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Sustainability Appraisal Scoping Report for the Stroud District Local Plan Review

Prepared by LUC
April 2018

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Contents

1	Introduction	1
	The Plan Area	1
	The Stroud District Local Plan Review	2
	Sustainability Appraisal and Strategic Environmental Assessment	2
	Structure of the Scoping Report	5
2	Relevant Plans and Programmes	6
	International	6
	National	8
	Sub National	13
3	Baseline Information	18
	Geography	18
	Population	19
	Housing	19
	Social Inclusion and Deprivation	21
	Health	22
	Culture, Leisure and Recreation	22
	Education	23
	Crime	23
	Landscape, Biodiversity and Geodiversity	24
	Historic Environment	27
	Air and Water	28
	Flood Risk	29
	Energy and Climate Change	30
	Soils	31
	Resource Use/Waste and Recycling	32
	Employment and Economic Activity	33
	Transport	36
	Tourism	38
4	Key Sustainability Issues and Likely Evolution without the Plan	48
5	Sustainability Appraisal Framework	55
	Use of the SA Framework	60
	Proposed Structure of the SA Report	60
6	Next Steps	63

Tables

Table 1.1: Meeting the Requirements of the SEA Regulations	3
Table 3.1: Number of dwellings by year in Stroud District and Gloucestershire County	20
Table 3.2: Heritage assets at risk in Stroud District	28
Table 3.3: Installed capacity of sites generating electricity from renewable sources by region, 2016	31
Table 3.4: Daily commuter flows into and out of Stroud District	33

Table 3.5: GVA per hour worked indices for Gloucestershire Local Enterprise Partnership comparative to UK	34
Table 3.6: Total number of commercial properties and vacancy rates in Stroud's town centres (as at end of recording period 2016)	35
Table 3.7: Stroud - Staying visits in the Gloucestershire County context	38
Table 4.1: Key Sustainability Issues for Stroud District and Likely Evolution without the Local Plan Review	49
Table 5.1: SA Framework	56

Figures

Figure 1.1: Main stages of Sustainability Appraisal	2
Figure 1.2: Stages in SA scoping (Stage A)	2
Figure 3.1: Recreation	34
Figure 3.2: Landscape Features	35
Figure 3.3: Biodiversity Designations	36
Figure 3.4: Geodiversity Sites	37
Figure 3.5: Heritage Assets	38
Figure 3.6: Water Quality	39
Figure 3.7: Hydrology	40
Figure 3.8: Land Classification	41
Figure 3.9: Transport Links	42

1 Introduction

- 1.1 Stroud District Council commissioned LUC in February 2018 to carry out Sustainability Appraisal (SA) incorporating Strategic Environmental Assessment (SEA) of the emerging Stroud District Local Plan Review.
- 1.2 The purpose of this Scoping Report is to provide the context for, and determine the scope of, the SA/SEA of the Local Plan Review and to set out the framework for undertaking the later stages of the SA/SEA.
- 1.3 In summary, the Scoping stage of SA/SEA involves: reviewing other relevant plans, policies and programmes; considering the current state of the environment, as well as social and economic factors in the plan area (Stroud District); identifying any key environmental, social and economic issues or problems which may be affected by the Local Plan Review; and setting out the 'SA framework', which comprises specific sustainability objectives against which the likely effects of the Local Plan Review can be assessed.
- 1.4 The adopted Stroud District Local Plan (November 2015) was subject to SA/SEA throughout its preparation and that SA work is being drawn on as appropriate throughout the SA/SEA of the Local Plan Review.

The Plan Area

- 1.5 Stroud District sits within the county of Gloucestershire. The District is approximately 45,325ha in size, taking up approximately 17.1% of the total area of Gloucestershire. It is mostly rural in character with 51.6% of the land classed as rural¹. The population density in the most rural parts of the District is less than one person per hectare².
- 1.6 The first tier settlements in the District are Stroud, Stonehouse and Cam and Dursley, as set out in the adopted Local Plan. These settlements are located on the A419 and A4135 respectively – these roads provide relatively easy motorway access at the M5 which passes through the western part of the District. Approximately 22km of the Severn Estuary shoreline falls within the jurisdiction of Stroud District Council³.
- 1.7 The town of Stroud is positioned as the focal point of the 'Five Valleys' (Chalford Valley, Nailsworth Valley, Ruscombe Valley, Slad Valley and Painswick Valley)⁴, providing it with a dramatic landscape setting and connection with the wider countryside. Existing market towns and large villages of the District include Berkeley, Frampton on Severn, Minchinhampton, Nailsworth, and Wotton Under Edge.
- 1.8 The Stroud Valleys were among the earliest cloth making areas in Britain. As such, factories and mills are present within the District from these times with surviving structures mainly centred on the town of Stroud. Following the decline of the textile industry in the District the factories and mills have mainly been used for other industrial purposes, or have been converted to alternative uses such as residential and office use⁵. Stroud District Council is currently based in Ebley Mill which is thought to have been present in Stroud town since 1393.

¹ Defra (June 2011) *Local Authority Rural-Urban Classification*

² Gloucestershire County Council (October 2013) *Census Briefing for Commissioners*

³ EPR for Stroud District Council *Severn Estuary (Stroud District) Visitor Survey Report*

⁴ Stroud District Council (January 2009) *Public Realm Strategy: Stroud town centre*

⁵ Local Development Framework: Scott Wilson for Stroud District Council (June 2009) *Local Development Framework: Sustainability Appraisal Scoping Report*

The Stroud District Local Plan Review

- 1.9 Stroud District Council adopted its current Local Plan in November 2015, which set out the planning strategy for the District up to 2031. Although the Plan was adopted relatively recently, an early review is being commenced in order to ensure that it remains up to date and can meet future needs for development over the 20 year period between 2016 and 2036.
- 1.10 An Issues and Options consultation for the Local Plan Review was published in October 2017 and a series of public consultation events were held during autumn 2017. These events were designed to gather feedback on key issues of particular concern in Stroud District today, the matters most likely to grow in importance over the next 20 years and options for addressing key issues and providing for future needs.
- 1.11 The next iteration of the Local Plan Review, the Preferred Options consultation, is due to be published later in 2018.

Sustainability Appraisal and Strategic Environmental Assessment

- 1.12 Under the Planning and Compulsory Purchase Act 2004, SA is mandatory for Development Plan Documents. For these documents it is also necessary to conduct an environmental assessment in accordance with the requirements of the Strategic Environmental Assessment (SEA) Directive (European Directive 2001/42/EC). Therefore, it is a legal requirement for the Stroud District Local Plan Review to be subject to SA and SEA throughout its preparation.
- 1.13 The requirements to carry out SA and SEA are distinct, although it is possible to satisfy both using a single appraisal process (as advocated in the national Planning Practice Guidance⁶), whereby users can comply with the requirements of the SEA Directive through a single integrated SA process – this is the process that is being undertaken in Stroud District. From here on, the term ‘SA’ should therefore be taken to mean ‘SA incorporating the requirements of the SEA Directive’.
- 1.14 The SA process comprises a number of stages, with scoping being Stage A as shown in **Figure 1.1**:

Figure 1.1: Main stages of Sustainability Appraisal

Stage A: Setting the context and objectives, establishing the baseline and deciding on the scope.
Stage B: Developing and refining options and assessing effects.
Stage C: Preparing the Sustainability Appraisal Report.
Stage D: Consulting on the preferred options for the Plan and the SA report.
Stage E: Monitoring the significant effects of implementing the Plan.

- 1.15 **Figure 1.2** below sets out the tasks involved in the Scoping stage.

Figure 1.2: Stages in SA scoping (Stage A)

A1: Identifying other relevant policies, plans and programmes, and sustainability objectives.
A2: Collecting baseline information.
A3: Identifying sustainability issues and problems.
A4: Developing the SA framework.
A5: Consulting on the scope of the SA.

⁶ <https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal#sustainability-appraisal-requirements-for-local-plans>

Meeting the requirements of the SEA Directive

- 1.16 The SEA Directive was transposed into UK law through the [Environmental Assessment of Plans and Programmes Regulations 2004](#) (commonly referred to as the 'SEA Regulations'). This Scoping Report includes some of the required elements of the final 'Environmental Report' (the output required by the SEA Regulations). **Table 1.1** below signposts the relevant sections of the Scoping Report that are considered to meet the SEA Regulations requirements (the remainder will be met during subsequent stages of the SA of the Stroud District Local Plan Review). This table will be included in the full SA Report at each stage of the SA to show how the SEA Regulations requirements have been met through the SA process.

Table 1.1: Meeting the Requirements of the SEA Regulations

SEA Directive Regulations	Covered in this Scoping Report?
Preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan or programme, are identified, described and evaluated (Regulation 12 (2)). The information to be given is (Schedule 2):	The full SA Report for the Stroud District Local Plan Review will constitute the 'environmental report' and will be produced at a later stage in the SA process.
a) An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.	Chapters 1 and 2.
b) The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.	Chapters 3 and 4.
c) The environmental characteristics of areas likely to be significantly affected.	Chapter 3.
d) Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive 92/43/EEC.	Chapters 3 and 4.
e) The environmental protection, objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.	Chapter 2.
f) The likely significant effects on the environment, including short, medium, long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above issues.	Requirement will be met at a later stage in the SA process.
g) The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.	Requirement will be met at a later stage in the SA process.
h) An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Requirement will be met at a later stage in the SA process.
i) A description of measures envisaged concerning monitoring in accordance with Regulation 17.	Requirement will be met at a later stage in the SA process.

SEA Directive Regulations	Covered in this Scoping Report?
j) A non-technical summary of the information provided under the above headings.	Requirement will be met at a later stage in the SA process.
The report shall include such of the information referred to in Schedule 2 as may reasonably be required taking account of current knowledge and methods of assessment, the contents and level of detail in the plan or programme, the stage of the plan or programme in the decision-making process, and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of the assessment (Regulation 12(3)).	This Scoping Report and the Environmental Reports will adhere to this requirement.
<p>Consultation:</p> <ul style="list-style-type: none"> When deciding on the scope and level of detail of the information that must be included in the environmental report, the responsible authority shall consult the consultation bodies⁷ (Regulation 12(5)). 	Consultation with the relevant statutory environmental bodies is being undertaken in relation to this SA Scoping Report between April and May 2018.
<ul style="list-style-type: none"> Every draft plan or programme for which an environmental report has been prepared in accordance with Regulation 12 and its accompanying environmental report shall be made available for the purposes of consultation (Regulation 13(1)) and the period must be of such length that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents (Regulation 13(3)). 	Public consultation on the Stroud District Local Plan Review: Issues and Options took place in Autumn 2017. Consultation on the Preferred Options is due to take place in late 2018. That consultation will be accompanied by a full SA report which will include the SA findings for the reasonable alternative options considered, as well as the Preferred Options.
<ul style="list-style-type: none"> Other EU Member States, where the implementation of the plan or programme is likely to have significant effects on the environment of that country (Regulation 14). 	Not relevant as there will be no effects beyond the UK from the Stroud Local Plan Review.
Taking the environmental report and the results of the consultations into account in decision-making (Art. 8)	
<p>Provision of information on the decision: As soon as reasonably practicable after the adoption of a plan or programme, the responsibility authority shall inform the consultation bodies, the public consultees and the Secretary of State that the plan or programme has been adopted and provide a copy of a statement (Regulation 16(4)) that sets out:</p> <ul style="list-style-type: none"> how environmental considerations have been integrated into the plan or programme; how the environmental report has been taken into account; how opinions expressed in response to the invitation in Regulation 13(2)(d), action taken by the responsible authority in accordance with Regulation 13(4) have been taken into account; how the results of any consultations entered into under Regulation 14(4) have been taken into account; the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and the measures that are to be taken to monitor the significant environmental effects of the implementation of 	Requirement will be met at a later stage in the SA process.

⁷ The consultation bodies are Environment Agency, Historic England and Natural England

SEA Directive Regulations	Covered in this Scoping Report?
the plan or programme.	
<p>Monitoring: The responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action (Regulation 17).</p>	Requirement will be met at a later stage in the SA process.

Habitats Regulations Assessment

- 1.17 Under Article 6 (3) and (4) of the Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) land-use plans, including Development Plan Documents, are also subject to Habitats Regulations Assessment (HRA). The purpose of HRA is to assess the impacts of a land-use plan against the conservation objectives of a European site and to ascertain whether it would adversely affect the integrity of that site.
- 1.18 The HRA for the Stroud District Local Plan Review will be undertaken and reported on separately to the SA; however the findings will be taken into account in the SA where relevant (for example to inform judgements about the likely effects of the Local Plan Review on biodiversity).

Structure of the Scoping Report

- 1.19 This chapter has described the background to the production of the Stroud District Local Plan Review and the requirement to undertake SA. The remainder of this report is structured into the following sections:
- **Chapter 2** describes the other plans, policies and programmes of relevance to the SA of the Local Plan Review.
 - **Chapter 3** presents the baseline information which will inform the assessment of the policies and sites in the emerging Local Plan Review.
 - **Chapter 4** identifies the key environmental, social and economic issues in Stroud District of relevance to the Local Plan Review and considers the likely evolution of those issues without its implementation.
 - **Chapter 5** presents the SA framework that will be used for the appraisal of the Local Plan Review and the proposed method for carrying out the SA.
 - **Chapter 6** describes the next steps to be undertaken in the SA of the Local Plan Review.

2 Relevant Plans and Programmes

2.1 Annex 1 of the SEA Directive requires:

(a) *“an outline of the...relationship with other relevant plans or programmes”*; and

(e) *“the environmental protection objectives established at international, Community or Member State level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation”*

2.2 In order to establish a clear scope for the SA it is necessary to review and develop an understanding of the environmental, social and economic objectives contained within international and national policies, plans and strategies that are of relevance to the Stroud District Local Plan Review. Given the SEA Directive requirements above, it is also necessary to consider the relationship between the Stroud District Local Plan Review and other relevant plans, policies and programmes.

2.3 This chapter summarises the relevant international and national policies, plans and programmes which should be taken into consideration during preparation of the Stroud District Local Plan Review and its SA, as well as those plans and programmes which are of relevance at a regional and local level. The objectives of these plans and programmes have been taken into account when drafting the SA framework in Chapter 5.

International

2.4 **United Nations Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the ‘Aarhus Convention’)** (1998): Establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective.

2.5 **United Nations Declaration on Sustainable Development (Johannesburg Declaration)** (2002): Sets broad framework for international sustainable development, including building a humane, equitable and caring global society aware of the need for human dignity for all, renewable energy and energy efficiency, sustainable consumption and production and resource efficiency.

2.6 **European Environmental Noise Directive** (2002): Sets out a hierarchy for the avoidance, prevention and reduction in adverse effects associated with environmental noise, including noise generated by road and rail vehicles, infrastructure, aircraft and outdoor, industrial and mobile machinery.

2.7 **European Nitrates Directive** (1991): Identifies nitrate vulnerability zones and puts in place measures to reduce water pollution caused by the introduction of nitrates.

2.8 **European Urban Waste Water Directive** (1991): Protects the environment from the adverse effects of urban waste water collection, treatment and discharge, and discharge from certain industrial sectors.

2.9 **European Air Quality Framework Directive** (1996) and **Air Quality Directive** (2008): Put in place measures for the avoidance, prevention, and reduction in harmful effects to human health and the environment associated with ambient air pollution and establish legally binding limits for the most common and harmful sources of air pollution.

2.10 **European Drinking Water Directive** (1998): Protects human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.

