

City of Bradford Metropolitan District Council



Core Strategy: Issues and Options

Topic Paper 7: Environment



February 2007

1.0 INTRODUCTION

1.1 Delivering sustainable development is now the cornerstone of spatial planning. The topics covered in this paper relate to essential elements in the concept of sustainability; the effective protection of the environment and the prudent use of natural resources. Reflecting this approach, the paper is broadly divided into two sections; the first focuses on the District's environmental assets, and the second on climate change and use of resources. This issues and options paper is divided into 4 sections:

- Influences
- Key Issues and Options
- Evidence
- Key Questions

1.2 Environmental assets are defined as Bradford's heritage and built form, landscape and biodiversity, all of which are crucial elements in the District's identity and future projects. The climate change and use of resources section addresses issues relating to the approaches to climate change, sustainable building design, energy, the water resource and flood risk, and air quality.

1.3 The Councils planning policies relating to the environment are presently contained in the Replacement Unitary Development Plan (2005). The Government's planning reform agenda under the Planning and Compulsory Purchase Act (2004), means that this document will need to be replaced by the Local Development Framework (LDF). The Core Strategy is the key document, which will set the top level policies guiding the location of development, including community facilities. This Paper is the first stage towards the development of a Core Strategy for the District and has been prepared to seek your views on the key environmental issues.

1.4 The purpose of these papers is to encourage responses to the key issues and options affecting Bradford. The list of issues is not meant to be final, but it represents the initial thoughts as to the key issues that the Core Strategy could address. It is also an opportunity to raise new issues.

2.0 INFLUENCES

Overview of Guidance

- 2.1 Spatial planning has a long-established role in the protection of environmental assets, supported by legislation. In recent years a change in emphasis has been advocated in policy guidance towards the restoration and enhancement of a wider resource, whether this be nature conservation, landscape or built heritage, and consultation with local communities. This would be based on the evidence offered by techniques such as landscape character assessment and conservation area appraisal, or surveys initiated by the Local Biodiversity Action Plan, all of which aim to identify the elements of diversity that form the local character of particular areas of the District.
- 2.2 By contrast, planners have a less established role in encouraging the more sustainable use of resources and in addressing climate change. The latter is most clearly defined in the approach to managing flood risk set out in PPS 25. Climate change issues are often debated in the media, stimulated recently by the publication of the Stern Review that probes the economics of climate change. However the consequences of climate change are generally illustrated in global rather than local terms. This paper considers such issues from both a regional and district wide perspective.
- 2.3 The section on the environment in the **Draft Regional Spatial Strategy (RSS) for Yorkshire and the Humber**, which sets the context for this paper, identifies a need 'to transform cities and towns, raise environmental quality, increase biodiversity, enhance natural and built heritage, address climate change and protect rural and coastal areas'. The section on the Leeds City Region (of which Bradford forms a part) emphasises the rich variety of urban and rural habitats, the importance of Saltaire as a World Heritage Site, the regions role in the production of energy, the issue of poor air quality where traffic levels are high, the low proportion of tree cover, and the need for further flood protection measures and increased flood alleviation along the Aire valley in response to climate change.

