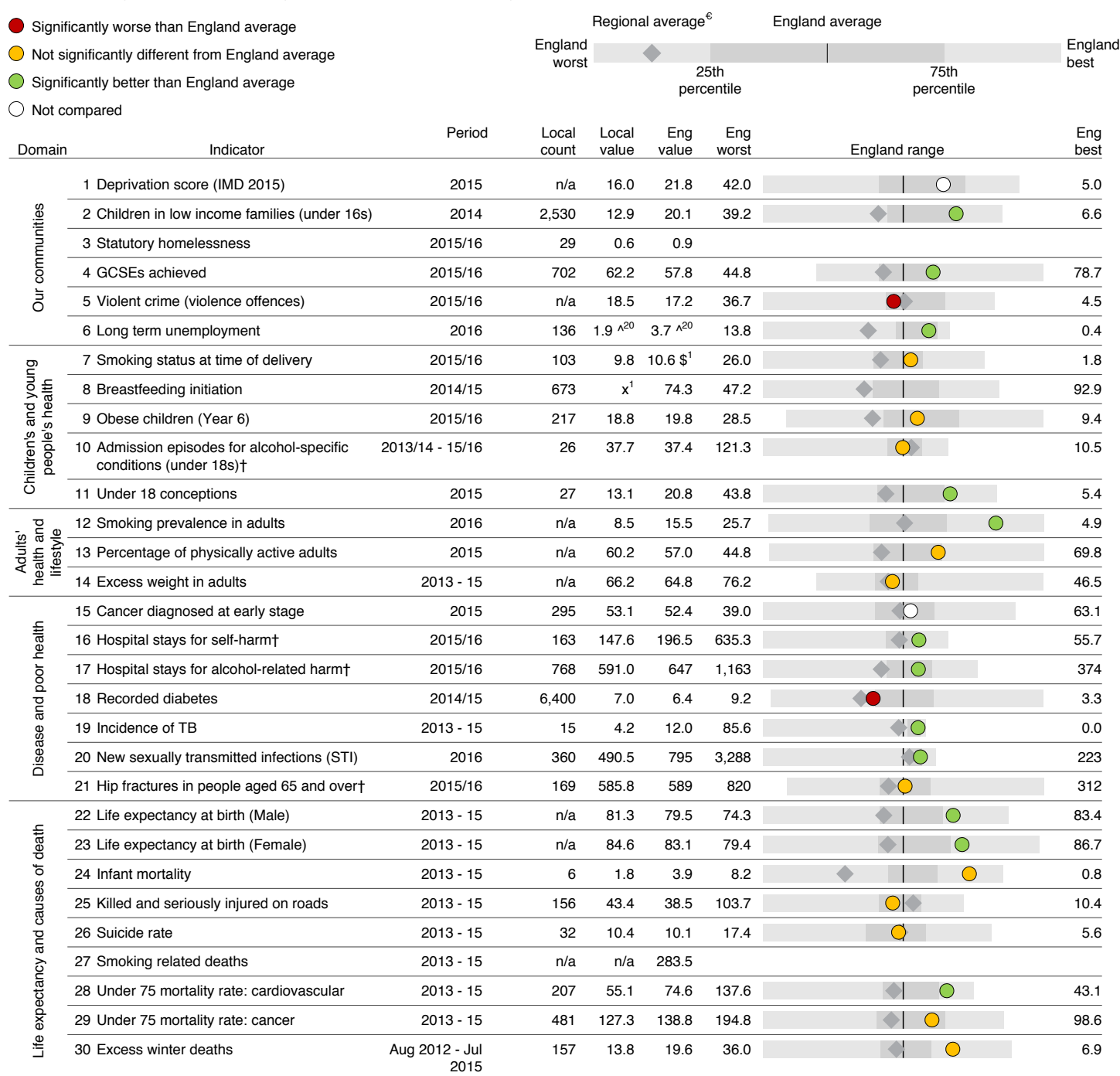
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● Significantly worse than England average

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Indicator notes

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Appendix B: Full SA Framework

Appendix B: SA Framework for the South Worcestershire Development Plan Review

#	SA Objective	Decision making criteria: Will the option/proposal...	Indicators include (but are not limited to)
1	Climate change Mitigation: Minimise SW's contribution to climate change.	Increase energy consumption or GHG emissions? Generate or support renewable energy?	• Energy consumption; • GHG emissions; • Access to sustainable transport; • Renewable energy generation; • Green infrastructure (carbon sink).
2	Climate Change Adaptation: Plan for the anticipated impacts of climate change.	Increase the number of residents at risk of flooding? Increase the risk of flooding?	• EA Flood Map for Planning; • Surface water flood risk; • Number of developments given planning permission on floodplains contrary to EA advice; • Presence or loss of green infrastructure.
3	Biodiversity and Geodiversity: Protect, enhance and manage the flora, fauna, biodiversity and geodiversity assets of SW.	Result in a net loss of vegetation? Protect or enhance wildlife sites or biodiversity hotspots? Protect or enhance geodiversity hotspots?	• Number of planning approvals which generate adverse impacts on sites of biodiversity importance; • Length of greenways constructed; • Percentage of major development generating overall biodiversity enhancement; • Hectares of biodiversity habitat delivered through strategic site allocations; • Impacts on geodiversity sites.
4	Landscape and Townscape: Conserve, enhance and manage the character and appearance of the landscape and townscape, maintaining and strengthening their distinctiveness.	Protect or enhance the local landscape? Protect or enhance the local townscape?	• Use of locally sourced materials; • Is development in-keeping with surroundings?; • Alterations to the urban / rural fringe; • Increase of coalescence; • Amount of new development in the AONB.

5	Pollution and Waste: Reduce waste generation, increase the reuse and recycling of materials whilst minimizing the extent and impacts of water, air and noise pollution.	Increase waste production? Increase the risk of air, noise or water pollution? Increase the number of residents exposed to the risk of air, noise or water pollution?	• Number of residents in areas of poor air quality; • Proximity to pollutants (e.g. busy roads); • Quality of waterways in or adjacent to sites; • Local increases in road traffic or congestion; • Number of developments given planning permission contrary to EA advice relating to river water quality or the protection of groundwater; • Proximity to AQMAs and current AQMA status.
6	Natural Resources: Protect, enhance and ensure the efficient use of SW's land, soils and water.	Impact on demand capacity of local water sources? Use previously developed land or existing buildings? Result in the loss of local soils?	• Proportion of previously developed land; • Use of existing buildings; • Likely impacts on soil fertility, structure and erosion; • Agricultural Land Classification; • Mineral Safeguarding Sites; • Re-use of contaminated land.
7	Housing: Provide a range of housing to meet the needs of the community.	Ensure that residents will have the opportunity to meet in a home which meets their needs? Result in the loss of, or otherwise impact on, any existing housing?	• Proportion of affordable housing; • Impacts on existing houses and estates; • Number of care homes; • Total number of homes planned for site.
8	Health and Wellbeing: Safeguard and improve the physical and mental health of residents.	Provide residents with adequate access to necessary health facilities and services? Encourage healthy lifestyles?	• Access to health facilities; • Percentage of District's population with access to a natural greenspace within 400m of their home; • Local air quality; • Hectares of accessible open space per 1,000 population.
9	Cultural Heritage: Conserve, enhance and manage sites, features and areas of historic and cultural importance.	Will the proposal conserve heritage assets/the historic environment? Will the proposal enhance heritage assets/the historic environment?	• Number of Listed Buildings adversely impacted by development; • Number of Listed Buildings partially damaged or lost; • Number of archaeological sites, scheduled monuments and registered parks adversely impacted by development; • Quantity of development which is discordant with the relevant management plans but given planning permission in Conservation Areas.

10	Transport and Accessibility: Improve the choice and efficiency of sustainable transport in SW and reduce the need to travel.	Improve travel choice, reduce journey need and shorten the length and duration of journeys?	- Distance and accessibility to public transport options; - Distance and accessibility to key services and amenities, as well as employment opportunities; - Suitability of existing routes of access into sites, considering anticipated increases in usage.
		Improve accessibility to key services and amenities for existing and new residents?	
11	Education: Improve education, skills and qualifications SW.	Raise educational attainment levels for residents in the district?	- Distance and accessibility to educational facilities, including primary and secondary schools; - Local education attainment levels.
		Offer residents with frequent, affordable and sustainable access to educational facilities?	
12	Economy and Employment: Support a strong, diverse, vibrant and sustainable local economy to foster balanced economic growth.	Encourage sustainable economic growth?	- Access and distance to local employment opportunities; - Local employment rates; - Increases or decreases in quantity of employment land in the district.
		Ensure high and stable levels of employment?	