- 2.11 **European Landfill Directive (1999)**: Prevents and reduces the negative effects on the environment from the landfilling of waste by introducing stringent technical requirements for waste and landfills.
- 2.12 **European Water Framework Directive (2000)**: Protects inland surface waters, transitional waters, coastal waters and groundwater.
- 2.13 **European Waste Framework Directive (2008)**: Sets out the waste hierarchy requiring the reduction of waste production and its harmfulness, the recovery of waste by means of recycling, re-use or reclamation and final disposal that does not harm the environment, including human health.
- 2.14 **European Industrial Emission Directive (2010)**: 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.
- 2.15 **European Floods Directive (2007)**: A framework for the assessment and management of flood risk, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity.
- 2.16 **European Energy Performance of Buildings Directive (2010)**: Aims to promote the energy performance of buildings and building units. Requires the adoption of a standard methodology for calculating energy performance and minimum requirements for energy performance.
- 2.17 **United Nations Paris Climate Change Agreement (2015)**: International agreement to keep global temperature rise this century well below 2 degrees Celsius above pre-industrial levels.
- 2.18 **International Convention on Wetlands (Ramsar Convention) (1976)**: International agreement with the aim of conserving and managing the use of wetlands and their resources.
- 2.19 **European Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) (1979)**: Aims to ensure conservation and protection of wild plant and animal species and their natural habitats, to increase cooperation between contracting parties, and to regulate the exploitation of those species (including migratory species).
- 2.20 **International Convention on Biological Diversity (1992)**: International commitment to biodiversity conservation through national strategies and action plans.
- 2.21 **European Habitats Directive (1992)**: Together with the Birds Directive, the Habitats Directive sets the standard for nature conservation across the EU and enables all 27 Member States to work together within the same strong legislative framework in order to protect the most vulnerable species and habitat types across their entire natural range within the EU. It also established the Natura 2000 network.
- 2.22 **European Birds Directive (2009)**: Requires the maintenance of all species of naturally occurring birds in the wild state in the European territory at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements.
- 2.23 **United Nations Declaration on Forests (New York Declaration) (2014)**: Sets out international commitment to cut natural forest loss by 2020 and end loss by 2030.
- 2.24 **United Nations (UNESCO) World Heritage Convention (1972)**: Promotes co-operation among nations to protect heritage around the world that is of such outstanding universal value that its conservation is important for current and future generations.
- 2.25 **European Convention for the Protection of the Architectural Heritage of Europe (1985)**: Defines 'architectural heritage' and requires that the signatories maintain an inventory of it and take statutory measures to ensure its protection. Conservation policies are also required to be integrated into planning systems and other spheres of government influence as per the text of the convention.
- 2.26 **European Landscape Convention (2002)**: Promotes landscape protection, management and planning. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape.

National

- 2.27 **The National Planning Policy Framework (NPPF)**⁸ is the most significant national policy context for the Local Plan Review. The document sets out the Government's planning policy for England and how these policies should be applied. The Local Plan Review must be consistent with the NPPF requirements. The NPPF sets out information about the purposes of local plan-making, stating that:
- "Local Plans must be prepared with the objective of contributing to the achievement of sustainable development. To this end, they should be consistent with the principles and policies set out in this Framework, including the presumption in favour of sustainable development."*
- 2.28 The NPPF also requires Local Plans to be 'aspirational but realistic'. This means that opportunities for appropriate development should be identified in order to achieve net gains in terms of sustainable social, environmental and economic development; however significant adverse impacts in any of those areas should not be allowed to occur.
- 2.29 National policy of most relevance to the emerging Local Plan Review has been summarised below. At the time of writing, a draft of the revised NPPF has been published for consultation (from March to May 2018). As such, each topic section refers to any proposed revisions which have been set out in the draft consultation document.
- 2.30 The Government is also setting out goals for managing and improving the environment within the next 25 years within its **environment plan**⁹. That document seeks to influence planning at a local level and therefore will be relevant to the scope of the SA and the Local Plan Review process. Reference has been included within each topic below to the relevant text from the environment plan.

Population Growth, Health and Wellbeing

- 2.31 The **NPPF** promotes "*strong, vibrant and healthy communities*" and "*sustainable, inclusive and mixed communities*".
- 2.32 One of the core planning principles is to "*take account of and support local strategies to improve health, social and cultural wellbeing for all, and deliver sufficient community and cultural facilities and services to meet local needs*".
- 2.33 Local planning authorities should "*boost significantly the supply of housing*" to meet the "*full, objectively assessed needs for market and affordable housing*". A Strategic Housing Market Assessment should be completed to assess the full housing needs of the local area, including the scale, mix and range of tenures required. Local planning authorities should work with neighbours where housing market areas cross administrative boundaries.
- 2.34 It is recognised through the framework that access to high quality open spaces and opportunities for sport and recreation can make an important contribution to the health and wellbeing of communities.
- 2.35 The NPPF states that "*good design is a key aspect of sustainable development*" and requires development to add to the overall quality of the area over its lifetime. The importance of good architecture and appropriate landscaping to reinforce local distinctiveness, raise the area's standard more generally in the area and address the connections between people and places is emphasised.
- 2.36 The NPPF promotes the retention and enhancement of local services and community facilities in villages, such as local shops, meeting places, sports, cultural venues and places of worship.
- 2.37 The framework also requires that developments create safe and accessible environments where crime and disorder, and fear of crime, do not undermine quality of life or community cohesion.

⁸ Department for Communities and Local Government (2012) *National Planning Policy Framework*

⁹ HM Government (January 2018) *A Green Future: Our 23 Year Plan to Improve the Environment*

- 2.38 Considering the promotion of educational standards there is a need to take a *"proactive, positive and collaborative approach"* to bring forward development that will *"widen choice in education"*, including sufficient choice of school places.
- 2.39 Health and wellbeing should also be considered in through the local plan process. Local plans should promote healthy lifestyles, social and cultural wellbeing and ensure access by all sections of the community is promoted.
- 2.40 The **draft revised NPPF**¹⁰ contains as part of its three overall overarching objectives, a social objective to *"support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment."*
- 2.41 The updated document states that strategic policies will be required for the plan area to include *"policies, and strategic site allocations, necessary to provide the homes and workplaces needed, including affordable housing ... (and) community facilities (such as health, education and cultural infrastructure)"*. Policies should also *"identify the size, type and tenure of homes required for different groups in the community"* with at least 10% of new homes to be provided for affordable home ownership subject to conditions and exemptions.
- 2.42 To help to diversify opportunities for builders and increase the number of schemes that can be built-out quickly to meet housing need, the draft revised NPPF states that at least 20% of the sites allocated for housing through a local authority's plan should be half a hectare or smaller.
- 2.43 Where there is an identified need, development of exception sites to provide entry-level homes suitable for first-time buyers is to be supported by local planning authorities unless such need is already to be met at other locations within the authority area. These sites should deliver a high proportion of entry-level homes to be offered at discounted sale or for affordable rent.
- 2.44 The updated document continues the theme of promoting healthy and safe communities which is to be achieved by creating places which *"promote social interaction (and) enable and support healthy lifestyles."*
- 2.45 **A Green Future: Our 25 Year Plan to Improve the Environment:** Sets out goals for improving the environment over the next 25 years. It details how the Government will work with communities and businesses to leave the environment in a better state than it is presently. The document identifies six key areas upon which action will be focused. Those of relevance to the topics of population growth, health and wellbeing are using and managing land sustainably; and connecting people with the environment to improve health and wellbeing. These two key areas are of relevance to the emerging Local Plan Review as follows:
- Using and managing land sustainably:
 - Embed an 'environmental net gain' principle for development, including housing and infrastructure.
 - Connecting people with the environment to improve health and wellbeing:
 - Help people improve their health and wellbeing by using green spaces including through mental health services.
 - Encourage children to be close to nature, in and out of school, with particular focus on disadvantaged areas.
 - 'Green' our towns and cities by creating green infrastructure and planting one million urban trees.
 - Make 2019 a year of action for the environment, working with Step Up To Serve and other partners to help children and young people from all backgrounds to engage with nature and improve the environment.

¹⁰ Ministry of Housing, Communities and Local Government (March 2018) *National Planning Policy Framework (Consultation draft)*

Economy

- 2.46 The economic role of the planning system as set out in the **NPPF** is to contribute towards building a “strong, responsive and competitive economy” by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure.
- 2.47 Local planning authorities should retain and enhance existing markets and, where appropriate, plan positively for the expansion of emerging sectors, ensuring that markets remain attractive and competitive.
- 2.48 Competitive town centre environments are prioritised over edge of town developments, which should only be considered where they have good access and do not compromise the viability of town centres in the long term.
- 2.49 Sustainable growth and expansion of all types of business and enterprise in rural areas should be supported, both through conversion of existing buildings and well-designed new buildings.
- 2.50 The **NPPF** requires Local Plans to set out a clear economic vision and strategy that positively and proactively encourages sustainable economic growth, supports existing and emerging sectors, prioritises economic regeneration, facilitates flexible working practices, supports the rural economy and provides the flexibility to adapt to future trends in economic needs where necessary.
- 2.51 The **draft revised NPPF** contains an economic objective to *“help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity.”*
- 2.52 It also requires that planning seeks to *“create the conditions in which businesses can invest, expand and adapt”* with policies required to *“to address potential barriers to investment, such as inadequate infrastructure, services or housing, or a poor environment.”* Planning policies are also required specifically to address support for the rural economy.
- 2.53 The updated NPPF also continues support for the role of town centres. Included within this support is a requirement to *“allocate a range of suitable sites in town centres to meet the scale and type of development needed, looking at least ten years ahead.”*

Transport

- 2.54 The **NPPF** encourages local planning authorities to promote land uses, transport infrastructure and technologies that reduce the need to travel, greenhouse gas emissions and congestion. Developments that will generate significant movement are required to be located where travel can be minimised and the use of sustainable transport modes maximised.
- 2.55 The **draft revised NPPF** requires that *“transport issues should be considered from the earliest stages of plan-making”*. The scale, location and density of development should reflect *“opportunities from existing or proposed transport infrastructure”*. To help reduce congestion and emissions, and improve air quality and public health the planning system should focus significant development *“on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.”* The draft revised framework also requires that planning policies support an appropriate mix of uses across an area to further help reduce the need to travel as well as the provision of high quality walking and cycling network.
- 2.56 While the revised framework promotes the use and development of sustainable transport networks it also requires that *“where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development”* should be identified and protected.

Air, Land and Water Quality

- 2.57 In relation to the protection of air, land and water quality through the planning system the **NPPF** contains the following provisions:
- The planning system should protect and enhance soils, particularly the best and most versatile agricultural land.

- New and existing development should be prevented from generating and being adversely effected by unacceptable levels of soil, air and water pollution.
- “*Despoiled, degraded, derelict, contaminated and unstable land*” should be remediated where appropriate.
- The NPPF encourages the reuse of previously developed land, “*provided that it is not of high environmental value*”.

2.58 The **draft revised NPPF** states that planning policies and decisions should contribute to and enhance the natural and local environment by protecting and enhancing valued soil and the economic and other benefits of the best and most versatile agricultural land. Policies should also prevent new and existing development from “*contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution.*”

2.59 **A Green Future: Our 25 Year Plan to Improve the Environment**¹¹: Of the key areas in the document around which action will be focused, those of relevance in terms of the protection of air, land and water quality are using and managing land sustainably; recovering nature and enhancing the beauty of landscapes; and increasing resource efficiency, and reducing pollution and waste. The three key areas of relevance to the emerging Local Plan Review are as follows:

- Using and managing land sustainably:
 - Embed a ‘net environmental gain’ principle for development, including natural capital benefits to improved and water quality.
 - Protect best agricultural land.
 - Improve soil health, and restore and protect peatlands.
- Recovering nature and enhancing the beauty of landscapes:
 - Respect nature by using our water more sustainably.
- Increasing resource efficiency and reducing pollution and waste:
 - Reduce pollution by tackling air pollution in our Clean Air Strategy and reduce the impact of chemicals.

Climate Change Adaptation and Mitigation

2.60 In relation to climate change adaptation and mitigation, the **NPPF** contains the following:

- One of the core planning principles is to support the transition to a low carbon future in a changing climate, by planning for new development in locations and designs that reduce greenhouse gas emissions and energy use.
- Development in areas at risk of flooding should be avoided. Where development is necessary, it should be made safe without increasing flood risk elsewhere.

2.61 Local planning authorities should adopt proactive strategies to mitigate and adapt to climate change, taking full account of flood risk, coastal change, water supply and demand considerations and green infrastructure.

2.62 The **draft revised NPPF** contains as part of its environmental objective a requirement to “*mitigate and adapt to climate change, including moving to a low carbon economy*”. The document also states that the “*planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change.*” To achieve these aims new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

2.63 The revised framework also requires that development is directed away from areas which are at highest existing or future risk of flooding. Where development is required in such areas, the “*development should be made safe for its lifetime without increasing flood risk elsewhere.*”

¹¹ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

- 2.64 **A Green Future: Our 25 Year Plan to Improve the Environment**¹²: The key areas in the document of relevance in terms of responding to climate change are using and managing land sustainably; and protecting and improving our global environment. Actions that will be taken as part of these two key areas are as follows:
- Using and managing land sustainably:
 - Take action to reduce the risk of harm from flooding and coastal erosion including greater use of natural flood management solutions.
 - Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.

Biodiversity

- 2.65 The **NPPF** emphasises the importance of planning for biodiversity at a landscape-scale across local authority boundaries. The document also requires local planning authorities to enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity and ecological networks where possible.
- 2.66 The **draft revised NPPF** states as part of its environmental objective that the planning system should contribute to protecting and enhancing the natural environment including helping to improve biodiversity, and using natural resources prudently. In support of this aim the framework states that Local Plans should “*identify and map components of local wildlife-rich habitats*” and should also “*promote the conservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*”
- 2.67 **A Green Future: Our 25 Year Plan to Improve the Environment**¹³: The key areas in the document of relevance in terms of the protection and promotion of biodiversity are recovering nature and enhancing the beauty of landscapes; securing clean, productive and biologically diverse seas and oceans; and protecting and improving our global environment. Actions that will be taken as part of these three key areas are as follows:
- Recovering nature and enhancing the beauty of landscapes:
 - Develop a Nature Recovery Network to protect and restore wildlife, and provide opportunities to re-introduce species that have been lost from the countryside.
 - Securing clean, healthy, productive and biologically diverse seas and oceans:
 - Achieve a good environmental status of the UK’s seas while allowing marine industries to thrive, and complete our economically coherent network of well-managed marine protected areas.
 - Protecting and improving our global environment:
 - Provide international leadership and lead by example in tackling climate change and protecting and improving international biodiversity.
 - Support and protect international forests and sustainable agriculture.

Historic Environment

- 2.68 Of relevance to the conservation and enhancement of the historic environment through the planning system, the **NPPF** includes the following within its core planning principles:
- Seeking to secure high quality design.
 - Taking account of the different roles and character of different areas.

¹² HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

¹³ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

- Conserving heritage assets in a manner appropriate to their significance.
- 2.69 The framework also requires the protection and enhancement of valued landscapes, giving particular weight to those identified as being of national importance, as well as recognition that heritage assets are an irreplaceable resource and that they should be conserved in a manner appropriate to their significance.
- 2.70 The **draft revised NPPF** contains an environmental objective to contribute to protecting and enhancing the built and historic environment. The draft revised document sets out a strategy to seek "*the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect.*"

Landscape

- 2.71 The Stroud Local Plan Review will be required to have consideration for the conservation and enhancement of landscape character in the District. In relation to this topic the **NPPF** includes planning principles to:
- Take account of the different roles and character of different areas.
 - Contribute to conserving and enhancing the natural environment.
- 2.72 The NPPF also requires the protection and enhancement of valued landscapes, giving particular weight to those identified as being of national importance, as well as the natural and historic environments more generally.
- 2.73 The **draft revised NPPF** includes as part of its approach to protecting the natural environment, recognition for the intrinsic character and beauty of the countryside, and the wider benefits from natural capital. Importantly, great weight is to be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty.
- 2.74 **A Green Future: Our 25 Year Plan to Improve the Environment**¹⁴: The key area in the document of relevance in terms of the conservation and enhancement of landscape character is recovering nature and enhancing the beauty of landscapes. Actions that will be taken as part of this key area are as follows:
- Working with AONB authorities to deliver environmental enhancements.
 - Identifying opportunities for environmental enhancement of all England's Natural Character Areas, and monitoring indicators of landscape character and quality.

