

# Waste Core Strategy for Worcestershire

FIRST DRAFT SUBMISSION CONSULTATION



## Worcestershire Waste Core Strategy

The Council is preparing a Waste Core Strategy: a plan for how to manage all the waste produced in Worcestershire up to 2027. In November 2009, the Council issued an Emerging Preferred Options Consultation to invite a discussion on how we should proceed. This report is the follow up to that consultation. It sets out a detailed draft of the strategy.

September 2010

**Please note**, this is still a draft document, the Council's Cabinet have agreed that it can be released for consultation purposes but it does not represent their views or those of the Council. The Cabinet and then the Council as a whole will consider the final report after we have received and incorporated the comments people make on this report. At present however this is only a draft for discussion.

The Council is preparing a **Waste Core Strategy**: a plan for how to manage all the waste produced in Worcestershire up to 2027. In November 2009, the Council issued an **Emerging Preferred Options Consultation** to invite a discussion on how we should proceed. This report is the follow up to that consultation. It sets out a detailed draft of the strategy.

This document is a draft, but for ease and clarity of understanding the majority of this document has been phrased as though it is the completed Waste Core Strategy.

This gives you the opportunity to comment on proposed wording as well as content. We have taken account of all of the comments from previous stages and have included a commentary written in blue italics to indicate how this document has been shaped by earlier consultations and how alternatives have been considered.

This consultation is the last opportunity for you to significantly revise the strategy.

It would be very helpful to us if you could let us know if you agree with our approach and the policies we propose or, if not, why not and what you think we need to say. It would be helpful to us if you could complete the questionnaire and return it to us or fill it in online at our website ([www.worcestershire.gov.uk/wcs](http://www.worcestershire.gov.uk/wcs)).

The consultation will run from **28th September - 9th November 2010**. It is important that you reply by the 9th November 2010, so that we can fully consider your comments.

We will take your comments into account and prepare a final version of the document which will be submitted to the Secretary of State after a final round of consultation in which you will only be able to comment on whether the Waste Core Strategy is "sound". To be sound the Strategy must be justified, effective and consistent with national policy.

Please send your comments or completed questionnaires to:

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Please contact me if you need any further information or additional copies of this report or questionnaire.

You may be aware that an application for planning permission has been submitted for an Energy from Waste Plant at Hartlebury. That application will be determined in accordance with the Development Plan current at the time unless material considerations indicate otherwise. Because it has not been submitted, tested at Examination or adopted by the Council, the First Draft Submission consultation Waste Core Strategy will be given no weight in the determination of the application.

# Worcestershire Waste Core Strategy

First Draft Submission Consultation

September 2010



## Foreword

We all produce waste. It is a fact of life and it has consequences we cannot ignore. In 2008 people in Worcestershire produced about:

- 299,863t of municipal waste 2008 (Defra);
- 422,525t of commercial and industrial waste, (Environment Agency);
- An estimated 740,390t, of construction, demolition and excavation waste (Scott Wilson 2009/West Midlands Regional Planning Body).

The environmental costs of managing waste are difficult to calculate but are very wide ranging and must include traffic congestion, air pollution, the generation of greenhouse gases, soil, ground and water pollution and damage to the landscape and ecology of the County. All of which are in direct conflict with government policy to create a low carbon future.

Much of our waste is landfilled (439,145t in 2008, Environment Agency) meaning resources are effectively thrown away and ignored. The landfill tax alone on this tonnage was almost £17.6 million. The cost of transporting it and paying site owners to take it is estimated to be about £30 million. A total cost to the Worcestershire economy of about £47 million in 2008 for throwing resources away, of which at least  $\frac{3}{4}$  probably could have been re-used as a resource.

If we provide "sufficient opportunities for new waste management facilities of the right type, in the right place and at the right time" we can save much of this, recycle it and turn it into a resource. We can reduce landfilling to the absolute minimum. This would not only reduce the harmful effects of what we currently do but save resources for the future. We need to make sure that we can do so with the minimum of conflict.

The Waste Core Strategy will be one of the catalysts for this change. The planning system can and will put in place the policy framework to enable it to happen but only you, the people of Worcestershire, will make it happen.



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# Executive Summary

## The purpose of the strategy

We all produce waste. It is a fact of life that much of it is currently landfilled.

If we have the right type of waste management facilities in the right place at the right time, we can reuse, recycle or recover energy from our waste and turn it into a resource. The Waste Core Strategy is designed to make sure that there are enough opportunities for new waste management facilities in Worcestershire to be able to deal with the county's waste.

The Waste Core Strategy is a statutory "Development Plan Document" and forms part of the Development Plan for Worcestershire. The County Council is responsible for determining applications for 'county matters'<sup>1</sup>, which includes applications for waste handling, treatment and disposal. Some elements of the Waste Core Strategy will also be relevant to City, District and Borough Councils' decisions when determining planning applications for all types of development. The Waste Core Strategy will apply until 2027.

## An Overview of Waste Management in Worcestershire

The main document includes an overview of waste management in Worcestershire. In summary, waste arisings (i.e. the locations where waste is produced) broadly reflect the distribution of population and the location of industry. In general, existing waste management sites tend to be clustered in or near to towns in the north of the county with few existing waste sites in Malvern Hills District and Worcester City.

There is already a distinct hierarchy of settlements in Worcestershire and, in terms of waste management, settlements at different levels of the hierarchy perform different functions. The Strategy is based on the broad geographic hierarchy below.

Box 1. Broad Geographic Hierarchy <sup>2</sup>	
1.	Worcester and its expansion areas, Kidderminster area and Redditch
2.	Bromsgrove, Droitwich and Malvern
3.	Evesham and Pershore
4.	Tenbury Wells and Upton-upon-Severn
5.	Rural areas

<sup>1</sup> Town and Country Planning (Prescription of County Matters) (England) Regulations 2003. Including applications for "the use of land, the carrying out of building, engineering or other operations, or the erection of plant or machinery used or proposed to be used, wholly or mainly for the purposes of recovering, treating, storing, processing, sorting, transferring or depositing of waste" and any operations or uses ancillary to the purpose.

<sup>2</sup> For further detail, see background document "Allocating areas of search". Please note, the hierarchy does not naturally accord with district boundaries; for example, growth with Worcester and its expansion areas will not all be within Worcester City. This is recognised in the approach taken by Worcester City, Malvern Hills and Wychavon District Councils in their approach to the



Every waste stream is different and is subject to different pressures and influences. In Worcestershire there is currently a 'capacity gap', meaning that current waste arisings within the county are greater than the capacity to treat them. We think that we need to enable the following:

**Table 1: Capacity Gap and land requirements to 2035**

(Totals are cumulative over the lifetime of the plan)

		2010	By 2015/6	By 2020/21	By 2025/6	By 2034/5
<b>Capacity Gap</b> <b>Total</b> (all waste streams) tpa	Municipal Waste	398,139	414,817	456,496	473,175	503,197
	Commercial & Industrial Waste	426,008	489,724	562,341	645,104	842,671
	Construction & Demolition Waste	363,649	268,062	268,062	268,062	268,062
	<b>Total</b>	<b>1,187,796</b>	<b>1,172,603</b>	<b>1,286,899</b>	<b>1,386,341</b>	<b>1,613,930</b>
<b>Total land requirement for the lifetime of the Waste Core Strategy rounded to the nearest 0.5 ha</b>		<b>36.5-47.5</b>	<b>36.0-47.0</b>	<b>39.5-51.5</b>	<b>42.5-55.5</b>	<b>49.5-64.5</b>

**Note:** Land areas rounded to the nearest 0.5 hectares.

Calculations of Worcestershire's existing landfill void space and likely remaining lifespan (see background document "Landfill") indicate that there will be sufficient capacity in existing landfills for the life of the Strategy. There is therefore no requirement to identify new landfill capacity.





## The vision and objectives

The Waste Core Strategy provides a picture of what we hope waste management in Worcestershire will be like in 2027. This gives us a sense of direction. From this, we have developed objectives and a set of policies to help us to achieve them.

### THE VISION

By 2027 waste production in Worcestershire will be minimised and what is produced will be regarded as a source of useful material to be reused. So far as possible this resource will be managed in Worcestershire itself, in accordance with the principles of sustainable development and the waste hierarchy. There will be sufficient waste management capacity in Worcestershire to enable waste to be treated as a resource and support the local economy without compromising the County's distinctive environmental, social and cultural assets. These facilities will be located where they minimise the need to move waste by road and where they are best suited to serve the needs of local communities and the local economy. They will be designed to adapt to and mitigate climate change and will reflect the characteristics of the local area.

### THE OBJECTIVES

- WO1** To base our decisions on the principles of sustainable development and the need to reduce greenhouse gas emissions and mitigate climate change.
- WO2** To protect and enhance the county's natural resources, environmental, social, cultural and economic assets and the character and amenity of the local area.
- WO3** To do everything possible to minimise waste production and make driving waste up the waste hierarchy the basis for waste management in Worcestershire.
- WO4** To ensure that the waste implications of all new development in Worcestershire are taken into account.
- WO5** To address the "Capacity Gap" between how much waste management capacity we have and what we need over the plan period to 2027.
- WO6** To safeguard existing waste management facilities from incompatible development.
- WO7** To reduce waste miles by road where possible.
- WO8** To encourage communities in Worcestershire to take responsibility for their own waste and involve all those affected as openly and effectively as possible.
- WO9** To develop a waste management industry that contributes positively to the local economy.

### THE POLICIES



## The policies

**WCS 1: Location of Waste Management Development:** To make sure that the right type of development happens in the right place the Waste Core Strategy identifies **areas of search** for waste management development. These are the locations that we think would be most suitable for waste management facilities; those with marked with a ♦ would be most suitable for larger facilities.

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Shire Business Park</li> <li>2. Berkeley Business Park</li> <li>3. Great Western Business Park</li> <li>4. Buckholt Business Centre</li> <li>5. Warndon Business Park</li> <li>6. Newtown Road Industrial Estate</li> <li>7. Shrubhill Industrial Estate</li> <li>8. Sherriff Street Industrial Estate</li> <li>9. Diglis Industrial Estate</li> <li>10. Venture Business Park</li> <li>11. Weir Lane Industrial Estate</li> <li>12. Ball Mill Top Business Centre</li> <li>13. Top Barn Business Centre</li> <li>14. Ball Mill Quarry Complex</li> <li>15. Hartlebury Trading Estate ♦</li> <li>16. Waresley Quarry</li> <li>17. Gemini Business Park</li> <li>18. Oldington Trading Estate</li> <li>19. Birchen Coppice Trading Estate</li> <li>20. Foley Business Park</li> <li>21. Hoo Farm Industrial Estate</li> <li>22. Foley Industrial Estate</li> <li>23. Former British Sugar Site</li> <li>24. Vale Industrial Estate</li> <li>25. Greenhill Industrial Estate</li> <li>26. Ikon Trading Estate</li> <li>27. Blackstone Quarry</li> <li>28. East Moons Moat</li> <li>29. Park Farm Industrial Estate</li> </ol> | <ol style="list-style-type: none"> <li>30. Pipers Road Park Farm</li> <li>31. Washford Industrial Estate</li> <li>32. Kingfisher Enterprise Park</li> <li>33. Lakeside Industrial Estate</li> <li>34. Weights Farm Business Park</li> <li>35. Ravensbank Business Park</li> <li>36. Buntsford Hill Industrial Estate</li> <li>37. Buntsford Gate Business Park</li> <li>38. Silver Birches Business Park</li> <li>39. Bromsgrove Technology Park</li> <li>40. Pinches Quarry</li> <li>41. Stanley Evans Quarry</li> <li>42. Berry Hill Industrial Estate ♦</li> <li>43. Former Coal Yard, Union Lane</li> <li>44. Stonebridge Cross Business Park</li> <li>45. Hampton Lovett Industrial Estate ♦</li> <li>46. Enigma Business Park</li> <li>47. Spring Lane Industrial Estate</li> <li>48. Link Business Centre</li> <li>49. Blackmore Business and Technology Park</li> <li>50. Merebrook Industrial Estate</li> <li>51. Vale Business Park ♦</li> <li>52. Four Pools Industrial Estate</li> <li>53. Keytec7 Business Park ♦</li> <li>54. Racecourse Road Trading Estate</li> <li>55. Pershore Trading Estate</li> <li>56. Hill and Moor Landfill Site</li> <li>57. Upton upon Severn Industrial Estate</li> <li>58. Tenbury Business Park</li> </ol> |
|---|---|

The policy also sets out how proposals outside the areas of search should be dealt with.



**WCS 2: Ensuring sustainable waste management development:** sets out the environmental, social and economic considerations that need to be balanced to make sure that new waste management development contributes towards the aims of sustainable development.

**WCS 3: Managing waste from new development:** sets out how all new development must consider the reduction, reuse and recycling of waste. It looks at the construction, occupation and demolition stages of all developments.

**WCS 4: Managing the impact of new waste management development:** sets out how proposals for new waste management facilities must consider the ways that their operations might affect natural resources, environmental, social, cultural and economic assets and the character and amenity of the county and how any impacts can be minimised.

**Specialised Waste Management Facilities** (policies applicable to specific types of facilities):

**WCS 5: Energy from Waste:** The Waste Core Strategy promotes the reuse and recycling of resources. Where this is not possible the recovery of energy from residual waste will be expected. Recovering energy from the remaining waste that cannot be recycled is an important part of the waste hierarchy.

**WCS6: Landfill:** The Waste Core Strategy aims to reduce the amount of waste going to landfill, but there will still be a small amount of waste that needs to be disposed of. This policy sets out when this will be allowed and the extra criteria that planning applications for landfill will need to meet.

**WCS 7: Managing the impact of surrounding uses:** This policy looks at safeguarding existing waste management facilities.

### Deliverability and Implementation

The Council is committed to monitoring the Waste Core Strategy in order to achieve the vision and strategic objectives it sets out and has developed a monitoring schedule considering each of the objectives in the Waste Core Strategy.

In order to be effective, the Waste Core Strategy must be deliverable. It is considered that all objectives could be delivered through the policy framework.



# 1. Introduction

## The purpose of the Waste Core Strategy

- 1.1. The Waste Core Strategy is a new type of plan, designed to secure spatial planning rather than just the regulation and control of land uses. Spatial planning demands a wide, integrated approach that aims to promote outcomes that deliver economic, social and environmental objectives together over time. As a consequence it covers a wide range of, sometimes technical, issues. This level of detail is necessary to ensure the document is precise and unambiguous. We have tried to reduce jargon to a minimum but there is a glossary in **Appendix 1**.
- 1.2. The Waste Core Strategy is a statutory "Development Plan Document" and forms part of the Development Plan for Worcestershire and forms an essential part of the Worcestershire Waste Development Framework. It applies to the whole county, as shown in **Figure 1: Area of Coverage**. It supersedes the saved Structure Plan policies for waste (see **Appendix 2**) and will be used by the County Council, City, District and Borough councils to determine planning applications.
- 1.3. The County Council is responsible for determining applications for 'county matters'<sup>3</sup>, which includes applications for waste handling, treatment and disposal. However all development has waste implications and some elements of the Waste Core Strategy will also be relevant to City, District and Borough

councils' decisions when determining planning applications for all types of development.

- 1.4. The Waste Core Strategy is the plan for Worcestershire's waste. It sets out how all the different kinds of waste produced by everyone who lives, works, or visits the county will be managed between now and 2027. It will inform and guide waste management development by the private and public sector and encourage and stimulate businesses involved in the recycling and re-use of resources. Specifically, it provides for all the following kinds of Directive Waste<sup>4</sup> produced in, or imported into, Worcestershire:
  - Municipal Solid Waste (MSW),
  - Commercial and Industrial (C and I) Waste,
  - Hazardous Waste and
  - Construction and Demolition (C and D) Waste.

It does not address non-Directive Agricultural Waste, such as crop residues and animal dung, or mineral waste where this is dealt with within the quarry or gravel pit where it is produced.

<sup>3</sup> Town and Country Planning (Prescription of County Matters) (England) Regulations 2003. Including applications for "the use of and, the carrying out of building, engineering or other operations, or the erection of plant or machinery used or proposed to be used, wholly or mainly for the purposes of recovering, treating, storing, processing, sorting, transferring or depositing of waste" and any operations or uses ancillary to the purpose.

<sup>4</sup> Waste as defined under Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste: "waste" shall mean any substance or object in the categories set out in Annex I of this directive which the holder discards or intends or is required to discard;



**1.5.** The Waste Core Strategy does not set out how you must deal with your waste or where you must take it to be treated or disposed of, but makes sure that there are sufficient opportunities for you and the waste management industry to address all of the current and predicted future waste arisings in the County up to 2027. Because some wastes can only be treated at specialist facilities, economies of scale mean these are located in centralised locations, including those outside Worcestershire. The Strategy enables sufficient facilities within the county to collect and transfer all those wastes to specialist management facilities.

**1.6.** The Strategy predicts how much waste is likely to arise over the period up to 2027 and how much capacity will be needed to manage it, where it will be located and when. These predictions, the nature and source of the wastes produced and the technologies to manage them are all likely to change, so the Strategy is designed to be flexible. It identifies a range of suitable locations, and criteria to assess other locations which are put forward, and enables different technologies to deal with all types of waste.

**1.7.** The Waste Core Strategy should complement rather than duplicate the pollution control regime, with planning authorities working under the assumption that the relevant

pollution control regime will be properly applied and enforced<sup>5</sup>. Wherever possible, developers are encouraged to submit applications for planning permission to the County Council and applications for pollution control permits to the Environment Agency in parallel. Developers should discuss their proposals with both the planning and pollution control authorities.

**1.8.** The council has two distinct responsibilities, as a waste disposal authority (relating to the Joint Municipal Waste Management Strategy) and as a waste planning authority (relating to the Waste Core Strategy). These are covered by different statutory regulations and policy requirements. The two elements are conducted quite separately. The reviewed Joint Municipal Waste Management Strategy deals with how municipal waste should be managed. Within this context the Waste Core Strategy sets the policy framework by which all waste management facility developments must be assessed, including those brought forward from the reviewed Joint Municipal Waste Management Strategy.

**1.9.** For the present, we intend the Waste Core Strategy to apply until 2027<sup>6</sup>. The council's integrated waste management contract is currently being renegotiated and extended in 5 year periods. We will consider the implications of any changes which arise from any extensions to it as part of our monitoring processes and will consider if the strategy needs revising accordingly.

<sup>5</sup> Planning Policy Statement 23: Planning and Pollution Control (2004)  
<sup>6</sup> This will cover a 15 year period from adoption (expected 2012), in line with national policy.



## The process

- 1.10.** The Waste Core Strategy has been shaped in consultation with communities, businesses and other organisations. Formal consultation was undertaken on the Refreshed Issues and Options report in September - December 2008 and the Emerging Preferred Options report in November 2009 - February 2010, and more informal targeted consultation has been undertaken throughout. Almost every waste site in the County has been visited during the preparation of the strategy to ensure that local concerns were addressed. Full details of the consultations undertaken and the ways in which comments were taken into account can be found in the "Summary of Waste Core Strategy Pre-Submission Consultations (Regulation 30)", which is available on the Council's website ([www.worcestershire.gov.uk/wcs](http://www.worcestershire.gov.uk/wcs)).
- 1.11.** We have taken account of all the comments from previous stages and this consultation is the last opportunity for you to significantly revise the strategy. We intend to respond to your comments as quickly as possible, refer it to Councillors for approval and if they approve, to publish the draft submission early in 2011. You will then have six weeks to make comments on the 'soundness' of the strategy and then we intend to submit the final Strategy to the Secretary of State for Examination. He will appoint an independent Inspector to assess the 'soundness' of the report. Only the Inspector decides what he will consider in

detail and who will be invited to contribute.

- 1.12.** Sustainability Appraisals (SA) have been undertaken at Refreshed Issues and Options and Emerging Preferred Options stages and a SA has been undertaken on this report. The SA has informed and shaped the process throughout<sup>7,8</sup>, and the final submission will be subject to a further final SA. Habitats Regulation Assessments<sup>9</sup> (HA) have also informed the process to date and a further assessment will accompany the final submission.
- 1.13.** We are now asking for your comments on this *First Draft Submission Document*. Although we will consult on the final version in early 2011, it is government policy that we should try to address people's concerns before that stage; this will be our best opportunity therefore to make significant changes before it is submitted to the Secretary of State. You can comment by completing the questionnaire. Comments will also be accepted in writing to either using the contact details inside the front cover.
- 1.14.** We have produced a summary document which gives the key points and you will be able to answer some of the consultation questions from reading this summary but others can only be answered after reading the full document.

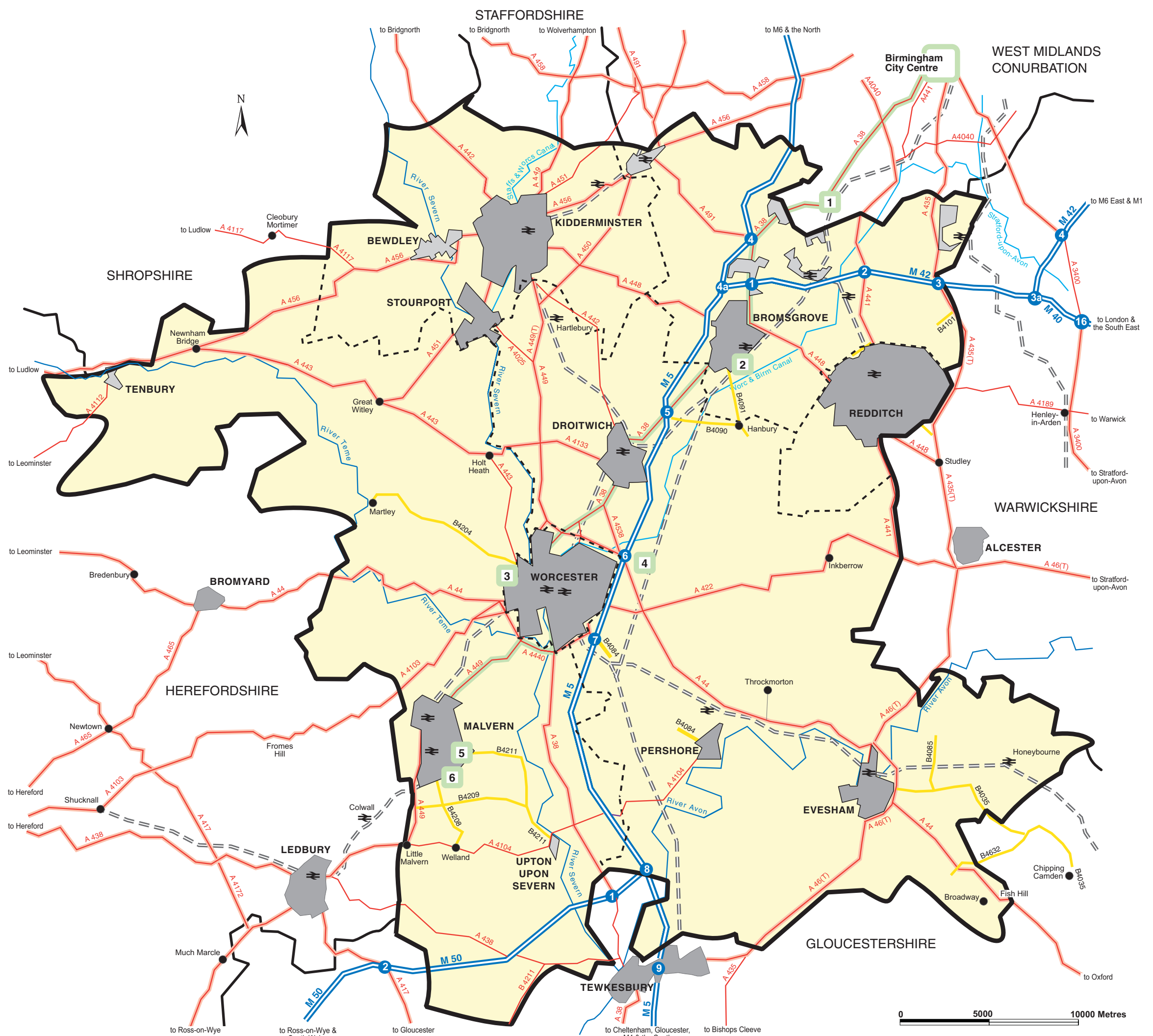
<sup>7</sup> Initial Sustainability Appraisal of Issues and Options for Waste Core Strategy for Worcestershire: April 2009

<sup>8</sup> Sustainability Appraisal of Emerging Preferred Options for the Waste Core Strategy for Worcestershire: November 2009

<sup>9</sup> Habitats Regulations Appraisal of the Waste Core Strategy for Worcestershire : August 2009

# Waste Core Strategy

## Figure 1: Area of Coverage



- Principal Urban Areas / Urban Settlements
- Other Settlements

### Strategic Highway Network

- Motorways
- Motorway Junction
- Other Principal Roads
- Lorry Routes (see note)
- B Roads used as Lorry Routes

- Railways
- Rail Stations
- Major Rivers
- Canals
- Worcestershire County Boundary
- District Boundary

- Central Technology Belt
- Central Technology Belt Locations

- Birmingham City Centre Locations**
- Aston University
  - University of Birmingham
  - Birmingham City University
  - Birmingham Science Park Aston
  - Birmingham Research Park
  - University Science Park Pebble Mill
  - Queen Elizabeth Hospital Birmingham
- 1 Longbridge Technology Park
  - 2 Bromsgrove Technology Park
  - 3 University of Worcester
  - 4 Worcestershire Technology Park (Proposed)
  - 5 Malvern Hills Science Park
  - 6 QinetiQ

**Note:** Lorry Routes - This information was taken from Worcestershire Advisory Lorry Route Map dated 2006

July 2010

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## 2. Setting the Context

### Q1 (pg2 of the questionnaire):

Does the overview of waste management in Worcestershire adequately cover the main issues influencing the County?

If not please include details.

### An Overview of Waste Management in Worcestershire

*The overview of waste management in Worcestershire (previously the Spatial Portrait) has been refined following comments made in response to the Emerging Preferred Options consultation. It now includes more detail relating to the climate change, sustainable transport, the County's environmental and historic assets and the waste management industry in Worcestershire.*

**2.1.** The County of Worcestershire (see **Figure 1: Area of Coverage**) has a population of 557,600<sup>10</sup> and covers an area of 173,529 ha. There are six District, City and Borough Councils in Worcestershire: Bromsgrove; Malvern Hills; Redditch; Worcester City; Wychavon; and Wyre Forest. Worcestershire is part of the West Midlands region and adjoins the South West region.

### Environment

**2.2.** Worcestershire's landscape is one of the most diverse in Britain. It spans the boundary between the ancient landscapes of the north and west of Britain and the planned landscapes associated with much of Central England, with a combination of geology, topography, soils, tree cover, settlement patterns and land use that has produced 22

significantly different rural landscape types. In addition, the Malvern Hills area of outstanding natural beauty (AONB) and the Cotswolds AONB are partly within the County. The European Geoparks Association has designated the west of the county as part of the Abberley and Malvern Hills Geopark. The council has produced a Landscape Character Assessment<sup>11</sup> of these features and a web tool to enable applicants and Local Planning Authorities to identify the defining characteristics of any particular site and to assess how proposals would relate to them.

**2.3.** The contrast of hard rocks to the north and west and softer rocks in the central and southern areas gives Worcestershire the appearance of a shallow basin surrounded by a ridge of higher ground, forming the catchment of the River Severn and its tributaries the Teme, Avon and Stour. Land drainage and flooding issues are important influences on development.

<sup>10</sup> ONS mid year estimate 2008

<sup>11</sup> <http://www.worcestershire.gov.uk/cms/environment-and-planning/landscape-character-assessment.aspx>





- 2.4.** Approximately 10% of the land area of Worcestershire is at risk of flooding. This area includes at least 9,146 properties. Flooding affects every town in the county and will significantly affect where development can take place. Current compliance with Water Framework Directive specification for water quality is poor in some of the county's rivers and there is some potential for deterioration if the location of new growth is not properly controlled.
- 2.5.** It is equally possible that water shortages could frustrate development, including waste management, over the life of the Strategy. Customer security of water supplied by Severn Trent Water is ranked 20th out of 23 (where 23rd is the poorest performance) in England and Wales<sup>12</sup>.
- 2.6.** Worcestershire has a diverse and rich historic environment which encompasses all those material remains that our ancestors have created in the landscapes of town and countryside. It includes all below and above-ground evidence including buildings of historic and architectural interest. With over 22,000 historic assets currently recorded on the county Historic Environment Record, of these only a small fraction are formally designated, with 135 conservation areas, 6,800 Listed Buildings, and 235 Scheduled Ancient Monuments. All of these various elements contribute strongly to the County's distinctiveness and character, and there remains a constant potential for further unrecorded heritage

assets to be recognised anywhere in the County. A Historic Landscape Characterisation is in preparation to enable historic and archaeological features to be considered in a similar way to the Landscape Character Assessment process.

- 2.7.** Worcestershire encompasses the southern limit of many northern plant and animal species and the northern limit of species found in the south and so is exceptionally rich biologically. There are 111 SSSI's in the county. Worcestershire also has over a quarter of the UK's resource of unimproved neutral grassland habitat. There are two SACs (European designated Special Areas of Conservation) in the County and five other European protected sites within 15km of the County boundary.

### Economy

- 2.8.** 71% of the population of Worcestershire live in urban areas, principally Worcester, Redditch, Kidderminster, Stourport-on-Severn, Bromsgrove, Malvern, Droitwich and Evesham, with over one-sixth of the population living in Worcester. Some towns, notably Bewdley, Pershore, Upton and Tenbury, provide a traditional market town role, serving an extensive rural hinterland. Together with Stourport and Evesham, these towns are likely to be a focus for work to assist rural regeneration.

<sup>12</sup> Ofwat "Security of Supply 2006-07 report [http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Attachments/ByTitle/SecuritySupply\\_06-07.pdf/\\$FILE/SecuritySupply\\_06-07.pdf](http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Attachments/ByTitle/SecuritySupply_06-07.pdf/$FILE/SecuritySupply_06-07.pdf)



- 2.9.** At 78%, employment in Worcestershire is above the regional average (71%)<sup>13</sup>. Employment in the County is predominantly urban based, with retail, distribution and hotels, public administration, health and education services employing almost half of the workforce. Textiles, clothing, chemicals and other manufacturing are also locally important. The towns in the north of the county have traditionally relied on manufacturing however in Bromsgrove and Kidderminster, the collapse of the car and carpet industries respectively has weakened the local economies. Redditch, by comparison, has retained a more mixed, more robust employment base. Food-related industries are important in the southern half of the County. Worcester, Malvern and to a lesser degree Droitwich have large distribution, research and professional and educational sectors.
- 2.10.** Agriculture dominates the use of land in the County. Only 1% of the West Midlands is Grade 1 Agricultural Land Quality and virtually all of this is in Worcestershire and Herefordshire<sup>14</sup>. The greatest part of the County is in productive agricultural use, most distinctively horticulture, particularly orchards and market gardening.
- 2.11.** Bromsgrove, Droitwich and Malvern form part of the Central Technology Belt, proposed between Longbridge and Malvern. The concept arose as part of the former regional economic strategy, its status is unclear at present but it is now

being considered as part of the county economic development strategy (see **Figure 1**). The Belt was originally devised as a multi organisational initiative to attract development, particularly high technology manufacturing or research activities along a corridor across the county to move the local economy away from a reliance on motor manufacturing and related industries towards new sectors, notably, medical technologies and healthcare, advanced materials, transportation technologies and digital media. It is very likely that the concept, if not its original form will remain.

- 2.12.** Waste management is estimated to contribute £95.9 million per year to the economy of Worcestershire<sup>15</sup>. About 12,000 people work in the waste sector in the west midlands<sup>16</sup>, with another 1,250 people employed in "sewage and refuse disposal, sanitation and similar activities" in Worcestershire<sup>17</sup>. This is a modest number, but is expected to rise by 2020<sup>18</sup>, even without any impetus from the Waste Core Strategy. With this increase waste management is likely to have a growing role in future "green" employment in the county.

<sup>13</sup> Worcestershire County Economic Assessment 2009-2010.

<sup>14</sup> Agricultural Land Classification (ALC) Statistics, DEFRA, [www.defra.gov.uk](http://www.defra.gov.uk)

<sup>15</sup> Gross value added (GVA) based on number of employees in Sewerage, Collection of non-hazardous waste, Collection of hazardous waste, Treatment and disposal of non-hazardous waste, Treatment and disposal of hazardous waste, Dismantling of wrecks, Recovery of sorted materials and Remediation activities and other waste management services in Worcestershire in 2007.

<sup>16</sup> Energy and Utility Skills Labour Market Investigation 2006 and Census of Population 2001. EU Skills AACS LMI March 2001.