Appendix C: PPP Review

Appendix C: Plan, Policy and Programme Review

Title of PPP	Main objectives and environmental / socio-economic requirements of PPP	Implications for the SWDPR and SA
Biodiversity, flora and fauna		
A Green Future: Our 25 Year Plan to Improve the Environment (2018)	The document sets out government action to help achieve natural world regain and retain good health. The main goals of the Plan are to achieve: • Clean air; • Clean and plentiful water; • Thriving plants and wildlife; • A reduced risk of harm from environmental hazards such as flooding and drought; • Using resources from nature more sustainably and efficiently; and • Enhanced beauty, heritage and engagement with the natural environment.	The SWDPR and SA should consider how environmental challenges can be addressed and environmental goals can be met.
EC Seventh Environmental Action Programme 2013-2020 (2013)	The main concern of the EEB was the need to describe in an un-ambivalent manner the environmental challenges the EU is faced with, including accelerating climate change, deterioration of our eco-systems and increasing overuse of natural resources.	The SWDPR and SA should consider how environmental challenges can be addressed.
Our life insurance, our natural capital: an EU biodiversity strategy to 2020 (2011)	The EU biodiversity strategy follows on from the EU Biodiversity Action Plan (2006). It aims to halt the loss of biodiversity and ecosystem services across the EU by 2020. The strategy contains six targets and 20 actions. The six targets cover: • Full implementation of EU nature legislation to protect biodiversity; • Better protection for ecosystems, and more use of green infrastructure; • More sustainable agriculture and forestry; • Better management of fish stocks; • Tighter controls on invasive alien species; and • A bigger EU contribution to averting global biodiversity loss.	The SWDPR and SA should consider how biodiversity can be enhanced and protected.
The Pan-European Biological and	The strategy aims to stop and reverse the degradation of biological and landscape diversity values in Europe.	The SWDPR and SA should consider how biological and

Landscape Diversity Strategy (1995)		landscape diversity values can be protected and enhanced.
UN Convention on Biological Diversity (1992)	The aims of the Convention include the conservation of biological diversity (including a commitment to significantly reduce the current rate of biodiversity loss), the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.	The SWDPR and SA should consider how biological diversity can be enhanced and protected.
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	The Convention seeks to conserve wild flora and fauna and their natural habitats, and to monitor and control endangered and vulnerable species.	The SWDPR and SA should consider how European wildlife and natural habitats can be conserved.
Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992 (the Habitats Directive)	The main aim of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those habitats and species of European importance. In applying these measures Member States are required to take account of economic, social and cultural requirements, as well as regional and local characteristics. The provisions of the Directive require Member States to introduce a range of measures, including: • Maintain or restore European protected habitats and species listed in the Annexes at a favourable conservation status as defined in Articles 1 and 2; • Contribute to a coherent European ecological network of protected sites by designating Special Areas of Conservation (SACs) for habitats listed on Annex I and for species listed on Annex II. These measures are also to be applied to Special Protection Areas (SPAs) classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network (Article 3); • Ensure conservation measures are in place to appropriately manage SACs and ensure appropriate assessment of plans and projects likely to have a significant effect on the integrity of an SAC. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensatory measures are necessary to ensure the overall coherence of the Natura 2000 network (Article 6); • Member States shall also endeavour to encourage the management of features of the landscape that support the Natura 2000 network (Articles 3 and 10); • Undertake surveillance of habitats and species (Article 11); • Ensure strict protection of species listed on Annex IV (Article 12 for animals and Article 13 for plants). • Report on the implementation of the Directive every six years (Article 17), including assessment of the	The SWDPR and SA will need to have due regard to the SACs in the area.

	conservation status of species and habitats listed on the Annexes to the Directive.	
The Conservation of Habitats and Species Regulations 2010 (Habitats regulations)	This transposes into national law the Habitats Directive and also consolidates all amendments that have been made to the previous 1994 Regulations. This means that competent authorities have a general duty in the exercise of any of their functions to have regard to the Directive.	The SWDPR and SA will need to have due regard to the SACs in the area.
The Countryside and Rights of Way Act 2000	The Act provides for public access on foot to certain types of land, amends the law relating to public rights of way, increases measures for the management and protection for Sites of Special Scientific Interest (SSSI) and strengthens wildlife enforcement legislation, and provides for better management of Areas of Outstanding Natural Beauty (AONB)	The SWDPR and SA should consider how the countryside and rights of way can be enhanced and protected.
The Natural Environment and Rural Communities Act 2006	The Act makes provision in respect of biodiversity, pesticides harmful to wildlife and the protection of birds, and in respect of invasive non-native species. It alters enforcement powers in connection with wildlife protection, and extends time limits for prosecuting certain wildlife offences. It addresses a small number of gaps and uncertainties which have been identified in relation to the law on sites of special scientific interest. And it amends the functions and constitution of National Park authorities, the functions of the Broads Authority and the law on rights of way.	The SWDPR and SA should consider the recommended actions in this document to conserve biodiversity, including restoring or enhancing species populations or habitats.
DEFRA Wildlife and Countryside Act (1981, as amended)	The principle mechanism for the legislative protection of wildlife in Great Britain.	The SWDPR and SA should consider legislative protection of wildlife.
DEFRA. Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011)	The England biodiversity strategy 2020 ties in with the EU biodiversity strategy in addition to drawing links to the concept of ecosystem services. The strategy's vision for England is; "By 2050 our land and seas will be rich in wildlife, our biodiversity will be valued, conserved, restored, managed sustainably and be more resilient and able to adapt to change, providing essential services and delivering benefits for everyone". The Strategy's overall mission is: "to halt overall biodiversity loss, support healthy well-functioning ecosystems and establish coherent ecological networks, with more and better places for nature for the benefit of wildlife and people".	The SWDPR and SA should consider how biodiversity can be enhanced and protected.
DoE Biodiversity: The UK Action Plan (1994)	Government's strategy for protection and enhancement of biodiversity, from 1992 convention on Biodiversity commitments. Advises on opportunities and threats for biodiversity.	The SWDPR and SA should consider how biodiversity can be enhanced and protected.

TCPA: Biodiversity by Design: A Guide for Sustainable Communities (2004)	The development process should consider ecological potential of all areas including both greenfield and brownfield sites. Local authorities and developers have a responsibility to mitigate impacts of development on designated sites and priority habitats and species and avoid damage to ecosystems.	The SWDPR and SA should consider how biodiversity can be enhanced and protected.
National Planning Policy Framework (DCLG 2012)	The recently released NPPF seeks to streamline the planning system and sets out the Government's planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on promoting the conservation and enhancement of the natural environment. It requires the planning system to contribute to and enhance the natural and local environment by: • protecting and enhancing valued landscapes, geological conservation interests and soils; • recognising the wider benefits of ecosystem services; • minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; • preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and • remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.
Making Space for Nature: a review of England's wildlife sites and ecological network (2010)	The Making Space for Nature report, which investigated the resilience of England's ecological network to multiple pressures, concluded that England's wildlife sites do not comprise of a coherent and resilient ecological network. The report advocates the need for a step change in conservation of England's wildlife sites to ensure they are able to adapt and become part of a strong and resilient network. The report summarises what needs to be done to improve England's wildlife sites to enhance the resilience and coherence of England's ecological network in four words; more, bigger, better, and joined. There are five key approaches which encompass these, which also take into account of the land around the ecological network: • Improve the quality of current sites by better habitat management. • Increase the size of current wildlife sites. • Enhance connections between, or join up, sites, either through physical corridors, or through 'stepping stones'. • Create new sites.	The SWDPR and SA should consider how England's wildlife sites and ecological network can be enhanced and protected.

	• Reduce the pressures on wildlife by improving the wider environment, including through buffering wildlife sites. To establish a coherent ecological network 24 wide ranging recommendations have been made which are united under five key themes: • There is a need to continue the recent progress in improving the management and condition of wildlife sites, particularly our SSSIs. We also make recommendations for how these should be designated and managed in ways that enhance their resilience to climate change. • There is a need to properly plan ecological networks, including restoration areas. Restoration needs to take place throughout England. However, in some areas, both the scale of what can be delivered to enhance the network, and the ensuing benefits for wildlife and people, will be very high. These large areas should be formally recognised as Ecological Restoration Zones. • There are a large number of surviving patches of important wildlife habitat scattered across England outside of SSSIs, for example in Local Wildlife Sites. We need to take steps to improve the protection and management of these remaining wildlife habitats. 'Protection' will usually be best achieved through incentive-based mechanisms, but at times may require designation. • There is a need to become better at deriving multiple benefits from the ways we use and interact with our environment. There are many things that society has to do that may seem to have rather little to do with nature conservation, but could have, or even should have if we embrace more radical thinking; e.g. flood management by creating wetlands. • It will not be possible to achieve a step-change in nature conservation in England without society accepting it to be necessary, desirable, and achievable. This will require strong leadership from government and significant improvements in collaboration between local authorities, local communities, statutory agencies, the voluntary and private sectors, farmers, landowners and other land-managers and individual citizens	
DEFRA England's Trees, Woods and Forests Strategy (2007)	The England's Trees, Woods, and Forest Strategy (2007) aims to: • provide, in England, a resource of trees, woods and forests in places where they can contribute most in terms of environmental, economic and social benefits now and for future generations • ensure that existing and newly planted trees, woods and forests are resilient to the impacts of climate change and also contribute to the way in which biodiversity and natural resources adjust to a changing climate • protect and enhance the environmental resources of water, soil, air, biodiversity and landscapes (both woodland and non-woodland), and the cultural and amenity values of trees and woodland	The SWDPR and SA should consider how trees, woods and forests can be enhanced and protected.

