

Summary of Baseline Information

Topic		Current Baseline	Evolution without Plan
Population and Human Health	Population growth and structure	The West Berkshire population is expected to increase to 168,396 by 2036. The average age in West Berkshire is 40.4 years, with 26% of the population under 20 and 18% over 65.	The predicted level of population growth in the district puts increasing pressure on public services, housing and waste facilities. This in turn will put increasing pressure on natural resources, waste production and new developments meaning that natural resources may be lost and unsustainable waste disposal may occur. Inappropriate development may be approved which do not have a reliable source of minerals and do not include the most sustainable waste practices. There are a number of potential health implications of minerals and waste development and without an up to date plan it is more likely that there could be negative impacts from development as a result of out-of-date policies being used to control and manage development.
	Quality of life/social deprivation	There are typically low levels of deprivation in West Berkshire, with West Berkshire being the 291 st lowest deprived area in England (out of 326), although there are pockets of higher deprivation across the district, the most deprived area in the District is the Greenham ward.	
	Health	The population of West Berkshire consider themselves to be relatively health (86% stated their health was 'good' on the 2011 census). However there are pockets of the district where health deprivation is an issue. These areas are concentrated in the more urban areas of Newbury and Thatcham, and in the Eastern Urban Area of Calcot and Purley-on-Thames. Lambourn, Mortimer and Aldermaston also have higher rates of health deprivation.	
	Tourism and recreation of national and regional importance	Tourism does not form a significant part of the West Berkshire economy however, there are a number of heritage and cultural attractions within the district, including the North Wessex Downs Area of Outstanding Natural Beauty, several nation recreational routes for walking and cycling and the Kennet and Avon Canal.	
Material Assets (land use, transport, waste and minerals)	Infrastructure Network	At the centre of West Berkshire is the crossroads of the M4 motorway and the A34. The A4 and A339 also provide good road access through the district to major urban areas outside the district. A railway line travels through the centre of the district linking the district to the west country (to the west) and Reading and London to the east. A second railway runs along the north eastern boundary of the district with Oxfordshire providing links to Reading and London to the east and Oxford to the north. There are limited bus services outside the main urban areas.	With a predicted increase in population an increased demand on public transport and increasing pressure on the existing transport and waste management infrastructure is inevitable. Without an up to date Minerals and Waste plan is it likely that the area would continue to produce more waste, which may not be managed in the most appropriate way. It is predicted that aggregate requirements / consumption will increase within the district and without an up to date plan there could be an increase of importation of minerals. There are a number of constraints and issues which may impact the location
	Traffic and Congestion	There is a reliance on private cars for travel to work, with 71% of people show as travelling to work by car in the 2011	

		<p>census. This is higher than the regional (66%) or national (63%) figures.</p> <p>There are a number of localised congestion hotspots across the district usually related to junctions with the strategic road network.</p>	of mineral development including the location of viable mineral deposits and the transportation of minerals.
Waste and Mineral Infrastructure	<p>West Berkshire's most abundant resources are sharp sand and gravel, soft sand, chalk and clay. Hard rock and marine dredged sand and gravel are also supplied through the two rail depots at Theale. Recycled aggregates are produced in the district, the 2017 mineral survey suggested that just over 300,000 tonnes of recycled aggregates were produced, with 60,000 tonnes of material for non-aggregate use. Mineral extraction has declined in West Berkshire over the last 10 years, with only 2 currently active quarries (both near the end of their lives) remaining. Processing of material is usually done by mobile processing plants on site, but there is a permanent processing plant at Colthrop Industrial Estate.</p> <p>There are a number of strategic areas in the district where there is a concentration of waste management facilities (Beenham / Padworth, Theale / Burghfield, Tadley and Newbury). Over time there has been a reduction in the reliance on landfilling, with increases in recovery and composting. Recycling has remained largely static.</p>		
Emergency Services	<p>There is one hospital, West Berkshire Community Hospital, within the district. The hospital has a minor injuries unit and runs a number of clinics. However, for Accident and Emergency cases residents are required to travel out of the district.</p> <p>There is one police station in the district located in Newbury and five fire stations.</p>		
Economy and Employment	<p>Berkshire has one of the highest performing local economies in England (in terms of GVA per head). 23T of GVA in Berkshire is generated by the ICT sector, compared with 6% nationally.</p> <p>There are generally low levels on unemployment in the district (3.1% at March 2017).</p>		

