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Sustainability Appraisal of the Herefordshire Minerals and Waste Local Plan

Appendices

Prepared by LUC
August 2017

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Contents

Appendix 1

Review of Plans, Programmes and Policies

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
INTERNATIONAL				
International				
IPCC's Fifth Assessment Report on Climate Change (IPCC, 2014)[1]	To limit and/or reduce all greenhouse gas emissions which contribute to climate change	None	Plan should support reduction in emissions of greenhouse gases.	Include sustainability objectives to **support reduction in emissions of greenhouse gases.**
Johannesburg Declaration on Sustainable Development (2002)	Commitment to building a humane, equitable and caring global society aware of the need for human dignity for all. Areas of focus include: • Sustainable consumption and production patterns. • Accelerate shift towards sustainable consumption and production – 10 year framework of programmed of action. • Reverse trend in loss of natural resources. • Renewable energy and energy efficiency. • Urgently and substantially increase Global share of renewable energy. • Significantly reduce the rate of biodiversity loss by 2010.	To promote greater resource efficiency, increase energy efficiency and develop new technology for renewable energy.	Allocate sites and develop policies that take account of the Declaration.	Include sustainability objectives to **enhance the natural environment** and **promote renewable energy and energy/resource efficiency**.
Aarhus Convention (1998)	Established a number of rights of the public with regard to the environment. Local	No targets or indicators.	Allocate sites and develop policies that take account of the	Ensure that the **public are involved and consulted** at all

[1] IPCC (2014) Fifth Assessment Report on Climate Change

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	authorities should provide for: • The right of everyone to receive environmental information. • The right to participate from an early stage in environmental decision making. • The right to challenge in a court of law public decisions that have been made without respecting the two rights above or environmental law in general.		Convention.	relevant stages of SA production.
Bern Convention (1979)	The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and came into force in 1982. The principal aims of the Convention are to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species) listed in Appendix III. To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1,000 wild animal species.	No targets or indicators.	Allocate sites and develop policies that take account of the Convention.	Include sustainability objectives to **protect and enhance biodiversity**.
Ramsar Convention – Convention on Wetlands of International Importance (1971)	To promote the conservation and wise use of all wetlands through local, regional and national actions and international co-operation, as a contribution towards achieving sustainable development	The number of Ramsar sites being designated in the UK.	Plan should promote the conservation and make wise use of all wetland areas.	Consider inclusion of objectives which aim to **promote conservation and wise use of wetland**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	throughout the world.			**areas**.
EU Directives				
SEA Directive 2001 Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment	Provide for a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.	The Directive must be applied to plans or programmes whose formal preparation begins after 21 July 2004 and to those already in preparation by that date.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive at the national level.	**Requirements of the SEA Directive must be met in Sustainability Appraisals.**
The Waste Framework Directive 2008 Directive 2008/98/EC on waste	Prevention or reduction of waste production and its harmfulness. The recovery of waste by means of recycling, re-use or reclamation. Recovery or disposal of waste without endangering human health and without using processes that could harm the environment.	Sets targets for recycling rates; 50% recycling rates for household waste and 70% for C&D waste by 2020.	Plan should reflect the waste hierarchy. Plan should make provision for sufficient recycling facilities to ensure targets can be met and encourage the use of secondary aggregates.	Consider objectives to provide an adequate supply of suitable waste facilities, to **reduce waste**, and to **reduce waste sent to landfill**.
The Landfill Directive 1999 Directive 99/31/EC on the landfill of waste	Prevent or reduce negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.	Reduce the amount of biodegradable waste sent to landfill to 75% of the 1995 level by 2010. Reduce this to 50% in 2013 and 35% by 2020.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objectives to **increase recycling and reduce the amount of waste**.

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EU Management of Waste from Extractive Industries (2006/21/EC)	The purpose of the Directive is to prevent water and soil pollution from the deposition of waste into heaps or ponds and puts emphasis on the long-term stability of waste facilities to help avoid major accidents. The main elements of the Directive are: • Conditions for operating permits. • General obligations concerning waste management. • The obligation to characterise waste before disposing of it or treating it. • Measures to ensure the safety of waste management facilities. • A requirement to draw up closure plans. • An obligation to provide for an appropriate level of financial security.	No targets or indicators.	Plans should clearly recognise that some minerals development can cause pollution and harm human health where they produce dangerous substances.	Include sustainability objectives that **encourage recycling** and the **prudent use of natural resources** and the **protection of the environment**. Also **promote a reduction in water and soil pollution**.
The Industrial Emissions Directive 2010 Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)	This Directive lays down rules on integrated prevention and control of pollution arising from industrial activities. It also lays down rules designed to prevent or, where that is not practicable, to reduce emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of protection of the environment taken as a whole.	The Directive sets emission limit values for substances that are harmful to air or water.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objective for **reducing pollution**.
The Packaging and Packaging Waste Directive 1994	Harmonise the packaging waste system of Member States. Reduce the environmental impact of packaging waste.	By June 2001 at least 50% by weight of packaging waste should have been recovered, at least	Allocate sites and develop policies that take account of the	Include sustainability objectives to **minimise the**

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Directive 94/62/EC on packaging and packaging waste		25% by weight of the totality of packaging materials contained in packaging waste to be recycled with a minimum of 15% by weight for each packaging material.	Directive as well as more detailed policies derived from the Directive contained in the NPPF.	**environmental impact of waste and promote recycling.**
The Birds Directive 2009 Directive 2009/147/EC is a codified version of Directive 79/409/EEC as amended	The preservation, maintenance, and re-establishment of biotopes and habitats shall include the following measures: • Creation of protected areas. • Upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones. • Re-establishment of destroyed biotopes. • Creation of biotopes.	No targets or indicators.	Sites and policies should make sure that the upkeep of recognised habitats is maintained and not damaged from development. Avoid pollution or deterioration of habitats or any other disturbances effecting birds.	Include sustainability objectives for the **protection of birds**.
The Habitats Directive 1992 Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora	Promote the maintenance of biodiversity taking account of economic, social, cultural and regional requirements. Conservation of natural habitats and maintain landscape features of importance to wildlife and fauna.	No targets or indicators.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objectives to **protect and maintain the natural environment and important landscape features.**
The Water Framework Directive 2000 Directive 2000/60/EC establishing a	Protection of inland surface waters, transitional waters, coastal waters and groundwater.	No targets or indicators.	Develop policies that take account of the Directive as well as more detailed policies derived from the	Include sustainability objectives to **protect and minimise the impact on water quality**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
framework for community action in the field of water policy			Directive contained in the NPPF.	
The Floods Directive 2007 Directive 2007/60/EC on the assessment and management of flood risks	Establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.	Preliminary Flood Risk Assessments to be completed by December 2011. Flood Hazard Maps and Flood Risk Maps to be completed by December 2013. Flood Risk Management Plans to be completed by December 2015.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objectives that relate to **flood management and reduction of risk**.
The Drinking Water Directive 1998 Directive 98/83/EC on the quality of water intended for human consumption	Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	Member States must set values for water intended for human consumption.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objectives to **protect and enhance water quality**.
The Bathing Water Quality Directive 2006 Directive 2006/7/EC on the quality of water intended for human consumption	The revised Bathing Water Directive entered into force in March 2006. The overall objective of the revised Directive remains the protection of public health whilst bathing.	There is a requirement for all bathing waters to be classed as 'sufficient' by 2015.	Plan must adhere to the requirements of the Directive, as appropriate.	Sustainability objectives should reflect the Directive requirements and **protect the quality of bathing waters**.
The Air Quality Directive 2008 Directive 2008/50/EC	Avoid, prevent and reduce harmful effects of ambient noise pollution on human health and the environment.	No targets or indicators.	Allocate sites and develop policies that take account of the Directive as well as	Include sustainability objectives to **maintain and**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
on ambient air quality and cleaner air for Europe			more detailed policies derived from the Directive contained in the NPPF.	**enhance air quality**.
The Noise Directive 2000/14/EC	• Monitor the environmental problem by drawing up strategic noise maps. • Informing and consulting the public about noise exposure, its effects and the measures considered to address noise. • Addressing local noise issues by requiring authorities to draw up action Plans to reduce noise where necessary and maintain environmental noise where it is good.	No targets or indicators.	Allocate sites and develop policies that take account of the Directive as well as more detailed policies derived from the Directive contained in the NPPF.	Include sustainability objectives to **reduce noise pollution.**
EUROPEAN				
EU Seventh Environmental Action Plan to 2020	The EU's objectives in implementing the programme are: (a) to protect, conserve and enhance the Union's natural capital; (b) to turn the Union into a resource-efficient, green and competitive low-carbon economy; (c) to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing; (d) to maximise the benefits of the Union's environment legislation; (e) to improve the evidence base for	No targets or indicators.	Allocate sites and develop policies that take account of the Action Plan as well as more detailed policies contained in the NPPF.	Include sustainability objectives to **protect and enhance the natural environment** and **promote energy efficiency**.

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	environment policy; (f) to secure investment for environment and climate policy and get the prices right; (g) to improve environmental integration and policy coherence; (h) to enhance the sustainability of the Union's cities; (i) to increase the Union's effectiveness in confronting regional and global environmental challenges.			
EU Biodiversity Strategy to 2020	The European Commission has adopted an ambitious new strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. The six targets cover: • Full implementation of EU nature legislation to protect biodiversity • Better protection for ecosystems, and more use of green infrastructure • More sustainable agriculture and forestry • Better management of fish stocks • Tighter controls on invasive alien species • A bigger EU contribution to averting global biodiversity loss	Biodiversity loss is an enormous challenge in the EU, with around one in four species currently threatened with extinction and 88% of fish stocks over-exploited or significantly depleted.	Allocate sites and develop policies that take account of the Strategy as well as more detailed policies contained in the NPPF.	Include sustainability objectives to **value, protect and enhance biodiversity.**

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European Spatial Development Perspective (1999)	Economic and social cohesion across the community. Conservation of natural resources and cultural heritage. Balanced competitiveness between different tiers of government.	No targets or indicators.	Allocate sites and develop policies that take account of the Plan as well as more detailed policies contained in the NPPF.	Include sustainability objectives to **conserve natural resources and cultural heritage**.
European Landscape Convention (Florence, 2002)	The convention promotes landscape protection, management and planning.	No indicators or targets.	Allocate sites and develop policies that take account of the Convention as well as more detailed policies contained in the NPPF.	Include sustainability objectives **to protect, manage and plan for landscape provision.**
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992) *Revision of the 1985 Granada Convention*	Protection of the archaeological heritage, including any physical evidence of the human past that can be investigated archaeologically both on land and underwater. Creation of archaeological reserves and conservation of excavated sites.	No indicators or targets.	Allocate sites and develop policies that take account of the Convention as well as more detailed policies contained in the NPPF.	Include sustainability objectives to **protect the archaeological heritage**.
NATIONAL				
White Papers				
Natural Environment White Paper, 2011 *The Natural Choice: securing the value of nature*	The White Paper contains 92 commitments related to the natural environment under several themes including the following: • Protecting and improving our natural environment; • Growing a green economy; and	No targets or indicators.	Ensure that site allocations and policies will protect the intrinsic value of nature and recognise the multiple benefits it could have	Include a sustainability objective relating to the **enhancement of the natural**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	• Reconnecting people and nature.		for communities.	**environment**.
National Policies and Strategies				
DCLG (2012) *National Planning Policy Framework*	Presumption in favour of sustainable development.	No targets or indicators.	Development plan has a statutory status as the starting point for decision making.	Sustainability appraisal should be an integral part of the plan preparation process, and should consider all the likely **significant effects on the environment, economic and social factors**.
	Building a strong, competitive economy.	No targets or indicators.	Set out clear economic visions for that particular area.	Include a sustainability objective relating to **strengthening the economy.**
	Promoting healthy communities.	No targets or indicators.	Promote safe and accessible environments with a high quality of life and community cohesion.	Include a sustainability objective relating to **health and well-being**.
	Meeting the challenge of climate change, flooding, and coastal change.	No targets or indicators.	Use opportunities offered by new	Include a sustainability

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			development to reduce causes/impacts of flooding.	objective relating to **climate change mitigation and adaption**.
	Conserving and enhancing the natural environment.	No targets or indicators.	Recognise the wider benefits of biodiversity.	Include a sustainability objective relating to the **conservation and enhancement of the natural environment**.
	Conserving and enhancing the historic environment	No targets or indicators.	Sustain and enhance heritage assets and put them to viable uses consistent with their conservation.	Include a sustainability objective relating to the **conservation of historic features**.
	Facilitating the use of sustainable materials.	No targets or indicators.	Encourage prior extraction of minerals where practicable and environmentally feasible.	Include a sustainability objective relating to **sustainable mineral extraction**.
DCLG (2014) *National Planning Policy for Waste*	The National Planning Policy for Waste was adopted in October 2014 and sets out the need for local authorities to: • Prepare local plans using a robust proportionate evidence base • Identify need for waste management facilities	No targets or indicators.	Allocate sites and develop policies that take account of the National Planning Policy for Waste.	Include a sustainability objective relating to **sustainable waste management.**

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	• Identify suitable sites and areas
	• Determine planning applications
	• Monitor and report:
	  ○ Take up in allocated sites and areas
	  ○ Existing stock and changes in the stock of waste management facilities.
	  ○ The amount of waste recycled, recovered or going for disposal.			

DEFRA (2013) *National Waste Management Plan for England*	Provides an analysis of the current waste management situation in England, and evaluates how it will support implementation of the objectives and provisions of the revised Waste Framework Directive. At the local authority level, the Waste Management Plan notes that waste planning authorities (county and unitary authorities in England) are responsible for producing local waste management plans that cover the land use planning aspect of waste management for their areas.	No targets or indicators.	Allocate sites and develop policies that take account of the National Waste Management Plan.	Include a sustainability objective relating to **sustainable waste management**.
DCLG (2014) *Planning Practice Guidance on Minerals*	Guidance on mineral safeguarding, mineral extraction, restoration and aftercare of mineral sites, and planning for aggregate and industrial minerals, hydrocarbon and coal extraction.	No targets or indicators.	Mineral planning authorities are expected to prepare Local Aggregate Assessments, to assess the demand for and	Include SA objectives relating to **sustainable mineral extraction**.

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			supply of aggregates. Also required to define Mineral Safeguarding Areas and Mineral Consultation Areas. Allocate sites and develop policies that take account of the guidance document.	
DCLG (2015) *Planning Practice Guidance on Waste*	Provides guidance to waste planning authorities. States that local plans should identify sufficient opportunities to meet the identified needs of an area for the management of waste, aiming to drive waste management up the Waste Hierarchy. Local Plans should ensure that suitable sites and areas for the provisions of waste management facilities are identified in appropriate locations.	No targets or indicators.	Allocate sites and develop policies that take account of the guidance document.	Include SA objectives that relate to **sustainable waste management.**
DEFRA (2012) *National Policy Statement for Waste Water*	Sets out the proposed policy framework to inform planning decisions on applications for large waste water infrastructure projects.	No targets or indicators.	Allocate sites and develop policies that take account of the National Policy Statement for Waste Water.	Include SA objectives that relate to **sustainable waste management** and **the protection of water quality**.
DEFRA (2013) *National Policy Statement for Hazardous Waste*	Sets out the strategic need and justification of Government policy for the provision of national significant infrastructure for the management of hazardous waste.	No targets or indicators.	Allocate sites and develop policies that take account of the National Policy Statement for	Include SA objectives that relate to **sustainable waste management** which will include hazardous

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			Hazardous Waste.	waste.
HM Government (2013) *Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in moving to a more resource efficient economy*	The aim of the Programme is to improve the environment and protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth: • encourage businesses to contribute to a more sustainable economy by building waste reduction into design, offering alternative business models and delivering new and improved products and services; • encourage a culture of valuing resources by making it easier for people and businesses to find out how to reduce their waste, to use products for longer, repair broken items, and enable reuse of items by others; • help businesses recognise and act upon potential savings through better resource efficiency and preventing waste, to realise opportunities for growth; and • support action by central and local government, businesses and civil society to capitalise on these opportunities.	No targets or indicators.	Policies should take account of the strategic measures in the Programme.	Include SA objectives which seek to **promote waste prevention**.
Collation of the Results of the 2009 Aggregate Mineral Survey for England and Wales	The report provides comprehensive information for monitoring and facilitating aggregates provision at local, regional and national level. Aggregate Minerals (AM) surveys, based on four-yearly intervals since	No targets or indicators.	Develop appropriate and sustainable policies in the light of the survey results.	Include a sustainability objective that **ensures sufficient mineral provision**

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	1973, provide an in depth and up-to-date understanding of regional and national sales, inter-regional flows, transportation, consumption and permitted reserves of primary aggregates, The Aggregate Minerals 2009 survey report also presents data on the movement and consumption of primary aggregates by sub region. Information is also presented on the quantity of aggregate minerals granted and refused planning permission and, for the first time, planning permission applications withdrawn or awaiting a decision, between 2006 and 2009, by site type and environmental designation.			for the County.
English Heritage (2008): *Minerals Extraction and the Historic Environment*	The document sets out English Heritage's position on mineral extraction and the high-level policies that will form the basis for responses and views put forward by English Heritage on any matter relating to the winning, working and safeguarding of minerals. Although it was produced before the NPPF English Heritage consider the document and a majority of the contents are still relevant. Its principal purpose is to guide the work of English Heritage, but it will also be of interest to the wider historic environment sector, government, local authorities, the minerals industry and other organisations that care for the environment. The document sets out English Heritage's formal policy on mineral extraction, including: • Sustainability and supply	No key targets (as yet).	Ensure English Heritage's formal policy on mineral extraction is taken into account in the development of the MWLP.	Include sustainability objectives that consider the **impacts upon the historic environment**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	• Safeguarding the industry's heritage • Impacts and mitigating of current and future extraction • Maintaining historic fabric and local distinctiveness			
English Heritage (2008): *Mineral Extraction and Archaeology: A Practice Guide*	The document provides guidance specifically for dealing with archaeological remains as part of mineral development through the planning process. Although it was produced before the NPPF English Heritage consider the document and a majority of the contents are still relevant. The principal purpose of this Practice Guide is to provide clear and practical guidance on the archaeological evaluation of mineral development sites. The guide seeks to ensure that: • The best-informed decisions are made regarding the level of archaeological knowledge needed at each stage of the planning process • The use of the full range of up to date and appropriate investigative techniques is considered • There is consistency in planning authority responses, proportionate to the archaeological potential of the site and reasonable in all other respects.	No key targets (as yet)	Ensure the best practice is taken into account in the development of the MWLP.	Include sustainability objectives that consider the **impacts upon archaeology**.
HM Government (2009) *The UK Low Carbon Transition Plan*	Plan plots how the UK will meet the 34 percent cut in emissions on 1990 levels by 2020. The Plan shows how reductions in the power sector and heavy industry; transport; homes and communities; workplaces and	The plan includes a 5-point Action Plan covering the following areas: • Protecting the public from	Plan should include policies that contribute towards achieving lower carbon emissions.	Objectives should reflect the aims set in the UK Low Carbon Transition Plan to **reduce carbon**

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	jobs; and farming, land and waste sectors could enable carbon budgets to 2022 to be met.	immediate risk; • Preparing for the future; • Limiting the severity of future climate change through a new international climate agreement; • Building a low carbon UK; • Supporting individuals, communities and businesses to play their part.		**emissions**.
HM Government (2011): The *Carbon Plan: Delivering our low carbon future*	The Carbon Plan is a Government wide plan of action on climate change, including domestic and international activity.	The plan includes a range of sectorial plans and targets including low carbon industry.	Plan should include policies that contribute towards achieving lower carbon emissions such as diverting waste from landfill by driving it up the waste hierarchy and using alternate or low emission transport options where viable.	Include a sustainability objective relating to **reducing carbon emissions.**
DECC (2009) *The UK Renewable Energy Strategy*	Increase our use of renewable electricity, heat and transport, and help tackle climate change. Build the UK low-carbon economy, promote energy security and take action against climate change.	15% of energy from renewable sources by 2020. Reducing UK CO2 emissions by 750 million tonnes by 2030.	Ensure that site allocations and policies will support renewable energy provision including electricity, heat and transport.	Include a sustainability objective relating to **increasing energy provided from renewable sources.**

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DEFRA (2013) *The National Adaptation Programme – Making the Country Resilient to a Changing Climate*	The report sets out visions for the following sectors: • Built Environment – *"buildings and places and the people who live and work in them are resilient to a changing climate and extreme weather and organisations in the built environment sector have an increased capacity to address the risks and take the opportunities from climate change".* • Infrastructure – *"an infrastructure network that is resilient to today's natural hazards and prepared for the future changing climate".* • Healthy and resilient communities – *"a health service, a public health and social care system which are resilient and adapted to a changing climate. Communities and individuals, including the most vulnerable, are better prepared to cope with severe weather events and other impacts of climate change. Emergency services and local resilience capability take account of and are resilient to, a changing climate".* • Agriculture and Forestry – *"profitable and productive agriculture and forestry sectors that take the opportunities from climate change, are resilient to its threats and contribute to the resilience of the natural environment by helping maintain ecosystem services and protect and enhance biodiversity".* • Natural Environment – *"the natural environment, with diverse and healthy*	No targets or indicators.	Policies should take account of the aims of the Programme.	Include SA objectives which seek to **promote the implementation of adaptation measures to make the area more resilient to a changing climate**.

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	ecosystems, is resilient to climate change, able to accommodate change and valued for the adaptation services it provides". • Business – *"UK businesses are resilient to extreme weather and prepared for future risks and opportunities from climate change".* • Local Government – *"Local government plays a central in leading and supporting local places to become more resilient to a range of future risk and to be prepared for the opportunities from a changing climate".*			
DCLG (2014) *Planning Practice Guidance – Flood risk and coastal change*	The guidance replaces Planning Policy Statement 25 (Development and Flood Risk). It advises how to take account of and address the risks associated with flooding and coastal change in the planning process. The guidance states that waste and mineral planning authorities need to take account of flood risk when allocating land for development. They should prepare their plan policies with regard to any available Strategic Flood Risk Assessments. The location of Mineral Safeguarding Areas and site allocations, in particular in relation to sand and gravel workings which are often located in functional floodplains, need to be identified. It advocates exploring benefits, such as restoring mineral working located in flood risk areas to increase flood water storage, which can also enhance the natural environment.	No targets or indicators.	Ensure that the MWLP has regard to any available SFRA. The sequential approach should be applied to the allocation of sites for waste management and, where possible, mineral extraction and processing.	The SA framework should include objectives to **reduce flood risk and support the restoration of mineral sites** located in flood risk areas.
DEFRA (GP3):	To prevent pollution of groundwater.	To meet Water Framework	Plan should recognise	Include an objective

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Underground, Under threat – Groundwater Protection: Policy and Practice		Directive requirements for groundwater quality.	the importance and vulnerability of groundwater resources and ensure that they are not detrimentally affected by waste development.	to **protect groundwater quality**.
Environment Agency (2011) *The National Flood and Coastal Erosion Risk Management Strategy for England*	This Strategy sets out the national framework for managing the risk of flooding and coastal erosion. It sets out the roles for risk management authorities and communities to help them understand their responsibilities. The strategic aims and objectives of the Strategy are to: • *"manage the risk to people and their property;* • *Facilitate decision-making and action at the appropriate level – individual, community or local authority, river catchment, coastal cell or national;* • *Achieve environmental, social and economic benefits, consistent with the principles of sustainable development".*	No targets or indicators.	Policies should seek to reduce and manage the risk of all types of flooding.	The SA framework should include objectives which seek to **reduce the risk and manage flooding sustainably**.
DEFRA (2008) *Future Water: The Government's Water Strategy for England*	Sets out how the Government want the water sector to look by 2030 and an outline of the steps which need to be taken to get there. The vision for 2030 is one where we, as a country have: • *"improved the quality of our water*	No targets or indicators.	Policies should aim to contribute to the vision set out in this Strategy.	Include SA objectives which seek to **protect, manage and enhance the water environment**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	environment and the ecology it supports, and continue to maintain high standards of drinking water quality from taps; • *Sustainably managed risks from flooding and coastal erosion, with greater understanding and more effective management of surface water;* • *Ensure a sustainable use of water resources, and implement fair, affordable and cost-reflective water charges;* • *Cut greenhouse gas emissions; and* • *Embed continuous adaptation to climate change and other pressures across the water industry and water users".*			
Environment Agency (2009) *Water for People and the Environment: Water Resources Strategy for England and Wales*	The Strategy vision for water resource "is for there to be enough water for people and the environment, meeting legitimate needs". Its aims include: • To manage water resource and protect the water environment from climate change. • Restore, protect, improve and value species and habitats that depend on water. • To contribute to sustainable development through good water management. People to understand how water and the water environment contribute to their quality of life.	No targets or indicators.	Policies should reflect the aims of the strategy where relevant.	Include SA objective which seeks to **promote water management and efficiency**.
DEFRA (2009) Safeguarding our Soils: A Strategy for England	The vision is *"by 2030, all England's soils will be managed sustainability and degradation threats tackled successfully. This will improve the quality of England's soils and safeguard their ability to provide essential*	No targets or indicators.	Ensure that site allocations and policies will help protect and enhance the quality of soils and seek to	Include SA objective which seeks to **safeguard and enhance the quality**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	services for future generations". The Strategy highlights the areas for priority including: • Better protection for agricultural soils. • Protecting and enhancing stores of soil carbon. • Building the resilience of soils to a changing climate. • Preventing soil pollution. • Effective soil protection during construction and development. • Dealing with our legacy of contaminated land.		sustainably manage their quality for future generations.	**of soil**.
DEFRA (2007) *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland*	Make sure that everyone can enjoy a level of ambient air quality in public spaces, which poses no significant risk to health or quality of life. Render polluting emissions harmless.	Sets air quality standards for 13 air pollutants.	Develop policies that aim to meet the standards.	Include sustainability objectives to **reduce pollution and protect and improve air quality.**
DEFRA (2011) *Biodiversity 2020: A strategy for England's wildlife and ecosystem services*	The strategy aims to guide conservation efforts in England up to 2020, and move from a net biodiversity loss to gain. The strategy includes 22 priorities which include actions for the following sectors: • Agriculture; • Forestry; • Planning and Development; • Water Management; • Marine Management; • Fisheries; • Air Pollution; and • Invasive Non-Native Species.	The strategy develops ambitious yet achievable goals for 2020 and 2050, based on Aichi Targets set at the Nagoya UN Biodiversity Summit in October 2010.	Develop policies that promote conservation and enhancements of biodiversity and ensure that site allocations take account of the aims of the strategy.	Include sustainability objective that **relates to biodiversity**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
DEFRA (2011) *Securing the Future: Delivering UK Sustainable Development Strategy*	Enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life for future generations. There are 4 shared priorities: • sustainable consumption and production; • climate change and energy; • natural resource protection and environmental enhancement; and • sustainable communities.	Sets out indicators to give an overview of sustainable development and priority areas in the UK. They include 20 of the UK Framework indicators and a further 48 indicators related to the priority areas.	Ensure that site allocations and policies meet the aims of the Sustainable Development Strategy.	Include sustainability objectives to cover the Strategy's shared priorities.
DECC (2014) *Community Energy Strategy*	Sets out plans to promote and facilitate the planning and development of decentralised community energy initiatives in four main types of energy activity: • Generating energy (electricity or heat) • Reducing energy use (saving energy through energy efficiency and behaviour change) • Managing energy (balancing supply and demand) • Purchasing energy (collective purchasing or switching to save money on energy)	No targets or indicators.	Ensure that site allocations and policies will support community low carbon and renewable energy provision including electricity, heat and transport.	Include a sustainability objective relating to **increasing energy provided from decentralised low carbon and renewable sources.**
National Legislation				
Flood and Water Management Act 2010	To improve the management of flood risk for people, homes and businesses. To protect water supplies.	Local Authorities to prepare flood risk assessments, flood maps and plans.	Plan should take account of flooding and water management issues and strategies.	Consider inclusion of an objective to **reduce flood risk and other impacts**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		Lead Local Flood Authorities to prepare Local flood risk management strategies.		**on the water environment.**
Climate Change Act 2008	The Climate Change Act 2008 introduced a statutory target of reducing carbon emissions.	Target of reducing carbon emissions by 80 per cent below 1990 levels by 2050, with an interim target of 34% by 2020.	Planning makes a significant contribution to both mitigating and adapting to climate change through its ability to influence the location, scale, mix and character of development. The plan should include policies that contribute towards achieving lower carbon emissions and greater resilience to the impacts of climate change.	Objectives should reflect the aims set in the Climate Change Act to **reduce carbon emissions**.
Regulations				
The Conservation of Habitats and Species Regulations (2010) (as amended)	The Regulations provide for the designation and protection of 'European sites', the protection of 'European protected species', and the adaptation of planning and other controls for the protection of European Sites.	No targets or indicators specifically, or directly relevant to minerals plans.	Consider how the plan can contribute to meeting the regulations.	Include sustainability objectives relating to **protection of European sites.**
LOCAL				
Herefordshire Council (2015) *Herefordshire Core Strategy 2011 – 2031*	The Core Strategy provides the strategic planning framework for the county's future development needs. It sets out a range of policies to identify what those needs are and how they can be met.	Preparation of Annual Monitoring Report.	Ensure that site allocations and policies will be in conformity with the Core Strategy, consider its objectives and add more detailed	The SA framework will include objectives to **ensure a balanced approach taken to new development to**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
			policies to guide development in certain areas.	**ensure sustainability principles are met**.
Herefordshire Council (2011, 2016) *Waste Strategy for Herefordshire and Worcestershire 2004-2034*	Aims to reduce waste and restrict growth by: • Reducing packaging and facilitating more sustainable consumer behaviour • Re-use waste – through re-use schemes. • Retain waste –within the household through home composting and the use of home waste disposal units for kitchen waste where composting is unsuitable • Recycle waste – Through the provision of a single container to each household that will contain all dry recyclable material, to be collected fortnightly and automatically separated • Recovery of value from residual • Final disposal – into suitable landfill sites, which recover gas to generate energy as far as practicable.	• Achieve the national reductions in household residual waste of 35% by 2015 and 45% by 2020. • Work towards achieving national recycling/composting levels of household waste of 45% by March 2015 and 50% by March 2020. • Continue to meet the requirements of the Household Waste Recycling Act 2003. • By 2015, or earlier if practicable, recover value from a minimum of 78% of municipal waste. • Reduce the amount of biodegradable municipal waste landfilled in order to meet the yearly allowances set by Government under the Landfill Allowance	Plan should support the waste hierarchy – reduce, reuse, recycle, other recovery and disposal.	The SA framework will include objectives which **support the waste hierarchy**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		Trading Scheme.		
Herefordshire Council (2016) *Herefordshire Local Transport Plan 4 2016-2031*	The LTP4 objectives are: • Enable economic growth – by building new roads linking new development to the transport network and by reducing short distance car journeys. • Provide a good quality transport network for all users – by being proactive in our asset management and by working closely with the public, Highways England and rail and bus companies. • Promote healthy lifestyles – by making sure new developments maximise healthier and less polluting forms of transport by delivering and promoting active travel schemes and by reducing short distance single occupant car journeys on our roads. • Make journeys easier and safer – by making bus and rail tickets compatible and easier to buy and use, by providing 'real time' information at well-equipped transport hubs, by improving signage to walking and cycling routes and by helping people feel safe during their journeys.	The Transport Plan 2016-2031 contains a range of monitoring indicators. Issues covered include the following: Congestion, accessibility, road traffic accidents, road and footway maintenance, conditions of highway structures, road flooding.	Plan should include policies which aim to reduce traffic growth, pollution and congestion.	The SA framework should include objectives that seek **to minimise use of rural roads and maximise use of the strategic road network** and lorry route networks. Consider objectives to **reduce the emissions of greenhouse gases**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	• Ensure access to services for those living in rural areas – by improving the resilience of our road network and by working closely with all transport operators to deliver a range of transport options particularly for those without a car.			
Herefordshire Council (2005) *Biodiversity Action Plan* *This document is currently being reviewed and updated*	Protect and enhance the county's biodiversity assets: • Improve the condition of Council owned Sites of Special Scientific Interest (SSSI) • Prepare and implement a Biodiversity Action Plan complete with an effective monitoring, reporting and review system • Protect and enhance the biodiversity on Council owned land	Indicators and targets are included for each objective.	Plan should include policies to preserve and enhance, where possible, the wildlife and habitats of Herefordshire.	The SA framework will include objectives that seek to **protect and enhance the county's biodiversity assets**.
Herefordshire Council (2017) *Invest Herefordshire – Herefordshire's Economic Vision*	The economic vision has four key roles: • to support the growth of the Herefordshire economy by identifying priority projects; • to attract investment to Herefordshire and guide it within the County; • to raise the profile of Herefordshire and the investment opportunities; and, • to provide Herefordshire with clear priorities for negotiations.	• Increase GVA per head by 10% in real terms from £19,500 to £21,500 by 2031. • Directly assist in the creation of 1,000 new businesses by 2031. • Create 10,000 new jobs by 2031. • Provide 1,500 HE student places in county by 2025.	Plan should take account of the fact that minerals and waste developments need to make a contribution to a sustainable economy in Herefordshire.	The SA framework will include objectives to **help to meet economic vision of the County.**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		• Increase the total visitor spend by 7.5% by 2021. • Increase the total number of annual visits by 10% to over 5.5 million visitors. • A 30% reduction in Herford through traffic average journey times by 2031. • 100% increase in the number of people cycling regularly by 2021 and a 200% increase by 2031.		
Malvern Hills AONB Partnership (2014) *Malvern Hills AONB Management Plan 2014-2019*	Aims of the management plan include: • To conserve and enhance the features which contribute to the distinctive landscapes of the area. • To preserve, promote and wisely use the geodiversity of the AONB. • To value, conserve, restore and wisely use nature • To conserve and enhance the historic environment of the AONB, including the significance of its heritage assets, their setting and the historic character of the landscape.	No specific targets or indicators.	The Minerals and Waste Local Plan should be consistent with supporting the objectives in the Management Plan to conserve and enhance the Malvern Hills AONB.	The SA framework should include objectives to **enhance and protect natural environmental assets including AONB's.**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
Wye Valley AONB Partnership (2015) *Wye Valley AONB Management Plan, 2015-2020*	Aims of the management plan include: • Conserve and, where necessary, enhance the natural beauty of the landscape in the Wye Valley AONB, with its natural and cultural features and processes and the Special Qualities and features of the Landscape Management Zones. • Conserve, and where appropriate enhance, the biodiversity of the AONB • Conserve and enhance sites that are important for the scientific and general understanding, appreciation and enjoyment of the geodiversity heritage of the AONB. • Conserve and sympathetically manage the historic environment and cultural heritage of the AONB and promote engagement with and understanding of it. • Ensure that all development with and impacting on the AONB is compatible with the aims of AONB designation. • Ensure all minerals development within the AONB is compatible with the aims of AONB designation • Ensure the most sustainable, effective and efficient use and supply of services and energy within and impacting on the AONB, compatible	No specific targets or indicators.	The Minerals and Waste Local Plan should be consistent with supporting the objectives in the Management Plan to conserve and enhance the Wye Valley AONB.	The SA framework should include objectives to **enhance and protect natural environmental assets including AONB's.**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	with the aims of AONB designation • Ensure transport in the AONB is sustainable and integrated and compatible with the purposes of AONB designation.			
Environment Agency & Natural England (2014) *River Wye SAC Nutrient Management Plan (NMP)*	The aims of the NMP are: • Sections of the River Wye SAC where the phosphate levels currently exceed the favourable condition target (River Lugg) will be subject to measures to reduce phosphate levels to those which are defined as favourable for the site. The design and timing of these measures should ensure that, taking these measures into account, new development within existing water discharge permits can occur without any significant adverse effect on the integrity of these sections of the River Wye SAC and without compromising the achievement of the reductions in phosphate levels required as soon as possible and at the latest by 2027; • Sections currently meeting the favourable condition phosphate target will be subject to measures to ensure that future inputs of phosphate will not at any time lead to any adverse effect on the integrity of the River Wye SAC as a consequence of currently available capacity at the permitted discharges being utilised by new development; and	Phosphate levels in the River Wye (annual averages) to be as follows: • River Wye from English/Welsh boundary to the River Lugg confluence - 0.03mg/l soluble reactive phosphorus (SRP) (I.e. the standard to achieve in the River Wye immediately upstream of the confluence with the River Lugg is 0.03mg/l SRP) • River Wye from the Lugg confluence downstream – 0.05mg/l SRP (I.e. the standard to achieve in the River Wye downstream of the confluence with the River Lugg is 0.05mg/l SRP) • River Lugg (from Leominster to Wye confluence) – 0.05mg/l SRP (I.e. the standard to achieve in the River Lugg immediately upstream of the confluence with the River Wye is 0.05mg/l SRP.) A target of 0.03mg/l SRP has also been set for the River Lugg	The Minerals and Waste Local Plan should be consistent with supporting the objectives in the Plan.	The SA framework will include an objective relating to **water quality and to the conservation of sites of international importance to nature conservation**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	The plan will attempt to identify further actions which will facilitate further development within the catchment that is in line with the policies within the emerging core strategy and other strategic planning documents within the catchments of the River Wye SAC. The objectives of the NMP include: • Source apportionment within the River Wye and River Lugg catchments to understand current phosphate contributions from the point and diffuse sectors, focusing on significant water company and point source discharges and on diffuse inputs from the agricultural sector; • Assessment of the additional phosphate loads from these sectors as a result of the planned growth within Herefordshire; and • Identification of the scale of potential phosphate reduction measures that could be required to aim to achieve compliance with the River Wye SAC targets for phosphates.	upstream of Leominster, which is designated as a SSSI, although it is not part of the SAC.		
Environment Agency (2015) Water for life and livelihoods: *The Severn River Basin District Management Plan*	Improved water quality within the Severn River Basin which includes the River Wye catchment.	To meet the requirements of the Water Framework Directive: • Prevent deterioration in the status of aquatic ecosystems, protect them and improve the	Increasing percentage of river length achieving good environment status by target dates of 2021, 2027 and beyond	Consider inclusion of objective to **protect and enhance water quality.**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		ecological condition of waters; • Aim to achieve good status for all waterbodies by 2021 or 2027; • Meet the requirements of Water Framework Directive protected areas; • Promote sustainable use of water as a natural resource; • Conserve habitats and species that depend directly on water; • Progressively reduce or phase out the release of individual pollutants or groups of pollutants that present a significant threat to the aquatic environment; • Progressively reduce the pollution of groundwater and prevent or limit the entry of pollutants; • Contribute to mitigating the effects of floods and droughts.	2027.	
Herefordshire Council (2016) *Draft Local Flood Risk*	The objectives of the plan are to: • Understand flood risks throughout Herefordshire.	The Draft Local Flood Risk Management Strategy sets out a work programme to be undertaken, subject to funding	The Plan should include policies consistent with sustainable flood risk	Consider inclusion of objectives to **reduce the risk of flooding and the impact on**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
Management Strategy	• Manage the likelihood and impacts of flooding. • Help the community help themselves. • Manage flood warning, response and recovery. • Promote sustainable and appropriate development.	coming forward.	management.	**society, the economy and the environment**.
Herefordshire Council (2009) *Strategic Flood Risk Assessment for Herefordshire* Herefordshire Council (2015) *Strategic Flood Risk Assessment - Update*	The primary aim of the SFRAs is to determine whether planning policies or development land allocations will increase the risk of flooding, both within the development and the surrounding area, and to identify and promote measures that will minimise flood risk and/or enhance flood resilience at all levels.	No key targets or indicators.	The Plan must take into account the SFRA's sequential testing and guidance for selecting suitable sites for minerals and waste development.	The SA framework should include objectives to **ensure minerals and waste developments are not at risk of flooding both presently and taking into account climate change and do not increase the risk of flooding elsewhere**.
Environment Agency Wales (2010) *The Wye and Usk Catchment Flood Management Plan and The Severn Catchment Flood Management Plan*	CFMP aims to promote more sustainable approaches to managing flood risk.	Indicators include: Coastal and fluvial flood frequency; Environment Agency annual indicative flood zone updates; Environment Agency quarterly indicative flood plain mapping	Plan should include policies consistent with sustainable flood risk management.	Consider inclusion of objectives to **reduce the risk of flooding and the impact on society, the economy and the environment.**
Environment Agency Wales (2016) *Wye Abstraction Licencing*	The Water Framework Directive's (WFD) main objectives are to protect and enhance the water environment and ensure the sustainable use of water resources for	The main components of this assessment that help us to understand the availability of water resources are:	Plan should be consistent with the vision to ensure sustainable	Consider inclusion of objectives to **ensure sustainable management of**