	• increase the contribution that trees, woods and forests make to the quality of life for those living in, working in or visiting England; and • improve the competitiveness of woodland businesses and promote the development of new or improved markets for sustainable woodland products and ecosystem services where this will deliver identify able public benefits, nationally or locally, including the reduction of carbon emissions.	
The Natural Choice: Securing the Value of Nature. The Natural Environment White Paper. (HM Government 2011)	Published in June 2011, the Natural Environment White paper sets out the Government's plans to ensure the natural environment is protected and fully integrated into society and economic growth. The White Paper sets out four key aims: (i) <u>Protecting and improving our natural environment</u> There is a need to improve the quality of our natural environment across England, moving to a net gain in the value of nature. It aims to arrest the decline in habitats and species and the degradation of landscapes. It will protect priority habitats and safeguard vulnerable non-renewable resources for future generations. It will support natural systems to function more effectively in town, in the country and at sea. It will achieve this through joined-up action at local and national levels to create an ecological network which is resilient to changing pressures. (ii) <u>Growing a green economy</u> The ambition is for a green and growing economy which not only uses natural capital in a responsible and fair way but also contributes to improving it. It will properly value the stocks and flows of natural capital. Growth will be green because it is intrinsically linked to the health of the country's natural resources. The economy will capture the value of nature. It will encourage businesses to use natural capital sustainably, protecting and improving it through their day-to-day operations and the management of their supply chains. (iii) <u>Reconnecting people and nature</u> The ambition is to strengthen the connections between people and nature. It wants more people to enjoy the benefits of nature by giving them freedom to connect with it. Everyone should have fair access to a good-quality natural environment. It wants to see every child in England given the opportunity to experience and learn about the natural environment. It wants to help people take more responsibility for their environment, putting local communities in control and making it easier for people to take positive action. (iv) <u>International and EU leadership</u> The global ambitions are: • internationally, to achieve environmentally and socially sustainable economic growth, together with	The SA Framework should include objectives relating to the protection and enhancement of the natural environment.

	food, water, climate and energy security; and to put the EU on a path towards environmentally sustainable, low-carbon and resource-efficient growth, which is resilient to climate change, provides jobs and supports the wellbeing of citizens	
UK National Ecosystem Assessment (2011)	The UK National Ecosystem Assessment is the first analysis of the UK's natural environment and the benefits it provides to society and economic prosperity. The assessment leads on from the Millennium Ecosystem Assessment (2005) and analyses services provided by ecosystem set against eight broad habitat types. The ecosystem services provided by these habitat types have been assessed to find their overall condition. The assessment sought to answer ten key questions: 1) What are the status and trends of the UK's ecosystems and the services they provide to society? 2) What are the drivers causing changes in the UK's ecosystems and their services? 3) How do ecosystem services affect human well-being, who and where are the beneficiaries, and how does this affect how they are valued and managed? 4) Which vital UK provisioning services are not provided by UK ecosystems? 5) What is the current public understanding of ecosystem services and the benefits they provide? 6) Why should we incorporate the economic values of ecosystem services into decision-making? 7) How might ecosystems and their services change in the UK under plausible future scenarios? 8) What are the economic implications of different plausible futures? 9) How can we secure and improve the continued delivery of ecosystem services? 10) How have we advanced our understanding of the influence of ecosystem services on human well-being and what are the knowledge constraints on more informed decision making?	The SA Framework should include objectives relating to the protection and enhancement of the natural environment.
DEFRA Guidance for Local Authorities on Implementing Biodiversity Duty (2007)	The Duty is set out in Section 40 of the Natural Environment and Rural Communities Act (NERC) 2006, and states that: "Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". Particular areas of focus include: Policy, Strategy and Procurement; Management of Public Land and Buildings; Planning, Infrastructure and Development; and Education, Advice and Awareness.	The SWDPR and SA should consider how biodiversity can be enhanced and protected.
CABE Making Contracts Work for Wildlife: How to Encourage Biodiversity in Urban Parks (2006)	Advises on how to make the most of the potential for biodiversity in urban parks and it shows how the commitment of individuals and employers can make the difference between failure and inspiring success.	The SWDPR and SA should consider how biodiversity can be enhanced and protected.

Site Improvement Plan, Bredon Hill Special Area of Conservation, Natural England (2015)	The Site Improvement Plan for Bredon Hill SAC sets out the qualifying features of Bredon Hill for which it was designated as a SAC. It informs of the threats and pressures to which the SAC is vulnerable and lays out plans for management of the SAC to avoid and mitigate adverse impacts of development.	The SWDPR and SA should consider the threats to the SAC and consider how the site can be protected and enhanced.
Site Improvement Plan, Lyppard Grange Ponds Special Area of Conservation, Natural England (2014)	The Site Improvement Plan for Lyppard Grange Ponds SAC sets out the qualifying features of the ponds for which it was designated as a SAC. It informs of the threats and pressures to which the SAC is vulnerable and lays out plans for management of the SAC to avoid and mitigate adverse impacts of development.	The SWDPR and SA should consider the threats to the SAC and consider how the site can be protected and enhanced.
Sever river basin district: river basin management plan (2015)	The river basin management plan presents the ecological, chemical and quantitative status of the surface and groundwater bodies present in the river basin. In accordance with the RBMP, new development should not lead to deterioration of the water body. Objectives, according to the Water Framework Directive, are as follows: • To prevent deterioration of the status of surface waters and groundwater; • To achieve objectives and standards for protected areas; • To aim to achieve good status for all water bodies or, for heavily modified water bodies and artificial water bodies, good ecological potential and good surface water chemical status; • To reverse any significant and sustained upward trends in pollutant concentrations in groundwater; • The cessation of discharges, emissions and losses of priority hazardous substances into surface waters; and • Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants.	The SWDPR and SA should aim to be in accordance with the RBMP for the Severn river basin. In particular, any potential impact on the ecological, chemical or quantitative status of waterbodies should be addressed.
Population and human health		

National Planning Policy Framework (DCLG, 2012)	The NPPF seeks to streamline the planning system and sets out the Government's planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on promoting healthy communities. The NPPF requires planning authorities to aim to achieve places which promote: • Opportunities for meetings between members of the community who might not otherwise come into contact with each other, including through mixed-use developments, strong neighbourhood centres and active street frontages which bring together those who work, live and play in the vicinity; • Safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion; and • Safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas. In order to deliver the social, recreational and cultural facilities and services the community needs, planning policies and decisions should: • Plan positively for the provision and use of shared space, community facilities (such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship) and other local services to enhance the sustainability of communities and residential environments; • Guard against the unnecessary loss of valued facilities and services, particularly where this would reduce the community's ability to meet its day-to-day needs; • Ensure that established shops, facilities and services are able to develop and modernise in a way that is sustainable, and retained for the benefit of the community; and • Ensure an integrated approach to considering the location of housing, economic uses and community facilities and services.	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.
DCMS: Playing to win: a new era for sport. (2008)	The Government's vision for sport and physical activity for 2012 and beyond is to increase significantly levels of sport and physical activity for people of all ages and to achieve sustained levels of success in international competition. The ambition is for England to become – a truly world leading sporting nation. The vision is to give more people of all ages the opportunity to participate in high quality competitive sport.	The SWDPR and SA should consider how to support access to sports facilities and increase participation in sport for the South Worcestershire residents.
DoH: Healthy Lives, Healthy People: Our strategy for public health in England White	Sets out the Government's approach to tackling threats to public health and dealing with health inequalities. It sets out an approach that will: • Protect the population from health threats – led by central government, with a strong system to the frontline;	The SWDPR and SA should consider how to support healthy lives of residents.