Sub National

- 2.75 **Gloucestershire's Local Transport Plan 2015-2031**¹⁵: The primary purpose of the document is to set out the transport issues, pressures and priorities for the County particularly in relation to increased transport demands which will result due to projected housing development and future accelerated economic growth. Transport improvement should be balanced given the need to take responsibility for reducing transport derived carbon emissions. The main transport priorities for the County to support economic growth have been set out as follows:
- A417 Missing Link.
 - A46 M5 Junction 9 corridor improvements.
 - M5 Junction 10 all ways improvement.
 - Gloucestershire rail strategy, including Gloucester and Cheltenham stations regeneration.
- 2.76 **Strategic Economic Plan for Gloucestershire**¹⁶: Produced by GFirst LEP, the Local Enterprise Partnership for Gloucestershire, the SEP has set out strategic priorities to achieve economic

¹⁴ HM Government (2018) A Green Future: Our 23 Year Plan to Improve the Environment [online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/673203/25-year-environment-plan.pdf

¹⁵ Gloucestershire County Council (November 2017) *Gloucestershire's Local Transport Plan 2015-2031*

¹⁶ Gloucestershire Local Enterprise Partnership (March 2014) *Strategic Economic Plan for Gloucestershire*

growth of £493 million in the County from 2015-2021. These priorities include improving employability and economic productivity of the work force through upskilling; attracting new employers and talented employees to the area through promotion of and exploiting the current opportunities provided by the motorway corridor, as well as improving wider connections through future transport infrastructure and broadband improvements. Building on existing connections to the rest of the UK which Gloucestershire has at the M5 corridor, the availability of employment land at this location has been identified as a key area to attract businesses.

- 2.77 **Gloucestershire Local Flood Risk Management Strategy**¹⁷: Gloucestershire County Council is the Lead Local Flood Authority for administrative area of the County. The County Council has responsibility to lead and coordinate on management of surface water runoff, ordinary watercourses and groundwater and also has increased responsibilities in relation to management of flood risk from the highway network and planning for emergencies.
- 2.78 The Gloucestershire Local Flood Risk Management Strategy sets out how the County Council aims to manage flood risk in partnership across Gloucestershire up to 2023. The strategy has mapped those areas which are most at risk of flooding, identifying areas which have less than 25%, between 25% and 50%, between 50% and 75% and over 75% susceptibility to groundwater flooding.
- 2.79 The Annual Progress and Implementation Plans to be produced annually as follow up to the strategy are to detail progress in relation to flood risk against the strategy objectives and agreed actions.
- 2.80 There are three adopted Local Plans in place to guide planning decisions on minerals and waste developments throughout Gloucestershire. These are the **Gloucestershire Minerals Local Plan 1997-2006**¹⁸, the **Gloucestershire Waste Local Plan 2002-2012**¹⁹ and the **Waste Core Strategy for Gloucestershire**²⁰. The Gloucestershire MLP 1997-2006 was adopted in February 2003. A number of the policies in this document have since been deleted meaning they no longer form part of the development plan and work is currently being undertaken on the **Emerging Minerals Local Plan for Gloucestershire 2018 - 2032**²¹ to replace those policies which have been saved. Consultation on the draft replacement plan occurred between September 2016 and November 2016. The Waste Core Strategy was adopted in November 2012 and replaced many of the policies in the Waste Local Plan.
- 2.81 The Gloucestershire MLP 1997-2006 through Saved Policy A1 sets out that the County Council should *"endeavour to maintain a landbank that reflects the local apportionment of the Regional Guidelines"*. Saved Policy A2 sets out that the authority should *"maintain a landbank of reserves for the winning and working of aggregate minerals throughout and at the end of the Plan period"*. The MLP also sets out preferred areas for aggregate mineral working beyond which proposed aggregate minerals working will only be permitted if it can be demonstrated that the mineral is of a specification, or will meet a forecast shortfall, which is required to maintain the County's appropriate contribution to local, regional and national need.
- 2.82 The Draft Minerals Local Plan for Gloucestershire 2018-2032 was published for public consultation in September 2016 with the aim of providing a clear policy framework for how mineral developments should take place across Gloucestershire. This includes the vision of the County in 2033 at the end of the plan period where it is a leading county in managing its mineral resources and mineral resources will have played a key part in delivering renewal, regeneration and economic growth. The working of minerals will also have been undertaken to limit adverse impacts including those in terms of health and well-being, economic vitality of local businesses, the natural and built environment and flood risk.
- 2.83 The plan sets out seven objectives to achieve this vision. It also sets out the type of development which is to be permitted within Mineral Safeguarded Areas and Mineral Consultation Areas as well as safeguarded mineral infrastructure sites. A total of 10 allocations have been made through the

¹⁷ Gloucestershire County Council (July 2014) *Local Flood Risk Management Strategy*

¹⁸ Gloucestershire County Council (February 2003) *Gloucestershire Minerals Local Plan 1997-2006*

¹⁹ Gloucestershire County Council (October 2004) *Gloucestershire Waste Local Plan 2002-2012*

²⁰ Gloucestershire County Council (November 2012) *Gloucestershire Waste Core Strategy*

²¹ Gloucestershire County Council (September 2016) *Draft Minerals Local Plan for Gloucestershire*

plan which includes five sites for the future working of sand & gravel and five sites for crushed rock limestone. Once adopted the plan will replace and update all aspects of the current MLP.

- 2.84 Gloucestershire Waste Core Strategy through Policy WCS2 seeks to *“raise awareness and positively influence attitudes and behaviour so as to reduce the amount of waste produced and ensure a greater proportion of waste is re-used.”* New development in the County is expected to incorporate the principles of waste minimisation and re-use. Policy WCS6 sets out that up to 2027 development will be delivered to provide residual waste recovery capacity for up to 145,000 tonnes per year of municipal solid waste; up to 73,000 tonnes per year of commercial & industrial; and strategic residual recovery facilities to allow for up to 50,000 tonnes per year.
- 2.85 Outline boundaries for site allocations to meet the need for strategic residual recovery have been set out for:
- Wingmoor Farm East, to the south west of Bishop’s Cleeve in Tewkesbury
 - The Park, to the west of Bishop’s Cleeve in Tewkesbury
 - Wingmoor Farm West, to the west of Bishop’s Cleeve in Tewkesbury
 - Javelin Park, to the south of Quedgeley and Harwicke by Junction 12 of the M5 Motorway in Stroud
 - Land at Moreton Valence, to the south west of Hardwicke and to the north of Whitminster in Stroud.
- 2.86 **A Strategic Framework for Green Infrastructure in Gloucestershire 2015²²**: The framework sets out a vision of green infrastructure in Gloucestershire as being enhanced, extended, promoted and managed to maximise its contribution to the natural and historic environment as well as health and well-being, the economy and quality of life including response to climate change. The contribution that green infrastructure can make to sustainable economic growth is to be achieved by giving its provision the same consideration as the delivery of other key infrastructure across the County.
- 2.87 The strategic green infrastructure principles for the County are:
- The successful connecting of functional strategic green infrastructure across the county.
 - Maximising opportunities to improve both strategic green infrastructure and more local green infrastructure whenever change is being considered.
 - Partnership working focussing co-ordination through the Local Nature Partnership and GFirst LEP to promote and enhance green infrastructure.
 - Ensuring the functional benefits of green infrastructure are understood.
 - Embedding the principles of green infrastructure in policies guiding change in the County.
 - Securing funding (for example through S106 agreements and CIL) to deliver improvements to strategic green infrastructure and individual green infrastructure projects.
 - Ensuring that the evidence to support the evaluation of different green infrastructure initiatives is robust and up to date.
- 2.88 **Gloucestershire Nature Map²³**: The Gloucestershire Local Nature Partnership has set out the Nature Map to identify the presence of characteristic habitats which most typify the County. At such locations habitats of these types are to be supported, expanded and appropriately linked to help promote wildlife. The Nature Map identifies landscape-scale areas as the County’s wildlife Strategic Nature Areas (SNAs) in respect of Priority Habitats, which provide the best opportunity for creating and linking these key wildlife habitats. This approach is to achieve large-scale habitat restoration and creation and is expected to help deliver wide-ranging benefits for people as well as wildlife as a result of support for a range of ecosystem services.

²² Gloucestershire Local Nature Partnership (2015) *A Strategic Framework for Green Infrastructure in Gloucestershire 2015*

²³ Gloucestershire Local Nature Partnership (Accessed: April 2018) *Gloucestershire’s Natural Environment: Gloucestershire Nature Map* Online at: <http://gloucestershirenature.org.uk/actionplan>

- 2.89 **Cotswolds AONB Management Plan 2013-2018**²⁴: The management plan sets out the special qualities (the statement of significance) of the AONB and a vision of how the landscape is to evolve over the twenty year period. The benefits of the AONB are set in terms of its scenic beauty, cultural heritage, green infrastructure provision, sustainable economic growth (including rural tourism and business) and ecosystem services. Key issues have been identified for each of the themes relating to the AONB, from which objectives and policies have been drawn to protect the AONB and its special qualities.
- 2.90 The Cotswolds Conservation Board is currently undertaking work to prepare the **Cotswolds AONB Management Plan 2018-2023**²⁵. Currently in draft form, once adopted the new plan will supersede the adopted management plan to provide updated policies and guidance for developers and partner organisations and monitoring indicators against which the success of the plan will be measured.
- 2.91 The draft plan sets a vision for the AONB in 2043 as a "*Distinctive, unique, accessible living landscape treasured for its diversity which is recognised by all for its wide open views, dry stone walls, intimate valleys, flower rich grasslands, ancient woodlands and distinctive Cotswold stone architecture.*"
- 2.92 **2017-2027 Severn Estuary Strategy**²⁶. The Strategy was developed by the Severn Estuary Partnership to "champion an integrated approach to the sustainable use and enjoyment of the Severn Estuary". The aims of this Strategy are to:
- Update and streamline the 2001 Severn Estuary Strategy.
 - Provide a strategic policy framework for the Severn Estuary.
 - Provide context to inform and support decision-making.
 - Facilitate the Marine & Coastal Act (2009) obligations related to cross-border integration, land-sea integration and taking an ecosystem-based approach to management.
- 2.93 The Strategy also sets out five principles for its enactment which are in keeping with the UK High-Level Marine Objectives. These are:
- Achieving a sustainable marine economy.
 - Ensuring a strong, healthy and just society.
 - Living within environmental limits.
 - Promoting good governance.
 - Using sound science responsibly.
- 2.94 **The Severn Estuary Shoreline Management Plan Review (SMP2)**²⁷. The SMP2 sets out draft policies for how the shoreline at the Severn Estuary should be managed for the next 100 years. The plan divides the area with the estuary into 16 Theme Areas each of which is in turn divided into a number of Policy Units of more manageable sizes. Within each Policy Unit the SMP2 gives recommendations for epoch (0-20 years; 20-50 years; and 50-100 years) in terms of one of four policy options: no active intervention; hold the line; managed realignment; or advance the line.
- 2.95 **Flood Risk Management Strategy**²⁸. The Strategy is a long term plan to manage tidal flood risks in the Severn Estuary. It covers the coast from Gloucester to Lavernock Point near Cardiff and from Gloucester to Hinkley Point in Somerset. The three main objectives of the Strategy are to:
- Define a 100 year plan of investment for flood defences by the Environment Agency, National Resources Wales and local authorities.

²⁴ Cotswolds Conservation Board (March 2013) *Cotswolds AONB Management Plan 2013-2018*

²⁵ Cotswolds Conservation Board (February 2018) *Cotswolds AONB Management Plan 2018-2023*

²⁶ Severn Estuary Partnership (May 2017) *Severn Estuary Strategy 2017-2027*

²⁷ Atkins on behalf of Severn Estuary Coastal Group (October 2010) *The Severn Estuary Shoreline Management Plan Review (SMP2)*

²⁸ Environment Agency and National Resources Wales (Accessed April 2018) *Severn Estuary Flood Risk Management Strategy Online* at: <http://www.severnestuariespartnership.org.uk/sep/projects/severn-estuary-flood-risk-management-strategy/>

- Prioritise other flood risk management measures such as providing advice to utility companies to protect critical infrastructure, development control advice and flood warning investment.
- Decide where new inter-tidal wildlife habitats should be created to compensate for losses of habitat caused by rising sea levels.

2.96 **Stroud District Environment Strategy 2007-2027**²⁹: The strategy sets out the priorities for the District to 'live within environmental limits'. The priorities for Stroud have been identified as:

- Sustainable consumption and production.
- Climate change and energy.
- Protecting natural resources and enhancing the environment.
- Creating sustainable communities.
- Keeping the Council and local community focused on environmental limits.

2.97 **A Heritage Strategy for Stroud District**³⁰: The strategy was adopted as supplementary planning advice for the Council in February 2018. The document seeks to achieve the positive management and conservation of the District's heritage. Concurrently, the strategy will be expected to maximise the contribution that the historic environment makes to the character of the District, its economic well-being, and the quality of life of its communities.

2.98 The strategy has three main objectives to ensure that the local historic environment is properly valued:

- Maximising the contribution that the historic environment makes to the character of the District, its economic well-being, and the quality of life of its communities;
- Identifying ways to positively address the issues and pressures that are facing heritage assets; and
- Maximising opportunities for the historic environment to help deliver the District Council's wider corporate objectives, including those of the Local Plan.

²⁹ Stroud District Council (February 2007) *Stroud District Environment Strategy 2007-2027*

³⁰ Stroud District Council (February 2018) *A Heritage Strategy for Stroud District*

3 Baseline Information

- 3.1 Baseline information provides the basis for predicting and monitoring the likely sustainability effects of a plan and helps to identify key sustainability issues and means of dealing with them.
- 3.2 Annex 1 of the SEA Directive requires information to be provided on:
- (a) *the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan;*
 - (b) *the environmental characteristics of areas likely to be significantly affected;*
 - (c) *any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC [the 'Birds Directive'] and 92/43/EEC [the 'Habitats Directive'].*
- 3.3 Baseline information was previously collated for the June 2009 Local Development Framework SA Scoping Report and this has been used as the starting point to collate baseline data. This information has been revised and updated to make use of the most recent available information sources, and these sources have been referred to in footnotes. The revised and updated baseline data set out in this section reflects the scope of the Local Plan Review.
- 3.4 Data referred to have been chosen primarily for regularity and consistency of collection, in order to enable trends in the baseline situation to be established, and also subsequent monitoring of potential sustainability effects.

Geography

- 3.5 Stroud District is located in the western part of Gloucestershire and covers an area of approximately 45,325ha. The District is bordered by Forest of Dean District on the other side of the River Severn to the west, Gloucester and Tewkesbury to the north, Cotswold District to the east and South Gloucestershire to the south.
- 3.6 Stroud is made up of 30 wards and 52 parishes. The ten electoral divisions in Stroud District are Bisley and Painswick; Cam Valley; Dursley; Hardwicke and Severn; Minchinhampton; Nailsworth; Rodborough; Stonehouse; Stroud Central; and Wotton-under-Edge. The adopted Stroud District Local Plan has set out eight parish cluster areas which have distinct qualities, issues, constraints and opportunities. These cluster areas are the Gloucester Fringe, Severn Vale, Stonehouse Cluster, Berkeley Cluster, Cotswold Cluster, Wotton Cluster, Stroud Valleys and Cam and Dursley³¹.
- 3.7 The town of Stroud is located approximately 30km to the north east of Bristol. It is located within the centre-north of the District. The Stroud Valleys is the focus of much of the development in Stroud (approximately 40%) as well as a significant portion of its population given that it includes both Stroud and Nailsworth. Other important centres in the District include Cam and Dursley and Stonehouse (all first tier settlements). The Settlement Hierarchy set out in the adopted Local Plan 2015 identifies Berkeley, Frampton on Severn, Hunts Grove, Minchinhampton, Nailsworth and Wotton-under-Edge as second tier Local Service Centres with further smaller settlements spread across the District which offer a more limited level of access to services and facilities.
- 3.8 In addition to connections with the surrounding towns and areas of Gloucestershire, Stroud District has further close links with the West Midlands and South Wales. The M5 runs through the District from north to south, providing links with Birmingham to the north and South Wales (via the M48).