3.0 KEY ISSUES AND OPTIONS

ENVIRONMENTAL ASSETS

Biodiversity

- 3.1 Biodiversity is the widespread term for biological diversity, which represents the richness and variety of plants, birds, animals and insects throughout the world. Biodiversity is not just about rare, or threatened species or habitats, but peoples day to day quality of life and experience of nature.
- 3.2 A wide range of legislative provisions exists at the international and national level that can impact on planning decisions affecting biodiversity and geological conservation issues. **Working with the Grain of Nature: a Biodiversity Strategy for England** sets out the Government's vision for conserving and enhancing biological diversity, including the broad aim that planning should have a minimal impact on biodiversity and enhance it wherever possible. **PPS1: Delivering Sustainable Development** also supports biodiversity, stating that the reversal of biodiversity loss/decline is a national planning priority.
- 3.3 While supporting the broad aim of the Biodiversity Strategy **PPS9**, which sets out planning policy on **Biodiversity and Geological Conservation**, puts greater emphasis on restoration and enhancement, based on the view that maintaining a wide range of species is vital to the future. In addition to indicating the location of designated sites, local development frameworks should identify any areas or sites suitable for the restoration or creation of new priority habitats that contribute to regional targets. Distinctive elements in the biodiversity resource of the region, that are relevant to Bradford are upland heath and floodplain habitats, where urban regeneration is seen as an opportunity to create and restore habitat corridors. The LDF should also protect ancient woodland, to the extent of refusing proposals that would harm it, whilst also protecting networks of connected corridors from development.
- 3.4 Core strategy policies need to reflect national, regional and local biodiversity priorities and objectives, including those agreed by local biodiversity partnerships. Important objectives in the **Bradford Local Biodiversity Action Plan** are- safeguarding locally and nationally valued species and habitats and raising public awareness of and commitment towards local biodiversity issues. Key habitats and species identified in the local BAP are set out in the evidence section, as are the four tiers of protected sites. Additional strategic documents relating to nature conservation are the **Nature Conservation Strategy for Bradford** and the more recent **Woodland Strategy**. The latter expresses the Council's commitment to improving the amount of woodland cover and quality of woodlands in Bradford.

- 3.5 Existing policies in the RUDP offer strong support for the four levels of designated sites and also wildlife corridors. Policy NE10 aims to ensure that development respects important landscape and geological features and Policies NE11 and 12 require ecological appraisals and landscape and wildlife enhancement schemes, where appropriate. Outside designated areas, where there are competing priorities for development gain, a lack of information about species and habitats and limited resources for evaluation can lead to the biodiversity asset being undervalued.

Key Question

- 7.1 While the overall aim must be to protect the biodiversity resource, where should local policy support and resources for enhancement be focused?

Options

- Sites of national and international importance for nature conservation value i.e. the South Pennine Moors Special Protection Area and the 4 Sites of Special Scientific Interest.
- Regional priorities for habitat restoration and creation i.e. upland heath, floodplain habitat and woodland.
- Key habitats and species identified in Bradford's Local Biodiversity Action Plan and wildlife corridors.
- Ensuring that development proposals have a minimal impact on the overall biodiversity resource and enhance it wherever possible.

Landscape

- 3.6 The European Landscape Conventions definition of landscape is 'an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'. **PPS7 Sustainable Development in Rural Areas** states that Local Development Documents should provide sufficient protection for landscape areas, using tools like landscape character assessment.
- 3.7 The Draft RSS requires that development strategies, plans and decisions will maintain and enhance distinctive landscapes and related assets of regional, sub-regional and local importance. The landscapes identified, from a regional perspective, that are of relevance to Bradford are historic landscapes, parks and gardens, and derelict and despoiled urban fringe landscapes, especially those in the South Pennines. Enhancement could include: new woodland planting, restoration of field boundaries, reclamation of derelict sites, and sympathetic development.
- 3.8 A detailed landscape appraisal of the Bradford District has been carried out in-house, based upon the approach to distinct landscape character developed by Natural England. The appraisal identifies ten specific,

distinct and unique landscape character areas, and sets out a description of each area. Important positive features and detractors are identified and an analysis provided of the areas sensitivity to change. Policy NE3 in the RUDP identifies the landscape character areas resulting from the assessment and Policy NE3A sets criteria for assessing proposals.

- 3.9 The diversity of the landscape character areas set out is an important element in Bradford's identity and the quality of life of its residents. The landscape backdrop is a significant influence on the character of individual settlements, and treatment of settlement edges, when new development is permitted, has an impact on the surrounding landscape, whether in a positive or negative way.

Key Question

7.2 Using the Landscape Character Assessment as a framework, where should policy emphasis and resources be focused?

Options

- Derelict and despoiled urban fringe landscapes.
- Landscapes with strong historic and cultural associations that attract visitors to the District.
- Mitigation measures where development is proposed and maintaining the status quo elsewhere.