<sup>17</sup> Annual Business Inquiry, Worcestershire County Council. Note that the West Midlands and Worcestershire figures are not directly comparable due to the use of different categories.

<sup>18</sup> Annual Business Inquiry, Worcestershire County Council.



## Transport

- 2.13.** The River Avon is navigable throughout the County and the River Severn as far north as Stourport-on-Severn. The River Severn is currently used for freight transportation between Ryall and Ripple Quarries, water transportation can therefore be commercially viable in the county. The canal network is extensive and connects to systems to the north, south and east of the County. There are however some limitations on vessel size due to locks on or between the canals and there is very little likelihood of increased freight traffic on the county's canals in the foreseeable future.
- 2.14.** The strategic rail network within Worcestershire has strong links to the north and south of the County which could be utilised for the transportation both within the county and with the surrounding area, however there is very little spare freight capacity and the development of new stations or railheads will not be easy.
- 2.15.** River barriers significantly influence road travel within Worcestershire; the main strategic transport routes in the County, notably the M5 and the Birmingham to Bristol Railway, are markedly north-south and river crossing points are often congested. Motorway links to the M42 and M50 do however mean that long distance movements into, out of and across the County are easily possible<sup>19</sup>. This said, local road congestion is a major constraint on growth in many parts of the county.
- 2.16.** At present all the County's waste is transported by road.

## Climate Change

- 2.17.** Worcestershire produces significant volumes of greenhouse gas, around 5.3mt of CO<sub>2</sub> per annum<sup>20</sup>. At 9.7 tonnes/head, emissions are higher than the West Midlands regional figure (9.1 tonnes/head).
- 2.18.** In Worcestershire the most likely impacts from climate change are an increased risk of subsidence in areas with clay soils and more likelihood of extreme weather such as flooding events<sup>21</sup> and higher wind speeds. Some areas are also likely to experience increased outdoor fire risk.<sup>22</sup>
- 2.19.** As a result of climate change we should expect warm wetter winters as well as hotter drier summers. This means that during the summer months the possibility of water shortages increases. Over half of public water supply in Worcestershire is provided from groundwater sources. Increases in housing numbers and the predicted increase in water usage per person per day will put further pressure on water supply in Worcestershire.
- 2.20.** Seasonal variations in temperature and precipitation are also likely and could impact on waste management activities, affecting decomposition rates of waste. As such the processes involved in and design of some waste treatment methods may change over the life of the Strategy to reflect this.

<sup>19</sup> Worcestershire's Local Transport Plan 2006-2011 <http://worcestershire.whub.org.uk/ltp-2006/wcc-transport-ltp-final-2006-2011.pdf>

<sup>20</sup> Environment Agency 2007, <http://www.environment-agency.gov.uk/>.

<sup>21</sup> Flood risk is dealt with in more detail in WCS2.

<sup>22</sup> See "Planning for Climate Change in Worcestershire: Technical Research Paper" for more details of anticipate Climate Change effects in the County.



## Waste Management

**2.21.** Waste arisings (i.e. the locations where waste is produced) broadly reflect the distribution of population and the location of industry in the County. In general, existing waste management sites tend to be clustered in or near to towns in the north of the County with few existing waste sites in Malvern Hills District and Worcester City. The most marked exceptions to this are civic amenity sites, which are found in or near to all towns in the County. At present (2010), the following waste facilities are operational in the County:<sup>23</sup>

- 12 Household Waste Sites,
- 22 Waste Transfer Stations,
- 2 Material Reclamation Facilities,
- 15 Metal Recycling Sites (10 of which manage End of Life Vehicles),

- 7 Composting Sites,
- 7 Physical Treatment Sites,
- 3 Thermal Treatment Sites,
- 13 Landfill sites or infilling operations, and
- 155 Sewage treatment works.

**2.22.** The size of sites in the county ranges from 0.013ha to over 13 hectares, however over 2/3 of sites in the County are smaller than 0.5 hectares in size. Only 22% of sites are larger than 1 hectare.

**2.23.** Table 2 shows the average throughput of waste sites per hectare. It does not show that of household waste sites due to the large variations seen. All averages are approximate.

**Table 2: Average throughput per hectare**

Facility Type	Throughput per hectare (tpa)
Waste Transfer Station/ Material Reclamation Facilities	23,500
Metal Recycling Sites	15,000
End of Life Vehicles	2,000
Composting	18,000
Physical Treatment	27,000

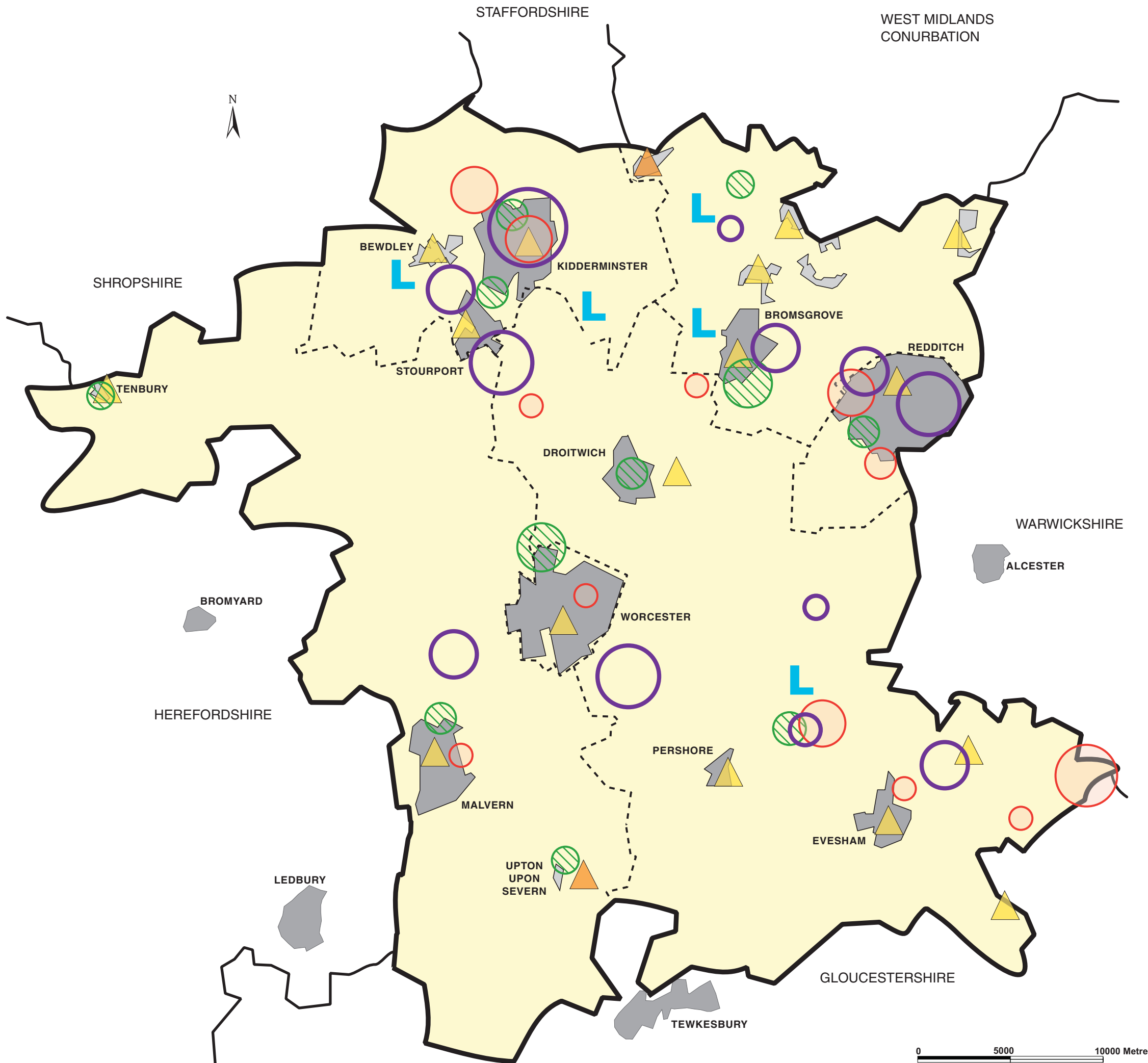
<sup>23</sup> As at 28th July 2009



- 2.24. The median average throughput of all waste sites in Worcestershire is 17,500 t/Ha/per annum, with the mean average<sup>24</sup> being 33,597 t/Ha/per annum.
- 2.25 **Figure 2** illustrates current waste management capacity, foci of waste arisings and resource demand relating to recyclables, organics and energy. It gives an indication of the current distribution of capacity. It is however only illustrative in nature. Exact locations and more details regarding site size, the materials handled and the issues currently faced are set out in Worcestershire Waste Core Strategy Background Document "Waste Sites in Worcestershire". Sewage treatment capacity is not shown on this figure.
- 2.26. There is already a distinct hierarchy of settlements in Worcestershire and, in terms of waste management; settlements at different levels of the hierarchy perform different functions. Current arisings, resource demand<sup>25</sup> and existing waste management capacity influence the role of each settlement and this is likely to be reinforced by expected patterns of future growth. A picture of the functions of each settlement for waste management is set out in **Box 2 over page**.

<sup>24</sup> The median average is the numeric value separating the higher half of a sample (in this case the average tonnes per hectare at different waste facility types) from the lower half. The median can be found by arranging the sample in order from lowest value to highest value and picking the middle one. If there is an even number of observations, then there is no single middle value; the median is then defined to be the mean of the two middle values. The mean average can be calculated by adding all the values and dividing by the number of values.

<sup>25</sup> Refers to the demand for resources from organic waste recovery (e.g. composting), recycling and energy recovery.



# Waste Core Strategy

**Figure 2: Focus of arisings, resource demand and capacity diagram**

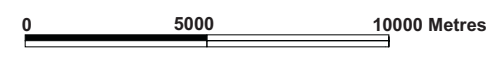
- Principal Urban Areas / Urban Settlements
- Other Settlements
- Worcestershire County Boundary
- District Boundary
- Focus of Arisings
- Focus of Arisings + Resource Demand
- Household Waste Recycling Capacity
- Waste Transfer Capacity
- Treatment Capacity
- Landfill Capacity

**Capacity in tonnes per annum**

- up to 5,000
- 5,001 - 15,000
- 15,001 - 45,000
- 45,001 - 135,000
- more than 135,001

July 2010

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**Q2 (pg2 of the questionnaire):** Do you agree with the Broad Geographic Hierarchy?  
If not please include details.

## Box 2. Broad Geographic Hierarchy<sup>26</sup>

### 1. Worcester and its expansion areas, Kidderminster area and Redditch

#### **Worcester:**

Areas in and around Worcester have a high concentration of waste arisings. Roughly a third of new employment land in Worcestershire up to 2026 is expected to be in this area. Current waste management capacity is limited to sorting and transfer facilities, with no treatment facilities. Worcester provides a focus in demand for recycling, recovery and organics.

#### **Kidderminster area (Kidderminster, Stourport and Bewdley):**

With links to the West Midlands conurbation and traditional manufacturing industries, waste arisings are currently concentrated in and around these towns. Growth is expected in this area and this is likely to result in a modest increase in arisings. This area has the greatest concentration of waste management facilities and plays an important role for waste management in the county. It has a balance of facilities for transfer, treatment and disposal and is also one of the areas with the greatest recycling, recovery and organics resource demand.

#### **Redditch:**

With links to the West Midlands conurbation and traditional manufacturing industries, waste arisings are currently concentrated in and around Redditch. Significant growth is expected in this area and this is likely to result in a modest increase in arisings. Following Kidderminster, this has the greatest concentration of waste management facilities in the county, with a mixture of facilities for transfer and treatment. Redditch also has one of the highest levels of recycling, recovery and organics resource demand.

### 2. Bromsgrove, Droitwich and Malvern

Arisings in the vicinity of these settlements are substantial and the pattern of distribution reflects the presence of industrial uses on the edge of the towns. As they form part of the Central Technology Belt, future employment is likely to be in high technology manufacturing or research activities which are not typically high waste producers. They could give rise to specialist waste arisings, requiring specific treatment methods. Treatment facilities are limited but resource demand is significant.

<sup>26</sup> For further detail, see background document "Identifying areas of search"



## Box 2. Broad Geographic Hierarchy continued

### 3. Evesham and Pershore

The distribution of arisings reflects Evesham and Pershore's functions as major market towns. Whilst they still form a significant focus, arisings are lower in these market towns than in the other district centres in the upper levels of the geographic hierarchy. Future growth in these areas is not expected to be significant. Evesham has some waste treatment and transfer capacity. In Pershore there is one large site which includes landfill, composting, transfer and a household recycling centre. There is a further composting facility near to Pershore. Resource demand in Evesham and Pershore is significant for the south of the County.

### 4. Tenbury Wells and Upton-upon-Severn

Commercial and industrial arisings and resource demand in these towns is higher than in the surrounding rural areas, they are modest in comparison to other settlements in the hierarchy. There is little waste management capacity in Tenbury Wells and Upton-upon-Severn and some future capacity may be needed to deliver local services and meet the needs of these areas.

### 5. Rural areas

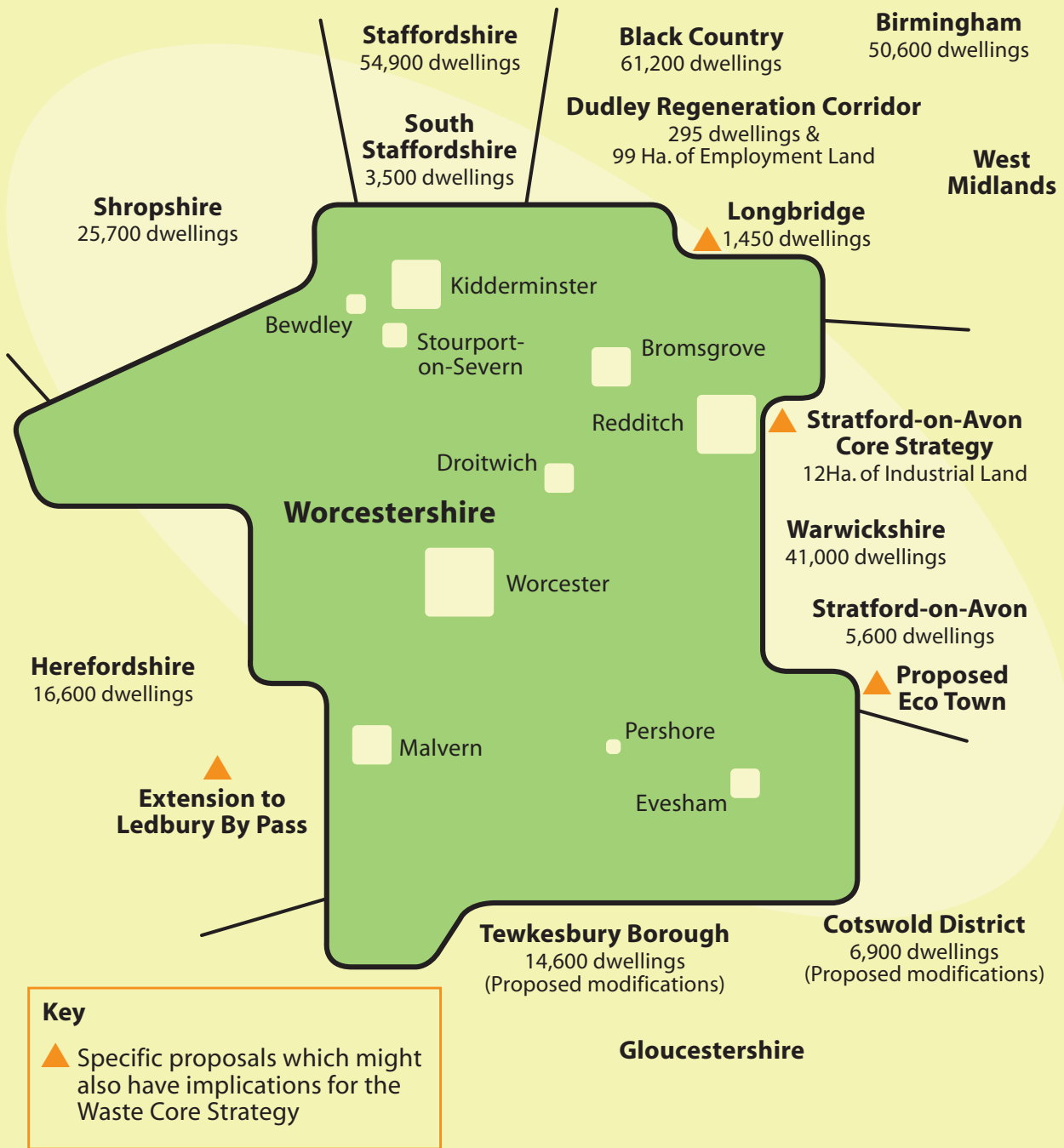
In general, arisings in rural areas are lower than in the settlements in the hierarchy. Some facilities exist in rural areas but these are relatively dispersed. The main rural waste activity is landfill, but other activities make use of disused agricultural land and buildings, mineral workings and disused airfields. These areas currently have limited waste management capacity and low levels of resource demand. New facilities may be appropriate should specific need arise.

2.27. The District Councils in, and County, District and Unitary councils adjoining, the county are still developing their Core Strategies but the general pattern of development is expected to maintain and reinforce the current distribution of population and employment up to at least 2026. **Figures 2a and 2b** on the following pages show

anticipated changes diagrammatically. There is no evidence to date to suggest that the existing settlement hierarchy in Worcestershire will be changed by any of these proposals.



# Figure 2a: Levels of Housing Growth proposed up to 2026 in emerging RSS for the West Midlands and South West around Worcestershire\*



\* The Secretary of State has rescinded the RSS these figures will be revised, they are however the best available at the time of writing

# Figure 2b: Draft District Core Strategy Proposals Preferred Options for Housing Growth for 2006 -2026\*

These proposals are draft and subject to change and should only be used to give an indication of location and scale of growth

- Principal Urban Areas / Urban Settlements
- Other Settlements
- County and District Boundary
- Railways
- Rail Stations
- Major Rivers
- Canals
- 'A' Road
- Motorways
- Motorway Junction
- Green Belt

**South Worcestershire (24,500)**  
Preferred Options Report (Nov 2008)

- Preferred Option Housing Growth
- Alternative Option Housing Growth

**Bromsgrove District Council (2,100)**  
Draft Document (Oct 2008)

- Preferred Option Housing Growth
- Longbridge AAP - min. of 700 homes

**Wyre Forest District Council (3,400)**  
Preferred Options (Jan 2009)

- Preferred Option Housing Growth

**Redditch District Council (6,600)**  
Preferred Draft (Oct 2008)

- Preferred Option Housing Growth

Footnote: The White Young Green study into 'The future growth implications of Redditch', second stage report has concluded that there are more sustainable locations outside of the Borough than the three previously designated ADRs and is therefore not able to meet the 3,300 dwellings required by WMRSS within its own boundaries. Redditch Borough is able to accommodate 2,243 within its own administrative boundaries leaving about 4,350 to be accommodated outside the Borough. The Second Stage report, 2008 states that the most suitable locations for the future growth, outside but adjacent to Redditch Borough are Bordesley Park and Foxlydiate.

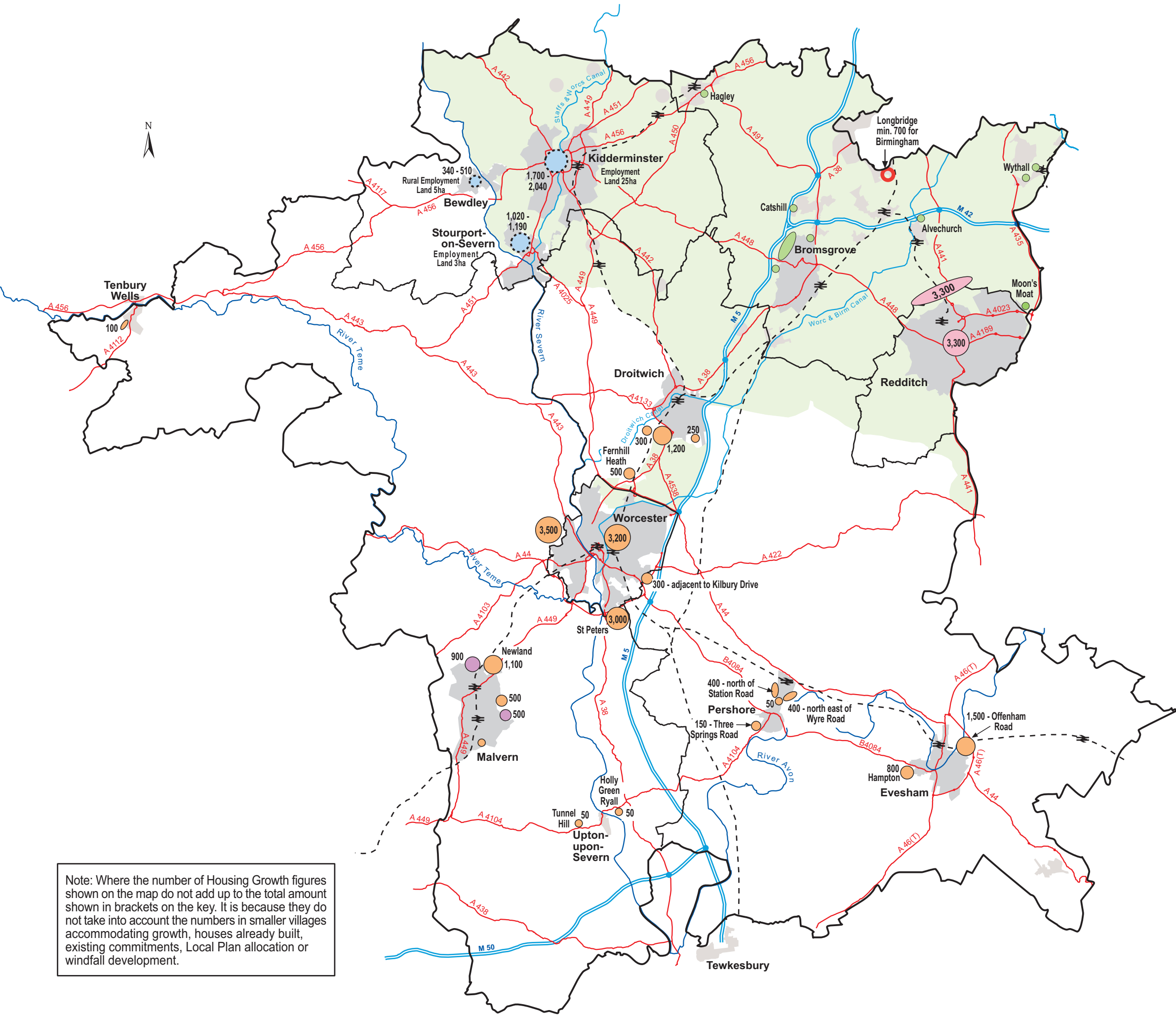
Note: Where District Council Preferred Option Housing Growth figures are known they are shown on the map

\* The Secretary of State has rescinded the RSS these figures will be revised, they are however the best available at the time of writing

Note: Where the number of Housing Growth figures shown on the map do not add up to the total amount shown in brackets on the key. It is because they do not take into account the numbers in smaller villages accommodating growth, houses already built, existing commitments, Local Plan allocation or windfall development.



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**2.28.** The hierarchy does not naturally accord with district boundaries; for example, growth with Worcester and its expansion areas will not all be within Worcester City. This is recognised in the approach taken by Worcester City, Malvern Hills and Wychavon District Councils in their approach to the South Worcestershire Joint Core Strategy.

*Over half of respondents to the emerging preferred options consultation supported the Broad Geographic Hierarchy (previously Spatial Hierarchy). This has now been refined and forms part of the Overview of Waste Management in Worcestershire.*

**2.29.** The kinds of waste shown in **Table 3** arise in Worcestershire<sup>27</sup>.

**Table 3. Summary of waste types in Worcestershire**

Type of waste	Description	Current arisings
Municipal Solid Waste (MSW)	Mainly waste collected from households and disposed of by the County Council. For the purposes of the Strategy this includes Herefordshire and Worcestershire's MSW due to the way the waste is managed.	357,626 <sup>28</sup>
Commercial and Industrial Waste (C&I)	Business waste, collected and managed by the private sector.	841,102 <sup>29</sup>
Construction, demolition and excavation	Waste from building works and other related operations, managed by the private sector.	510,555 <sup>30</sup>
Hazardous waste	Waste defined as needing special management because difficult to handle or potentially polluting or dangerous.	46,464.35 <sup>31</sup>
Agricultural waste (Directive waste only)	On farm, animal and plant wastes currently fall outside the scope of the legal definition of controlled waste in England and Wales	3,500t <sup>32</sup>
Clinical and radioactive waste	Clinical waste is the term used to describe waste produced from healthcare and similar activities that may pose a risk of infection or may prove hazardous to any person coming into contact with it. Radioactive wastes from non-nuclear industries is mostly produced by hospitals, pharmaceutical companies, education and research establishments.	1,000 <sup>33</sup> (clinical waste)  Defra estimate arisings of radioactive waste in Worcestershire to be less than 10m <sup>3</sup> per year.

<sup>27</sup> See background document "Arisings and Capacity"  
<sup>28</sup> 2008/9 Defra Municipal Waste Statistics (Herefordshire and Worcestershire)  
<sup>29</sup> 2010/11 projection using Waste Strategy for England methodology from 2002/3 SWMA baseline.  
<sup>30</sup> 2010 projection from RSS Phase 2 Future Capacity Study.  
<sup>31</sup> 2008 data from Environment Agency, Hazardous Waste Interrogator. See background document "Hazardous waste"  
<sup>32</sup> WMRA estimate for Worcestershire, 2003, see background document "Agricultural waste"  
<sup>33</sup> See background document " Waste arising from healthcare and related activities: clinical wastes and low level radioactive wastes "



## Additional capacity requirements

### Q3 (pg 2-3 of the questionnaire):

Do you agree with the figures relating to arising and capacity gap?

If not please include details.

Further details relating to alternative methods are set out in the background document "capacity and arisings"

*During the Emerging Preferred Options consultation limitations in data were acknowledged but there was general support for the projections used to estimate additional capacity requirements. These figures have been updated to take into account more recent data. The land area requirements have also been re-calculated following questions raised in the previous consultation relating to average throughput on local sites. We have therefore considered a range of assessments of how the arisings for each of the major streams should be defined, what projections of future arisings are likely and how much land would be needed to manage these arisings<sup>34</sup>. These are available in the background document "Arisings and capacity". Responses to the Refreshed Issues and Options consultation suggested that we should extend our current assumptions and projections for the period up to 2034/5. The tables below have been developed in the light of this.*

**2.30.** Every waste stream is different and is subject to different pressures and influences. In Worcestershire there is currently a 'capacity gap', meaning that waste arisings within the county are greater than the capacity to treat them. Based on the projections of future municipal, commercial and industrial and construction and demolition arisings and current treatment capacity in Worcester the capacity gap has been identified in **Table 4**<sup>35</sup>. This is based on the concept of equivalent self-sufficiency<sup>36</sup> for waste arisings from Worcestershire, but when considering municipal waste this also includes figures for Herefordshire due to the way in which this waste is managed.

**2.31.** In order to realise equivalent self-sufficiency we must provide enough waste management capacity to manage the amounts of waste identified in **Table 4**. To provide for this capacity, it has been calculated<sup>37</sup> that, on average, between 25,000-32,500 tonnes per annum is managed per hectare and these figures have been used to calculate the land requirement shown in **Table 4**.

**2.32.** It is expected that there will be increased capacity requirements for treatment and transfer of all the major waste streams over the life of the Strategy and beyond (**Figure 3**) with two exceptions:

- i) the requirements for C&D waste transfer capacity are slightly lower in 2015/6 than 2010 due to the assumption that more development will initially be concentrated on previously developed land and that such sites will generate considerable volumes of C&D waste but that over time more new development will take place on greenfield sites and the C&D wastes produced from redevelopment will decrease and
- ii) Hazardous waste arisings are projected to be static over the life of the strategy;<sup>38</sup> there is already a surplus of actual hazardous waste capacity over arisings in the county<sup>39</sup> and a further surplus of unused, licensed capacity. Worcestershire is a net importer of hazardous waste<sup>40</sup>. There is no capacity gap for hazardous waste in Worcestershire over the life of the strategy.<sup>41</sup>

<sup>34</sup> See background paper "Arisings and capacity gap"

<sup>35</sup> Full details of the methodology are set out in background document "Arisings and capacity".

<sup>36</sup> Equivalent self-sufficiency means Worcestershire's capacity to treat waste that arises in the County; however cross-boundary movements are inevitable as specialised facilities exist, often benefitting from economies of scale. As such, some facilities perform a regional or even national function and the concept of equivalent self-sufficiency allows imports and exports of waste to be taken into account.

<sup>37</sup> See background document "Arisings and capacity"

<sup>38</sup> Waste Strategy 2007

<sup>39</sup> 2008 data from Environment Agency, Hazardous Waste Interrogator

<sup>40</sup> See background paper "Hazardous Waste"

<sup>41</sup> "Phase 2: Future Capacity Requirements, WMRA/Shropshire CC 18/11/2004"



**Table 4: Capacity Gap and land requirements to 2035**  
(Totals are cumulative over the lifetime of the plan)

		2010	By 2015/6	By 2020/21	By 2025/6	By 2034/5
<b>Biological treatment<sup>42</sup> capacity gap</b>	MSW tpa	6,755	11,973	47,197	49,449	53,502
	C&I tpa	34,080.6	39,177.9	44,987.3	51,608.3	67,413.7
	C&D tpa	-	-	-	-	-
	<b>Total tpa</b>	<b>40,835.6</b>	<b>51,150.9</b>	<b>92,184.3</b>	<b>101,057.3</b>	<b>120,915.7</b>
	<b>Equivalent land area (ha)</b>	<b>1.26-1.63</b>	<b>1.57-2.05</b>	<b>2.84-3.69</b>	<b>3.11-4.04</b>	<b>3.72-4.84</b>
<b>Physical treatment, thermal treatment<sup>43</sup> and recovery<sup>43</sup> capacity gap</b>	MSW tpa	361,384	372,844	379,299	393,726	419,695
	C&I tpa	391,927.10	450,545.80	517,353.40	593,495.40	775,257.00
	C&D tpa	259,749	191,473	191,473	191,473	191,473
	<b>Total tpa</b>	<b>1,013,060.1</b>	<b>1,014,862.8</b>	<b>1,088,125.4</b>	<b>1,178,694.4</b>	<b>1,386,425</b>
	<b>Equivalent land area (ha)</b>	<b>31.17-40.52</b>	<b>31.23-40.59</b>	<b>33.48-43.53</b>	<b>36.27-47.18</b>	<b>42.66-55.46</b>
<b>Waste sorting and transfer<sup>44</sup> capacity gap</b>	MSW tpa	30,000	30,000	30,000	30,000	30,000
	C&I tpa	0	0	0	0	0
	C&D tpa	103,900	76,589	76,589	76,589	76,589
	<b>Total tpa</b>	<b>133,900</b>	<b>106,589</b>	<b>106,589</b>	<b>106,589</b>	<b>106,589</b>
	<b>Equivalent land area (ha)</b>	<b>4.12-5.36</b>	<b>3.28-4.26</b>	<b>3.28-4.26</b>	<b>3.28-4.26</b>	<b>3.28-4.26</b>
<b>Total capacity gap (all streams)</b>	MSW tpa	398,139	414,817	456,496	473,175	503,197
	C&I tpa	426,007.7	489,723.7	562,340.7	645,103.7	842,670.7
	C&D tpa	363,649	268,062	268,062	268,062	268,062
	Haz	0	0	0	0	0
	<b>Total tpa</b>	<b>1,187,795.7</b>	<b>1,172,602.7</b>	<b>1,286,898.7</b>	<b>1,386,340.7</b>	<b>1,613,929.7</b>
	<b>Equivalent land area (ha)</b>	<b>36.55-47.51</b>	<b>36.08-46.90</b>	<b>39.60-51.48</b>	<b>42.66-55.45</b>	<b>49.66-64.56</b>
<b>Total land requirement for the lifetime of the Waste Core Strategy rounded to the nearest 0.5 ha</b>		<b>36.5 - 47.5</b>	<b>36.0 - 47.0</b>	<b>39.5-51.5</b>	<b>42.5 - 55.5</b>	<b>49.5 - 64.5</b>

**Note:** Land areas rounded to 2 decimal places, any differences between individual land areas and totals and cumulative totals is due to rounding.

We have calculated the capacity gap up to 2034 both to give some indication of possible future needs and because this is the estimated end date of the JMWMS.