³¹ Stroud District Council (November 2015) *Stroud District Local Plan*

- 3.9 The District's landmass sits on the estuary of the River Severn to the west. The River Frome empties into the estuary after passing through the settlements of Brimscombe, Stroud and Stonehouse from east to west respectively within the District. The District also benefits from the presence of a number of canals which are currently subject to various stages of restoration. The Stroudwater Canal and the Thames and Severn Canal run from east to west through the District and in the past connected the River Severn to the River Thames at Lechlade. Together these canals form the Cotswold Canals. The Gloucester and Sharpness Canal runs along much of the course of the River Severn at the western edge of the District from south to north towards Gloucester.

Population

- 3.10 The total resident population in Stroud as per the Office for National Statistics Mid -2016 Population Estimates³² is recorded as 117,472 which makes the District the third most populous in Gloucestershire. At present there are slightly more females (59,700) in the District than males (57,700). The population density for the District is 255 people per square metre as of 2016, which is slightly higher than the figure for Gloucestershire (235 people per square metre) and the wider South West region (231 people per square metre).
- 3.11 The District saw a population change of 0.65% from mid-2015 to mid-2016 with a net internal migration rate of 0.62% and net international migration rate of 0.09%³³. The South West region as a whole is expected to see an increase of 393,200 residents up to 2024 which represents a 7.3% increase from 2014 figures. This is slightly less than the national figure of 7.5%.
- 3.12 The District has a marginally lower proportion of people who are of working age (60.1%) when compared to the South West region (60.9%) and Great Britain as a whole (63.1%). The proportion of work age residents who are economically active (83.4%) is slightly higher than the figure for the wider South West region (81.0%) and the national (78.0%) figure³⁴. It is predicted that by 2024 those over 65 will represent 24.8% of the District's population. From the 2014 figure this will be a growth of 24.5%. The population growth in the South West region for those of working age is expected to be less than 2.5%³⁵ reflecting a trend towards an increasingly ageing population.

Housing

- 3.13 The latest census data in 2011 showed that there were 47,794 households in Stroud District³⁶. This represented an increase in household numbers of 7.1% or 3,177 households since 2001³⁷. This increase was mainly attributed to a rise in the number of one person households and cohabiting couples. It is expected that this trend is likely to continue in the District.
- 3.14 Household projections show that in 2018 there are approximately 51,230 households in the District. Over the following ten year period up to 2028 projections show that the number of households is set to increase to approximately 56,240³⁸.
- 3.15 Stroud saw an increase of 8.6% in terms of the number of dwellings in the District between the 2001 and 2011 censuses. The growth at national level (8.3%), regional level (9.9%) and county level (9.0%) were comparative to that experienced in Stroud during the same period. The latest available information shows that as of April 2016 there were 52,230 dwellings in the District of

³² ONS (March 2018) *Population estimates revision tool*

³³ ONS (June 2017) *Population Estimates for UK, England and Wales, Scotland and Northern Ireland: Mid-2016*

³⁴ Nomis (Accessed March 2018) *Labour Market Profile – Stroud* Online at: <https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx>

³⁵ ONS (May 2016) *Subnational population projections for England: 2014-based projections*

³⁶ ONS (March 2011) *Census data*

³⁷ Gloucestershire County Council (March 2016) *Understanding Stroud 2015*

³⁸ ONS (July 2016) *Household projections for England and local authority districts*

which 45,530 were in private ownership. **Table 3.1** below displays the comparative number of dwellings within the District and at County level between 2012 and 2016³⁹.

Table 3.1: Number of dwellings by year in Stroud District and Gloucestershire County

Year	Stroud District	Gloucestershire County
2012	50,340	271,090
2013	50,750	273,410
2014	51,220	276,110
2015	51,800	278,940
2016	52,230	281,760

- 3.16 The 2011 census highlighted that there were 14,952 homes with no usual resident household in Gloucestershire in 2011, representing 5.5% of all of the accommodation available for residence in the County which is lower than the average for the South West (6.0%) but higher than the figure for England (4.3%)⁴⁰. This is inclusive of derelict properties and those not in use as well as holiday homes.
- 3.17 In terms of housing deprivation measured as part of the 2015 Indices of Multiple Deprivation, 33 areas of Gloucestershire are within the most 10% deprived nationally for Barriers to Housing and Services, an increase from 32 areas in 2010. Three of these areas are in Stroud⁴¹.
- 3.18 The existing housing stock in the District is relatively old and the worst housing conditions are most evident in the private rented sector. Of all homes in Stroud 25.5% were built pre-1919. This is slightly above the national average. A smaller proportion of housing stock in Stroud has been built between 1919 and 1964 and a significantly higher proportion of homes than the national average were built post 1980. The average percentage of properties built post-1980 nationally is only 18.5% while in Stroud the figure is 28.6%⁴².
- 3.19 The minimum housing requirement for the period April 2006 to March 2031 as set out in the adopted Local Plan is 11,400 homes. The Stroud District Land Availability⁴³ reports that as at 1st April 2017 for this period 4,623 completions have been made and there are a further 5,802 new homes committed. As such, the District has a remaining minimum requirement to deliver 975 additional homes over the plan period – this target is intended to be met through a combination of allocations and windfall. Of those new homes which have been completed between April 2006 and March 2017 68% were on brownfield land while of those committed at April 2017 only 28% are on brownfield land, reflecting the large housing allocations identified in the Local Plan.
- 3.20 The Council's Strategic Assessment of Land Availability (SALA)⁴⁴ details sites with potential for housing as well as for employment, retail and community uses. The SALA identifies sufficient housing completions, commitments, allocations, SALA sites within settlements and small site windfalls to deliver the Local Plan requirement by 2031 with a surplus of 1,773 additional homes above the minimum requirement. The additional deliverable housing sites identified and promoted through the SALA process means that the deliverable housing supply position for the 2016-2021 period sits at 6.75 years. The SALA has not, however, identified any site specific sources of housing within settlements to meet needs beyond 2031 and therefore there is a requirement to find additional land as part of the Local Plan Review. The SALA identifies sites outside settlement development limits with future potential to deliver an additional 6,547 houses for the period 2016-2036 if required.
- 3.21 The adopted Local Plan has also identified a target of 950 additional bedspaces in Class C2 care homes, to meet the needs of elderly people. It is reported in the SHMA that at March 2017 only 107 completions had been made and there were no further commitments identified meaning that a further provision of 843 beds would be required over the plan period.

³⁹ Ministry of Housing, Communities & Local Government (March 2018) *Number of dwellings by tenure and district, England*

⁴⁰ Local Authorities of Gloucestershire (March 2014) *Strategic Housing Market Assessment Update*

⁴¹ Gloucestershire County Council and the Clinical Commissioning Group on behalf of the Gloucestershire Health and Wellbeing Board (2018) *JSNA - Understanding Gloucestershire – 2017*

⁴² Stroud District Council (March 2015) *Housing Strategy 2015 – 2019*

⁴³ Stroud District Council (June 2017) *Stroud District Housing Land Availability Residential Commitment in Stroud District as at 1st April 2017*

⁴⁴ Stroud District Council (May 2017) *Strategic Assessment of Land Availability*

- 3.22 Gloucestershire's Gypsy and Traveller Accommodation Assessment (GTAA) reported that in Stroud up to 2031 there is no current or future need associated with a household that meets the new planning definition. However there is a requirement for up to seven additional pitches for unknown Gypsy or Traveller households during the period 2021-2031. The requirement for Travelling Showpeople plots for households that meet the planning definition is eight additional plots and for up to four plots for unknown households for the period 2016-2031⁴⁵.

Social Inclusion and Deprivation

- 3.23 Stroud is one of the 20% least deprived districts/unitary authorities in England.⁴⁶ This follows the trend of the wider county area given that Gloucestershire is not very deprived, with even the most deprived districts (Gloucester City, and Forest of Dean) falling within the middle quintile (i.e. middle 20%) for deprivation out of 326 English authorities⁴⁷.
- 3.24 Stroud itself has no lower super output areas (LSOAs) that rank in the top 20% most deprived in England. Furthermore of all districts in Gloucestershire, Stroud District displays the largest proportion of population (73%) living within the two least deprived national quintiles in England. There are only three LSOAs in the District (within the Cam West, Dursley and Stonehouse wards) which are within the 30% most deprived LSOAs in England⁴⁸.
- 3.25 From the 2010 IMD information release to 2015, Stroud's worst ranking domain remains "Barriers to Housing and Services", with 8% of the District's population living within LSOAs ranked in the most deprived national quintile. However, Stroud performs favourably relative to the rest of Gloucestershire in this domain, and has the county's least deprived LSOA - Berkeley 3 - which ranks 32,785th out of 32,844 nationally. Stroud District has seen a relative improvement in the national rankings since 2010 for "Crime and Disorder" given that in 2015 there are proportionally 21% more people living in the least deprived LSOAs for this domain, and 2% fewer in the most deprived national quintile areas⁴⁹.
- 3.26 ONS data shows that annual house price rates of change for the year ending December 2017 for all regions of England is highest for the South West region at 7.5%⁵⁰. Within Stroud itself house prices are 8.2 times earnings as at 2016, compared to 4.5 times earnings in 1999⁵¹. This is in line with the trend across much of the country with housing affordability worsening in all local authority districts. On average, working people could expect to pay around 7.6 times their annual earnings on purchasing a home in England and Wales in 2016, up from 3.6 times earnings in 1997. As such the issue of housing affordability will need to be addressed through planning policy and future affordable housing provision in the District will need to be delivered as part of any development planned for.
- 3.27 The South West region has the highest proportion of fuel poor homes in England with 289,658 homes reported as fuel poor in 2014⁵². The proportion of households in fuel poverty in Stroud in 2015 was recorded as 10.4%, however, which is marginally lower than the county level at 10.7% and the regional level at 11.4%⁵³.

⁴⁵ Cheltenham, Cotswold, Forest of Dean, Gloucester, Stroud and Tewkesbury Councils (March 2017) *Gloucestershire Gypsy and Traveller Accommodation Assessment*

⁴⁶ Public Health England (July 2017) *Health Profile 2017 Stroud District*

⁴⁷ Gloucestershire County Council (March 2016) *Indices of Deprivation 2015 Gloucestershire*

⁴⁸ DCLG (Accessed March 2018) *Indices of Deprivation 2015 explorer* Online at: <http://dclgapps.communities.gov.uk/imd/idmap.html>

⁴⁹ Gloucestershire County Council (2015) *Understanding Stroud 2015*

⁵⁰ ONS (February 2018) *House Price Index, UK: December 2017*

⁵¹ ONS (March 2017) *Housing affordability in England and Wales: 1997 to 2016*

⁵² Cheltenham Borough Council, Forest of Dean District Council, Gloucester City Council, Stroud District Council and Tewkesbury Borough Council April 2017) *Home Energy Conservation Act Report April 2017- March 2019*

⁵³ Department for Business, Energy and Industrial Strategy (June 2017) *Sub-Regional Fuel Poverty England 2017*

Health

- 3.28 The health of people in Stroud is generally better than the average for England. Early deaths from heart disease and cancer amongst Stroud's population have seen a steady decline in recent years which is a nationally observed trend. The number of those dying early as a result of illnesses related to these ailments in the District is lower than national average figure. The overall number of men and women dying early from all causes is also lower than the national average figure.
- 3.29 While life expectancy for men is higher than the England average, in the most deprived areas of the District men are expected to live 6.3 years less and women are expected to live 6.0 years less than men and women in the least deprived areas.
- 3.30 Stroud District also performs favourably against many other health-rated indicators in comparison to the English average. While 60% of adults in Stroud have been recorded as being overweight or obese, this figure is lower than the Gloucestershire (64%) and England (64%) average. The percentage of physically inactive adults in Stroud District has also remained below the Gloucestershire and England average in recent years. Figures recorded in relation to the number of hours pupils in year 8 and 9 partook of physical activities also show that those in Stroud participated in physical activity in and out of school more often than those within the other local authority areas of Gloucestershire. 26.1% of pupils were recorded as partaking of physical activities more than 8 hours a week and 29.3% did around 6 hours of physical activity a week⁵⁴.
- 3.31 Stroud District performs significantly worse than the English average in relation to admission for alcohol specific conditions for those under 18 and hospital stays for self-harm. Local priorities for the area identified by Public Health England are tackling health inequalities; improving health and wellbeing into older age; improving mental health; and reducing obesity and alcohol related harm⁵⁵.

Culture, Leisure and Recreation

- 3.32 There is a variety of open spaces across Stroud District, including formal parks, gardens, local nature reserves, sports pitches and various informal grass areas. The distribution of notable open spaces in Stroud and the surrounding area is shown in **Figure 3.1: Recreation** at the end of this chapter. Lying to the south of the town of Stroud, Minchinhampton and Rodborough Commons are notable areas of common land covering approximately 335 hectares and are owned and managed by the National Trust. Both areas have been declared Sites of Special Scientific Interest (SSSIs), while Rodborough Common is also a Regionally Important Geological Site (RIGS) and Special Area of Conservation (SAC). Together with nearby Selsley Common (SSSI), the areas are notable examples of grassland commons in the Cotswold area.
- 3.33 At the town of Stroud, Stratford Park is 23ha with a lake and leisure centre complex. Other sizeable open spaces in the town include Old Cemetery on Bisley Road which is also a Nature Reserve, Uplands Allotments off Folly Lane and Daisy Bank park and children's play area.
- 3.34 The Council undertook an Outdoor Playing Space Survey of Local Provision and Needs in 2013. The survey established that at the time of reporting there was a deficiency of 31.93ha in the District as per Fields in Trust standards. Deficiency was reported in terms of the provision made for youths/adults, playing pitches and equipped children's play areas. Deficiencies in overall provision were also reported at five of the eight clusters which were surveyed (Stroud Valleys, Cam/Dursley, Wotton, Gloucester Fringe and Stonehouse)⁵⁶. The adopted Stroud District Local Plan (2015) includes objectives of increasing open space provision within these areas given the deficiencies identified⁵⁷. A new Green Infrastructure, Sport and Recreation Study is currently being prepared for the District which will deliver recommendations in the autumn of 2018.

⁵⁴ Gloucestershire County Council (March 2016) *Understanding Stroud 2015*

⁵⁵ Public Health England (July 2017) *Health Profile 2017 Stroud District*

⁵⁶ Stroud District Council (September 2013) *Outdoor Playing Space A Survey of Local Provision and Needs*

⁵⁷ Stroud District Council (November 2015) *Stroud District Local Plan*

Education

- 3.35 Gloucestershire County Council acts as the Local Education Authority in Stroud. It is currently responsible for the education of more than 47,300 pupils at primary level and 38,200 pupils at secondary level as well as a further 1,000 pupils enrolled in special schools⁵⁸.
- 3.36 The county has a total of 576 facilities, including seven colleges and universities. Stroud College of Further Education is located within the town of Stroud and is part of a series of five campuses located in and around North Bristol and Stroud which make up South Gloucestershire and Stroud College.
- 3.37 A recent report by Ofsted has concluded that following an inspection of services for children in need of help and protection, children looked after and care leavers, children's services in Gloucestershire are inadequate⁵⁹. The report highlighted that these services were previously judged to be inadequate in 2011 and that senior leaders have not sufficiently prioritised or improved the quality of social work practice since this time meaning that there are serious and widespread failures for children in need of help and protection. Educational attainment outcomes for children in care are variable. Progress at key stage 2 through to key stage 4 is described as low by Ofsted. School attendance by children in Year 11 and above is poor. Ofsted has also described the improvement strategies which are currently in place as not yet being sufficiently effective to improve educational attainment and attendance for those children affected.
- 3.38 In Stroud the proportion of those with qualifications equivalent to NVQ level and higher (40.9%) is higher than the South West regional level (37.8%) as well as the national level (38.2%). No data is available at the District level in relation to those residents who do not have a qualification; however the proportion of those within the South West region without a qualification (5.1%) is lower than the national figure (8.0%)⁶⁰.