Paper (2010)	• Empower local leadership and encourage wide responsibility across society to improve everyone's health and wellbeing, and tackle the wider factors that influence it; • Focus on key outcomes, doing what works to deliver them, with transparency of outcomes to enable accountability through a proposed new public health outcomes framework; • Reflect the government's core values of freedom, fairness and responsibility by strengthening self-esteem, confidence and personal responsibility; positively promoting healthy behaviours and lifestyles; and adapting the environment to make healthy choices easier; and • Balance the freedoms of individuals and organisations with the need to avoid harm to others, use a 'ladder' of interventions to determine the least intrusive approach necessary to achieve the desired effect and aim to make voluntary approaches work before resorting to regulation.	
DoH & Department for Work and Pensions. Improving health and work: changing lives: The Government's Response to Dame Carol Black's Review of the health of Britain's working-age population (2008)	This sets out the Governments response to a review into the health of Britain's working age population conducted by Dame Carol Black. The vision is to: "create a society where the positive links between work and health are recognised by all, where everyone aspires to a healthy and fulfilling working life and where health conditions and disabilities are not a bar to enjoying the benefits of work". To achieve the vision three key aspirations have been identified: 1. creating new perspectives on health and work; 2. improving work and workplaces; and 3. supporting people to work. Through these three aspirations Britain's working population will fulfil their full potential, create stronger communities and help relieve the financial burden of health problems on the economy.	The SWDPR and SA should consider how to support healthy lives of residents.
DoH: Our health, our care, our say: a new direction for community services (2005)	Puts emphasis on moving healthcare into the community and will therefore have an impact on sustainable development considerations, including supporting local economies and how people travel to healthcare facilities.	The SWDPR and SA should consider how to support the provision of healthcare facilities in the districts.
Health and Social Care Act 2012	An Act to establish and make provision about a National Health Service Commissioning Board and clinical commissioning groups and to make other provision about the National Health Service in England; to make provision about public health in the United Kingdom; to make provision about regulating health and adult social care services; to make provision about public involvement in health and social care matters, scrutiny of health matters by local authorities and co-operation between local authorities and commissioners of health care services; to make provision about regulating health and social care workers; to establish and make	The SWDPR and SA should consider how to support the provision of healthcare facilities.

	provision about a National Institute for Health and Care Excellence; to establish and make provision about a Health and Social Care Information Centre and to make other provision about information relating to health or social care matters; to abolish certain public bodies involved in health or social care; to make other provision about health care; and for connected purposes.	
Forestry Commission: Trees and Woodlands - Nature's Health Service (2005)	Provides detailed examples of how the Woodland Sector (trees, woodlands and green spaces) can significantly contribute to people's health, well-being (physical, psychological and social) and quality of life. Increasing levels of physical activity is a particular priority.	The SWDPR and SA should consider how green infrastructure can contribute to the health and well-being of residents.
Countryside Agency: The Countryside in and Around Towns – A vision for connecting town and country in the pursuit of sustainable development (2005)	A vision for the landscape of urban/rural fringe environments and how to better manage these areas and make improvements. Key functions for the environment include: a bridge to the country; a gateway to the town; a health centre; a classroom; a recycling and renewable energy centre; a productive landscape; a cultural legacy; a place for sustainable living; an engine for regeneration; and a nature reserve.	The SWDPR and SA should consider how to best manage the landscape of urban/rural fringe environments.
Accessible Natural Green Space Standards Towns and Cities: Review & Toolkit for Implementation (2003)	Aims to help Local Authorities develop policies which acknowledge, protect and enhance the contribution natural spaces make to local sustainability. Three aspects of natural space in cities and towns are discussed: their biodiversity; their ability to cope with urban pollution; ensuring natural spaces are accessible to everyone.	The SWDPR and SA should consider how natural spaces can be enhanced and protected for the purpose of local sustainability in the districts.
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The Sustainable Development Strategy was review in 2009 and "underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.	The SWDPR and SA should consider ways to promote sustainable development in the districts.
UN The Aarhus Convention (1998)	Links environmental rights and human rights. It establishes that sustainable development can be achieved only through the involvement of all stakeholders and links government accountability and environmental protection.	Sustainable development should be a key focus of the SWDPR and SA.

Social Exclusion Unit: Preventing Social Exclusion (2001)	The primary aims are to prevent social exclusion, and reintegrate people who have become excluded. Improvement is required in the areas of truancy, rough sleeping, teenage pregnancy, youth at risk and deprived neighbourhoods.	The SWDPR and SA should consider how to prevent social exclusion and reintegrate people who have become excluded.
DCLG Homes for the future: more affordable, more sustainable (2007)	The Housing Green Paper outlines plans for delivering homes; new ways of identifying and using land for development; more social housing- ensuring that a decent home at an affordable price is for the many; building homes more quickly; more affordable homes; and greener homes - with high environmental standards and flagship developments leading the way.	The SWDPR and SA should consider how to deliver more affordable and environmentally sustainable homes.
ODPM & Home Office: Safer Places: The Planning System and Crime Prevention (2004)	Practical guide to designs and layouts that may help with crime prevention and community safety, including well-defined routes, places structured so that different uses do not cause conflict, places designed to include natural surveillance and places designed with management and maintenance in mind.	The SWDPR and SA should consider how to prevent crime in new developments.
Cabinet Office: Reaching Out: An Action Plan on Social Exclusion (2006)	Sets out an action plan to improve the life chances of those who suffer, or may suffer in the future, from disadvantage. Guiding principles for action include: better identification and earlier intervention; systematically identifying 'what works'; promoting multi-agency working; personalisation, rights and responsibilities; and supporting achievement and managing underperformance.	The SWDPR and SA should consider how to reduce suffering and improve the life chances of disadvantaged people.
Worcester Strategic Housing Market Assessment Monitoring 2012/2013 (2014)	The document gives a strategic view of housing supply and demand in all housing sectors up to 2030 and also provides Local Authorities with a comprehensive understanding of the dynamics and segments of the functional housing markets operating within Worcestershire. It forms part of the evidence base informing emerging planning and housing policies and strategies for those authorities bringing forward their Development Plan Documents for examination.	The SWDPR and SA should consider the outcomes of the Housing Assessment.
Worcestershire County Economic Assessment 2010-2011 (2010)	The Worcestershire Economic Assessment is a statutory document, which outlines the key economic strengths, weaknesses, opportunities and threats of the county. It provides a shared, consistent evidence base, to inform decision-making by the range of partners able to improve the economy of Worcestershire in the short, medium and long term.	The SWDPR and SA should consider the outcomes of the Economic Assessment.
Worcestershire Green Infrastructure Strategy 2013 - 2018 (2014)	This paper enables the strategic planning, coordination, delivery and management of existing and future green spaces that cover local authority boundaries. GI presents an alternative approach to planning that is proactive, multi-scale and multi-functional.	The SWDPR and SA should promote and enhance the development of green infrastructure.

South Worcestershire Joint Core Strategy Sports Facilities Framework (2010)	The framework is to ensure development has a positive impact on the area. It forms part of the key evidence base to inform sporting elements within the districts, identifying delivery mechanisms for community facilities to ensure sustainability with future growth.	The SWDPR and SA should consider community sports facilities in new developments.
South Worcestershire Public Open Space Alignment Study (2007)	The paper is used as an evidence base, identifying local needs, setting local standards and drafting relevant policies. It report has been set out in the context of the PPG17 5 step process. For each of the stages it: - Identifies the requirements of PPG17; - Summarises the work done by each authority to meet these requirements; - Identifies any differences in approach and the implications of such differences; and - Outlines any additional work required to align the individual PPG17 studies.	The SWDPR and SA should maintain existing open space provision and promote the provision of new and high quality open space.
Planning for Health in South Worcestershire (SPD) (2017)	The document provides guidance for local authority planning officers, applicants and the wider community on delivering healthier developments. It focuses on the nine health and wellbeing principles: - Sustainable development; - Urban form - design and the public realm; - Housing and employment; - Age-friendly environments for the elderly and those living with dementia; - Community facilities; - Green infrastructure and play spaces/recreation; - Air quality, noise, light and water management; - Active travel; and - Encouraging healthier food choices.	The SWDPR and SA should consider how to support the health and wellbeing of South Worcestershire's residents.
South Worcestershire Employment Land Review (2011)	The Employment Land Review assess the need for employment land, assesses how the current land supply matches the needs, and consequently advises on policy and land allocations.	The SWDPR and SA should consider the advice suggested in the Review.
Soil, water and air		
EC Air Quality Directive (1996)	Aims to improve air quality throughout Europe by controlling the level of certain pollutants and monitoring their concentrations. In particular, the Directive aims to establish levels for different air pollutants; draw up common methods for assessing air quality; methods to improve air quality; and make sure that information on air quality is easily accessible to Member States and the public.	The SWDPR and SA should consider the recommended actions in this document to improve air quality.