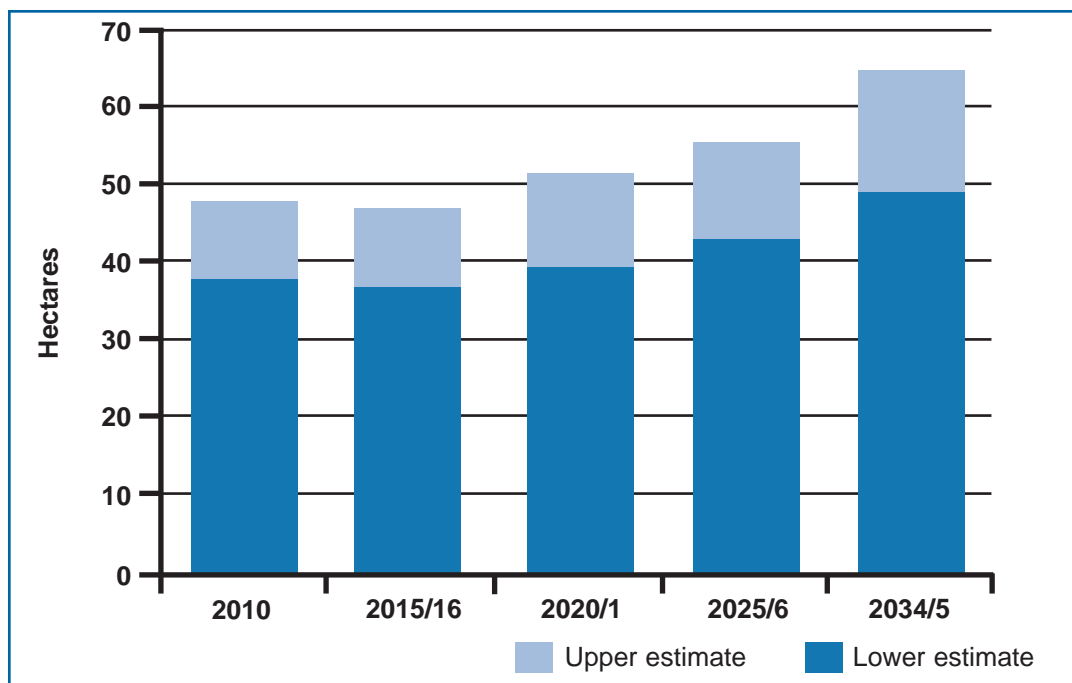
<sup>42</sup> See background document "Resource recovery from biodegradable waste: composting and anaerobic digestion"

<sup>43</sup> See background document "Types of waste management facilities" and "Recovering energy from waste: thermal and biological treatment technologies"

<sup>44</sup> See background document "Waste transfer stations"



**Figure 3. Cumulative land requirements for the lifetime of the Waste Core Strategy**



**2.33.** Calculations of Worcestershire's existing landfill void space and likely remaining lifespan (see background document "Landfill") indicate that there will be sufficient capacity in existing landfills for the life of the Strategy. There is therefore no requirement to identify new landfill capacity. We recognise that there are no hazardous waste landfill facilities in the county. There is however surplus hazardous waste landfill capacity in the West Midlands and the region is a net importer of hazardous waste. There is no evidence that the industry considers that there is, or will be, any demand for such landfill locally. It is therefore unlikely that any proposals for new landfill capacity will be needed.

**2.34.** The revised Joint Municipal Waste Management Strategy identifies the need for some form of treatment facility to manage about 250,000tpa of residual MSW. Officers also

anticipate the need for replacement, upgrading and improvements to at least five of the County's Household Recycling Centres (Upton upon Severn, Bromsgrove, Worcester West, Tenbury Wells and Kidderminster). These have been included in the calculations for MSW capacity.

**2.35.** A capacity gap has also been identified for waste water treatment in order to accommodate future development. Bromsgrove will need much higher waste water treatment capacity to meet the demands of planned expansion, and Redditch, Worcester and Kidderminster will also need some increased capacity. New locations for waste water treatment infrastructure will be identified by the District Councils in their Core Strategies as part of infrastructure needed for new development. Any proposals will need to be assessed against the policies in the Waste Core Strategy.

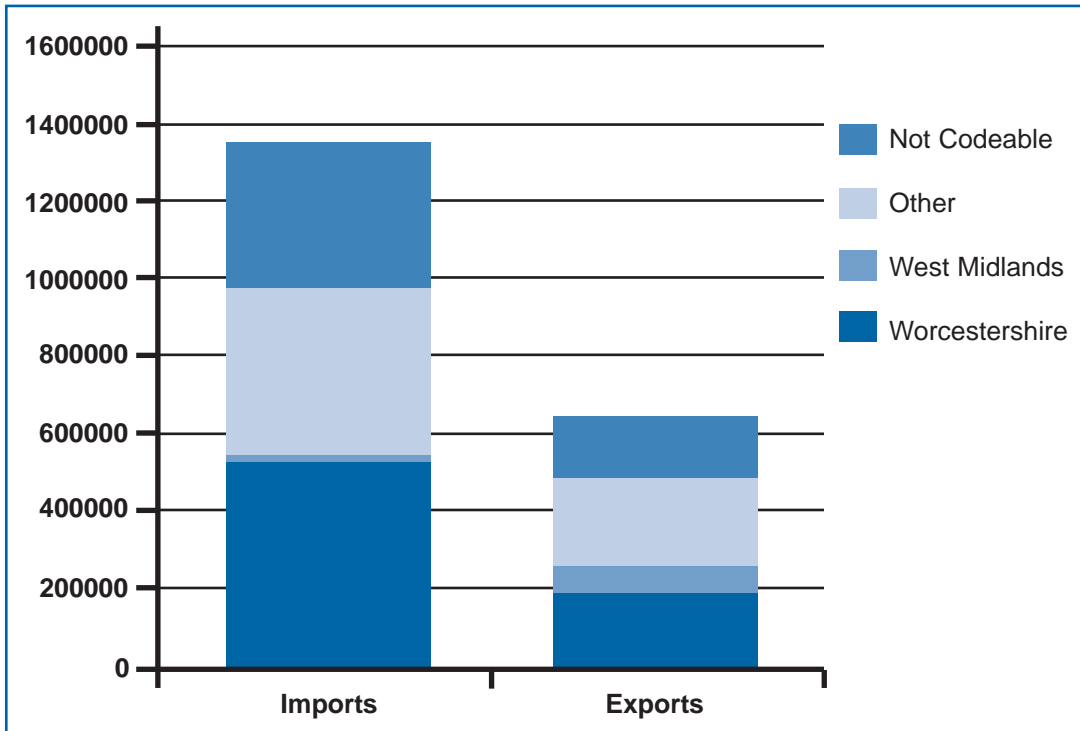


2.36. No capacity gap has been identified for clinical waste<sup>45</sup>, non-nuclear and nuclear industry low-level radioactive wastes<sup>46</sup>. Whilst a capacity gap is not identified for many of these types of wastes, facilities may be required to meet a national or regional need and should be assessed against the policies of the Local Development Framework as they come forward.

**Imports and Exports**

2.37. In addition to wastes produced in Worcestershire, some waste is also imported, and other waste is exported<sup>47</sup>. Overall, the evidence is that the amount of waste imported exceeds that exported from the County (see Figure 4).

**Figure 4: Overall levels of waste imports and exports in Worcestershire**



<sup>45</sup> See background document "Waste arising from healthcare and related activities: clinical wastes and low level radioactive wastes"  
<sup>46</sup> See background document "Waste arising from healthcare and related activities: clinical wastes and low level radioactive wastes"  
<sup>47</sup> See background document



- 2.38.** Cross-boundary movements of waste are inevitable and reflect the normal workings of the economy. There are significant movements of C&I and to a much lesser extent, (because it is usually high volume and low value material) C&D waste within and beyond the county boundary.
- 2.39.** Municipal waste is managed jointly with Herefordshire. Neither county has large scale arisings and managing the waste produced jointly enables operates to be more efficient and economical than if they had been managed separately. Due to this arrangement, movements of municipal waste between the two counties are expected to occur for the lifetime of the integrated Municipal Waste Management contract (currently 2027). and this has been taken into account in the development of the strategy.
- 2.40.** There is nothing unusual about cross-boundary movements, some waste materials are moved, bought and sold like any other commodity. Some materials are difficult to manage and specialised facilities exist, often benefiting from economies of scale, to manage particular kinds of waste. As a result, some facilities perform a regional or even national function.
- 2.41.** We can identify some fairly clear trends relating to waste movements<sup>48</sup>. Significant imports come from the south-west with these being larger than from any other region. Within the West Midlands, the most significant volume of imports is from Herefordshire. **(see Figure 5)**
- 2.42.** The pattern of exports from the County is more diffuse with some materials sent to every region in England, the most significant being the south west and the north east. The largest movements out of the county to those within the West Midlands are to Herefordshire, Warwickshire and the West Midlands conurbation. **(see Figure 6)**
- 2.43.** It is thought that metals and hazardous waste are drawn into the West Midlands conurbation, where there is a large capacity to manage these wastes, and that MSW for landfill, green waste and C&D waste travel out of the conurbation into the shire counties<sup>49</sup>.

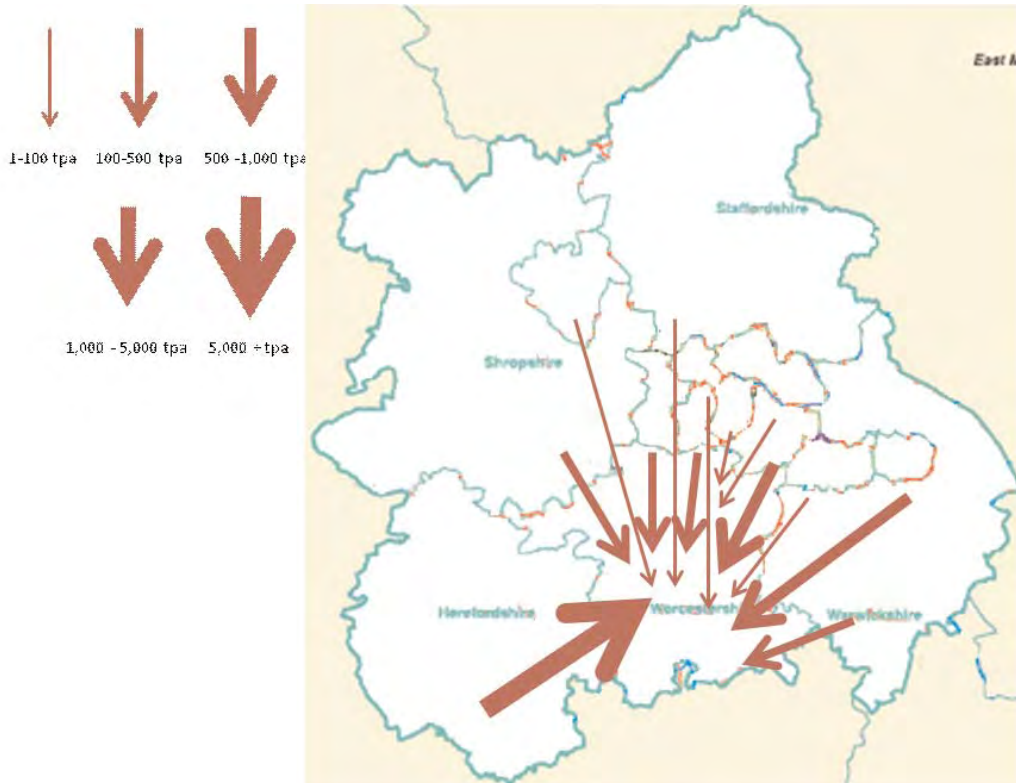
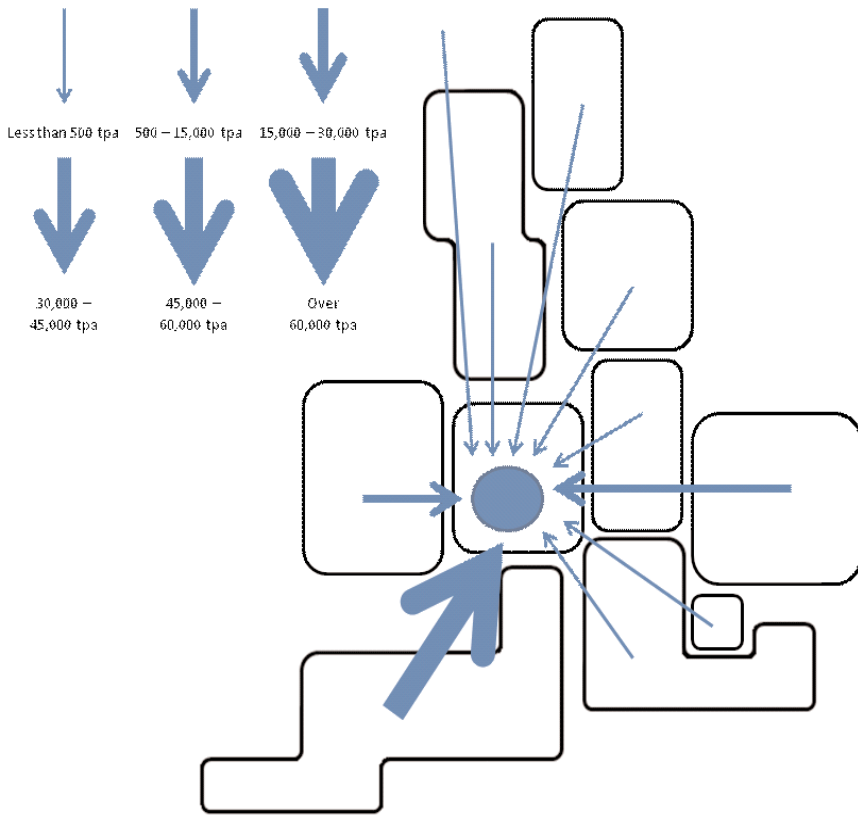
<sup>48</sup> Data about sub regional movements of waste is very poor however. We believe that the best source of information is the Environment Agency Waste Data Interrogator (WDI) and we have based our assumptions about waste movements on it. We acknowledge however that it is imperfect, considerable volumes of both imports and exports are recorded as "not codeable" by the Agency and their origin and destination cannot be identified. Some movements, but it is not clear how much, are just within and beyond the county.

<sup>49</sup> Waste Background Paper; WMRA. Technical submission to the Phase 2 review of the WMRSS



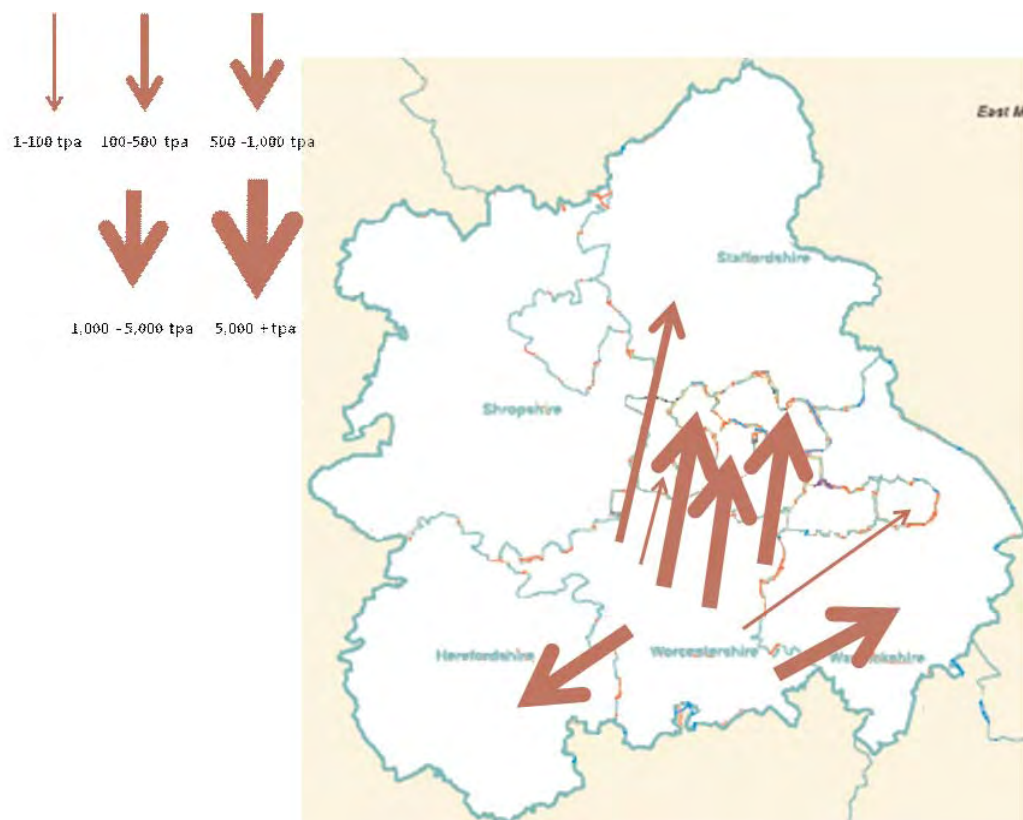
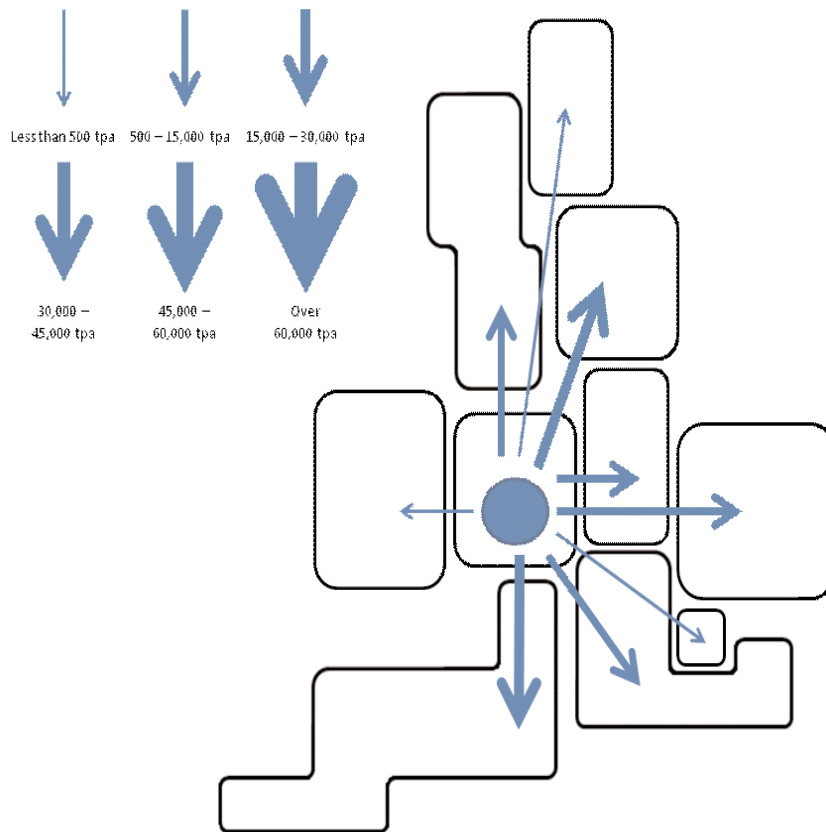


**Figure 5: Waste imports to Worcestershire by Region and by West Midlands Authority**





**Figure 6: Waste exports from Worcestershire by Region and by West Midlands Authority**





## Policy and Contextual Issues

### Q4 (p3 of questionnaire):

Are there any additional national or local policies that should be considered in the development of the Waste Core Strategy?

If so please include details.

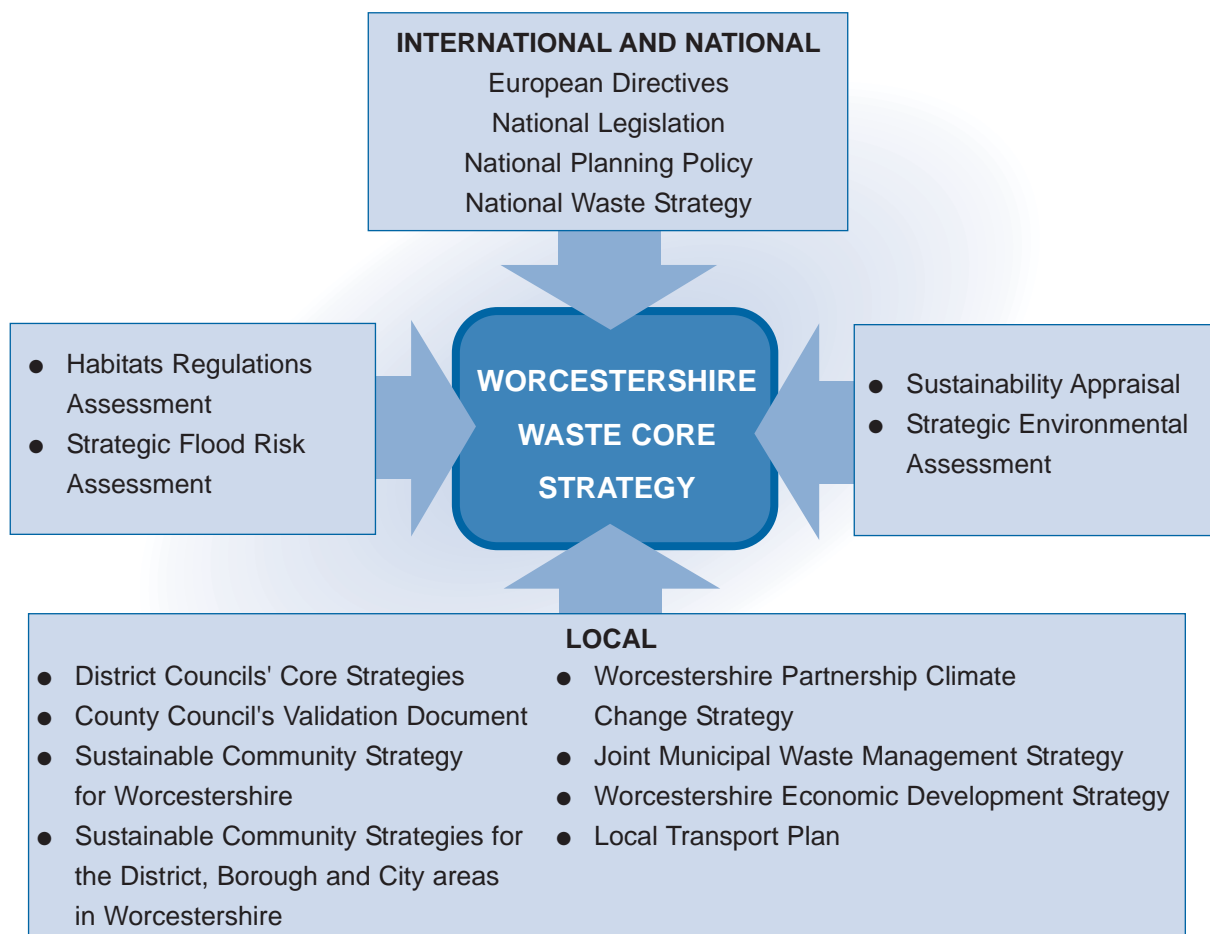
2.44. What we do locally is guided by policies prepared internationally, (e.g. European Union Directives), nationally, (e.g. Planning Policy Statements and the National Waste Strategy) and locally, by the County, City, Borough and District Councils in Worcestershire and their partnership organisations. The diagram below (**Figure 7**) shows some of the most important policy drivers<sup>50</sup>.

2.45. Government policy requires that the Waste Core Strategy should accord with but not repeat or reformulate national policy. Planning Permission will only be granted where it is in accordance with the development plan (including the relevant district council Development Plan Documents), relevant national policy and other material considerations.

2.46. Any applications submitted must provide sufficient information to comply with the Council's proposed *Validation Document* (to be adopted).

<sup>50</sup> See Waste Core Strategy Background Document "Links with Districts' and neighbouring Local Authorities' plans and strategies" for discussion of how other plans and strategies have influenced the Waste Core Strategy.

**Figure 7: Relevant Plans and Policies**





*All references to the Regional Spatial Strategy (RSS) have been removed. The Secretary of State has stated his intention to revoke the Regional Spatial Strategies. The procedures he has undertaken to date mean that it is no longer part of the Development Plan. The Government Office for the West Midlands (GOWM) has confirmed that where the technical information on which the RSS reflected national policy, it is still valid and is a material consideration in the preparation of Core Strategies. Some of the background evidence on which the RSS was based informed our own thinking on waste issues. We do not anticipate that the abolition of the RSS itself will require us to make significant changes to the Waste Core Strategy.*

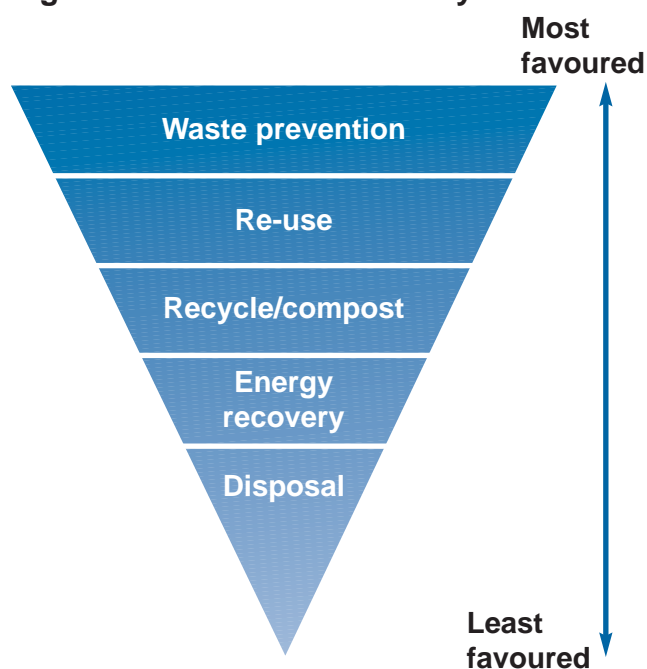
2.47. In addition to these broad policy headings specific legislation and policies apply to different elements of waste management. The Waste Core Strategy has taken account of these and a range of other less specific issues which set the context for what it needs to address and how. Detailed consideration has been made in a series of Background Documents that have been produced to develop an evidence base around these issues and to inform the direction of the Waste Core Strategy (see [www.worcestershire.gov.uk/wcs](http://www.worcestershire.gov.uk/wcs)).

*Following comments made in response to the Emerging Preferred Options consultation this document includes more explicit consideration of the Waste Hierarchy and the relevant Sustainable Community Strategies.*

### Waste Hierarchy

2.48. One of the key principles from national policy is that waste should be managed as a resource. Many waste management facilities have a key role in resource efficiency, facilitating the movement of waste up the waste hierarchy (**Figure 8**) and enabling resource recovery, either through re-use or recycling of waste, or through energy recovery. Re-use and recycling of materials reduces the amount of waste being sent to landfill and lessens the requirement for virgin materials for new products, in turn reducing greenhouse gas emissions<sup>51</sup>.

**Figure 8: The Waste Hierarchy**



Source: Defra Waste Strategy for England 2007

<sup>51</sup> Landfill gas contains carbon dioxide and methane. Methane (CH<sub>4</sub>) is a greenhouse gas that remains in the atmosphere for approximately 9-15 years and is over 20 times more effective in trapping heat in the atmosphere than carbon dioxide (CO<sub>2</sub>).



- 2.49.** All of the Sustainable Community Strategies in Worcestershire and in adjoining authorities make waste prevention, and the promotion of re-use and recycling priorities in their areas.
- 2.50.** Based on national and local drivers, the discussion in the Waste Core Strategy background papers and the outcomes of our consultations, we have identified that we must address the need to:
- manage waste as a sustainable resource;
  - protect human health and amenity;
  - enhance the environment generally and Worcestershire's special characteristics in particular;
  - support waste minimisation and the integration of waste management with other development proposals;
  - ensure that we have enough waste management capacity;
  - consider how to identify areas suitable for waste management purposes;
  - consider how to assess our progress in achieving the strategy;
  - focus development in Worcestershire, with the larger towns acting as strategic locations for growth, the market towns maintaining local importance, and some development in rural areas;
  - contribute to the *Sustainable Community Strategy*, in particular through tackling the challenges of climate change, enhancing the County's environment and contributing to economic success which is shared by all; and

- contribute to the county *Economic Development Strategy*, in particular to foster high technology development generally and the growth of the Central Technology Belt through Worcestershire from Longbridge, through Bromsgrove, Droitwich, Worcester and Malvern.

**2.51.** In the short term we anticipate that the economy will be unsteady<sup>52</sup>. In the longer term waste production and the technologies available to manage it may be unpredictable and we anticipate that new methods of waste management and new technologies will emerge during the life of the Strategy. In addition Climate Change is expected to become an ever more pressing issue and may generate unexpected pressures.

**2.52.** We assume that waste management will become more of a political priority and that legislation will require more waste streams to be addressed, that re-use and recycling will be increasingly economically attractive and landfilling increasingly unattractive to industry, that it will increasingly be conducted in a professional and responsible way. We also assume that reducing our use of natural resources, recycling materials and recovering energy from those that can not be recycled will be increasingly attractive as a business opportunity and more acceptable to the public as a vital part of moving towards a more sustainable existence.

<sup>52</sup> We have based our assumptions on future changes within the West Midlands and the economy on "Drivers for Change" (AWM Forum for the Future.)



**2.53.** We have therefore developed the Waste Core Strategy with an eye to flexibility and we must not frustrate innovation or market opportunity in what we do. Reviewing the progress of the Waste Core Strategy will be an important part of this.

### **Consistency and coherence**

**2.54.** This is the first Development Plan Document (DPD) to be prepared by the County Council and no other Core Strategies have been adopted in Worcestershire at the time of writing. Consistency between this and other core strategies can only be tested as others are examined and adopted. During the course of the plan all local authorities within and adjoining the county were consulted and where relevant the content of their emerging plans has been taken into account.



### 3. Our Vision and Objectives

**Q5 (p3 of the questionnaire):**  
Do you agree with the vision? Does it respond to local issues? Should any alternatives be considered? If no please make suggestions for addressing these issues.

**Q6 (pg 3-4 of the questionnaire):**  
Do you agree with the objectives? If no or do not know, please state why you feel this way and propose further suggestions for addressing these issues.

*Following comments made in response to the Emerging Preferred Options consultation the Vision has been refined to make it more specific, with greater detail on what Worcestershire will be like in terms of its treatment of waste. In addition more explicit reference has been made to the Sustainable Community Strategies of the County.*

#### The vision

- 3.1. The vision aims to translate the issues, needs and constraints set out in the Overview of Waste Management in Worcestershire into a meaningful vision for the Waste Core Strategy.
- 3.2. We need a picture of what waste management will mean in Worcestershire in 2027, to understand what we need to do to achieve it and give us objectives to aim for; policies to achieve it; and ways of assessing our progress in meeting it.
- 3.3. Whilst the vision can be ambitious and inspiring, it needs to be realistic. It has been informed by national and local priorities and has been developed to take into account the unique characteristics of

Worcestershire and the consultations we have undertaken. It attempts to capture the thoughts of everyone involved so that it is acceptable and useful to the people who live in, work in and visit Worcestershire<sup>53</sup>.

3.4. To fully reflect the communities' priorities in Worcestershire, the Sustainable Community Strategies of the County have been a fundamental consideration in informing the vision. The *Worcestershire Sustainable Community Strategy* identifies three cross cutting themes: climate change, community engagement and community cohesion, and six strategic sustainability issues for the County:

- Communities that are safe and feel safe;
- A better environment for today and tomorrow;
- Economic success that is shared by all;
- Meeting the needs of children and young people;
- Improving Health; and
- Stronger Communities.



**Photo:** Stanford Highway Depot processes highway maintenance waste (including tarmac from roads and footways, concrete kerbs and road planings) to produce Type 1 sub-base, storage grade foambas (tarmac) and structural grade foambase. All Type 1 sub-base used for road maintenance in Worcestershire now comes from this facility rather than from a quarry.

<sup>53</sup> You can find out more about our thinking behind the Vision Statement in the background document, "Towards a Vision Statement".



**3.5.** Within these issues several priority outcomes are identified. The following are particularly relevant to the Waste Core Strategy:

**Tackling the challenges of Climate Change**

- To reduce harmful climate change causing gas emissions across the County;
- To assist adaptation to the impacts of climate change on the County.

**A better environment for today and tomorrow**

- To enhance Worcestershire's countryside and urban green space and appropriate access to them while protecting the natural and historic environment;
- To maximise the diversion of waste away from landfill through prevention, re-use, recycling/composting and recovery
- To address issues of water quality, supply and consumption and land drainage in Worcestershire (this includes flood risk);
- To increase energy efficiency and increase the proportion of energy generated from renewable sources.