Heritage assets and built form

- 3.10 **PPS1: Delivering Sustainable Development, PPG15: Planning and the Historic Environment and PPG16: Archaeology and Planning** promote good design and the protection and enhancement of the historic environment. The RSS states that 'the heritage resource makes a very important contribution to the Region's distinctive character, identity and sense of place; it also greatly adds to the quality of life of residents, and in particular the local and regional economy'. Policy ENV9 states:-

'The region will safeguard and enhance the historic environment, and ensure that historical context informs future development and regeneration. All development strategies, plans, programmes and decisions in the Region will conserve distinctive elements of the historic environment and enhance local character and distinctiveness

- 3.11 Relevant heritage priority areas identified are industrial landscapes, housing areas and civic buildings, especially in West and South Yorkshire.
- 3.12 The RSS identifies as an issue the vulnerability of the heritage resource to decay and deterioration and the impact of poor design

nearby. There is a need to recognise the benefits of the heritage resource to the local and regional economy and ensure new development adds to this, rather than detracts from it. This is especially important in terms of providing a sense of place in urban areas. The RUDP contains a range of policies seeking to protect Bradford District's rich and diverse built heritage and historic environment.

- 3.13 One of the key principles in **PPS1: Delivering Sustainable Development** is that planning policies should promote high quality inclusive design in the layout of new developments and individual buildings in terms of function and impact, not just for the short term but over the lifetime of the development. Design which fails to take the opportunities available for improving the character and quality of an area should not be accepted. It also states that 'good design should contribute positively to making places better for people'. An objective that is reinforced by the **Commission for Architecture and the Built Environment (CABE)** in its guide 'By Design'. 'Good design is essential if we are to produce attractive, high-quality, sustainable places in which people will want to live, work and relax.'

Key Question

7.3 How should priorities be determined for the protection and management of Bradford's heritage assets?

Options

- According to the results of the Conservation Area Assessments.
- According to the results of the Listed Buildings at Risk Surveys.
- Identify Saltaire as a priority due to its status as a World Heritage Site, followed by other areas that attract visitors to the district.
- A combination of the above.

Key Question

7.4 What should be the overall approach in the Core Strategy to achieving high standards of design for new development?

Options

- Aim for development that respects and reflects its context and is accessible to all.
- Aim for the highest standards of innovation and design for individual buildings with limited reference to context.
- Put the emphasis on setting detailed design criteria and only accepting development that meets these standards throughout the District.
- Identify distinct areas where particularly high standards of design would need to be met, whether these be Conservation Areas, the City Centre or Neighbourhood Renewal Areas.

CLIMATE CHANGE AND USE OF RESOURCES

Approach to Climate Change

- 3.14 The key priority of the **UK Climate Change Programme** is to ensure that the UK meets its legally binding target, under the Kyoto Protocol, to reduce its greenhouse gas emissions to 12.5% below 1990 levels by 2008-2012. The programme is also designed to move towards the domestic goal of a 20% reduction in carbon dioxide emissions below 1990 levels by 2010. The pivotal role of local authorities in tackling national and international priorities on climate change embraces a range of targets and actions and is still evolving.
- 3.15 Bradford Council, in common with many others, has signed the Nottingham Declaration, making a high-level commitment to act on climate change and has followed this up by producing an Environment Strategy. This sets out a number of important objectives that include; mitigating climate change impacts by reducing greenhouse gas and carbon dioxide emissions in the District, improving water management and minimising the risk and impact of flooding, minimising air, water and land pollution, and reducing the environmental impact of road traffic.
- 3.16 One of the key principles of **PPS1: Delivering Sustainable Development** is to 'ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change – through policies which reduce energy use, reduce emissions (for example, by encouraging patterns of development which reduce the need to travel by private car, or reduce the impact of moving freight), promote the development of renewable energy resources and take climate change impacts into account in the location and design of development.'
- 3.17 The **Draft Supplement to PPS1: Planning and Climate Change** identifies a number of decision-making principles that planning authorities should adhere to in preparing and delivering spatial strategies. Among these are the following:
- 'New development should be located and designed to optimise its carbon performance and limit its likely contribution to carbon emissions. Specifically, substantial new development should be expected to consider and take into account the potential of decentralised energy supply systems based on renewable and low-carbon energy;'
 - 'New development should be located and designed for the climate, and impacts, it is likely to experience over its intended lifetime;'
 - 'Climate change considerations should be integrated into all spatial planning concerns, including transport, housing, economic growth