DEFRA: The Air Quality Strategy for England, Scotland, Wales, and Northern Ireland (2007).	The Strategy provides specific UK targets for reducing air pollution and sets out local authority responsibilities for achieving most of these. It states that land use planning has a key role to play in contributing to these targets.	The SWDPR and SA should consider the recommended actions in this document to improve air quality.
DEFRA: Safeguarding our Soils: A Strategy for England (2009)	The Soil Strategy for England outlines the Government's approach to safeguarding our soils for the long term. It provides a vision to guide future policy development across a range of areas and sets out the practical steps that are needed to take to prevent further degradation of our soils, enhance, restore and ensure their resilience, and improve understanding of the threats to soil and best practice in responding to them. Key objectives of the strategy include: • Better protection for agricultural soils; • Protecting and enhancing stores of soil carbon; • Building the resilience of soils to a changing climate; • Preventing soil pollution; • Effective soil protection during construction and development; and • Dealing with our legacy of contaminated land.	The SWDPR and SA should consider the recommended actions in this document to safeguard soils for the long term in South Worcestershire.
DEFRA (2012) Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance	This document establishes a legal framework for dealing with contaminated land in England. This document provides guidelines for how local authorities should implement the regime, including how they should go about deciding whether land is contaminated land in the legal sense of the term. Key aims are as follows: • To identify and remove unacceptable risks to human health and the environment. • To seek to ensure that contaminated land is made suitable for its current use. • To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.	The SWDPR and SA should consider how contaminated land can be dealt with, and include policies that promote the correct management of contaminated land.
Soils Lead Coordination Network: Soils and the Natural Heritage: a Vision by the Soils LCN for the Protection of the UK Soil Resource and Sustainable Use of Soils (2007)	This document sets out the Soils Lead Coordination Network's vision for soil conservation. The "desired outcomes" of the vision are as follows: • Maintaining the diversity and biodiversity of UK soils; • Controlling and when appropriate reversing loss of soil carbon and water-holding capacity; • Reducing accelerated soil erosion and sediment transport into watercourses; and • Ensuring appropriate status of soils in mitigation and remediation scenarios to control the impact of climate change.	The SWDPR and SA should consider how soils can be protected and enhanced, and include policies that promote the conservation of soils.

Water Framework Directive 2000/60/EC	This provides an overarching strategy, including a requirement for EU Member States to ensure that they achieve 'good ecological status' by 2015. River Basin Management Plans were defined as the key means of achieving this. They contain the main issues for the water environment and the actions we all need to take to deal with them.	The SA Framework should include objectives that consider effects upon water quality and resource.
HM Government Strategy for Sustainable Construction (2008)	Encourages the construction industry to adopt a more sustainable approach towards development; identifies eleven themes for targeting Action, which includes conserving water resources.	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include policies that promote the sustainable use of water resources.
DEFRA The Water Environment (Water Framework Directive) (England and Wales) Regulations (2003)	Requires all inland and coastal waters to reach "good status" by 2015. It mandates that: - Development must not cause a deterioration in status of a waterbody; and - Development must not prevent future attainment of 'good status', hence it is not acceptable to allow an impact to occur just because other impacts are causing the status of a water body to already be less than good. This is being done by establishing a river basin district structure within which demanding environmental objectives are being set, including ecological targets for surface waters.	The SA Framework should include objectives that consider effects upon water quality and resource.
Environment Agency: Building a Better Environment: Our role in development and how we can help (2013)	Guidance on addressing key environmental issues through the development process (focusing mainly on the issues dealt with by the Environment Agency), including managing flood risk, surface water management, use of water resources, preventing pollution.	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include policies that promote the sustainable use of water resources.
National Planning Policy Framework (DCLG, 2012)	The NPPF states that plans should prevent development from contributing to, or being put at risk of, air or water pollution. Plans should consider the presence of Air Quality Management Areas and cumulative impacts on air quality from individual sites in local areas. The NPPF states that planning should protect and enhance soils, particularly those recognized as best and most versatile agricultural land (Grades 1, 2 and 3a).	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.
Severn River basin	The management plan lays out the objectives for the Severn River basin, which include avoiding	The SWDPR should avoid

district, river basing management plan (2015)	deterioration of surface and groundwater, achieving good status for all water bodies, reversing significant and sustained pollution and progressively reducing pollution of groundwater. The plan also sets out measures by which objectives can be achieved.	pollution and over abstraction in the Severn basin.
Planning for Soil in Worcestershire (2011)	The document aims to raise the awareness of the importance of soils and provide guidance on policy preparation for the management and protection of Worcestershire's soil resource. The paper supports strategic consideration of soils by identifying best practice and how policy can best serve the sub regional interests.	The SWDPR and SA should consider their impacts on soil resources.
Air Quality Action Plan for Worcestershire (2013)	The AQAP has been produced following the declaration of an AQMA in response to exceedances of or one or more air quality strategic objectives. It sets out the local actions that will be implemented to improve air quality and meet objectives. Objectives include: • To provide a robust framework for ensuring long term commitment and support of air quality issues. • To be flexible enough to be amended with new policy changes, additional • AQMAs and solutions as new ideas materialise in the air quality management field. • Identify the effective actions that will be the basis of a long term implementation strategy to improve local air quality in Worcestershire. • Highlight air quality issues in Worcestershire to policy makers and organisations that can deliver real improvements within partner authorities and the wider community. • Identify potentially effective members of a Steering Group that can deliver implementation of the finalised action plan • Identify national, regional and local policy that has an impact on local air quality or a role to play in improving air quality. • Focus and resources should be targeted on implementing achievable actions that can provide the most cost effective reductions in emissions and improvements in local air quality that would necessitate a revocation of the AQMA's.	The SWDPR and SA should consider the impacts of, and on, air quality.
Worcestershire Local Flood Risk Management Strategy (2015-2021)	This is about managing flooding in Worcestershire. The Local Flood Risk Management Strategy sets out roles and responsibilities for flood risk management, assesses the risk of flooding in the County, where funding can be found to manage flood risk, what our policies are as a Lead Local Flood Authority and what our objectives and actions are to manage flood risk.	Discord between development and policies proposed in the SWDPR and this strategy should be avoided.
Severn Trent Water, Water Resource Management Plan 2014	The Plan sets out how Severn Trent Water maintains the balance between supply and demand for water. Their priorities for the future include keeping bills for customers at a minimum, taking fair and balanced approach for all stakeholders and delivering long term environmental benefits.	Development proposed in the SWDPR should seek to be in accordance with the future plans

		of the Severn Trent WRMP.
Planning for Water in Worcestershire Technical Research Paper (2011).	The paper provides a consistent, strategic approach to the management of water by identifying key issues and implications surrounding managing the water in Worcestershire. These can then be properly and strategically planned.	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include policies that promote the sustainable use of water resources.
South Worcestershire Water Cycle Study 2012 Update (2013)	The WCS considers the issues of flood risk, water resources, water supply, wastewater collection, wastewater treatment, water quality, environmental issues and demand management. It offers a relatively detailed look on the potential development in the area and the implications this may have for each of these issues.	Development proposed in the SWDPR should seek to take on board the advice and constraints noted in the WCS.
South Worcestershire Strategic Flood Risk Assessment (SFRA) Level 2 Update (2012)	Enables authorities to select and develop sustainable site allocations away from areas of greatest vulnerability of flooding. The SFRA assesses allocations provided in the SWDP. It sets out a procedure to be followed when assessing sites in the future. The SFRA will provide details on all types of flood risk to enable the authority to: • Apply the sequential and, where necessary, exception tests in determining land use allocations; • Refine information on the areas that may flood, taking into account other sources of flooding and the impacts of climate change; • Inform the SA of local development documents; • Prepare appropriate policies for flood risk management for these areas; • Identify the level of detail required for site-specific flood risk assessments; and • Determine the acceptability of flood risk in relation to emergency planning capability.	Development proposed in the SWDPR should take into consideration the areas at risk of flooding to avoid locating vulnerable development in areas of incompatible risk.
Severn River basin Flood risk management plan 2015 - 2021	Flood risk management plans (FRMPs) explain the risk of flooding from rivers, the sea, surface water, groundwater and reservoirs. FRMPs set out how risk management authorities will work with communities to manage flood and coastal risk over the period 2015-2021. The river basin district is made up of 10 catchments (2 in Wales, 6 in England and 2 cross-border catchments) and 8 flood risk areas (6 in Wales and 2 in England).	SWDPR should take into consideration the areas at risk of flooding to avoid locating vulnerable development in areas of incompatible risk.
River Severn catchment flood management plan	The catchment flood management plan should be used to inform planning and decision making. The overall aim is to promote more sustainable approaches to managing flood risk.	SWDPR should take into consideration the areas at risk of

(2009)		flooding to avoid locating vulnerable development in areas of incompatible risk.
Climatic factors		
UN Framework Convention on Climate Change (1992)	Sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change.	The SWDPR and SA should consider ways to reduce the impact of climate change in South Worcestershire.
IPCC Kyoto Protocol to the United Nations Framework Convention on Climate Change (1997)	Commits member nations to reduce their emissions of carbon dioxide and other greenhouse gases, or engage in emissions trading if they maintain or increase emissions of these gases.	The SWDPR and SA should consider ways to reduce the impact of climate change in South Worcestershire.
EC Sixth Environmental Action Programme Community 2002-2012 (2002)	Climate change has been identified as one of four priority areas for Europe. The EAP's main objective is a reduction in emissions of greenhouse gases without a reduction in levels of growth and prosperity, as well as adaptation and preparation for the effects of climate change.	The SWDPR and SA should consider ways to reduce the impact of climate change in South Worcestershire.
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The Sustainable Development Strategy was review in 2009 and "underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.	The SWDPR and SA should consider ways to promote sustainable development in South Worcestershire.
UK Climate Change Act 2008 (2008)	The 2008 Climate Change Act seeks to manage and respond to climate change in the UK, by: - Setting ambitious, legally binding targets; - Taking powers to help meet those targets; - Strengthening the institutional framework; - Enhancing the UK's ability to adapt to the impact of climate change; and	The SWDPR and SA should consider ways to reduce the impact of climate change in South Worcestershire.