**Economic success that is shared by all**

- To promote technology-led growth benefiting all sectors and parts of the County.

**Community engagement**

- To empower local people to have a greater choice and influence over local decision making and a greater role in the planning, design and delivery of public service.

<sup>54</sup> See Worcestershire Waste Core Strategy Background Document "Links with Districts' & neighbouring Local Authorities' plans and strategies" for more details."

**3.6.** Many of the core themes are also echoed in the Sustainable Community Strategies of the district, borough and city councils in Worcestershire, with all strategies addressing issues of climate change, energy consumption, sustainable transport, and the movement of waste up the waste hierarchy. Other issues such as flooding and quality of the natural environment are also considered by most<sup>54</sup>.

**3.7.** From the consideration of priorities at national and local levels, we have developed a vision to drive the Waste Core Strategy:

**The Vision**

By 2027 waste production in Worcestershire will be minimised and what is produced will be regarded as a source of useful material to be reused. So far as possible this resource will be managed in Worcestershire itself, in accordance with the principles of sustainable development and the waste hierarchy.

There will be sufficient waste management capacity in Worcestershire to enable waste to be treated as a resource and support the local economy without compromising the County's distinctive environmental, social and cultural assets. These facilities will be located where they minimise the need to move waste by road and where they are best suited to serve the needs of local communities and the local economy. They will be designed to adapt to and mitigate climate change and will reflect the characteristics of the local area.





3.8. To be useful the vision cannot be restricted to a single statement. It must be a philosophy that guides us, and encompasses all of the following:

- i. Waste minimisation will be our priority. The issue is no longer one of waste disposal but of resource management, and the management of waste as a way of saving scarce resources will be encouraged in all new developments. Momentum is gathering to make the West Midlands a Zero waste region. We should be prepared for this to be our long term goal. This will however take time to achieve and in the medium term we will aim for the following targets for recycling, composting and recovery:
  - **C&I** - 75%
  - **C&D** - 75%
  - **MSW** - 78% in line with BPEO<sup>55</sup> targets
    - a minimum of 33% of waste to be recycled and/or composted,
    - a maximum of 22% landfilled
    - the remaining 23% for energy recovery and aiming for the national target of 50% recycling and composting by 2020.
- ii. There will be significantly more waste management capacity and facilities of different kinds and sizes than there are now, enabling more flexibility in the way waste is managed and facilitating the movement of waste up the waste hierarchy. This will minimise the amount of waste sent to landfill, mitigate the effects of waste management on climate change and reduce greenhouse gas emissions in the county.

- iii. There will be very little material that cannot be reused or recycled. What cannot be recycled will mostly be used to generate useful benefits, such as energy recovery. Only as a last resort will it be landfilled. There will be adequate household recycling centres in every town in the county to enable the collection of segregated wastes and most of our MSW will be subject to recycling or recovery. There will also be more recycling facilities for both C&I and C&D waste than at present.
- iv. Waste management facilities will be located where they are best suited to serve the communities and economic needs of Worcestershire and will need to recognise the distinctive distribution of waste arisings, resource demand<sup>56</sup> and current waste management capacity in Worcestershire. To reflect the pattern outlined in the Geographic Hierarchy, over half of the new facilities we need will be in or near to Worcester, Redditch or Kidderminster, about a third, in or near to Bromsgrove, Droitwich and Malvern, about tenth, in or near to Evesham and Pershore, and a small amount in Tenbury Wells and Upton upon Severn. Where there is a particular need facilities may also be located in rural areas.

<sup>55</sup> BPEO - Best Practicable Environmental Option, see back ground document "Arisings and capacity"

<sup>56</sup> Resource demand relating to recyclables, organics and energy. Information provided by AWM in relation to AWM's "Landfill Diversion Strategy " Locational Analysis Tool



3. OUR VISION AND OBJECTIVES • Worcestershire Waste Core Strategy

- v. There will be sufficient capacity to achieve 'equivalent self-sufficiency' for waste management in the county and facilities will exist to fill the capacity gap identified in **Table 4: Capacity Gap and land requirements to 2035**. To safeguard existing and future waste management facilities where they are environmentally acceptable, all new development close to waste sites will take account of any impacts they may have on the operation of such sites.
  - vi. The transportation of waste by road will be kept to a minimum with facilities located close to arisings or onward treatment facilities and with water or rail infrastructure being developed and utilised for freight movement wherever possible.
  - vii. Waste management facilities will be located and designed to protect and enhance the local characteristics of the county and its natural beauty. Facilities will be resource efficient, and not create pollution, damage natural or cultural assets or unacceptably affect the health or amenities of local people. They will be designed to mitigate their impacts on climate change and will be able to adapt to those changes that occur in the future. New facilities will be well designed to complement their surroundings, and most will be enclosed. New development at existing facilities will be both more efficient and their operations and appearance enhanced; some outdoor activities will be enclosed or screened.
  - viii. We need a change of attitude to recognise that waste management is essential to support the functions of the economy. Encouraging a new sector of the economy constructed around the management of waste as a resource will create new employment opportunities and enhance local economic resilience and contribute towards a low carbon economy. Most types of waste management facilities are akin to other business or industrial activities and should be seen as an opportunity. New waste management facilities will therefore be on industrial or previously developed land unless there are very good reasons to the contrary.
  - ix. Waste management will be a dynamic, constantly changing activity, part of a network of symbiotic activities within both Worcestershire and the West Midlands. The network of waste facilities in the county and the individual components within it will be capable of constant adjustment to address changes in the nature of business activity and technology within the wider economy up to 2027 and beyond. Our key word must be flexibility.
- 3.9.** We must all take responsibility for the waste that we produce and for what we do with it. The Waste Core Strategy will encourage a high provision for waste management in order to achieve the vision, but this will not be at the expense of the County's environmental, social or cultural assets.



## Realising the Vision: Setting our objectives

### Q6 (pg 3-4 of the questionnaire):

Do you agree with the objectives? If no or do not know, please state why you feel this way and propose further suggestions for addressing these issues.

**Q7 (pg 4 of the questionnaire):** Do the objectives reflect local issues and contribute towards the vision? If no or do not know, please state why you feel this way and propose further suggestions for addressing these issues.

*In response to the Emerging Preferred Options consultation, the objectives were developed to include new objectives **WO2** and **WO9**. The existing objectives were also refined and group together thematically. The objectives are numbered for convenience and are not given in order of importance.*

**3.10.** The **vision** will give us a sense of direction but we need more detailed **objectives** to direct our policies so that the vision can be realised.

**3.11.** The Council intends to base the Strategy on the following objectives<sup>57</sup>:

### The Objectives

**WO1** To base our decisions on the principles of sustainable development and the need to reduce greenhouse gas emissions and to mitigate climate change.

**WO2** To protect and enhance the County's natural resources, environmental, social, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of the local people.

<sup>57</sup> The objectives are numbered for convenience of referencing, not in order of significance.

<sup>58</sup> As shown in Table 4: Capacity Gap and land requirements to 2035.

**WO3** To do everything possible to minimise waste production and make driving waste up the waste hierarchy the basis for waste management in Worcestershire.

**WO4** To ensure that the waste implications of all new development in Worcestershire are taken into account.

**WO5** To address the "Capacity Gap" between how much waste management capacity we have and what we need over the plan period to 2027<sup>58</sup>.

**WO6** To safeguard existing waste management facilities from incompatible development.

**WO7** To reduce waste miles by road.

**WO8** To encourage communities in Worcestershire to take responsibility for their own waste and involve all those affected as openly and effectively as possible.

**WO9** To develop a waste management industry that contributes positively to the local economy.

**3.12.** We will need to monitor whether we are achieving our vision and objectives and have developed a framework of indicators to assess them (**see Section 10**). They will be reported in our Annual Monitoring Report and to give a more spatial view we will also need to consider other local reporting mechanisms, such as the *Worcestershire State of the Environment Report* undertaken by the Worcestershire Partnership. Monitoring will help us to know if there are any other significant matters which need attention. If this is the case we will need a new vision and will need to revise the Waste Core Strategy accordingly.



## 4. Location of waste management development

- 4.1. Sustainable development is the core principle underpinning planning<sup>59</sup>, it looks to balance environmental, social and economic objectives in decision making and is fundamental to national policy. In Worcestershire the county's *Sustainable Community Strategy* also seeks to balance these priorities. To achieve the Waste Core Strategy vision we must meet the needs of the larger community but acknowledge that the impacts will not be felt uniformly by all local communities<sup>60</sup>. This section sets out the capacity we need to provide and the methodology for directing the right type of development to the right place.
- 4.2. Within this context the Waste Core Strategy will enable the waste management industry in Worcestershire to be able to meet market opportunities and technological innovations wherever they emerge. Provision of waste management facilities to fill the capacity gap will come from a mix of extensions to existing sites, intensification or re-development of existing sites and new sites.
- 4.3. To guide the location of new sites the Strategy identifies the extra capacity needed and the broad spatial distribution it should follow. The Strategy defines "areas of search" but not specific sites where new facilities will be permitted. The areas of search identified are

sufficient to meet the land requirement identified in **Table 4: Capacity Gap and land requirements to 2035.**

- 4.4. Any proposals within areas of search will still need to be meet the wider objectives of the Waste Core Strategy and will be assessed on their own merits against all other policies in the Local Development Framework.
- 4.5. Locations will be identified to enable facilities of a range of scales and sizes to be brought forward. Five locations have been identified which would be suitable for large scale developments, including the residual treatment facility identified in the JMWMS (with a capacity of up to 250,000 tpa). The remainder of locations would be more suited to medium or small scale facilities. The areas of search will not be technology specific, allowing the Strategy to remain flexible.

### Method for identifying areas of search

- 4.6 We have identified areas of search for waste management facilities using the following methodology (see **Figure 9**) which is given in more detail in the background document "Identifying areas of search".

<sup>59</sup> Planning Policy Statement 1: Delivering Sustainable Development.

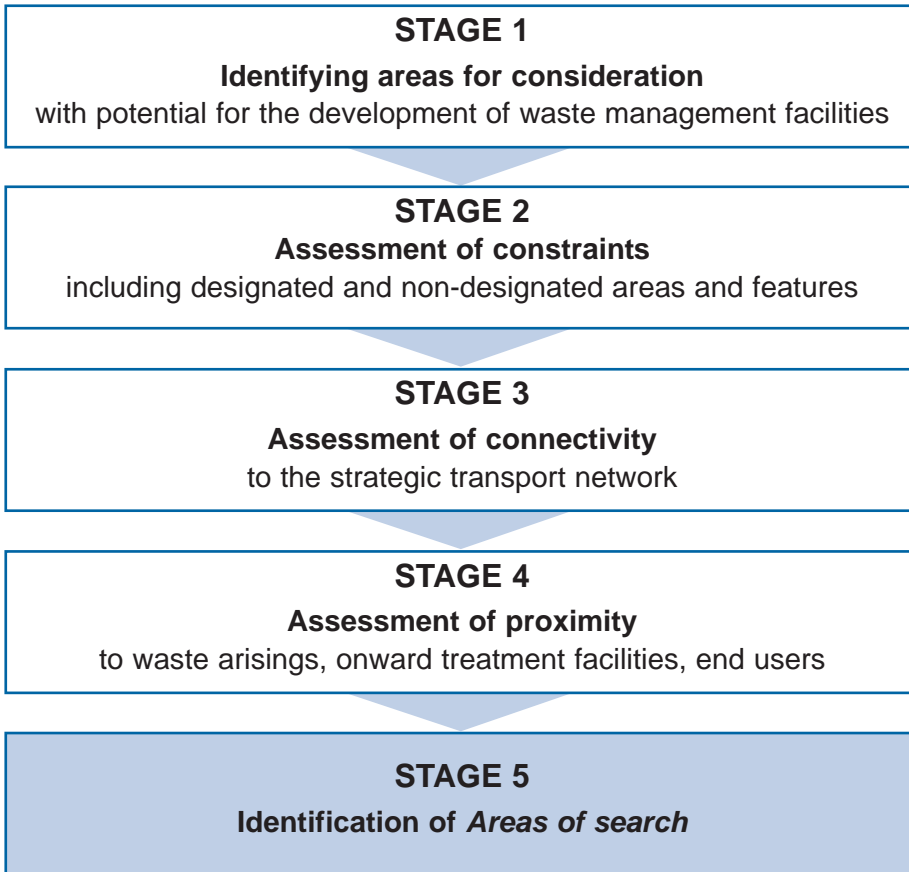
<sup>60</sup> See Equality Impact Assessment screening exercise at [www.worcestershire.gov.uk/wcs](http://www.worcestershire.gov.uk/wcs).



**Q8 (p5 of questionnaire):**

Do you agree with the method for identifying areas of search?  
 Does it respond to local issues and contribute towards the vision and objectives?  
 If no, please make suggestions for addressing these issues.

**Figure 9: Method for identifying areas of search**



**Stage 1: Identifying areas for consideration**

**Q9 (p5 of the questionnaire):**

Do you agree with the types of existing land that would be compatible for waste management facilities?  
 If no please make suggestions for addressing these issues.

*In consultation, stakeholders supported identifying areas of search based on their characteristics and size.*

4.7. In Worcestershire, the types of existing land uses that would be compatible with waste management development are:

- Sites with current use rights (current planning permission) for waste management purposes;
- Active mineral workings or landfill sites (where operationally related to the permitted use and for a temporary period commensurate with the permitted use of the site);
- Industrial land;
- Contaminated or derelict employment land;
- Land within or adjoining a sewage treatment works; or
- Redundant agricultural or forestry buildings and their curtilage.



**Q10 (p5-6 of the questionnaire):**  
Do you agree with the broad categories of waste management facilities?  
  
If no please make suggestions for addressing these issues.

**4.8.** Different types of waste management facility have different requirements and impacts and therefore require different types of land. Three broad categories of facility have been identified taking into account size and other characteristics (see **Table 5**).

**Table 5. Broad categories of waste management facility**

Description	Typical examples <sup>61</sup>
<p><b>Category 1</b></p> <p>These would include operations which are akin to industrial activities.</p>	<ul style="list-style-type: none"> <li>• Large scale anaerobic digestion</li> <li>• Material recovery facilities</li> <li>• Mechanical biological treatment Metal recycling and end of life vehicle facilities</li> <li>• Physical treatment</li> <li>• Thermal treatment</li> <li>• Waste transfer and bulking stations</li> </ul>
<p><b>Category 2</b></p> <p>The nature and scale of these developments can be less industrial and may also be in keeping with other locations.</p>	<ul style="list-style-type: none"> <li>• In-vessel composting</li> <li>• Small scale anaerobic digestion facilities</li> <li>• Small scale waste transfer activities taking place inside redundant agricultural buildings</li> </ul>
<p><b>Category 3</b></p> <p>Some facilities may not fall into either category 1 or 2 and the proposed location would need to be considered on its own merits in relation to the proposed development.</p>	<ul style="list-style-type: none"> <li>• Windrow composting facilities</li> <li>• Landfill sites</li> <li>• Local recyclable collection points (such as "bottle banks" in car parks)</li> <li>• Waste water treatment facilities</li> </ul>

<sup>61</sup> This is not a definitive list.



4.9. Table 6 shows the types of existing land uses which might be compatible with category 1 and 2 facilities. Category 3 facilities require more specialised locations which will be judged on their merit as proposals are brought forward.

**Table 6. Existing land uses compatible with category 1 and 2 facilities**

	Category 1	Category 2
Sites with current use rights for waste management purposes	✓	✓
Active mineral workings or landfill sites	✓	✓
Industrial land	✓	✓
Contaminated or derelict employment land	✓	✓
Land within or adjoining a sewage treatment works		✓
Redundant agricultural or forestry buildings or their curtilage		✓

4.10. A desktop search for locations that fell into these categories was undertaken and from this, potentially compatible locations were identified as shown in **Box 3 below**. These potentially compatible locations are identified on **Figure 10: Potentially compatible locations**.



### Box 3. Land use suitable for new waste management development - compatible locations

**Compatible locations suitable for Category 1 and 2 facilities:**  
**Sites with current use rights (current planning permission) for waste management purposes:**  
 There are 93 waste management facilities<sup>62</sup> in Worcestershire. Existing waste sites have not been identified as areas of search as they are often discrete parcels of land and the identification of *areas of search* is not site specific.

**Active mineral workings or landfill sites (where operationally related to the permitted use and for a temporary period commensurate with the permitted use of the site);**  
 These land uses are generally compatible with waste management development. There are 18 permitted minerals workings in Worcestershire, many of which involve some form of landfill as part of their restoration scheme.

**Industrial land;**  
 There are industrial estates in and around every main urban area in the County. These total 129 sites and have been considered in the identification of areas of search.

**Contaminated or derelict employment land.**  
 In Worcestershire there are two sites listed on the contaminated land register. There are several hundred sites known to be affected by contamination but, due to the diversity of land uses on these sites and varied significance of the contamination, it is not useful to identify these sites to inform the identification of *areas of search*.  
 30 areas of derelict land have been identified and considered in the identification of *areas of search*.

**Additional compatible locations suitable for Category 2 facilities:**

**Land within or adjoining a sewage treatment works;**  
 Sewage treatment capacity has been identified as a concern over the period of the Waste Core Strategy. No District Council Core Strategies have been adopted in Worcestershire at the time of writing. Detailed areas of housing development have not therefore been identified. To allow for future expansion of existing sewage treatment works these sites have not been considered further in the identification of areas of search for waste management development.<sup>63</sup>

**Redundant agricultural or forestry buildings and their curtilage.**  
 No redundant agricultural or forestry buildings were identified in the preparation of the Waste Core Strategy due to the dispersed nature of agricultural activities in the County.

<sup>62</sup> As June 2009

<sup>63</sup> In Worcestershire, Severn Trent Water Ltd currently use anaerobic digestion in the management of 95% of the sewage sludge produced, and have not indicated the need for any further capacity for AD treatment. See Worcestershire Waste Core Strategy "Waste water treatment infrastructure background document" for more details.



# Waste Core Strategy for Worcestershire

## Figure 10: Potentially Compatible Locations

- County Boundary
  - Principal Urban Areas
  - Other Settlements
  - Major Rivers
  - Canals
  - Active Mineral Workings
  - Contaminated land
  - Industrial Sites
  - Sewage Treatment Works
- 
- Existing Waste Sites June 2009**
- A02 - Other landfill taking special waste (1)
  - A04 - Household, commercial and industrial waste landfill (4)
  - A05 - Landfill taking non-biodegradable waste (5)
  - A10 - In house storage facility (1)
  - A11 - Household, commercial and industrial waste transfer station (20)
  - A13 - Household waste amenity site (12)
  - A14 - Transfer station taking non-biodegradable waste (3)
  - WTD - Waste Transport Depot (2)
  - A15 - Material recycling facility (4)
  - A16 - Physical treatment facility (3)
  - A18 - Incinerator (2)
  - A19 - Metal recycling site (vehicle dismantler) (2)
  - A19a - End of Life Vehicles facility (9)
  - A20 - Metal recycling site (MRS) (Mixed) (6)
  - A22 - Composting facility (4)
  - OPP - Outstanding Planning Permission (10)
  - PC - Pending Consideration (5)
- Total Number of Sites - 93**

NB: Due to the scale of the map, symbols are only indicative of the site location.

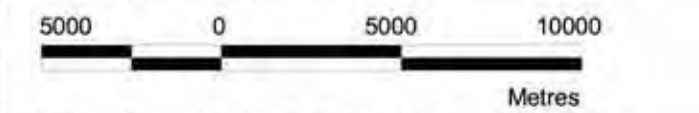
The number shown in brackets on the key: e.g. (3) indicates the number of sites in that category in Worcestershire.

WTD (Waste Transport Depot) is not an Environment Agency 'A Code' but is a term derived by Worcestershire County Council Planning Policy team to describe two specific sites, which did not neatly fit under any of the 'A Code' Listings, which were primarily used as storage depots.

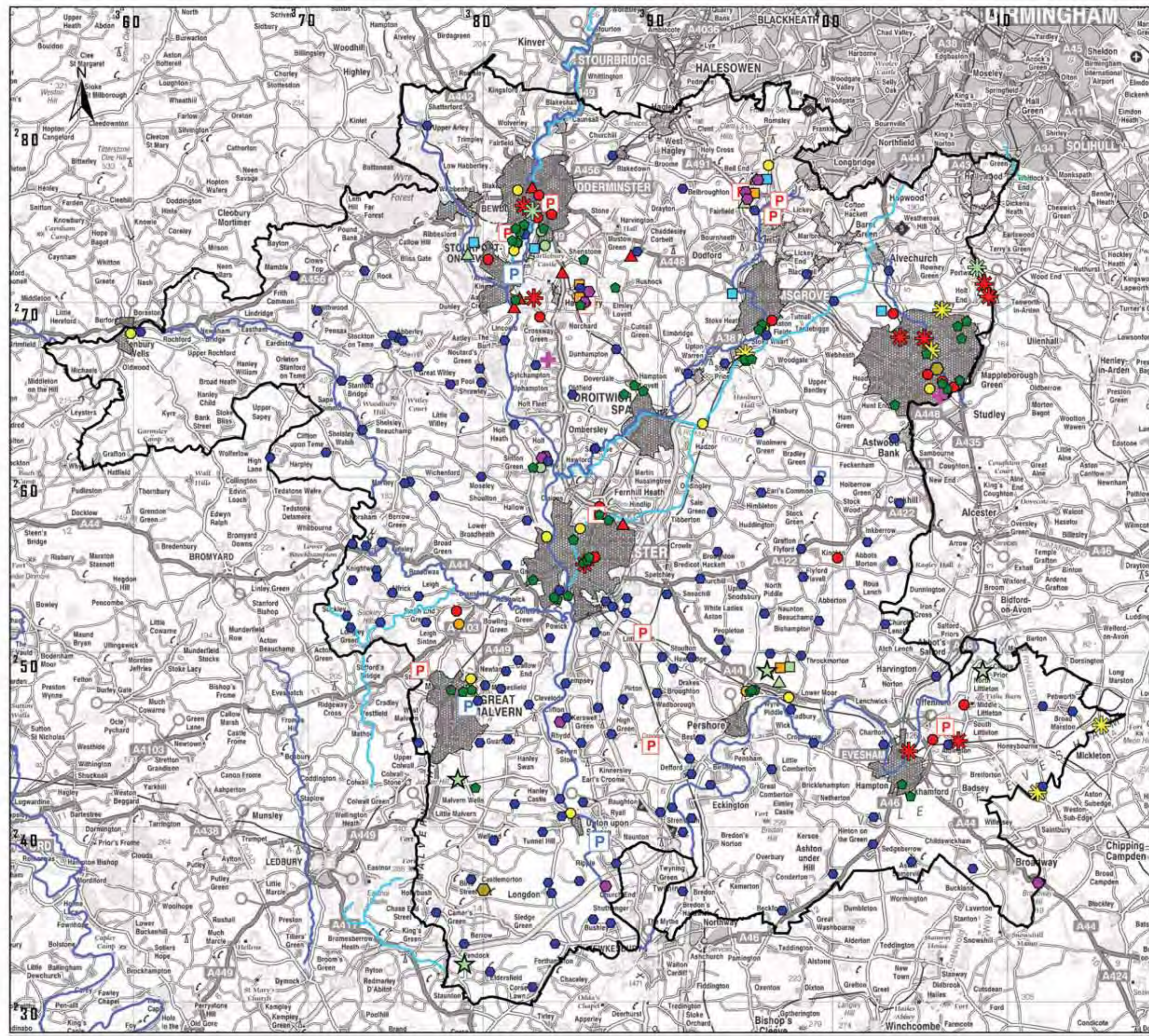
OPP (Outstanding Planning Permission) refers to sites with planning permission for Waste Management Facilities but are not yet implemented.

PC (Pending Consideration) refers to sites, where planning applications had been submitted to the County Council and are pending consideration.

Redundant agricultural land and derelict land are not shown.



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4.11. An assessment of the quality of buildings, internal access roads and other site infrastructure of each identified location has been undertaken. For clarity and ease of use this has been summarised as a 'traffic light' assessment and can be seen in the background document "Identifying areas of search". The following classifications have been used:

<b>Green</b>	Compatible location with good infrastructure.
<b>Orange</b>	Compatible location but infrastructure would need improvements.
<b>Red</b>	Not a compatible location.

4.12. Where the infrastructure of these locations is adequate to support a waste management facility (green), or could be with some improvement (orange), these locations have been taken forward for further assessment. Where locations are not compatible (red), these have been precluded from further consideration.



## Stage 2: Assessment of constraints

**Q11 (pg 6 of the questionnaire):**  
Do you agree with the constraints listed?

If no please make suggestions for addressing these issues.

**4.13.** The locations identified as suitable in **Stage 1** (green and orange) have been assessed against primary and secondary constraints.

**4.14.** The identified primary constraints (see **Figure 11 and Box 4**) are matters of international and national importance. Locally important features that contribute to the distinctive character of Worcestershire have been identified as secondary constraints<sup>64</sup> (see **Figure 12, Figure 13 and Box 5**).

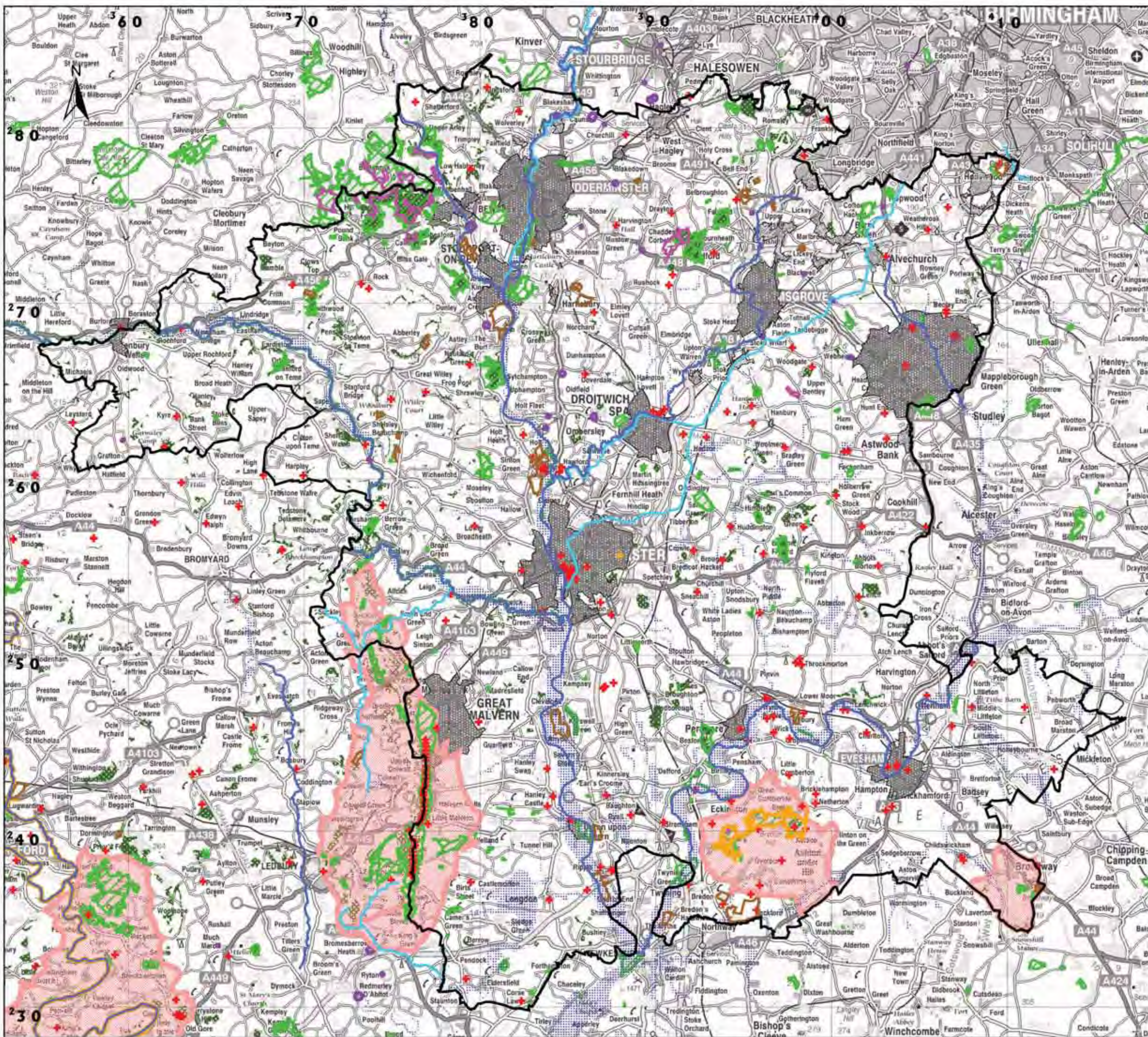
**4.15.** Compatible land uses within the designated areas of any primary constraint have been precluded from selection as areas of search. The consideration of secondary constraints has informed the selection of areas of search but does not exclude them from further consideration. Instead any proposal would need to show how they protect and enhance these features in line with policy **WCS 4: Managing the impact of new waste management development**.

### Box 4. Primary constraints

- Ancient semi-natural woodland
- Areas of Outstanding Natural Beauty (AONBs)
- Conservation Areas
- European or nationally designated nature conservation sites
  - Ramsar sites
  - Natura 2000 sites<sup>65</sup>
  - National Nature Reserves
  - SSSIs
- Flood Zone 3
- Listed buildings and their settings
- Registered Battlefields
- Registered Parks and Gardens
- Scheduled and other ancient monuments and their settings
- Source Protection Zone 1

<sup>64</sup> Secondary Constraints includes some nationally recognised features (Green belt, Flood zone 2 and Source Protection zones), where it is possible that waste management development could occur without impacting on the purpose for which they were identified.

<sup>65</sup> Natura 2000 sites are a network of European designated sites for wildlife, consisting of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).