Biodiversity Flora and Fauna	Designations	<p>There are 3 Special Areas of Conservation (SACs) (River Lambourn, Kennet and Lambourn Floodplain and Kennet Valley Alderwoods)</p> <p>50 SSSIs covering 1,406ha of the district. These include, amongst other habitats, Ancient woodland, chalk grassland and chalk streams.</p> <p>There are no Special Protection Areas in the district, although the southern eastern corner of the district falls within the 5km buffer zone of the Thames Basin Heaths SPA.</p> <p>There are three Local Nature Reserves</p> <p>508 Wildlife Heritage Sites and 17 Biodiversity Opportunity areas</p>	<p>Without the new Minerals and Waste Local Plan applications for minerals and waste development would be determined using the Replacement Berkshire Minerals Local Plan and the Waste Plan for Berkshire, both of which are dated, and the NPPF. This approach would not give consideration of the collective impacts or opportunities and may not address fully local circumstances. As such it is possible that designated sites may be impacted upon.</p> <p>Increase in traffic and congestion may worsen around designated sites should development of minerals and waste sites be inappropriately located.</p>
	Priority habitats and species	788 out of 943 protected species for conservation naturally in the UK Biodiversity Action Plan are present in West Berkshire and require positive action	
Soil, Geology and Geomorphology	Soils Superficial and Bedrock		<p>With increasing development there are a number of threats to soil from compaction and soil sealing. This prevents water infiltrating into the soil and can result in increased surface run off and promote soil erosion.</p> <p>There is also the threat of soil loss as a result of agriculture and this trend is likely to continue.</p> <p>Climate change is likely to increase pressure on soil. An increase in soil erosion is likely due to increased wind speeds and increased flooding events.</p> <p>Mineral and waste sites have the potential to cause contamination and the risks associated with contamination of these sites would increase in the absence of an up to date Minerals and Waste Local Plan.</p>
	Geology	<p>West Berkshire's underlying geology is Chalk, London Clay and Reading and Bagshot Beds. In many areas alluvial deposits and plateau gravels are superimposed upon this geology.</p> <p>West Berkshire main mineral resources are sharp sand and gravel, soft sand, chalk and clay.</p> <p>Hard rock and marine dredged sand and gravel are imported via the rail depots at Theale.</p>	
	Designated and non-designated heritage sites	<p>There is one regionally Important Geological / Geomorphological Site (RIGS) in the district at Rushall Farm Pit.</p> <p>Some SSSI's (identified above) have also been identified for their geomorphological value.</p>	

	Contaminated land	There are two sites declared contaminated land under the Environmental Protection Act, and a further 1200 potentially contaminated land sites have been identified in the district.	As well as being a resources, aggregates and soil contribute to the construction, demolition and excavation waste streams, much of which can be recycled. In the absence of an up to date Minerals and Waste Local Plan these opportunities may not be realised.
	Agricultural and Land Use	Agriculture is the largest land use in the district at 79% of the district. Over half of the agricultural land is under arable cropping, with around a third bring used for grazing.	
Water	Water Resources	<p>The district is located within two water resources zones (the Kennet Valley Resources Zone and the Swindon and Oxfordshire Resources Zone).</p> <p>There are three main rivers flowing through the district, the River Kennet, River Lambourn and River Pang, in addition to the River Thames forming the north eastern boundary of the district. The main groundwater resource is the chalk aquifer that underlies much of eastern and southern England.</p> <p>The district is included within an area identified with “serious levels of water stress”</p>	Without the new Minerals and Waste Local Plan applications for minerals and waste development would be determined using the Replacement Berkshire Minerals Local Plan and the Waste Plan for Berkshire, both of which are dated, and the NPPF. This approach would not give consideration of the collective impacts or opportunities and may not address fully local circumstances. As such, it is possible the aquatic environment is at risk either from contamination via leachate or aquifer systems of potentially form the flooding of waste sites.
	Water Framework Directive	A Catchment Flood Management Plan has been developed for the River Thames. While the river Thames does not flow through West Berkshire, it flows along its north eastern boundary of the district with Oxfordshire, the rivers flowing though West Berkshire are tributaries to the Thames, joining the Thames outside of West Berkshire.	
	Flood Risk	Flood risk in West Berkshire is widespread, arising from not only rivers but also from surface water and groundwater. Widespread flooding of homes and businesses occurred most recently in Winter 2013/14 and July 2007.	
	Water Quality	<p>There are no Nitrate Sensitive Areas in West Berkshire, but there are large areas covered by Nitrate Vulnerable Zones. This is characteristic of the agricultural land use of much of west Berkshire.</p> <p>Groundwater sources protection zones have been identified by the Environment Agency. There are 25 SPZs in the district.</p>	
Climate Change and Air Quality	Air Quality	There are two Air Quality management areas in West Berkshire. One in Central Newbury along a section of the	Waste management generates carbon dioxide and methane which are both greenhouse gases. Some waste management