	Establishing clear and regular accountability to the UK Parliament and to the devolved legislatures. Significantly, the Act sets a legally binding target of at least an 80 per cent cut in greenhouse gas emissions by 2050 and at least a 34 per cent cut by 2020. These targets are against a 1990 baseline.	
UK Renewable Energy Strategy (2009)	The UK has committed to sourcing 15% of its energy from renewable sources by 2020 – an increase in the share of renewables from about 2.25% in 2008. The Renewable Energy Strategy sets out how the Government will achieve this target through utilising a variety of mechanisms to encourage Renewable Energy provision in the UK. This includes streamlining the planning system, increasing investment in technologies as well as improving funding for advice and awareness raising.	The SWDPR and SA should consider ways to promote renewable energy generation in the districts.
UK Renewable Energy Roadmap Update (2013)	This is the second Update to the 2011 Renewable Energy Roadmap. It sets out the progress that has been made and the changes that have occurred in the sector over the past year. It also describes the continuing high ambitions and actions along with the challenges going forward.	The SWDPR and SA should consider ways to promote renewable energy generation in the districts.
The UK Low Carbon Transition Plan (2009)	The UK Low Carbon Transition Plan sets out how the UK will meet the Climate Change Act's legally binding target of 34 per cent cut in emissions on 1990 levels by 2020. It also seeks to deliver emissions cuts of 18% on 2008 levels. The main aims of the Transition Plan include the following: - Producing 30% of energy from renewables by 2020; - Improving the energy efficiency of existing housing; - Increasing the number of people in 'green jobs'; and - Supporting the use and development of clean technologies.	The SWDPR and SA should consider ways to reduce greenhouse gas emissions in the districts.
National Planning Policy Framework (DCLG, 2012)	At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on climate change, flooding, and coastal change. Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape. New development should be planned to avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure. To support the move to a low carbon future, planning authorities should: - plan for new development in locations and ways which reduce greenhouse gas emissions; - actively support energy efficiency improvements to existing buildings; and - when setting any local requirement for a building's sustainability, do so in a way consistent with the	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.

	Government's zero carbon buildings policy and adopt nationally described standards. Local plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by: • applying the Sequential Test; • if necessary, applying the Exception Test; • safeguarding land from development that is required for current and future flood management; • using opportunities offered by new development to reduce the causes and impacts of flooding.	
DfT An Evidence Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006)	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.	The SWDPR and SA should consider how to increase public awareness towards climate change in the districts.
Carbon Trust: The Climate Change Challenge: Scientific Evidence and Implications (2005)	This report summarises the nature of the climate change issue. It explains the fundamental science and the accumulating evidence that climate change is real and needs to be addressed. It also explains the future potential impacts, including the outstanding uncertainties.	The SWDPR and SA should consider ways to reduce the impact of climate change in the districts.
Energy Saving Trust: Renewable Energy Sources for Homes in Urban Environments (2005)	Provides information about the integration of renewable energy sources into new and existing dwellings in urban environments. It covers the basic principles, benefits, limitations, costs and suitability of various technologies.	The SWDPR and SA should consider ways to integrate renewable energy technology into new and existing dwellings.
Environment Agency, Adapting to Climate Change: A Checklist for Development (2005)	The document contains a checklist and guidance for new developments to adapt to climate change. The main actions are summarised in a checklist.	The SWDPR and SA should consider ways to reduce the impact of climate change in the districts.
Floods & Water Management Act (2010)	Seeks to "localise" responsibility for flood risk, particularly from ordinary watercourses. Key policies within the act include: • Providing the Environment Agency with an overview of all flood and coastal erosion risk management	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include

	and unitary and county councils to lead in managing the risk of all local floods; • Encouraging the uptake of sustainable drainage systems and providing for unitary and county councils to adopt SUDS for new developments and redevelopments; • Introduce an improved risk based approach to reservoir safety; • Widen the list of uses of water that water companies can control during periods of water shortage; • Enabling water and sewerage companies to operate concessionary schemes for community groups on surface water drainage charges; • Amending the Water Industry Act 1991 to provide a named customer and clarify who is responsible for paying the water bill; and • Make it easier for water and sewerage companies to develop and implement social tariffs where companies consider there is a good cause to do so.	policies that promote the sustainable use of water resources.
Worcestershire Climate Change Strategy Action Plan (2012-2020)	The strategy sets out plans which will influence the county's performance up until 2050, bringing together country wide strategies. Four strands run through the Worcestershire-wide strategy on climate change; • Building our low carbon economy; • Hitting tough but critical carbon targets; • Adapting to inevitable climate change; and • Empowering people to take action.	The SWDPR and SA should seek to be in accordance with, and potentially enhance, measures of the climate change strategy.
Planning for Renewable Energy in Worcestershire – Technical Research paper (2009)	The paper provides a summary of the significant issues surrounding renewable energy in Worcestershire, and provides the best guidance and practice to be used to determine the future of renewable energy.	The SWDPR and SA should consider ways to ensure the development of renewable energy in Worcestershire.
Material Assets		
EC Sixth Environmental Action Programme 2002-2012 (2002)	Natural resources and waste (in particular recycling) has been identified as one of four priority areas for Europe. The EAP requires member states to achieve 22% of electricity production from renewable energies by 2010; to significantly reduce the volumes of waste generated and the quantity going to disposal; and to give preference to waste recovery and particularly to recycling.	The SWDPR and SA should consider ways to increase renewable energy generation and significantly reduce the amount of waste going to disposal.
EC Waste Framework	Objective is the protection of human health and the environment against harmful effects caused by the	The SWDPR and SA should

Directive (1975, updated 2006)	collection, transport, treatment, storage and tipping of waste. Particular focus is placed on the re-use of recovered materials as raw materials; restricting the production of waste; promoting clean technologies; and the drawing up of waste management plans.	consider the recommended actions in this document to correctly manage waste disposal.
EC Landfill Directive (1999)	Aims to prevent or reduce as far as possible negative effects on the environment, in particular the pollution of surface water, groundwater, soil and air, and on the global environment, including the greenhouse effect, as well as any resulting risk to human health, from the landfilling of waste, during the whole lifecycle of the landfill.	The SWDPR and SA should consider the recommended actions in this document to correctly manage waste disposal.
Cabinet Office: Waste Not, Want Not, A Strategy for tackling the waste problem (2002)	A study into how England's current waste management practices could be improved to reduce the current, and growing, waste problem.	The SWDPR and SA should consider the recommended actions in this document to correctly manage waste disposal.
DEFRA Waste and Emissions Trading Act (2003)	Sets out legislative provisions for waste (including waste sent to landfill, waste management in England and Wales, and recycling plans), and about penalties for non-compliance with schemes for the trading of emissions quotas.	The SWDPR and SA should adhere to the principles of the Waste and Emissions Trading Act.
DEFRA Waste Strategy for England (2007)	Aims are to reduce waste by making products with fewer natural resources; break the link between economic growth and waste growth; re-use products or recycle their materials; and recover energy from other wastes where possible. Notes that for a small amount of residual material, landfill will be necessary.	The SWDPR and SA should consider the recommended actions in this document to correctly manage waste disposal.
DECC Energy White Paper: Meeting the Energy Challenge (2007)	Sets out Government's long term energy policy, including requirements for cleaner, smarter energy; improved energy efficiency; reduced carbon emissions; and reliable, competitive and affordable supplies. The White Paper sets out the UK's international and domestic energy strategy, in the shape of four policy goals: 1) aiming to cut CO ₂ emissions by some 60% by about 2050, with real progress by 2020; 2) maintaining the reliability of energy supplies; 3) promoting competitive markets in the UK and beyond; and 4) ensuring every home is heated adequately and affordably.	The SWDPR and SA should consider ways to reduce the impact of climate change in the districts.
DECC Energy Act (2010)	Aims include increasing the use of renewable energy; cutting the UK's carbon emissions; maintaining the reliability of the UK's energy supplies; promoting competitive energy markets in the UK; and reducing the number of people living in fuel poverty.	The SWDPR and SA should consider the recommended actions in this document to support sustainable energy in the