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
Strategy	economic and social development. CAMS contribute to achieving environmental objectives under the WFD by providing a water resource assessment of rivers, lakes, reservoirs, estuaries and groundwater (referred to as water bodies) and: • identifying water bodies that fail flow conditions expected to support good ecological status; • preventing deterioration of water body status due to new abstractions; • providing results which inform River Basin Management Plans (RBMPs).	• a resource allocation for the environment defined as a proportion of natural flow, known as the Environmental Flow Indicator (EFI); • the Fully Licensed (FL) scenario - the situation if all abstraction licences were being used to full capacity; • the Recent Actual (RA) scenario – the amount of water which has actually been abstracted on average over the previous six years.	management of water resources.	**water resources.**
Worcestershire County Council (2016) *Emerging Minerals Local Plan*	The objectives of the plan are to: • Deliver development in accordance with the priorities of the spatial strategy • Maximise the contribution of substitute, secondary and recycled materials and minerals waste to overall mineral supply. • Maintain the steady and adequate supply of sand and gravel and address shortfalls in the landbank of permitted reserves. • Maintain the county's role in the steady and adequate supply of brick clay, bricks and brick products. • Foster an adequate and diverse	The Emerging Minerals Local Plan outlines targets and indicators for each objective such as the location of new mineral developments, landbank of permitted reserves and productive capacity for each mineral type, applications in mineral resources consultation areas, etc.	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of minerals** and **reducing cumulative impacts of mineral development**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	supply of building stone. • Enable the sustainable supply of other locally and nationally important mineral resources found in the county, including crushed rock and silica sand. • Safeguard locally and nationally important minerals and supporting infrastructure from being needlessly sterilised. • Promote community inclusion in mineral development from inception to after-use so that local issues are understood and addressed. • Ensure that mineral development contributes to the mitigation of and adaptation to climate change and makes prudent use of natural resources. • Ensure that mineral development protects and enhances the health, well-being, safety and amenity of people and communities in and around Worcestershire. • Ensure that mineral development protects and enhances the natural and historic environment and distinctive local character. • Ensure that mineral development protects and enhances the vitality of the local economy. • Optimise opportunities to integrate economic, social and environmental benefits through the delivery of high			

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	quality multifunctional green infrastructure throughout the life of the mineral development.			
Powys County Council (2011) *Powys Local Development Plan 2011 - 2026*	*NB The Powys Local Development Plan 2011 – 2026 contains waste and minerals policies.* Relevant policies: • Policy W1 – Waste • Policy M1 – Existing Sites • Policy M2 – New Minerals Sites • Policy M3 – Temporary Minerals Workings	Key targets for waste: By 2019/2020: • 64% of all waste produced in the County to be recycled or composted; • Maximum 10% of all waste produced in the County to be sent to landfill; • Maximum of 36% all waste produced in the County to be diverted to energy from waste facilities. By 2024/25: • 70% of all waste produced in the County to be recycled or composted; • Maximum 5% of all waste produced in the County to be sent to landfill; • Maximum of 30% all waste produced in the County to be diverted to energy from waste facilities.	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of minerals and waste** and **reducing cumulative impacts of mineral and waste developments**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		Key targets for minerals: • To maintain at least a 25 year landbank of crushed rock aggregates. • To protect non sterilised mineral resources of commercial interest from sterilisation by other development. • To review the likelihood of future extraction from long time inactive reserves identified annually. • To comply with the Aggregates Regional Technical Statement (MTAN).		
Shropshire Council (2011) *Local Development Framework 2006-2026 Adopted Core Strategy*	Relevant policies: • Policy CS 19 Waste Management Infrastructure • Policy CS20 Strategic Planning for Minerals	Monitoring indicators relevant to MWLP: • Capacity of new waste management facilities by type • Municipal waste management performance. • Production of primary, land-won aggregates. • Landbank for sand and gravel resources. • Landbank for crushed	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of minerals and waste** and **reducing cumulative impacts of mineral and waste developments**.

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
		rock resources.		
Monmouthshire County Council (2014) *Adopted Local Development Plan 2011 - 2021*	Relevant policies: • Policy S14 – Waste • Policy S15 - Minerals • Policy SAW1 – Identified Potential Waste Management Sites • Policy W1 – Waste Reduction • Policy W2 – Waste Recovery Facilities: Households • Policy W3 – Waste Management Facilities • Policy W3 – Rural Composting • Policy W5 – Waste Disposal by Landfill or Landraising • Policy W6 – Waste Deposition on Agricultural Land for Agricultural Improvement Purposes • Policy M1 – Local Building and Walling Stone • Policy M2 – Minerals Safeguarding Areas • Policy M3 – Mineral Site Buffer Zones	Monitoring indicators relevant to MWLP: • Amount of waste management capacity permitted expressed as a percentage of the total capacity required as identified in the Regional Waste Plan. • Extent of primary land-won aggregates resources as a percentage of total capacity identified in the Regional Technical Statement • Number of permitted permanent non-mineral developments on safeguarded sites	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of minerals and waste** and **reducing cumulative impacts of mineral and waste developments**.
Worcester City Council Malvern Hills District Council and Wychavon District Council (2016) *South Worcestershire Development Plan*	Relevant policies: • SWDP32 Minerals • SWDP 33 Waste	No key targets or indicators.	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of waste** and **reducing cumulative impacts of waste developments**.

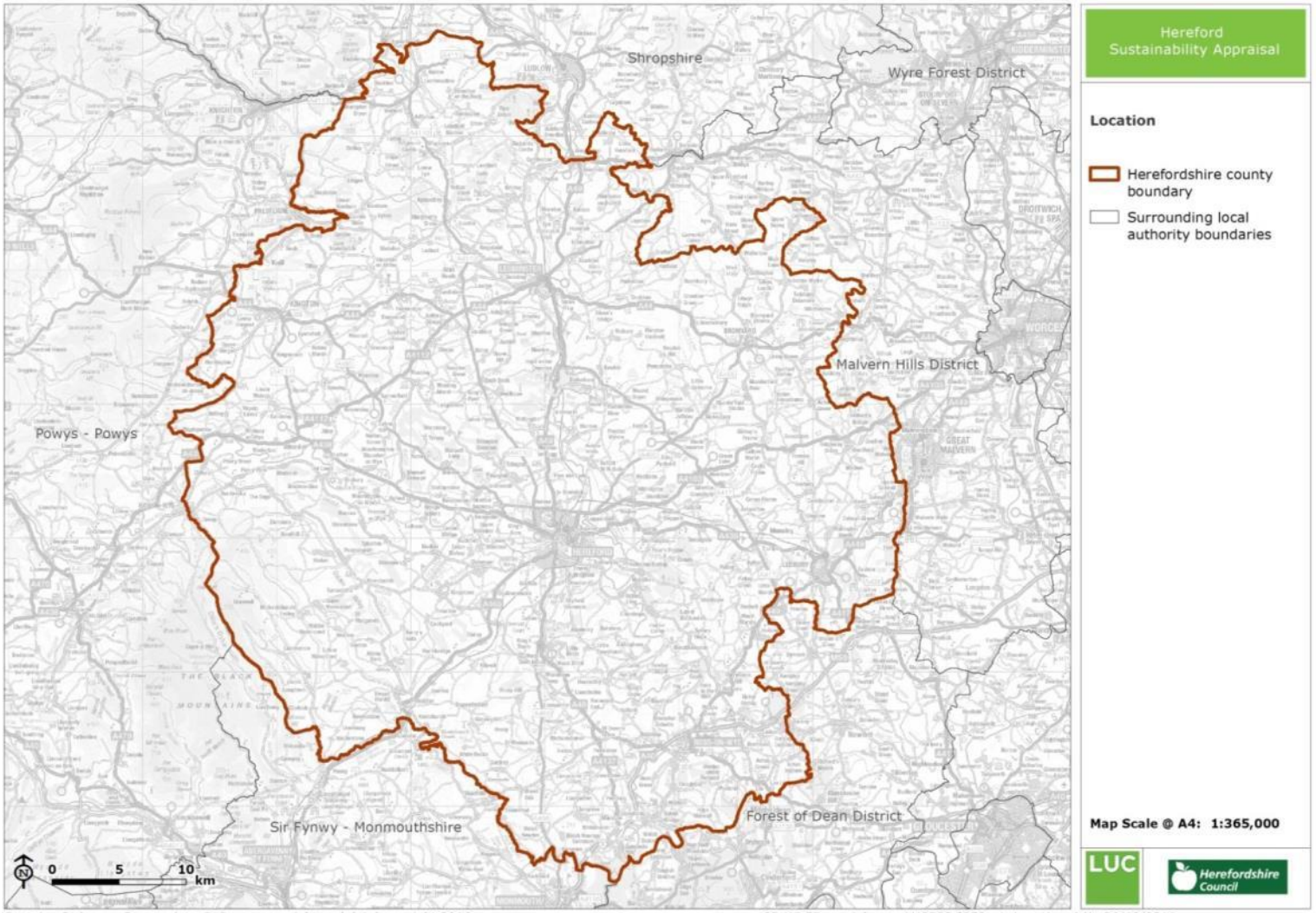
Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
Gloucestershire County Council (2012) *Gloucestershire Waste Core Strategy*	Objectives of the adopted Gloucestershire Waste Core Strategy: • To raise awareness of waste issues amongst Gloucestershire residents and businesses in order to generate collective responsibility for waste, ensure it is seen as a potential resource and to reduce the amount of waste produced, with zero-growth achieved across all waste streams by 2020. • To make the best use of Gloucestershire's waste by ensuring that residents and businesses re-use as much of their waste as possible and that if waste cannot be re-used, it can easily be recycled or composted to achieve the following: - At least 60% household waste recycled/composted by 2020 with an aspiration for 70% by 2030. - Diversion of an additional 91,000 – 111,000 tonnes/year of C&I waste from landfill through recycling/composting facilities. - Diversion of an additional 85,000 tonnes/year of C&D waste from licensed landfill through inert recycling and recovery. • To recover the maximum amount of value including energy from any waste that cannot be re-used, recycled or composted through the provision of the following:	• At least 60% household waste recycled/composted by 2020 with an aspiration for 70% by 2030 • Diversion of an additional 91,000 – 111,000 tonnes/year of C&I waste from landfill through recycling/composting facilities • Diversion of an additional 85,000 tonnes/year of C&D waste from licensed landfill through inert recycling and recovery • Provision for between 108,000 – 145,000 tonnes/year residual waste recovery capacity for municipal waste by 2027. • Recovery facilities with the capacity to divert between 43,000 – 73,000 tonnes/year of C&I waste from landfill by 2020.	Any cross-boundary issues will need to be addressed during the preparation of the Minerals and Waste Local Plan.	Consider inclusion of objectives to **encourage sustainable transport of waste** and **reducing cumulative impacts of waste developments**.

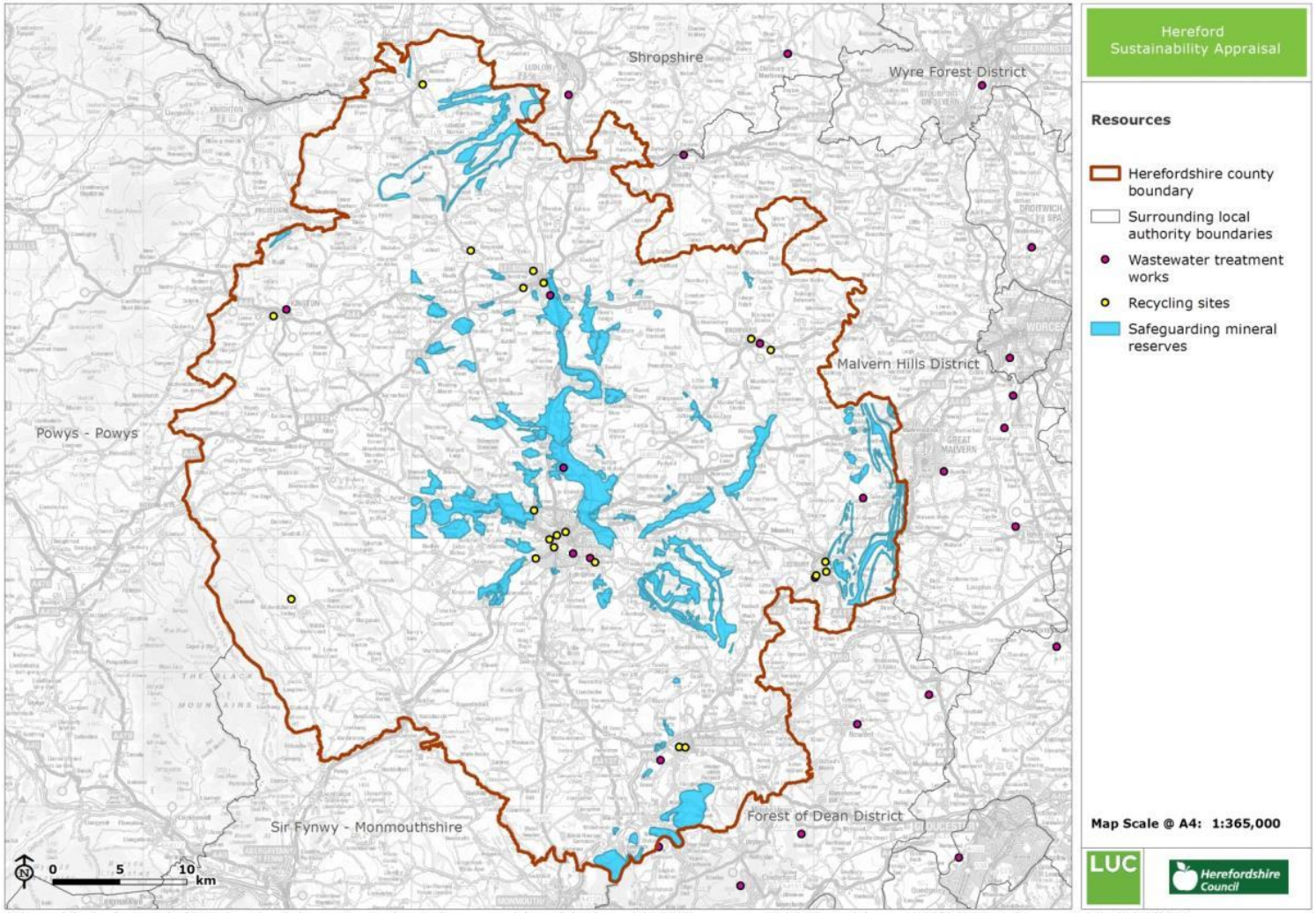
Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	- Provision for between 108,000 – 145,000 tonnes/year residual waste recovery capacity for municipal waste by 2027. - Recovery facilities with the capacity to divert between 43,000 – 73,000 tonnes/year of C&I waste from landfill by 2020. • To recognise the continuing role of landfill for the disposal of certain residual and hazardous wastes whilst reducing our reliance on landfill as the primary method of waste management in Gloucestershire. • To ensure the environmental and social impacts of waste management particularly climate change and risks to human health are minimised by: o managing waste close to where it arises, o promoting the use of sustainable transport, o avoiding current and potential flood risk areas, o safeguarding existing and proposed waste sites, o promoting high quality sustainable design, o protecting national and local areas of landscape and nature conservation importance, and o prioritising the co-location of			

Strategy, Plan or Programme	Key objectives relevant to the Minerals and Waste Local Plan	Key targets and indicators relevant to the Minerals and Waste Local Plan	Implications for the Minerals and Waste Local Plan	Implications for SA
	similar or related facilities on existing waste sites or previously developed sites in preference to greenfield locations where appropriate and where the cumulative impact is not unacceptable to the host location.			

Appendix 2

Maps


Hereford
Sustainability Appraisal
Location
Herefordshire county boundary
Surrounding local authority boundaries
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
Contains Ordnance Survey data © Crown copyright and database right 2016
CB:KS EB:mcginley_m LUCBRI 6952_r1_Location_A4L 26/10/2016
Source: OS


Hereford
Sustainability Appraisal
Resources
Herefordshire county boundary
Surrounding local authority boundaries
Wastewater treatment works
Recycling sites
Safeguarding mineral reserves
Map Scale @ A4: 1:365,000
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
LUC
Herefordshire Council
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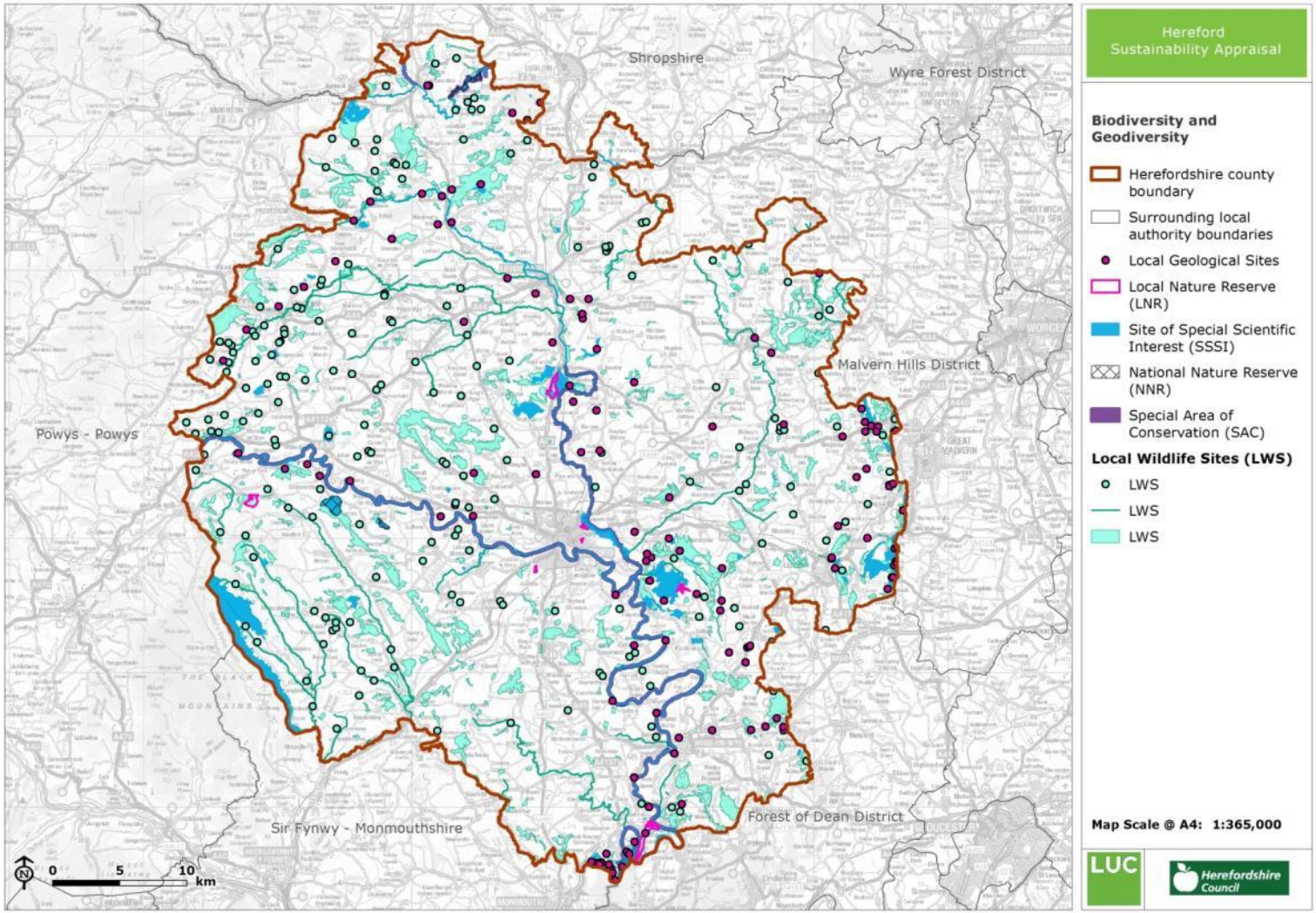
Source: OS, HC



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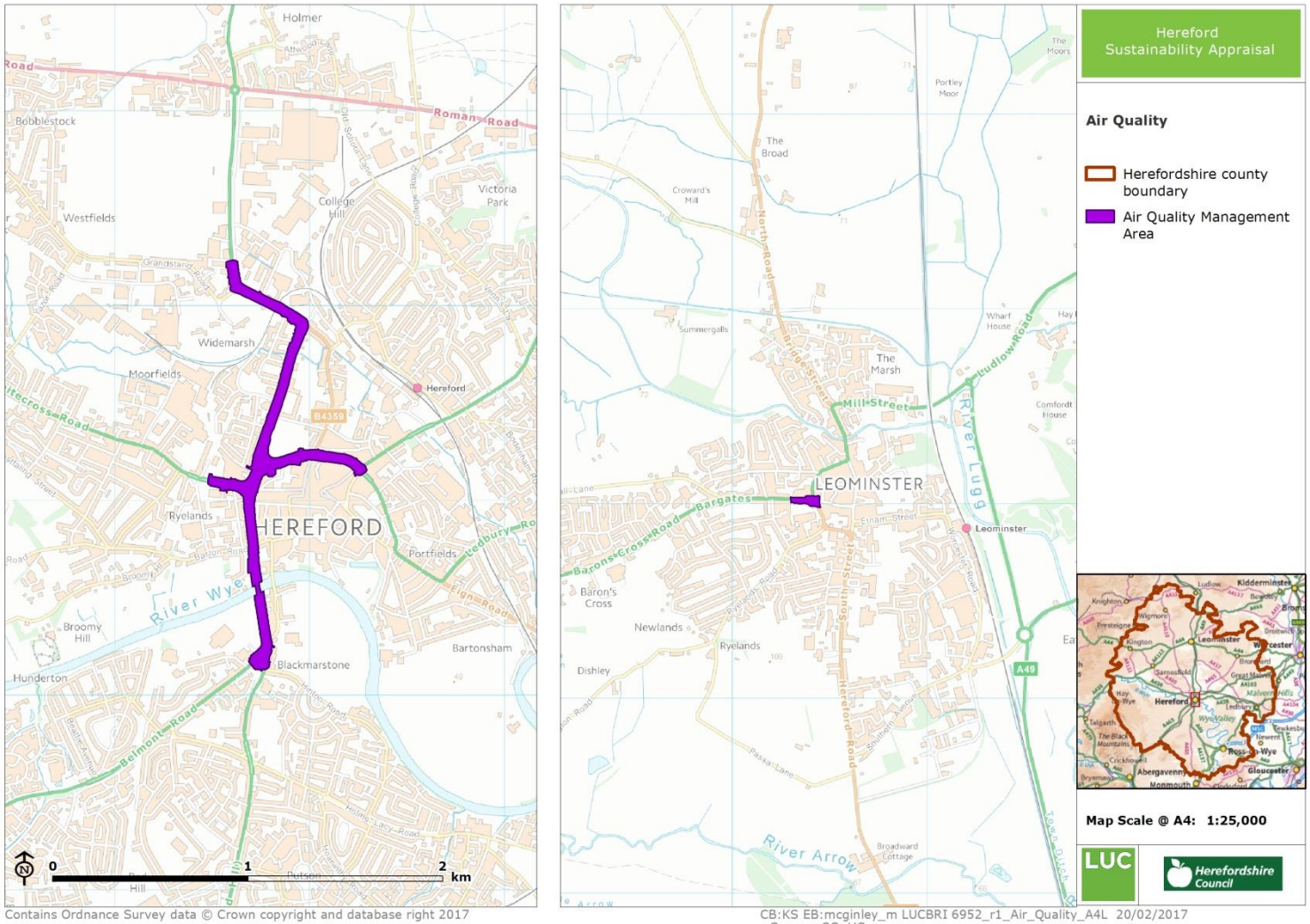

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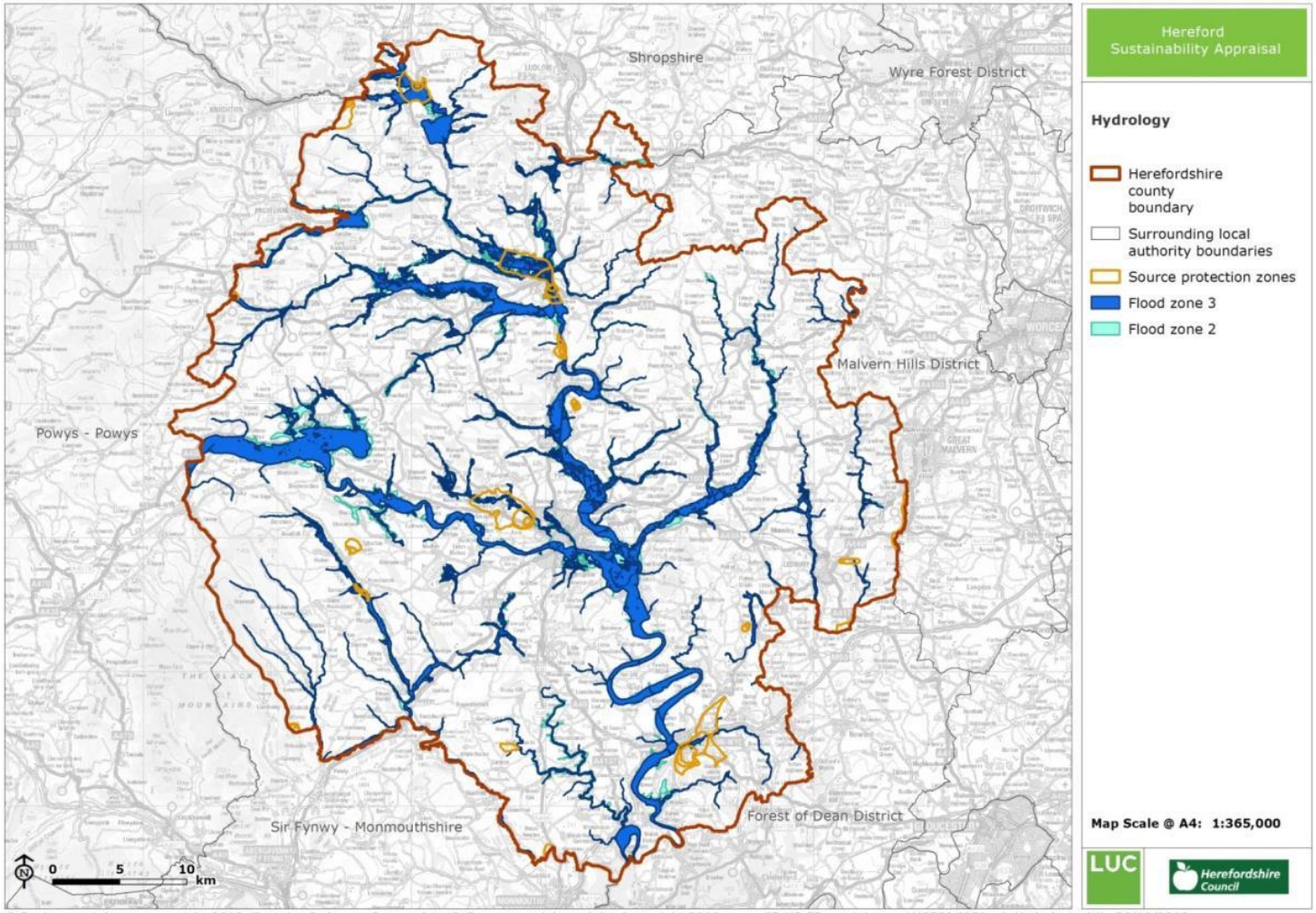
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Sustainability Appraisal
Hydrology
Herefordshire county boundary
Surrounding local authority boundaries
Source protection zones
Flood zone 3
Flood zone 2
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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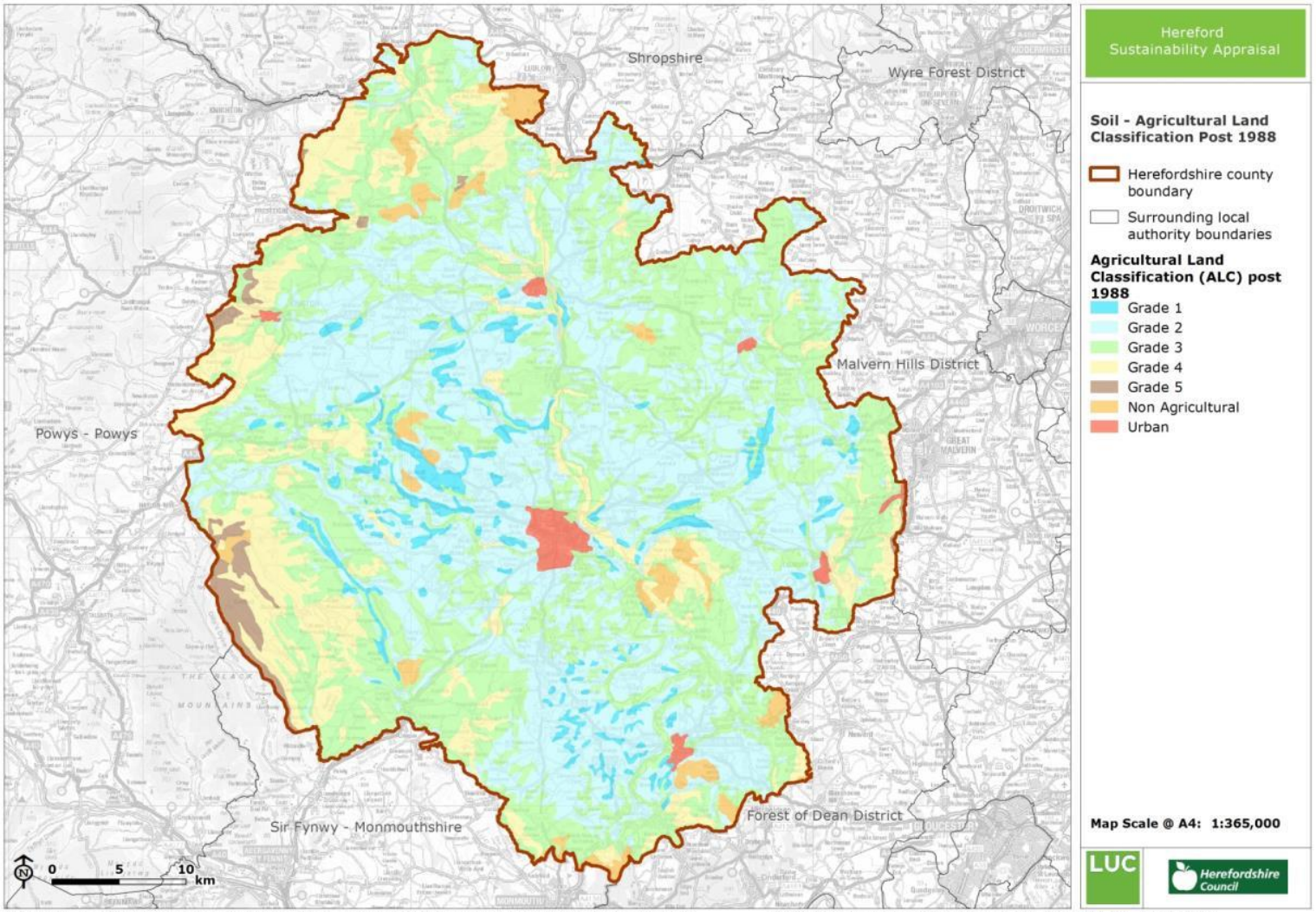
CB:KS EB:mcginley_m LUCBRI 6952_r1_Hydrology_A4L 26/10/2016
Source: OS, EA