and regeneration, water supply and waste management, and not considered separately;'

Sustainable Building Design

- 3.18 **PPS1: Delivering Sustainable Development** advises that design should be 'sustainable, durable and adaptable' and 'make efficient and prudent use of resources'. Sustainable design can be defined as construction that minimises the amount of resources (energy, materials, water etc) needed and waste and pollution produced, but which has a long life-span and can be easily adapted. The draft supplement to PPS1: Planning and Climate Change identifies broad criteria against which sustainable design can be assessed. The draft PPS expects new development to be located to optimise its carbon performance and make the most of existing and planned opportunities for decentralised, renewable and low-carbon, energy supplies.
- 3.19 A number of the criteria set are repeated in Policy ENV5 in the RSS which expects development strategies to improve energy efficiency, maximise the efficient use of power sources and maximise renewable energy capacity. Among the means identified to achieve this are; requiring orientation and layout of development to maximise passive solar heating, maximising the use of combined heat and power systems and requiring at least 10% of the energy to be used in sizeable new development to come from on-site renewable energy sources.
- 3.20 Through a number of consultation documents recently produced, the DCLG aims to provide clarity about a potential framework for achieving zero carbon development within the next 10 years. This identifies a role for planning policies in regulating the location, siting and design of development, for Building Regulations in dealing with the conservation of fuel and power, health and safety and accessibility in buildings and for the **Code for Sustainable Homes**, which sets sustainability standards for houses. At each of the 6 levels of the code, there are minimum energy efficiency/carbon emissions and water efficiency standards. The minimum standards for code level 1 are higher than those found in the current minimum mandatory standards set in Building Regulations. The Government is intending to put in place accreditation and assessment arrangements so that developers of new homes can choose to receive a code rating.
- 3.21 Bradford Council has produced its own **Sustainable Design Guide SPD**, however this is currently advisory in nature. It provides more detailed information and advice relating to policies in the rUDP and the carrying out of sustainable design.

- 3.22 While more detailed policies relating to sustainable development will be expressed in DPDs and SPDs, if the Council is to pursue the goal of low or zero carbon development, then a clear statement of intent is needed in the core strategy, as the most strategic means of influencing decision-making. The argument in favour of strong action at a local level stresses that Councils should not depend on national government to change regulations, but can make policy more challenging locally with the advantages of public consultation and greater responsiveness. The opposing view which supports a clear long-term path, towards higher standards achieved through consistent regulations set at national level, emphasises the benefits of providing the development industry with certainty and a set time scale.

Key Question

7.5 In framing a strategic policy for sustainable design, which approach should the council favour?

Options

- Allow developers together with pressure from consumers and national government to determine whether and where higher standards of sustainable design are achieved.
- Identify circumstances or particular sites in the planning framework, perhaps sites over a certain size, greenfield sites or locations in strong market areas, where higher levels of sustainable design would need to be met.
- Focus efforts on targeting local areas within which to test the application of particular aspects of sustainable design eg requiring green roofs for development on the edges of settlements or sustainable urban drainage schemes for areas where infrastructure is under pressure.