		districts.
DTI Micro Generation Strategy (2006)	Acknowledges that local authorities can be pro-active in promoting small-scale, local renewable energy generation schemes through "sensible use of planning policies".	The SWDPR and SA should consider promoting small scale renewable energy generation schemes.
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The sustainable Development Strategy was review in 2009 and "underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.	The SWDPR and SA should consider ways to promote sustainable development in the districts.
EU Transport White Paper. Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system (2011)	The white paper sets out a European vision for a competitive and sustainable transport system for the EU. The white paper sets out an aim to achieve a 60% reduction in greenhouse gas emissions from the European transport system whilst growing transport systems and supporting mobility. The White paper sets out ten strategic goals.	The SWDPR and SA should consider ways to support sustainable transport systems in the districts.
National Planning Policy Framework (DCLG, 2012)	The recently released NPPF seeks to streamline the planning system and sets out the Governments planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on promoting sustainable transport. The NPPF requires development plans to seek to reduce greenhouse gas emissions and congestion, reduce the need to travel, and exploit opportunities for the sustainable movement of people and goods. Developments should be located and designed where practical to: • Accommodate the efficient delivery of goods and supplies; • Give priority to pedestrian and cycle movements, and have access to high quality public transport	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.

	facilities; • Create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones; and • Incorporate facilities for charging plug-in and other ultra-low emission vehicles; and consider the needs of people with disabilities by all modes of transport.	
Department for Transport: Transport White Paper: The Future of Transport – A Network for 2030 (2004)	Sets out factors that will shape transport in the UK over the next thirty years. Also sets out how the Government will respond to the increasing demand for travel, while minimising the negative impact on people and the environment.	The SWDPR and SA should consider ways to reduce the impact of transport on the environment.
Department for Transport: Towards a Sustainable Transport System: Supporting Economic Growth in a Low Carbon World (November 2008)	Outlines five national goals for transport, focusing on the challenge of delivering strong economic growth while at the same time reducing greenhouse gas emissions. It outlines the key components of national infrastructure, discusses the difficulties of planning over the long term in the context of uncertain future demand and describes the substantial investments we are making to tackle congestion and crowding on transport networks. The National Goals for Transport are as follows: Goal 1: To reduce transport's emissions of carbon dioxide and other greenhouse gases, with the desired outcome of tackling climate change. Goal 2: To support economic competitiveness and growth, by delivering reliable and efficient transport networks. Goal 3: To promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society. Goal 4: To contribute to better safety, security and health and longer life expectancy by reducing the risk of death, injury or illness arising from transport, and by promoting travel modes that are beneficial to health. Goal 5: To improve quality of life for transport users and non-transport users, and to promote a healthy natural environment.	The SWDPR and SA should consider ways to reduce the impact of transport on the environment.
Department for Transport: The Future of Rail White Paper (2004)	Sets out a blueprint for a new streamlined structure for Britain's Railway. The proposals aim to provide a single point of accountability for the network's performance, allow closer working between track and train and provide for greater devolution of decision-making.	The SWDPR and SA should consider ways to support the future of Britain's railway system.
Department for Transport: An Evidence	Summary report of the findings of an evidence base review investigating the research base on public attitudes towards climate change and transport behaviour.	The SWDPR and SA should consider ways to encourage

Base Review of Public Attitudes to Climate Change and Transport Behaviour (2006)		support for reducing greenhouse gas emissions.
Department for Transport: National Cycling Strategy and Review (1996, reviewed 2005)	The National Cycling Strategy aims to increase cycle use for all types of journey. The Review focuses on the mechanisms established for the delivery of cycling and the effect these have had on increasing cycling rates.	The SWDPR and SA should consider ways to support cycling as a sustainable mode of transport in the districts.
Secretary of State for Transport (2013) Aviation Policy Framework	This document will fully replace the 2003 Air Transport White Paper as Government's policy on aviation, alongside any decisions Government makes following the recommendations of the independent Airports Commission. Key aims of this document includes: • To ensure that the UK's air links continue to make it one of the best connected countries in the world. This includes increasing our links to emerging markets so that the UK can compete successfully for economic growth opportunities; • To ensure that the aviation sector makes a significant and cost-effective contribution towards reducing global emissions; • To limit and where possible reduce the number of people in the UK significantly affected by aircraft noise; and • To encourage the aviation industry and local stakeholders to strengthen and streamline the way in which they work together.	The SWDPR and SA should consider ways to encourage the aviation industry in the districts.
DEFRA, Noise Policy Statement for England (NPSE) (2010)	This document seeks to clarify the underlying principles and aims in existing policy documents, legislation and guidance that relate to noise. The key aims of this document are as follows: • Avoid significant adverse impacts on health and quality of life; • Mitigate and minimise adverse impacts on health and quality of life; and • Where possible, contribute to the improvement of health and quality of life.	The SWDPR and SA should consider the recommended actions in this document to reduce the impact of noise on health and quality of life.
Environment Agency: Water for people and the environment: A Strategy for England	Looks at the steps needed, in the face of climate change, to manage water resources to the 2040s and beyond, with the overall aim of improving the environment while allowing enough water for human uses.	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include

and Wales (2009)		policies that promote the sustainable use of water resources.
EU Sustainable Development Strategy (2006)	This Strategy identifies key priorities for an enlarged Europe. This includes health, social inclusion and fighting global poverty. It aims to achieve better policy integration in addressing these challenges, and to ensure that Europe looks beyond its boundaries in making informed decisions about sustainability. The sustainable Development Strategy was review in 2009 and "underlined that in recent years the EU has mainstreamed sustainable development into a broad range of its policies. In particular, the EU has taken the lead in the fight against climate change and the promotion of a low-carbon economy. At the same time, unsustainable trends persist in many areas and the efforts need to be intensified". Sustainable development is a key focus of the EU and the strategy continues to be monitored and reviewed.	The SWDPR and SA should consider how the water environment can be protected and enhanced, and include policies that promote the sustainable use of water resources.
Strategy for Sustainable Construction (2008)	"Themes for Action" include: re-use existing built assets; design for minimum waste; aim for lean construction; minimise energy in construction; minimise energy in building use; avoid polluting the environment; preserve and enhance bio-diversity; conserve water resources; respect people and their local environment; and set targets (benchmarks & performance indicators).	The SWDPR and SA should consider ways to support sustainable construction in the districts.
HM Treasury: Barker Review of Housing Supply, Delivering Stability: Securing our Future Housing Needs (2004)	Government objectives include: to achieve improvements in housing affordability in the market sector; a more stable housing market; location of housing supply which supports patterns of economic development; and an adequate supply of publicly-funded housing for those who need it.	The SWDPR and SA should consider ways to support improvements of affordable housing in the districts.
Planning for Town Centres: Practice guidance on need, impact and the sequential approach (December 2009)	This practice guidance was intended to support the implementation of town centre policies set out in Planning Policy Statement 4: Planning for Sustainable Economic Growth (PPS4) (now replaced by PPG). It is aimed at helping those involved in preparing or reviewing need, impact and sequential site assessments.	The SWDPR and SA should consider the recommended actions in this document to plan for sustainable economic growth.
Worcestershire County Council LTP 2018 – 2030 (2017)	The Local Transport Plan is underpinned by Worcestershire County Council's Corporate Plan "Shaping Worcestershire's Future 2017-2022" with its four key priorities: • Open for Business; • The Environment;	The SWDPR and SA should adhere to the principles of the Transport Plan.