Hereford
Sustainability Appraisal
Soil - Agricultural Land Classification Post 1988
Herefordshire county boundary
Surrounding local authority boundaries
Agricultural Land Classification (ALC) post 1988
Grade 1
Grade 2
Grade 3
Grade 4
Grade 5
Non Agricultural
Urban
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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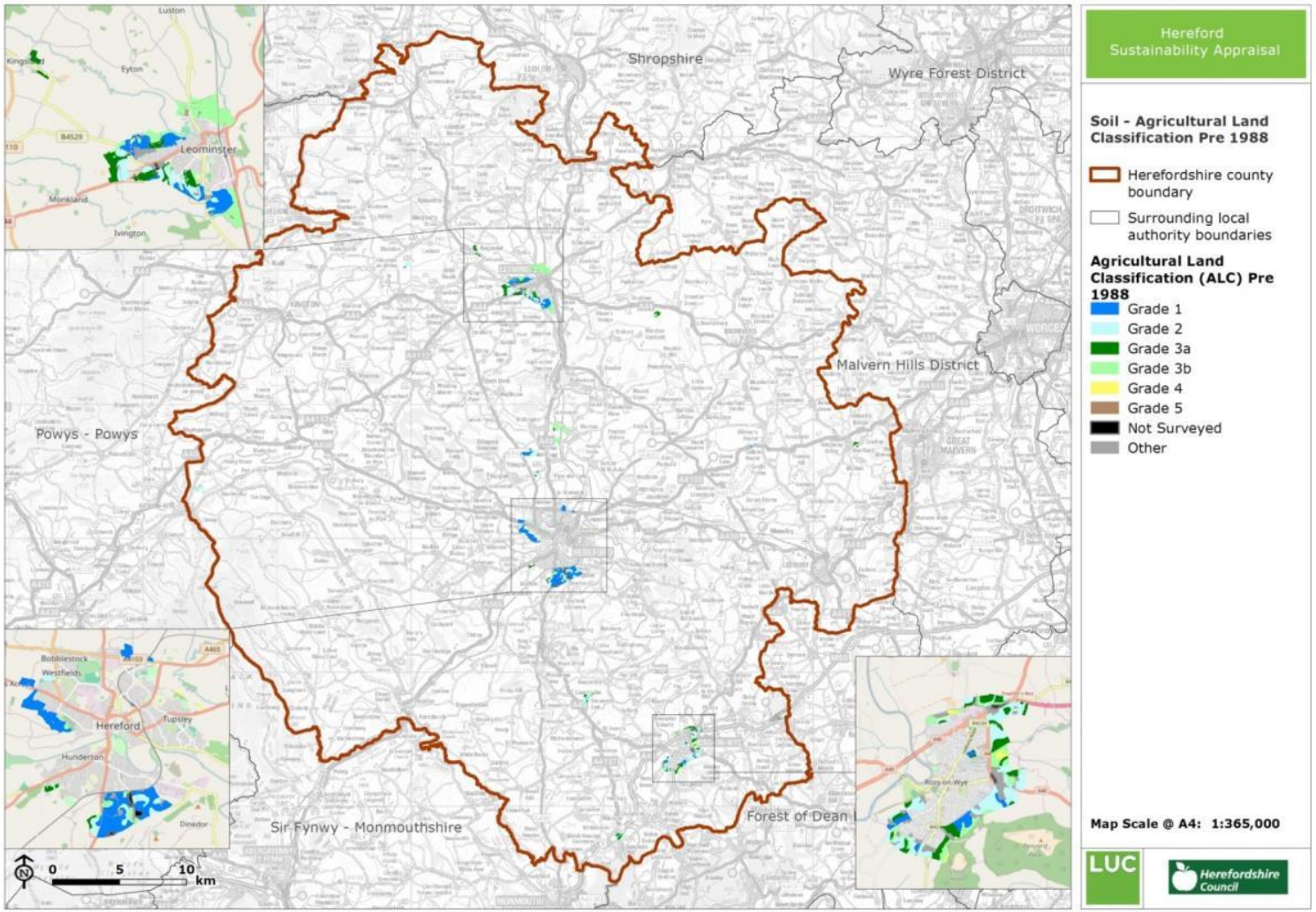
Source: NE, OS



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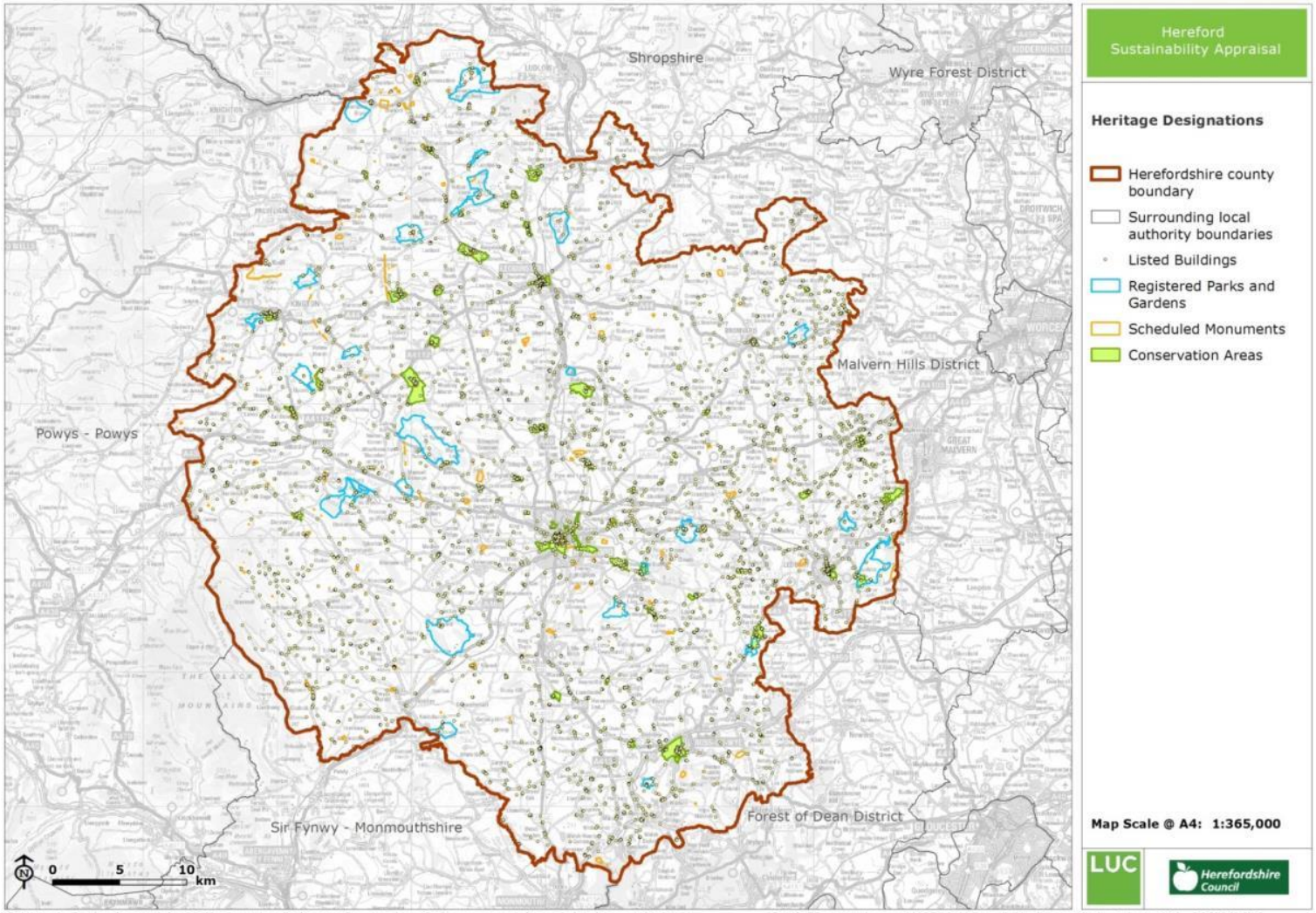
Hereford
Sustainability Appraisal
Heritage Designations
Herefordshire county boundary
Surrounding local authority boundaries
Listed Buildings
Registered Parks and Gardens
Scheduled Monuments
Conservation Areas
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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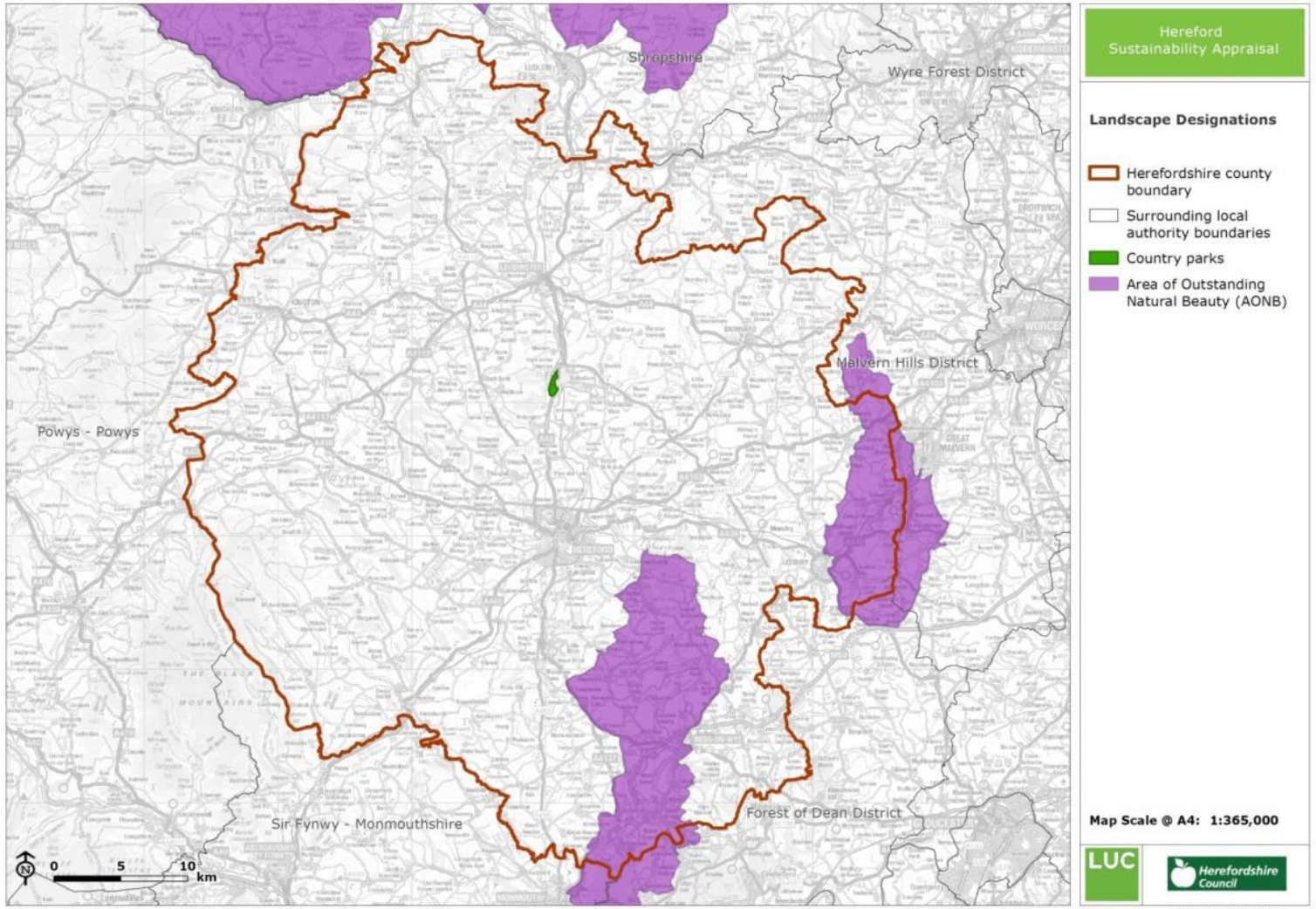
CB:KS EB:mcginley_m LUCBRI 6952_r1_Heritage_Designations_A4L 26/10/2016
Source: HC, OS, HE


Hereford
Sustainability Appraisal
Landscape Designations
Herefordshire county boundary
Surrounding local authority boundaries
Country parks
Area of Outstanding Natural Beauty (AONB)
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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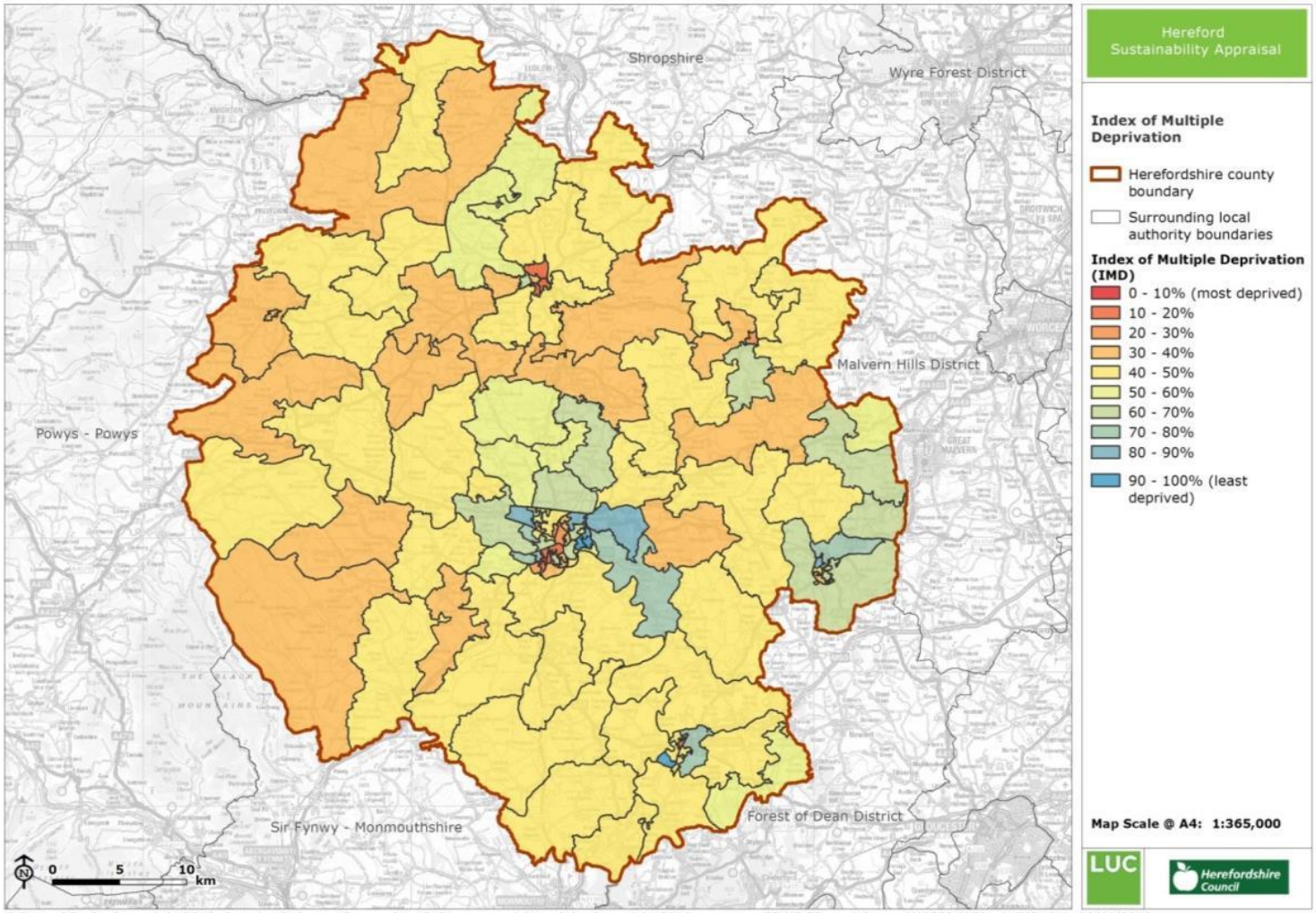
Source: NE, OS



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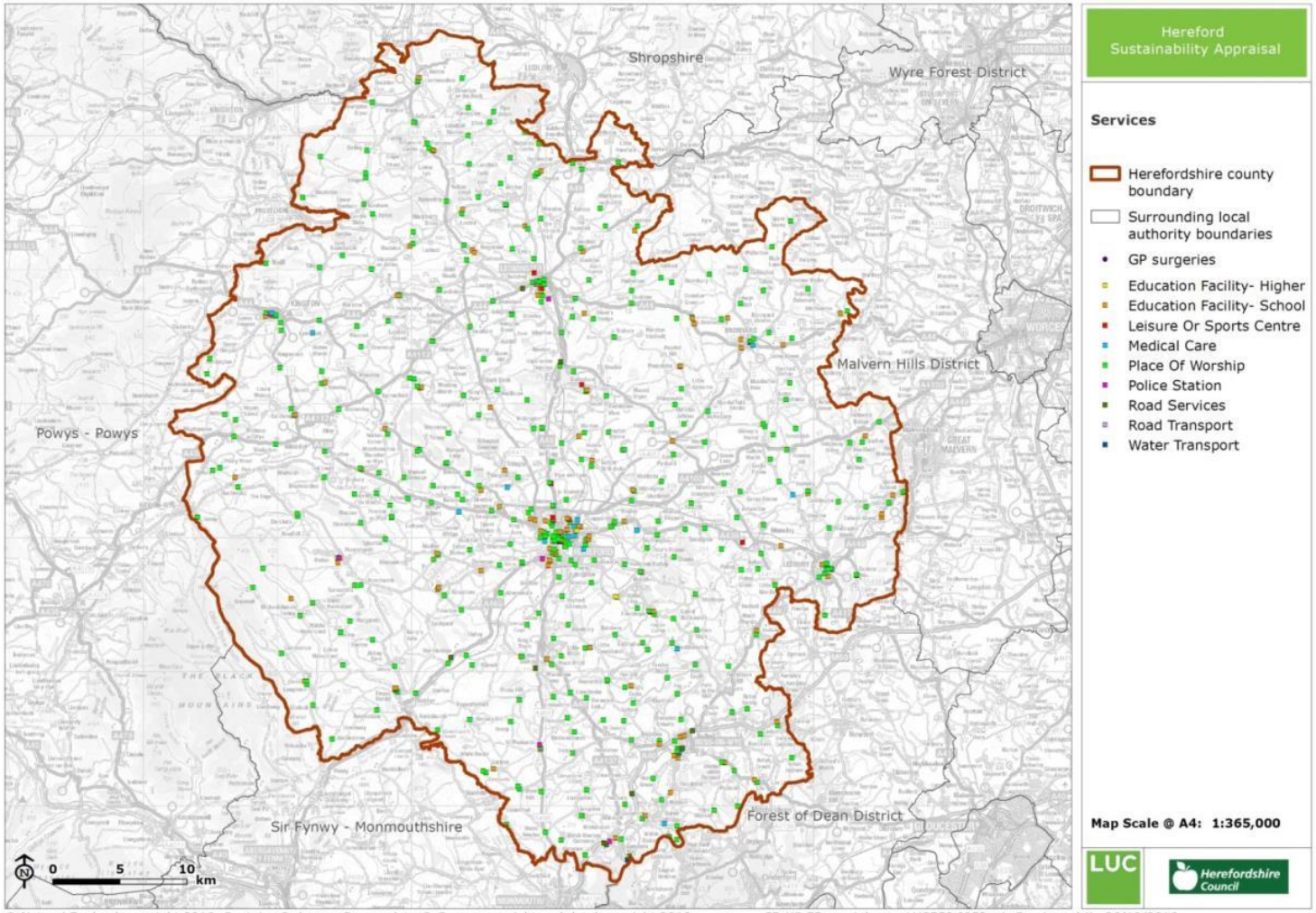
Hereford
Sustainability Appraisal
Services
Herefordshire county boundary
Surrounding local authority boundaries
GP surgeries
Education Facility- Higher
Education Facility- School
Leisure Or Sports Centre
Medical Care
Place Of Worship
Police Station
Road Services
Road Transport
Water Transport
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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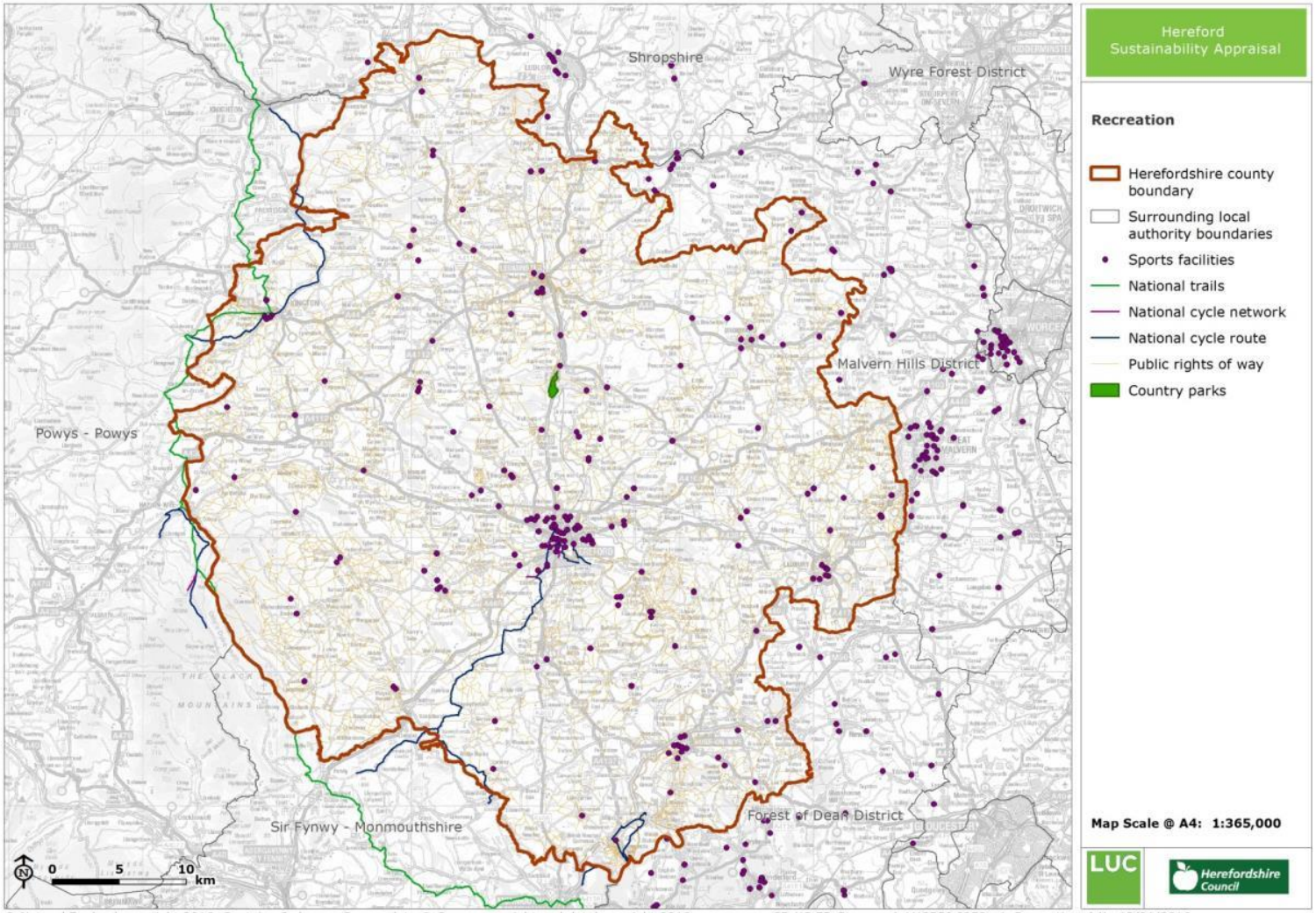
CB:KS EB:mcginley_m LUCBRI 6952_r1_Services_A4L 26/10/2016
Source: NE, OS


Hereford
Sustainability Appraisal
Recreation
Herefordshire county boundary
Surrounding local authority boundaries
Sports facilities
National trails
National cycle network
National cycle route
Public rights of way
Country parks
Map Scale @ A4: 1:365,000
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
LUC
Herefordshire Council
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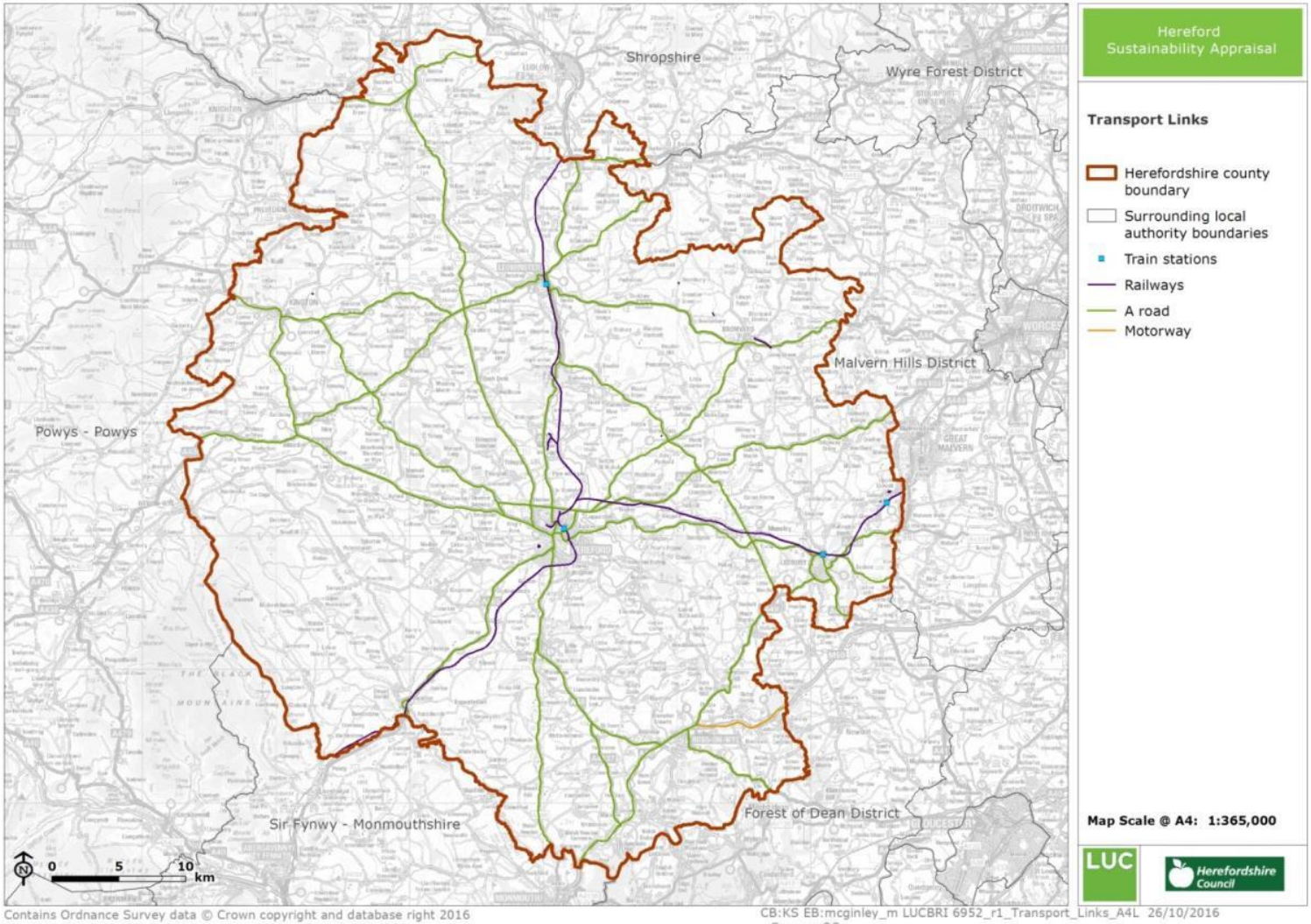
Source: NE, OS, Sports England, Sustrans, HC


Hereford
Sustainability Appraisal
Transport Links
Herefordshire county boundary
Surrounding local authority boundaries
Train stations
Railways
A road
Motorway
Shropshire
Wyre Forest District
Malvern Hills District
Powys - Powys
Sir Fynwy - Monmouthshire
Forest of Dean District
0
5
10
km
Map Scale @ A4: 1:365,000
LUC
Herefordshire Council
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CB:KS EB:mcginley_m LUCBRI 6952_r1_Transport_Links_A4L 26/10/2016
Source: OS

Appendix 3

List of options presented in the HMWLP showing which options have been subject to SA and why

MWLP Issue	Option	Has the Option been subject to SA?
The Plan area	**Question 1.** Do you agree that the administrative area of Herefordshire should be the plan area for the MWLP?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The Plan period	**Question 2.** Do you think that the MWLP should cover the period to 2031? If not, please state what period you consider to be more appropriate and why.	No, this is an opinion-seeking question relating to the length of time the MWLP should cover, and has little bearing on sustainability as it is assumed there will always be a MWLP or equivalent in place.
Plan review period	**Question 3**. Do you think that the MWLP should be reviewed every five years to consider the need for an update to the MWLP?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Using the Core Strategy as a key element of the evidence base	**Question 4**. Do you consider that the documents identified in Table 2.1 constitute the documents appropriate to consider in developing the MWLP?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 5. Are there any documents in Table 2.1 that should not be considered in their current form? Please give your reasons.	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 6. Are there any other documents not listed in Table 2.1 that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Evidence base	**Question 7**. Are you aware of any other new information that should be considered as part of the evidence base for the MWLP that has not been identified elsewhere in this Issues and Options document?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The Duty to Cooperate	**Question 8**. Do you consider that Herefordshire Council has done enough to discharge its Duty to Cooperate with neighbouring authorities on minerals and waste matters?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 9. Are there any other neighbouring authorities, other bodies with which Herefordshire Council needs to cooperate, or any other methods of cooperation other than those described in section 2.5?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The proposed vision for the Minerals and Waste Local Plan	**Question 10**. Do you support the vision for the MWLP set out in paragraph 3.2.12 or should it be amended in some way? Please give your reasons for any suggested changes.	Yes – the vision will be subject to SA.