Energy

- 3.23 The ambitious goal of the **Energy White Paper** is to put ourselves on a path to cut the UK's carbon dioxide emissions (by 60% by 2050) – by creating a low-carbon economy through improved energy efficiency and increased use of renewables. **PPS22** relating to **Renewable Energy** aims to promote and encourage, rather than restrict, the development of renewable energy resources. Renewable energy developments should be capable of being accommodated in locations where the technology is viable and environmental, economic and social impacts can be addressed satisfactorily.
- 3.24 RSS Policy ENV5 aims to increase energy efficiency through passive design, better use of existing power sources and other measures, and to increase installed renewable energy capacity in the Region. The **Sub Regional Renewable Energy Assessment and Targets Study**

(2004) sets out potential renewable energy targets for 2010 and 2021; identified as 80MW and 270MW for West Yorkshire. Although most of this renewable energy would come from wind turbines and biomass, other technologies such as photovoltaics should be more commercially viable to help deliver the 2021 target.

- 3.25 Policy NR12 in the RUDP seeks to encourage the generation of power from renewable energy sources. Policy NR13 sets criteria that wind farms and individual turbines need to fulfil in order to be permitted.

Key Question

7.6 How supportive should the policy context be towards the development of renewable energy sources?

Options

- Broadly supportive policies that lead us to fulfil sub-regional targets i.e. to take our 'fair share' but no more.
- Very supportive policy framework with aspirational targets aimed at raising Bradford's profile as a leader in 'green' issues.

Air Quality

- 3.26 **PPG23** sets out national policy relating to **Planning and Pollution Control**, seeking to ensure that polluting activities that are necessary for society and the economy should be sited and planned so that adverse effects are minimised. The Environment Act of 1995 introduced the National Air Quality Strategy and the requirement for local authorities to determine if statutory air quality objectives, based on the protection of human health, are likely to be exceeded.
- 3.27 Recent assessments in Bradford have concluded that the main pollutant of concern is nitrogen dioxide, produced mainly by traffic. There are a number of areas for which Action Plans will need to be produced and actions identified in order to reduce levels of pollutants to the required standard. The locations identified experience significant levels of traffic congestion.

The Water Resource and Flood Risk

- 3.28 Climate change will have an impact on the water resource and flood risk through increases in peak flows caused by storms and a greater number of local storms. However the magnitude of this increase and its impact on the District during the plan period is less easy to predict. National Government figures predict that peak flows caused by storms will increase by 20% up to 2050.
- 3.29 The main aim of the **Water Framework Directive** is to improve the quality of surface waters and groundwaters to achieve 'good' status,

whilst reducing any danger a water body poses, such as flooding. It is also designed to stop the deterioration of wetlands and improve habitats for wildlife. **PPS23 on Planning and Pollution Control** stresses that statutory frameworks already exist for regulating water quality, and provides for Local Authorities to minimise pollution from land uses accordingly.

- 3.30 The Draft RSS contains policies ENV2 and ENV3 relating to the water resource and ENV1 relating to flood risk. The purpose of ENV2 is to safeguard water resources and encourage water efficiency, while ENV3 aims to maintain high water quality standards by ensuring an adequate sewage and waste treatment system that is in line with the Water Framework Directive. To assist in achieving these aims developers should consider the use of best practice measures (eg BREEAM, sustainable drainage systems and grey water systems) wherever possible. The issue of water quality will need to be addressed where infrastructure for sewage discharge and treatment is already at full capacity and where the River Aire passes through the urban areas of Bradford.
- 3.31 **PPS25: Development and Flood Risk** identifies a role for planners in managing flood risk, both through choice of location for development and influencing structural form. The Policy Statement requires planning authorities to frame policies for the location of development that aim to avoid flood risk to people and property and to manage any residual risk. It sets out a sequential test that aims to match the type of development to the degree of flood risk. According to this approach development should only be permitted in areas of flood risk when, taking into account the vulnerability of the land use proposed, there are no suitable alternatives in areas of lower flood risk and the overall benefits outweigh the risk from flooding.
- 3.32 Policy ENV1 in the Draft RSS aims to ensure that the allocation of areas for development will take place in line with strategic flood risk assessments and that flood management reflects regional spatial and economic priorities, as well as environmental objectives. Local authorities are recommended to undertake strategic flood risk assessments and then to adopt a risk-based sequential approach to planning for flood risk in line with PPS25; consider specifying higher standards of resilience to flooding for new development in high flood risk areas (e.g. minimum ground floor levels, suitable ground floor uses etc) and to determine the balance between blight and flood risk, especially in regeneration areas.
- 3.33 Bradford has a history of land and property being flooded, most recently in November 2000, through heavy downpours of rain and watercourses overflowing their banks. The Authority works in partnership with a variety of organisations to address water management and an increased programme of investment is underway.