		A339 and the other along a section of the A4 in Thatcham. Since the declaration of the AQMAs and the implementation of the Air Quality Management Plan levels of nitrogen dioxide are declining.	facilities are capable of producing heat and electricity from thermal and biological treatment processes thereby converting energy within stored material to useful energy, reducing fossil fuel requirements. In the absence of the Minerals and Waste Local Plan opportunities to implement this form of energy and reduce use of fossil fuels may be missed. The UK is likely to see more extreme weather events, including hotter and drier summers.
	Climatic Factors	<p>The Department of Energy and Climate Change have produced UK local authority and regional carbon dioxide emissions national statistics for 2005 – 2016. The data suggests that West Berkshire has a slightly higher CO₂ emission per capita (6t) when compared to the south east region (5t) and the UK as a whole (5.4t). The highest proportion of CO₂ emissions in West Berkshire comes from the transport sector at 36%. While transport is the highest proportion of CO₂ emissions regionally (45%) nationally the highest proportion is from Industrial/Commercial sectors (40%)</p> <p>In West Berkshire there has been a 33% decrease in CO₂ emissions per capita between 2005 and 2016 (from 8.9t in 2005 to 6t in 2016).</p>	<p>HGV movements associated with mineral and waste development will generate CO₂ emissions and nitrogen dioxide and without an up to date plan to ensure these factors are fully considered, there would be the potential for development to take occur in less sustainable locations where there is likely to be a greater generation of CO₂ emissions.</p> <p>The reduction in CO₂ emissions previously seen in the district will become increasingly hard to achieve particularly as this is likely to be affected by new developments and the increased traffic associated with those new developments.</p>
Historic Environment	Designated Heritage Assets	<p>There are 1877 listed buildings in West Berkshire (42 Grade I, 109 Grade II* and 1,728 Grade II).</p> <p>90 sites/structures identified as Scheduled Monuments. 12 registered parks and gardens 2 historic battlefields</p> <p>There are 15 listed buildings/structures included on the Historic England Heritage at Risk Register (2 grade I, 4 Grade II*, 3 Registered parks and gardens, 4 Scheduled monuments).</p> <p>54 conservation areas</p>	<p>In the absence of the Minerals and Waste Local Plan applications for minerals and waste development would be determined against the saved policies of the existing Replacement Minerals Local Plan for Berkshire and Waste Plan for Berkshire and against the policies of the NPPF.</p> <p>This approach may not give consideration of the collective impacts or opportunities and may not address fully local circumstances. As such, it is possible that archaeological sites may be impacted upon, and archaeological remains may be needlessly destroyed. Further traffic and congestion may worsen around important sites.</p>
	Historic Landscape Character	The Historic Environment Character Zoning (HECZ) project carried out by West Berkshire's Archaeology service provides a comprehensive account of the historic environment. The district has been divided into 23 Historic Character Areas (9HECAs), which are in turn sub-divided into 91 Historic Environment Character Zones (HECZs). Each HECA has a	

		similar landscape historic and evolution as well as geographical characteristics. HECZs have common traits in archaeological monuments, buildings, land-use of settlement patterns.	
	Other known and unknown features	Over 5000 other heritage assets are recorded in the Historic Environmental Record.	
Landscape and Visual Amenity	Designated Landscapes	<p>The North Wessex Downs Area of Outstanding Natural Beauty (AONB) covers 74% of West Berkshire, to the north of the district.</p> <p>The Berkshire Landscape Character Assessment (2003) identifies 14 landscape types which are subdivided into potential character areas. The main landscape characters identified in West Berkshire are Chalk Scarp, Woodland and Heathland Mosaic, Farmed Chalk Mosaic, Wooded Downland, Open Downlands and Elevated Wooded Chalk slopes.</p>	<p>Landscapes can change by a variety of physical, environmental and man-made influences. Increased development pressures, particularly in the South East has the potential to threaten the landscape character and could result in the loss of unique landscape features. Mineral and Waste sites have the potential to alter the landscape and visual amenity in a negative way. The development of the MWLP will ensure adequate protection is given to the protection of landscape character, especially within the AONB.</p> <p>Agricultural pressures and climate change could also have an effect with potential increase in erosion and flooding events resulting in changes in livestock, crops and land uses.</p>
	Tranquillity	West Berkshire is largely rural in nature where tranquillity will form part of the character of the area.	

Limitations

The information presented in this report is the result of a desk-based review of publically available data and no formal requests for records, data of information have been made