MWLP Issue	Option	Has the Option been subject to SA?
Review of the Core Strategy objectives	**Question 11**. Do you agree with the reasoning given in Table 3.1 for the review of the Core Strategy objectives? Please give your reasons.	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The draft objectives for the Minerals and Waste Local Plan	**Question 12**. Do you agree with the list of objectives for the MWLP set out in Table 3.2? If not, please state what amendments or additions you believe are needed and why.	Yes – the objectives for the MWLP will be subject to SA.
Review of the Core Strategy general policies	**Question 13**. Do you agree with the reasoning given in Table 3.3 for the review of the Core Strategy general policies? Please give your reasons.	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Environmental constraints	**Question 13**. Are the environmental constraints listed in Table 3.4 correct and complete?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 14. Are the distances listed in Table 3.4 for each constraint and type of development appropriate?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Minerals evidence base	**Question 15**. Do you have any alternative/additional information that should be considered in preparing policy in relation to minerals in Herefordshire?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The Minerals Need Assessment	**Question 16**. Are you aware of any other sources of data that the Minerals Need Assessment could use in order to improve the estimates for the supply of and demand for minerals?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 17. Is the information provided in the Need Assessment on quarries within Herefordshire accurate and complete to your knowledge?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Data, methods of analysis and conclusions of the Minerals Need Assessment	**Question 18**. Does the Minerals Need Assessment provide an acceptable selection of forecasts for future demand for primary aggregates?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 19. Are there any other methods of forecasting that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 20. Are you aware of any other sources of data that the Minerals Need Assessment could use in order to improve the forecasts of future demand?	No, this is an opinion-seeking question rather than a proposed

MWLP Issue	Option	Has the Option been subject to SA?
		option that can be subject to SA.
Sand and gravel	**Question 21**. Do the three scenarios presented in Table 4.1 constitute an appropriate range of forecasts of future demand for sand and gravel? Are there any other forecasts that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 22. Are options M1 to M4 appropriate options to consider for addressing the future balance of supply and demand for sand and gravel?	Yes
	Question 23. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Crushed rock	**Question 24**. Do the forecasts in paragraph 4.4.1 constitute appropriate forecasts for future demand for crushed rock?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 25. Are options M5 to M7 appropriate options to consider for addressing the future balance of supply and demand for crushed rock?	Yes
	Question 26. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Building stone	**Question 27**. Do options M8 to M10 present appropriate options for ensuring a sufficient supply of building stone to meet future demand?	Yes
	Question 28. Is there any other information you are aware of that should be considered in assessing the likely future balance between supply of and demand for building stone?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Hydrocarbons	**Question 29**. Do options M11 and M12 constitute appropriate options for the MWLP for dealing with the uncertainty over potential future hydrocarbon activity in Herefordshire?	Yes
	Question 30. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 31. Is there any other information that you are aware of that needs to be considered in relation to potential future hydrocarbon activity within the county?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Potential future	**Question 32**. Do you have any comments or information about any of the sites	No, this is an opinion-seeking question rather than a proposed

MWLP Issue	Option	Has the Option been subject to SA?
mineral sites	listed in Table 4.2 above that needs to be considered?	option that can be subject to SA.
	Question 33. Are there any other existing or potential new sites which Herefordshire Council should consider?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Future mineral site identification	**Question 34**. Do options M13 to M16 constitute appropriate options for different approaches to mineral site identification?	Yes
	Question 35. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Mineral site safeguarding	**Question 36**. Do options M17 and M18 constitute appropriate options for different approaches to safeguarding mineral sites?	Yes
	Question 37. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Waste evidence base	**Question 38**. Do you have any alternative/additional information that should be considered in preparing policy in relation to waste management in Herefordshire?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
The Waste Need Assessment	**Question 39**. The existing waste sites are set out in the Waste Need Assessment 2016. Do you have any comment on existing operations that should be considered in preparing policy?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 40. Are you aware of any other currently operating sites that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 41. Does the Waste Need Assessment make reasonable estimates for estimating the amount of waste arisings in 2015 (the baseline) for the different waste streams?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Data, methods of analysis and conclusions of the Waste Need Assessment	**Question 42**. Does the Waste Need Assessment provide an acceptable selection of forecasts for future arisings of the five principal waste streams listed in paragraph 5.2.5?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 43. Are there any other methods of forecasting that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 44. Are you aware of any other sources of data that the Waste	No, this is an opinion-seeking

MWLP Issue	Option	Has the Option been subject to SA?
	Assessment could use in order to improve the forecasts of future demand?	question rather than a proposed option that can be subject to SA.
Types of waste management technology	**Question 45**. Do you agree with the approach proposed for the WMLP in relation to different types of waste management technology?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 46. Is there an alternative approach that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
LACW	**Question 47**. Do the scenarios presented in Tables 5.1 and 5.2 constitute an appropriate range of forecasts for future arisings of LACW? Do you prefer any one forecast?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 48. Are there any alternative forecasts that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 49. Is option W1 an appropriate approach for the WMLP to take in respect of future provision of new capacity for managing LACW?	Yes
	Question 50. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
C&I waste	**Question 51**. Do the scenarios presented in Table 5.3 and 5.4 constitute an appropriate range of forecasts for future arisings of C&I waste? Do you prefer any one forecast?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 52. Are there any alternative forecasts that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 53. Do options W2 and W3 constitute appropriate alternative approaches for the WMLP to take in respect of future provision of new capacity for managing C&I waste?	Yes
	Question 54. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
CD&E waste	**Question 55**. Do the scenarios presented in Table 5.5 constitute an appropriate range of forecasts for future arisings of CD&E waste? Do you prefer any one	No, this is an opinion-seeking question rather than a proposed

MWLP Issue	Option	Has the Option been subject to SA?
	forecast?	option that can be subject to SA.
	Question 56. Are there any alternative forecasts that should be included?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 57. Do options W4 and W5 constitute appropriate alternative approaches for the WMLP to take in respect of future provision of new capacity for managing CD&E waste?	Yes
	Question 58. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Agricultural waste	**Question 59**. Are the assumptions about the future amount of natural and non-natural agricultural waste arisings reasonable?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 60. Is option W6 an appropriate approach for the WMLP to take in relation to agricultural waste?	Yes
	Question 61. Is option W7 an appropriate approach for the MWLP to take in relation to the management of agricultural waste?	Yes
	Question 62. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Hazardous waste	**Question 63**. Is the estimate for future arisings of hazardous waste in paragraph 5.8.2 reasonable?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 64. Is option W8 an appropriate approach for the WMLP to take in relation to new capacity for hazardous waste?	Yes
	Question 65. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Potential future waste sites	**Question 66**. Do you have any comments or information about any of the sites listed in Table 5.6 above that needs to be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
	Question 67. Are there any other existing or potential new sites which	No, this is an opinion-seeking question rather than a proposed

MWLP Issue	Option	Has the Option been subject to SA?
	Herefordshire Council should consider?	option that can be subject to SA.
Future waste site identification	**Question 68**. Do options W9 to W12 constitute appropriate options for different approaches to waste site identification?	Yes
	Question 69. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.
Waste site safeguarding	**Question 70**. Do options W13 and W14 constitute appropriate approaches for the WMLP to take in relation to safeguarding existing waste sites from other development?	Yes
	Question 71. Are there any other options that should be considered?	No, this is an opinion-seeking question rather than a proposed option that can be subject to SA.

HMWLP Issue	Question in the HMWLP	Options assessed in the SA
The proposed vision for the Minerals and Waste Local Plan	**Question 10.** Do you support the vision for the MWLP set out in paragraph 3.2.12 or should it be amended in some way?	*"Over the period to 2031, Herefordshire will move towards a sustainable provision of minerals and waste management, balancing development needs whilst seeking to support the county's communities, protect and enhance environmental, historic and cultural assets and strengthen the local economy. Sustainable provision within Herefordshire will be achieved through: efficient use of mineral resources; support for the circular economy; and optimising self-sufficiency and resilience".*
The draft objectives for the Minerals and Waste Local Plan	**Question 12.** Do you agree with the list of objectives for the MWLP set out in Table 3.2?	1. To safeguard mineral and waste resources within Herefordshire and the associated transport infrastructure for the future 2. To prioritise the long-term conservation of primary minerals through enabling provision of sustainable alternatives, effective use of mineral reserves, promoting efficient use of minerals in new development 3. To enable the management of waste in accordance with the waste hierarchy and to promote a circular economy within Herefordshire 4. To enable minerals and waste development to make an appropriate contribution to improve the health, well-being and quality of life of residents, through best practice operations, open space provision, educational and cultural information and green infrastructure 5. To plan for the steady and adequate supply of minerals present within Herefordshire to

HMWLP Issue	Question in the HMWLP	Options assessed in the SA
		contribute to the county's economic growth, development, local distinctiveness and energy requirements 6. To make adequate provision for the waste management infrastructure appropriate within Herefordshire 7. To identify suitable locations for minerals and waste development 8. To reduce the need to travel and lessen the harmful impacts from traffic growth, promote the use of alternatives to road transport and ensure that new development is served by suitable transport networks 9. To achieve sustainable communities and protect the environment by delivering well-designed minerals and waste development that use land efficiently, reinforce local distinctiveness, and are supported by the necessary infrastructure including green infrastructure 10. To address the causes and impacts of climate change relating to minerals and waste development activity, including using opportunities arising from minerals and waste operations and reclamation activity to mitigate and adapt to climate change and to leave a positive legacy 11. To conserve, promote, utilise and enjoy our natural, built, heritage and cultural assets for the fullest benefits to the whole community by safeguarding the county's current stock of valued heritage and significant environmental assets from loss and damage, reversing negative trends, ensuring best condition and encouraging expansion, as well as appropriately managing future assets.
Sand and gravel	**Question 22.** Are options M1 to M4 appropriate options to consider for addressing the future balance of supply and demand for sand and gravel?	• **Option M1:** Make no provision for additional permitted reserves of sand and gravel, on the assumption that demand will remain fairly low and sufficient landbank will remain at 2031 (scenario 2). • **Option M2:** Make provision for some additional reserves of sand and gravel to be permitted, on the basis that demand will rise in line with the middle forecast and the landbank will fall below the minimum required by the NPPF before the end of the timeframe of the Core Strategy (scenario 1). • **Option M3:** Make provision for significant additional reserves of sand and gravel to be permitted, on the basis that demand will rise in line with the Core Strategy housing trajectory and permitted reserves will be exhausted before the end of the MWLP timeframe (scenario 3). • **Option M4:** Make no provision for additional permitted reserves of sand and gravel and adopt policy to meet any shortfall in demand through greater use of recycled

HMWLP Issue	Question in the HMWLP	Options assessed in the SA
		aggregates and/or imports of sand and gravel.
Crushed rock	**Question 25.** Are options M5 to M7 appropriate options to consider for addressing the future balance of supply and demand for crushed rock?	• **Option M5:** Make no provision for additional permitted reserves of crushed rock, on the assumption that reserves in the remaining operational quarry will continue to provide a sufficient landbank to meet demand over the period of the Minerals and Waste Local Plan. • **Option M6:** Make provision for some additional reserves of crushed rock to be permitted, on the assumption that reserves in the remaining operational quarry will not provide a sufficient landbank to meet demand over the period of the Minerals and Waste Local Plan. • **Option M7:** Make no provision for additional permitted reserves of crushed rock and adopt policy to meet any shortfall in demand through greater use of recycled aggregates and/or imports of crushed rock.
Building stone	**Question 27.** Do options M8 to M10 present appropriate options for ensuring a sufficient supply of building stone to meet future demand?	• **Option M8:** Make no provision for additional permitted reserves of building stone, on the assumption that the quarries remaining operational over the lifetime of the MWLP will provide sufficient stone to meet demand. • **Option M9:** Extend some or all of the permissions for existing building stone quarries/delves so that extraction can continue beyond the current required closure date in order to meet future demand. • **Option M10:** Make provision for additional permitted reserves of building stone in order to be able to continue to meet demand over the lifetime of the Minerals and Waste Local Plan.
Hydrocarbons	**Question 29.** Do options M11 and M12 constitute appropriate options for the MWLP for dealing with the uncertainty over potential future hydrocarbon activity in Herefordshire?	• **Option M11:** Adopt specific policies to provide a basis for determining proposals for hydrocarbon exploration, appraisal and extraction on the basis that this could become a possibility within the lifetime of the Minerals and Waste Local Plan. • **Option M12**: Do not adopt specific policies for hydrocarbon exploration, appraisal and extraction on the basis that this is unlikely to occur within the lifetime of the Minerals and Waste Local Plan, relying instead on development management policies to determine future applications. This option recognises that associated policies may be added in a periodic review of the MWLP prior to 2031.
Future mineral site identification	**Question 34.** Do options M13 to M16 constitute appropriate options for different approaches to mineral site identification?	• **Option M13:** Allocate suitable sites from those put forward by landowners and operators in the call for sites which comply with the policies in the Minerals and Waste Local Plan. • **Option M14:** Do not allocate sites but identify areas of search within which applications for development will be looked upon favourably as long as they comply with the policies in the Minerals and Waste Local Plan.

HMWLP Issue	Question in the HMWLP	Options assessed in the SA
		• **Option M15:** Do not allocate sites and do not identify areas of search, but assess any applications regardless of location on the basis of compliance with policies in the Minerals and Waste Local Plan. • **Option M16:** Allocate suitable sites from those put forward in the call for sites and identify areas of search within which applications for development will be looked upon favourably, but also allow for proposals for development to come forward regardless of location.
Mineral site safeguarding	**Question 36.** Do options M17 and M18 constitute appropriate options for different approaches to safeguarding mineral sites?	• **Option M17:** Safeguard existing minerals sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent mineral operations at those sites, do not include a buffer around the site. • **Option M18:** Safeguard existing minerals sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent mineral operations at those sites, including a buffer around the site.
LACW	**Question 49**. Is option W1 an appropriate approach for the WMLP to take in respect of future provision of new capacity for managing LACW?	• **Option W1:** Do not identify sites to manage LACW over the lifetime of the MWLP. Monitor quantities of LACW generated and keep forecasts of future generation under review. Include policy within the MWLP to allow proposals to come forward for new capacity to manage LACW in the event that this is required in the future.
C&I waste	**Question 53**. Do options W2 and W3 constitute appropriate alternative approaches for the WMLP to take in respect of future provision of new capacity for managing C&I waste?	• **Option W2:** Identify and allocate sites suitable for accommodating l C&I waste recycling/recovery/disposal capacity. • **Option W3:** Do not allocate sites to provide new capacity to manage C&I waste over the lifetime of the MWLP. Monitor quantities of C&I waste generated and keep forecasts of future generation under review. Include policy within the MWLP to allow proposals to come forward for new residual C&I waste treatment/disposal capacity in the event that this is required in the future.
CD&E waste	**Question 57**. Do options W4 and W5 constitute appropriate alternative approaches for the WMLP to take in respect of future provision of new capacity for managing CD&E waste?	• **Option W4:** Identify sites for allocation in the MWLP to provide new capacity for the management of non-hazardous CD&E waste. • **Option W5:** Do not identify specific sites for allocation, but look favourably on proposals for new facilities to recover CD&E waste at the following types of site: extensions to existing waste management facilities; mineral voids.
Agricultural waste	**Question 60**. Is option W6 an appropriate approach for the WMLP to take in relation	• **Option W6:** Do not allocate any sites for the location of new facilities to meet agricultural waste, but allow proposals for anaerobic digestion or other types of biomass facilities on farms to be considered on their merits as they arise.

HMWLP Issue	Question in the HMWLP	Options assessed in the SA
	to agricultural waste?	
	Question 61. Is option W7 an appropriate approach for the MWLP to take in relation to the management of agricultural waste?	• **Option W7:** Include policy to require adequate provision for the management and disposal of waste materials, liquids and litter from agricultural activities.
Hazardous waste	**Question 64**. Is option W8 an appropriate approach for the WMLP to take in relation to new capacity for hazardous waste?	• **Option W8:** Do not allocate any sites for the location of new hazardous waste facilities, but allow proposals on industrial sites to be considered on their merits as they arise.
Future waste site identification	**Question 68**. Do options W9 to W12 constitute appropriate options for different approaches to waste site identification?	• **Option W9:** Allocate suitable sites from those put forward by landowners and operators in the call for sites which comply with the policies in the Minerals and Waste Local Plan. • **Option W10:** Do not allocate sites but identify types of sites or types of location within which applications for development will be looked upon favourably as long as they comply with the policies in the Minerals and Waste Local Plan. • **Option W11:** Do not allocate sites and do not identify types of sites or types of location, but assess any applications regardless of location on the basis of compliance with policies in the Minerals and Waste Local Plan. • **Option W12:** Allocate suitable sites from those put forward in the call for sites and identify types of sites or types of location within which applications for development will be looked upon favourably, but also allow for proposals for development to come forward regardless of location.
Waste site safeguarding	**Question 70**. Do options W13 and W14 constitute appropriate approaches for the WMLP to take in relation to safeguarding existing waste sites from other development?	• **Option W13:** Safeguard existing waste sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent waste operations at those sites, do not include a buffer around the site. • **Option W14**: Safeguard existing waste sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent waste operations at those sites, including a buffer around the site.

Appendix 4

Detailed SA matrices of the options proposed in the HMWLP

Vision

SA Objective	SA Score	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that strengthen the local economy which will generate employment opportunities in Herefordshire.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that strengthen the local economy.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that support the county's communities which is assumed to include minimising adverse effects from development such as noise, air, odour, and light pollution, and providing areas which can be used for recreation as part of the development or restoration of sites.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that strengthen the local economy which will provide employment opportunities for local people.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	-	A minor negative effect is identified for this objective as the Vision does not promote the sustainable transportation of minerals and waste. **The Vision could be updated to refer to the use of sustainable transport modes for minerals and waste which would reduce road traffic, congestion and pollution.**
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance historic and cultural assets.

SA Objective	SA Score	Justification
7. Move treatment of waste up the waste hierarchy.	++	A significant positive effect is identified for this objective as the Vision aims to achieve sustainable provision of waste management by supporting the circular economy.
8. Promote sustainable use of mineral resources.	++	A significant positive effect is identified for this objective as the Vision aims to achieve sustainable provision of minerals through the efficient use of mineral resources.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+	A minor positive effect is identified for this objective as the Vision aims to achieve sustainable provision by supporting the circular economy which will reduce energy use and greenhouse gas emissions by diverting waste from landfills, support the use of materials and products more efficiently, reduce the consumption of primary resources, and promote low-impact design, materials and operation of assets and buildings.
10. Promote effective restoration and appropriate after use of sites.	-	A minor negative effect is identified for this objective as the Vision does not promote the effective restoration of sites to an appropriate after-use. **The Vision could be updated to include reference to the restoration of sites to a high standard which could provide areas of habitat for species, as well as increased opportunities for recreation and tourism.**
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance environmental assets which is assumed to include biodiversity and geodiversity.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance environmental assets which is assumed to include AONBs, historic landscapes, open spaces, parks and gardens, and their settings.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance environmental assets which is assumed to include ground and surface waters.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance environmental assets which is assumed to include the water environment and areas at risk of flooding.

SA Objective	SA Score	Justification
15. Minimise noise, light, and air pollution.	+	A minor positive effect is identified for this objective as the Vision aims to achieve sustainable provision by supporting the circular economy which will improve air quality. It also promotes developments that support the county's communities which is assumed to include minimising adverse effects on those communities from noise, light and air pollution.
16. Value, protect and enhance soil quality and resources.	+	A minor positive effect is expected for this objective as the Vision supports the sustainable provision of minerals and waste management that protect and enhance environmental assets which is assumed to include best and most versatile agricultural land.

Objectives

SA Objective	SA Score – Social Objectives				Justification
	1	2	3	4	
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+	+	+	0	Objective 1 will have a minor positive effect on this objective as it seeks to safeguard mineral and waste resources which will support the development and growth of the minerals and waste economy in Herefordshire and generate employment opportunities for local people. Objective 2 will have a minor positive effect on this SA objective as it supports the efficient use of minerals in new developments which will generate employment opportunities in the recycled and secondary aggregates industry. Objective 3 will have a minor positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will generate employment opportunities in waste management. Objective 4 is unlikely to enhance the provision of employment opportunities in the minerals and waste sectors and therefore, a negligible effect is expected for this SA objective.

SA Objective	SA Score – Social Objectives				Justification
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+	+	+	0	Objective 1 will have a minor positive effect on this objective as it seeks to safeguard mineral and waste resources which will encourage investment in these sectors. Objective 2 supports the efficient use of minerals in new developments including using recycled and secondary aggregates which can benefit both the minerals and waste industries by slowing the rate of consumption of raw primary resources and reducing levels of waste disposal by recycling and reusing materials which would otherwise be considered to be waste. Objective 3 will have a minor positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will support the waste management industry. Objective 4 is unlikely to encourage investment in the local economy and therefore, a negligible effect is expected for this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?/-	+	+	++	Objective 1 will have a mixed effect (minor positive/minor negative) as it is possible that, by safeguarding mineral and waste resources for development, the effects associated with these operations (e.g. dust, noise, odour, vibration and traffic levels) may have a negative impact on health and wellbeing, however, it is also possible that such developments may improve health and amenity through the delivery of green infrastructure, enhanced public rights of way, or improved access to recreation as part of the development and restoration of sites. Objective 2 will have a minor positive effect as it supports the long-term conservation of primary minerals and the promotion of the efficient use of minerals in new developments which may reduce adverse impacts on health and amenity incurred from the development of new mineral sites. Objective 3 will have a minor positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will divert waste from landfills, support the

SA Objective	SA Score – Social Objectives				Justification
					use of materials and products more efficiently, reduce the consumption of primary resources, and promote low-impact design, materials and operation of assets and buildings which will reduce negative effects such as air pollution and emissions thereby improving the health and well-being of residents in Herefordshire. Objective 4 will have a significant positive effect on this SA objective as it supports minerals and waste development that make an appropriate contribution to improving health, well-being and quality of life of residents, through best practice operations, open space provision, educational and cultural information and green infrastructure.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+	+	+	0	Objective 1 promotes the safeguarding of minerals and waste resources in Herefordshire which will support investment in the local economy thereby generating employment opportunities for local people which could reduce employment deprivation in the county. Objective 2 will have a minor positive effect on this SA objective as it supports the efficient use of minerals in new developments which will generate employment opportunities in the recycled and secondary aggregates industry, thereby reducing employment deprivation. Objective 3 will have a minor positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will generate employment opportunities in waste management. Objective 4 is unlikely to provide opportunities for local people to access employment and skills in the minerals and waste sectors and therefore, a negligible effect is expected for this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+/-	+	+	+?	Objective 1 will have a mixed effect (minor positive/minor negative) as it seeks to safeguard mineral/waste resources and their associated transport infrastructure including railheads which can facilitate the sustainable transport of minerals, however, it is also likely that there will be an increase in materials and waste being

SA Objective	SA Score – Social Objectives				Justification
					transported by road. Objective 2 will have a minor positive effect on this SA objective as it supports the long-term conservation of primary minerals and the efficient use of minerals in new development including using recycled and secondary aggregates which will reduce road haulage activities if the recovered materials are sourced locally thereby reducing road congestion in the County. Objective 3 will have a minor positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will reduce transportation of waste. Objective 4 supports minerals and waste developments that make an appropriate contribution to improving the health and well-being of residents through best practice operations which may include the use of alternatives to road transport. However, this minor positive effect is uncertain.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+/-?	+	+	+	Objective 1 will have a mixed effect (minor positive/minor negative) as safeguarding mineral and waste resources may lead to more mineral extraction activities and waste operations that could have an adverse impact on the historic environment, although this is uncertain until the location, scale and design of the developments are known. Positive effects may be achieved in the longer term through the restoration of sites which may enhance historic settings. Objective 2 will have a minor positive effect as it supports the long-term conservation of primary minerals and the promotion of the efficient use of minerals in new developments which may reduce adverse impacts on the historic environment incurred from the development of new mineral sites. Objective 3 promotes a circular economy which supports the reuse and repair of buildings of historic value and the restoration of land which may enhance historic settings. Objective 4 supports minerals and waste developments that make an appropriate contribution to improving the health and well-being

SA Objective	SA Score – Social Objectives				Justification
					of residents through open space provision which can enhance historic settings.
7. Move treatment of waste up the waste hierarchy.	0	0	++	0	Objectives 1, 2 and 4 are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective. Objective 3 will have a significant positive effect as it directly relates to this SA objective.
8. Promote sustainable use of mineral resources.	++	++	++	0	Objective 1 will have a significant positive effect on this SA objective as it seeks to safeguard mineral resources within Herefordshire. Objective 2 will have a significant positive effect on this SA objective as it prioritises the long-term conservation of primary minerals, the effective use of mineral reserves and the efficient use of minerals in new developments. Objective 3 will have a significant positive effect on promoting a circular economy as it supports resource efficiency including the use of recycled and secondary aggregates. Objective 4 is not likely to have an effect on promoting the sustainable use of mineral resources and therefore, a negligible effect is expected for this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+/-	+	++	+?	Option 1 will have a mixed effect (minor positive/minor negative) as it seeks to safeguard mineral/waste resources which will ensure a steady and adequate supply of minerals in Herefordshire thereby reducing the need to import minerals, and it will ensure that the County remains reasonably self-sufficient in manging the waste it produces which will reduce transport distances of waste. However, the operation of these developments may increase the proportion of waste and minerals transported by road resulting in increased emissions from lorries, particularly HGVs. Objective 2 will have a minor positive effect on this SA objective as it supports the long-term conservation of primary minerals and the efficient use of minerals in new developments including using

SA Objective	SA Score – Social Objectives				Justification
					recycled and secondary aggregates, which will reduce energy consumption and road haulage activities if the recovered materials are sourced locally thereby reducing transport emissions. Objective 3 will have a significant positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will reduce energy use and greenhouse gas emissions by diverting waste from landfills, support the use of materials and products more efficiently, reduce the consumption of primary resources, and promote low-impact design, materials and operation of assets and buildings. Objective 4 supports minerals and waste developments that make an appropriate contribution to improving the health and well-being of residents through best practice operations which may include the sustainable transport of waste and materials which would reduce greenhouse gas emissions. However, this minor positive effect is uncertain.
10. Promote effective restoration and appropriate after use of sites.	+?	+?	+	+?	Objectives 1 and 2 will have a minor positive effect as safeguarding mineral and waste resources, and the effective use of mineral reserves may provide opportunities for the restoration of land at former mineral and waste sites. Objective 3 will have a minor positive effect on this SA objective as the circular economy supports land restoration. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of residents through the provision of open space and green infrastructure which may be delivered as part of the restoration of sites. However, this minor positive effect is uncertain.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	++/-?	+	+	+	Objective 1 seeks to safeguard mineral and waste resources which, depending on the location/scale/design of the development, may have a negative effect on biodiversity. However, through safeguarding, geological formations may be preserved and in some

SA Objective	SA Score – Social Objectives				Justification
					instances created, and this should contribute to maintaining and enhancing geodiversity. Furthermore, through the sympathetic restoration of sites, there are opportunities to enhance habitats for wildlife, improve biodiversity and deliver biodiversity gains to degraded habitats. Objectives 2 and 3 seek to conserve primary minerals and promote the efficient use of mineral reserves and a more circular economy which will reduce the rate of extraction of natural resources and any associated impacts on biodiversity and geodiversity. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of residents through the provision of open space and green infrastructure which will provide net gains for biodiversity.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+/-?	+	+	+	Objective 1 seeks to safeguard mineral and waste resources which, depending on the location/scale/design of the development, may have a negative effect on landscape quality. However, it is also possible that mineral and waste developments may improve the landscape through the delivery of green infrastructure as part of the development or restoration of the site. Objective 2 will have a minor positive effect as it supports the long-term conservation of primary minerals and the promotion of the efficient use of minerals in new developments which may reduce adverse impacts on the quality of the landscape incurred from the development of new mineral sites. Objective 3 will have a significant positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will reduce the number of landfills required which may protect the character and quality of Herefordshire's landscapes. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of

SA Objective	SA Score – Social Objectives				Justification
					residents through the provision of open space and green infrastructure which will enhance and restore the landscape quality of Herefordshire.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	-?	+	+	+?	Objective 1 seeks to safeguard mineral and waste resources which, depending on the location/scale/design of the development, may have a negative effect on the quality and quantity of water resources including groundwater aquifers (e.g. from contamination from leaching of chemical and oil spillages and leachate break-out, release of sediment, diversion of watercourses, etc.). Objective 2 will have a minor positive effect as it supports the long-term conservation of primary minerals which will reduce the need for mineral extraction and limit any impacts on the flow and quality of surface and groundwater. Objective 3 will have a minor positive effect as it supports a reduction in waste production and the recovery of waste materials and residuals as a valuable resource. Water is a key element in the circular economy as it is used in many production processes. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of residents through best practice operations which may include water pollution control measures and measures to minimise water usage. However, this positive effect is uncertain.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+/-?	+	0	+?	Objective 1 seeks to safeguard mineral and waste resources, which depending on the type of the operation, may increase the risk of flooding (e.g. landfills/sites used for waste management of hazardous materials are suitable in Flood Zones 1, 2 and potentially 3a, waste treatment and mineral working/processing facilities are suitable in all Flood Zones excluding 3b, and sand and gravel working is suitable in all Flood Zones). The restoration of sites provides opportunities for flood water storage and management. Objective 2 will have a minor positive effect as it supports the long-

SA Objective	SA Score – Social Objectives				Justification
					term conservation of primary minerals, the effective use of mineral reserves, and the efficient use of minerals in new developments which will reduce the need for mineral extraction thereby limiting any increase in flood risk that may occur as a result of extraction. Objective 3 is unlikely to reduce the risk of flooding and therefore will have a negligible effect on this SA objective. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of residents through best practice operations which may include the provision of SuDS onsite, and through the provision of open space which will increase the area of permeable surfaces thereby reducing flood risk. However, this positive effect is uncertain.
15. Minimise noise, light, and air pollution.	-?	+	++	+?	Objective 1 will have a minor negative effect as it is possible that, by safeguarding mineral and waste resources for development, there may be negative effects associated with these operations such as noise, light, odour, and air pollution. The level of these effects will depend on the location, scale and design of the developments. Objective 2 seeks to conserve primary minerals and promote the efficient use of mineral reserves which will reduce the rate of extraction of natural resources and any associated impacts such as dust, noise, light and air pollution. Furthermore, the Objective supports the efficient use of minerals in new developments including using recycled and secondary aggregates, which will reduce road haulage activities if the recovered materials are sourced locally thereby reducing transport emissions. Objective 3 will have a significant positive effect on this SA objective as promoting a circular economy and managing waste in accordance with the Waste Hierarchy will reduce greenhouse gas emissions (for example from the transportation of waste) thereby benefiting air quality. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an

SA Objective	SA Score – Social Objectives				Justification
					appropriate contribution to improving the health and well-being of residents through best practice operations which may include the control of emissions from the developments including dust, noise, and air pollution. However, this minor positive effect is uncertain.
16. Value, protect and enhance soil quality and resources.	+/-?	+	+	+	Objective 1 seeks to safeguard waste resources which, depending on the location of the development, may be located on previously developed sites or on greenfield locations. Safeguarding mineral resources may lead to more mineral extraction activities, increasing the potential impact on soils (e.g. removal of soil, contamination from leaching of chemical and oil spillages and leachate break-out). Positive effects may be experienced through site restoration which can lead to the enhancement of soil quality. Objective 2 will have a minor positive effect on this objective as it reduces extraction of primary raw materials which may have an adverse impact on the soil environment. Objective 3 will have a minor positive effect on soil quality as it avoids landfilling and supports composting/anaerobic digestion which will provide nutrients to the soil. Objective 4 will have a minor positive effect on this SA objective as it supports minerals and waste developments which make an appropriate contribution to improving the health and well-being of residents through the provision of green infrastructure which can improve the quality and stability of soil.

SA Objective	SA Score – Economic Objectives				Justification
	5	6	7	8	
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+	+	+	0	Objective 5 will have a minor positive effect on this objective as it seeks to ensure there is a steady and adequate supply of minerals to meet Herefordshire's needs which will support the development and growth of the minerals economy in the county and generate employment opportunities for local people. Objective 6 will have a minor positive effect as it supports the adequate provision of waste management infrastructure which is likely to generate jobs in the waste management industry. Objective 7 will have a minor positive effect as it seeks to identify suitable locations for minerals and waste development. As minerals can only be worked where the resources lies, location options for the economically viable extraction of minerals may be restricted and therefore, the number of employment opportunities limited. However, waste related development can be located where there are synergies with complementary industries which will support economic growth and facilitate employment generation. Objective 8 is unlikely to provide employment opportunities in the minerals and waste sectors and therefore, a negligible effect is expected for this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	++	++	+	+	Objective 5 will have a significant positive effect as it seeks to ensure there is a steady and adequate supply of minerals to contribute to the county's economic growth. Objective 6 will have a significant positive effect as it supports the adequate provision of waste management infrastructure which will encourage investment in the waste industry in Herefordshire. Objective 7 will have a minor positive effect as it seeks to identify suitable locations for minerals and waste development. As minerals can only be worked where the resources lies, location options for the economically viable extraction of minerals may be limited.

SA Objective	SA Score – Economic Objectives				Justification
					However, waste related development can be located where there are synergies with complementary industries which will support economic growth in Herefordshire. Objective 8 seeks to locate new minerals and waste developments in close proximity to suitable transport networks which will reduce transport costs and encourage investment in the minerals and waste sectors.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?/-?	+?/-?	+?/-?	+?	Objective 5 will have a mixed effect (minor positive/minor negative) as it is possible that, by producing a steady and adequate supply of minerals, the effects associated with mining and quarrying (e.g. dust, noise, odour, vibration and traffic levels) may have a negative impact on health and wellbeing, however, it is also possible that such developments may improve health and amenity through the delivery of green infrastructure, enhanced public rights of way, or improved access to recreation as part of the development and restoration of sites. Objective 6 will have a mixed effect (minor positive/minor negative) as it supports the adequate provision of waste management infrastructure which may have adverse effects on health and wellbeing from odour, noise, vermin, or traffic levels, and on the amenity of the surrounding area. However, waste management facilities provide opportunities to reduce, reuse, recycle and minimise resource extraction which can provide improved air quality. Effects are uncertain until the location, scale and design of the waste management facility is known. Objective 7 will have a mixed effect (minor positive/minor negative) as it seeks to identify suitable locations for minerals and waste developments which may have adverse effects from the operation of these developments (e.g. dust, noise, odour, vibration and traffic levels) on health and amenity. Furthermore, waste developments are likely to be located where most waste is generated (urban areas) thereby subjecting larger numbers of people to these negative effects. However, positive effects may be achieved through

SA Objective	SA Score – Economic Objectives				Justification
					the delivery of green infrastructure, enhanced public rights of way or improved access to recreation as part of the development and restoration of sites. Objective 8 supports the use of alternatives to road transport and steers new development to locations that are served by suitable transport networks which will reduce adverse effects on health and wellbeing such as noise, air pollution, and vibration. Although this is uncertain until the location, scale and design of the developments are known.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+	+	+	0	Objective 5 seeks to ensure there is a steady and adequate supply of minerals which will support investment in the local economy and construction industry thereby generating employment opportunities for local people which could reduce employment deprivation in the county. Objective 6 will have a minor positive effect as it supports the adequate provision of waste management infrastructure which is likely to generate employment opportunities in the waste management industry. Objective 7 will have a minor positive effect as it seeks to identify suitable locations for minerals and waste development. As minerals can only be worked where the resources lies, location options for the economically viable extraction of minerals may be restricted and therefore, the number of employment opportunities for local people limited. However, waste related development can be located where there are synergies with complementary industries which will support economic growth and facilitate employment generation in Herefordshire. Objective 8 is unlikely to provide opportunities for local people to access employment and skills and therefore, a negligible effect is identified for this objective.
5. Reduce road traffic, congestion and	+?/-?	+?/-?	+?/-?	++	Objective 5 encourages the production of a steady and adequate

SA Objective	SA Score – Economic Objectives				Justification
pollution, and promote sustainable modes of transport and efficient movement patterns in the County.					supply of minerals in Herefordshire which may reduce the need for importing minerals, however, the transport of minerals may utilise either sustainable transport modes (e.g. rail) or the road network which will result in mixed effects (minor positive/minor negative) for this objective. Objective 6 will have a mixed effect (minor positive/minor negative) as it supports the adequate provision of waste management infrastructure which will reduce the transportation of waste further afield for processing, however, there may be increased traffic levels from the operation of these waste management facilities. Objective 7 will have a mixed effect (minor positive/minor negative) as minerals will need to be worked where the resource lies which may increase the transportation of minerals by road if the site is not in close proximity to sustainable transport modes such as rail or water. Although most waste is transported by road, waste developments may be located in close proximity to sustainable transport networks (rail or water) which would reduce traffic, congestion and pollution. Effects are uncertain until the location of the developments is known. Objective 8 will have a significant positive effect as it seeks to reduce the need to travel and lessen the harmful impacts from traffic growth, promote the use of alternatives to road transport and ensure that new development is served by sustainable transport networks.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?/-?	+?/-?	+?	Objective 5 will have a mixed effect (minor positive/minor negative) as ensuring a steady and adequate supply of minerals may lead to more mineral extraction activities that could have an adverse impact on the historic environment, although this is uncertain until the location, scale and design of the developments are known. Positive effects may be achieved as a landbank of minerals in the county may help to ensure that heritage details are retained throughout the built environment. Objective 6 will have a minor negative effect as it supports the

SA Objective	SA Score – Economic Objectives				Justification
					adequate provision of waste management infrastructure which may have adverse effects on the built environment or heritage designations. Effects are uncertain until the location, scale and design of the waste management facility is known. Objective 7 will have a mixed effect (minor positive/minor negative) as it is possible to locate waste developments away from designated and undesignated historic assets, however, mineral developments are limited to where the resource lies which may be near protected historic assets. Objective 8 supports the use of alternatives to road transport and steers new development to locations that are served by suitable transport networks which will reduce adverse effects on the setting, fabric and structure of the built environment/heritage assets from emissions and vibration. Although this is uncertain until the location, scale and design of the developments are known.
7. Move treatment of waste up the waste hierarchy.	0	++	+	0	Objectives 5 and 8 are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective. Objective 6 supports the adequate provision of waste management infrastructure in Herefordshire which will provide opportunities to move treatment of waste up the waste hierarchy and therefore a significant positive effect is identified for this objective. Objective 7 will have a minor positive effect as waste developments can be located near to sites that either are an important source of waste arisings or a market for processed waste materials which would support a circular economy.
8. Promote sustainable use of mineral resources.	-	0	-	0	Objective 5 will have a minor negative effect as ensuring a steady and adequate supply of minerals will lead to more mineral extraction. Objective 7 will have a minor negative effect as identifying suitable locations for minerals development will encourage mineral

SA Objective	SA Score – Economic Objectives				Justification
					extraction. Objectives 6 and 8 are not likely to promote the sustainable use of mineral resources and therefore negligible effects are identified for this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?/-?	+?/-?	+	Objective 5 will have a mixed effect (minor positive/minor negative) as it seeks to ensure a steady and adequate supply of minerals in Herefordshire thereby reducing the need to import minerals. However, the operation of mineral developments may increase the proportion of minerals transported by road resulting in increased emissions from lorries, particularly HGVs. Objective 6 will have a mixed effect (minor positive/minor negative) as it seeks to ensure that there is adequate provision for waste management infrastructure which will ensure that the County remains reasonably self-sufficient in manging the waste it produces which will reduce transport distances of waste. However, the operation of these developments may increase the proportion of waste transported by road resulting in increased emissions from lorries, particularly HGVs. Effects are uncertain until the location, scale and design of the waste management facility is known. Objective 7 will have a mixed effect (minor positive/minor negative) as minerals will need to be worked where the resource lies which may increase the transportation of minerals by road if the site is not in close proximity to sustainable transport modes thereby increasing greenhouse gas emissions. Waste developments may be located in close proximity to sustainable modes of transport or where most of the waste is generated which would reduce the distance waste is transported thereby reducing greenhouse gas emissions. Effects are uncertain until the location of the developments is known. Objective 8 will have a minor positive effect as it supports the use of alternatives to road transport and steers new development to locations that are served by suitable transport networks which will reduce greenhouse gas emissions.