A strategic flood risk assessment for Bradford District was carried out in 2003 to inform the allocation of proposed development sites.

- 3.34 Flood risk will need to influence the strategic choices for development that are to be addressed in the Core Strategy. A balanced view of the competing objectives of reducing flood risk and achieving regeneration will need to be taken when considering development in certain areas, particularly Bradford City and locations along the valley floor within Airedale.

Key Question

7.7 In seeking to strike a balance between encouraging regeneration and reducing flood risk, which factors are most important?

Options

- Identify flood risk as the most important issue in determining the location of development, even if this means building on more extensive areas of greenfield land.
- Identify Bradford's need for development and regeneration as the most important factor, with less emphasis on flood risk.
- Require high standards of flood risk assessment from developers and insist on restrictions on intensity, form and type of development, even where this risks slowing down the process of regeneration.

Minerals

- 3.35 There are various Mineral Planning Guidance Documents (MPG's) and the new replacement Minerals Planning Statements (MPS's), however the main MPG's and MPS's which would relate to the forward planning of minerals in the Bradford District, are **MPS1, MPG 1 and MPG6**. Significant consideration should be given to MPS1 – which although in a draft format follows the Government's new overall message of sustainable development.
- 3.36 The key policy messages in **MPS1** are:
- the need to maintain sufficient supply to meet the anticipated need for minerals consistent with environmental acceptability;
 - the need to protect designated areas of national and international importance;
 - the need to encourage efficient use of extracted materials and the use of substitute or recycled materials in place of primary minerals wherever practicable; and
 - the need to ensure that where extraction does take place, restoration and aftercare of sites are of high quality.

- 3.37 The **Draft RSS** follows the overarching key policies set out in MPS1, but gives a regional context. However, the RSS *only* addresses aggregate production and fails to acknowledge blockstone production in the region.
- 3.38 The RSS concentrates on reducing the exploitation of primary aggregates and seeks to maximise the production of secondary aggregates (i.e. recycled construction and demolition waste) stating it's overarching outcome by 2021 to be:
- Mineral deposits in the Region will have been safeguarded through maximising the use of secondary aggregates.
- 3.39 The RSS sets out in table format the apportionment for land won aggregates for the region between 2001 and 2016, to sub-regional level, with West Yorkshire apportionment being 17.8 million tonnes.
- 3.40 The Region intends to monitor the situation to ensure that sub-regional apportionments are met and that the use of substitute/secondary aggregates is maximised. This will be undertaken through the collection of information from mineral planning authorities.
- 3.40 The **Regional Aggregates Working Party (RAWP)** is a Yorkshire and Humber regional technical working group with membership drawn from officers of the MPAs, the minerals industry, the Department for Communities and Local Government (DCLG) and the British Geological Survey (BGS). There are similar working parties in the other regions of England and in North and South Wales.
- 3.41 This group produces reports, which include the results of the Aggregates Monitoring Surveys, statistical information on the aggregate minerals industry in the Region and brief descriptions of the main activities during the year. The last available report was in 2004.
- 3.42 The statistical information on sales is provided by the industry. The data has been collected by individual Mineral Planning Authorities (MPAs) and then collated at regional level. The breakdown of figures is to sub-regional level.
- 3.43 The tables below illustrate the position in West Yorkshire in terms of sand & gravel and crushed rock. The figures are for both the industry and MPA's to be able to plan, monitor and manage the extraction of minerals.