# Waste Core Strategy for Worcestershire

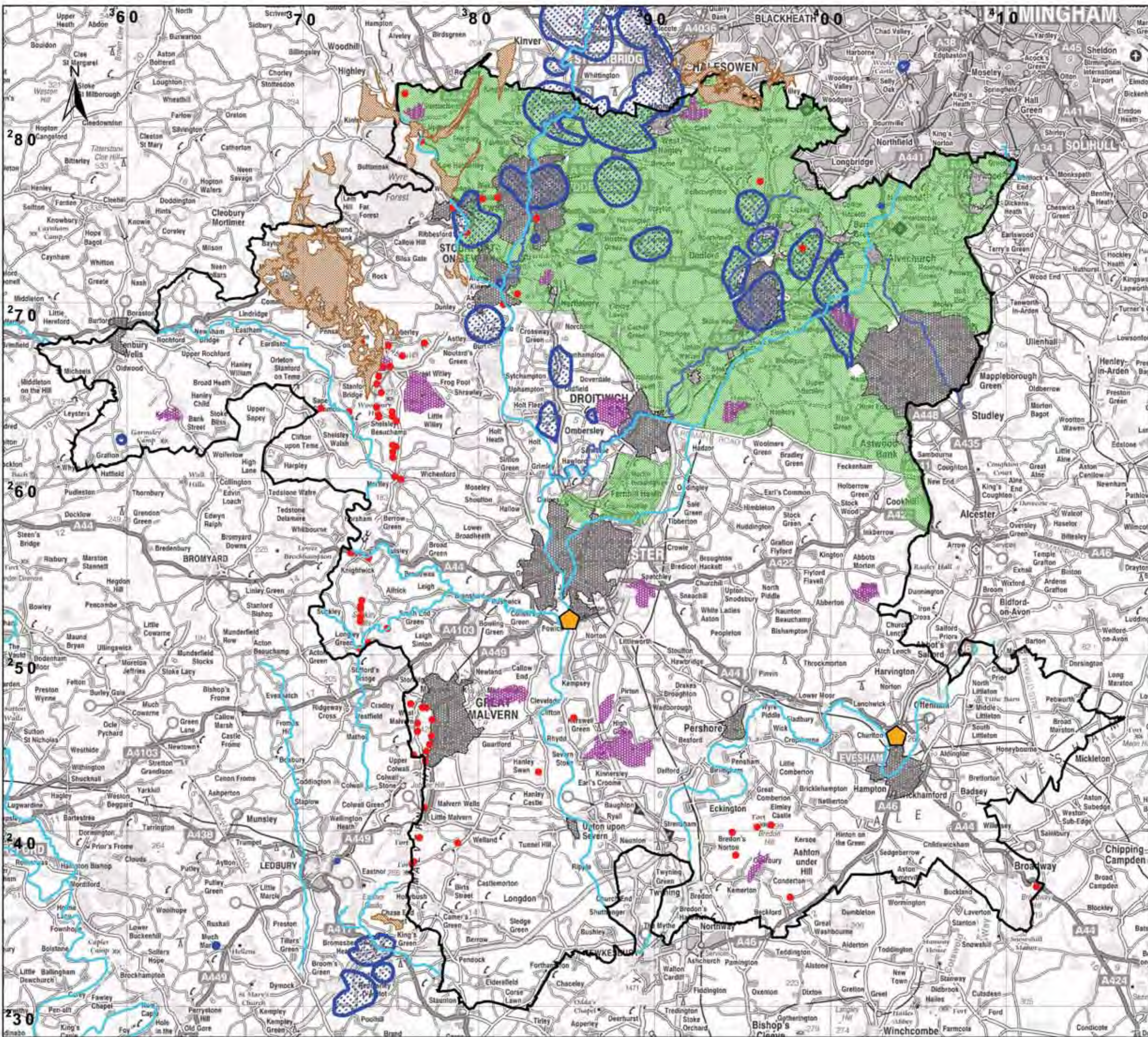
Figure 11: Primary Constraints - Biodiversity

- County Boundary
- Principal Urban Areas
- Other Settlements
- Major Rivers
- Canals
- Primary Constraints**
- Site of Special Scientific Interest
- Special Area of Conservation
- National Nature Reserve
- Area of Outstanding Natural Beauty
- Ancient Semi-Natural Woodland
- Scheduled Ancient Monument
- Minerals Area boundary
- Source Protection Zones**
- Zone I - Inner Protection Zone
- Flood Zone 3

NB: Due to the scale of map certain constraints may be concealed behind others



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## Waste Core Strategy for Worcestershire

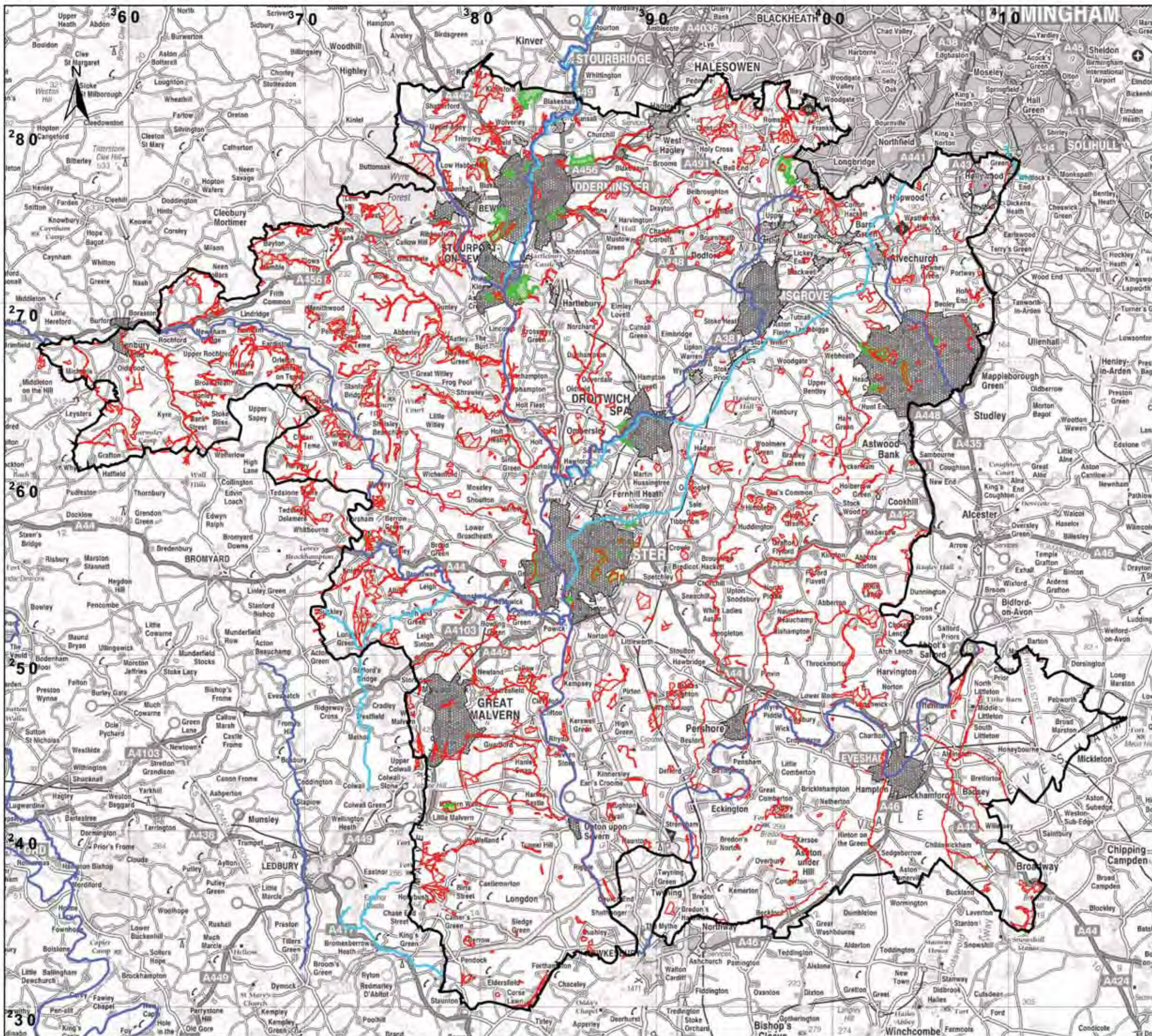
Figure 12: Secondary Constraints - Historical, Geological & Landscape Constraints

- County Boundary
- Principal Urban Areas
- Other Settlements
- Major Rivers
- Canals
- Secondary Constraints**
  - Local Geological Sites
  - Registered Parks and Gardens
  - Registered Battlefields
  - Green Belt
  - Surface Coal Resource
- Source Protection Zone**
  - Zone II - Outer Protection Zone

NB: Due to the scale of the map certain constraints may be concealed behind others



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# Waste Core Strategy for Worcestershire

Figure 13: Secondary Constraints - Biodiversity

- County Boundary
- Principal Urban Areas
- Other Settlements
- Major Rivers
- Canals
- Secondary Constraints**
- Special Wildlife Site
- Special Wildlife Site (Linear)
- Local Nature Reserves

NB: Due to the scale of the map certain constraints may be concealed behind others



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### Box 5. Secondary constraints

- Battlefields
- Coal resource (potential hazard)
- Flood Zone 2
- Green Belt
- Local Geological Sites<sup>67</sup>
- Local Nature Reserves
- Mineral resources identified in the development plan as a preferred area for mineral working<sup>68</sup>
- Source Protection Zones 2 and 3
- Special Wildlife Sites

4.16. The assessment of constraints has informed the 'traffic light' assessment and locations have been classified according to the following:

- Green:** No primary or secondary constraints.
- Orange:** Secondary constraints but no primary constraints.
- Red:** Primary constraints.

4.17. Locations which are not within areas of primary constraint (green and orange) have been taken forward for further assessment. Those which are within primary constraints (red) have not been considered further.

<sup>67</sup> Formerly known as RIGS

<sup>68</sup> As identified by "saved" policy number 1 in the Hereford and Worcester Minerals Local Plan, April 1997, or any areas identified in future adopted policy.



Objective WO7

### Stage 3: Assessment of connectivity

**Q12 (p6 of questionnaire):**  
 Do you agree with the way in which connectivity is assessed?  
 Should any alternative approaches be considered?  
 If so please include details.

**4.18.** To achieve the vision of the Strategy, proximity<sup>69</sup> and connectivity to arisings and onward treatment facilities or end users is important. Proximity and connectivity go hand in hand. Whilst a location might be physically close to arisings, onward treatment facilities or end users, without access to good quality transport links, physical proximity has little relevance. Water and rail transport are more sustainable than road transport and therefore will be encouraged wherever possible.

**4.19.** Although emissions from transport only constitute a small part of the greenhouse gas emissions resulting from waste management activities, they are a locally important issue, with a reduction being one of the priorities identified both nationally and in the Worcestershire Climate Change Strategy. Encouraging the transfer of freight from roads to waterways has the potential to reduce CO2 emissions (contributing to reducing the impacts of climate change), traffic congestion and HGVs accidents.

**4.20.** The transport connections for individual locations were assessed. Those adjacent to rail networks or navigable waterways and with supportive road links have been given preference due to the potential for multi-modal transport of waste to and from the waste management

facility. It is, however, acknowledged that connections to those networks may not be viable in all cases.

**4.21.** Transport connectivity has informed the 'traffic light' assessment and has been categorised as follows:

- Green:** Good transport/connectivity with multimodal potential.
- Orange:** Good transport/connectivity but no multimodal potential.
- Red:** Poor connectivity and no multimodal potential.

**4.22** Where there is multi-modal potential (green) or good transport connections by a single mode (orange), these locations have been taken forward for further assessment. Locations with poor connectivity (red) have been precluded from further consideration.

### Stage 4: Assessment of proximity

**Q13 (p6 of questionnaire):**  
 Do you agree with using the geographical hierarchy to inform patterns of distribution?  
 If no, please make suggestions for addressing these issues.

**4.23.** The locations which have been considered in the 'traffic light' assessment have been structured in accordance with the geographic hierarchy, set out in the **Overview of Waste Management in Worcestershire (Box 2) in Section 2.**

Objectives WO1, WO7, WO8

<sup>69</sup> The term 'proximity' is used in the Waste Core Strategy in its normal sense of 'nearness' and it should not be confused with the Proximity Principle which no longer forms part of national planning policy.





*When developing a method for identifying areas of search, several other methods were assessed; a) dividing allocations between districts according to current arisings; b) dividing allocations between districts based on expected future growth; c) dividing allocations between settlements according to current arisings; d) focusing preferred areas in those settlements with the greatest potential for sustainable transport. Basing patterns of distribution on the geographic hierarchy was felt to be most appropriate as this takes into account current roles in waste management, current waste arisings and resource demand and expected future growth. Further detail relating to this is available in background document "Identifying areas of search".*

**4.24.** In order to achieve a sustainable pattern of waste management development and help achieve the vision, the geographic hierarchy has been considered alongside proximity of locations to waste arisings and resource demand (see **Overview of Waste Management in Worcestershire**). The following aspirational distribution has been used to guide the identification of *areas of search*:

**Table 7. Proportion of areas of search at each level of geographic hierarchy**

Level of the Hierarchy	Aspirational distribution areas of search
<b>Worcester, Kidderminster and Redditch</b>	
Worcester and its expansion areas	20%
Kidderminster area (including Stourport and Bewdley)	20%
Redditch	20%
<b>Bromsgrove, Droitwich and Malvern</b>	
Bromsgrove	10%
Droitwich	10%
Malvern	10%
<b>Evesham and Pershore</b>	
Evesham	4%
Pershore	4%
<b>Tenbury Wells and Upton-upon-Severn</b>	
Tenbury Wells	1%
Upton-upon-Severn	1%
<b>Rural areas</b>	Proposals to be assessed as they are brought forward



4.25. In the traffic light assessment, locations within each level of the hierarchy have been ranked according to C&I waste arisings and resource demand of their area. The smallest scale at which this information is available is by Lower-level Super Output Areas (LSOA) which are areas that roughly equate to 1,500 people and are used in collecting Census data. This information is shown in **Figure 14 and Figure 15**<sup>70</sup>.

4.26. This information has been used to indicate patterns of arisings and resource demand. It is recognised that this is not definitive and may vary for different types of wastes<sup>71</sup>. Therefore, rather than categorising proximity as red, orange and green in the traffic light assessment, preference has been given sequentially to locations within the highest categories (7-3) for proximity to either waste arisings or resource demand. Where they help to meet a gap in the spatial distribution and are otherwise suitable, locations within the lower categories (1-2) for proximity have also been taken forward for further consideration<sup>72</sup>.

<sup>70</sup> Resource demand for recyclables, organics and energy. Waste Arisings are for C&I waste only based on the ADAS Study methodology. Information provided by AWM in relation to AWM's "Landfill Diversion Strategy" Locational Analysis Tool.

<sup>71</sup> Waste arisings and resource demand by LSOA has been used as an indicator for proximity when identifying areas of search. However, proximity to specific waste streams, onward treatment facilities or end users may be more relevant to some proposals for waste management development. Where clearly justified, this can be used to inform the assessment of proximity when applying the methodology to proposals outside the areas of search.

<sup>72</sup> In practice, this means that areas of search have been identified at Weir Lane Industrial Estate, Venture Business Park and Tenbury Business Park in order to bring the actual distribution for Worcester and Tenbury Wells closer to the aspirational distribution (see Table 8).

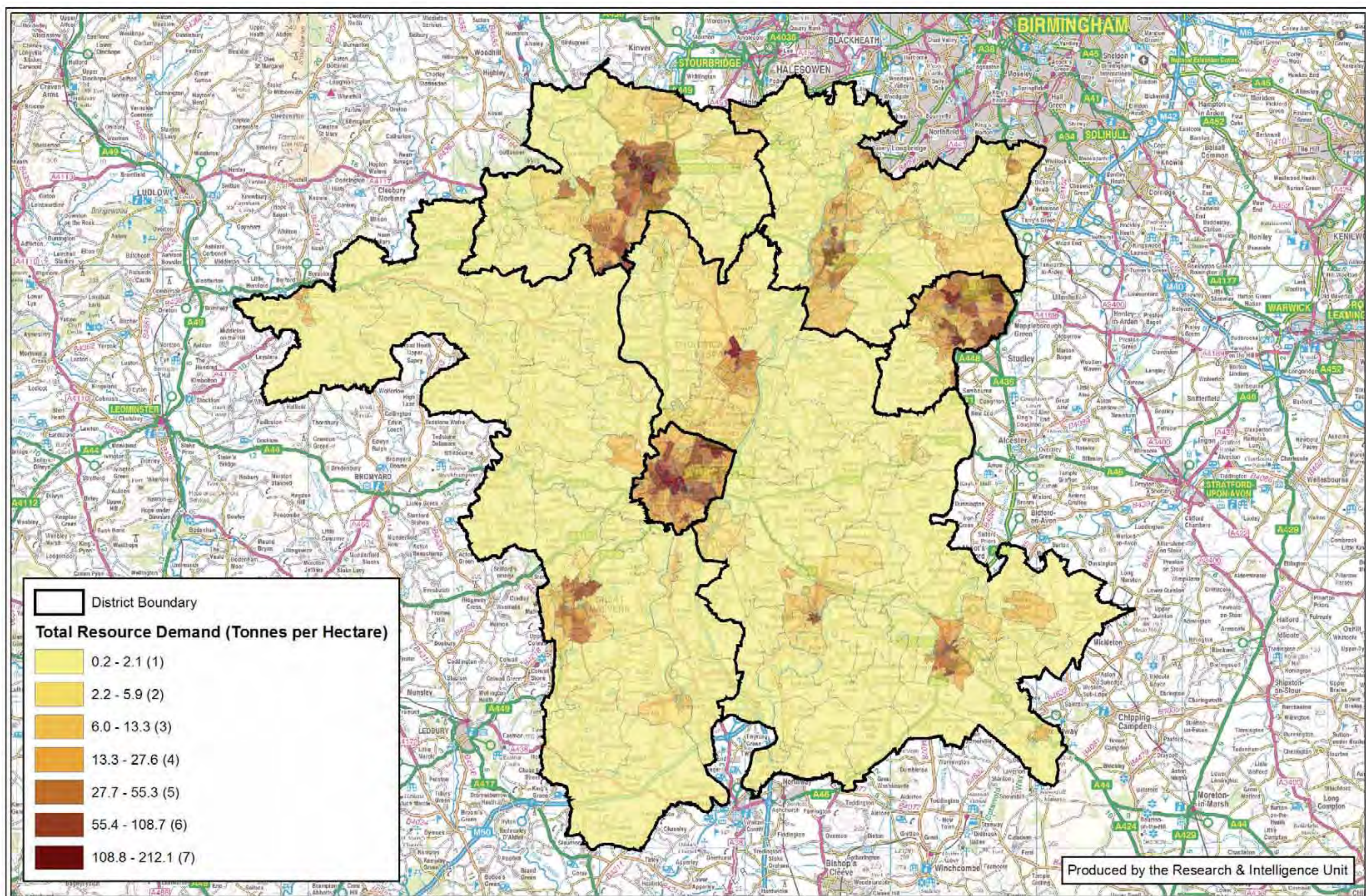


Figure 14: Total Resource Demand per Hectare by LSOA

Based on AWM Landfill Diversion Strategy (2009)

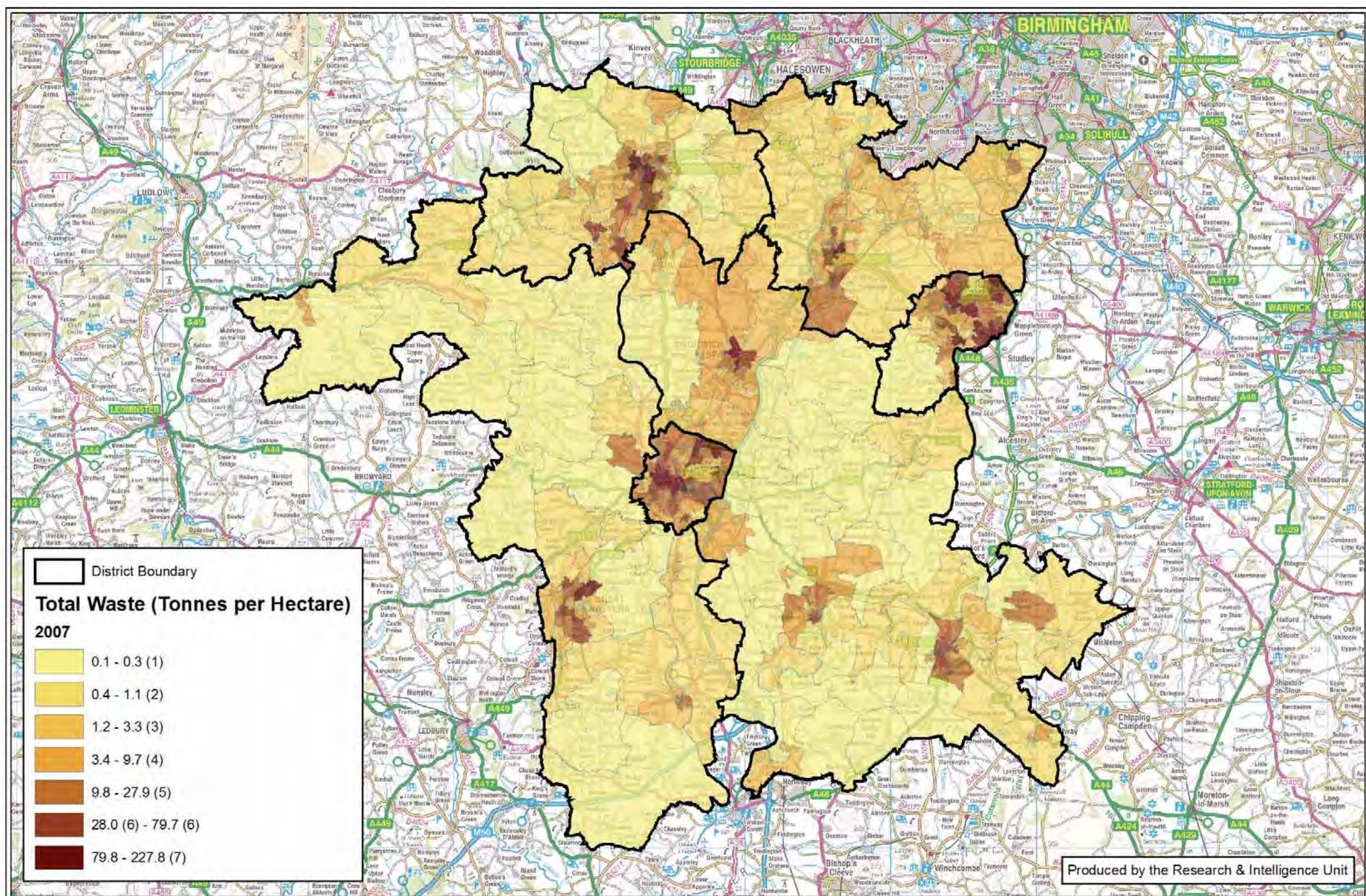


Figure 15: Total C&I Waste Arisings per Hectare by LSOA

Based on ADAS Study into Commercial and Industrial Waste Arisings April 2009



Objectives W01, W02, W05, W07, W08, W09

**Stage 5: Identifying the areas of search**

**Q14 (p6 of questionnaire):**  
 Do you agree with the areas of search identified?  
 If there any other locations that you think may be suitable for consideration as areas of search please provide details. Full details of all locations assessed are given in the background document "identifying areas of search"

4.27. During stage 1, a desktop search was carried out for the whole of Worcestershire and 170 locations were identified as compatible. These were assessed through stages 2 to 4 of the methodology and were then assessed further, considering their classification in the 'traffic light' assessment. Only locations classified as green at least one category have been identified as areas of search. These are as shown in **Table 8** and **Figure 16**.

**Table 8. Identified areas of search and percentage distribution**

Level of the Hierarchy		Stage 1	Stage 2	Stage 3	Aspirational distribution	Percentage of actual total distribution
<b>Worcester, Kidderminster and Redditch</b>					60%	58%
<b>Worcester and its expansion areas</b>	1. Shire Business Park	★	★	★	20%	17%
	2. Berkeley Business Park	★	★	●		
	3. Great Western Business Park	★	●	★		
	4. Buckholt Business Centre	★	●	●		
	5. Warndon Business Park	★	●	●		
	6. Newtown Road Industrial Estate	★	★	●		
	7. Shrubhill Industrial Estate	★	★	●		
	8. Sherriff Street Industrial Estate	★	★	●		
	9. Diglis Industrial Estate	★	●	★		
	10. Venture Business Park	★	★	●		
	11. Weir Lane Industrial Estate	★	★	●		
	12. Ball Mill Top Business Centre	★	★	●		
	13. Top Barn Business Centre	★	★	●		
	14. Ball Mill Quarry Complex	★	●	●		
<b>Kidderminster, Stourport and Bewdley</b>	15. Hartlebury Trading Estate ◆	★	●	★	20%	27%
	16. Waresley Quarry	★	●	●		
	17. Gemini Business Park	★	★	●		
	18. Oldington Trading Estate	★	●	●		
	19. Birchen Coppice Trading Estate	★	●	●		
	20. Foley Business Park	●	★	●		
	21. Hoo Farm Industrial Estate	●	★	●		
	22. Foley Industrial Estate	●	★	★		
	23. Former British Sugar Site	★	★	●		
	24. Vale Industrial Estate	●	★	●		
	25. Greenhill Industrial Estate	★	●	●		
	26. Ikon Trading Estate	★	●	●		
	27. Blackstone Quarry	★	●	●		
<b>Redditch</b>	28. East Moons Moat	★	★	●	20%	14%
	29. Park Farm Industrial Estate	★	●	●		
	30. Pipers Road Park Farm	★	●	●		
	31. Washford Industrial Estate	★	●	●		
	32. Kingfisher Enterprise Park	★	★	●		
	33. Lakeside Industrial Estate	★	●	●		
32. Weights Farm Business Park	★	●	●			
	33. Ravensbank Business Park	★	●	●		

**Note:** Figures rounded to the nearest 1%.  
 ◆ Denotes locations which may be suitable for large-scale facilities.  
 ★ Site rated as green at this stage of the traffic light assessment.  
 ● Site rated as orange at this stage of the traffic light assessment.

Table 8 continued on next page



**Table 8. Identified areas of search and percentage distribution**

Level of the Hierarchy		Stage 1	Stage 2	Stage 3	Aspirational distribution	Percentage of actual total distribution
<b>Bromsgrove, Droitwich and Malvern</b>					30%	29%
<b>Bromsgrove</b>	36. Buntsford Hill Industrial Estate	★	●	●	10%	6%
	37. Buntsford Gate Business Park	★	●	●		
	38. Silver Birches Business Park	★	●	●		
	39. Bromsgrove Technology Park	★	●	●		
	40. Pinches Quarry	★	●	●		
<b>Droitwich</b>	41. Stanley Evans Quarry	★	●	●	10%	16%
	42. Berry Hill Industrial Estate ◆	★	★	●		
	43. Former Coal Yard, Union Lane	★	★	★		
	44. Stonebridge Cross Business Park	★	★	●		
<b>Malvern</b>	45. Hampton Lovett Industrial Estate ◆	★	★	●	10%	8%
	46. Enigma Business Park	★	★	●		
	47. Spring Lane Industrial Estate	★	★	●		
	48. Link Business Centre	★	★	●		
	49. Blackmore Business and Technology Park	★	★	●		
<b>Evesham and Pershore</b>					8%	11%
<b>Evesham</b>	50. Merebrook Industrial Estate	★	★	●	4%	6%
	51. Vale Business Park ◆	★	★	●		
<b>Pershore</b>	52. Four Pools Industrial Estate	●	★	●	4%	5%
	53. Keytec7 Business Park ◆	★	★	●		
	54. Racecourse Road Trading Estate	★	★	●		
	55. Pershore Trading Estate	★	★	●		
<b>Upton upon Severn and Tenbury Wells</b>					2%	1.5%
<b>Upton upon Severn</b>	56. Hill and Moor landfill site	★	★	●	1%	0.5%
<b>Tenbury Wells</b>	57. Upton upon Severn Industrial Estate	★	●	●	1%	1%
	58. Tenbury Business Park	★	★	●	1%	1%

**Note:** Figures rounded to the nearest 1% except Upton upon Severn.

- ◆ Denotes locations which may be suitable for large-scale facilities.
- ★ Site rated as green at this stage of the traffic light assessment.
- Site rated as orange at this stage of the traffic light assessment.







**4.28.** The overall pattern of distribution generally aligns with the aspirational distribution, however in some areas the land currently available is not adequate to meet these targets. As proposals for employment land are brought forward in the District, City and Borough Councils' Local Development Frameworks, new industrial land allocations will be expected to be suitable for waste management development.

### Assessment of proposals

**4.29.** It is essential that development is delivered in the right place and the *areas of search* have been identified in order to achieve this. To ensure that all development is appropriately located, all proposals for waste management development will be assessed against **Policy WCS1**.

# Waste Core Strategy for Worcestershire

Figure 16: Areas of Search

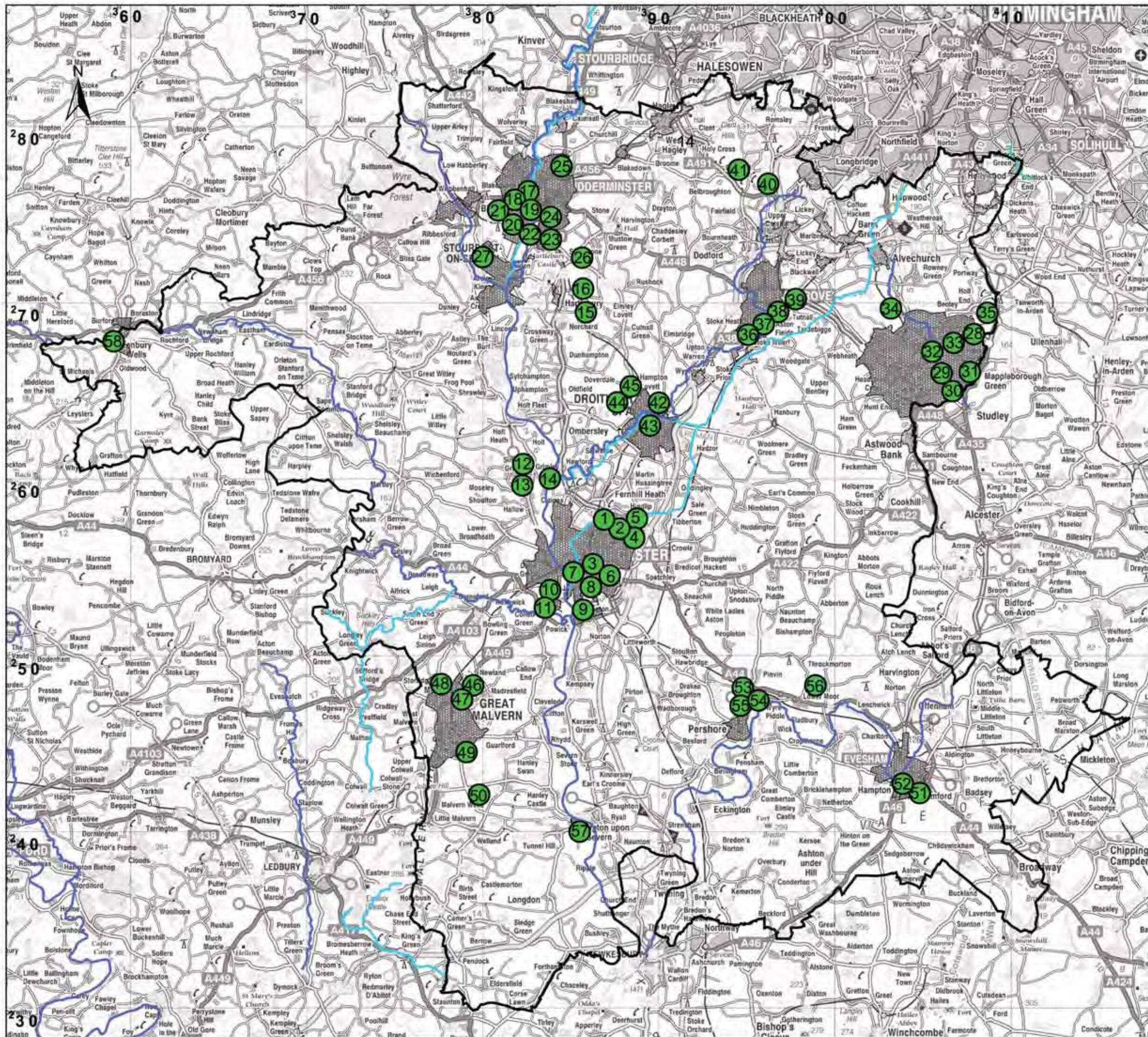
-  County Boundary
-  Principal Urban Areas
-  Other Settlements
-  Major Rivers
-  Canals
-  Areas of Search locations  
(Numbers refer to table of areas of search)

## Table of Areas of Search

- Worcester and its expansion areas**
- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| 1. Shire Business Park            | 8. Sheriff Street Industrial Estate |
| 2. Berkeley Business Park         | 9. Diglis Industrial Estate         |
| 3. Great Western Business Park    | 10. Venture Business Park           |
| 4. Buckholt Business Centre       | 11. Weir Lane Industrial Estate     |
| 5. Warndon Business Park          | 12. Ball Mill Top Business Centre   |
| 6. Newtown Road Industrial Estate | 13. Top Barn Business Centre        |
| 7. Shrubhill Industrial Estate    | 14. Ball Mill Quarry Complex        |
- Kidderminster, Stourport and Bewdley**
- |                                    |                                 |
|------------------------------------|---------------------------------|
| 15. Hartlebury Trading Estate      | 21. Hoo Farm Industrial Estate  |
| 16. Waresley Quarry                | 22. Foley Industrial Estate     |
| 17. Gemini Business Park           | 23. Former British Sugar Site   |
| 18. Oldington Trading Estate       | 24. Vale Industrial Estate      |
| 19. Birchen Coppice Trading Estate | 25. Greenhill Industrial Estate |
| 20. Foley Business Park            | 26. Ikon Industrial Estate      |
|                                    | 27. Blackstone Quarry           |
- Redditch**
- |                                 |                                |
|---------------------------------|--------------------------------|
| 28. East Moons Moat             | 32. Kingfisher Enterprise Park |
| 29. Park Farm Industrial Estate | 33. Lakeside Industrial Estate |
| 30. Pipers Road Park Farm       | 34. Weights Farm Business Park |
| 31. Washford Industrial Estate  | 35. Ravensbank Business Park   |
- Bromsgrove**
- |                                      |                          |
|--------------------------------------|--------------------------|
| 36. Buntsford Hill Industrial Estate | 40. Pinches Quarry       |
| 37. Buntsford Gate Business Park     | 41. Stanley Evans Quarry |
| 38. Silver Birches Business Park     |                          |
| 39. Bromsgrove Technology Park       |                          |
- Droitwich**
- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| 42. Berry Hill Industrial Estate    | 45. Hampton Lovett Industrial Estate |
| 43. Former Coal Yard, Union Lane    |                                      |
| 44. Stonebridge Cross Business Park |                                      |
- Malvern**
- |                                   |  |
|-----------------------------------|--|
| 46. Enigma Business Park          | 49. Blackmore Business and Technology Park |
| 47. Spring Lane Industrial Estate | 50. Merebrook Industrial Estate            |
| 48. Link Business Centre          |  |
- Evesham and Pershore**
- |                                    |                             |
|------------------------------------|-----------------------------|
| 51. Vale Business Park             | 55. Pershore Trading Estate |
| 52. Four Pools Industrial Estate   | 56. Hill and Moor Landfill  |
| 53. Keytec7 Business Park          |                             |
| 54. Racecourse Road Trading Estate |                             |
- Upton upon Severn and Tenbury Wells**
- |   |  |
|---|--|
| 57. Upton upon Severn Industrial Estate |  |
| 58. Tenbury Business Park               |  |



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**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

Objectives WO1, WO2, WO5, WO7, WO8, WO9

**POLICY WCS 1: Location of waste management development**

Within the areas of search planning permission will be granted for proposals for waste management development subject to evaluation against the other policies of the development plan<sup>73</sup>.