SA Objective	SA Score – Economic Objectives				Justification
10. Promote effective restoration and appropriate after use of sites.	+?	+?	0	0	Planning a steady and adequate supply of minerals may require the excavation of sites which may eventually be restored to an appropriate after use. Objective 6 will have a minor positive effect as there are opportunities to restore the waste management sites to an appropriate after use once they cease operation. Objectives 7 and 8 are not likely to have an effect on promoting restoration of sites and therefore, negligible effects are identified for this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?/-?	+?/-?	+?/-?	+?	Objective 5 will have a mixed effect (minor positive/minor negative) as it is possible that by producing a steady and adequate supply of minerals, there may be negative effects on biodiversity and geodiversity from mining and quarrying. However, sites may improve biodiversity through the delivery of green infrastructure as part of the development or restoration of the site. The level of these effects will depend on the location, scale and design of the developments. Objective 6 will have a mixed effect (minor positive/minor negative) as it seeks to ensure that there is adequate provision for waste management infrastructure which may have negative effects on biodiversity if facilities are sited on or close to protected habitats or where habitats and species may be disturbed by activities and noise. However, it is also possible that the design of the facilities will enhance biodiversity by providing green infrastructure. The level of these effects will depend on the location, scale and design of the developments. Objective 7 will have a mixed effect (minor positive/minor negative) as it is possible to locate waste developments away from protected habitats and species, however, mineral developments are limited to where the resource lies which may be within a designated area for biodiversity. Objective 8 supports the use of alternatives to road transport and

SA Objective	SA Score – Economic Objectives				Justification
					steers new development to locations that are served by suitable transport networks which will reduce adverse effects on biodiversity such as noise, air pollution, and vibration. Although this is uncertain until the location, scale and design of the developments are known.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	+?/-?	+?/-?	+?	Objective 5 will have a mixed effect (minor positive/minor negative) as it is possible that, by producing a steady and adequate supply of minerals, there may be negative effects associated with mining and quarrying on landscape quality and character. However, there may also be opportunities to provide green infrastructure as part of the development or restoration of sites which would benefit the landscape. The level of these effects will depend on the location, scale and design of the developments. Objective 6 will have a mixed effect (minor positive/minor negative) as it seeks to ensure that there is adequate provision for waste management infrastructure which, depending on the location, scale and design of the waste management facility, may have negative effects on the landscape. However, it is also possible that the design of the facilities will enhance the landscape by providing landscaping and boundary treatments. The level of these effects will depend on the location, scale and design of the developments. Objective 7 will have a mixed effect (minor positive/minor negative) as it is possible to locate waste developments away from protected or sensitive landscapes, however, mineral developments are limited to where the resource lies which may be within an area of high landscape value. Objective 8 supports the use of alternatives to road transport and steers new development to locations that are served by suitable transport networks which will reduce the negative impacts on the landscape character of Herefordshire. Although this is uncertain until the location, scale and design of the developments are known.
13. Value, protect and enhance the quality of watercourses and maximise	-?	-?	+?/-?	0	Objective 5 supports a steady and adequate supply of minerals. This may result in the extraction of minerals which, depending on the

SA Objective	SA Score – Economic Objectives				Justification
the efficient use of water.					location/scale/design of the developments, may have a negative effect on the quality and quantity of water resources including groundwater aquifers (e.g. from contamination from leaching and leachate break-out, release of sediment, diversion of watercourses, etc.). Objective 6 seeks to ensure that there is adequate provision for waste management infrastructure which, depending on the location/scale/design of the developments and the treatment processes used, may have a negative effect on the quality and quantity of water resources including groundwater aquifers. Objective 7 will have a mixed effect (minor positive/minor negative) as it is possible to locate waste developments away from vulnerable surface and groundwater, however, mineral developments are limited to where the resource lies which may be within close proximity to vulnerable watercourses. Objective 8 is not likely to have an effect on protecting or enhancing the quality of watercourses or maximising the efficient use of water and therefore, a negligible effect is identified for this objective.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?/-?	+?/-?	+?/-?	0	Objective 5 supports a steady and adequate supply of minerals. This may result in the extraction of minerals which, depending on the type of the operation, may increase the risk of flooding. However, the restoration of sites provides opportunities for flood water storage and management. Objective 6 seeks to ensure that there is adequate provision for waste management infrastructure which, depending on the type of development, may be suitable in flood risk zones. For example, landfills and sites used for waste management facilities for hazardous waste are suitable in Flood Zones 1, 2 and potentially 3a, while waste treatment facilities are suitable in all flood zones excluding 3b. Objective 7 will have a mixed effect (minor positive/minor negative) as it is possible to locate waste developments away from areas at

SA Objective	SA Score – Economic Objectives				Justification
					risk of flooding, however, mineral developments are limited to where the resource lies which may be within an area susceptible to flooding. Objective 8 is not likely to reduce the risk of flooding and therefore, a negligible effect is identified for this objective.
15. Minimise noise, light, and air pollution.	+?/-?	+?/-?	+?/-?	+	Objective 5 will have a mixed effect (minor positive/minor negative) as it seeks to ensure a steady and adequate supply of minerals in Herefordshire which will reduce the need to import minerals thereby reducing transport emissions. However, by producing a steady and adequate supply of minerals, there may be negative effects associated with mining and quarrying such as dust, noise, odour, and air pollution. The level of these effects will depend on the location, scale and design of the developments. Objective 6 will have a mixed effect (minor positive/minor negative) as it seeks to ensure that there is adequate provision for waste management infrastructure which will ensure that the County remains reasonably self-sufficient in manging the waste it produces which will reduce transport distances of waste and air pollution. However, there also may be negative effects associated with these developments such as noise, light and air pollution. Effects are uncertain until the location, scale and design of the waste management facility is known. Objective 7 will have a mixed effect (minor positive/minor negative) as minerals will need to be worked where the resource lies which may increase the transportation of minerals by road if the site is not in close proximity to sustainable transport modes thereby increasing air pollution. Waste developments may be located in close proximity to sustainable modes of transport or where most of the waste is generated which would reduce the distance waste is transported thereby benefiting air quality. Effects are uncertain until the location of the developments is known. Objective 8 will have a minor positive effect as it supports the use of alternatives to road transport and steers new development to

SA Objective	SA Score – Economic Objectives				Justification
					locations that are served by suitable transport networks which will reduce air and noise pollution.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?/-?	+?	0	Objective 5 seeks to ensure a steady and adequate supply of minerals which may lead to more mineral extraction activities, increasing the potential impact on soils (e.g. removal of soil, contamination from leaching of chemical and oil spillages and leachate break-out). Positive effects may be experienced through site restoration which can lead to the enhancement of soil quality. Objective 6 will have a mixed effect (minor positive/minor negative) as unlike mineral developments which are limited to where the resource lies; waste management facilities can be located on brownfield land. There is also potential for positive effects on the soil environment from site restoration. However, it is possible that there may be contamination of soils from the processes used during waste treatment. Objective 7 will have a minor positive effect as waste developments can be located on brownfield land unlike mineral sites which must be worked where the resource lies. Objective 8 is not likely to protect or enhance soil quality or resources and therefore, a negligible effect is identified for this objective.

SA Objective	SA Score – Environmental Objectives			Justification
	9	10	11	
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	0	0	Objectives 9, 10 and 11 are unlikely to generate employment opportunities and therefore, negligible effects are expected for this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	0	0	0	Objectives 9, 10 and 11 are unlikely to encourage investment in the local economy and therefore, negligible effects are expected for this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+	+	+	Objective 9 will have a minor positive effect as it seeks to achieve sustainable communities and protect the environment by delivering well-designed minerals and waste developments that are supported by green infrastructure which may improve health and amenity by providing areas for recreation. Objective 10 will have a minor positive effect as it seeks to address the causes and impacts of climate change relating to minerals and waste development activity which will reduce negative effects such as air pollution and emissions thereby improving the health and well-being of residents in Herefordshire. Objective 11 will have a minor positive effect as it seeks to protect, conserve and enhance the county's natural and cultural assets which may improve the health, wellbeing and quality of life of residents.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	0	0	Objectives 9, 10 and 11 are unlikely to provide opportunities for local people to access employment and skills in the minerals and waste sectors and therefore, negligible effects are expected for this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	0	+	0	Objectives 9 and 11 are unlikely to reduce road traffic, congestion or pollution and therefore, negligible effects are expected for this SA objective. Objective 10 seeks to address the causes and impacts of climate change

SA Objective	SA Score – Environmental Objectives			Justification
				relating to minerals and waste development activity which may include supporting the use of alternatives to road transport thereby reducing road traffic, congestion and pollution.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+	+	++	Objective 9 promotes the delivery of well-designed mineral and waste developments that reinforce local distinctiveness and are supported by green infrastructure which can contribute to the setting of historic assets. Objective 10 seeks to address the causes and impacts of climate change relating to minerals and waste development activity including reducing greenhouse gas emissions which can have a detrimental impact on the fabric of historic buildings. Objective 11 will have a significant positive effect as it supports the protection, conservation and enhancement of historic assets. Furthermore, it supports the use of local building stone to help maintain and improve the quality of the built environment and local distinctiveness.
7. Move treatment of waste up the waste hierarchy.	0	+	0	Objectives 9 and 11 are unlikely to move the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective. Objective 10 will have a minor positive effect as it supports sustainable working practices to adapt to and mitigate the impacts of climate change which may include sustainable waste management practices.
8. Promote sustainable use of mineral resources.	0	+	0	Objectives 9 and 11 are unlikely to promote the sustainable use of mineral resources and therefore, negligible effects are expected for this SA objective. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change including the more sustainable use of resources such as recycled and secondary aggregates, and the generation of renewable energy through energy from waste facilities which would reduce extraction of non-renewable resources.

SA Objective	SA Score – Environmental Objectives			Justification
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	0	++	0	Objectives 9 and 11 are unlikely to reduce the impacts of climate change and therefore, negligible effects are expected for this SA objective. Objective 10 will have a significant positive effect as it seeks to address the causes and impacts of climate change relating to minerals and waste development activity including using opportunities arising from minerals and waste operations and reclamation activity to mitigate and adapt to climate change and to leave a positive legacy.
10. Promote effective restoration and appropriate after use of sites.	+?	+	+?	Objective 9 will have a minor positive effect as it promotes the protection of the environment by delivering well-designed minerals and waste developments that are supported by green infrastructure which may be delivered as part of the restoration of sites. However, this effect is uncertain. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change which may be achieved through the appropriate restoration of mineral and landfill sites. Objective 11 will have a minor positive effect on this SA objective as it supports the protection, conservation and enhancement of Herefordshire's natural environment including green infrastructure and landscaping which may be delivered as part of the restoration of sites. However, this minor positive effect is uncertain.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+	+	++	Objective 9 will have a minor positive effect as it promotes the protection of the environment by delivering well-designed minerals and waste developments that include green infrastructure which can provide opportunities for enhancing biodiversity. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change which will reduce habitat and species losses. Objective 11 will have a significant positive effect as it seeks to conserve and protect biodiversity and geodiversity from loss and damage, and to

SA Objective	SA Score – Environmental Objectives			Justification
				reverse negative trends and encourage expansion.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+	+	++	Objective 9 promotes the delivery of well-designed mineral and waste developments that reinforce local distinctiveness and are supported by green infrastructure which will minimise the landscape and visual intrusion of waste and mineral facilities. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change which can include restoring former mineral and landfill sites thereby restoring the landscape quality of Herefordshire. Objective 11 will have a significant positive effect as it seeks to conserve, protect and enhance the landscape character and quality of Herefordshire particularly the AONB. It also supports the utilisation of a strategic approach to reclamation of mineral sites which would restore landscape quality.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	0	+	++	Objective 9 is unlikely to protect and enhance the quality of watercourses or maximise the efficient use of water and therefore, a negligible effect is expected for this SA objective. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change by using more sustainable design and working practices which may include water pollution control measures and measures to minimise water usage. Objective 11 will have a significant positive effect as it seeks to conserve, protect and enhance ground and surface waters.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+	+	++	Objective 9 will have a minor positive effect as it promotes the protection of the environment by delivering well-designed minerals and waste developments that include green infrastructure which will increase the area of permeable surfaces thereby reducing flood risk. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of

SA Objective	SA Score – Environmental Objectives			Justification
				climate change which can include avoiding areas of flood risk and providing opportunities for water storage in flood zones. Objective 11 will have a significant positive effect as it seeks to conserve, protect and enhance ground and surface waters and green infrastructure which can reduce the risk of flooding.
15. Minimise noise, light, and air pollution.	0	++	0	Objectives 9 and 11 are unlikely to minimise noise, light and air pollution and therefore, negligible effects are expected for this SA objective. Objective 10 will have a significant positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change which will reduce air pollution from greenhouse gas emissions.
16. Value, protect and enhance soil quality and resources.	+	+	++	Objective 9 will have a minor positive effect as it promotes the protection of the environment by delivering well-designed minerals and waste developments that use land efficiently which may reduce negative impacts on soil quality and structure. Objective 10 will have a minor positive effect as it supports mineral and waste developments that help adapt to and mitigate the impacts of climate change including taking a long-term view for sites to provide ecosystem services and the maintenance of agricultural capacity which will benefit soil quality and structure. Objective 11 will have a significant positive effect as it seeks to conserve, protect and enhance green infrastructure and ecosystem services (including agriculture) which will benefit the soil environment by improving the quality and stability of soils.

Minerals

Sand and gravel reserves

Option M1: Make no provision for additional permitted reserves of sand and gravel, on the assumption that demand will remain fairly low and sufficient landbank will remain at 2031 (scenario 2).

Option M2: Make provision for some additional reserves of sand and gravel to be permitted, on the basis that demand will rise in line with the middle forecast and the landbank will fall below the minimum required by the NPPF before the end of the timeframe of the Core Strategy (scenario 1).

Option M3: Make provision for significant additional reserves of sand and gravel to be permitted, on the basis that demand will rise in line with the Core Strategy housing trajectory and permitted reserves will be exhausted before the end of the MWLP timeframe (scenario 3).

Option M4: Make no provision for additional permitted reserves of sand and gravel and adopt policy to meet any shortfall in demand through greater use of recycled aggregates and/or imports of sand and gravel.

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	+	++	0	Negligible effects are identified for options M1 and M4 as they do not seek to make provision for additional permitted reserves of sand and gravel and therefore it is likely that no further jobs will be generated in the minerals sector in Herefordshire. Option M2 will have a minor positive effect as it will make provision for some additional sand and gravel reserves which will generate some employment opportunities for local people in the minerals industry. Option M3 will have a significant positive effect as it supports the provision of significant additional reserves of sand and gravel to ensure there will be a steady and adequate supply of minerals to meet the county's needs (based on the Core Strategy housing trajectory) which will support the development and growth of the minerals economy and generate employment opportunities for local people.
2. Maintain or enhance conditions	+/--	+	++	+/--	The NPPF seeks a minimum landbank of seven years for sand and gravel provision.

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
that enable a sustainable economy and continued investment.					Option M1 ensures that there is an adequate supply of minerals to meet the needs of society over the plan period (landbank of 9.9 years). However, as planning permission expires in 2026 for Wellington Quarry there is a need for additional reserves of sand and gravel to be permitted to meet demand from 2027 onwards. This option does not support the provision of additional reserves which would encourage investment in Herefordshire's minerals sector and therefore a mixed effect (minor positive/significant negative) is identified for this objective. Option M2 will have a minor positive effect as it will make some provision for additional reserves which will ensure a steady and adequate supply of minerals to meet the county's need and will encourage the growth of the minerals industry. Option M3 will have a significant positive effect as it supports the provision of significant reserves of sand and gravel which will ensure there is a steady and adequate supply of minerals and will encourage long-term investment in Herefordshire's minerals sector. Option M4 will have a mixed effect (minor positive/significant negative) as it makes no provision for additional reserves that should be permitted to meet demand from 2027 onwards which would encourage investment in the minerals industry, however, it does aim to meet any shortfall in demand through greater use of recycled aggregates which would encourage investment in the recycled and secondary aggregates industry.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+/-	+/-	+/-	+/-	Option M1 will have a mixed effect (minor positive/minor negative) as it relies on the one active sand and gravel quarry in Herefordshire to meet demand which may continue to subject the local community to the negative effects associated with this operation (e.g. dust, noise, vibration and traffic levels). However, this option may have a positive effect as it seeks to maintain supplies from this permitted reserve therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected communities in Herefordshire. Options M2 and M3 will have mixed effects (minor positive/minor negative) as they support the provision of new sand and gravel reserves which may have adverse impacts from their operations on the health and wellbeing of nearby communities. However, it is also possible that such developments may improve health and amenity through the delivery of green infrastructure, enhanced public rights of way, or improved access to recreation as part of the development or restoration of sites. Option M4 will have a mixed effect (minor positive/minor negative) as it also relies on

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
					the one active sand and gravel quarry to meet demand which may continue to subject the local community to the negative effects associated with its operation. However, as it does not make provision for additional reserves to be permitted and supports meeting any shortfall in demand through greater use of recycled aggregates, this may reduce adverse impacts on health and amenity incurred from the development of new mineral sites.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	+	++	0	Negligible effects are identified for options M1 and M4 as they do not seek to make provision for additional permitted reserves of sand and gravel and therefore it is likely that no further jobs will be generated in the minerals sector in the county. Option M2 will have a minor positive effect as it will make provision for some additional sand and gravel reserves which will generate some employment opportunities for local people in the minerals industry, thereby reducing employment deprivation in Herefordshire. Option M3 will have a significant positive effect as it supports the provision of significant additional reserves of sand and gravel which will provide opportunities for local people to access employment in the minerals sector.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+/--?	+?/-?	+?/-?	+/--?	Option M1 will have a mixed effect (significant negative/minor positive) as it supports the continued extraction of minerals from the existing sand and gravel quarry at Wellington Quarry which transports aggregate materials locally by road and to London and the West Midlands by rail resulting in mixed effects for this objective. As planning permission for this quarry expires in 2026 and without the provision of additional reserves, it is likely that minerals will need to be imported which may increase road traffic, congestion and pollution. This effect is uncertain. Options M2 and M3 seek to provide additional sand and gravel reserves which will reduce the need for importing aggregate minerals, however, it is unknown whether the transport of minerals will utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective. Option M4 will have a mixed effect (significant negative/minor positive) as it also supports the continued extraction of minerals from the existing sand and gravel quarry at Wellington Quarry which transports aggregate materials locally by road and to

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
					London and the West Midlands by rail resulting in mixed effects for this objective. Furthermore, this option supports the importation of sand and gravel which may increase road traffic/congestion/pollution if transported via road. This option also supports the greater use of recycled and secondary aggregates which may reduce road haulage activities if the recovered materials are sourced locally.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?/-?	--?/+?	+?/-?	Options M1 and M4 will have mixed effects (minor positive/minor negative) as they rely on the one active sand and gravel quarry to meet demand which could result in continued impacts on heritage assets and their settings. However, these options may also have a minor positive effect as they seek to maintain supplies from this permitted reserve therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected heritage designations, and it may also result in benefits for the setting of historic designations through the sites eventual restoration. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in impacts to the historic environment. However, the provision of additional reserves may also help to ensure that heritage details are retained throughout the built environment. Positive effects may also be achieved in the longer term through the restoration of sites which may enhance historic settings. Option M3 will have a mixed effect (significant negative/minor positive) as it supports the provision of significant additional sand and gravel reserves which could result in adverse impacts on the historic environment at numerous locations. However, it is also possible that, through site restoration, there may be benefits for the setting of historic assets.
7. Move treatment of waste up the waste hierarchy.	0	0	0	+	Options M1-M3 are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective. Option M4 will have a positive effect as it supports the greater use of recycled aggregates which diverts waste materials from landfills.
8. Promote sustainable use of mineral resources.	-	-	--	+/-	Option M1 will have a minor negative effect as it supports the continued extraction of minerals from the existing permitted sand and gravel reserve. Option M2 will have a minor negative effect as it supports the provision of some

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
					additional sand and gravel reserves which will increase extraction of raw primary resources. Option M3 will have a significant negative effect as it supports the significant provision of additional permitted sand and gravel reserves which will significantly increase the rate of extraction of mineral resources. Option M4 will have mixed effects (minor positive/minor negative) as it promotes greater use of recycled aggregates which will help to conserve the mineral resource in Herefordshire, however, it also supports the continued extraction of minerals from Wellington Quarry.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+/-	+?/-?	++?/-?	++/--	Option M1 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the existing sand and gravel quarry at Wellington Quarry which transports aggregate materials locally by road thereby increasing greenhouse gas emissions; however it also transports minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves (which will address the need for sand and gravel provision from 2027 onwards) thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals at these sites will utilise either sustainable transport modes (e.g. rail) or the road network. Option M3 will have a mixed effect (significant positive/minor negative) as it seeks to provide significant additional sand and gravel reserves which will meet demand from 2027 onwards thereby reducing the need for importing large quantities of aggregate minerals and any associated greenhouse gas emissions, however, it is unknown whether the transport of minerals at these sites will utilise either sustainable transport modes (e.g. rail) or the road network. Option M4 makes no provision for additional permitted reserves and seeks to address any shortfall in demand through greater use of recycled aggregates and the import of sand and gravel. This approach is likely to have mixed effects (significant positive/significant negative) as it would increase greenhouse gas emissions associated with mineral importation, however, it would also result in a decrease in emissions as the use of recycled aggregates can have lower embodied energy in addition to reduced

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
					transport emissions where recycled materials are reused in close proximity to the site of reprocessing.
10. Promote effective restoration and appropriate after use of sites.	+?	+?	+?	+?	Uncertain minor positive effects are identified for all options as they provide opportunities for the restoration of land at former mineral sites.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?/-?	+?/-?	+?/--?	+?/-?	Options M1 and M4 will have mixed effects (minor positive/minor negative) as they rely on the one active sand and gravel quarry to meet demand which will result in continued impacts on nearby biodiversity and geodiversity. However, these options may also have a minor positive effect as they seek to maintain supplies from this permitted reserve therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected habitats and species, and it may result in benefits for biodiversity and geodiversity through the sites eventual restoration. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in impacts to biodiversity and geodiversity assets. Conversely, this option may result in benefits to biodiversity and geodiversity through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites. Option M3 will have a mixed effect (minor positive/significant negative) as it supports the provision of significant additional sand and gravel reserves which could result in adverse impacts on biodiversity and geodiversity at numerous locations. However, it is also possible that, through site restoration, there may be benefits for habitats and species. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural	+?/-?	+?/-?	+?/--?	+?/-?	Options M1 and M4 will have mixed effects (minor positive/minor negative) as they rely on the one active sand and gravel quarry in Herefordshire to meet demand which will result in continued impacts on the nearby landscape. However, these options may also have a minor positive effect as they seek to maintain supplies from this permitted reserve therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected landscapes in Herefordshire, and it may result in benefits to the

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
areas and open spaces.					landscape through the sites eventual restoration. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in landscape impacts in the short/long term. Conversely, this option may result in benefits to the landscape through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites. Option M3 will have a mixed effect (minor positive/significant negative) as it supports the provision of significant additional sand and gravel reserves which could result in adverse impacts on landscape character and quality at numerous locations. However, it is also possible that, through site restoration, there may be benefits to the landscape. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?/-?	+?/--?	+?/-?	Options M1 and M4 will have mixed effects (minor positive/minor negative) as they rely on the one active sand and gravel quarry in Herefordshire to meet demand which will continue to operate, involving activities that may negatively affect water resources and quality. However, it is also possible that there are mitigation measures in place which prevent the deterioration of water quality and incorporate water efficiency practices. Therefore, uncertain mixed effects are identified for these options. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in negative impacts on water quality at these locations. However, depending on the site proposal, there may be opportunities to protect the quality of watercourses and incorporate water efficiency practices. Option M3 will have a mixed effect (minor positive/minor negative) as it supports the provision of significant additional reserves of sand and gravel which could result in negative impacts on water quality at numerous locations. However, depending on the site proposal, there may be opportunities to protect the quality of watercourses and incorporate water efficiency practices. All effects are uncertain and will depend on the site proposal (location, design, scale, method of working) which would be assessed at planning application stage.

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+	+	+	+	All options will have a minor positive effect as through either the continued operation of the existing permitted sand and gravel reserve (options M1 and M4) or the provision of additional sand and gravel reserves (options M2 and M3), this type of development is classified as water-compatible and potentially suitable in all flood zones including 3b (the functional floodplain). Furthermore, these sites may also have the potential to increase flood capacity through their eventual restoration.
15. Minimise noise, light, and air pollution.	+/-	+?/-?	++?/-?	++/--	Option M1 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the existing sand and gravel quarry at Wellington Quarry which transports aggregate materials locally by road thereby increasing air pollution; however it also transports minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions. However, through the provision of additional sites there is potential for previously unaffected communities to be subjected to noise pollution from the operation of these developments. Option M3 will have a mixed effect (significant positive/minor negative) as it seeks to provide significant additional sand and gravel reserves which will meet demand from 2027 onwards thereby reducing the need for importing large quantities of aggregate minerals and any associated greenhouse gas emissions. However, through the provision of additional sites to provide significant reserves of sand and gravel there is potential for previously unaffected communities to be subjected to noise pollution from the operation of these developments. Option M4 makes no provision for additional permitted reserves and seeks to address any shortfall in demand through greater use of recycled aggregates and the import of sand and gravel. This approach is likely to have mixed effects (significant positive/significant negative) as it would increase air pollution from mineral importation, however, it would also result in a decrease in air pollution as the use of recycled aggregates can have lower embodied energy in addition to reduced transport emissions where recycled materials are reused in close proximity to the site of reprocessing.

SA Objective	Option M1	Option M2	Option M3	Option M4	Justification
16. Value, protect and enhance soil quality and resources.	+?/-?	+?/-?	+?/--?	+?/-?	Options M1 and M4 will have mixed effects (minor positive/minor negative) as they rely on the one active sand and gravel quarry in Herefordshire to meet demand which will result in continued impacts on the soil environment. However, these options may also have a minor positive effect as they seek to maintain supplies from this permitted reserve therefore not resulting in new mineral extraction sites which may be located on best and most versatile agricultural land, and it may result in benefits to the soil environment through the sites eventual restoration. Option M2 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which will lead to some additional mineral activities, increasing the potential impacts on soils. However, positive effects may be experienced through site restoration which can lead to the enhancement of soil quality. Option M3 will have a mixed effect (minor positive/significant negative) as it seeks to provide significant additional sand and gravel reserves which will lead to more mineral extraction activities, increasing the potential impact on soils (e.g. removal of soil). However, positive effects may be experienced through site restoration which can lead to the enhancement of soil quality.

Crushed rock reserves

Option M5: Make no provision for additional permitted reserves of crushed rock, on the assumption that reserves in the remaining operational quarry will continue to provide a sufficient landbank to meet demand over the period of the Minerals and Waste Local Plan.

Option M6: Make provision for some additional reserves of crushed rock to be permitted, on the assumption that reserves in the remaining operational quarry will not provide a sufficient landbank to meet demand over the period of the Minerals and Waste Local Plan.

Option M7: Make no provision for additional permitted reserves of crushed rock and adopt policy to meet any shortfall in demand through greater use of recycled aggregates and/or imports of crushed rock.

SA Objective	Option M5	Option M6	Option M7	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	+	+	Option M5 makes no provision for additional permitted reserves of crushed rock and therefore it is likely that no further jobs will be generated in the minerals sector in Herefordshire. Option M6 will have a minor positive effect as it will make provision for some additional crushed rock reserves which will generate some employment opportunities for local people in the minerals industry. Option M7 makes no additional permitted reserves of crushed rock however it aims to meet any shortfall in demand through the greater use of recycled aggregates which may increase employment opportunities in the recycled aggregates industry.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+?	+	+?	The NPPF requires a minimum landbank of 10 years for crushed rock provision. Options M5 and M7 will have minor positive effects as it is likely that the two operational crushed rock quarries will ensure that there is a steady and adequate supply of minerals to meet the needs of society in accordance with national policy. This effect is uncertain as there is not an identified landbank of this resource due to the unavailability of data on current sales and permitted reserves, however, the West Midlands AMR 2014 identifies a landbank for 33.3 years (in 2011) which is likely to significantly cover the minimum level required by the NPPF. Furthermore, Option M7 aims to meet any shortfall through the greater use of recycled aggregates which may encourage investment in this sector. Option M6 will have a minor positive effect as it will make some provision for additional reserves

SA Objective	Option M5	Option M6	Option M7	Justification
				which will encourage investment in the minerals sector and help to ensure that there is a steady and adequate supply of minerals to meet the needs of society in accordance with national policy.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+/-	+/-	+/-	Option M5 will have a mixed effect (minor positive/minor negative) as it relies on the two operational crushed rock quarries in Herefordshire to meet demand which may continue to subject the local communities to the negative effects associated with their operation (e.g. dust, noise, vibration and traffic levels). However, this option may have a positive effect as it seeks to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected communities in Herefordshire. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional crushed rock reserves which may have adverse impacts from their operations on health and amenity of nearby communities. However, it is also possible that such developments may improve health and amenity through the delivery of green infrastructure, enhanced public rights of way, or improved access to recreation as part of the development or restoration of sites. Option M7 will have a mixed effect (minor positive/minor negative) as it relies on the two operational crushed rock quarries in Herefordshire to meet demand which may continue to subject the local communities to the negative effects associated with their operation. Furthermore, to meet any additional demand it supports the importation of crushed rock which may also have adverse effects on communities as a result of increased traffic and air pollution. However, as it does not make provision for additional reserves to be permitted and supports meeting any shortfall in demand through greater use of recycled aggregates, this may reduce adverse impacts on health and amenity incurred from the development of new mineral sites.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	+	+	Option M5 makes no provision for additional permitted reserves of crushed rock and therefore it is likely that no further jobs will be generated in the minerals sector in Herefordshire. Option M6 will have a minor positive effect as it will make provision for some additional crushed rock reserves which will generate some employment opportunities for local people in the minerals industry. Option M7 makes no additional permitted reserves of crushed rock however it aims to meet any shortfall in demand through the greater use of recycled aggregates which may increase employment opportunities in the recycled aggregates industry.

SA Objective	Option M5	Option M6	Option M7	Justification
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?/-?	+?/-?	Option M5 will have a mixed effect (minor positive/minor negative) as it supports the continued extraction of minerals from the two existing operational crushed rock quarries (Perton Quarry and Leinthall Quarry) which primarily transport aggregate materials by road, however, it is possible that minerals are also transported by rail (unknown). Planning permission expires for Leinthall Quarry in 2027 and without the provision of additional reserves, in order to ensure there is a steady supply of minerals during the lifetime of the MWLP, it may be necessary to import crushed rock which may increase road traffic, congestion and pollution. However, this effect is uncertain as it is unknown what the current landbank of crushed rock reserves is. Option M6 seeks to provide some additional crushed rock reserves which will reduce the need for importing aggregate minerals, however, it is unknown whether the transport of minerals will utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective. Option M7 will have a mixed effect (minor positive/minor negative) as it supports the continued extraction of minerals from the two existing operational crushed rock quarries (Perton Quarry and Leinthall Quarry) which primarily transport aggregate materials by road, however, it is possible that minerals are also transported by rail (unknown). Furthermore, this option supports the importation of crushed rock which may increase road traffic/congestion/pollution if transported via road. This option also supports the greater use of recycled and secondary aggregates which may reduce road haulage activities if the recovered materials are sourced locally.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?/-?	+?/-?	Options M5 and M7 will have mixed effects (minor positive/minor negative) as they rely on the two existing operational crushed rock quarries to meet demand which could result in continued impacts on heritage assets and their settings. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected heritage designations, and it may also result in benefits for the setting of historic designations through the sites' eventual restoration. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional crushed rock reserves which could result in impacts to the historic environment. However, the provision of additional reserves may also help to ensure that heritage details are retained throughout the built environment. Positive effects may also be achieved in the longer term through the restoration of sites which may enhance historic settings.