Crime

- 3.39 In the District it is reported that there have been 33% fewer recorded crimes than the previous 5 years up to 2016.⁶¹ Police and crime prevention services are recognised as important assets to local people with 42% of respondents to the 2017 Stroud District Council Budget Consultation⁶² stating that these services were the most important for their business sector or community.
- 3.40 For the year ending September 2017, the crime rate in Stroud urban area presented through the Home Office statistics was 38.59 recorded crimes per 1,000 population. This figure was recorded as being significantly lower than the average for Gloucestershire force area which was 54.38 recorded crimes per 1,000 population for the same year period.⁶³ Shoplifting and criminal damage and arson were the crimes which were most recorded in the District in the most recent reporting period. These offences accounted for 616 and 681 recorded crimes respectively of a total of 4,530 recorded crimes during the 12 month period ending September 2017⁶⁴.

⁵⁸ Gloucestershire County Council (October 2017) *Summary of School Numbers on Roll by Age*

⁵⁹ Ofsted (June 2017) *Gloucestershire: Inspection of services for children in need of help and protection, children looked after and care leavers*

⁶⁰ Nomis (Accessed March 2018) *Labour Market Profile – Stroud* Online at: <https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx>

⁶¹ Stroud District (Accessed March 2018) *Stroud District Community Safety Partnership Strategy 2017-2021* Online at: <https://www.stroud.gov.uk/community-and-living/community-safety-and-neighbourhood-wardens/stroud-district-community-safety-partnership-strategy-2017-2021>

⁶² Future Focus Research for Stroud District Council (November 2017) *Budget Consultation 2017 Report*

⁶³ Home Office (Accessed March 2018) *Crime in Stroud compared with crime in other similar areas* Online at: <https://www.police.uk/gloucestershire/CA1/performance/compare-your-area/?section=timeline#timeline>

⁶⁴ ONS (January 2018) *Recorded crime data at Community Safety Partnership / Local Authority level*

Landscape, Biodiversity and Geodiversity

- 3.41 Stroud District sits across three National Character Areas (NCAs). The bulk of land in the District is split between NCA 106 (Severn and Avon Vales) to the west and NCA 107 (Cotswolds) to the east with a small area of land to the west of Wotton-under-Edge lying within NCA 118 (Bristol, Avon Valleys and Ridges). The boundaries of each of the NCAs within Stroud are shown in **Figure 3.2: Landscape Features** at the end of this chapter. To the west the land is described as being mostly a low lying and open agricultural vale landscape with much of the east defined by a steep scarp crowned by a high, open wold and significant portions of woodland⁶⁵⁶⁶.
- 3.42 The most western portion of the District contains part of the Severn Estuary and as such is characterised by the low lying rich estuarine landscape in the Severn Vale. The exception to this low lying character towards the west is found at the hillocks that the River Severn meanders around. Much of the District is rural with lower densities of development towards this location.
- 3.43 The Stroud District Landscape Assessment⁶⁷ identifies a number of landscape character types for the District which **Figure 3.2: Landscape Features** at the end of this chapter, also shows. These are split between the Cotswold Upland Landscapes to the east and Severn Vale Lowland Landscapes to the west. Each of the landscape character types has a series of key characteristics and key priorities for actions set out for them within the Landscape Assessment.
- 3.44 Within the Cotswold Upland Landscapes the following landscape character types have been identified:
- Wolds Top;
 - Rolling Valleys;
 - Secluded Valleys; and
 - Escarpment.
- 3.45 Within the Severn Vale Lowland Landscapes the following landscape character types have been identified:
- Rolling Agricultural Plain (including Lowland Plain, Escarpment Footslopes and Frome River Valley);
 - Undulating Lowlands (including Little Avon Basin, Little Avon Mid-Valley, Wooded Lowlands and Lowland Ridges);
 - Severn Vale Hillocks;
 - Severn Vale Grazing Marshes;
 - Sandstone Ridge;
 - Triassic Ridge;
 - Wooded Cambrian Ridge; and
 - Kingswood Vale (including Kingswood Vale – north and Kingswood Vale – south).
- 3.46 The adopted Stroud District Plan was supported by a Landscape Sensitivity Appraisal which appraised Potential Locations for growth (housing, mixed-use and employment). Those locations appraised as having the highest potential sensitivity to growth were those at Nortonwood by Nailsworth and to the east of Stonehouse. Locations which were identified as having a potential medium-high sensitivity to growth were those to the west of Cam, east of Rodborough and north of Stroud⁶⁸.
- 3.47 As part of work to support the Council's SALA, landscape sensitivity assessment work was undertaken across the District at locations around the principal settlements. This found that those land parcels within the Cotswolds AONB generally have higher sensitivities than those

⁶⁵ Natural England (March 2015) *NCA Profile: 107 Cotswolds*

⁶⁶ Natural England (December 2014) *NCA Profile: 106 Severn and Avon Vales*

⁶⁷ Stroud District Council (2000) *Stroud District Landscape Assessment*

⁶⁸ URS on behalf of Stroud District Council (July 2013) *Landscape Sensitivity Appraisal*

parcels outside of the designation. As such, many of the locations which have lower sensitivities in terms of landscape were identified at settlements to the west such as at Stonehouse, Eastington, Hardwicke and Cam (north)⁶⁹ in particular.

- 3.48 The eastern portion of the District contains the Cotswolds AONB which covers just over half of its total land area. The boundary of the AONB is drawn to exclude many of the areas which display higher levels of development along the A419 corridor at Stonehouse and Stroud and towards Brimscombe, as well as along the A46 towards Nailsworth and at Cam and Dursley.
- 3.49 The AONB is characterised by its dramatic escarpment and expansive high wolds in particular and contains a number of nationally and internationally designated biodiversity assets. These include Rodborough Common (SAC and SSSI), Minchinhampton and Selsley Commons (SSSI) to the south of Stroud town and the areas of beech woodland which are present towards the boundary with Tewkesbury Borough which contain Cotswold Commons and Beechwoods NNR and SSSI as well as Cotswold Beechwoods SAC⁷⁰. The Cotswolds Beechwoods SAC is recognised as potentially being particularly vulnerable to recreational pressures. The site is close to the city of Gloucester to the north west and is also accessible from the town of Stroud to the south.
- 3.50 The Cotswolds AONB Management Plan 2013-2018 was adopted by the Cotswolds Conservation Board in March 2013 to provide a vision for the future management of the area, together with clear objectives and policies. The Cotswolds Conservation Board is currently undertaking a review of the management plan and the new plan period will set out how the AONB will be managed up to 2023. Given the close proximity of the AONB to larger towns and cities and the trend towards a growing and ageing population the emerging management plan has identified increasing pressures on the area in terms of the need to provide housing, employment and services. Further pressures which are likely to result relate to recreational pressures associated with such new growth⁷¹.
- 3.51 The Gloucestershire Nature Map sets out the core of an ecological network for the future in the County. Strategic Nature Areas (SNAs) have been identified through this work as selected landscape-scale areas of land which show where the characteristic habitats which typify the County can be expanded and linked to protect and enhance biodiversity assets. The Nature Map shows that within Stroud there are important areas for wildlife at the SNAs. These are areas for wet grassland (including areas for traditional orchards) mostly to the west towards the River Severn and along parts of a number of the other smaller water bodies (including the Berkeley Pill/Little Avon, River Cam and River Frome) as well as areas for woodland mosaic and lowland calcareous (limestone) grassland mostly towards the east and the edge of the Cotswolds AONB.
- 3.52 The SNAs within the County have been grouped together within Priority Landscapes where appropriate through work by the former Gloucestershire Biodiversity Partnership in 2010. In total six Priority Landscapes which contain important ecosystems and ecological networks have been identified. Within Stroud, Severn Vale has been identified as one of these areas recognising it as part of the "wildlife highway" with an overall aim to restore a continuous expanse of lowland wet grassland and other wetland habitats⁷².
- 3.53 Based on the work to identify the SNAs through the Nature Map the Severn Vale as defined by the flood plain of the River Severn has also been set out as a Nature Improvement Area⁷³ as per the direction of Defra's Natural Environment White Paper. Such areas have been identified given that they provide good opportunities for ecological network restoration and improved habitat management.
- 3.54 Where the Severn Estuary passes into the western portion of Stroud, a number of important nationally and internationally designated biodiversity sites have been designated. The area has been declared as a Ramsar site, a SSSI, SAC and Special Protection Area (SPA). The estuary area has been recognised for importance for habitats including sandbanks, mudflats and sandflats,

⁶⁹ Stroud District Council (December 2016) *Stroud District Landscape Sensitivity Assessment*

⁷⁰ Joint Nature Conservation Committee (January 2016) *Natura 2000 - Standard Data Form: Cotswold Beechwoods*

⁷¹ Cotswolds Conservation Board (February 2018) *Cotswolds AONB Management Plan 2018-2023 2nd Draft for Consultation*

⁷² Gloucestershire Local Nature Partnership (Accessed March 2018) *Priority Landscapes* Online at: <http://gloucestershirenature.org.uk/actionplan/priority-landscapes.php>

⁷³ Gloucestershire Local Nature Partnership (August 2016) *Nature Improvement Areas In Gloucestershire*

Atlantic salt meadows, and Reefs⁷⁴. Severn Estuary SSSI is generally in favourable condition with 95.88% of the units reported on meeting the criteria for favourable or unfavourable recovering condition⁷⁵.

- 3.55 Habitats Regulations Assessments (HRAs) have concluded that proposed residential growth identified in the existing Local Plan within the catchment of Rodborough Common SAC and Severn Estuary SAC/SPA/Ramsar could have a likely significant effect in terms of recreation pressures on their areas, in the absence of appropriate mitigation. Stroud District Council has therefore worked with Natural England, landowners and other bodies to develop appropriate avoidance strategies which involve all housing developments within identified catchment zones paying per net additional dwelling to fund alternative recreation provision elsewhere or to mitigate the effects on-site through funding appropriate management activities^{76/77}. A separate Habitats Regulations Assessment for the new Local Plan will also be undertaken and reported on as the Local Plan is prepared.
- 3.56 Gloucestershire has some of the most varied geology seen within the U.K. The District of Stroud takes in parts of the Cotswolds escarpment at its eastern edge. Within this portion of the District the rocks evident are from mainly the Quaternary (Alluvium, River Terrace Gravels and Glacial Deposits), and Jurassic periods (Oxford Clay and Kellaway Beds, Great Oolite Group, Inferior Oolite Group, Whitby Mudstone, Marlstone Rock, Dyrham and Charmouth Mudstone). To the west within the portion of the District which falls within Severn Vale there is geological evidence of the Quaternary (Alluvium, River Terrace Gravels and Glacial Deposits), Jurassic (Charmouth Mudstone and Blue Lias), Triassic (Penarth Group, Mercia Mustone Group and Sherwood Sandstone), Permian (Bridgnorth Sandstone), Devonian (Old Red Sandstone), Silurian (Ludlow, Wenlock and Llandovery) and Ordovician periods (Igneous intrusions, Breadstone Shales and Bronsil Shale)⁷⁸.
- 3.57 The Cotswold Hills Geopark which was formed in 2004 takes in areas towards the east of the District. In its entirety the boundaries stretch from Stroud in the south west towards areas outside of the District at the settlements of Tetbury and Cirencester in the south east and Bourton on the Water and Chippin Campden in the east and north east respectively. The geopark extends to include land within the District as far west as Painswick to the north and land around Stroud and Stonehouse as well as Cam and Dursley and Wotton-under-Edge further to the south. It comprises an area of diverse and significant geology; a swathe of land approximately 95km in length. The SSSIs of Rodborough Common, Selsley Common, Woodchester Park and Minchinhampton Common⁷⁹ are all within the geopark having been recognised at least in part for the importance of the geodiversity on display.
- 3.58 Across the entirety of Stroud there are 259 locally designated biodiversity and geodiversity sites. Of these sites 125 are in positive condition. This total is broken down between 122 Key Wildlife Sites which are in positive condition and three RIGSs which are in positive condition. In Gloucestershire 44.84% of the local sites are in positive condition as of March 2017. This represents a small decrease in those sites which were in positive condition from 2010 to 2015 when the figure was 45.17%. The distribution of sites in Stroud which are designated for their biodiversity or geodiversity value is shown in **Figure 3.3: Biodiversity Designations** and **Figure 3.4: Geodiversity Sites** respectively at the end of this chapter.

⁷⁴ Natural England (February 2016) *European Site Conservation Objectives for Severn Estuary*

⁷⁵ Natural England (march 2018) *SSSI Condition Summary Site: Severn Estuary SSSI* online at: <https://designatedsites.naturalengland.org.uk/ReportConditionSummary.aspx?SiteCode=S1002284&ReportTitle=Severn%20Estuary%20SSSI>

⁷⁶ Stroud District Council (March 2015) *Interim Strategy for Avoidance of Likely Significant Effects on Rodborough Common Special Area of Conservation (SAC)*

⁷⁷ Stroud District Council (December 2017) *Strategy for Avoidance of Likely Significant Adverse Effects on the Severn Estuary SAC, SPA and Ramsar Site*

⁷⁸ Gloucestershire Geoconservation Trust (Accessed April 2018) *Gloucestershire Geodiversity* Online at: http://www.glosgeotrust.org.uk/glos_geodiversity.shtml

⁷⁹ Cotswold Hills Geopark Partnership (Accessed April 2018) *Cotswold Hills Geopark* <http://www.cotswoldhillsgeopark.net>

Historic Environment

- 3.59 Sustaining the high quality of townscapes in Stroud is important to defining the character of the District. Furthermore, preserving the cultural and historic environment benefits communities in additional ways:
- It provides an essential educational resource for the understanding of the past and its legacy.
 - It contributes to the national and local economy as it promotes tourism and provides jobs.
 - It provides people with a sense of belonging to a unique and special place – a sense of identity.
- 3.60 This is particularly true of Stroud where tourism is an important component of the economy. English Heritage (now Historic England) reported that in 2014 in the south west the indirect and induced heritage GVA was £2.53 million and contributed to the employment of 41,300 people⁸⁰.
- 3.61 There are currently 41 Conservation Areas designated in the District. Of these, 15 have adopted Conservation Area Statements. Many of these areas are focussed on the more developed centre of Stroud.
- 3.62 The Industrial Heritage Conservation Area (IHCA) which covers the length of the Cotswold Canals for approximately 23km from Sapperton in the east to Saul in the west is noted as being a particularly large, complex and potentially vulnerable heritage asset. This is one of the largest conservation areas in Britain⁸¹. The IHCA Conservation Area Statement has been adopted as a Supplementary Planning Document (SPD)⁸² and the IHCA also benefits from an adopted Design Guide⁸³. The IHCA passes through some 19 'sub areas' identified as having distinct characteristics through the IHCA Conservation Area Statement - Volume 2: Character Parts⁸⁴.
- 3.63 Two of the Conservation Areas in the District have remained on Historic England's Heritage at Risk List from 2016 to 2017. These are the IHCA and Stanley Mills Conservation Areas, which both have a trend of 'deteriorating' recorded for them. There is a total of 36 Conservation Areas in the south west on the Heritage at Risk List⁸⁵ meaning that those in Stroud make up approximately 6% of the figure for the entire south west region.
- 3.64 At present there are 3,303 Listed Buildings in Stroud, with a further 69 Scheduled Monuments and 15 Registered Parks and Gardens also designated⁸⁶. Of the Listed Buildings in the District 11 are on the Heritage at Risk List. There are a further six Scheduled Monuments on the Heritage at Risk List⁸⁷ at present in the District. **Figure 3.5: Heritage Assets** at the end of this chapter shows the location of the heritage assets in the District.
- 3.65 Details of the heritage assets (including Conservation Areas) identified as being at risk and their respective conditions are provided in **Table 3.2** below.