**For proposals outside areas of search:**

- a) Category 1 and 2 development<sup>74</sup> must be assessed against the five stages of the method for identifying areas of search set out above.
- b) Category 3 development must justify why the land use is suitable for the proposed development and must be assessed against stages 2-5 of the methodology set out above.

**Explanatory text**

**4.30.** Preference will be given to proposals in the identified areas of search, however it is acknowledged that:

- there may be suitable locations that were not known about or assessed during the identification of these areas;

- changes may have occurred to improve the performance of a location previously considered against the traffic light assessment and these make it acceptable for waste management development; or

- specific proposals may justify a different location. Such justification might include:

- Co-location of waste sites or other factors such as proximity to specific waste arisings, onward treatment facilities or end users that result in a reduction of waste miles.
- Locations which facilitate the transport of waste by means of transport other than road.
- Alterations or extensions to existing sites, or increases in capacity.
- Development which serves an identified local economic or social need.

**4.31.** The Strategy will remain flexible but it is important that any proposals outside of the areas of search contribute to the achievement of the strategy. All proposals for development outside of these areas will therefore be assessed against the methodology, as set out in **Figure 9: Method for identifying and outlined above.**

**4.32.** Category 1 and 2 sites will be assessed against stage 1-5 of the methodology. Category 3 sites must justify why the land use is suitable for the proposed development, but will not be assessed against stage 1 of the methodology.

<sup>73</sup> Applications will be determined in accordance with the development plan unless material considerations indicate otherwise.

<sup>74</sup> Category 1, 2 and 3 development as defined in Table 5. Broad categories of waste management facility.





## 5. Ensuring Sustainable Waste Management Development

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

*The majority of respondents to the Emerging Preferred Options consultation supported the "Draft Policy Direction WCS1: Ensuring Sustainable Development" following comments received WCS2 below covers the issues set out in this draft policy direction and has been developed to be more targeted and to give greater consideration to the implementation of the waste hierarchy, flooding issues, community involvement and benefits to the local economy.*

**5.1.** Proposals for the treatment and management of waste must contribute to the delivery of sustainable development in Worcestershire<sup>75</sup> by delivering positive social, economic and environmental impacts where possible and not having any unacceptable negative impacts, including cumulative and cross boundary effects.

### POLICY WCS 2: Ensuring Sustainable Waste Management Development

All proposals for the treatment, management and disposal of waste must demonstrate:

- i. how they implement the principles of the Waste Hierarchy to foster higher end uses and maximise the use of waste materials as a resource.
- ii. how climate change mitigation and resilience, the efficient use of energy, water and resources and the protection and enhancement of locally important natural resources, including landscape and biodiversity, have been determining design features.
- iii. that they will not adversely contribute to flood risk and will remain safe and operational during flooding events. It will be expected that all proposals will be based on the Sequential Test locating development in Flood Zone 1 where possible. Proposed development outside Flood Zone 1 must be justified through the Exception test (as appropriate) and accompanied by a Flood Risk Assessment of all types of flooding impacts on the development, to others and climate change implications.

<sup>75</sup> This policy has been developed based on local circumstances identified in the natural resource technical research papers on Planning for Climate Change in Worcestershire, Planning for Water in Worcestershire and Planning for Renewable Energy in Worcestershire, The Economic Strategy for Worcestershire 2008-2018, The Worcestershire Sustainable Community Strategy and a background document on Climate Change and Waste Management in Worcestershire.



Objective WO3

- iv. that they implement, as a minimum, the top two tiers of the energy hierarchy for Worcestershire<sup>76</sup>. In addition, all new built development or significant alterations to buildings which create a gross building footprint of 1000m<sup>2</sup> or more must gain at least 10% (or more, if local targets are higher) of energy supply annually from renewable energy supplies in accordance with the sequential approach set out in the energy hierarchy.
  - v. that construction methods for new built development and significant alterations to buildings maximise the use of reused and/or recycled materials and take into account the whole life-cycle of the building.
  - vi. That they benefit the local and sub-regional economy and contribute to the achievement of the "Economic Strategy for Worcestershire".
  - vii. That they consult and involve the local community prior to the application being made, in accordance with Worcestershire's Statement of Community Involvement, and demonstrate how any involvement has influenced the proposal.
- Development proposals will not be allowed where these criteria are not met unless exceptional circumstances are clearly justified by the applicant.

### Explanatory text

#### Waste Hierarchy

5.2. All proposals must reduce the amount of waste material being sent to landfill by maximising the reuse and recycling or recovery/recovering energy from the waste material and must demonstrate how they enable waste to be treated at the highest possible level of the waste hierarchy (see **Figure 8: The Waste Hierarchy**). Any proposals for waste management or disposals at the lower levels of the hierarchy must be strongly justified.



<sup>76</sup> See the energy hierarchy for Worcestershire at Figure 17: Energy hierarchy for Worcestershire.



Objective WO1

## Determining design

### Climate change mitigation and resilience<sup>77</sup>

- 5.3** Waste management activities have wide ranging impacts on climate change. There are two aspects that need to be considered:
- Mitigation - reducing the extent of potential climate change by reducing carbon emissions resulting from human activities; and
  - Adaptation - how the development can be designed to cope with the changes in our climate and severe weather events caused by increasing levels of greenhouse gases.
- 5.4.** Mitigation and adaptation should not be considered independently of each other. Climate sensitive design will need to be holistic in its approach and should be guided by the principles of *Planning Policy Statement 1: Delivering Sustainable Development and the supplement Planning and Climate Change* and meet design standards identified in Local Plans or adopted Local Development Frameworks.
- 5.5.** Climate change mitigation and adaptation are expected to be determining features in the design of all new buildings and in site layout.

## Water Efficiency<sup>78</sup>

- 5.6.** Design of new facilities should incorporate the appropriate use of harvested rain and grey water to help reduce demands for fresh water and pressures on water supply in the County. Treating water requires high energy use, therefore efficient use of rain or grey water where suitable will help reduce carbon emissions as well as preserve supplies.

## Protection and enhancement of natural resources<sup>79</sup>

- 5.7.** All proposals would also be expected to protect and enhance biodiversity, landscape and the historic environment. As such they should take into account local policies and strategies, in particular those identified in **Figure 17**. Where relevant, the equivalent policies and strategies for adjoining Local Authorities and regions should be considered.

Objectives WO1, WO2

Objective WO2

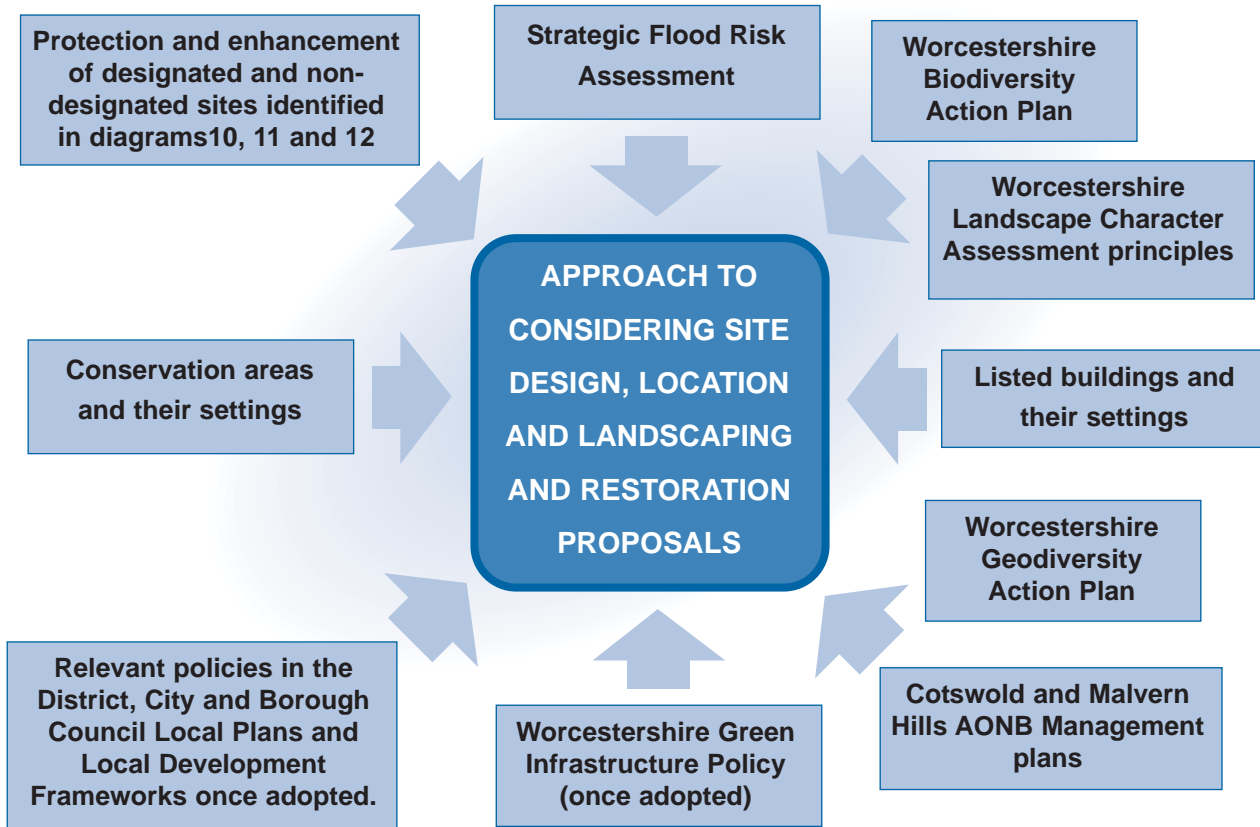
<sup>77</sup> See Worcestershire Waste Core Strategy Background Document Climate Change and Waste Management in Worcestershire (2010) for further details.

<sup>78</sup> Control of pollution and protection of water resources is considered in Policy WCS 4.

<sup>79</sup> Landscaping and restoration are considered in Policy WCS 4.



**Figure 17: Approach to considering site design, location and landscaping and restoration of proposals**



**5.8.** The scope for enhancing natural resources will depend on the nature, scale and location of the development. However, even small sites can contribute towards biodiversity gain through consideration and incorporation of features such as bird, bat and bug boxes. Landscaping also has the potential to enhance habitats for biodiversity on small or large schemes by for example planting native trees or mowing regimes. Development should enhance the value of biodiversity on all sites, even where the current interest is limited.

**Flood risk**

**5.9.** Flooding and its impacts are major challenges to be tackled in Worcestershire and climate change is likely to result in greater frequency of extreme flood events. In preparing their Local Development Frameworks, the District, Borough and City Councils in Worcestershire have undertaken Strategic Flood Risk Assessments. These have been considered and, where relevant, have been supplemented with additional information to inform the approach of the Waste Core Strategy. This is set out in the background document Flood Risk Assessments in Worcestershire

Objective WO1



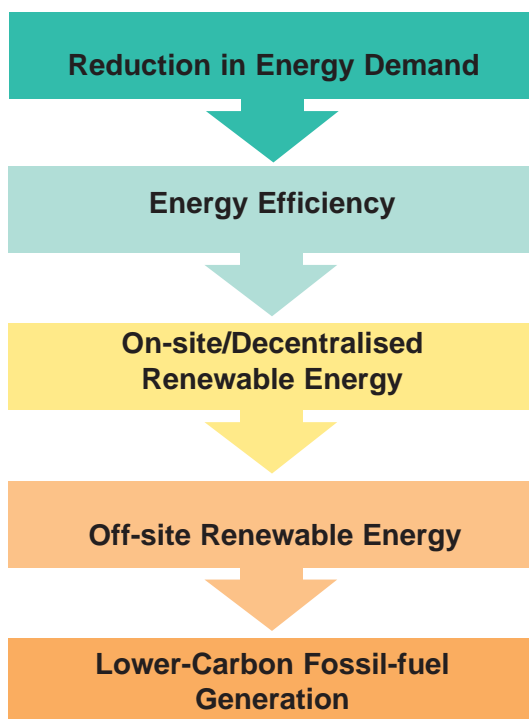
- 5.10. Flooding issues must be considered for all development and must comply with the requirements of national<sup>80</sup> and local policy. Any proposals for waste management development in flood zones 2 or 3 or in Flood Zone 1 with an area greater than 1 Ha or a floor area greater than 1000 m2 must include a flood risk assessment in accordance with the requirements of PPS25, which are summarised in Annex I of this document.
- 5.11. New development should not increase flood risk on the site or elsewhere. Facilities will need a drainage system that can cope with high levels of rainfall and improved attenuation of run-off. The incorporation of sustainable drainage systems (SuDS)<sup>81</sup>, including green roofs and permeable car parks, may also present a solution. This should be considered in the FRA.
- 5.12. Sequential Tests must be used to ensure that the most vulnerable elements of a development are located in the lowest risk areas of the site. Consideration should be given to water courses and topography as these influence both the impact the site could have on flooding, as well as the impact of flooding on the operation of the site. All proposals must demonstrate how the development will remain safe and operational during flooding events.

**Energy hierarchy**

5.13. As a minimum we would expect all proposals for waste management development to address the top two tiers of the energy hierarchy for Worcestershire<sup>82</sup> (see Figure 18), considering reduction in energy demand and energy efficiency. This might be done through design of the facility or the use of more efficient equipment, machinery or processes.

Objective WO1

**Figure 18: Energy hierarchy for Worcestershire.**



*Adapted from the Energy Savings Trust*

**Source:** Worcestershire County Council: Planning for Renewable Energy in Worcestershire Natural Resource Technical Research Paper.

<sup>80</sup> Currently Planning Policy Statement 25: Development and Flood Risk

<sup>81</sup> The uptake of sustainable drainage systems is likely to increase as a result of the Flood and Water Management Act 2010 removing the automatic right to connect to sewers and providing for unitary and county councils to adopt SUDS for new developments and redevelopments.

<sup>82</sup> An energy hierarchy for Worcestershire has been recommended in Planning for Renewable Energy in Worcestershire natural resource technical research paper.



5.14. All new built development, and development involving significant alterations to buildings with a building footprint over 1000m<sup>2</sup>, would also be expected to consider energy generation applying the lower three tiers of the hierarchy in a sequential manner. It is expected that at least 10% of energy will come from renewable or low-carbon energy. Where possible this should be from on-site/decentralised renewable energy; only where it can be demonstrated that this is not possible should off-site renewable energy be considered. In turn lower-carbon fossil-fuel generation would only be considered satisfactory where it is demonstrated that neither of the other sources of generation are possible<sup>83</sup>.

5.15. The positive contribution of waste management activities through energy recovery from waste management activities will be encouraged, for example through landfill gas collection and management systems, energy recovery from biological processes and combined heat and power from thermal treatment activities, provided proposals are in accordance with all other policies<sup>84</sup>.

**Construction Methods**

5.16. Design and construction of new buildings should consider resource efficiency. They would be expected to minimise the use of virgin materials, maximise the use of recycled/reused materials and to

take into account the whole life-cycle of the building, considering the decommissioning of the site and how whether the materials may be re-used or recycled.

5.17. All new waste development must also be in accordance with **Policy WCS 3** and is expected to meet any local standards for sustainable design and construction as set out in the District, Borough and City Councils' Local Development Frameworks.

**Local and sub-regional economic benefits**

5.18. Waste management is part of a network of symbiotic activities within both Worcestershire and the West Midlands and is essential to support the functions of the wider economy.

5.19. All development proposals are expected to demonstrate how they will have local or sub-regional economic benefits. This might be through creating local employment, developing skills in sustainable technologies and by modernising and diversifying business or developing new treatment technologies.

<sup>83</sup> Further guidance is available in the Planning for Renewable Energy in Worcestershire Technical Research Paper, available at [www.worcestershire.gov.uk/planning](http://www.worcestershire.gov.uk/planning).

<sup>84</sup> Energy from waste is considered in Policy WCS5.



Objective WO8

5.20. For waste management to contribute positively to the economy, facilities will need to be of the right type and in the right place and economic benefits provided by the waste industry will need to be balanced against the need to minimise waste production.

**Community involvement**

5.21. Community involvement has an important role to play in contributing towards sustainable development. Community views have shaped the development of the Waste Core Strategy and the community should also be given the opportunity to influence any development proposals brought forward, in accordance with **Worcestershire's Statement of Community Involvement**.

5.22. It is expected that developers will consult with local communities and other stakeholders on all waste management proposals before planning applications are submitted to the Local Planning Authority. Public consultation and involvement (pre-application stage) can be very constructive, helping to avoid misinformation, address fears expressed by the public and allow suggested changes to be incorporated in the final submitted application and therefore should be proportionate to the scale and nature of the proposal. This can make the process of determining the planning application more inclusive and reflect local community concerns.

5.23. In accordance with the validation document all proposals must include a "consultation statement" detailing how the community and other stakeholders were involved and what influence this has had on the proposal.



# 6. Managing waste arising from all new development

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

*WCS3 below refines the ideas set out in Draft Policy Direction WCS7: Assessing the waste implications of new development in the Emerging Preferred Options consultation. As a result of consultation comments received this policy now applies to all development, rather than including a threshold as previously suggested. To respond to other consultation comments, the information required is commensurate to the scale of the development proposal.*

**6.1.** In order to drive Worcestershire's waste up the waste hierarchy, the waste implications of all new developments must be considered at all stages throughout their life cycle; through construction, occupation and demolition. Maximising the amount of construction and demolition waste that is reused and recycled can help to meet the climate change objectives of *Worcestershire's Sustainable Community Strategy* by displacing the need to produce primary aggregates as well as reducing the need for new landfill capacity.

**6.2.** This policy relates to all types of development proposal, including (but not limited to) residential, commercial, industrial and waste management development.

**POLICY WCS 3: Managing waste arising from all new development**

Proposals for all new development must:

- a) Demonstrate how waste arising from operations associated with construction, demolition and groundworks will be reduced, re-used and recycled.
- b) Incorporate facilities into the design that allow occupiers to separate and store waste for composting, recycling and recovery, unless it can be demonstrated that the existing facilities are adequate.

**Explanatory text**

**Waste from construction, demolition and groundworks**

**6.3.** The Strategy seeks to promote the reduction of waste wherever possible and proposals must include measures to reduce waste arisings as part of their planning application. These proposals should consider the types of waste that will be produced and the ways in which this can be managed to reduce disposal.

Objectives WO1, WO3, WO4, WO8

Objectives WO1, WO3, WO4





6.4. This should identify how the proposed construction methods can maximise the re-use and recycling of construction and demolition waste. In some cases this maybe possible to do in situ, for example construction and demolition waste may be crushed, screened and re-used on site. In other cases the waste may be taken off site for sorting and recycling elsewhere. Soils arising from groundwork may be suitable for use in onsite landscaping, subject to an appropriate landscape design, taking into account the local landscape character and visual impact. See **Figure 17: Approach to considering site design, location and landscaping and restoration of proposals.** Steep sided banks or raised profiles that do not marry in with existing surrounding ground levels are rarely appropriate. Consideration should be given to the on-site use of soil arisings or to appropriate off site disposal.



6.5. The information included in the application should be commensurate to the scale and complexity of the construction and/or demolition activity and the variety of wastes created. Above certain thresholds this information should comply with any legal requirements for Site Waste Management Plans. The current threshold is for projects valued at over £300,000.

**Incorporating facilities into design**

6.6. For the foreseeable future it is inevitable that waste will be produced both by Worcestershire's residents and its businesses, and this waste will need to be dealt with. Therefore it is important to consider the implications of managing waste arising from new developments and ensure that suitable facilities are available or provided, to enable the maximisation of recycling, composting and recovery of waste (on-site wherever possible and appropriate).

6.7. Facilities that allow occupiers to separate and store waste for composting, recycling and recovery need to be integrated into the design of the development. The level of provision should be adequate to meet the needs of the proposed development and the type and amount of waste arising from occupation.

Objectives WO1, WO3, WO4, WO8



- 6.8. Specifications for the minimum standards for the type, and scale of facilities and vehicular manoeuvrability needed for new residential, commercial and mixed use developments are set out in the ADEPT report "*Making Space for Waste*" (June 2010)<sup>85</sup>. New developments will be expected to comply with these.
  
- 6.9. On small scale sites provision might include collection points for segregated waste. On larger sites provision might include on-site treatment facilities such as community composting, anaerobic digestion forming part of a district heating system or, in the case of industrial operations, reprocessing of specific wastes produced on site. Any proposals for onsite treatment facilities would need to be assessed against other policies in the Waste Core Strategy and Local Development Framework.

<sup>85</sup> The Association of Directors of Environment, Economy, Planning and Transport guidance "*Making Space for Waste Designing Waste Management in New Developments: A Practical Guide for Developers and Local Authorities*"



## 7. Managing Development

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

*WCS 4 below develops the principles set out in Draft Policy Direction WCS11: Managing the impacts of Waste Management Related Development as set out in the Emerging Preferred Options Consultation. The remit of this policy has been increased to consider issues relating to amenity and infrastructure. During the Emerging Preferred Options Consultation significant support was shown for developing a policy on restoration and aftercare, these issues are also addressed in WCS4 below.*

*In the Emerging Preferred Options consultation we asked whether specific policies should be developed for local recycling centres. This received general support, but the issues to be considered in such a policy had a large overlap with those issues of concern for other types of waste management facilities. We have therefore taken the approach that policy WCS4 and the other policies set out in the development plan will adequately deal with any proposals for Local Recycling Centres.*

**7.1.** All development has impacts on the locality in which it takes places. **Policy WCS4** seeks to maximise positive

impacts and sets out criteria to ensure that waste development does not result in unacceptable adverse impacts.

### **POLICY WCS 4: Managing the impact of new waste management development**

All proposals for new waste management development must demonstrate that:

- i. They are consistent with the WCS objectives and appropriate national, and local planning policy.
- ii. They will protect and enhance European and nationally designated biodiversity, geodiversity and historic sites and sites of local importance.
- iii. They will protect and enhance European and nationally protected species and those species and habitats in the UK and local biodiversity action plans.
- iv. They will contribute positively to the quality and character of the area in which they would be located, through site design which takes into account local characteristics and does not have unacceptable adverse impacts on:
  - the local landscape character
  - the character of the built environment
  - the historic environment, heritage assets and archaeological features.
  - visual amenity.
- v. They will have no adverse visual impact on the natural beauty of the landscape or impact on the key characteristics of the local landscape character of the Malvern Hills or Cotswolds Areas of Outstanding Natural Beauty (AONB).

Objectives WO1, WO2



- vi. They will not have a detrimental effect on source protection zones or aquifers, water quality, quantity or natural flow of water systems, or their associated biodiversity, and must take into account the principles of the River Severn Basin Management Plan.
- vii. They will not have unacceptable impacts on air quality, such as from odours, fumes, dust and bio-aerosols. Where relevant, the issues identified in the Herefordshire and Worcestershire Air Quality Management Plan must be taken into account.
- viii. They will not have unacceptable impacts on the local amenity. The site will need to be compatible with surrounding uses and proposals will not cause unacceptable noise, vibration, odours, fumes, dust, vermin, birds, litter and visual impacts or light pollution. Any cumulative effects must also be minimised by effective mitigation measures.
- ix. They will be served by adequate infrastructure and have good access to the strategic transport network. This must not have an unacceptable adverse impact on safety or congestion on the transport network or amenity along transport corridors.
- x. They will be located in existing buildings or on previously developed land<sup>86</sup> unless there are no suitable sites.

<sup>86</sup> Previously developed land is often known as 'brownfield' land.  
<sup>87</sup> Inappropriate development is defined in national policy (currently Planning Policy Guidance 2: Green Belts).

- xi. Where they constitute inappropriate development in locations designated as green belt<sup>87</sup>, very special circumstances exist.
  - xii. Have considered the need for landscaping or restoration of the site. Any proposed schemes must protect or enhance the natural environment and demonstrate how locally important features have been taken into account.
- Development proposals will not be allowed where these criteria are not met unless exceptional circumstances are clearly justified.

**Explanatory text**

**Designated and locally important sites**

7.2. In line with national and international legislation and policy at all tiers of government, and to meet the objectives of the Waste Core Strategy, new development must protect, and if possible enhance, all sites of European and national importance including those within Worcestershire and those outside the County which may be impacted upon by development within it.

7.3. European and nationally designated sites, both within and outside the County, that might be affected by future development must be protected or enhanced by development. This includes any future designations.



**7.4.** European designated sites are Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. Developments affecting European sites must preserve their integrity and will not be permitted unless this is achieved, other than for imperative reasons of overriding public interest. In such cases significant mitigation would be expected.

**7.5.** The *Habitats Regulations Assessment* has identified the following sites with potential to be affected by development in Worcestershire:

- Bredon Hill SAC (Worcestershire)
- Lyppard Grange Ponds SAC (Worcestershire)
- Dixon Woods SAC (Gloucestershire)
- Fens Pools SAC (Dudley)
- River Wye/Afon Gwy SAC (Monmouthshire, Gloucestershire, Herefordshire, Powys)
- Walmore Common SPA and Ramsar (Gloucestershire)
- Severn Estuary SAC, SPA and Ramsar (Vale of Glamorgan, Cardiff, Newport, City of Bristol, Monmouthshire, Gloucestershire, North Somerset, Somerset, South Gloucestershire).

**7.6.** Where a proposed development is likely to have an adverse effect on a National Nature Reserve or Site of Special Scientific Interest (SSSI) (national designation) or locally identified sites, such as Special Wildlife Sites, Local Nature Reserves and Local Geological Sites, planning permission will not normally be granted, with exceptions only being made where the benefits of the development at this site clearly outweigh both the impacts that it is likely to have on the features for which that site was designated and any broader impacts on the national and local network of sites. Any proposals should look to preserve their integral biodiversity or geological interest and to enhance the site where possible.

**7.7.** Consideration must be given to Listed Buildings, Scheduled Monuments, Registered Battlefields or Registered Historic Parks and Gardens and their settings. Proposals will not be allowed where they are likely to result in significant adverse effects on these designated sites. Wherever possible, development should strive to strengthen landscape character, retaining and conserving existing features whilst seeking opportunities to restore or enhance others. This is fundamental to the principle of sustainability; it is no longer acceptable simply to mitigate to maintain the status quo, any change should protect and enhance the local environment.



**Protected species and habitats**

Objective WO2

**7.8.** The protection of specific species and habitats is also important and all waste management development proposals must protect or enhance European and nationally protected species and those species and habitats in the UK and local biodiversity action plan.

**7.9.** Where proposals are likely to affect species or habitats, appropriate surveys should be carried out by a qualified ecologist and submitted with the application. These should be carried out in line with the requirements of legislation and best practice. Different criteria apply, dependent on the degree of protection afforded to particular species but even for those given the least degree of protection development will not be permitted where there is unacceptable harm unless appropriate and satisfactory mitigation can be implemented.

**Quality and character of the area**

Objective WO2

**7.10.** *The Sustainable Community Strategy* identifies "a better environment for today and tomorrow" as a strategic sustainability issue and makes the protection of the natural and historic environment a priority outcome.

**7.11.** All development must contribute positively to the quality and character of the area, through design which takes into account local characteristics. Design will be assessed against policies in district Local Development Frameworks (LDFs). Depending on the character of the area and nature of the

proposed facility, consideration should be given to use of materials, vernacular, height, scale and massing of buildings and the layout, orientation and landscaping of the entire site.

**7.12.** In determining the design of the site and buildings, consideration should be given to the character of the natural and built environment, including listed buildings and conservation areas and their settings, and local landscape character, guided by the principles of the *Worcestershire Landscape Character Assessment, the County's historic landscape characterisation and the Regional Landscapes for Living concept*.

**7.13.** In all cases the location and design of waste management facilities should take into account the historic environment and historic environment record, heritage assets, archaeological features and seek to preserve or enhance these aspects as well as other features which contribute to the character of the local area. In determining the location of the development, its design and setting, the visual impact of the proposals should be taken into account according to the principles laid down by The Landscape Institute and the Institute of Environmental Assessment.



Objective WO2

**Areas of Outstanding Natural Beauty**

**7.14.** The Malvern Hills Area of Outstanding Natural Beauty (AONB) and the Cotswolds AONB are partially within Worcestershire. They are recognised as nationally important landscapes of equal status to National Parks. AONBs are designated solely for their landscape qualities, for the purpose of conserving and enhancing their natural beauty (which includes landform and geology, plants and animals, landscape features and the rich history of human settlement over the centuries). Therefore, development will only be permitted where there would be no adverse visual impact on the natural beauty of the landscape or unacceptable impact on the key characteristics of the local landscape character.

**7.15.** Where it is demonstrated that visual impact on the key characteristics of the AONB beyond the boundaries of the development site is limited and can be mitigated, development may be permitted. It may also be possible for permission to be given where, on balance, the landscape would be enhanced by the proposal. In all cases assessment of the landscape impact must be included in the application, based on a visual impact assessment and on the descriptions and guidelines outlined in the landscape character assessment, and incorporate mitigation measures as appropriate.

**Water Quality**

**7.16.** Development must not have a detrimental effect on water quality, and developers and operators must assess the area of influence of their activities and to take account of groundwater uses and dependent ecosystems within this area during planning, construction and operation. Proposals should take into account the principles of the *River Severn Basin Management Plan*, the five Catchment Abstraction Management Strategies which cover Worcestershire and should not have an unacceptable adverse impact on aquifers and Source Protection Zones.

**7.17.** Waste management activities can potentially have a serious impact on groundwater quality unless properly controlled and suitably located. The pollution control regime<sup>88</sup> has a significant role in regulating waste management activities to prevent harm to groundwater, however planning also has a part to play.

**7.18.** The potential impacts on groundwater depend on the nature of the facility. Leachate is an important consideration and occurs at sites which manage biodegradable wastes, in particular composting and landfill sites, where leachate management should be included with proposals.

Objective WO2

<sup>88</sup> The Environment Agency regulates waste management activity in order to prevent environmental harm from pollution and emissions, currently through Environmental Permitting.



**7.19.** Where new techniques, operations, products or substances are involved, or where substances that can potentially result in an unacceptable release to groundwater are handled, used, stored or treated, detail will be required to allow the potential impact of the proposal on groundwater to be assessed.

**7.20.** Even where adequate controls are proposed, no waste management facilities will be permitted within Source Protection Zone (SPZ) 1. A risk assessment must be undertaken where the site is:

- on or in a Major/Principal Aquifer;
- within Source Protection Zones 2 or 3; or
- in the case of landfill, below the water table in any strata where the groundwater provides an important contribution to river flow or other sensitive surface waters.

Proposals will not be permitted unless it can be demonstrated that there will be no risk to groundwater. Due to the greater levels of risk associated with landfill sites, they are unlikely to be permitted in these areas.

**7.21.** Water courses are rated according to their biodiversity and water quality. Waste management facilities must not impact negatively on their quality through surface run-off, discharges or during flooding events and cumulative effects of waste management facilities must be considered. New sewage discharges to groundwater in an area of existing discharges is likely to lead to an unacceptable cumulative impact.

**Air Quality**

**7.22.** Waste Management activities could potentially impact on air quality, especially where activities are conducted outdoors. This could include the creation of dust and particulate matter, odours, fumes, bioaerosols and stack emissions.

**7.23.** Development must not have a detrimental effect on air quality, and special attention must be paid where the processes could affect:

- national or international sites designated for nature conservation;
- Worcestershire's Air Quality Management Areas (AQMAs), or those of neighbouring authorities, or other areas where air quality is likely to be poor (including the consideration of cumulative impacts of developments on air quality); or
- listed heritage façades through soiling by emissions from point or mobile sources.

**7.24.** Mitigation measures should be employed to minimise the impact of waste management development on air quality, including consideration of techniques such as indoor working, dust suppression, air filters, or location at suitable distances from sensitive receptors.