SA Objective	Option M5	Option M6	Option M7	Justification
7. Move treatment of waste up the waste hierarchy.	0	0	+	Options M5 and M6 are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective. Option M7 will have a minor positive effect as it supports the greater use of recycled aggregates which diverts waste materials from landfills.
8. Promote sustainable use of mineral resources.	-	-	+/-	Option M5 will have a minor negative effect as it supports the continued extraction of minerals from the existing crushed rock quarries. Option M6 will have a minor negative effect as it supports the provision of some additional crushed rock reserves which will increase extraction of raw primary resources. Option M7 will have mixed effects (minor positive/minor negative) as it promotes greater use of recycled aggregates which will help to conserve the mineral resource in Herefordshire, however, it also supports the continued extraction of crushed rock from the two operational quarries.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?/-?	+?/-?	Option M5 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the two existing operational crushed rock quarries which primarily transport aggregate materials by road thereby increasing greenhouse gas emissions; however it is also possible that they transport minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals at these sites will utilise either sustainable transport modes (e.g. rail) or the road network. Option M7 makes no provision for additional permitted reserves and seeks to address any shortfall in demand through greater use of recycled aggregates and the import of crushed rock. This approach is likely to have mixed effects (minor positive/minor negative) as it may increase greenhouse gas emissions associated with mineral importation, however, it may also result in a decrease in emissions as the use of recycled aggregates can have lower embodied energy in addition to reduced transport emissions where recycled materials are reused in close proximity to the site of reprocessing.

SA Objective	Option M5	Option M6	Option M7	Justification
10. Promote effective restoration and appropriate after use of sites.	+?	+?	+?	Uncertain minor positive effects are identified for all options as they provide opportunities for the restoration of land at former mineral sites.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	--?/+?	+?/-?	--?/+?	Options M5 and M7 will have mixed effects (significant negative/minor positive) as they rely on the two existing operational crushed rock quarries to meet demand which will result in continued impacts on nearby biodiversity and geodiversity, particularly on Perton Roadside Section and Quarry SSSI which is designated for geodiversity. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected habitats and species, and it may result in benefits for biodiversity and geodiversity through the sites eventual restoration. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in impacts to biodiversity and geodiversity assets. Conversely, this option may result in benefits to biodiversity and geodiversity through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	+?/-?	+?/-?	Options M5 and M7 will have mixed effects (minor positive/minor negative) as they rely on the two existing operational crushed rock quarries in Herefordshire to meet demand which will result in continued impacts on the nearby landscape. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected landscapes in Herefordshire, and it may result in benefits to the landscape through the sites' eventual restoration. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which could result in landscape impacts in the short/long term. Conversely, this option may result in benefits to the landscape through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.

SA Objective	Option M5	Option M6	Option M7	Justification
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?/-?	+?/-?	Options M5 and M7 will have mixed effects (minor positive/minor negative) as they rely on the two existing operational crushed rock quarries to meet demand which will continue to operate, involving activities that may negatively affect water resources and quality. However, it is also possible that there are mitigation measures in place which prevent the deterioration of water quality and incorporate water efficiency practices. Therefore, uncertain mixed effects are identified for these options. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional crushed rock reserves which could result in negative impacts on water quality at these locations. However, depending on the site proposal, there may be opportunities to protect the quality of watercourses and incorporate water efficiency practices. All effects are uncertain and will depend on the site proposal (location, design, scale, method of working) which would be assessed at planning application stage.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?/-?	+?/-?	+?/-?	All options will have mixed effects (minor positive/minor negative) as through either the continued operation of the existing crushed rock reserves (options M5 and M7) or the provision of additional crushed rock reserves (option M6), this type of development is suitable in all flood zones, except 3b (the functional floodplain). These sites may also have the potential to increase flood capacity through their eventual restoration.
15. Minimise noise, light, and air pollution.	+?/-?	+?/-?	+?/-?	Option M5 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the two existing operational crushed rock quarries which primarily transport aggregate materials by road thereby increasing air pollution; however it is also possible that they transport minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions. However, through the provision of additional sites there is potential for previously unaffected communities to be subjected to noise pollution from the operation of these developments. Option M7 makes no provision for additional permitted reserves and seeks to address any shortfall in demand through greater use of recycled aggregates and the import of crushed rock.

SA Objective	Option M5	Option M6	Option M7	Justification
				This approach is likely to have mixed effects (minor positive/minor negative) as it would increase air pollution if minerals needed to be imported, however, it would also result in a decrease in air pollution as the use of recycled aggregates can have lower embodied energy in addition to reduced transport emissions where recycled materials are reused in close proximity to the site of reprocessing.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?/-?	+?/-?	Options M5 and M7 will have mixed effects (minor positive/minor negative) as they rely on the two existing operational crushed rock quarries to meet demand which will result in continued impacts on the soil environment. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may be located on best and most versatile agricultural land, and it may result in benefits to the soil environment through the sites' eventual restoration. Option M6 will have a mixed effect (minor positive/minor negative) as it supports the provision of some additional sand and gravel reserves which will lead to some additional mineral activities, increasing the potential impacts on soils. However, positive effects may be experienced through site restoration which can lead to the enhancement of soil quality.

Building stone reserves

Option M8: Make no provision for additional permitted reserves of building stone, on the assumption that the quarries remaining operational over the lifetime of the MWLP will provide sufficient stone to meet demand.

Option M9: Extend some or all of the permissions for existing building stone quarries/delves so that extraction can continue beyond the current required closure date in order to meet future demand.

Option M10: Make provision for additional permitted reserves of building stone in order to be able to continue to meet demand over the lifetime of the Minerals and Waste Local Plan.

SA Objective	Option M8	Option M9	Option M10	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	+?	+	Option M8 makes no provision for additional permitted reserves of building stone and therefore it is likely that no further jobs will be generated in the minerals sector in Herefordshire. Option M9 seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which would generate employment opportunities. However, this effect is uncertain as it would depend on planning permission being granted. Option M10 will have a minor positive effect as it will make provision for additional reserves of building stone which will generate some employment opportunities for local people in the minerals industry.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+/-?	+?	+	There is no landbank for building stone required by NPPF. Option M8 will have a mixed effect (minor positive/minor negative) as it supports the continued operation of the building stone quarries in Herefordshire, however, some of these quarries will cease to be operational during the lifetime of the MWLP, and without additional reserves the demand for buildings stone may outweigh supply. Option M9 seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which would help to ensure there is a steady and adequate supply of buildings stone to meet demand. However, this approach is dependent on whether planning permission will be gained which is uncertain. Option M10 will have a minor positive effect as it will make provision for additional reserves

SA Objective	Option M8	Option M9	Option M10	Justification
				which will encourage investment in the minerals sector and help to ensure that there is a steady and adequate supply of buildings stone to meet the needs of society.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+/-	+?/-?	+/-	Option M8 will have a mixed effect (minor positive/minor negative) as it relies on the existing building stone quarries in Herefordshire to meet demand which may continue to subject the local communities to the negative effects associated with their operation (e.g. dust, noise, vibration and traffic levels). However, it should be noted that building stone quarries are small scale and have a far lower rate of extraction when compared to other quarries and therefore their impacts may be less. This option may also have a positive effect as it seeks to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected communities in Herefordshire. Option M9 will have a mixed effect (minor positive/minor negative) as it seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which may continue to subject these local communities to the negative effects associated with their operation. This option may also have a positive effect as it seeks to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected communities in Herefordshire. However, this approach is dependent on whether planning permission will be gained which is uncertain. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional permitted reserves which may have adverse impacts from their operations on health and amenity of nearby communities. However, it is also possible that such developments may improve health and amenity through the delivery of green infrastructure, enhanced public rights of way, or improved access to recreation as part of the development or restoration of sites.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	+?	+	Option M8 makes no provision for additional permitted reserves of building stone and therefore it is likely that no further jobs will be generated in the minerals sector in Herefordshire. Option M9 seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which would generate employment opportunities. However, this effect is uncertain as it would depend on planning permission being granted. Option M10 will have a minor positive effect as it will make provision for additional reserves of building stone which will generate some employment opportunities for local people in the minerals industry.

SA Objective	Option M8	Option M9	Option M10	Justification
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?/-?	+?/-?	Option M8 will have a mixed effect (minor positive/minor negative) as it supports the continued extraction of minerals from the existing active quarries which primarily transport aggregate materials by road, however, it is possible that minerals are also transported by rail (unknown). Planning permission expires for a number of quarries and without the provision of additional reserves, in order to ensure there is a steady supply of building stone during the lifetime of the MWLP, it may be necessary to import building stone which may increase road traffic, congestion and pollution. These effects are uncertain as it is unknown whether the amount of building stone reserves in Herefordshire is sufficient to meet future demand. Option M9 seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which may reduce the need for importing aggregate minerals, however, it is unknown whether the transport of minerals would utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective. The effects are uncertain as it would depend on planning permission being granted. Option M10 seeks to provide additional buildings stone reserves which will reduce the need for importing aggregate minerals, however, it is unknown whether the transport of minerals will utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?/-?	+?/-?	Options M8 and M9 will have mixed effects (minor positive/minor negative) as they rely either on the existing building stone quarries to meet demand or on planning permission to extend the operational life of some or all of these quarries to meet demand, which could result in continued impacts on heritage assets and their settings. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected heritage designations. Furthermore, buildings stone is vital in retaining the local character of buildings and settlements. Uncertain effects are identified for Option M9 as it would depend on planning permission being granted. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional building stone reserves which could result in impacts to the historic environment. However, the provision of additional reserves may also help to ensure that heritage details are retained throughout the built environment. Positive effects may also be achieved in the longer term through the restoration of sites which may enhance historic settings.

SA Objective	Option M8	Option M9	Option M10	Justification
7. Move treatment of waste up the waste hierarchy.	0	0	0	All options are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective.
8. Promote sustainable use of mineral resources.	-	-?	-	All options will have minor negative effects as they support the extraction of building stone. Uncertain effects are identified for Option M9 as it is dependent on planning permission being granted.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?/-?	+?/-?	Option M8 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the existing operational building stone quarries which primarily transport aggregate materials by road thereby increasing greenhouse gas emissions; however it is also possible that they transport minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M9 will have a mixed effect (minor positive/minor negative) as it seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which may reduce the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals would utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective. The effects are uncertain as it would depend on planning permission being granted. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional buildings stone reserves thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals at these sites will utilise either sustainable transport modes (e.g. rail) or the road network.
10. Promote effective restoration and appropriate after use of sites.	+?	+?	+?	Uncertain minor positive effects are identified for all options as they provide opportunities for the restoration of land at former mineral sites.
11. Value,	+?/-?	+?/-?	+?/-?	Options M8 and M9 will have mixed effects (minor positive/minor negative) as they rely either on

SA Objective	Option M8	Option M9	Option M10	Justification
maintain, restore and expand county biodiversity and geodiversity.				the existing building stone quarries to meet demand or on planning permission to extend the operational life of some or all of these quarries to meet demand, which could result in continued impacts on nearby biodiversity and geodiversity. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may have negative impacts on previously unaffected habitats and species, and it may result in benefits for biodiversity and geodiversity through the sites eventual restoration. Uncertain effects are identified for Option M9 as it would depend on planning permission being granted. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional building stone reserves which could result in impacts to biodiversity and geodiversity assets. Conversely, this option may result in benefits to biodiversity and geodiversity through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	+?/-?	+?/-?	Options M8 and M9 will have mixed effects (minor positive/minor negative) as they rely either on the existing building stone quarries to meet demand or on planning permission to extend the operational life of some or all of these quarries to meet demand which will result in continued impacts on the nearby landscape. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites or negative impacts on previously unaffected landscapes in Herefordshire, and it may result in benefits to the landscape through the sites' eventual restoration. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional building stone reserves which could result in landscape impacts in the short/long term. Conversely, this option may result in benefits to the landscape through site restoration. Effects are uncertain as it will depend on the scale, location and design of the extraction sites.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?/-?	+?/-?	Options M8 and M9 will have mixed effects (minor positive/minor negative) as they rely either on the existing building stone quarries to meet demand or on planning permission to extend the operational life of some or all of these quarries to meet demand which may involve activities that negatively affect water resources and quality. However, it is also possible that there are mitigation measures in place or there will be measures in place (once permission is granted) which prevent the deterioration of water quality and incorporate water efficiency practices. Therefore, uncertain mixed effects are identified for these options.

SA Objective	Option M8	Option M9	Option M10	Justification
				Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional building stone reserves which could result in negative impacts on water quality at these locations. However, depending on the site proposal, there may be opportunities to protect the quality of watercourses and incorporate water efficiency practices. All effects are uncertain and will depend on the site proposal (location, design, scale, method of working) which would be assessed at planning application stage.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?/-?	+?/-?	+?/-?	All options will have mixed effects (minor positive/minor negative) as through either the operation of the existing building stone reserves or the provision of additional building stone reserves, this type of development is suitable in all flood zones, except 3b (the functional floodplain). These sites may also have the potential to increase flood capacity through their eventual restoration.
15. Minimise noise, light, and air pollution.	+?/-?	+?/-?	+?/-?	Option M8 will have a mixed effect (minor negative/minor positive) as it supports the continued extraction of minerals from the existing operational building stone quarries which primarily transport aggregate materials by road thereby increasing air pollution; however it is also possible that they transport minerals further afield using sustainable transport modes resulting in mixed effects for this objective. Option M9 will have a mixed effect (minor positive/minor negative) as it seeks to extend some or all of the permissions for existing building stone quarries to meet future demand which may reduce the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals would utilise either sustainable transport modes (e.g. rail) or the road network and therefore, mixed effects (minor positive/minor negative) are identified for this objective. The effects are uncertain as it would depend on planning permission being granted. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional buildings stone reserves thereby reducing the need for importing aggregate minerals and their associated greenhouse gas emissions, however, it is unknown whether the transport of minerals at these sites will utilise either sustainable transport modes (e.g. rail) or the road network. Through the provision of additional sites there is also potential for previously unaffected communities to be subjected to noise pollution from the operation of these

SA Objective	Option M8	Option M9	Option M10	Justification
				developments.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?/-?	+?/-?	Options M8 and M9 will have mixed effects (minor positive/minor negative) as they rely either on the existing building stone quarries to meet demand or on planning permission to extend the operational life of some or all of these quarries to meet demand which will result in continued impacts on the soil environment. However, these options may also have a minor positive effect as they seek to maintain supplies from these permitted reserves therefore not resulting in new mineral extraction sites which may be located on best and most versatile agricultural land, and it may result in benefits to the soil environment through the sites' eventual restoration. Option M10 will have a mixed effect (minor positive/minor negative) as it supports the provision of additional building stone reserves which will lead to additional mineral activities, increasing the potential impacts on soils. However, positive effects may be experienced through site restoration which can lead to the enhancement of soil quality.

Hydrocarbon activity

Option M11: Adopt specific policies to provide a basis for determining proposals for hydrocarbon exploration, appraisal and extraction on the basis that this could become a possibility within the lifetime of the Minerals and Waste Local Plan.

Option M12: Do not adopt specific policies for hydrocarbon exploration, appraisal and extraction on the basis that this is unlikely to occur within the lifetime of the Minerals and Waste Local Plan, relying instead on development management policies to determine future applications. This option recognises that associated policies may be added in a periodic review of the MWLP prior to 2031.

SA Objective	Option M11	Option M12	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	0	Both options are unlikely to support the provision of employment opportunities and therefore, negligible effects are identified for this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+?	+?/-?	An uncertain minor positive effect is expected for Option M11 as the policies can require that proposals for hydraulic fracturing, shale gas or coal bed methane should not have adverse economic impacts on other sectors such as agriculture and tourism. Option M12 does not support the adoption of specific policies and therefore hydrocarbon developments may have negative impacts on other industries. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential negative impacts on communities from seismic activity (from energy extraction and fluid injection processes), noise, dust, transport movements and emissions which are associated with this type of development. An uncertain

SA Objective	Option M11	Option M12	Justification
demographically.			minor positive effect is therefore expected for this objective. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on the health, wellbeing and amenity of communities as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	0	Both options are unlikely to reduce poverty and social inclusion and therefore, negligible effects are identified for this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which may limit potential negative impacts on traffic, congestion and pollution. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on traffic congestion and pollution as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
6. Value, protect	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals

SA Objective	Option M11	Option M12	Justification
and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.			for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential negative impacts on heritage assets or their setting. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on heritage assets or their settings as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
7. Move treatment of waste up the waste hierarchy.	0	0	Both options are unlikely to move the treatment of waste up the waste hierarchy and therefore, negligible effects are identified for this SA objective.
8. Promote sustainable use of mineral resources.	0	0	Both options are unlikely to promote the sustainable use of mineral resources and therefore, negligible effects are identified for this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which may limit potential negative impacts such as the release of methane from shale gas operations (from pipeline leaks). Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on air and noise pollution as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the

SA Objective	Option M11	Option M12	Justification
			MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
10. Promote effective restoration and appropriate after use of sites.	+?	+?/-?	Option M11 supports the inclusion of policies in the MWLP relating to hydrocarbon exploration, appraisal and extraction which may include policies relating to site restoration. An uncertain minor positive effect is identified for this objective. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction and therefore does not promote the effective restoration of sites. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 which may include policies relating to appropriate after uses and restoration of sites. Therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential impacts on biodiversity such as habitat fragmentation and disturbance. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on biodiversity and geodiversity assets as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential landscape and visual impacts from developments. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and

SA Objective	Option M11	Option M12	Justification
spaces.			extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on the local setting, character and wider landscape as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential negative impacts on the water environment such as disruption and pollution (e.g. from fracturing chemicals) of surface water and groundwater systems and flows, and abstraction of water necessary for the hydraulic fracturing of shale gas. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on the water environment as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit hydrocarbon developments in areas at risk of flooding. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes won't be located in

SA Objective	Option M11	Option M12	Justification
			areas at risk of flooding. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
15. Minimise noise, light, and air pollution.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which may limit potential negative impacts such as the release of methane from shale gas operations and noise pollution from trucks, drills and compressor stations. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on air and noise pollution as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are expected for this SA objective.
16. Value, protect and enhance soil quality and resources.	+?	+?/-?	Option M11 ensures that there are policies in place over the lifetime of the MWLP to determine proposals for hydrocarbon exploration, appraisal and extraction should the Government issue further rounds of licencing and identify blocks in Herefordshire. This plan-led approach would ensure that any future proposals for hydrocarbon schemes are assessed for their compliance against specific policies relating to hydrocarbon exploration, appraisal and extraction which is likely to limit potential negative impacts on soils such as loss of best and most valuable agricultural land, physical disturbances due to construction, contamination, and impacts to existing land uses such as agriculture. Option M12 does not support the adoption of specific policies for hydrocarbon exploration, appraisal and extraction, and instead relies on development management policies to determine future applications. It is considered that this approach would provide less certainty that hydrocarbon schemes would not have adverse impacts on the soil environment as they will only be assessed against generic development management policies which may lack the necessary detail to assess the impacts of hydrocarbon proposals. However, this option also recognises that associated policies may be added in a periodic review of the MWLP prior to 2031 and therefore, mixed effects (uncertain minor positive/uncertain minor negative) are

SA Objective	Option M11	Option M12	Justification
			expected for this SA objective.

Site allocation for future mineral extraction

Option M13: Allocate suitable sites from those put forward by landowners and operators in the call for sites which comply with the policies in the Minerals and Waste Local Plan.

Option M14: Do not allocate sites but identify areas of search within which applications for development will be looked upon favourably as long as they comply with the policies in the Minerals and Waste Local Plan.

Option M15: Do not allocate sites and do not identify areas of search, but assess any applications regardless of location on the basis of compliance with policies in the Minerals and Waste Local Plan.

Option M16: Allocate suitable sites from those put forward in the call for sites and identify areas of search within which applications for development will be looked upon favourably, but also allow for proposals for development to come forward regardless of location.

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+/-	+/-	-	++	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The allocation of these sites will generate employment opportunities in the minerals sector in Herefordshire. However, as the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable which have not been included in the recent call for sites. This approach would therefore not allow for the flexibility for the development of these sites for mineral extraction which would otherwise have generated employment opportunities for local people. An overall mixed effect (minor positive/minor negative) is identified for this SA objective. Option M14 would not allocate sites but identify areas of search within which applications for development would be looked upon favourably as long as they comply with the policies in the MWLP. A minor positive effect is expected as it encourages investment in the minerals sector which will generate employment opportunities by providing some degree of prior information about where in the county such developments might be permitted. However, a minor negative effect is also expected as it is possible that it may serve to restrict development in areas outside the areas of search that are nevertheless commercially and operationally viable which would

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					otherwise have generated employment opportunities for local people. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for minerals in the County as well as allowing for proposals at sites which only may become economically viable in the future, it would be less plan-led and would fail to provide certainty about the future supply of minerals and therefore future employment provision in this sector. A minor negative effect is expected on this SA objective. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This approach would provide a degree of certainty in relation to the development of new mineral extraction sites which would support the economic growth of this sector and the provision of new employment opportunities. As the plan period extends up to 2031, this approach would also provide flexibility in allocating sites that become available and economically viable in the future which may also generate employment opportunities for local people. A significant positive effect is identified for this objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+/-	+/-	-	++	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. This approach provides a level of certainty as to where mineral extraction will take place over the lifetime of the plan. The allocation of these sites will support the economic growth of the minerals sector and ensure there is a steady and adequate supply of minerals to meet the needs of society. However, as the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable which have not been included in the recent call for sites. This approach would therefore not allow for the flexibility for the development of these sites for mineral extraction thereby discouraging investment in the minerals sector in Herefordshire. An overall mixed effect (minor positive/minor negative) is identified for this SA objective. Option M14 would not allocate sites but identify areas of search within which applications for development would be looked upon favourably as long as they comply with the policies in the MWLP. A minor positive effect is expected as it encourages investment in the minerals sector by providing some degree of prior information about where in the county such developments might be permitted. However, a minor negative

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					effect is also expected as it is possible that it may serve to restrict development in areas outside the areas of search that are nevertheless commercially and operationally viable. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for minerals in the County as well as allowing for proposals at sites which only may become economically viable in the future, it would be less plan-led and would fail to provide certainty that a steady and adequate supply of minerals would be provided over the plan period. A minor negative effect is expected on this SA objective. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This approach would provide a degree of certainty in relation to the development of new mineral extraction sites which would support investment and economic growth of this sector. As the plan period extends up to 2031, this approach would also provide flexibility in allocating sites that become available and economically viable in the future. A significant positive effect is identified for this objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which could result in continued impacts on the health and amenity local communities (e.g. dust, noise, vibration and traffic levels). However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may have negative impacts on previously unaffected communities. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of settlements. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are not in close proximity to settlements and

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					communities. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to settlements and communities, but would also allow for some more speculative proposals to come forward which may negatively impact on the health and amenity of communities as a result of their operation.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+/-	+/-	-	++	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The allocation of these sites will generate employment opportunities in the minerals sector in Herefordshire. However, as the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable which have not been included in the recent call for sites. This approach would therefore not allow for the flexibility for the development of these sites for mineral extraction which would otherwise have generated employment opportunities for local people. An overall mixed effect (minor positive/minor negative) is identified for this SA objective. Option M14 would not allocate sites but identify areas of search within which applications for development would be looked upon favourably as long as they comply with the policies in the MWLP. A minor positive effect is expected as it encourages investment in the minerals sector which will generate employment opportunities by providing some degree of prior information about where in the county such developments might be permitted. However, a minor negative effect is also expected as it is possible that it may serve to restrict development in areas outside the areas of search that are nevertheless commercially and operationally viable which would otherwise have generated employment opportunities for local people. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for minerals in the County as well as allowing for proposals at sites which only may become economically viable in the future, it would be less plan-led and would fail to provide certainty about the future supply of minerals and therefore future employment provision in this sector. A minor negative effect is expected on this SA objective. Option M16 would allocate suitable sites from those put forward in the call for sites,

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					identify areas of search, and allow proposals for development to come forward regardless of location. This approach would provide a degree of certainty in relation to the development of new mineral extraction sites which would support the economic growth of this sector and the provision of new employment opportunities, thereby reducing employment deprivation in the county. As the plan period extends up to 2031, this approach would also provide flexibility in allocating sites that become available and economically viable in the future which may also generate employment opportunities for local people. A significant positive effect is identified for this objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. These sites may transport minerals using either sustainable transport modes (e.g. rail) or the road network, which is unknown at this stage. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for mineral sites to be allocated that are close to sustainable modes of transport (rail). However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are within close proximity to sustainable modes of transport. However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to sustainable modes of transport, but would also allow for some more speculative proposals to come forward.

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which could result in continued impacts on the built and historic environment. However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may have negative impacts on previously unaffected heritage assets and their settings. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of heritage assets and their settings. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are less sensitive in terms of heritage assets and their settings. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to heritage assets, but would also allow for some more speculative proposals to come forward.
7. Move treatment of waste up the waste hierarchy.	0	0	0	0	It is not expected that any of the options considered would have a direct impact upon this SA objective.
8. Promote sustainable use of mineral resources.	0	0	0	0	All options will have negligible effects as they do not safeguard or promote the efficient use of mineral resources.
9. Reduce Herefordshire's vulnerability to the	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. These sites may transport minerals using either sustainable transport modes (e.g. rail) which would

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
impacts of climate change as well as its contribution to the problem.					reduce greenhouse gas emissions or the road network which would contribute to air pollution. The effects are uncertain as the method of transportation is unknown at this stage. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for mineral sites to be allocated that are close to sustainable modes of transport (rail) which would reduce greenhouse gas emissions. However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are within close proximity to sustainable modes of transport which would reduce greenhouse gas emissions. However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to sustainable modes of transport, but would also allow for some more speculative proposals to come forward which may use the road network thereby increasing greenhouse gas emissions.
10. Promote effective restoration and appropriate after use of sites.	0	0	0	0	It is not expected that any of the options considered would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
biodiversity and geodiversity.					could result in continued impacts on nearby biodiversity and geodiversity assets. However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may have negative impacts on previously unaffected habitats and species. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of important areas of biodiversity and geodiversity. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral development at locations that are less sensitive in terms of geodiversity and biodiversity. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to areas of importance for biodiversity and geodiversity but would also allow for some more speculative proposals to come forward.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which could result in continued impacts on the landscape character of the areas where they are located. However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may have negative impacts on previously unaffected landscapes. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of areas that are of importance in terms of landscape character, particularly the Wye Valley AONB and Malvern Hills AONB. Option M15 would not allocate sites in Herefordshire but would assess any applications

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are less sensitive in terms of landscape character. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to important landscapes, including the Wye Valley AONB and Malvern Hills AONB, but would also allow for some more speculative proposals to come forward.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which could result in continued adverse impacts on water resources. However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may have negative impacts on previously unaffected water resources. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of vulnerable surface and ground water resources. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are less sensitive in terms of water quality. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to vulnerable surface and groundwater resources, but would also allow for some more speculative proposals to come forward.

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The sites proposed for inclusion in the MWLP are for sand and gravel reserves or crushed rock reserves of which sand and gravel are compatible in all flood zones while crushed rock reserves are permitted in all flood zones except 3b (the functional flood plain). Effects are uncertain as it will depend on the location and type of development. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of areas at risk of flooding. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are less sensitive in terms of flooding. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to flood risk areas, but would also allow for some more speculative proposals to come forward.
15. Minimise noise, light, and air pollution.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. These sites may transport minerals using either sustainable transport modes (e.g. rail) which would reduce air pollution or the road network which would contribute to air pollution. The effects are uncertain as the method of transportation is unknown at this stage. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for mineral sites to be allocated that are close to sustainable modes of transport (rail) which would reduce air pollution. However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M15 would not allocate sites in Herefordshire but would assess any applications

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote mineral developments at locations that are within close proximity to sustainable modes of transport which would reduce air pollution. However, as minerals need to be worked where they occur, this effect is uncertain as it may not be economically viable to extract minerals only from sites that are near sustainable transport modes. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to sustainable modes of transport, but would also allow for some more speculative proposals to come forward which may use the road network thereby increasing greenhouse gas emissions.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?	-?	+?/-?	Option M13 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. The majority of the sites put forward are extensions to existing mineral developments which could result in continued impacts on the quality and stability of soil resources at these locations. However, this option may also have a minor positive effect as it seeks to maintain supplies from these reserves therefore reducing the number of new mineral extraction sites that may be located on best and most versatile agricultural land. Option M14 seeks to identify suitable sites located in geographically extensive areas of search which will provide a greater choice of location options for potential mineral developments thereby allowing for the avoidance of best and most versatile agricultural land. Option M15 would not allocate sites in Herefordshire but would assess any applications for mineral extraction in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to be able to promote mineral developments at locations that do not contain high quality agricultural soil. Option M16 would allocate suitable sites from those put forward in the call for sites, identify areas of search, and allow proposals for development to come forward regardless of location. This combined approach would provide some degree of certainty in terms of the allocation of sites in relation to areas that contain best and most

SA Objective	Option M13	Option M14	Option M15	Option M16	Justification
					versatile agricultural land, but would also allow for some more speculative proposals to come forward.

Safeguarding mineral sites

Option M17: Safeguard existing minerals sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent mineral operations at those sites, do not include a buffer around the site.

Option M18: Safeguard existing minerals sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent mineral operations at those sites, including a buffer around the site.

SA Objective	Option M17	Option M18	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+/-?	+/-?	Minor positive effects are expected for both options as they seek to safeguard existing mineral sites and their associated facilities from other development that may have the potential to constrain or prevent mineral operations, which will support the development and growth of the minerals economy in Herefordshire and generate employment opportunities for local people. A minor negative effect (as part of an overall mixed effect) is expected for Option M18 as including a buffer around mineral sites may potentially restrict non-mineral developments which could have a negative effect on economic growth and employment opportunities. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option M17 as the omission of a buffer may lead to non-mineral developments being located in close proximity to the mineral sites which may sterilise the nearby mineral resources and thereby limit the growth of the minerals economy and reduce the number of people employed in the sector.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+/-?	+/-?	Minor positive effects are expected for both options as they seek to safeguard existing mineral sites and their associated facilities from other development that may have the potential to constrain or prevent mineral operations, which will support the development and growth of the minerals economy in Herefordshire. A minor negative effect (as part of an overall mixed effect) is expected for Option M18 as including a buffer around mineral sites may potentially restrict non-mineral developments which could have a negative effect on economic growth. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option M17 as the omission of a buffer may lead to non-mineral developments being located in close proximity to the mineral sites which may sterilise the nearby mineral resources and thereby limit the growth of the minerals economy.
3. Protect and improve the health	-?	+?/-?	By safeguarding existing mineral sites and their associated facilities, the effects associated with these operations (e.g. dust, noise, vibration and traffic levels) may have an adverse impact on health and

SA Objective	Option M17	Option M18	Justification
of the people of Herefordshire, and reduce disparities in health geographically and demographically.			wellbeing. Option M18 will have a minor positive effect as including a buffer ensures that there is sufficient distance between mineral activities and other forms of development (e.g. housing) which may protect residents from the noise and dust created from mineral working.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+/-?	+/-?	Minor positive effects are expected for both options as they seek to safeguard existing mineral sites and their associated facilities from other development that may have the potential to constrain or prevent mineral operations, which will support the development and growth of the minerals economy in Herefordshire and generate employment opportunities for local people. A minor negative effect (as part of an overall mixed effect) is expected for Option M18 as including a buffer around mineral sites may potentially restrict non-mineral developments which could have a negative effect on economic growth and employment opportunities. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option M17 as the omission of a buffer may lead to non-mineral developments being located in close proximity to the mineral sites which may sterilise the nearby mineral resources and thereby limit the growth of the minerals economy and reduce the number of people employed in the sector.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing mineral sites and their associated facilities, including transport facilities, which may either support the transportation of minerals by sustainable modes (e.g. rail) or via the road network.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing mineral sites which may lead to more mineral extraction activity that could have an adverse impact on the historic environment. A minor positive effect is expected for Option M18 as it includes a buffer zone which can ensure that there is sufficient distance between mineral sites and sensitive land uses such as sites of historic significance.

SA Objective	Option M17	Option M18	Justification
and the county's historic environment and cultural heritage.			
7. Move treatment of waste up the waste hierarchy.	0	0	Both options are not likely to have an effect on moving the treatment of waste up the waste hierarchy and therefore, negligible effects are expected for this SA objective.
8. Promote sustainable use of mineral resources.	++/-?	++/-?	Both options will have significant positive effects as they seek to safeguard existing mineral sites and their associated facilities from other development that may have the potential to constrain or prevent mineral operations. A minor negative effect is also expected for Option M17 as the omission of a buffer may lead to non-mineral developments being located in close proximity to the mineral sites which may sterilise the nearby mineral resources. A minor negative effect is also expected for Option M18 as applying a standard buffer may risk sterilising mineral resources as different mineral developments and land uses require different buffers to safeguard their resources.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing mineral sites and their associated facilities, including transport facilities, which may either support the transportation of minerals by sustainable modes (e.g. rail) thereby reducing greenhouse gas emissions or via the road network which would increase emissions.
10. Promote effective restoration and appropriate after use of sites.	0	0	Both options are not likely to have an effect on the effective restoration of sites and therefore, negligible effects are expected for this SA objective.
11. Value, maintain, restore and expand county biodiversity and	++/-?	++/-?	Minor negative effects are expected for both options as they seek to safeguard existing mineral sites which may lead to more mineral extraction activity that could have an adverse impact on biodiversity. Significant positive effects are also identified as, through safeguarding, geological formations may be preserved and in some instances created, and this should contribute to maintaining and enhancing geodiversity.

SA Objective	Option M17	Option M18	Justification
geodiversity.			Furthermore, Option M18 supports the allocation of a buffer zone which can ensure that there is sufficient distance between mineral sites and sensitive land uses such as nature conservation sites.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing mineral sites which may lead to more mineral extraction activity that could have an adverse impact on landscape character and quality. A minor positive effect is expected for Option M18 as it includes a buffer zone which can safeguard the character and appearance of the area surrounding the mineral site.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing mineral sites which may lead to more mineral extraction activity that could have a negative impact on the quality and quantity of water resources including groundwater aquifers. A minor positive effect is expected for Option M18 as it includes a buffer zone which can safeguard vulnerable surface and ground water resources surrounding the mineral site.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	-?	+?/-?	Objective 1 seeks to safeguard mineral and waste resources, which depending on the type of the operation, may increase the risk of flooding (e.g. mineral working/processing facilities are suitable in all Flood Zones excluding 3b, and sand and gravel working is suitable in all Flood Zones). A minor positive effect is expected for Option M18 as it includes a buffer zone which can safeguard areas at risk of flooding surrounding the mineral site.
15. Minimise noise, light, and air pollution.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing mineral sites and their associated facilities, including transport facilities, which may either support the transportation of minerals by sustainable modes (e.g. rail) thereby reducing air pollution or via the road network which would increase air pollution. Both options seek to safeguard existing mineral sites which may lead to more mineral extraction activity that could increase dust, light, and noise pollution.
16. Value, protect	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing mineral sites and

SA Objective	Option M17	Option M18	Justification
and enhance soil quality and resources.			their associated facilities which may lead to more mineral extraction activities, increasing the potential impact on soils (e.g. removal of soil, contamination from leaching of chemical and oil spillages and leachate break-out). A minor positive effect is expected for Option M18 as it includes a buffer zone which can safeguard areas of best and most versatile agricultural land surrounding the mineral site.