Sub-Regional Apportionment of the National and Regional Guidelines for Aggregates Provision, 2001 to 2016 (Million Tonnes)

	Land-won sand and gravel	Land-won crushed rock
West Yorkshire	5.5	17.8

CRUSHED ROCK RESERVES AND LANDBANKS

	Reserves at 31.12.04 (million tonnes)	Sub-regional Apportionment (million tonnes per annum)	Landbank at 31.12.04 (years)
West Yorkshire	21.18	1.11	19.1

- 3.44 Bradford has traditionally been a major supplier of blockstone for the Region and beyond.
- 3.44 Bradford is currently not a producer of sand and gravel, fireclay, peat or coal, although there are reserves in the district. It is unlikely that Bradford would become a major producer of these minerals as either the reserves have been significantly worked in the past (e.g. coal to the south of the region), or the reserves are situated in 'protected' areas (e.g. sand & gravel to the north of the region).
- 3.45 There are currently 16 operational sites in the Bradford, mainly extracting sandstone in a block form, with aggregate production a secondary activity. The sites vary in size, from the relatively small, extracting 10,000 tonnes per annum to the larger scale, extracting of 200,000 tonnes per annum.
- 3.46 Most of the sites are established historical sites, run by local companies. They are mostly situated in green belt (including the moors) to the North West of the City Centre and to the south of Keighley.
- 3.47 Many of the sites are approaching the exhaustion of their permitted reserves.

Aggregates

- 3.48 Clearly the message from both central government and the RSS is that there is a need to maximise the use of secondary aggregates, whilst maintaining sufficient landbank to meet the anticipated need for minerals and being consistent with environmental acceptability.
- 3.49 The figures for the sub-region (shown above) indicate that in West Yorkshire there are significant permitted reserves (21 million tonnes), with a landbank of over 19 years. The apportionment for West Yorkshire between 2001 and 2016 is 17.8 million tonnes, which is actually less than the current permitted reserves.

Key Question

7.8 How should the LDF contribute to meeting the regions need for aggregates?

Options include:

- Restricting further extraction of primary aggregates based on the landbank figures and permitted reserves shown for the West Yorkshire sub-region.
- Examining the link with blockstone extraction and sustainability of extracting primary aggregate whilst extracting blockstone.
- Examining the need for secondary aggregates and maximising their use where appropriate.

Blockstone

- 3.50 There is little or no evidence of blockstone demand and supply in the region. Blockstone is not considered in the RSS and the RAWP 2004 also makes no reference to blockstone.

Key Question

7.9 How Should the LDF deal with the supply of Blockstone?

Options include

- Lobbying the Yorkshire and Humber Region to undertake surveys to obtain factual information on blockstone, reserves, supply and demand.
- Allow 'market forces' to dictate the supply and demand.

4.0 EVIDENCE BASE

4.1 The Council has undertaken/commissioned or is in the process of undertaking studies in order to provide a sound evidence base required for the LDF. The Council has also drawn on other studies and documents. Of particular relevance to the environment are the following studies/documents:

Landscape Character Assessment 2003

District Nature Conservation Strategy

Conservation Area Assessments

Strategic Floor Risk Assessment (2003)

Regional Aggregates Working Party (RAWP) Annual Reports

5.0 KEY QUESTIONS

- 7.1 While the overall aim must be to protect the **biodiversity** resource, where should local policy support and resources for enhancement be focused?
- 7.2 Using the **Landscape** Character Assessment as a framework, where should policy emphasis and resources be focused?
- 7.3 How should priorities be determined for the protection and management of Bradford's **heritage assets**?
- 7.4 What should be the overall approach in the Core Strategy to achieving high standards of **design** for new development?
- 7.5 In framing a strategic level policy for **sustainable design**, which approach should the Council favour?
- 7.6 How supportive should the policy context be towards the development of renewable **energy** sources?
- 7.7 In seeking to strike a balance between encouraging regeneration and reducing **flood risk**, which factors are most important?
- 7.8 How should the LDF contribute to meeting the region's need for aggregates?
- 7.9 How Should the LDF deal with the supply of Blockstone?