Objective WO2

**Amenity**

- 7.25. Due to the nature of their operations it possible that some waste management activities could have potential impacts on residential and neighbouring amenity, including noise, vibration, odours, fumes, dust, vermin, birds, litter and visual impacts or light pollution. Development proposals will not be allowed where they would have unacceptable impacts on the amenity of sensitive receptors, including residents and businesses, and therefore measures must be taken to mitigate negative impacts where possible. Such measures might include carrying out noisy operations indoors, control of working hours, dust suppression or vermin control.
- 7.26 Some processes or kinds of technology are conventionally undertaken outdoors, including landfill, traditional windrow composting, bottle banks and "bring sites", and some forms of waste water treatment, however in most cases, we expect waste management operations to be carried out indoors to minimise negative impacts on amenity.
- 7.27 This would however depend on the nature and scale of the operation and its likely impacts on amenity. In all cases consideration must be given to balancing the impacts of noise, vibration, odours, fumes, dust, vermin, birds, litter and visual impacts or light pollution. In some cases proposals may demonstrate

that other methods of mitigation can be employed to make outdoor working acceptable.

- 7.28. One of the aims of the Community Strategy is to improve the environment for everyone. Proposals to amend or add to existing sites will be expected to improve the environmental acceptability and appearance of the original facility unless there are good reasons to the contrary, for example that it is in accordance with best practice and national and local policy and that the site operates without causing any reason for complaints.
- 7.29. Where proposals involve alterations or extensions to existing sites or increases in capacity, particular regard must be had to cumulative impacts on amenity.

**Infrastructure and transport**

- 7.30. All proposed development must be served by infrastructure which is adequate for all operations on site, such as water, electricity, waste-water disposal and internal access routes. Where new or additional infrastructure is required it must not place undue strain on existing networks.

Objective WO2



- 7.31.** Transport is an important consideration, therefore sites must have good access to the strategic transport network, whether by water, rail or road. These transport networks must have existing or potential capacity to support the movement of waste or recovered resources. In order to minimise waste miles, primary consideration should be given to transport by rail and water and new developments should be in proximity to waste arisings, onward treatment facilities or end-users in accordance with **Policy WCS1**.
- 7.32.** The impact on the local environment and amenity from traffic associated with waste development is a key consideration. Where road transport is necessary, the impact of the development and its associated traffic movements on the safety, integrity and amenity of the road network must be considered. Good accessibility to the strategic highway network will be required.
- 7.33.** All developments must take into account local movement and transportation policies in Local Plans or adopted Local Development Frameworks and aim to minimise the impact of the development by reducing the need to travel for visitors and the workforce.
- 7.34.** Water shortages could frustrate development in Worcestershire. Consideration should be given to the ability of Severn Trent Water Resource Zone 3 to supply the needs of the development.

**Locating development in existing buildings or on previously developed land**

- 7.35.** To help contribute towards the principles of sustainable development, new development should, in the first instance, be directed to previously developed land or existing buildings.
- 7.36.** Proposals involve the reuse of existing buildings, the buildings are suitable for the purpose. All development proposals must be compatible with surrounding uses and must not have unacceptable impacts upon the structure and integrity of existing buildings and operations.
- 7.37.** Where it can be demonstrated that there are no suitable locations on previously developed land or in existing buildings, development on Greenfield sites may be acceptable provided that:
- the proposal does not result in significant adverse impact on the openness of the countryside or its functions;
  - proposals would be compatible with their setting and would not have unacceptable direct or indirect impacts on matters of acknowledged importance in national or local policy; and
  - they would not significantly conflict with other spatial planning objectives in the Local Development Framework.
- 7.38.** Where waste management proposals are operationally related to or located on a mineral working, landfill site or other waste management facility of a temporary nature, permission will only be granted for a temporary period commensurate with the permitted use of the site.



Objectives WO1, WO2

**Green belt**

- 7.39 Large areas to the north of the County are designated as green belt (See Figure 12). There is a presumption against inappropriate development in the green belt in national policy<sup>89</sup> and proposals must clearly justify why permission should be granted.
- 7.40. Development will not be permitted unless the purposes of including land in greenbelt would not be compromised. In order for very special circumstances to justify inappropriate development, proposals will need to demonstrate that other considerations clearly outweigh any harm caused in relation to the purposes for which the green belt was designated.

Objectives WO1, WO2

**Landscaping and restoration**

- 7.41. Landscaping and restoration can provide opportunities to create new or enhance existing habitats and improve sense of place. They can be designed to have a role in climate amelioration, for example through the development of carbon sinks, connectivity of habitats, contribution to green infrastructure, or, on some sites, flood attenuation.

The scope and need for landscaping sites will depend on the nature, scale and location of the development. In all cases, landscaping and restoration proposals must protect and, where possible, enhance the local environment and take into account

and take into account designated sites, landscape character and locally important landscape features as outlined in **Figure 17: Approach to considering site design, location and landscaping and restoration of proposals.**

- 7.42. Landscaping and restoration can often perform more than one function; for instance a Sustainable Drainage System may incorporate planting which also serves to provide screening between neighbouring properties and creates an opportunity for enhanced habitats. Proposals should for landscaping and restoration should contribute to green infrastructure through the enhancement or creation of a multi-functional landscape and priority should be given to using native species in keeping with the principles of the Worcestershire landscape character assessment.

- 7.43. In line with the principles of **Policy WCS2** to take into account the whole lifecycle of the building, proposals for development which is likely to be temporary should give consideration to restoration of the site. In addition, maintenance and long term management or landscaping and restoration proposals should be addressed, through a site landscaping/ restoration management plan, outlining roles and responsibilities for the site over the longer term. Restoration of landfill is considered in **Policy WCS6.**

<sup>89</sup> Currently Planning Policy Guidance 2: Green Belt



## 8. Specialised Waste Management Facilities

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

### Energy from Waste

*From the Emerging Preferred Options consultation it was clear that resource recover should be a key priority. This is reflected throughout the draft submission Waste Core Strategy and this policy has been developed to ensure that recycling is maximised and where residual waste treatment is necessary energy recovery is maximised.*

**8.1. Objective WO4** makes implementing the waste hierarchy the basis for delivering sustainable waste management in Worcestershire. In order to implement the waste hierarchy and reduce the impacts of waste management on climate change, the Waste Core Strategy promotes the reuse and recycling of resources. Where this is not possible the recovery of energy from waste will be expected for all proposals.

**8.2.** Energy recovery from the waste which cannot be recycled can play an important part in a balanced energy policy and in diverting waste from landfill.

### POLICY WCS5: Recovering energy from waste material

Any process for waste management that could recover energy must do so.

Energy from waste proposals will be considered acceptable where they demonstrate that:

- i. sorting of waste is carried out to maximise resource recovery and recycling;
- ii. energy recovery is maximised; and
- iii. resource recovery from by-products is maximised and any residues can be satisfactorily managed and disposed.

Development proposals will not be allowed where these criteria are not met unless exceptional circumstances are clearly justified by the applicant.

### Explanatory text

**8.3.** In order to maximise resource recovery, any process for waste management that could recover energy must do so. There are currently three broad types of waste management activities which can result in energy recovery:

- Those that involve applying heat to break down the waste.
- Those that involve the controlled bacterial breakdown of waste.
- Those that involve processing waste to produce fuel.

We are aware that in the future other technologies may develop to recover energy from waste and these should also be assessed against this policy.

Objectives WO1, WO3



Objective WO3

**Sorting waste to maximise resource recovery and recycling**

**8.4.** All proposals must demonstrate that sorting of waste will be carried out to separate recyclable material for reprocessing. This could be done on-site or elsewhere.

**Maximising energy recovery**

**8.5.** Energy recovery must be maximised. This should be in the form of Combined Heat and Power (CHP) and the location of facilities should consider the potential users of the CHP. The ability to serve local users should be considered in the first instance. Where this is not possible grid connections should be considered. Only where it is demonstrated that CHP is either not practicable or would not provide the greatest energy recovery will heat or power as single energy recovery methods be considered appropriate.

Objectives WO1, WO3

**Maximising value recovery from by-products**

**8.6.** All waste management processes have residues. Some processes, such as those which include the application of heat to waste, may result in ash residues. Some ash can be used in road building, asphalt or breeze blocks. The opportunities to recover value from these residues must be fully considered. However, other residues may be hazardous and must be disposed of appropriately.

Objective WO3

**8.7** Other processes which involve the use of bacteria to break down waste can result in residues which can be used as a soil improver if the correct standards are met. Where this is not the case, use of the material for

other purposes, such as daily landfill cover, should be considered before disposal.

**Landfill**

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

*Draft Policy Direction WCS9 Landfill in the Emerging Preferred Options consultation was supported by the majority of respondents. The issues have been refined in WCS6 below. In the Emerging Preferred Options consultation we asked whether specific policies should be developed for landfill mining. This received general support, but the issues to be considered in such a policy had a large overlap with those issues of concern for landfill and we therefore think that policy WCS6 and the other policies in the development plan will adequately deal with any proposals for Local Recycling Centres.*

**8.8.** The term landfill refers to waste disposal sites for the deposit of waste into or onto land<sup>90</sup> and as such also includes landraising<sup>91</sup>.

<sup>90</sup> The Landfill (England & Wales) Regulations 2002

<sup>91</sup> Where the deposit of waste material above existing or original ground level raises land (this does not include landspreading - adding material to land to improve its fertility or soil texture).



- 8.9. In line with European and National policy and the aims of the *Worcestershire Sustainable Community Strategy*, the *Waste Core Strategy* aims to reduce the amount of waste going to landfill. This will maximise resource recovery and minimise impacts on the environmental and climate change.
- 8.10. Even when re-use, recycling, composting and recovery are maximised, there will, for the foreseeable future, be a small proportion of waste which, due to its nature, cannot be managed through any means other than disposal to landfill.
- 8.11. The nature and characteristics of landfill differ to those of other waste management facilities and activities. Considerations specifically relating to landfill proposals are addressed in this policy.
- 8.12. It is possible that during the life of the strategy, proposals may be put forward to recover resources from historic landfill sites (landfill mining). Any proposals for landfill mining would need to be assessed in accordance with the development plan and would be considered in consultation with the Environment Agency or any other relevant body.

<sup>92</sup> For more information see Waste Core Strategy background document "Landfill".

<sup>93</sup> West Midlands Regional Spatial Strategy - Phase Two Revision Waste Background Paper states that: "In 2003 the West Midlands was a net importer of hazardous waste and it has not been asked by Government to make provision for any capacity over and above the region's own needs...It is not considered necessary to make any specific to make any specific provision for new site to manage hazardous waste but the situation will be monitored closely".

### POLICY WCS6: Landfill

- a) No further planning permissions will be granted for new landfill sites except where it is demonstrated that:
  - i. There will be a shortfall in landfill capacity necessary to achieve the aims and purpose of the Strategy; or
  - ii. The proposal is essential for operational reasons and is the only practicable option.
- b) Proposals for all sites must include landfill gas management systems, with energy recovery where practicable.
- c) All proposals must include a restoration scheme which protects and enhances the local environment and takes into account locally important characteristics.

### Explanatory text

#### Circumstances where landfill may be acceptable

##### Shortfall in capacity

- 8.13. Existing landfill capacity in Worcestershire is sufficient to meet need during the lifetime of the strategy<sup>92</sup>, with the exception of hazardous waste where there is sufficient capacity within the West Midlands<sup>93</sup>. It is therefore unlikely that any proposals for new landfill capacity will come forward and no areas of search have been identified.

Objectives WO1, WO2, WO3, WO5

Objective WO5



Objectives WO1, WO2

**8.14.** Any proposals for new landfill capacity must clearly demonstrate that a shortfall in capacity exists, as well as clearly justifying why the waste could not be managed at a higher level of the waste hierarchy and must be disposed of to landfill.

**Operational necessity**

**8.15.** Landfill may be necessary for a variety of operational reasons. Landfill is often an essential component in the restoration of mineral workings and can also be used in the restoration of previously developed or derelict land. Proposals will only be allowed where it is demonstrated that landfill is the most appropriate means of restoration.

**8.16.** It is possible that proposals may be made for schemes which use waste materials, such as subsoil, for other purposes akin to landfill such as flood management schemes, landscaping or noise mounds. Development proposals must prove the need for such features and have regard to the local characteristics of the area, as outlined in *Figure 17: Approach to considering site design, location and landscaping and restoration of proposals (p64)*.

<sup>94</sup> For more information see Waste Core Strategy background document "Climate change and waste management in Worcestershire".



**Landfill gas management**

**8.17.** Non-inert landfill sites can cause greenhouse gas emissions through the uncontrolled release of landfill gas. Landfill sites are responsible for approximately 40% of the UK's methane emissions<sup>94</sup>. Where gas is collected and burned in a gas engine to produce electricity or is flared, the production of greenhouse gas is considerably reduced and energy can be recovered from the waste.

**8.18.** All proposals for non-inert landfill capacity should include landfill gas management systems. Proposals for non-inert landfill sites without landfill gas management systems will not be acceptable, except where it is clearly demonstrated that:

- they cannot practicably be implemented; and
- this would not result in any unacceptable adverse impacts.

Objective WO1



**8.19.** The design and management of each site will mean that some sites are more suited to energy recovery than others. In the first instance gas management systems should use landfill gas for energy production and only where it is demonstrated that this is not possible would flaring of gas be acceptable.

**Restoration Schemes**

Objective WO2

**8.20.** All proposals for new landfill capacity must consider the whole life of the landfill site, from engineering through to restoration. The restoration of landfill sites can provide opportunities to create new or enhance existing habitats and provide valuable open space for communities or, in some cases, recreational facilities. Restoration proposals must protect and, where possible, enhance the local environment and take into account designated sites and locally important characteristics as outlined in **Figure 17: Approach to considering site design, location and landscaping and restoration of proposals.**

**8.21.** Facilities may exist which are ancillary to a landfill site. These facilities are usually linked to the life of the landfill and, whilst they are acceptable during the operational life of the landfill, they will normally be required to cease operations when landfilling is completed. Any such facilities will need to be considered as part of the restoration scheme.

**8.22.** An aftercare period will be required which is adequate to ensure that a satisfactory outcome is produced and that all planting and landscaping is established. This will be a minimum of 5 years and will be distinct from any period set by the pollution control authority with regard to surrendering licences.





## 9. Managing the impact of surrounding uses

**Q15 (pg7 of the questionnaire)** Do the policy and explanatory text respond to local issues and contribute towards the achievement of the vision and objectives? If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

**Q16 (pg 8 of the questionnaire)** Are the policy and supporting text deliverable and flexible?

If no or don't know, please state why you feel this way and propose further suggestions for addressing these local issues.

*Draft Policy Direction WCS6 Safeguarding received general support in the Emerging Preferred Options consultation. This policy has been refined in WCS7 below.*

**9.1.** In order to meet Worcestershire's waste capacity requirements, appropriate existing and permitted sites should be protected from incompatible development. Such development could impede the operation of waste sites, in effect sterilising them. Relocating a waste management operation can be difficult due to the scarcity of appropriate sites, requirement for planning permission and environmental permits.

**9.2.** In order to ensure that no unacceptable adverse impacts arise from new waste management development, all proposals will be assessed through the policies in the development plan. However, the introduction of new sensitive receptors in close proximity to existing waste management operations could make a previously acceptable facility become

<sup>95</sup> The Environment Agency requires a bioaerosol risk assessment for sites managing biodegradable waste within 250m of sensitive receptors. This is deemed an appropriate distance for the purposes of this policy.

'unacceptable' to occupiers of the new sensitive receptor. In order to safeguard existing waste management capacity, the relationship between the new and existing land uses should be considered before permission is granted in order to minimise this conflict.

**9.3.** It has often been left to Environmental Health Officers to resolve any conflicts after development has taken place, in their role dealing with statutory nuisance, rather than the impacts and mitigation having been considered as part of the development proposal. If impacts are considered in the development and design of the proposal, it will usually be possible to reduce any impacts to an acceptable level.

### **POLICY WCS7: Impact of new development on existing or proposed waste management facilities**

In order to reduce conflict between different users, proposed new development within 250 metres<sup>95</sup> of existing or permitted waste development must demonstrate that:

- a) The amenity of the proposal and the operations of the waste management facility will not be adversely affected.
- b) The effects of all such impacts and conflicts can be rendered acceptable; any required mitigation will be the responsibility of the developer of the new proposal.

Where mitigation measures are not considered adequate to reduce adverse impacts to an acceptable level, permission for the new development will not be granted.

Objectives WO5, WO6, WO9



**Explanatory text**

**9.4.** The nature of different waste management operations means that their impacts will vary. Potential conflicts between land uses/users should be addressed through the consideration of:

- i. The noise, vibration, odour, fume and dust levels in the locality of the waste site and the impact these would have on the proposed new development;
- ii. The levels of traffic and congestion, vermin and bird nuisance experienced in the locality of the waste site and the impact this would have on the proposed new development; and
- iii. The distance of the proposed development from any potential source of bioaerosols and the potential impacts on sensitive receptors at the proposed new development.

**9.5.** All development proposals within 250m of a waste management facility (as indicated on the web tool<sup>96</sup>) must include:

- Details of the location of the proposal site in relation to the waste management facility;
- Details of the waste management facility (name and type as indicated on the web tool);
- A consideration of the likely impacts from the waste management facility;

- A consideration of the compatibility of the proposed development with the waste management facility, including any details which may influence this. This may include any intervening features which provide an existing buffer, through built development or the topography of the land, or surrounding land uses which are similar in nature to the waste management facility.

Where impacts are likely to affect the proposed development, it should be demonstrated that design and site layout are adequate to mitigate any impacts.

**9.6.** Liaison with the waste site operator is encouraged; however, where the waste operator is operating within the conditions of their planning permission and the requirements of the pollution control regime, any required mitigation will be the responsibility of the developer of the proposed new development.

**9.7.** Mitigation might take the form of orientation and layout of the site, building design, screening or buffer zones; however, these proposals should also take account of local characteristics and policies as set out in **Figure 17: Approach to considering site design, location and landscaping and restoration of proposals** and any other relevant design guidance in the Local Development Framework.

<sup>96</sup> We have developed a web-tool that maps all waste sites and can be used to determine whether a location is within 250m of a waste site. This is available on our website [www.worcestershire.gov.uk/wcs](http://www.worcestershire.gov.uk/wcs)



## 10. Implementation and Monitoring Framework

### Implementation

#### Q17 (p8 of the questionnaire):

Do you agree that the objectives are deliverable and capable of being implemented?

If no or don't know please state why you feel this way and propose further suggestions for addressing these issues.

**10.1.** The Waste Core Strategy will primarily be implemented through the grant of planning permission for individual proposals that are then realised on the ground. Those planning permissions will be determined in accordance with the Development Plan, of which the Waste Core Strategy is a major part. The key implementation mechanism for the Waste Core Strategy will be through the determination of planning application by the County Council in its role as a Waste Planning Authority (WPA). However The District Councils in the county will have an important role to play in how they consider the waste aspects of all applications for planning permission.

**10.2.** The implementation of the Strategy will also be affected by the application of other policies, work of other agencies, behaviour of the general public, and actions of industry. These will include the programmes and projects of the statutory agencies, procurement decisions of companies and organisations and decisions of infrastructure providers. The County Council has an important part to play in this, notably in its role as

Waste Disposal Authority (WDA) and as a major landowner and developer and through pre-application advice.

### Deliverability

**10.3.** In order to be effective, the Waste Core Strategy must be deliverable. Each of the objectives of the Strategy is considered below along with the policy framework which will facilitate their delivery.

**10.4.** It is considered that all objectives could be delivered through the policy framework. In general each objective is contributed to by a number of policies, making failure to deliver less likely. Some potential limitations in policy delivery have been identified but these are not considered to undermine the delivery of the objectives.

**WO1: To base our decisions on the principles of sustainable development and the need to reduce greenhouse gas emissions to and mitigate climate change.**

**10.5.** There are a variety of policy aspects which contribute towards this objective. It will need to be delivered through development proposals, specifically through the consideration of sustainable development and climate change in design and location of development. The policies have remained deliberately flexible to enable this and the measures used are expected to be commensurate to the scale of the development.



**WO2: To protect and enhance the County's natural resources, environmental, social, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of the local people.**

**10.6.** In the most two recent monitoring years (2007-2008 and 2008-2009) none of the minerals or waste planning applications determined by the County Council has had an unacceptable adverse effect on natural or historic assets or amenity, including designated assets. 100% of applications were also modified/conditioned in order to protect designated assets or amenity. Based on this evidence, it is believed that policies contributing towards this objective will be deliverable.

**10.7.** The implementation of these policies is supported by a number of tools prepared by the County Council and other partners, including the *Landscape Character Assessment and Worcestershire Biodiversity Action Plan*, *Geodiversity Action Plan* and AONB management plans. Implementation could be compromised if these strategies are not maintained, however this is considered to be very unlikely.

**WO3: To do everything possible to minimise waste production and make driving waste up the waste hierarchy the basis for waste management in Worcestershire.**

**10.8.** The strategy has made provision for the total 'capacity gap' to be managed through treatment facilities, and has not identified *areas of search* for landfill sites.

**10.9.** Ultimately we would like all the waste in the County to be reused, recycled, composted or recovered so that none is landfilled. We do not expect to achieve this for the foreseeable future and our monitoring targets, to recycle, compost or recover reflect this:

- 70% of MSW
- 75% of C & I and
- 75% of C & D waste.

**10.10.** Nonetheless our approach is to do everything possible to foster waste management in the county. Rather than underestimate how much capacity we need and risk frustrating the development of new facilities we have based the Strategy on high estimates of arisings and low estimates of existing capacity (see background document "Arisings and capacity" ). We recognise that we are probably over estimating how much capacity we need but we consider that by doing so we give the industry more opportunity and flexibility than the alternative. We will not achieve zero waste by minimising how much capacity we need or under providing land for it. The industry has consistently argued at the West Midlands Regional Technical Advisory Body for waste (WMRTAB) that the normal operation of the market makes the over provision of facilities impossible - business will not bring forward proposals unless they perceive that sufficient waste arisings exist and can be accessed economically.



**WO4: To ensure that the waste implications of all new development in Worcestershire are taken into account.**

- 10.11. All applications for development in the county will be expected to contribute towards the delivery of this objective. **Policy WCS 3** considers the minimisation of waste on site and the provision of facilities which allow waste to be stored for recycling.
- 10.12. Reduction, re-use and recycling of construction and demolition waste is required for large scale projects under the *Site Waste Management Regulations 2008*. This currently applies to projects over £300,000 but a requirement to consider C&D waste is extended to all development proposals in policy WCS3. A recent survey<sup>97</sup> found that when Site Waste Management Plans are initiated in the planning and design of projects, 65% of respondents made cost savings by designing out waste and none reported an increase in costs. The level of detail required by WCS3 is commensurate to the scale of the proposal meaning that costs associated with the process are likely to be lower for smaller developments.
- 10.13. Given the evidence that the consideration of C&D waste does not generally increase costs and can in some cases reduce costs, it is considered that this objective will be deliverable.

**10.14** The incorporation of facilities for the separation and storage of waste is also expected to be commensurate to the scale of the development, is based on The Association of Directors of Environment, Economy, Planning and Transport guidance *"Making Space for Waste Designing Waste Management in New Developments: A Practical Guide for Developers and Local Authorities"*<sup>98</sup>. Councils, developers and the waste industry have contributed to the document which included guidance for residential, commercial and mixed use developments and as such it is not expected to place any unacceptable burden on developers.

**10.15.** Implementation of this objective will however depend on the District, City and Borough Councils, as well as the County Council, in determining all planning applications. It is the County Council's intention to develop some guidance relating to this policy which will help to inform the District, City and Borough Councils and to set up a reporting mechanism to monitor the implementation of this policy.

<sup>97</sup> WRAP "Site Waste Management Plans impact survey 2009"

<sup>98</sup> Available at <http://www.cssnet.org.uk/>



**WO5: To address the "Capacity Gap" between how much waste management capacity we have and what we need over the plan period to 2027**

- 10.16. Applications will only be brought forward if there is adequate land available and this is an important consideration when looking at whether the Waste Core Strategy is deliverable.
- 10.17. The County Council commissioned research from ERM<sup>99</sup> on the location, extent and availability of land suitable for waste facilities in the county. The report estimated that approximately 18 sites of 1-2ha in size would be needed to meet the capacity gap in the County. At the time of the assessment they found 48 industrial estates with some available land. Whilst this is only a

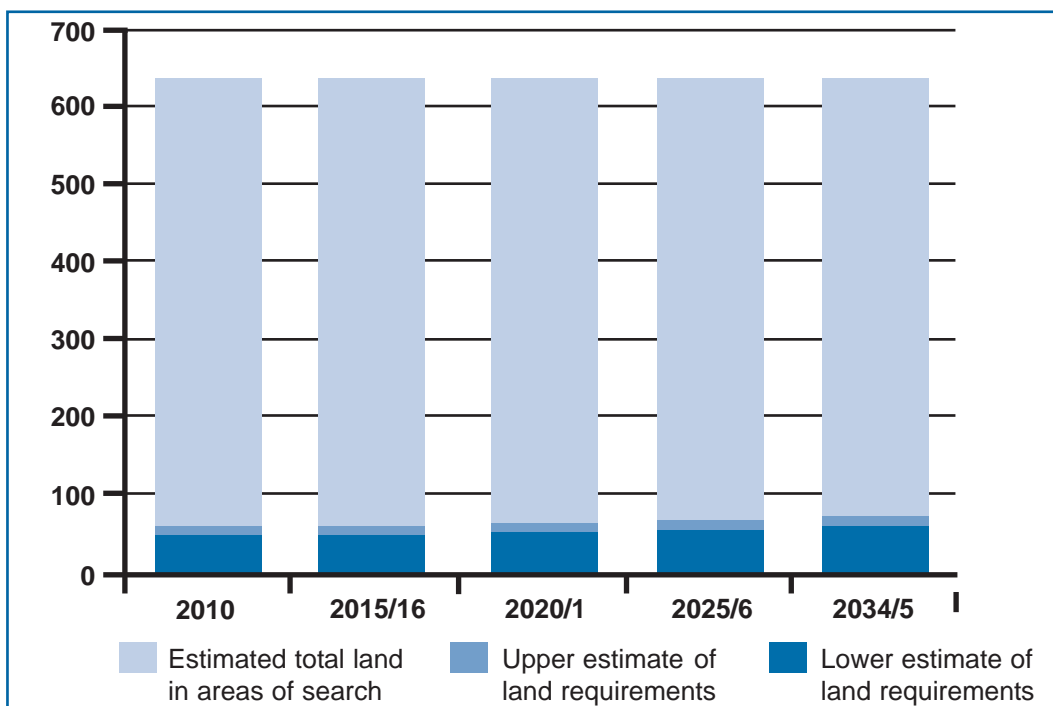
snap-shot, discussions with the property management companies indicated that likely turnover of sites and anticipated attitude of the site owners and managers should mean that other sites become available on these and other estates throughout the life of the Strategy.

- 10.18. Further work by the County Council<sup>100</sup> indicates that 49.5 - 64.5 ha will be needed to deliver the required facilities. The areas of search identified approximately 640 ha in size. This includes access roads and other areas on site which are not themselves part of industrial units or useable areas of mineral sites, but is at least 9 times the land area required, as illustrated in **Figure 19**.

<sup>99</sup> See background document "Industrial estates study" by ERM

<sup>100</sup> See background document "Arising and capacity"

**Figure 19: Comparison of land required and estimate of total land in areas of search**



**Note:** 2034/5 is beyond the life of the Strategy but is included to show estimated requirements into the future.



**Industrial Estates:**

**10.19.** The ERM research looked at industrial sites and spoke to property management companies in Worcestershire<sup>101</sup> and found that it would be feasible to find units on industrial estates that could be used for waste management facilities and that in general, owners of such industrial property will view any proposition in purely commercial terms and will not be concerned about the actual use provided that the facility is well maintained, visually unobtrusive and in-keeping with surrounding units. In Worcestershire many existing waste management operations take place on such estates.

**10.20.** The report also considered average capital and operational costs of different waste management operations and the average costs of renting or purchasing industrial land and concluded that this would be an economically feasible option in this County. The report considered that in the short term conditions looked even more favourable, with the falling prices of industrial land along with the potential of significantly longer lease periods likely to make waste facilities very attractive propositions for landowners in the current economic climate.

**Active mineral workings or landfill sites and redundant agricultural and forestry buildings**

**10.21.** There is a natural, symbiotic relationship between some kinds of waste management facilities and these kinds of locations.

Permissions have already been given in Worcestershire for the treatment and transfer of C&D waste at working mineral sites, for recycling and sorting facilities at landfills and open windrow composting on redundant agricultural land. It is believed that these kinds of locations are likely to be brought forward to contribute towards this objective.

**10.22.** All permitted mineral and landfill sites in the county were assessed through the traffic light assessment and five were considered suitable for identification as areas of search. Several of these have existing planning permissions for waste management development.

**WO6: To safeguard existing waste management facilities from incompatible development.**

**10.23. Policy WCS7** requires sites within 250m of existing or permitted waste operations to consider the implications they may have on these developments. We are developing a web tool to allow developers to identify waste site locations (boundary) and 250m buffer around them. The web tool will include details of site name, operator and type of facility and will be available for use on our website. This is intended to inform district planning and environmental health officers, developers and other parties. We are investigating the possibility of "broadcasting" this to District Councils' internal mapping systems.

<sup>101</sup> GVA Grimley, Harris Lamb, Halls Commercial, John Trustlove, Jonathan Chilton and King Sturge.



**WO7: To reduce waste miles by road.**

- 10.24. The approach to this is two-fold. Firstly more sustainable transport modes will be encouraged, and secondly waste facilities are expected to be located close to arisings, onward treatment opportunities or end-users.
- 10.25. The River Avon is navigable throughout the County and the River Severn as far north as Stourport-on-Severn. The canal network is extensive and connects to systems to the north, south and east of the County. The River Severn is currently being used for freight transportation between Ryall and Ripple Quarries, demonstrating that water transportation can be commercially viable in the county. There are however some limitations on vessel size due to locks on or between waterways.
- 10.26. Rail is particularly well suited to bulk freight movements, but opportunities for rail freight within Worcestershire are limited at present. CENTRO recently produced a *Rail Development Plan for the West Midlands* which highlights continuing importance of rail freight in the region. As part of LTP3 Worcestershire County Council intends to work with the Worcestershire Freight Quality Partnership, partners in the rail industry as well as the Borough, City and District Councils and landowners to identify and develop opportunities to develop rail freight infrastructure and services in Worcestershire, and to promote the use of rail freight for long-distance freight movements emanating from Worcestershire.

- 10.27 Given the potential limitations in relation to sustainable transport modes, this objective is most likely to be delivered by locating development close of waste arisings, onward treatment and end users. When identifying areas of search the majority of locations were close to foci of arisings and resource indicating that there is adequate land in appropriate locations to deliver this approach. Proximity must also be considered when bringing forward sites outside of the *areas of search* and the approach is flexible enough to respond to specific arisings or resource demand.

**WO8: To encourage communities in Worcestershire take responsibility for their own waste and involve all those affected as openly and effectively as possible.**

- 10.28. It is expected that all proposals will undertake public consultation prior to submission. Between 2008 and 2009 the number of applications submitted to the County Council with consultation statements rose from 18% to 22%<sup>102</sup> and it is believed that other proposals that did not include a consultation statement had also undertaken pre-application consultation with local communities.

<sup>102</sup> Worcestershire County Council "Minerals and Waste Local Development Scheme: The Fifth Annual Monitoring Report 2008-2009" December 2009.