⁸⁰ Historic England on behalf of the Historic Environment Forum (September 2017) *Heritage Counts: Heritage and the Economy 2017*

⁸¹ Stroud District Council (July 2017) *A Heritage Strategy for Stroud District*

⁸² Stroud District Council (November 2008) *Industrial Heritage Conservation Area Management Proposals SPD*

⁸³ Stroud District Council (November 2008) *The Industrial Heritage Conservation Area Design Guide*

⁸⁴ Stroud District Council (November 2008) *The Industrial Heritage Conservation Area Volume 2: Character Parts*

⁸⁵ Historic England (October 2017) *Heritage at Risk: South West Register 2017*

⁸⁶ Historic England (Accessed March 2018) *National Heritage List for England* online at: <https://historicengland.org.uk/listing/the-list>

⁸⁷ Historic England (Accessed March 2018) *Heritage at Risk List* online at: <https://historicengland.org.uk/advice/heritage-at-risk/search-register>

Table 3.2: Heritage assets at risk in Stroud District

Designated Site Name	Heritage Category	Condition
Stanley Mills	Conservation Area	Very bad - deteriorating
Stroud Industrial Heritage (IHCA)	Conservation Area	Poor - deteriorating
Main Building at Stanley Mills	Listed Building Grade I	Fair
The Mansion, Woodchester Park	Listed Building Grade I	Very bad
Church of St Mary the Virgin, Church Lane	Listed Building Grade I	Very bad
Old Mill Building at Longfords Mills	Listed Building Grade II*	Fair
St Marys House, Wing Cottage and Ivy Cottage, London Road	Listed Building Grade II*	Poor
Church of St James, Church Lane	Listed Building Grade II*	Very bad
Church of St Andrew	Listed Building Grade II*	Poor
Congregational Church, Bedford Street	Listed Building Grade II*	Poor
Church of St Mary Magdalene Gates and Wall	Listed Building Grade II*	Poor
Church of St John the Baptist, B4072	Listed Building Grade II	Poor
Church of St Giles, High Street	Listed Building Grade II	Poor
Leonard Stanley Priory	Scheduled Monument	Very bad
Bowl barrow 450m south east of Upper Hyde Farm	Scheduled Monument	Extensive significant problems - declining
Gatcombe long barrow, 400m east of Gatcombe Farm	Scheduled Monument	Generally unsatisfactory with major localised problems - declining
Bowl barrow 330m north of Symonds' Hall Farm	Scheduled Monument	Extensive significant problems - declining
Miserden Castle mound	Scheduled Monument	Generally satisfactory but with significant localised problems - declining
Bowl barrow 720m south east of Longwood Farm	Scheduled Monument	Extensive significant problems - declining

Air and Water

- 3.67 The impacts of air quality in the UK are recognised not only in terms of health alone but also associated economic impacts. The health cost of particulate matter alone in the UK has been estimated to be around £16 billion⁸⁸. Road traffic has been identified as the primary influence on air quality in Stroud and the primary polluter of concern is Nitrogen Dioxide. The air quality in the District for 2016 has been reported as being very good with levels of Nitrogen Dioxide recorded as being well below national limits and generally stable. At the small number of sites where increases in levels of Nitrogen Dioxide were reported, the increases recorded were marginal⁸⁹.
- 3.68 There are currently no AQMAs declared in the District. An AQMA had previously been established jointly with Tewkesbury District Council for the NO₂ annual mean objective, along the M5 corridor but this was revoked in 2004 following a return of air quality to acceptable limits.
- 3.69 Much of the western portion of the District has been classified by the Environment Agency as Surface Water Nitrate Vulnerable Zones (NVZs) and/or Ground Water NVZs. Such areas are designated where land drains into nitrate polluted waters or waters which could become polluted by nitrates⁹⁰.

⁸⁸ Defra (May 2013) *Abatement cost guidance for valuing changes in air quality*

⁸⁹ Stroud District Council (October 2017) *2017 Air Quality Annual Status Report*

⁹⁰ Environmental Agency (Accessed March 2018) *Nitrate Vulnerable Zones* Online at: http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=357683&y=355134&scale=1&layerGroups=default&ep=map&textonly=off&lang=_e&topic=nvz

- 3.70 Much of the eastern portion of the District is classified as a Drinking Water Safeguard Zones (Surface Water) as it has been identified as being at risk of failing the drinking water protection objectives. There are also areas to the east (by Minchinhampton and Nailsworth and to the south of Cam and Dursley) which are also defined as Source Protection Zones given that there is a risk of contamination from any activities that might cause pollution in the area⁹¹. **Figure 3.6: Water Quality** at the end of this chapter shows where the Source Protection Zones fall within the District as well as the location of the Surface Water NVZs and Ground Water NVZs.
- 3.71 Facilities for the treatment of waste water in Stroud fall under the responsibility of Gloucestershire County Council. Gloucestershire Waste Core Strategy provides policies for the safeguarding of such facilities and other waste related objectives and policies up to the year 2027. There are currently 84 operational waste water treatment facilities in Gloucestershire. The two main sewage treatment works for Gloucestershire are located outside of Stroud at Netheridge in Gloucester and Hayden to the south west of Cheltenham respectively⁹².
- 3.72 Water quality at the Severn Estuary is an important indicator of the overall health of the Estuary's ecosystem. This indicator is also an important factor in influencing tourism, recreational activities and the commercial/industrial sectors. In recent years the closure of major industries and the introduction of stricter pollution controls has meant that the levels of most contaminant which the estuary is subject to are much lower than previously. Major industries discharging into the estuary include (or have included until recently) smelters, incinerators, fertiliser and numerous other chemical plants in the Avonmouth area; coal and steel industry, paper mills, chemical and pharmaceutical manufacturers in south Wales; and nuclear power plants at Hinkley, Berkeley and Oldbury. Dissolved oxygen levels are generally high in the estuary, with levels above 8 mg/l throughout the whole Estuary and concentrations above 95% at the seaward end with no widespread severe oxygen depletion reported. Reporting by the Environment Agency also shows that in the waters of the estuary average concentrations of dissolved metals such as cadmium, copper, nickel, lead and zinc are all below Environmental Quality Standards thresholds.
- 3.73 Water abstraction needs to be managed responsibly at the estuary to meet the reasonable needs of water users. Whilst human requirements are important there is a need to ensure that enough water remains in the environment to conserve the water body habitats. Major rivers feeding the Severn Estuary are subject to freshwater abstraction to varying degrees with the large abstraction from the Severn at Gloucester feeding the Gloucester – Sharpness Canal, requiring carefully management to prevent the uptake of saline water⁹³.

Flood Risk

- 3.74 The River Severn and its tributaries are prominent features in the District and as such areas of Stroud particularly to the west display a high risk of fluvial flooding. Areas surrounding the River Severn as well as other larger water bodies such as the River Frome and Nailsworth Stream through Stonehouse, Stroud and Nailsworth as well as the River Cam through Cam and Dursley are within Flood Zone 3. Flood defences are present along much of the length of the River Severn within the District at areas to the west of Berkeley surrounding Berkeley Pill and at the areas surrounding the Gloucester and Sharpness Canal by the wetlands to the west of Slimbridge and to the west of Frampton on Severn. There is a flood storage area within the District to the north of Slimbridge and to the west of the A38. The **Figure 3.7: Hydrology** at the end of this chapter shows those areas in the District which are at high risk of flooding.
- 3.75 Flooding events have occurred at the River Severn Estuary where land was reclaimed from high tides since the Roman times and there are records of further historic flooding events occurring across the District. These including records along the River Frome notably in July 1968 around the areas of Whitminster and Ryeford. The area towards the River Severn Estuary at Sharpness Docks was also affected by flooding during this same period. At Stroud adjacent to the

⁹¹ Environmental Agency (Accessed March 2018) *Groundwater Protection Zones* Online at: http://maps.environment-agency.gov.uk/wiyby/wiybyController?x=531500.0&y=181500.0&topic=groundwater&ep=map&scale=5&location=London,%20City%20of%20London&lang=_e&layerGroups=default&distance=&textonly=off#x=419032&y=227848&lg=1,10,&scale=4

⁹² Gloucestershire County Council (November 2012) *Gloucestershire Waste Core Strategy*

⁹³ Severn Estuary Partnership (Autumn 2011) *State of the Severn Estuary Report*

Stroudwater Canal and River Frome this event resulted in further flooding. As recent as July 2007, fluvial flooding has been recorded along the Slad Brook along Painswick Stream to the north of the town. Towards the northern part of the District historic flooding events have been recorded at Shorn Brook to the south of Quedgeley.

- 3.76 The canal system in Stroud acts to provide flood alleviation in the District. At present water from watercourses within the Stroud District area is pumped into the Gloucester and Sharpness Canal to help manage water levels. Any failure of the canal could potentially cause or exacerbate flooding problems within the District⁹⁴. The reinstatement of the Stroudwater Canal is part of the current strategy to remove brownfield allocated development sites within the Stroud Valleys out of the floodplain.
- 3.77 Stroud District Council has led on the Stroud Rural SuDS project to use Natural Land Management techniques to reduce flood risk while enhancing water quality and biodiversity in the River Frome Catchment. Such techniques include promoting water attenuation, infiltration and slowing channel flow using woody debris dams⁹⁵. As the Lead Local Flood Authority for the area, Gloucestershire County Council has identified parishes and wards in Stroud and the other local authority areas which are considered to be of priority in terms of alleviating flood risk prioritising residential properties over non-residential. Within Stroud District Arlingham Civil Parish (CP), Brimscombe and Thrupp CP, Cainscross CP, Cam CP, Chalford CP, Dursley CP, Eastington CP, Frampton on Severn CP, Fretherne with Saul CP, Kingswood CP, Minchinhampton CP, Nailsworth CP, Rodborough CP, Slimbridge CP, Stonehouse CP, Stroud CP and Wotton-under-Edge CP all lie within areas which have been identified as having medium-high or high risk of flooding⁹⁶.

Energy and Climate Change

- 3.78 Stroud District Energy Strategy has been developed to “improve the energy efficiency across its housing stock portfolio”. Within the District it is estimated that approximately 1,700 (30%) of homes will require significant investment to improve energy efficiency given that they are either off the gas network, of solid wall construction, of non-traditional construction, have no loft space and/or are located within restricted locations such as conservation areas or the AONB⁹⁷.
- 3.79 850 Renewable Heat Incentive (RHI) eligible installations were established in Gloucestershire between April 2014 and January 2017. These include heating sources such as biomass boilers, solar water heating and certain heat pumps. A significant proportion (269) of these were established in Stroud during this period. Stroud has the highest rate of heat pump installations in the Country with 1.4% of households having a heat pump.
- 3.80 In terms of renewable electricity, the Feed-in Tariff register shows that Stroud District has the highest number of domestic renewable installations in Gloucestershire with a total of 2,646 comparative to the next highest total for Forest of Dean District which is 1,948. These installations have predominantly been solar photovoltaic which accounted for 2,638 installations giving the District 530 solar photovoltaic installations per 10,000 households. The average number of solar photovoltaic installations per 10,000 households for Gloucestershire is just over 250. During this same period in the District five wind installations and three hydro installations were put in place⁹⁸.
- 3.81 The South West region has the highest number of sites generating electricity from renewable sources of all regions in England at 113,166 out of 682,705. The South West does not, however, produce the highest amount of electricity from renewable sources of all regions considered with 3,948.3GWh out of the total 54,609.6GWh produced throughout England produced in the South West as shown in **Table 3.3** below. Of this total for the region, 2,481.5GWh are produced from

⁹⁴ Stroud District Council (March 2012) *Strategic Flood Risk Assessment for Local Development Framework Level 2*

⁹⁵ Gloucestershire County Council (October 2016) *Local Flood Risk Management Strategy Annual Progress and Implementation Plan 2016/17*

⁹⁶ Gloucestershire County Council (November 2017) *Local Flood Risk Management Strategy Annual Progress and Implementation Plan 2017/18*

⁹⁷ Stroud District Council (March 2017) *Energy Strategy*

⁹⁸ Cheltenham Borough Council, Forest of Dean District Council, Gloucester City Council, Stroud District Council and Tewkesbury Borough Council April 2017) *Home Energy Conservation Act Report April 2017- March 2019*

solar photovoltaic sources. The highest technology growth in capacity throughout England in 2016 was solar photovoltaic and it is noted that growth in the South-West, driven by large-scale schemes contributed significantly to the overall high level of national growth⁹⁹.

Table 3.3: Installed capacity of sites generating electricity from renewable sources by region, 2016

Region	Generation in GWh
East Midlands	4,780.6
East of England	8,160.0
North East	1,945.6
North West	6,275.0
London	1,048.1
South East	7,450.2
South West	3,948.3
West Midlands	1,685.9
Yorkshire and the Humber	19,315.9
<i>England total</i>	<i>54,609.6</i>

- 3.82 Stroud District has seen a steady fall in CO₂ emissions per capita from 2005 to 2015 with records for these years showing 7.0kt CO₂ and 5.1kr CO₂ respectively for those emissions within the scope of the local authority. Of the total CO₂ emissions within the scope of the local authority (591.8kt CO₂) 169.5kt CO₂ were as a result of transport¹⁰⁰.
- 3.83 While the overall trend in the District is towards a reduced rate of CO₂ emissions per year from 2011 to 2015, taking into account all sources of transport CO₂ emissions Stroud has seen an increase in those CO₂ emissions attributed to journeys made on motorways (231.79kt CO₂ to 247.06kt CO₂), A-roads (67.47kt CO₂ to 68.62kt CO₂) and minors roads (90.78kt CO₂ to 91.34kt CO₂)¹⁰¹. The decrease recorded in overall CO₂ emissions in the District is reflective of the national trend with CO₂ emissions recorded as 374mt CO₂ for 2016 which was a decrease of 7% from the previous year. This decreased has been mainly attributed to the decrease in the use of coal for electricity generation¹⁰².
- 3.84 Changes to the climate will bring new challenges to the District's built and natural environments. Hotter, drier summers may have adverse health impacts and may exacerbate the adverse environmental effects of air and water pollution. The UK Climate Projections (UKCP09) show that in 2050 the climate in the South West will be warmer with wetter winters and drier summers than at present¹⁰³. Specifically:
- Under medium emissions, the increase in winter mean temperature is estimated to be 2.1°C; it is unlikely to be less than 1.1°C and is very unlikely to be more than 3.2°C.
 - Under medium emissions, the increase in summer mean temperature is estimated to be 2.7°C; it is unlikely to be less than 1.3°C and is very unlikely to be more than 4.6°C.
- 3.85 A changing climate may place pressure on some native species and create conditions suitable for new species, including invasive non-native species.

Soils

- 3.86 The Agricultural Land Classification (ALC)¹⁰⁴ system provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The principal factors influencing agricultural production are

⁹⁹ ONS (September 2017) *Renewable electricity in Scotland, Wales, Northern Ireland and the regions of England in 2016*

¹⁰⁰ ONS (June 2017) *UK local authority and regional carbon dioxide emissions national statistics: 2005-2015*

¹⁰¹ National Atmospheric Emissions Inventory (Accessed March 2018) *Local Authority CO2 interactive maps (2015)*

¹⁰² ONS (march 2017) *2016 UK Greenhouse Gas Emissions, Provisional Figures*

¹⁰³ UK Climate Projections (Accessed March 2018) *Maps & key findings* Online at:

<http://ukclimateprojections.metoffice.gov.uk/21708?projections=23679>

¹⁰⁴ Natural England (December 2012) *Agricultural Land Classification: protecting the best and most versatile agricultural land*

climate, site and soil. These factors together with interactions between them form the basis for classifying land into one of five grades, where 1 describes land as 'Excellent' (land of high agricultural quality and potential) and 5 describes land as 'Very Poor' (land of low agricultural quality and potential). Land falling outside of these scores is deemed to be 'primarily in non-agricultural use', or 'land predominantly in urban use'.