Waste

Capacity for managing LACW

Option W1: Do not identify sites to manage LACW over the lifetime of the MWLP. Monitor quantities of LACW generated and keep forecasts of future generation under review. Include policy within the MWLP to allow proposals to come forward for new capacity to manage LACW in the event that this is required in the future.

SA Objective	Option W1	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	-	By failing to identify sites for the management of LACW over the lifetime of the MWLP and relying only on policy to allow for new proposals of this nature to come forward this option would provide less certainty with regards the development of new waste management facilities in Herefordshire. As such there may be an adverse impact on the potential contribution such facilities could have in terms of employment opportunities. A minor negative effect is expected on this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	-	By failing to identify sites for the management of LACW over the lifetime of the MWLP and relying only on policy to allow for new proposals of this nature to come forward this option would provide less certainty with regards the development of new waste management facilities in Herefordshire. As such there may be an adverse impact upon local economic growth in the waste management sector and therefore a minor negative effect is expected on this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	-?	This option proposes a more reactive approach to future development which could increase the potential for developments to have adverse impacts on the health and amenity of communities (e.g. odour, noise, traffic). Furthermore, this option supports the continued transportation of LACW for treatment and disposal to areas outside of Herefordshire which will continue to subject communities to transport emissions.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	-	By failing to identify sites for the management of LACW over the lifetime of the MWLP and relying only on policy to allow for new proposals of this nature to come forward this option would provide less certainty with regards the development of new waste management facilities in Herefordshire. As such there may be an adverse impact on the potential contribution such facilities could have in terms of employment opportunities. A minor negative effect is expected on this SA objective.

SA Objective	Option W1	Justification
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	-	By failing to identify sites for the management of LACW over the lifetime of the MWLP and relying only on policy to allow for new proposals of this nature to come forward this option would provide less certainty with regards the development of new waste management facilities in Herefordshire. There is currently no residual waste treatment or disposal capacity for LACW in the County however there is a historical precedent for working with Worcestershire County Council to manage the authorities' LACW. Relying upon facilities outside of the County to manage LACW is likely to result in a higher number of vehicles on the road thereby increasing road traffic, congestion and pollution. As such a minor negative effect is expected on this SA objective.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which may be sensitive in terms of their character or the setting of identified heritage assets. Effects are uncertain as it will depend on the location, scale and design of the development.
7. Move treatment of waste up the waste hierarchy.	--/+	This option would not identify sites for the management of LACW over the lifetime of the MWLP meaning that appropriate facilities to allow for the treatment of waste higher up the waste hierarchy would not be delivered through a more plan-led approach. There is currently no residual waste treatment or disposal capacity for LACW in Herefordshire although the Council has historically worked with Worcestershire County Council to manage effectively the County's' LACW. However while this may mean that the provision of facilities to allow for recycling and energy recovery for example would potentially lack certainty, providing for policy to allow for new proposals of this nature to come forward may help the MWLP be more reactive and flexible in terms of any change in waste generation over the plan period. An overall mixed effect (minor positive/significant negative) is therefore expected on this SA objective.
8. Promote sustainable use of mineral resources.	0	It is not expected that this option would directly impact upon the SA objective in question.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to	--/+?	This option would not identify sites for the management of LACW over the lifetime of the MWLP meaning that appropriate facilities to allow for the treatment of waste higher up the waste hierarchy would not be delivered through a more plan-led approach. There is currently no residual waste treatment or disposal capacity for LACW in Herefordshire although the Council

SA Objective	Option W1	Justification
the problem.		has historically worked with Worcestershire County Council to manage effectively the County's' LACW. However while this may mean that the provision of facilities to allow for recycling and energy recovery for example would potentially lack certainty, providing for policy to allow for new proposals of this nature to come forward may help the MWLP be more reactive and flexible in terms of any change in waste generation over the plan period. As such the potential for increased levels of recycling and an overall reduction of emissions from landfill are likely to be impacted upon to varying extents as a result of this approach. An overall mixed effect (minor positive/significant negative) is therefore expected on this SA objective.
10. Promote effective restoration and appropriate after use of sites.	0	It is not expected that this option would directly impact upon the SA objective in question.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which may be may be of importance in terms of local species and habitats and designated biodiversity and geodiversity sites. Effects are uncertain as it will depend on the location, scale and design of the development.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which may be sensitive in terms of their landscape character. This consideration is of particular relevance given that the Wye Valley AONB and Malvern Hills AONB both extend into Herefordshire. Effects are uncertain as it will depend on the location, scale and design of the development.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which may be sensitive in terms of vulnerable surface and ground water.
14. Reduce the risk of flooding and the resulting detriment to public well-	-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This

SA Objective	Option W1	Justification
being, the economy and the environment.		approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas that are at risk of flooding.
15. Minimise noise, light, and air pollution.	--/+?	Continuing to export large quantities of waste to Worcestershire by road will contribute to transport emissions thereby impacting on air quality in the county. The uncertain minor positive effect is identified as this option allows for proposals to come forward in the future which may include proposals for recycling of bio-waste (food and garden waste) which would help to reduce greenhouse gas emissions generated by bio-waste at landfill sites.
16. Value, protect and enhance soil quality and resources.	+?/-?	This option would not identify sites for the management of LACW over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which contain soils that are of higher agricultural value. Furthermore, this approach would be less able to direct new waste management facilities to brownfield land in preference to greenfield locations. This approach allows for proposals to come forward for new capacity to manage LACW such as the separate collection of bio-waste for recycling (food and garden waste) which would improve the nutrient content of soils thereby improving quality. Effects are uncertain as it will depend on the location, scale and design of the development.

Capacity for managing C&I waste

Option W2: Identify and allocate sites suitable for accommodating C&I waste recycling/recovery/disposal capacity.

Option W3: Do not allocate sites to provide new capacity to manage C&I waste over the lifetime of the MWLP. Monitor quantities of C&I waste generated and keep forecasts of future generation under review. Include policy within the MWLP to allow proposals to come forward for new residual C&I waste treatment/disposal capacity in the event that this is required in the future.

SA Objective	Option W2	Option W3	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+	-	Option W2 would identify and allocate sites to accommodate C&I waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. This may help to increase the likelihood of employment opportunities being provided in the waste management sector and therefore a minor positive effect is expected on this SA objective. Option W3 would not allocate sites for the accommodation of C&I waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. As such there may be an adverse impact on the potential contribution such facilities could have in terms of employment opportunities. A minor negative effect is expected on this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+	-	Option W2 would identify and allocate sites to accommodate C&I waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. This may help to increase the likelihood of economic growth in the waste management sector and therefore a minor positive effect is expected on this SA objective. Option W3 would not allocate sites for the accommodation of C&I waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. As such there may be an adverse impact on the potential contribution such facilities could have in terms of local economic growth. A minor negative effect is expected on this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health	+?/-?	-?	Option W2 seeks to identify and allocate sites suitable for accommodating C&I waste recycling/recovery/disposal which, dependent on the nature of the processes involved, may have adverse effects from their operations on the health and amenity of communities (e.g. odour, noise, traffic levels). However, this approach would reduce the need for transporting C&I waste further afield for processing which would reduce negative effects such as air pollution and emissions thereby improving the health and wellbeing of residents. Furthermore, the plan –led approach proposed by this option may promote

SA Objective	Option W2	Option W3	Justification
geographically and demographically.			residual C&I waste developments at locations that are at an appropriate distance from residential properties. Option W3 proposes a more reactive approach to future development which could increase the potential for developments to have adverse impacts on the health and amenity of communities (e.g. odour, noise, traffic). Furthermore, this option supports the continued transportation of residual C&I waste for treatment and disposal to areas outside of Herefordshire which will continue to subject communities to transport-related emissions.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+	-	Option W2 would identify and allocate sites to accommodate C&I waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. This may help to increase the likelihood of employment opportunities being provided in the waste management sector and therefore a minor positive effect is expected on this SA objective as it would help to reduce employment deprivation. Option W3 would not allocate sites for the accommodation of C&I waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. As such there may be an adverse impact on the potential contribution such facilities could have in terms of employment opportunities. A minor negative effect is expected on this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+/-	-	Option W2 would identify and allocate sites to accommodate C&I waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. It has been identified that the remaining potential capacity requirement for C&I waste treatment is not insignificant and the allocation of sites could help to appropriately meet this requirement. This approach is likely to reduce the requirement for cross boundary vehicular traffic associated with waste management. However, the allocation of new sites for waste treatment have the potential to generate large numbers of vehicle movements which would contribute to road traffic, congestion and pollution. Option W3 would not allocate sites for the accommodation of C&I waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. This approach is likely to increase the requirement for C&I waste to be transported outside of the County to be processed. A minor negative effect is therefore expected on this SA objective.
6. Value, protect and enhance the character and built quality of	+	-	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of their character or the setting of identified heritage assets. A minor positive

SA Objective	Option W2	Option W3	Justification
settlements and neighbourhoods and the county's historic environment and cultural heritage.			effect is therefore expected on this SA objective. Option W3 would not allocate sites for the accommodation of C&I waste. As such depending upon policy to allow proposals to come forward for this type of development would result in a more reactive approach thereby increasing the potential for development to result in adverse impacts in terms of local character and the setting of identified heritage assets. A minor negative effect is therefore expected on this SA objective.
7. Move treatment of waste up the waste hierarchy.	++	--/+	Option W2 would allocate sites for the development of new C&I waste management facilities. As such this approach is more likely to result in a higher level of certainty with regards the provision of facilities which would allow for recycling, energy recovery and appropriate waste disposal in the County. A significant positive effect is therefore expected on this SA objective. Option W3 would not identify sites for the development of new C&I waste management facilities. As such appropriate facilities to allow for the treatment of waste higher up the waste hierarchy would not be delivered through a more plan-led approach. This approach is expected to result in less certainty with regards the delivery of such facilities over the plan period. Option W3 would however include policy within the MWLP to allow proposals to come forward for new facilities and therefore development might be delivered to meet any change in waste generation forecast over the plan period through this manner. An overall mixed effect (minor positive/significant negative) is therefore expected on this SA objective.
8. Promote sustainable use of mineral resources.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	++/-	--/+?	Option W2 would allocate sites for the development of new C&I waste management facilities. As such this approach is more likely to result in a higher level of certainty with regards the provision of facilities which would allow for recycling, energy recovery and appropriate waste disposal in the County. This approach is likely to have positive impacts in terms of increasing the capacity for local recycling and reducing greenhouse gas emissions at landfills. However, the allocation of sites for waste treatment have the potential to generate large numbers of vehicle movements which would contribute to greenhouse gas emissions. Option W3 would result in no sites being allocated for the development of new C&I waste management facilities. As such capacity for recycling energy recovery and appropriate waste disposal in the County would not be improved upon in a plan-led manner. This approach may result in decreased potential to accommodate the recycling requirements of Herefordshire as well as an increase in greenhouse gas

SA Objective	Option W2	Option W3	Justification
			emissions from local landfills. The policy would however also include policy within the MWLP to allow proposals to come forward for new facilities which may help to meet any change in waste generation forecast over the plan period. An overall mixed effect (minor positive/significant negative) is therefore expected on this SA objective.
10. Promote effective restoration and appropriate after use of sites.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?	-?	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of importance for local species and habitats as well as biodiversity and geodiversity designations. Option W3 would not allocate sites for the accommodation of C&I waste. As such depending upon policy to allow proposals to come forward for this type of development would result in a more reactive approach thereby increasing the potential for development to result in adverse impacts on local species and habitats as well as biodiversity and geodiversity designations.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?	-?	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of their landscape character. This issue will be of particular concern in the County given that the Wye Valley AONB and Malvern Hills AONB extend into Herefordshire. Option W3 would not allocate sites for the accommodation of C&I waste. As such depending upon policy to allow proposals to come forward for this type of development would result in a more reactive approach thereby increasing the potential for development to result in adverse impacts in terms of local landscape, most significantly at the AONBs which fall within the County's boundaries.
13. Value, protect and enhance the quality of	+?	-?	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely

SA Objective	Option W2	Option W3	Justification
watercourses and maximise the efficient use of water.			to be sensitive in terms of vulnerable surface and ground water. Option W3 would not identify sites for the management of residual C&I waste over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which may be sensitive in terms of vulnerable surface and ground water.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?	-?	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas that are less likely to be subject to flooding. Option W3 would not identify sites for the management of residual C&I waste over the lifetime of the MWLP instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas at risk of flooding.
15. Minimise noise, light, and air pollution.	++/-	--/+?	Option W2 will have a significant positive effect as the provision of new C&I waste management facilities will reduce the requirement for cross boundary vehicular traffic associated with waste treatment and disposal which will reduce road traffic and air pollution. Furthermore, this approach will also increase the capacity for the recycling and recovery of waste which would help to reduce greenhouse gas emissions generated by C&I waste at landfill sites. However, the allocation of sites for waste treatment have the potential to generate large numbers of vehicle movements which would have an adverse impact on air quality. Option W3 would result in no sites being allocated for the development of new C&I waste management facilities. As such capacity for recycling energy recovery and appropriate waste disposal in the County would not be improved upon in a plan-led manner. This approach may result in decreased potential to accommodate the recycling requirements of Herefordshire as well as an increase in greenhouse gas emissions from landfills. An uncertain minor positive effect is identified as Option W3 allows for applications to come forward in the future that may include proposals for new residual C&I waste treatment facilities which would help to reduce the amount of C&I waste being transported to landfill sites thereby decreasing the emission of greenhouse gases.
16. Value, protect and enhance soil quality and	+?	-?	Option W2 would identify and allocate sites to accommodate C&I waste. As such this would result in a plan-led approach in terms of the development of new C&I waste management facilities in Herefordshire. However, this plan-led approach is more likely to promote new developments at brownfield land in

SA Objective	Option W2	Option W3	Justification
resources.			preference to greenfield locations. Option W3 would not identify sites for the management of C&I waste instead relying on policy to allow for new proposals of this nature to come forward. This approach would be decidedly less plan-led and more reactive to the proposals of developers and may result in new schemes coming forward in areas which contain soils that are of higher agricultural value.

Non-hazardous CD&E waste recovery

Option W4: Identify sites for allocation in the MWLP to provide new capacity for the management of non-hazardous CD&E waste.

Option W5: Do not identify specific sites for allocation, but look favourably on proposals for new facilities to recover CD&E waste at the following types of site: extensions to existing waste management facilities; mineral voids.

SA Objective	Option W4	Option W5	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+	-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. This may help to increase the likelihood of employment opportunities being provided in the waste management sector and therefore a minor positive effect is expected on this SA objective. Option W3 would not allocate sites for the management of non-hazardous CD&E waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. While this approach may be more flexible in terms of responding to changes in the future production of this type of waste the approach is decidedly less plan led meaning that there may be an adverse impact on the potential contribution such facilities could have with regards to employment opportunities. A minor negative effect is expected on this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+	-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. The Waste Need Assessment for CD&E waste has concluded that it is likely that strategic locations for the future management of non-hazardous CD&E waste should be considered. As such it is likely that there will be potential for economic growth in this area of the waste management sector. Given the high volume of growth in CD&E arisings in the County over the plan period (up to a range of between 431,000 to 458,000 tonnes) it is considered that this growth and its requirement to be managed could contribute to the overall growth of the County's economic. A minor positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. The Waste Need Assessment for CD&E waste has concluded that it is likely that strategic locations for the future management of non-hazardous CD&E waste should be considered. As such this option would address this requirement is a decidedly less plan led approach which may limit the potential for economic growth in this area of the waste management sector. CD&E waste arisings are expected to rise to a range of between 431,000 to 458,000 tonnes over the plan period and this approach would provide less certainty in terms of meeting this requirement and economic growth which could be facilitated by meeting this need. A minor

SA Objective	Option W4	Option W5	Justification
			negative effect is therefore expected on this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. Option W4 would thereby increase certainty with regards this type of provision and could result in this type of development being more appropriately sited in relation to being well related to sources of waste. This would help to reduce the volume of waste sent to landfill in Herefordshire by promoting recycling, re-use and energy recovery as well as potentially reducing the requirement for waste to be transported long distances to be processed. This approach should therefore help to reduce air pollution which would benefit the health of residents. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and existing sites may have adverse impacts from their operations on local communities. It is expected however that as support would be given to extensions where a level of waste related development has already occurred this may reduce the potential for impacts on previously unaffected communities. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+	-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature. This may help to increase the likelihood of employment opportunities being provided in the waste management sector and therefore a minor positive effect is expected on this SA objective. Option W3 would not allocate sites for the management of non-hazardous CD&E waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. While this approach may be more flexible in terms of responding to changes in the future production of this type of waste the approach is decidedly less plan led meaning that there may be an adverse impact on the potential contribution such facilities could have with regards to employment opportunities. A minor negative effect is expected on this SA objective.
5. Reduce road traffic, congestion and pollution, and promote	+	+/-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. The Waste Need Assessment for CD&E waste has concluded that it is likely that strategic locations for the future management of non-hazardous CD&E waste should be considered. As such it is likely that there is often no need for permanent waste management sites for CD&E waste as some such facilities will be

SA Objective	Option W4	Option W5	Justification
sustainable modes of transport and efficient movement patterns in the County.			required over the plan period. It is considered likely that a plan-led approach would provide an increased level of certainty to developers in terms of providing new facilities of this nature and would allow for such facilities to be more appropriately related to waste sources. This approach is likely to reduce the requirement for vehicular traffic associated with waste management within and across local authority boundaries and therefore a minor positive effect is expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. As such this would provide less certainty in terms of the delivery of new waste management facilities in Herefordshire. Option W5 would also mean that new waste management sites may come forward at locations which are not well related to sources of waste. This option would however also look favourably on new proposals for CD&E waste recovery facilities at extensions to existing waste management facilities and mineral voids. While this approach is likely to increase the requirement for CD&E waste to be transported over longer distances both inside the County and across local authority boundaries to be processed if proposals at new sites were to come forward, allowing for the extension of existing sites may allow for the use of established transport networks to limit the potential for increased journey times. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of their character or the setting of identified heritage assets. A minor positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and existing sites may be sensitive in terms of the setting they provide for heritage assets or the contribution they make to local character. It is expected however that as support would be given to extensions where a level of waste related development has already occurred potential for impacts on the setting of heritage assets or existing local character may be reduced. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
7. Move treatment of waste up the waste hierarchy.	++	+/-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. It is likely that this option would help to provide certainty in terms of the provision of new facilities to allow for the treatment of waste higher up the waste hierarchy for example by

SA Objective	Option W4	Option W5	Justification
			encouraging re-use, recycling and energy recovery. This will be of importance in Herefordshire over the plan period considering that the Waste Need Assessment for CD&E waste has concluded that it is likely that strategic locations for the future management of non-hazardous CD&E waste should be considered. A significant positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids however. As such new facilities to meet requirements in the County are likely to be provided at existing waste sites. Requirements for the treatment of waste higher up the waste hierarchy would therefore likely be met over the plan period however this option would provide less certainty in relation to this provision and would most likely limit new development of this type to existing waste sites. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
8. Promote sustainable use of mineral resources.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+	+/-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. Option W4 would thereby increase certainty with regards this type of provision and could result in this type of development being more appropriately sited in relation to being well related to sources of waste. This would help to reduce the volume of waste sent to landfill in Herefordshire by promoting recycling, re-use and energy recovery as well as potentially reducing the requirement for waste to be transported long distances to be processed. This approach should therefore help to reduce local contribution to greenhouse gas emissions and therefore a minor positive effect is expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. As such new facilities to meet requirements in the County are likely to be provided at existing waste sites. Requirements for the treatment of waste higher up the waste hierarchy would therefore likely be met over the plan period however this option would provide less certainty in relation to this provision. Where development is to be provided away from existing sites as extensions, failure to allocate new sites would mean that the opportunity to site waste management facilities in close proximity to sources of waste may be missed meaning that journeys to process waste

SA Objective	Option W4	Option W5	Justification
			may be increased. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
10. Promote effective restoration and appropriate after use of sites.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be located in close proximity to designated biodiversity and geodiversity sites and other undesignated areas which are of value in terms of habitat space. A minor positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and existing sites may contain important habitat space or be sensitive in terms of the geodiversity they support. It is expected however that as support would be given to extensions where a level of waste related development has already occurred potential impact on biodiversity and geodiversity is likely to be reduced. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of their landscape character. This issue is considered to be of particular relevance in the County given that the Wye Valley AONB and Malvern Hills AONB both pass within its boundaries. A minor positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and existing sites may be sensitive in terms of landscape character. It is expected however that as support would be given to extensions where a level of waste related development has already occurred potential for impacts on

SA Objective	Option W4	Option W5	Justification
			landscape character may be reduced. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are less likely to be sensitive in terms of vulnerable surface and ground water. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and existing sites may be sensitive in terms of the quality of surface and ground water. It is expected however that as support would be given to extensions where a level of waste related development has already occurred potential for impacts on water quality may be reduced. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas that are less likely to be subject to flooding. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led as these sites may be located in areas at risk of flooding. It is expected however that as support would be given to extensions where a level of waste related development has already occurred potential flood risk impacts may be reduced. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
15. Minimise noise, light, and air pollution.	+	+/-	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. Option W4 would thereby increase certainty with regards this type of provision and could result in this type of development being more appropriately sited in relation to being well related to sources of waste. This would help to reduce the volume of waste sent to landfill in Herefordshire by promoting recycling, re-use and energy recovery as well as potentially reducing the requirement for waste to be transported long distances to be processed. This approach should therefore help to reduce local

SA Objective	Option W4	Option W5	Justification
			contribution to air pollution and therefore a minor positive effect is expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. As such new facilities to meet requirements in the County would likely be provided, most likely at existing waste sites. Requirements for the treatment of waste higher up the waste hierarchy would therefore likely be met over the plan period however this option would provide less certainty in relation to this provision. Where development is to be provided away from existing sites as extensions, failure to allocate new sites would mean that the opportunity to site waste management facilities in close proximity to sources of waste may be missed meaning that journeys to process waste may be increased. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
16. Value, protect and enhance soil quality and resources.	+?	+?/-?	Option W4 would identify and allocate sites for the management of non-hazardous CD&E waste. As such this would result in a plan-led approach in terms of the development of new CD&E waste management facilities in Herefordshire. By adopting this approach it is expected that development could be delivered in areas which are of less value in terms of agricultural soil quality. A minor positive effect is therefore expected on this SA objective. Option W5 would not allocate sites for the management of non-hazardous CD&E waste. New proposals for this type of development would be looked upon favourably at extensions to existing waste management facilities and mineral voids, however. This approach would be decidedly less plan-led and therefore may result in the loss of higher value agricultural soils in Herefordshire. It is expected however that as support would be given to extensions where a level of waste related development has already occurred this may result in some of the required development needed to address local need proceeding as intensification at existing sites which would likely reduce the development of higher value agricultural soils. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.

Agricultural waste facilities

Option W6: Do not allocate any sites for the location of new facilities to meet agricultural waste, but allow proposals for anaerobic digestion or other types of biomass facilities on farms to be considered on their merits as they arise.

Option W7: Include policy to require adequate provision for the management and disposal of waste materials, liquids and litter from agricultural activities.

SA Objective	Option W6	Option W7	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	+	Option W6 would not allocate sites for new facilities to meet agricultural waste. The Waste Need Assessment has set out that the non-natural agricultural waste will likely remain in the range 6,000 to 8,000 tonnes. The amount of natural agricultural waste which is managed at permitted facilities in the County is likely to be dictated by the development of on-farm anaerobic digestion facilities and it is also predicted that significant agricultural growth will not be seen over the plan period. Considering it is unlikely that there will be further significant growth in local agricultural waste production and therefore allowing proposals for biomass facilities on farms is unlikely to detract from the potential for waste to be managed at separate specialist facilities which might otherwise support local employment opportunities. A negligible effect is therefore expected on this SA objective. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. As such this approach would require the development of new facilities to meet any increased growth of agriculture (and associated growth in agricultural waste production). The policy would support any required growth in the agricultural waste sector to meet an identified change in demand which would be of benefit in terms of local job provision. A minor positive effect is therefore expected this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	0	0	Agricultural waste production in Herefordshire is expected to remain in the range of 6,000 to 8,000 tonnes over the plan period which is significantly less that other types of waste. As such a negligible effect is expected on both Options W6 and W7 given that the relatively small size of this specific waste sector allows for it to be mostly addressed at on-farm anaerobic digestion facilities. It is expected that such facilities and the smaller number of waste management facilities required to handle any additional agricultural waste while allowing for the creation of smaller number of employment opportunities would not significantly contribute to the overall growth of the local economy.
3. Protect and	0	0	It is not expected that either option would have a direct impact upon this SA objective.

SA Objective	Option W6	Option W7	Justification
improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.			
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	+	Option W6 would not allocate sites for new facilities to meet agricultural waste. The Waste Need Assessment has set out that the non-natural agricultural waste will likely remain in the range 6,000 to 8,000 tonnes. The amount of natural agricultural waste which is managed at permitted facilities in the County is likely to be dictated by the development of on-farm anaerobic digestion facilities and it is also predicted that significant agricultural growth will not be seen over the plan period. Considering it is unlikely that there will be further significant growth in local agricultural waste production and therefore allowing proposals for biomass facilities on farms is unlikely to detract from the potential for waste to be managed at separate specialist facilities which might otherwise support local employment opportunities. A negligible effect is therefore expected on this SA objective. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. As such this approach would require the development of new facilities to meet any increased growth of agriculture (and associated growth in agricultural waste production). The policy would support any required growth in the agricultural waste sector to meet an identified change in demand which would be of benefit in terms of local job provision. A minor positive effect is therefore expected this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+	?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered. As such this approach is likely to result in much of the agricultural waste being managed onsite reducing the requirement for its transport. A minor positive effect is therefore expected on this SA objective. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. While this may include the allocation of sites for new facilities of this type, due to the high number of farms in Herefordshire little evidence is available to underpin a spatial strategy. As such it is unclear how new waste management facilities specific to agriculture could be provided in a manner as to limit journeys undertaken by private vehicle (many of which would likely include HGVs) and therefore an uncertain effect is expected on this SA objective.

SA Objective	Option W6	Option W7	Justification
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered on the merits of the proposed development. As such there would be little control as to where such proposals might come forward in relation to heritage assets however the appropriate consideration of developments is likely to include criteria relating to impacts on the historic environment. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. This approach may allow for the allocation of specific land for the delivery of these new facilities and this would allow for sites which are less sensitive in terms of the historic environment to be put forward.
7. Move treatment of waste up the waste hierarchy.	++/-?	++	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered. As such this approach should help to promote energy recovery from agricultural waste in the County in contrast to the potential for disposal of waste at landfill. A significant positive effect is therefore expected on this SA objective. The significant positive effect is combined with a minor negative effect however given that this approach would not require for increased provisions for waste management to be provided meaning that less certainty would be attached to in terms of the future provision of facilities of this type if agricultural waste production was increase in Herefordshire. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. As such this option is likely to support the treatment of waste higher up the waste hierarchy mostly likely through recycling and energy recovery and would address any local growth in agricultural waste production through an appropriate plan-led approach. A significant positive effect is therefore expected on this SA objective.
8. Promote sustainable use of mineral resources.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as	+	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered. As such this approach should help to promote energy recovery from agricultural waste in the County in contrast to the potential for disposal of waste at landfill. As such this approach would likely help to reduce greenhouse gas emissions at landfills. Handling agricultural waste onsite is also likely to help reduce the number of journeys required for its treatment and

SA Objective	Option W6	Option W7	Justification
its contribution to the problem.			the associated contribution to greenhouse gas emissions in Herefordshire. Given the reduced volume of waste which is produced by the agricultural industry in Herefordshire when compared to household and commercial and industrial waste the positive effect expected on this SA objective is minor. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. While this approach might identify areas which are more suitable for this type of development considering the high number of farms in Herefordshire there is little evidence to underpin an appropriate spatial strategy. As such it would be difficult to site new facilities in areas as to reduce the number of vehicular journeys needed to manage agricultural waste. It is expected that the delivery of new facilities to meet requirements for the treatment of agricultural waste would help to reduce greenhouse gas emissions at landfills however and as such an uncertain minor positive effect is expected on this SA objective.
10. Promote effective restoration and appropriate after use of sites.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	+?/-?	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered on the merits of the proposed development. As such there would be little control as to where such proposals might come forward in relation to biodiversity and geodiversity designations however the appropriate consideration of developments is likely to include criteria relating to impacts on such designations. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. This approach may allow for the allocation of specific land for the delivery of these new facilities and this would allow for sites which are less sensitive in terms of the biodiversity and geodiversity designations to be put forward.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural	+?/-?	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered on the merits of the proposed development. As such there would be little control as to where such proposals might come forward in relation to areas which may be more sensitive with regards to landscape character. The policy would however require the appropriate consideration of developments which is likely to include criteria relating to impacts on the landscape sensitivity which would limit the potential for significantly adverse impacts. Landscape

SA Objective	Option W6	Option W7	Justification
areas and open spaces.			sensitivity is likely to be a particularly relevant consideration at such proposals given the more rural character of most farmland. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. This approach may allow for the allocation of specific land for the delivery of these new facilities and this would allow for sites which are less sensitive in terms of the landscape character to be put forward.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?	Option W6 would allow for the appropriate treatment of agricultural waste in the County particularly that which might cause pollution to water bodies by run-off (for example livestock waste, manure and slurry). A minor positive effect this therefore expected on this SA objective. The minor positive effect is combined with a minor negative effect however given that this approach would not require for increased provisions for waste management to be provided meaning that future change in agricultural production in the County may not be appropriately met. Option W7 would also provide for appropriate facilities to manage agricultural thereby reducing the threat of detrimental waste from this source. The requirement of this policy for the delivery of sufficient facilities to manage waste from agricultural activities would mean that future changes in agricultural waste production would be more likely to be met in Herefordshire.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
15. Minimise noise, light, and air pollution.	+	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered. As such this approach should help to promote energy recovery from agricultural waste in the County in contrast to the potential for disposal of waste at landfill. As such this approach would likely help to reduce greenhouse gas emissions at landfills. Handling agricultural waste onsite is also likely to help reduce the number of journeys required for its treatment and the associated contribution to greenhouse gas emissions in Herefordshire. Given the reduced volume of waste which is produced by the agricultural industry in Herefordshire when compared to household and commercial and industrial waste the positive effect expected on this SA objective is minor.

SA Objective	Option W6	Option W7	Justification
			Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. While this approach might identify areas which are more suitable for this type of development considering the high number of farms in Herefordshire there is little evidence to underpin an appropriate spatial strategy. As such it would be difficult to site new facilities in areas as to reduce the number of vehicular journeys needed to manage agricultural waste. It is expected that the delivery of new facilities to meet requirements for the treatment of agricultural waste would help to reduce greenhouse gas emissions at landfills however and as such an uncertain minor positive effect is expected on this SA objective.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?	Option W6 would not allocate sites for new facilities to meet agricultural waste but would allow for proposals for biomass facilities on farms to be considered on the merits of the proposed development. As such there would be little control as to where such proposals might come forward in relation to areas which may be of value in terms of soil quality. The policy would however require the appropriate consideration of developments which is likely to include criteria relating to loss of agricultural land and potential soil contamination which would limit the potential for significantly adverse impacts. Los of agricultural land is likely to be a particularly relevant consideration at such proposals given the less developed nature of most farmland. Option W7 would provide policy to require the delivery of sufficient facilities to manage waste from agricultural activities. This approach may allow for the allocation of specific land for the delivery of these new facilities and this would allow for sites which are of lower value in terms of soil quality to be put forward.

Hazardous waste facilities

Option W8: Do not allocate any sites for the location of new hazardous waste facilities, but allow proposals on industrial sites to be considered on their merits as they arise.

SA Objective	Option W8	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	0	Option W8 would not allocate any sites for the location of new hazardous waste facilities but allow proposals on industrial sites to be considered on their merits as they arise. The annual hazardous waste in the future is estimated in the range of 9,000 to 12,000 tonnes and it is concluded that the generation levels of different waste streams are relatively small which is unlikely to warrant the development of specialist waste treatment capacity. Therefore, it is unlikely that there would be additional employment provision in this sector.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	0	Hazardous waste production in Herefordshire is expected to remain in the range of 9,000 to 12,000 tonnes over the plan period which is significantly less that other types of waste. Furthermore it has been identified that due to the location of the county, it is unlikely to be a destination chosen for a nationally significant infrastructure project which might otherwise increase waste production of this type. As such a negligible effect is expected in relation to Option W8 given that the relatively small size of this specific waste sector means that it is unlikely to warrant the development of specialist waste treatment capacity. It is expected that smaller facilities required to treat waste of this type would only create a smaller number of employment opportunities and would not significantly contribute to the overall growth of the local economy.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?	The Waste Needs Assessment identified that generation levels of waste streams are relatively small and are unlikely to warrant the development of specialist waste treatment capacity, therefore this option is unlikely to have an effect on this SA objective. However, it will consider proposals on industrial sites on their individual merits which are likely to be located away from sensitive receptors such as schools, hospitals and residential developments thereby limiting the potential for adverse effects on health and amenity.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	0	Option W8 would not allocate any sites for the location of new hazardous waste facilities but allow proposals on industrial sites to be considered on their merits as they arise. The annual hazardous waste in the future is estimated in the range of 9,000 to 12,000 tonnes and it is concluded that the generation levels of different waste streams are relatively small which is unlikely to warrant the development of specialist waste treatment capacity. Therefore, it is unlikely that there would be additional employment provision in this sector.