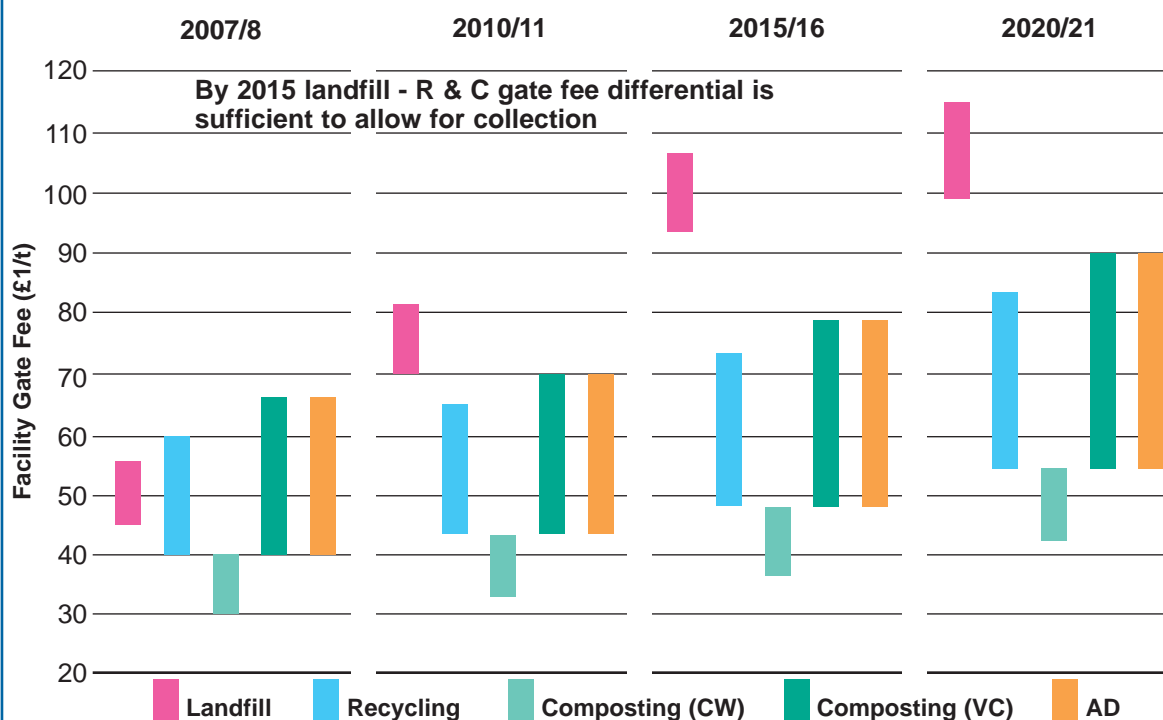
**WO9: To develop a waste management industry that contributes positively to the local economy.**

- 10.29.** The Strategy will enable the delivery of new waste management facilities. Not only does this have the potential to create new employment opportunities, and result in skills, training and technical innovation within the industry, but it could also support the local economy as a whole.
- 10.30.** The majority of commercial and industrial activities produce some form of waste, and in Worcestershire we know this is currently over 730,000 tonnes per annum<sup>103</sup>. Businesses must pay for the management and disposal of

this waste and over the coming years the cost of waste management are expected to increase. Costs of landfill will increase significantly due to increases in landfill tax and other factors, whereas the costs of other treatment methods is expected to increase at a much lower rate, as illustrated in **Figure 21**. The Strategy seeks to enable a greater range of waste management options in the County. This will give businesses greater opportunities to choose treatment methods that best suit the wastes they produce and to avoid the financial implications of sending waste to landfill.

<sup>103</sup> 2007 figures: EA Waste Data Interrogator total HIC arising in Worcestershire minus municipal waste in Worcestershire 2006/07.

**Figure 20: Comparative gate fees for landfill, Recycling and Composting facilities 2007/8 - 2020/21**



Source: Advantage West Midlands (2008) waste - Future Resource for Business



**10.31.** In the development of all new waste management facilities will be direct to locations close to arisings, providing the opportunity to reduce transport costs.

**Monitoring framework**

**Q18 (p9-10 of the questionnaire):**  
 Do you agree that the policies are capable of being effectively monitored using the framework set out?  
  
 If not or don't know please state why you feel this way and propose further suggestions for addressing these issues.

**10.32.** The Council is committed to monitoring the Waste Core Strategy in order to achieve the vision and strategic objectives it sets out.

**10.33.** The purposes of monitoring are:

- To assess the extent to which policies in the Core Strategy are being implemented.
- To identify policies that may need to be amended or replaced.
- To measure the performance of the Core Strategy against the vision and strategic objectives.
- To establish whether policies have had unintended consequences.
- To establish whether assumptions and objectives behind policies are still relevant.
- To establish whether targets are being achieved.
- Indicate where it is necessary to revise the Core Strategy.

**10.34.** This section sets out arrangements for monitoring the effectiveness of the Waste Core Strategy and the process of reporting results.

**10.35.** The monitoring schedule considers each of the objectives in the Waste Core Strategy, considering how they will be implemented and how their achievement will be monitored. Many of the objectives are contributed to by several policies, as illustrated in **Figure 21**.



Figure 21: The relationship between the policies and the objectives

	Objective	Policy						
		WCS 1	WCS 2	WCS 3	WCS 4	WCS 5	WCS 6	WCS 7
	<b>WO1:</b> To base our decisions on the principles of sustainable development and the need to reduce greenhouse gas emissions to and mitigate climate change.	*	*	*	*	*	*	
	<b>WO2:</b> To protect and enhance the County's natural resources, environmental, social, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of the local people.	*	*		*		*	
	<b>WO3:</b> To do everything possible to minimise waste production and make driving waste up the waste hierarchy the basis for waste management in Worcestershire.		*	*		*	*	
	<b>WO4:</b> To ensure that the waste implications of all new development in Worcestershire are taken into account.		*	*				
	<b>WO5:</b> To address the "Capacity Gap" between how much waste management capacity we have and what we need over the plan period to 2027.	*					*	*
	<b>WO6:</b> To safeguard existing waste management facilities from incompatible development.							*
	<b>WO7:</b> To reduce waste miles by road.	*	*					
	<b>WO8:</b> To encourage communities in Worcestershire take responsibility for their own waste and involve all those affected as openly and effectively as possible.	*	*	*				
	<b>WO9:</b> To develop a waste management industry that contributes positively to the local economy.	*	*					*



**10.36.** The approach taken has also been informed by the Sustainability Objectives and both the WCS and SA objectives have been taken into account when developing indicators for monitoring the strategy.

**10.37.** In order for the effectiveness of the strategy to be kept under review, it is necessary not only to identify how the outcomes will be monitored, but also to outline situations which may trigger a review of the Strategy. These are also set out in **Table 9**. Findings will be reported in the Council's *Mineral and Waste Local Development Scheme Annual Monitoring Report (The AMR)*. The monitoring period for the AMR is currently April to March.

**10.38.** If monitoring indicates that targets have been missed, the process outlined in **Figure 22** will be followed. In essence, the process sets out to establish if a failure to meet a target is significant, in which case we need to review and correct the Strategy, or the result of short-term or other factors which are not significant. It may be possible to correct some failures through mechanisms such as adopting a Supplementary Planning Document (SPD) rather than formally reviewing the entire strategy.

**Figure 22: Policy review process**



# 10. IMPLEMENTATION AND MONITORING FRAMEWORK • Worcestershire Waste Core Strategy

Table 9: Monitoring Schedule

WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?		WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?			
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>WO1:</b> To base our decisions on the principles of sustainable development and the need to reduce greenhouse gas emissions to and mitigate climate change.</p> <p><b>SA2:</b> Reduce causes of and adapt to impacts of climatechange</p> <p><b>SA3:</b> Avoid Flood risk</p> <p><b>SA8:</b> Promote energy efficiency and renewable/ low carbon energy</p>	<p>WCS 1: Location of waste management development</p> <p>WCS 2: Ensuring Sustainable Waste Management Development</p> <p>WCS 3: Managing Waste arising from all new development</p> <p>WCS 5: Recovering energy from waste material</p> <p>WCS 6: Landfill</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p> <p>EA and Defra for data collection.</p>	<p>Waste Planning Applications (Public and private sector)</p>	<p>Requires creative and integrated approach.</p>	<p>Potential for additional costs to make developments less viable. <i>Impact: Medium Likelihood: Medium</i></p> <p>Possible gap in applicant's knowledge relating to delivering energy hierarchy and design taking into account climate change adaptation and mitigation could result in a time lag in adoption/ acceptance of innovative design approaches. <i>Impact: Medium Likelihood: Medium</i></p>	<p>1. % of applications for waste management considering climate change mitigation and adaptation in design.</p> <p>2. % of proposals for waste management that consider energy efficiency.</p> <p>3. % of new built waste management development and significant alterations to buildings with a gross floor space of over 1000 sq m to gain at least 10% (or more, if local targets are higher) of energy supply annually from renewable energy supplies.</p> <p>4. % of new development incorporating SuDS</p> <p>5. Number of planning permissions granted contrary to the Environment Agency advice on flooding and water quality grounds.</p>	<p>100%</p> <p>100%</p> <p>100%</p> <p>100%</p> <p>0</p>	<p>Permission granted for one application that does not comply.</p> <p>Permission granted for one application that does not comply.</p> <p>Permission granted for one application that does not comply.</p> <p>Less than 90% for three years in any five.</p> <p>One permission granted contrary to Environment Agency advice.</p>





WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?			WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?		
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>WO2:</b> To protect and enhance the County's natural resources, environmental, social, cultural and economic assets, the character and amenity of the local area and the health and wellbeing of the local people.</p> <p><b>SA7:</b> Promote new technologies</p> <p><b>SA9:</b> Protect and enhance soil, water and air</p> <p><b>SA11:</b> Safeguard &amp; Strengthen landscape quality</p> <p><b>SA12:</b> Conserve &amp; enhance biodiversity and geodiversity</p> <p><b>SA16:</b> Conserve and enhance the historic &amp; built environment</p> <p><b>SA18:</b> Ensure efficient use of land</p>	<p>WCS 1: Location of waste management development</p> <p>WCS 2: Ensuring Sustainable Waste Management Development</p> <p>WCS 4: Managing the impact of new waste management development</p> <p>WCS 6: Landfill</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>EA and Defra for data collection.</p> <p>Natural England, English Heritage, Worcestershire Wildlife Trust and appropriate health authority for technical advice.</p>	<p>Waste Planning Applications (Public and private sector)</p>	<p>Locally important natural and historic resources and features must be determining factors in establishing acceptability of proposals.</p>	<p>Indicators depend on availability of data and advice from outside bodies. <i>Impact: Medium</i> <i>Likelihood: Medium</i></p> <p>Presence and significance of features outside the application site may not be recognised. <i>Impact: High</i> <i>Likelihood: Low</i></p>	<p>6. All permitted waste management facilities that could recover energy do so in accordance with WCS5.</p> <p>7. Number of permissions for new development which include provision for biodiversity enhancement.</p> <p>8. Number of permission having an unacceptable adverse impact on landscape character, scheduled ancient monuments, listed building, registered historic parks and gardens.</p> <p>9. Number of permission granted in the Malvern Hills or Cotswolds AONB.</p> <p>10. Number of permissions granted in accordance with highways advice.</p>	<p>100%</p> <p>100%</p> <p>None</p> <p>100%</p>	<p>Permission granted for one application that does not comply.</p> <p>Less than 75%<sup>104</sup> over three years in any five.</p> <p>Permission granted for one application that does not comply.</p> <p>One where no acceptable justification.</p> <p>Less than 90% over three years in any five.</p>

<sup>104</sup> This is lower than the 90% threshold used elsewhere because we recognise that some development will take place within existing buildings and will not have a significant impact on biodiversity or significant opportunity to provide enhancement.

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WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?		WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?			
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>WO3:</b> To do everything possible to minimise waste production and make driving waste up the waste hierarchy the basis for waste management in Worcestershire.</p> <p><b>SA1:</b> Manage waste in accordance with the waste hierarchy</p>	<p>WCS 2: Ensuring Sustainable Waste Management Development</p> <p>WCS 3: Managing Waste arising from all new development</p> <p>WCS 5: Recovering energy from waste material</p> <p>WCS 6: Landfill</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p> <p>EA and Defra for data collection.</p>	<p>Waste Planning Applications (Public and private sector)</p>	<p>The whole-life cycle of development must be considered in order to minimise waste and encourage the movement of waste up the waste hierarchy.</p> <p>Enough capacity must be available at the higher levels of the waste hierarchy to enable disposal to be minimised.</p>	<p>Indicators depend on availability of data and advice from outside bodies.</p> <p><i>Impact: Medium</i> <i>Likelihood: Medium</i></p>	<p>11. Increase in % of waste management capacity in the county for higher levels of the waste hierarchy (recycling/composting/recovery)</p> <p>12. Decrease land-fill, as measured by Defra annual reports on waste managed.</p>	<p>Increase in actual % of waste recycled, composted and/or recovered/transferred.</p> <p>Decrease in tonnages of waste sent to landfill (Defra figures)</p>	<p>Decrease in % of waste being treated through composting, recycling or recovery over three years in any five.</p> <p>Increase in actual tonnages sent to landfill over three years in any five or proportion land-filled greater than 22% for MSW 25% for C&amp;I waste 25% C&amp;D waste over two years in any five.</p>
						<p>13. % of Municipal and C&amp;I and C&amp;D waste recycled / recovered each year.</p> <p>14. Number of permissions for new landfill sites and their justification (ie which policy section)</p>	<p>78% MSW 75% C&amp;I 75% C&amp;D</p> <p>100% granted in accordance with policy</p>	<p>Target not met for three years in any five.</p> <p>One permission granted not in accordance with policy.</p>



WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?			WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?		
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<b>WO4:</b> To ensure that the waste implications of all new development in Worcestershire are taken into account.	WCS 2: Ensuring Sustainable Waste Management Development	WCC as Waste Planning Authority and Waste Disposal Authority.	Waste Planning Applications (Public and private sector)		WCS 3 will be applied by several different planning authorities. Consistency of monitoring may be an issue. <i>Impact: High</i> <i>Likelihood: Low</i>	15. % of permitted waste management development that considers how construction methods will maximise recycling and reuse	100%	Less than 90% for three years in any five.
	WCS 3: Managing Waste arising from all new development	District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.				16. % of all application for waste management submitted with a statement that considers sustainable construction methods	100%	Less than 90% for three years in any five.
		EA and Defra for data collection.				17. % of all new built development permitted that makes provision for sorting and storage of waste for recycling and composting in accordance with ADEPT minimum standard requirements	100%	Less than 75% <sup>105</sup> for three years in any five.

<sup>105</sup> This is lower than the 90% threshold used elsewhere because we recognise that some development will not have any implications for waste or have significant opportunity to provide such facilities.

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WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?			WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?		
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>WO5:</b> To address the "Capacity Gap" between how much waste management capacity we have and what we need over the plan period to 2027.</p>	<p>WCS 1: Location of waste management development</p> <p>WCS 6: Landfill</p> <p>WCS 7: Impacts of new development on existing or proposed waste management facilities</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p> <p>EA and Defra for data collection.</p>	<p>Waste Planning Applications (Public and private sector)</p>	<p>Adequate land will need to be available to enable development to deliver the capacity gap.</p>	<p>Financial constraints in current economic climate may limit investment in new facilities, particularly small-medium scale sorting and reprocessing facilities</p> <p><i>Impact: High</i> <i>Likelihood: Medium</i></p> <p>No appropriate land in locations which are close to arisings or onward treatment facilities</p> <p><i>Impact: High</i> <i>Likelihood: Low</i></p>	<p>18. Decrease in the Capacity Gap (determined through monitoring arisings and permitted capacity)</p> <p>19. Number of waste management facilities which have closed as a result of impacts from other new development.</p>	<p>Continuous decrease in capacity gap year on year</p> <p>None</p>	<p>Increase in capacity gap for two years in any five.</p> <p>One facility</p>
	<p><b>WO6:</b> To safeguard existing waste management facilities from incompatible development.</p>	<p>WCC as Waste Planning Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p>		<p>Waste Planning Applications (Public and private sector)</p>	<p>WCS7 will be applied by several different planning authorities. Consistency of monitoring may be an issue.</p> <p><i>Impact: High</i> <i>Likelihood: Low</i></p>	<p>20. Sufficient permitted capacity to landfill residual non hazardous waste which cannot be managed any other way.</p> <p>21. % of permissions within 250m of existing or permitted waste management development that are in compliance with WCS7.</p>	<p>Minimum 10 years 'capacity based on previous year's actual landfill (in EA WDI)</p> <p>100%</p>	<p>Capacity falls below 7 year's capacity.</p> <p>Less than 90% for three years in any five.</p>





WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?			WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?		
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>W07:</b> To reduce waste miles by road.</p> <p><b>SA4:</b> Reduce the need to travel and promote sustainable travel.</p>	<p>WCS 1: Location of waste management development.</p> <p>WCS 2: Ensuring Sustainable Waste Management Development.</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p> <p>EA and Defra for data collection.</p>	<p>Waste Planning Applications (Public and private sector)</p>	<p>Locations of new development should consider minimisation of waste miles by road, either through use of alternative means of transport or through location which takes account of the source of waste arisings, onward treatment facilities or end users.</p>	<p>Alternatives to road transport are not viable on sites proposed for waste management development  <i>Impact: Medium</i>  <i>Likelihood: High</i></p>	<p>22. % of permissions that are within the areas of search or are in compliance with the methodology used to select such sites and can justify proximity to waste arisings.</p>	<p>100%</p>	<p>One permission granted not in accordance with policy.</p>
<p><b>W08:</b> To encourage communities in Worcestershire take responsibility for their own waste and involve all those affected as openly and effectively as possible.</p>	<p>WCS 1: Location of waste management development.</p> <p>WCS 2: Ensuring Sustainable Waste Management Development.</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.</p> <p>District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p>	<p>Waste Planning Applications (Public and private sector)</p>		<p>Possible that consultation may lead to a more lengthy design process, and that additional costs may make developments less viable.  <i>Impact: High</i>  <i>Likelihood: Low</i></p>	<p>23. % of permitted applications for waste management with a consultation statement</p>	<p>100%</p>	<p>Less than 90% for three years in any five.</p>

## 10. IMPLEMENTATION AND MONITORING FRAMEWORK • Worcestershire Waste Core Strategy

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WHAT OBJECTIVE DO WE WANT TO ACHIEVE?	HOW WILL WE ACHIEVE IT?		WHAT ARE THE ISSUES?		HOW WILL WE KNOW IT IS BEING ACHIEVED?			
	POLICY	RESPONSIBLE BODY	DELIVERY MECHANISM	LAND USE AND PLANNING ISSUES	RISK ASSESSMENT	INDICATOR	TARGET	REVIEW TRIGGER
<p><b>WO9:</b> To develop a waste management industry that contributes positively to the local economy.</p>	<p>WCS 2: Ensuring Sustainable Waste Management Development.</p>	<p>WCC as Waste Planning Authority and Waste Disposal Authority.  District Councils as Local Planning Authorities addressing waste implications of general applications for planning permission.</p>	<p>Waste Planning Applications (Public and private sector)</p>			<p>24. Increase in GVA in Worcestershire from Waste Management.<sup>108</sup></p>	<p>Increase</p>	<p>Decrease in GVA in Worcestershire from Waste Management over three years in any five.</p>

<sup>108</sup> Calculated using the latest available date (currently 2007/08), based upon the total number of employees in the following sectors in the County:

- Sewerage
- Collection of non-hazardous waste
- Collection of hazardous waste
- Treatment and disposal of non-hazardous waste
- Treatment and disposal of hazardous waste
- Dismantling of wrecks
- Recovery of sorted materials
- Remediation activities and other waste management services

Using derived figure for Gross Value Added per head for these sectors (See worked example for 2007/08 figures):

GVA per head (Worcs)	£16,074 per year
Ratio of GVA per head/GVA per head employed in Electricity, Gas and Water Supply (West Mids)	4.26
Derived GVA per head, Elec. Gas and Water Supply (Worcs)	4.26 x 16,074 = £68,463 per year



# Appendix 1: Acronyms and glossary of terms

## Acronyms

<b>AD</b>	Anaerobic Digestion
<b>AMR</b>	Annual Monitoring Report
<b>AONB</b>	Area of Outstanding Natural Beauty
<b>AQMA</b>	Air Quality Management Areas
<b>AWM</b>	Advantage West Midlands
<b>BAP</b>	Biodiversity Action Plan
<b>C&amp;D</b>	Construction and Demolition Waste
<b>C&amp;I</b>	Commercial and Industrial Waste
<b>CHP</b>	Combined Heat and Power
<b>Defra</b>	Department for Environment, Food and Rural Affairs
<b>EA</b>	Environment Agency
<b>FRA</b>	Flood Risk Assessment
<b>JMWMS</b>	Joint Municipal Waste Management Strategy
<b>LBAP</b>	Local Biodiversity Action Plan
<b>LDF</b>	Local Development Framework
<b>LSOA</b>	Lower-level Super Output Areas are the smallest scale at which Census data can be used. They roughly equate to 1,500 people.
<b>MBT</b>	Mechanical Biological Treatment
<b>MHT</b>	Mechanical Heat Treatment
<b>MRF</b>	Materials Recycling/Reclamation Facility
<b>MSW</b>	Municipal Solid Waste
<b>NNI LLW</b>	Non-Nuclear Industry Low Level Radioactive Waste
<b>PPG</b>	Planning Policy Guidance
<b>PPS</b>	Planning Policy Statement
<b>RSS</b>	Regional Spatial Strategy (for the West Midlands unless otherwise stated)
<b>SAC</b>	Special Areas of Conservation (EU designation)
<b>SCI</b>	Statement of Community Involvement
<b>SuDS</b>	Sustainable Drainage Systems
<b>SFRA</b>	Strategic Flood Risk Assessment
<b>SPA</b>	Special Protection Areas (for Birds) (EU designation)
<b>SSSI</b>	Site of Special Scientific Interest
<b>SPZ</b>	Source Protection Zone
<b>STW</b>	Sewage Treatment Works (which may include small facilities such as pumping stations as well as full treatment works)
<b>SWS</b>	Special Wildlife Sites
<b>tpa</b>	Tonnes per annum
<b>UK BAP</b>	UK Biodiversity Action Plan
<b>WCS</b>	Waste Core Strategy
<b>WMRSS</b>	West Midlands Regional Spatial Strategy
<b>WPA</b>	Waste Planning Authority



## Glossary

<b>Adaptation (climate change)</b>	How development can be designed to cope with the changes in our climate and severe weather events caused by increasing levels of greenhouse gases.
<b>Air Quality Management Areas</b>	Declared where air quality objectives are not likely to be achieved.
<b>Ancient semi-natural woodland</b>	Woodland which developed naturally on undisturbed soils. The long continuity of semi-natural ancient woods and their undisturbed soils makes it one of the most valuable natural habitats. It supports a huge range of wildlife and often these species are unable to colonise new areas easily.
<b>Annual Monitoring Report</b>	A statutory requirement which assesses the effectiveness of the Council's planning policies, particularly regarding Mineral and Waste development, and progress in developing Development Plan Documents. The current report includes details of both national and local Core Indicators and a range of locally set targets.
<b>Areas of Outstanding Natural Beauty</b>	Areas of high scenic quality that have statutory protection in order to conserve and enhance the natural beauty of their landscapes.
<b>Battlefields</b>	English Heritage keeps a register of Historic Battlefields which comprises the sites of the most important military battles on English soil. These were often the turning points in English history but are vulnerable to many different modern-day pressures.
<b>Biodiversity</b>	"The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." - Convention on Biological Diversity Article 2. UNEP 1992.
<b>Biodiversity Action Plan</b>	UK (UK BAP) and local (LBAP) action plans to identify, conserve and protect existing biological diversity, and to enhance it wherever possible. The UKBAP describes the biological resources of the UK and provides detailed plans for conservation of these resources, at national and devolved levels. Action plans for the most threatened species and habitats have been set out to aid recovery, and reporting rounds show how the UKBAP has contributed to the UK's progress towards the significant reduction of biodiversity loss called for by the Convention on Biological Diversity.



<b>Equivalent self-sufficiency</b>	Worcestershire's capacity to treat waste that arises in the County, however cross-boundary movement are inevitable as specialised facilities exist, often benefiting from economies of scale. As such some facilities perform a regional or even nationally function and the concept of equivalent self-sufficiency allows imports and exports of waste to be taken into account.
<b>Flood Risk Assessment</b>	An assessment which identifies the main risks to a development site from flooding and recommends mitigation measures to reduce the impact of flooding to the site and surrounding area.
<b>Flood zones</b>	<p>These are areas which could be affected in the event of flooding from rivers.</p> <ul style="list-style-type: none"> <li>• Flood zone 3 indicates the extent of a flood with a 1 per cent (1 in 100) chance of happening in any year.</li> <li>• Flood zone 2 indicates the extent of an extreme flood with a 0.1 per cent (1 in 1000) chance of happening in any year.</li> <li>• Flood zone 1 is land assessed as having a less than 1 in 1000 probability of river or sea flooding in any year.</li> </ul> <p>Flood zones are defined in planning policy for England and are produced ignoring the presence of existing flood defences, since defences can be 'overtopped' if a flood occurs which is higher than the defences are designed to withstand. Defences can even fail in extreme events.</p>
<b>Geographic hierarchy</b>	Settlements within Worcestershire perform different waste management functions. The broad geographic hierarchy takes into account current waste arisings, resource demand and existing waste management capacity of each settlement. The settlements which have a major role to play in waste management are in the top levels and those which have only a minor role are in the bottom levels of the geographic hierarchy.



**Green belt**

Areas of land designated in the development plan (Local Development Framework Core Strategies, or previously Structure Plans). The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the most important attribute of Green Belts is their openness. Green Belts can shape patterns of urban development at sub-regional and regional scale, and help to ensure that development occurs in locations allocated in development plans. There are five purposes of including land in Green Belts:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns from merging into one another;
- to assist in safeguarding the countryside from encroachment;
- to preserve the setting and special character of historic towns; and
- to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

**Green infrastructure**

Green Infrastructure is a network of high quality green spaces and other environmental features. It is a resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens. Key considerations for green infrastructure are the functions or ecosystem services it provides. It should be considered at a broader scale than is necessarily the case for individual areas of open space, including the landscape context, hinterland and setting, as well as strategic links of sub-regional scale and beyond.

**Greenfield land**

Land that has not previously been developed. This is not the same as land designated as green belt.

**Inert landfill**

Waste which will not biodegrade or decompose (or will only do so at a very slow rate). Inert waste does not contain contaminants (e.g. such as combustible, putrescible, degradable, leachable, hazardous, or liquid wastes, etc). Types of materials include uncontaminated topsoil, subsoil, clay, sand, brickwork, stone, silica, and glass. Aggregates or inert materials are often used in construction or land reclamation works to create new levels.



<b>Listed buildings and their settings</b>	Buildings with exceptional architectural or historic special interest. Listing means that listed building consent must be applied for in order to make any changes to that building which might affect its special interest.
<b>Local Development Framework</b>	A folder of local development documents that outline the spatial planning strategy for the local area.
<b>Local Geological Sites</b>	Non-statutory areas of local importance for nature conservation that complement nationally and internationally designated geological and wildlife sites. Previously known as Regionally Important Geological Sites (RIGS).
<b>Local Nature Reserves</b>	Places with wildlife or geological features that are of special interest locally. They offer people special opportunities to study or learn about nature or simply to enjoy it.
<b>Lower-level Super Output Areas</b>	The smallest scale at which Census data can be used. They roughly equate to 1,500 people.
<b>Material consideration</b>	There is no definition in legislation of what constitutes a material consideration, but case law has said that any consideration which relates to the use and development of land is capable of being a planning consideration.
<b>Mineral resources</b>	Mineral deposits which are identified as preferred areas for extraction by "saved" policy number 1 in the Hereford and Worcester Minerals Local Plan, April 1997, or any areas identified in future adopted policy.
<b>Mitigation (climate change)</b>	Reducing the extent of potential climate change by reducing carbon emissions resulting from human activities.
<b>National Nature Reserves</b>	Many of the finest sites in England for wildlife and geology.
<b>Natura 2000 sites</b>	Natura 2000 sites are a network of European designated sites for wildlife, consisting of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).
<b>Non-inert landfill</b>	Waste that breaks down in landfill to create landfill gas or leachate, this includes biodegradable waste.
<b>Onward treatment</b>	Facilities which use the products from waste management activities, such as recycle from materials reclamation facilities.
<b>Overview of Waste Management in Worcestershire</b>	The Overview paints a picture of Worcestershire as it is at present. It highlights the main aspects of what makes the county distinctive and what waste management in the county is like.
<b>Proximity</b>	How near a location is to waste arisings, onward treatment facilities or end users.
<b>Ramsar sites</b>	Wetlands of international importance, designated under the Ramsar Convention.





<b>Registered Parks and Gardens</b>	Gardens, grounds and other planned open spaces, such as town squares. The emphasis of the Register is on 'designed' landscapes, rather than on planting or botanical importance. Historic parks and gardens are a fragile and finite resource: they can easily be damaged beyond repair or lost forever.
<b>Resource demand</b>	Refers to the demand for resources from organic waste recovery (e.g. composting), recycling and energy recovery.
<b>Scheduled or other ancient monuments</b>	Scheduled monuments, designated by English Heritage, are not always ancient, or visible above ground. Scheduling is applied only to sites of national importance, and even then only if it is the best means of protection. Only deliberately created structures, features and remains can be scheduled.
<b>Sites of Special Scientific Interest</b>	Areas of land or water of national importance identified by Natural England on account of their flora, fauna, geological or physiographical features.
<b>Source Protection Zone</b>	The Environment Agency defines Source Protection Zones for groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area.
<b>Special Areas of Conservation</b>	Designated areas under the European Community Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, intended to protect the habitats of threatened species.
<b>Special Protection Areas</b>	Areas classified under the European Community Directive on the Conservation of Wild Birds, intended to protect the habitats of threatened species.
<b>Special Wildlife Sites</b>	Sites considered to be the best places for wildlife in the county outside of legally protected areas such as SSSIs, National Nature Reserves and Local Nature Reserves.
<b>Strategic Flood Risk Assessment</b>	Strategic Flood Risk Assessments provide information on areas that may flood, taking into account different sources of flooding and the impacts of climate change. These form the basis for preparing appropriate policies for flood risk management for these areas.



<b>Sui generis</b>	A term used in planning law to mean uses of land which do not fit comfortably within the classes defined in the Use Classes Order 1987 and do not enjoy the privileges therein. To simplify a very complex area of law, sui generis uses are those which are considered to be unlike other activities and so usually, but not always, need planning permission. Scrap yards and car breakers yards and the chemical treatment or landfill of waste are sui generis. The courts have often, but not always, held that many other waste management facilities are also sui generis.
<b>Sustainable development</b>	Sustainable development is focussed on providing a better quality of life for everyone now and for generations to come. This is achieved through considering the long-term effects of social, economic and environmental impacts in an integrated and balanced manner.
<b>Validation document</b>	Once adopted, the Validation document will provide applicants and their agents with guidance on the information required when submitting a planning application. If an applicant fails to submit an application in accordance with the requirements set out in the Validation document the application will be declared invalid.
<b>Waste arisings</b>	Waste produced which needs to be managed.



## Appendix 2: Superseded Saved Structure Plan Policies

The following policies in the Worcestershire County Structure Plan, adopted June 2001, were "saved" by the Secretary of State for Communities and Local Government on 7th September 2007 in exercise of the power confirmed by paragraph 1(3) of Schedule 8 to the Planning and Compulsory Purchase Act 2004 and are hereby superseded:

- WD1** Waste Hierarchy
- WD2** Location of Waste Handling and Treatment Facilities
- WD3** Waste Management Facilities
- WD4** Landfill



# Annex I: Considering Flood Risk in Waste Management Development

- 10.39.** Land is categorised according to the risk of fluvial flooding:
- Flood zone 1 - low probability (less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%))
  - Flood zone 2 - medium probability (between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%))
  - Flood zone 3a - high probability (1 in 100 or greater annual probability of river flooding (>1%))
  - Flood zone 3b - functional flood plain (annual probability of 1 in 20 (5%) or greater in any year).
- 10.40.** Development should be located in line with the Sequential Test in PPS25, giving preference to Flood Zone 1, 2 and then 3. If there is no reasonably available site, in Flood Zone 1 development may

be permitted outside where a sequential test and Flood Risk Assessment (FRA)<sup>107</sup> demonstrate the suitability of the location for the proposed development.

- 10.41.** The Sequential Test is a key component of the hierarchical approach to ensure that sites are located in the most suitable areas by avoiding and managing flood risk. shows that certain uses will not be appropriate in certain flood zones but that in some cases, where suitable land is not available in zones with lower flood risk, it may be appropriate to apply the 'exception test' in considering whether the development is justified in zones of higher risk.

<sup>107</sup> Flood Risk Assessment must be carried out in accordance with Planning Policy Statement 25 "Development and Flood Risk" and its practice guide, or subsequent national policy.

**Figure 23: Flood risk vulnerability and compatibility for waste uses (adapted from PPS25 table D2 and D3)**

Waste Proposal	Flood Risk Flood Zone Vulnerability Classification	Flood Zones			
		1	2	3a	3b
Installations requiring hazardous substances consent.	Highly vulnerable	✓	ex	x	
Landfill and sites used for waste management facilities for hazardous waste	More vulnerable	✓	✓	ex	x
Waste treatment (except landfill and hazardous waste facilities) and o Sewage treatment works (if adequate measures to control pollution and manage sewage during flooding events are in place)	Less vulnerable	✓	✓	✓	x
Sewage transmission infrastructure and pumping stations.	Water compatible	✓	✓	✓	✓
Not applicable	Essential Infrastructure	✓	✓	ex	ex

**Key**  
 X development should not be permitted  
 ✓ development is appropriate  
 ex the Exceptions test is required



- 10.42. For waste proposals in Flood Zone 2 or 3, Flood Risk Assessments (FRA) should be undertaken, considering all types of flooding, and be informed by the relevant District, Borough or City Strategic Flood Risk Assessment (SFRA), the River Severn Catchment Flood Management Plan and by the County background document Flood Risk Assessments in Worcestershire. A FRA will also be required if the site is in Flood Zone 1 and has an area greater than 1 Ha or a floor area greater than 1000 m<sup>2</sup>.

If you require this document in alternative formats  
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