- 3.87 Most of the land in Stroud District is classed as Grade 3 (Good to Moderate) Agricultural Land. Relatively large areas of Grade 2 (Very Good) Agricultural Land are present in Stroud most notably to the west by Slimbridge, Frampton on Severn, Arlingham and the parish of Elmore. There are swathes of land which are Grade 4 (Poor) Agricultural Land mostly towards the central and eastern parts of the District by the town of Stroud and southerly towards Cam and Dursley. The distribution of different grades of agricultural soils in Stroud is shown in **Figure 3.8: Agricultural Land Classification** at the end of this chapter.
- 3.88 The Council maintains a list of the previously developed land in the District which is considered appropriate for residential development as per The Town and Country Planning (Brownfield Land Register) Regulations 2017. The Stroud District Brownfield Land Register contains those sites of at least 0.25ha in area and those capable of supporting at least 5 dwellings with further information available relating to those sites which would be considered suitable for a grant of permission in principle for residential development. Many of these sites are located within the more developed locations of the District particularly Stroud and Stonehouse and within the industrial bottoms of the Stroud Valleys. The largest of these brownfield sites which does not have planning permission is the former Standish Hospital site which is 13.07ha at the edge of Standish¹⁰⁵.

Resource Use/Waste and Recycling

- 3.89 In 2012 Gloucestershire County Council adopted the Gloucestershire Waste Core Strategy to guide future waste management development throughout up to 2027. The Waste Core Strategy should be read in conjunction with the remaining save policies of the Gloucestershire Waste Local Plan 2002-2012. Most of the County's waste arises in or near to a central corridor set out in the Core Strategy particular at Gloucester and Cheltenham and to a lesser extent Tewkesbury and Stroud. The Waste Core Strategy allocates two strategic sites within the District boundaries at Javelin Park, Harefield and Moreton Valence respectively¹⁰⁶. The Gloucestershire Waste Core Strategy (WCS) indicates, however, that local capacity is presently sufficient to meet the county's landfill needs through to at least the end of the 2020s.
- 3.90 In Gloucestershire responsibility for waste management is shared between the County Council, which is responsible for waste disposal and the individual District, City and Borough Councils which have responsibility for collecting household waste. The Gloucestershire Waste Partnership is a partnership of all seven District, City and Borough Councils who work together to provide waste management services across the County¹⁰⁷.
- 3.91 The latest figures relating to recycling and waste collection in Stroud show that between 2016 and 2017 the percentage of household waste sent for reuse, recycling or composting was 45.5%. This was an increase of 14.0% from the previous reporting period. Of all local authorities in England Stroud was ranked 136 out of 326 in relation to recycling rates. Recycling rates recorded for the nearby authorities of Bristol City (43.4%) and South Gloucestershire (45.5%) were similar to those recorded for Stroud while the Cotswolds (59.6%) and Tewkesbury (53.3%) performed markedly better during the same reporting period. Recycling rates in Gloucester City during the same period were significantly lower at 39.7%¹⁰⁸.
- 3.92 Gloucestershire County Council has set a target of reducing waste produced by residents to 228kg per person by 2020. Stroud District Council has reported that this target has already been met

¹⁰⁵ Stroud District Council (December 2017) *Stroud District Brownfield Land Register* Online at:

<https://www.stroud.gov.uk/environment/planning-and-building-control/planning-strategy/brownfield-land-register>

¹⁰⁶ Gloucestershire County Council (November 2012) *Gloucestershire Waste Core Strategy*

¹⁰⁷ Gloucestershire Waste Partnership (July 2009) *Gloucestershire Waste Partnership - Partnership Agreement*

¹⁰⁸ SUEZ with Lichfields (Accessed March 2018) *Recycling in the UK (2016-17)* Online at: <http://www.sita.co.uk/individuals/recycling-in-the-uk/>

with waste per resident reduced to 114kg. This has been achieved by increasing household rates of recycling and composting for glass, plastics and cans (from 1.96kg to 2.14kg per person), for paper and cardboard (from 2.34kg to 2.49kg per person) and food composting (2.25kg per person following its introduction)¹⁰⁹.

Employment and Economic Activity

- 3.93 Between October 2016 and September 2017 the percentage of economically active people in Stroud was 83.4%¹¹⁰. This is above the national average of 78.1%, and the regional average of 81.0%. During the same period, the unemployment rate of 3.5% of the economically active population across the South West region was lower than the national average of 4.4%. The number of people claiming Jobseeker's Allowance as a percentage of the working age resident population as of November 2016 was 0.3% in Stroud which is lower than the regional (0.8%) and national figures (1.1%) for the same period.
- 3.94 The two main employment sectors within Stroud between October 2016 and Sep 2017 were professional occupations (20.9%) and skilled trade occupations (14.0%). Of the 6,685 enterprises within Stroud in 2017, 89.4% were considered as 'micro' size (0-9 employees), 8.9% were considered to be 'small' (10-49 employees), 1.5% were considered to be 'medium' (50-249 employees) and 0.3% were considered to be 'large' (250+ employees).
- 3.95 In 2015, the average gross weekly pay for residents for aged 16 and above in full time work in Stroud was £545.00. This figure is higher than the regional average (£527.00); however it is lower than the national average of £552.70¹¹¹. From census data across the individual authorities of Gloucestershire, Stroud recorded the highest median earned income which was £28,017, comparative to the county figure of £26,012¹¹².
- 3.96 The District sees large flows of commuters travelling into and out of the District with a daily net flow of 7,239 workers out of the District. The most important employment locations for people in the District which are outside of its boundaries include the areas of Gloucester City, South Gloucestershire, Cotswold, Cheltenham, Tewkesbury and City of Bristol. Stroud has negative commuter flows with all of these areas as recorded in the most recent census and shown in **Table 3.4** below¹¹³. Internal commuter flows show that the towns of Stroud and Stonehouse and to a lesser extent Cam and Dursley and Nailsworth are important employment centres within the District for residents¹¹⁴.

Table 3.4: Daily commuter flows into and out of Stroud District

Authority area	Number of commuters travelling out of Stroud	Number of commuters travelling into Stroud
Gloucester City	5,492	4,699
South Gloucestershire	3,132	1,568
Cotswold	2,334	957
Cheltenham	1,947	1,191
Tewkesbury	1,791	946
City of Bristol	1,511	630

- 3.97 Stroud District Council is a key local authority stakeholder in the Gloucestershire Local Enterprise Partnership (LEP) which sets out to grow the Gloucestershire economy by £493 million and create 33,909 jobs and protect a further 2,125 jobs from 2015-2021. The LEP strategy and objectives

¹⁰⁹ Stroud District Council (March 2017) *Recycling More And Reducing Waste*

¹¹⁰ Nomis (Accessed March 2018) *Labour Market Profile – Stroud* Online at: <https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx>

¹¹¹ Nomis (Accessed March 2018) *Labour Market Profile – Stroud* Online at: <https://www.nomisweb.co.uk/reports/lmp/la/1946157376/report.aspx>

¹¹² Local Authorities of Gloucestershire (March 2014) *Strategic Housing Market Assessment Update*

¹¹³ ONS (2011) *Census WU03UK - Location of usual residence and place of work by method of travel to work* Online at: <https://www.nomisweb.co.uk/census/2011/wu03uk/chart>

¹¹⁴ ONS (2011) *2011 Census* Online at: <http://commute.datashine.org.uk>

have been set out in the SEP for Gloucestershire¹¹⁵. The SEP has identified that there has been a degree of stagnation in economic productivity in Gloucestershire relative to the rest of the UK. GVA per hour worked in Gloucestershire increased from £22.70 in 2004 to £25.70 in 2011; however over the same period, the national increase was from £22.30 to £27.30. The trend towards a degree of stagnation in productivity year-on-year from 2004 up to 2011 is confirmed through data presented in the SEP given that GVA per filled job is approximately 8% lower than at the national level.

- 3.98 ONS figures for the same measure of productivity in terms of GVA per work worked across the County from 2012 up to 2016, however, show that there has been a degree of recovery in terms of the rate of increase in productivity in Gloucestershire. For this period in Gloucestershire an increase of £26.30 to £28.60 was recorded while at the national level an increase from £27.70 to £30.10¹¹⁶ was recorded over the same time period. Viewing the LEP's relative productivity comparative to the rate for the UK for the period (2012 to 2016) in terms of GVA per hour work indices demonstrates that productivity in the area has been growing almost as fast as that reported at a national level, as is demonstrated in **Table 3.5** below. The table shows that productivity was increasing at a markedly less favourably rate up to 2010-2011 comparative to UK levels. It should be noted that a decrease in the productivity index number of an area does not necessarily mean a decrease in productivity in actual terms but rather that the area has performed relatively worse than the rest of the UK over the period. In other words, its actual productivity level may have improved, but at a slower rate than the UK overall.

Table 3.5: GVA per hour worked indices for Gloucestershire Local Enterprise Partnership comparative to UK

Year	Gloucestershire	UK
2004	100.1	100.0
2005	100.2	100.0
2006	99.5	100.0
2007	98.7	100.0
2008	97.1	100.0
2009	96.4	100.0
2010	96.0	100.0
2011	95.7	100.0
2012	95.4	100.0
2013	94.6	100.0
2014	94.5	100.0
2015	94.3	100.0
2016	94.5	100.0

- 3.99 Between 2006 and March 2017 65.04ha of land was developed in Stroud District for employment generating uses. 24.80ha of this land was developed for "B" uses. From a base date of 2006, Stroud District is reported as having a net provision of employment land of about 94.50ha and a net provision of land for "B" uses of about 64.66ha in March 2017. Given that the Local Plan requirement for B class employment land for the period 2006-2031 for Stroud has been set out to be 58.00ha, a total surplus of employment land at April 2017 has been recorded as 6.66ha. Whilst this figure takes account of actual losses to other uses, there are potential losses of existing employment sites mainly to residential uses which have yet to be implemented including at Dudbridge Industrial Estate and Wimberley Mill. Five employment allocations are set out in the adopted Local Plan at West of Stonehouse, North East Cam, Quedgeley East, Sharpness and South of Severn Distribution Park. These sites account for a total area of 51.2ha of employment land¹¹⁷.
- 3.100 There are five town centres within the District at Stroud, Cam/Dursley, Nailsworth, Stonehouse and Wotton-under-Edge. In line with national trends the traditional role of high streets in relation to providing for a majority of shopping needs has seen a decline in the District given the rise of e-

¹¹⁵ Gloucestershire LEP (March 2014) *Strategic Economic Plan for Gloucestershire*

¹¹⁶ ONS (February 2018) *Subregional Productivity: Labour Productivity (GVA per hour worked and GVA per filled job) indices by UK NUTS2 and NUTS3 subregions*

¹¹⁷ Stroud District Council (April 2017) *Employment Land Availability*

retailing, e-banking and a general shift towards the acquisition of services online. In general the town centres of the District reflect a similar or slightly lower proportion of vacant commercial properties to the national average which is 11% for a similar period (recorded at January 2017) as shown in **Table 3.6** below.

Table 3.6: Total number of commercial properties and vacancy rates in Stroud's town centres (as at end of recording period 2016)

Town centre name	Total number of commercial properties	Proportion of vacant commercial properties
Stroud	320	10%
Nailsworth	116	5%
Dursley	102	9%
Stonehouse	70	9%
Wotton-under-Edge	90	10%

- 3.101 Stroud town centre is by far the largest of those in the District as indicated by the number of commercial properties. The town centre, however, has a small food store offer at 4% of town centre commercial properties¹¹⁸ and a non-food sector which may be under threat by the potential withdrawal of national retailers¹¹⁹. The food store offer through convenience outlets is significantly lower than the national average, which is 13% of town centre commercial properties. The town does not attract a high number of national retailers and access to the centre during the evening has been identified as a barrier to the night time economy. The town does, however, benefit from a well-attended Saturday market.
- 3.102 The most recent information (December 2016) relating to vacancy rates in the town centre show that 10% of commercial properties are unoccupied which is slightly higher than the previous year (8%) but slightly lower than national vacancy rate (11%) for a comparable period. Future projections relating to the make-up of the town centre suggest that it is likely to experience marked contraction of comparison floorspace as well as a reduction in the number of service units and an increase in the number of vacant commercial properties. The popularity of the market and current lack of convenience floorspace in the town centre may however provide opportunities to limit the level of underutilised space. Other potential strengths and opportunities for the town centre include capitalising on the successful integration of new housing in the town centre for “young professionals” and canal side opportunities.
- 3.103 Nailsworth is the second largest centre in the District being approximately three times smaller than Stroud when considering the overall number of retail properties. It functions as a local centre with a considerable number of existing leisure and tourist uses. The centre, however, has no comparison national retailers of a large scale present but supports a numbers of cafes, independent retailers and gift shops. Vacancy levels in Nailsworth for 2016 were well below the national level at 5%, although it is worth highlighting that this figure saw a notable increase from the previous year's figure which was only 1%.
- 3.104 In Dursley the number of convenience and comparison properties has remained relatively constant from 2005 to 2016. Vacancies in the centre according to the most recent available information in 2016 at 9% are similar to those observed pre-recession. Recent years have seen the number of service units decrease while leisure uses in the centre have increased slightly. Future potential opportunities for the town centre include increasing its tourism potential due to its attractive landscape setting and location on the Cotswolds Way.
- 3.105 Comparison and convenience uses in Wotton-under-Edge have remained relatively constant in recent years, which is similar to the trend identified in Dursley. The trend towards a slight increase in the leisure offer of the town has also been recorded while the number of service uses has fallen reflecting a withdrawal of banking uses from the centre. While there has been a significant increase from the 4% figure for 2005, the percentage of vacant uses in Wotton-under-Edge is broadly in line with smaller towns in the District given that it is recorded as 10% for 2016.

¹¹⁸ Stroud District Council (August 2017) *Future Of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton-Under-Edge*

¹¹⁹ Stroud District Council (September 2017) *Stroud District Local Plan Review: Issues and Options Paper*

As the town sits at the southern historic gateway to the Cotswolds there may be potential to identify potential growth opportunities for its tourism offer.

- 3.106 Stonehouse is the second larger town in the District by population but it has the fewest number of total retail outlets. The proportion of convenience uses in the town have remained relatively constant in recent years while there has been growth in leisure uses and a decrease in the proportion of service uses. This is in line with a number of the other smaller town centres in the District and leisure uses rose from 18% of commercial uses in 2005 to 20% in 2016 in the town while the proportion of service uses fell from 31% in 2005 to 21% in 2016. Options for marketing for the town centre include its promotion as benefiting from strong links to the A38/M5 corridor and as an entrance to the Stroud valleys.
- 3.107 It is expected that new retail commitments outside the District's boundaries will have a further impact on the demand for retail capacity within the town centres of Stroud. These include a new John Lewis store which is to open in Cheltenham and a further 100,000 sqft retail offer which is to be developed in the town. Further retail developments which have the potential to impact on the role of town centres in the District include the expansion of the sub regional shopping centre at Cribbs Causeway and the expansion of the retail offer at Gloucester Docks¹²⁰.
- 3.108 In total, 2640 sqm of convenience goods floorspace capacity and 4840sqm of comparison goods floorspace capacity by 2031 has been forecasted as required for the District by the Town Centres and Retailing Study and Update¹²¹. The majority of this capacity is to be delivered at Stroud where 1,390sqm net additional convenience floorspace capacity and 3,630sqm net additional comparison floorspace capacity are required.

Transport

- 3.109 The District has motorway access towards its western edge at the M5 junctions 12 (Gloucester) and 13 (Stroud). The A38 runs parallel to this route through the length of the District. These routes run south towards Bristol and the M4 and M48 which then provide access to South Wales. To the north the A38 and M5 provide access to Gloucester as well as Cheltenham and Worcester and further afield towards Birmingham. There are current capacity issues at peak times at junctions 12, 13 and at 14 serving the south of the District within South Gloucestershire.
- 3.110 The town of Stroud is accessible from these routes via the A419 which first passes through Stonehouse. The A419 between the M5 Junction 13 and Stroud currently experiences significant congestion and delays with Gloucestershire County Council considering proposals for improvements to address these issues¹²². The road network through the Cotswolds AONB to the east is less developed consisting of a network of smaller A-roads, B-roads (most notably the A4173, A46 and portion of the A419 to the east of Stroud) and narrow country lanes many of which converge towards the larger settlements outside the AONB's boundaries at Stroud towards the north and Cam and Dursley to the south.
- 3.111 The District is also served by a railway station at Cam and Dursley on the mainline between Bristol and Birmingham and railway stations at Stonehouse and Stroud linking to Birmingham and to the south via Swindon to the Great Western Mainline which runs westwards from London Paddington to Bristol Temple Meads.
- 3.112 **Figure 3.9: Transport Links** at the end of this chapter shows the main transport links in the District.
- 3.113 The Local Plan identifies a number of existing cycle routes for protection from harmful development:
- The Eastington to Chalford cycle route.
 - The Eastington to Nailsworth cycle route.