	• Children and Families; • Health and Well-being The LTP sets out issues and priorities for investment in transport infrastructure, technology and services to support all modes of transport.	
Worcestershire Highways Asset Management Strategy (2018)	The main purpose of the Strategy is to maintain the highway asset in the most effective and efficient manner to meet the corporate priority outcomes and the objectives that feed into these.	The SWDPR and SA should adhere to the principles of the Strategy
Worcestershire Rights of Way Improvement Plan	The Plan assesses how the PRow fits into current areas of work and identifies improvements to further meet county objectives.	The SWDPR and SA should seek to improve the current PRow to further meet objectives.
South Worcestershire Infrastructure Delivery Plan (2016)	The Infrastructure Delivery Plan sets out the Council's plans for supporting the delivery of infrastructure in South Worcestershire, including social and community facilities, transport and utility services. This requires joint working between key partners and delivery agencies. The plan sets out infrastructure considered necessary for delivering the plan.	The SWDPR and SA should seek to match development with infrastructure delivery.
Wychaven Cycling Strategy Supplementary Planning Guidance (SPG) (2003)	The National Cycling Strategy (NCS) was published in 1996. It required Local Planning Authorities, through planning guidance and funding mechanisms, to develop viable cycling strategies to increase the percentage of cycling trips. The objectives of having a strategy are to demonstrate what has been implemented to date, summarise relevant planning policy, provide guidelines for prospective developers and provide an indicative programme of future cycling infrastructure development.	The SWDPR should seek to be in accordance with the Cycling Strategy.
Historic Environment		
Council of Europe: Convention on the Protection of the Architectural Heritage of Europe (1985)	Aims for signatories to protect their architectural heritage by means of identifying monuments, buildings and sites to be protected; preventing the disfigurement, dilapidation or demolition of protected properties; providing financial support by the public authorities for maintaining and restoring the architectural heritage on its territory; and supporting scientific research for identifying and analysing the harmful effects of pollution and for defining ways and means to reduce or eradicate these effects.	The SWDPR and SA should consider the recommended actions in this document to protect architectural heritage in the districts.

Council of Europe: The Convention on the Protection of Archaeological Heritage (Revised) (Valetta Convention) (1992)	The convention defines archaeological heritage and identifies measures for its protection. Aims include integrated conservation of the archaeological heritage and financing of archaeological research and conservation.	The SWDPR and SA should consider the recommended actions in this document to protect archaeological heritage in the districts
DCMS Ancient Monuments and Archaeological Areas Act (1979)	An act to consolidate and amend the law relating to ancient monuments, to make provision of matters of archaeological or historic interest, and to provide grants by secretary of state to the Architectural Heritage fund.	The SWDPR and SA should consider the recommended actions in this document to protect ancient monuments and archaeological heritage in the area.
National Planning Policy Framework (DCLG, 2012)	The recently released NPPF seeks to streamline the planning system and sets out the Government's planning policies and how these should be applied. At the heart of the NPPF is presumption in favour of sustainable development. The NPPF includes guidance on conserving and enhancing the historic environment. It seeks to ensure local authorities plan recognise heritage assets as an irreplaceable resource and conserve them in a manner that reflects their significance. Planning authorities should take into account: • The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; • The wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring; and • The desirability of new development making a positive contribution to local character and distinctiveness; and opportunities to draw on the contribution made by the historic environment to the character of a place.	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.
Planning (Listed Buildings and Conservation Areas) Act (1990)	An act to consolidate certain enactments relating to special controls in respect of buildings and areas of special architectural or historic interest with amendments to give effect to recommendations to give effect to recommendations of the Law Commissions.	The SWDPR and SA should consider how to protect listed buildings and conservation areas.

English Heritage and CABI: Buildings in Context: New Development in Historic Areas (2002)	Aims to stimulate a high standard of design when development takes place in historically sensitive contexts by showing 15 case studies in which achievement is far above the ordinary and trying to draw some lessons both about design and about the development and planning process, particularly regarding building in sensitive locations.	The SWDPR and SA should consider the recommended actions in this document regarding building new homes in historically sensitive locations.
Office of the Deputy Prime minister (ODPM) Secure and Sustainable Buildings Act (2004)	Amends the Building act, and others, with regard to sustainable construction practices and conservation of historic buildings. Also states the general nature of security provisions which should be in place at the construction stage and beyond.	The SWDPR and SA should consider ways to implement sustainable construction practices into the development of new homes.
Historic England: Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment (2008)	This Historic England document sets out the framework for the sustainable management of the historic environment. This is presented under the following six headline 'principles': Principle 1: The historic environment is a shared resource Principle 2: Everyone should be able to participate in sustaining the historic environment Principle 3: Understanding the significance of places is vital Principle 4: Significant places should be managed to sustain their values Principle 5: Decisions about change must be reasonable, transparent and consistent Principle 6: Documenting and learning from decisions is essential.	The SWDPR and SA should consider the recommended actions in this document to protect the historic environment in the districts.
Historic England: Tall Buildings: Historic England Advice Note 4 (2015)	This Historic England Advice Note updates previous guidance by Historic England and CABI, produced in 2007. It seeks to guide people involved in planning for and designing tall buildings so that they may be delivered in a sustainable and successful way through the development plan and development management process. The advice is for all relevant developers, designers, local authorities and other interested parties.	The SWDPR and SA should consider the recommended actions in this document to protect heritage assets in the districts.
Historic England (2015) The Historic Environment in Local Plans, Historic Environment Good Practice Advice in Planning: 1	Practice Advice note is to provide information to assist local authorities, planning and other consultants, owners, applicants and other interested parties in implementing historic environment policy in the National Planning Policy Framework (NPPF) and the related guidance given in the National Planning Practice Guide (PPG).	Development proposed in the SWDPR should be in accordance with Historic England's advice.

Historic England (2015) Managing Significance in Decision-Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2	The purpose of this Historic England Good Practice Advice note is to provide information in relation to assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.	Development proposed in the SWDPR should be in accordance with Historic England's advice.
Historic England (2015) The Setting of Heritage Assets, Historic Environment Good Practice Advice in Planning: 3	This document sets out guidance, against the background of the National Planning Policy Framework (NPPF) and the related guidance given in the Planning Practice Guide (PPG), on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.	Development proposed in the SWDPR should be in accordance with Historic England's advice.
Historic Environment Assessment for the South Worcestershire Joint Core Strategy Area (2010).	The paper provides a strategic level historic environment evidence base for the JCS site allocations and policy DPD and Green Infrastructure strategy.	The SWDPR and SA should consider historical assets.
Landscape		
Council of Europe: European Landscape Convention (2006)	Aims to promote the protection, management and planning (including active design and creation of Europe's landscapes, both rural and urban, and to foster European co-operation on landscape issues.	The SWDPR and SA should consider the recommended actions in this document to correctly manage the rural and urban landscape in the districts.
English Heritage and CABE: Guidance on Tall Buildings (2007)	Provides advice and guidance on good practice in relation to tall buildings in the planning process and to highlight other related issues, which need to be taken into account, i.e. where tall buildings would and would not be appropriate.	The SWDPR and SA should consider the recommended actions in this document to correctly manage the planning of tall buildings in the districts.

National Planning Policy Framework (DCLG, 2012)	The NPPF states that development could seek to promote or reinforce local distinctiveness; both aesthetic considerations and connections between people and places should be considered. The NPPF also promotes the protection and enhancements of valued landscapes, giving greatest weight to National Parks and Areas of Outstanding Natural Beauty.	The SWDPR and SA should adhere to the principles of the Planning Policy Framework.
Malvern Hills AONB Management Plan (2014-2019)	The management plan sets out the key issues for the AONB, which include landscape, people, economy, recreation and support. For each of these issues, the management plan sets out policies and plan delivery actions as well as monitoring programme. It seeks to protect the AONB's tranquillity, biodiversity value, perception amongst the public and to help establish somewhere prosperous, clean, sustainable and enjoyable. The purpose of the management plan is to help manage the AONB to: • Conserve its special features; • Manage the pressures on these qualities; and • Where possible, improve the AONB for current and future generations who live in and visit the area.	The SWDPR should seek to be in accordance with the management plan and to avoid adverse impacts on the AONB. The SA should help to ensure the SWDPR does so.
Cotswolds AONB Management Plan (2018-2023)	The management plan sets out policies for management of the AONB and for the carrying out their functions in relation to it. The management plan should be recognised as 'material consideration' in adopted local plans and planning decisions. The four ambitions for the Cotswolds AONB are; • Promotion of the Cotswolds and the walking and exploring capital of England • The local design and delivery of a Cotswolds package of agri-environment payments for public good and services and rural development support. • Ensuring communities and businesses within and around the AONB identity and celebrate being part of a nationally recognised landscape • To fully explore the case for and against the Cotswolds being designated as England's next National Park.	The SWDPR should seek to be in accordance with the management plan and to avoid adverse impacts on the AONB. The SA should help to ensure the SWDPR does so.
Landscape Character Assessment (2011)	Explains the modern concepts of landscape and landscape character. Summarises the 22 landscape character types which make up Worcestershire.	The SWDPR and SA should consider landscape character.

Appendix D: Responses from statutory consultees

Habitat Regulations Assessments

Sustainability Appraisals

Strategic Environmental Assessments

Landscape Character Assessments

Landscape and Visual Impact Assessments

Green Belt Reviews

Expert Witness

Ecological Impact Assessments

Habitat and Ecology Surveys



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