SA Objective	Option W8	Justification
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	Option W8 would not allocate any sites for the location of new hazardous waste facilities instead allowing for proposals on industrial sites to be considered on their merits. Given that it has been identified that generation levels of waste streams are relatively small and are unlikely to warrant the development of specialist waste treatment capacity, it is possible that waste will continue to be transported to the current operational hazardous waste transfer and treatment facility or further afield for processing which will continue to impact on road traffic, congestion and pollution. However, this approach will only have a minor negative effect if there is an increase in hazardous waste over the baseline situation. However, this approach may have a positive effect as it promotes the co-location of waste management facilities on industrial sites which may constitute an important source of waste arisings or a market for processed waste materials thereby reducing the distance that hazardous waste needs to be transported.
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	?	The effects on the historic environment are uncertain as it will depend on whether there is a future need for a hazardous waste treatment site and the location, scale and design of the development.
7. Move treatment of waste up the waste hierarchy.	++?	Option W8 would not allocate any sites for the location of new hazardous waste facilities instead allowing for proposals on industrial sites to be considered on their merits which would allow for the treatment of hazardous waste higher up the waste hierarchy which may include hazardous waste recycling. The effect is uncertain as it is unknown whether any proposals will come forward in the future.
8. Promote sustainable use of mineral resources.	0	It is not expected that this option would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	Option W8 would not allocate any sites for the location of new hazardous waste facilities instead allowing for proposals on industrial sites to be considered on their merits. Given that it has been identified that generation levels of waste streams are relatively small and are unlikely to warrant the development of specialist waste treatment capacity, it is possible that waste will continue to be transported to the current operational hazardous waste transfer and treatment facility or further afield for processing which will continue to contribute to greenhouse gas

SA Objective	Option W8	Justification
		emissions. However, this approach will only have a minor negative effect if there is an increase in hazardous waste over the baseline situation. However, this approach may have a positive effect as it promotes the co-location of waste management facilities on industrial sites which may constitute an important source of waste arisings or a market for processed waste materials thereby reducing the distance that hazardous waste needs to be transported and the emission of greenhouse gases.
10. Promote effective restoration and appropriate after use of sites.	0	It is not expected that this option would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county biodiversity and geodiversity.	-?	The Waste Needs Assessment identified that generation levels of waste streams are relatively small and are unlikely to warrant the development of specialist waste treatment capacity, therefore this option is unlikely to have an effect on this SA objective. However, the option would allow proposals for this type of development at industrial sites which would result in the loss of habitats for biodiversity.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	Option W8 would not allocate any sites for the location of new hazardous waste facilities instead allowing for proposals on industrial sites to be considered on their merits. The option would allow proposals for this type of development at industrial sites and as such it is expected that these areas are to be of reduced value in terms of local landscape character thereby protecting high quality landscapes. However, there may also be visual impacts from the development of hazardous sites.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	?	The effects on the water environment are uncertain as it will depend on whether there is a future need for a hazardous waste treatment site and the location, scale and design of the development.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	0	It is not expected that this option would have a direct impact upon this SA objective.
15. Minimise noise, light, and air pollution.	+?/-?	Option W8 would not allocate any sites for the location of new hazardous waste facilities instead allowing for proposals on industrial sites to be considered on their merits. Given that it has been identified that generation levels of waste streams are relatively small and are unlikely to

SA Objective	Option W8	Justification
		warrant the development of specialist waste treatment capacity, it is possible that waste will continue to be transported to the current operational hazardous waste transfer and treatment facility or further afield for processing which may contribute to air pollution. However, this approach will only have a minor negative effect if there is an increase in hazardous waste over the baseline situation. However, this approach may have a positive effect as it promotes the co-location of waste management facilities on industrial sites which may constitute an important source of waste arisings or a market for processed waste materials thereby reducing the distance that hazardous waste needs to be transported and the emission of greenhouse gases.
16. Value, protect and enhance soil quality and resources.	+/-?	The Waste Needs Assessment identified that generation levels of waste streams are relatively small and are unlikely to warrant the development of specialist waste treatment capacity. However, it will consider proposals on industrial sites on their individual merits which are likely to be located on brownfield land thereby protecting greenfield locations. However, it is possible that the allocation of additional sites for the management of hazardous waste may result in contamination of soils.

Site allocation for new waste facilities

Option W9: Allocate suitable sites from those put forward by landowners and operators in the call for sites which comply with the policies in the Minerals and Waste Local Plan.

Option W10: Do not allocate sites but identify types of sites or types of location within which applications for development will be looked upon favourably as long as they comply with the policies in the Minerals and Waste Local Plan.

Option W11: Do not allocate sites and do not identify types of sites or types of location, but assess any applications regardless of location on the basis of compliance with policies in the Minerals and Waste Local Plan.

Option W12: Allocate suitable sites from those put forward in the call for sites and identify types of sites or types of location within which applications for development will be looked upon favourably, but also allow for proposals for development to come forward regardless of location.

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+/-	+	-	++	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and would provide certainty in terms of where future waste sites would be supported and these sites could help to support the provision of new employment opportunities in the County. As the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable for waste uses which have not been identified at present. This approach would therefore not allow for the flexibility for the development of these sites for waste management uses which would otherwise have generated employment opportunities for local people. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP (e.g. existing industrial estates, extensions to existing waste sites, areas of brownfield land and mineral voids). This approach would provide a level of certainty in terms of sites at which waste uses might be permitted thereby allowing for future development to be partially plan-led while avoiding the inflexibility of allocating only those sites which have already between put forward in response to the call for sites. This approach should allow for the meeting of the requirements for waste uses over the plan period up to 2031 beyond the only two promoted sites and may generate additional employment opportunities for local people. A minor positive effect is therefore expected on this SA objective. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the future meeting of waste needs and therefore future employment provision in this sector. A minor negative effect is therefore expected on this SA objective. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach would provide a degree of certainty in relation to the delivery of new waste developments which should help to support the growth of this sector and the provision

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					of new employment opportunities. As the plan period extends up to 2031 this approach would also allow for flexibility in terms of any change in requirement which might emerge during this period of time. The development of sites which may become viable and suitable over this period of time are more likely to be supported through Option W12. A significant positive effect is therefore expected on this SA objective.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+/-	+	-	++	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. This option would affect the entirety of the waste sector and the economic contribution it makes to the County. This approach would be decidedly plan-led and would provide certainty in terms of where future waste sites would be supported and these sites could help to support the economic growth of the waste sector in Herefordshire. As the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable for waste uses which have not been identified at present. This approach would therefore not allow for the flexibility for the development of these sites for waste management uses. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP. This option would affect the entirety of the waste sector and the economic contribution it makes to the County. This approach would provide a level of certainty in terms of sites at which waste uses might be permitted thereby allowing for future development to be partially plan-led while avoiding the inflexibility of allocating only those sites which have already between put forward in response to the call for sites. This approach should allow for the meeting of the requirements for waste uses over the plan period up to 2031 beyond the only two promoted sites. It is expected that this approach could allow for a level of economic growth within the waste sector as to meet future requirements and for proposals to come forward at sites which only may become economically viable in the future. A minor positive effect is therefore expected on this SA objective. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. This option would affect the entirety of the waste sector and the economic contribution it makes to the County. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County as well as allowing for proposals at

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					sites which only make become economically viable in the future it would be decidedly less plan-led and would fail to provide certainty in relation to the future meeting of waste needs and therefore economic growth in this sector. A minor negative effect is therefore expected on this SA objective. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. This option would affect the entirety of the waste sector and the economic contribution it makes to the County. This approach would provide a degree of certainty in relation to the delivery of new waste use development which should help to support the growth of this sector and the provision of new employment opportunities. As the plan period extends up to 2031 this approach would also allow for flexibility in terms of any change in requirement which might emerge of this period of time. The plan would allow for proposals to come forward at sites which may only become economically viable in the future. A significant positive effect is therefore expected on this SA objective.
3. Protect and improve the health of the people of Herefordshire, and reduce disparities in health geographically and demographically.	+?/-?	+?/-?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued impacts on the health and amenity local communities (e.g. odour, noise, and traffic levels). However, this option may also have a minor positive effect as it seeks to extend existing waste facilities therefore reducing the number of new waste management developments that may have negative impacts on previously unaffected communities. Option W10 provides a choice of location options for potential waste developments. However, to ensure that waste facilities are located near to the source of arisings it is likely that they will be located close to urban areas which may have negative impacts on the health and amenity of communities. However, this approach would provide a level of certainty in terms of sites at which waste uses might be permitted and could help to promote the co-locating of waste management facilities with other industrial processes which constitute either an important source of waste arisings or a market for processed waste materials. This approach may help to reduce the distance which local waste needs to be transported and any associated transport emissions which could be beneficial to the health of residents.

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					Option W11 would not set out site allocations or identify specific types of sites or types of location where applications would be looked upon favourably. As such this approach is likely to result in new developments of this type coming forward at locations which are less sustainable in terms of requirement to transport waste over longer distances which would increase greenhouse gas emissions and therefore have an adverse impact on the health of residents. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach of allocating sites and setting types of locations or sites where development would be supported would provide a degree of certainty in relation to the delivery of new waste use development. It is expected that the approach would help to support the provision of such sites at locations which might help to reduce the requirements for waste to be transported longer distances in Herefordshire. By allowing for developments to be considered at any location in the County however more proposals of this type may be submitted at locations where waste would need to be transported over longer distances which would have an adverse impact on health and wellbeing of residents. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+/-	+	-	++	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and would provide certainty in terms of where future waste sites would be supported and these sites could help to support the provision of new employment opportunities in the County. As the lifetime of the MWLP extends to 2031, it is likely that sites could become available and economically viable for waste uses which have not been identified at present. This approach would therefore not allow for the flexibility for the development of these sites for waste management uses which would otherwise have generated employment opportunities for local people. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP (e.g. existing industrial estates, extensions to existing waste sites, areas of brownfield land and mineral voids). This

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					approach would provide a level of certainty in terms of sites at which waste uses might be permitted thereby allowing for future development to be partially plan-led while avoiding the inflexibility of allocating only those sites which have already between put forward in response to the call for sites. This approach should allow for the meeting of the requirements for waste uses over the plan period up to 2031 beyond the only two promoted sites and may generate additional employment opportunities for local people. A minor positive effect is therefore expected on this SA objective. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the future meeting of waste needs and therefore future employment provision in this sector. A minor negative effect is therefore expected on this SA objective. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach would provide a degree of certainty in relation to the delivery of new waste developments which should help to support the growth of this sector and the provision of new employment opportunities. As the plan period extends up to 2031 this approach would also allow for flexibility in terms of any change in requirement which might emerge during this period of time. The development of sites which may become viable and suitable over this period of time are more likely to be supported through Option W12. A significant positive effect is therefore expected on this SA objective.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and could allow for more certainty in terms of siting new such developments in locations where waste would be required to be transported over shorter distances and potentially where more sustainable modes of transport (such as rail or water routes) could be made use of to facilitate waste transfer. At present however only two sites have been identified in the call for sites and therefore if waste requirements change over the plan period which extends to 2031 this approach would over less flexibility in address any new requirement. This approach may result in the need to transport higher amounts of

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					waste outside of the County. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP. This approach would provide a level of certainty in terms of sites at which waste uses might be permitted and could help to promote the co-locating of waste management facilities with other industrial processes which constitute either an important source of waste arisings or a market for processed waste materials. This approach may help to reduce the distance which local waste needs to be transported. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the location of new waste management sites. As such this approach is likely to result in new developments of this type coming forward at locations which are less sustainable in terms of requirement to transport waste over longer distances which would increase local contributions to greenhouse gas emissions. A minor negative effect is therefore expected for Option W11. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach of allocating sites and setting types of locations or sites where development would be supported would provide a degree of certainty in relation to the delivery of new waste use development. It is expected that the approach would help to support the provision of such sites at locations which might help to reduce the requirements for waste to be transported longer distances in Herefordshire. This approach is also expected to provide flexibility in terms of meeting any change in waste management requirements in the County which would help to prevent any significant rise in the need to handle waste at landfill or manage waste in neighbouring authorities. By allowing for developments to be considered at any location in the County however more proposals of this type may be submitted at locations where waste would need to be transported over longer distances to the detriment of local greenhouse gas emissions. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
6. Value, protect and enhance the character and built quality of settlements and neighbourhoods and the county's historic environment and cultural heritage.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued impacts on the built and historic environment. However, this option may also have a minor positive effect as it seeks to extend existing waste facilities therefore reducing the number of new waste management developments that may have negative impacts on previously unaffected heritage assets and their settings. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of heritage assets and their settings. Option W11 would not set out site allocations or identify specific types of sites or types of location where applications would be looked upon favourably. As such by relying only upon policies in the MWLP this approach would be more reactive to applications which came forward and would fail to take a more plan-led approach. It is considered that this approach would be less likely to be able to promote development at locations which have less sensitivity in terms of the settings of heritage assets and existing local character. A minor negative effect is therefore expected for Option W11. Option W12 would provide for the allocation of sites for waste management development as well as allowing for specific types of sites or types of location where applications would be looked upon favourably and also allow for proposals for development to come forward regardless of location. As such this combined approach to waste management development would provide some degree of certainty in terms of the location of such development in relation to heritage assets and sensitive areas of existing character but would also allow for some more speculative proposals to come forward. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W12.
7. Move treatment of waste up the waste hierarchy.	+/-	+	-	++	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and would provide certainty in terms of where future waste sites would be supported and these sites could support the moving of waste higher up the waste management hierarchy. At present only two sites (for inert waste recycling and biomass) have been put forward for existing or new waste uses in responses to the call for sites. As the lifetime of the

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					MWLP extends to 2031, it is likely that sites could become available and economically viable for waste uses which have not been identified at present and could help to appropriately manage waste through more sustainable methods. This approach would not allow for the flexibility for the development of these sites for waste management uses. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W9. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP. This approach would provide a level of certainty in terms of sites at which waste uses might be permitted thereby allowing for future development to be partially plan-led while avoiding the inflexibility of allocating only those sites which have already between put forward in responses to the call for sites. This approach should allow for the meeting of the requirements for waste uses over the plan period up to 2031 beyond the only two promoted sites. As such waste is likely to be handled higher up the waste management hierarchy at supported new facilities and therefore a minor positive effect is expected for Option W10. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the future meeting of waste needs and therefore the delivery required facilities to handled waste higher up the waste management hierarchy. A minor negative effect is therefore expected for Option W11. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach would provide a degree of certainty in relation to the delivery of new waste use development which should help to support the handling of waste higher up the waste management hierarchy. As the plan period extends up to 2031 this approach would also allow for flexibility in terms of any change in requirement which might emerge of this period of time. The development of sites which may become viable and suitable over this period of time are more likely to be supported through Option W12. It is expected that this combined approach would provide support in terms of the appropriate handling of waste higher up the waste management hierarchy over the

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					entirety of the plan period. A significant positive effect is therefore expected for Option W12.
8. Promote sustainable use of mineral resources.	0	0	0	0	It is not expected that any of the options considered would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and could allow for more certainty in terms of siting new such developments in locations where waste would be required to be transported over shorter distances and potentially where more sustainable modes of transport (such as rail or water routes) could be made use of to facilitate waste transfer. At present however only two sites have been identified in the call for sites and therefore if waste requirements change over the plan period which extends to 2031 this approach would over less flexibility in addressing any new requirement. This approach may result in the need to transport higher amounts of waste outside of the County and may result in higher volumes of waste being sent to landfill which would result in the higher levels of greenhouse gas emissions being produced. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W9. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP. This approach would provide a level of certainty in terms of sites at which waste uses might be permitted and could help to promote the co-locating of waste management facilities with other industrial processes which constitute either an important source of waste arisings or a market for processed waste materials. This approach may help to reduce the distance which local waste needs to be transported and would also not be as inflexible as limiting development to specific sites allocations in terms of allowing for development to meet local waste management requirements. As such greenhouse gas emissions from both waste transport and requirement to use landfill to handle waste could be managed and a minor positive effect is therefore expected for Option W10. Option W11 would not allocate sites in Herefordshire but assess any applications for

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the location of new waste management sites. As such this approach is likely to result in new developments of this type coming forward at locations which are less sustainable in terms of requirement to transport waste over longer distances which would increase local contributions to greenhouse gas emissions. A minor negative effect is therefore expected for Option W11. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach of allocating sites and setting types of locations or sites where development would be supported would provide a degree of certainty in relation to the delivery of new waste use development. It is expected that the approach would help to support the provision of such sites at locations which might help to reduce the requirements for waste to be transported longer distances in Herefordshire. This approach is also expected to provide flexibility in terms of meeting any change in waste management requirements in the County which would help to prevent any significant rise in the need to handle waste at landfill or manage waste in neighbouring authorities. By allowing for developments to be considered at any location in the County however more proposals of this type may be submitted at locations where waste would need to be transported over longer distances to the detriment of local greenhouse gas emissions. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
10. Promote effective restoration and appropriate after use of sites.	0	0	0	0	It is not expected that any of the options considered would have a direct impact upon this SA objective.
11. Value, maintain, restore and expand county biodiversity and	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued impacts on nearby biodiversity and geodiversity assets. However, this option may also have a minor positive effect as it seeks to extend

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
geodiversity.					existing waste facilities therefore reducing the number of new waste management developments that may have negative impacts on previously unaffected habitats and species. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of biodiversity and geodiversity assets. Option W11 would not set out site allocations or identify specific types of sites or types of location where applications would be looked upon favourably. As such by relying only upon policies in the MWLP this approach would be more reactive to applications which came forward and would fail to take a more plan-led approach. It is considered that this approach would be less likely to be able to promote development at locations which have less sensitivity in terms of biodiversity and geodiversity. A minor negative effect is therefore expected for Option W11. Option W12 would provide for the allocation of sites for waste management development as well as allowing for specific types of sites or types of location where applications would be looked upon favourably and also allow for proposals for development to come forward regardless of location. As such this combined approach to waste management development would provide some degree of certainty in terms of the location of such development in relation to areas of importance for biodiversity and geodiversity but would also allow for some more speculative proposals to come forward. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W12.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued impacts on the landscape character of the areas where they are located. However, this option may also have a minor positive effect as it seeks to extend existing waste facilities therefore reducing the number of new waste management developments that may have negative impacts on previously unaffected landscapes. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of areas that are of importance in terms of landscape character, particularly the Wye Valley AONB and Malvern Hills

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					AONB. Option W11 would not set out site allocations or identify specific types of sites or types of location where applications would be looked upon favourably. As such by relying only upon policies in the MWLP this approach would be more reactive to applications which came forward and would fail to take a more plan-led approach. It is considered that this approach would be less likely to be able to promote development at locations which have less sensitivity in terms of landscape character. This issue will be of particular concern in Herefordshire given that parts of the Wye Valley AONB and Malvern Hills AOBN fall within the County. A minor negative effect is therefore expected for Option W11. Option W12 would provide for the allocation of sites for waste management development as well as allowing for specific types of sites or types of location where applications would be looked upon favourably and also allow for proposals for development to come forward regardless of location. As such this combined approach to waste management development would provide some degree of certainty in terms of the location of such development in relation to areas of importance for landscape character in Herefordshire but would also allow for some more speculative proposals to come forward. This issue will be of particular concern in Herefordshire given that parts of the Wye Valley AONB and Malvern Hills AOBN fall within the County. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W12.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued adverse impacts on water resources. However, this option may also have a minor positive effect as it seeks to extend existing waste facilities therefore reducing the number of new waste management developments that may have negative impacts on previously unaffected water resources. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of vulnerable surface and ground water resources. Option W11 would not allocate sites in Herefordshire but would assess any applications for waste development in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					approach. It is considered that this approach would be less likely to promote waste developments at locations that are less sensitive in terms of water quality. Option W12 promotes a combined approach would provide some degree of certainty in terms of the allocation of sites in relation to vulnerable surface and groundwater resources, but would also allow for some more speculative proposals to come forward.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. Waste treatment facilities are classified as less vulnerable and are suitable in all flood zones excluding 3b (the functional flood plain). Effects are uncertain as it will depend on the location and type of development. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of areas at risk of flooding. Option W11 would not allocate sites in Herefordshire but would assess any applications for waste development in relation to compliance with the policies of the MWLP. By relying only upon policies in the MWLP, this approach would fail to take a more plan-led approach. It is considered that this approach would be less likely to promote waste developments at locations that are less sensitive in terms of flooding. Option W12 promotes a combined approach would provide some degree of certainty in terms of the allocation of sites in relation to flood risk areas, but would also allow for some more speculative proposals to come forward.
15. Minimise noise, light, and air pollution.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire which are currently considered to be suitable as per the policies in the MWLP and have been put forward by landowners and operators. As such this approach would be decidedly plan-led and could allow for more certainty in terms of siting new such developments in locations where waste would be required to be transported over shorter distances and potentially where more sustainable modes of transport (such as rail or water routes) could be made use of to facilitate waste transfer. At present however only two sites have been identified in the call for sites and therefore if waste requirements change over the plan period which extends to 2031 this approach would over less flexibility in addressing any new requirement. This approach may result in the need to transport higher amounts of waste outside of the County and may result in higher volumes of waste being sent to

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					landfill which would result in the higher levels of greenhouse gas emissions being produced. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W9. Option W10 would not allocate sites in Herefordshire but identify types of sites or types of location at which proposals for waste development will be looked upon favourably where they comply with the policies of the MWLP. This approach would provide a level of certainty in terms of sites at which waste uses might be permitted and could help to promote the co-locating of waste management facilities with other industrial processes which constitute either an important source of waste arisings or a market for processed waste materials. This approach may help to reduce the distance which local waste needs to be transported and would also not be as inflexible as limiting development to specific sites allocations in terms of allowing for development to meet local waste management requirements. As such greenhouse gas emissions from both waste transport and requirement to use landfill to handle waste could be managed and a minor positive effect is therefore expected for Option W10. Option W11 would not allocate sites in Herefordshire but assess any applications for waste use in relation to compliance with the policies of the MWLP. Although this approach may be more responsive in terms of meeting any change in requirement for waste uses in the County it would be decidedly less plan-led and would fail to provide certainty in relation to the location of new waste management sites. As such this approach is likely to result in new developments of this type coming forward at locations which are less sustainable in terms of requirement to transport waste over longer distances which would increase local contributions to greenhouse gas emissions. A minor negative effect is therefore expected for Option W11. Option W12 would allocate sites in Herefordshire, identify types of sites or types of location at which proposals for waste development would be supported and also allow for proposals for this type of development to come forward regardless of location. The approach of allocating sites and setting types of locations or sites where development would be supported would provide a degree of certainty in relation to the delivery of new waste use development. It is expected that the approach would help to support the provision of such sites at locations which might help to reduce the requirements for waste to be transported longer distances in Herefordshire. This approach is also expected to provide flexibility in terms of meeting any change in waste management requirements in the County which would help to prevent any significant rise in the need

SA Objective	Option W9	Option W10	Option W11	Option W12	Justification
					to handle waste at landfill or manage waste in neighbouring authorities. By allowing for developments to be considered at any location in the County however more proposals of this type may be submitted at locations where waste would need to be transported over longer distances to the detriment of local greenhouse gas emissions. An overall mixed effect (minor positive/minor negative) is therefore expected on this SA objective.
16. Value, protect and enhance soil quality and resources.	+?/-?	+?	-?	+?/-?	Option W9 would only allocate sites in Herefordshire that have been put forward by landowners and operators and which comply with the policies in the MWLP. At present the Council has two expansion sites which have been promoted in response to the call for sites which could result in continued adverse impacts on soil quality. However, this option may also have a minor positive effect as it seeks to extend existing waste facilities therefore reducing the number of new waste management developments that may be located on best and most versatile agricultural land. Option W10 provides a greater choice of location options for potential waste developments thereby allowing for the avoidance of best and most versatile agricultural land and supporting development at brownfield land. Option W11 would not set out site allocations or identify specific types of sites or types of location where applications would be looked upon favourably. As such by relying only upon policies in the MWLP this approach would be more reactive to applications which came forward and would fail to take a more plan-led approach. It is considered that this approach would be less likely to be able to promote development at locations that do not contain high quality agricultural soil. Option W12 would provide for the allocation of sites for waste management development as well as allowing for specific types of sites or types of location where applications would be looked upon favourably and also allow for proposals for development to come forward regardless of location. As such this combined approach to waste management development would provide some degree of certainty in terms of the location of such development in relation to areas which contain higher quality agricultural soils but would also allow for some more speculative proposals to come forward. An overall mixed effect (minor positive/minor negative) is therefore expected for Option W12.

Safeguarding waste sites

Option W13: Safeguard existing waste sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent waste operations at those sites, do not include a buffer around the site.

Option W14: Safeguard existing waste sites and associated facilities, including transport facilities, from other development that may have the potential to constrain or prevent waste operations at those sites, including a buffer around the site.

SA Objective	Option W13	Option W14	Justification
1. Support, maintain or enhance the provision of employment opportunities in the minerals and waste sectors.	+/-	+/-	As both options would safeguard existing waste sites and associated facilities in Herefordshire they would help to protect land which allows for the treatment of waste from other uses. As such employment opportunities in the waste management sector and employment opportunities associated with waste management are likely to be protected and minor positive effects are expected for both options. A minor negative effect (as part of an overall mixed effect) is expected for Option W14 as including a buffer around waste sites may potentially restrict non-waste developments which could have a negative effect on economic growth and employment opportunities. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option W13 as the omission of a buffer may lead to developments located in close proximity to the waste sites being adversely affected by the operation of waste management facilities.
2. Maintain or enhance conditions that enable a sustainable economy and continued investment.	+/-	+/-	As both options would safeguard existing waste sites and associated facilities in Herefordshire they would help to protect land which allows for the treatment of waste from other uses. This should facilitate the maintenance of the waste management sector and its future growth thereby contributing to the growth of the County's economy. A minor positive effect is therefore expected on this SA objective for both options. A minor negative effect (as part of an overall mixed effect) is expected for Option W14 as including a buffer around waste sites may potentially restrict non-waste developments which could have a negative effect on economic growth and employment opportunities. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option W13 as the omission of a buffer may lead to developments located in close proximity to the waste sites being adversely affected by the operation of waste management facilities.
3. Protect and improve the health of the people of	-?	+?	Option W13 would safeguard existing waste sites and associated facilities in Herefordshire while not requiring for a buffer to be extended around them. As such this approach may result in sensitive receptors (such as residential properties, schools and hospitals) being located in close proximity to waste

SA Objective	Option W13	Option W14	Justification
Herefordshire, and reduce disparities in health geographically and demographically.			management facilities. While it is recognised that waste management facilities are much improved in recent times it is likely that there may be some adverse impacts in terms of public health or amenity given the potential for increased levels of noise, light, fumes or smells associated with waste treatment processes. A minor negative effect is therefore expected on this SA objective. Option W14 would safeguard existing waste sites and associated facilities in Herefordshire requiring a buffer to be extended around them. As such this approach would reduce the potential for any adverse impacts relating to the processes of waste management in terms of public health or amenity. A minor positive effect is therefore expected on this SA objective.
4. Reduce poverty and social inclusion by closing the gap between the most deprived areas in the county and the rest of the county.	+/-	+/-	As both options would safeguard existing waste sites and associated facilities in Herefordshire they would help to protect land which allows for the treatment of waste from other uses. As such employment opportunities in the waste management sector and employment opportunities associated with waste management are likely to be protected and minor positive effects are expected for both options. A minor negative effect (as part of an overall mixed effect) is expected for Option W14 as including a buffer around waste sites may potentially restrict non-waste developments which could have a negative effect on economic growth and employment opportunities. Conversely, a minor negative effect (as part of an overall mixed effect) is expected for Option W13 as the omission of a buffer may lead to developments located in close proximity to the waste sites being adversely affected by the operation of waste management facilities.
5. Reduce road traffic, congestion and pollution, and promote sustainable modes of transport and efficient movement patterns in the County.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing waste sites and their associated facilities, including transport facilities, which may either support the transportation of waste by sustainable modes (e.g. rail) or via the road network.
6. Value, protect and enhance the character and built quality of	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing waste sites which may lead to more waste management activities that could have continued adverse impacts on the historic environment. A minor positive effect is expected for Option W14 as it includes a buffer zone which can ensure that there is sufficient distance between waste sites and sensitive land uses such as sites of historic

SA Objective	Option W13	Option W14	Justification
settlements and neighbourhoods and the county's historic environment and cultural heritage.			significance.
7. Move treatment of waste up the waste hierarchy.	++	++	As both options would safeguard existing waste sites and associated facilities in Herefordshire they would help to protect land which allows for the treatment of waste from other uses. It is therefore likely that both options would help to promote the re-use and recycling of, as well as energy recovery from waste in the County. This is likely to help reduce the volume of waste which is disposed of at landfill in Herefordshire and a significant positive effect is therefore expected for both options.
8. Promote sustainable use of mineral resources.	0	0	It is not expected that either option would have a direct impact upon this SA objective.
9. Reduce Herefordshire's vulnerability to the impacts of climate change as well as its contribution to the problem.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing waste sites and their associated facilities, including transport facilities, which may either support the transportation of waste by sustainable modes (e.g. rail) or via the road network. The safeguarding of existing waste sites also promotes re-use and recycling of, as well as energy recovery from waste in the County. This is likely to help reduce the volume of waste which is disposed of at landfill thereby reducing local greenhouse gas emissions.
10. Promote effective restoration and appropriate after use of sites.	0	0	Both options are not likely to have an effect on the effective restoration of sites and therefore, negligible effects are expected for this SA objective.
11. Value, maintain, restore and expand county biodiversity and	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing waste sites which may lead to more waste management activities that could have continued adverse impacts on biodiversity and geodiversity. A minor positive effect is expected for Option W14 as it includes a buffer zone which can ensure that there is sufficient distance between waste sites and sensitive land uses such as nature

SA Objective	Option W13	Option W14	Justification
geodiversity.			conservation sites.
12. Value, protect, enhance and restore the landscape quality of Herefordshire, including its rural areas and open spaces.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing waste sites which may lead to more waste management activities that could have continued adverse impacts on landscape character and quality. A minor positive effect is expected for Option W14 as it includes a buffer zone which can safeguard the character and appearance of the area surrounding the waste site.
13. Value, protect and enhance the quality of watercourses and maximise the efficient use of water.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing waste sites which may lead to more waste management activities that could have continued negative impacts on the quality of water courses. A minor positive effect is expected for Option W14 as it includes a buffer zone which can safeguard vulnerable surface and ground water resources surrounding the waste site.
14. Reduce the risk of flooding and the resulting detriment to public well-being, the economy and the environment.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard mineral and waste resources, which depending on the type of the operation, may increase the risk of flooding (e.g. waste treatment facilities are suitable in all Flood Zones excluding 3b). A minor positive effect is expected for Option M18 as it includes a buffer zone which can safeguard areas at risk of flooding surrounding the waste site.
15. Minimise noise, light, and air pollution.	+?/-?	+?/-?	Both options will have mixed effects (minor positive/minor negative) as they seek to safeguard existing waste sites and their associated facilities, including transport facilities, which may either support the transportation of waste by sustainable modes (e.g. rail) thereby reducing air pollution or via the road network which would increase air pollution. The safeguarding of existing waste sites also promotes re-use and recycling of, as well as energy recovery from waste in the County. This is likely to help reduce the volume of waste which is disposed of at landfill thereby reducing local greenhouse gas emissions and improving air quality.

SA Objective	Option W13	Option W14	Justification
16. Value, protect and enhance soil quality and resources.	-?	+?/-?	Minor negative effects are expected for both options as they seek to safeguard existing waste sites and their associated facilities which may lead to more waste management activities, increasing the potential impact on soils (e.g. contamination). A minor positive effect is expected for Option W14 as it includes a buffer zone which can safeguard areas of best and most versatile agricultural land surrounding the waste site.

Appendix 5

Consultation responses

Consultation Authority	Comment	Action (how comments have been addressed in this SA Report)
Natural England	Natural England has not reviewed the plans listed. However, we advise that the following types of plans relating to the natural environment should be considered where applicable to your plan area: • Green infrastructure strategies • Biodiversity plans • Rights of Way Improvement Plans • River basin management plans • AONB and National Park management plans. • Relevant landscape plans and strategies.	Noted. A comprehensive review of Plans/Programmes/Policies has been undertaken which includes the types of plans referred to by Natural England (see Chapter 3 and Appendix 1).
	Section 3.34 states that there are 685 Local Wildlife Sites and 122 Local Geological Sites in Herefordshire, but in the adopted Herefordshire Core Strategy Section 2 Herefordshire Context - Environmental quality – key facts states different numbers.	Noted. The figures stated in the Scoping Report are confirmed as correct using Herefordshire Council's website and ArcGIS.
	Key sustainability issues - We note that there is no reference to biodiversity net gain. We recommend that biodiversity net gain should be referred to in line the National Planning Policy Framework.	Noted and referred to as a key sustainability issue.
	SA framework - There are no questions relating to maintaining and improving geodiversity, avoiding irreversible losses or creating, extending or enhancing Local Geological Sites.	Noted and included in the revised SA framework.
	SA framework - We advise adding reference to protecting the quality as well as the quantity of ground and surface water.	Noted and included in the revised SA framework.
	SA framework - We advise adding in an appraisal question about protecting soils to minimise loss and damage and also minimising all forms of contamination to soils.	Noted and included in the revised SA framework.

Consultation Authority	Comment	Action (how comments have been addressed in this SA Report)
Environment Agency	**Relevant Plans and Programmes:** We note, with reference to Local Plans and Programmes, mention of the Herefordshire Local Plan (Core Strategy) which was adopted in 2015 and on which we provided detailed comment. With specific reference to flood risk the Core Strategy was supported by the 2009 Strategic Flood Risk Assessment (SFRA), as stated in Table 2.3, which was augmented by a basic update prior to adoption of the Plan. However, it is understood that Herefordshire Council are now in the process of producing a more thorough update to the SFRA which will inform future Development Plan Documents, such as the Minerals and Waste Plan and the Hereford Area Plan. This point is picked up in paragraph 3.46.	Chapter 3 has been updated to include reference to the SFRA undertaken in 2009, its update in 2015, and the SFRA which will be published for consultation in 2017. The 2017 SFRA will be referred to in Appendix 1 in the next iteration of the SA once a draft version has been published.
	Key Sustainability Issues: We would state that Groundwater Vulnerability should be an important consideration moving forward with the Plan.	Noted and included as a key sustainability issue.
	Sustainability Appraisal Framework: With reference to Climate Change (SA Framework Objective 14) please note that the National Planning Practice Guidance (NPPG) refers to Environment Agency guidance on considering climate change in planning decisions which is available online: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances	Noted.
	Sustainability Appraisal Framework: The Plan could look at 'ensuring flood risk reduction/improvement to the flood regime'.	Noted and a new sub-objective has been included for SA objective 14.
	Limitations: Our indicative Flood Map for Planning (Rivers and sea) does not include climate change allowances and primarily shows potential flooding from Main Rivers. In considering flood risk data, the limitations of our Flood Map should be acknowledged. As stated above, the Council's SFRA is currently being reviewed and updated to reflect the latest climate change allowances. Some un-modelled or ordinary watercourses have not been	Noted and included in Chapter 2 under the heading 'Difficulties Encountered and Data Limitations'.

Consultation Authority	Comment	Action (how comments have been addressed in this SA Report)
	mapped on our Flood Map (catchments smaller than 3km2 are not represented. Whilst the smaller catchments do not have an associated flood extent based on our flood map, this does not mean there is no flood risk associated with the watercourse).	
	Review of Plans and Programmes (Appendix 1): Clarification on timescales for the production of the new SFRA should be sought and reference should be included in Appendix 1 if appropriate.	Noted. The SFRA will be published for consultation in 2017 and will be referred to in the next iteration of the SA Report.