¹²⁰ Stroud District Council (February 2017) *Environment Committee Agenda Paper: Future of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton Under Edge*

¹²¹ GVA on behalf of Stroud District Council (July 2013) *Stroud Retail Study Update 2013*

¹²² Gloucestershire County Council (August 2017) *Stonehouse A419 Improvements Full Business Case*

- The Cam and Dursley cycle route (and any proposed future extension to Uley).
 - The National Cycle Network Route 41 (Bristol to Stratford) and Route 45 (Salisbury to Chester) which cross the District and connecting routes to and from the Stroud Valleys Pedestrian Cycle Trail and the Cam and Dursley cycle route.
- 3.114 The District is currently served by a network of Public Rights of Way (PRoWs) which provide access to the Cotswolds AONB to the east. The National Trail Cotswold Way which passes along the western edge of the AONB begins at Bath before running into the southern portion of Gloucestershire by Wotton-under-Edge. It provides access by foot to Cam and Dursley and Stonehouse before passing in close proximity to Cheltenham and finishing at Chipping Campden. A dense network of footpaths and bridleways also provide access by alternative modes of transport beyond this route.
- 3.115 The length of the Stroudwater Navigation is accessible to the public, providing walking and cycling routes along the towpath apart from at two locations. At present a one mile section between Westfield Bridge and Bristol Road Wharf by the M5 motorway and one other much shorter section by the River Severn at Framilode Swing Bridge do not provide access to such routes. The section of the canal by the M5 motorway is currently subject to plans to be reinstated which would include the provision of a new surfaced towpath.
- 3.116 The strategy for transport provision within the District is set out through Gloucestershire's Local Transport Plan 2015-31 with Gloucestershire County Council acting as the local transport authority. Important development proposals for Stroud (some of which have confirmed funding to proceed) set out in the Local Transport Plan include improvements to the A419 corridor and Berkeley bridges at the A38. Gloucestershire County Council is to produce a Local Cycle and Walking Investment Strategy in roll out phases with phase 2 to cover Stroud and Tewkesbury. Strategic Cycle Highway improvements in the County are targeted for the M5 Growth Zone and are eventually to link Gloucester to Stroud¹²³. Specific locations within Stroud town which would benefit from improvements for cycle access include the town centre and Cainscross roundabout¹²⁴.
- 3.117 Within Gloucestershire approximately 17% of households do not own a car. This is significantly lower than the national average of 26%. At the county level, however, the percentage of those who cycle to work is 4.5% which is above the national average of 2%. It is also reported that across the county much of the population are located within 5km of services, employment opportunities and education which would be accessible by bicycle.
- 3.118 Stroud District Council has recently announced plans to invest in two cycling and walking projects: A cycle track linking Uley, Dursley and Cam with the Cam and Dursley railway station. The Cam, Dursley and Uley Greenway cycle route is currently being worked on by volunteers; and a cycle track from Sustrans national network 41 to Stonehouse Wharf, Ebley, Stroud, Thrupp and Brimscombe Port. The path will also have sections leading to Stonehouse, Stonehouse railway station, Stroud railway station and Nailsworth.
- 3.119 Specific emerging pressures within the Cotswolds AONB relate to increasing traffic volume and vehicle sizes which result in greater air and noise pollution as well as detrimental impacts on tranquillity, roadside verges, drainage. The AONB also faces potential pressures from non-motorised users travelling on foot, by bike or on horse. The good level of access to the AONB from nearby railway stations and international airports of Bristol, Birmingham and Heathrow as well as from military airports of Fairford and Brize Norton and the more local Gloucestershire, Oxfordshire and Cotswolds airports are likely to continue to have both positive and negative impacts on the AONB¹²⁵.

¹²³ Gloucestershire County Council (December 2017) *Local Transport Plan Implementation Report 2017*

¹²⁴ Gloucestershire County Council (June 2016) *Gloucestershire's Local Transport Plan 2015-2031 Gloucestershire's Cycle Network Gloucestershire's Local Transport Plan 2015-2031*

¹²⁵ Cotswolds Conservation Board (February 2018) *Cotswolds AONB Management Plan 2018-2023 2nd Draft for Consultation*

Tourism

- 3.120 In Stroud District, business rate figures show that £18,870,666 of income is generated through the service sector. This includes revenue from campsites and hotels as well as licensed premises, markets, restaurants, shops, museums, clubs and community and sports facilities and represents 28% of the total revenue for the District.
- 3.121 Across Gloucestershire, the total visitor related spend for tourists in 2016 was £1,112,779,000. The figure for Stroud District was £144,246,000 for the same period. The estimated number of jobs supported by the tourist trade in the District was 3,057 which accounted for 5% of all employment in Stroud. Day visits in the District were split fairly evenly between both countryside visits (1,381,000) and urban visits (1,335,000) demonstrating the variety of attractions in Stroud. Stroud was, however, the lowest performing of the local authority areas in Gloucestershire County during this period of time in relation to both domestic spend and overseas spend, with the Cotswolds performing mostly strongly in relation to both of these measures as shown below in **Table 3.7**¹²⁶.

Table 3.7: Stroud - Staying visits in the Gloucestershire County context

Area	Domestic trips (000's)	Overseas trips (000's)	Domestic spend (millions)	Overseas spend (millions)
Cheltenham	316	51	£57	£20
Cotswold	504	69	£105	£33
Forest of Dean	254	40	£44	£20
Gloucester	294	48	£50	£18
Stroud	232	37	£36	£14
Tewkesbury	276	42	£50	£16

- 3.122 Stroud District Council recognises the importance of the Cotswolds brand as a draw for tourists given its international recognition and reputation. As such, considering that it forms part of the Cotswolds AONB, the District aims to strengthen its position within the Cotswolds for tourism marketing purposes so that it remains an integral part of the tourism offer for the wider area. Research suggests the Cotswolds could be considered a destination for older visitors meaning that there is potentially future need to consider whether the area's core markets should be concentrated on this category of visitor or whether there is requirement to adopt a strategy to promote the District to a younger audience¹²⁷.
- 3.123 The updated challenges which town centres in the District face partially reflecting the national trend of the increased importance of e-retail impacts means there are likely to be evolving town centre roles within the District with emerging opportunities for leisure uses and tourism. The Stroud Town Centre Neighbourhood Development Plan 2015 – 2035¹²⁸ identifies the strong traditional market presence, independent shops, cafes and cultural street life and festivals as current strengths and potential opportunities to be built upon for the town centre. A rise in leisure uses has been discernible at all of the town centres in the District up to the end of 2016 most notably at Dursley, Wotton-under-Edge and Stonehouse¹²⁹. The potential for future tourism growth at Dursley and Wotton-under-Edge is recognised by the Council through the Local Plan Review Issues and Options paper¹³⁰. These towns benefit from attractive landscape setting and sit on the Cotswolds Way and as a southern historic gateway to the Cotswolds respectively.

¹²⁶ South West Research Company on behalf of Cotswold District Council (January 2018) *The Economic Impact of Gloucestershire's Visitor Economy 2016*

¹²⁷ Stroud District Council (March 2017) *Community Services And Licensing Committee Information Sheet: Tourism Update*

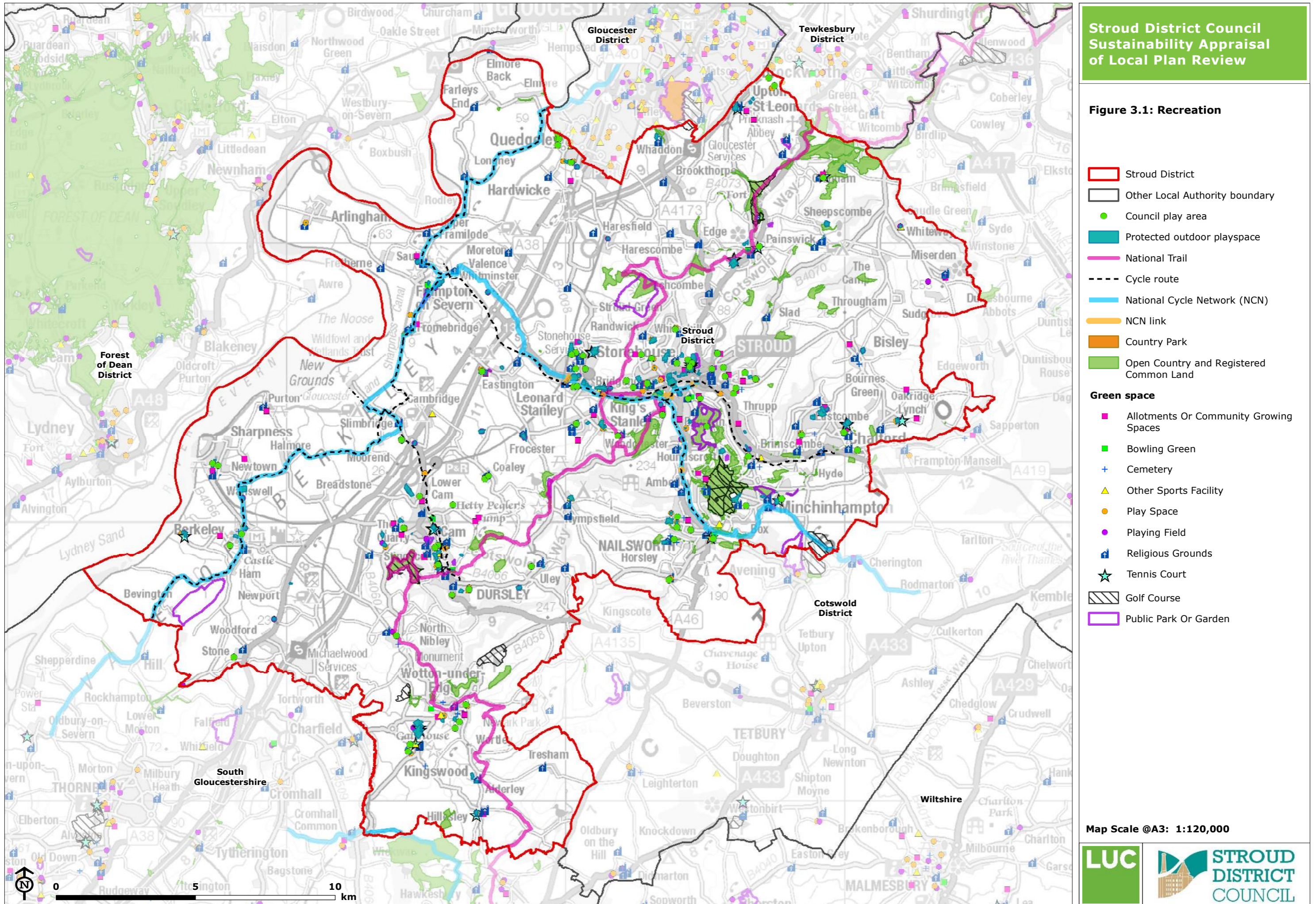
¹²⁸ Stroud Town Council (October 2016) *Stroud Town Centre Neighbourhood Development Plan 2015 – 2035*

¹²⁹ Stroud District Council (February 2017) *Environment Committee Agenda Paper: Future of Town Centres Stroud, Nailsworth, Stonehouse, Dursley, Wotton Under Edge*

¹³⁰ Stroud District Council (September 2017) *Stroud District Local Plan Review: Issues and Options Paper*

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Figure 3.1: Recreation






Map Scale @A3: 1:120,000







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















Figure 3.2: Landscape Features

-  Stroud District
-  Other Local Authority boundary
-  Area of Outstanding Natural Beauty

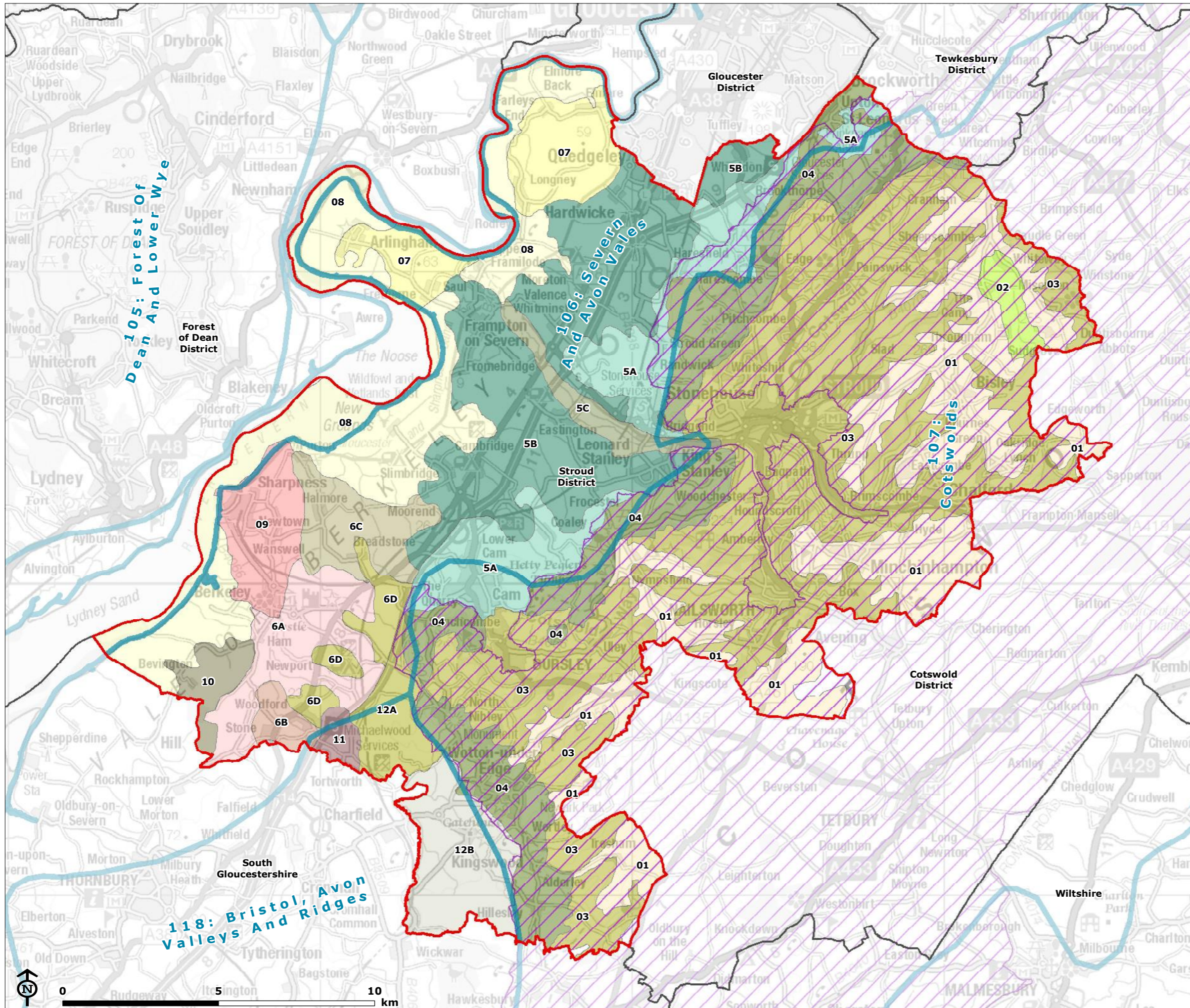
National Character Areas

-  105: Forest Of Dean And Lower Wye
-  106: Severn And Avon Vales
-  107: Cotswolds
-  118: Bristol, Avon Valleys And Ridges

Landscape Character Types

-  01: Wold Tops
-  02: Rolling Valleys
-  03: Secluded Valleys
-  04: Escarpment
- 5. Rolling Agricultural Plain
 -  5A: Escarpment foot slopes
 -  5B: Lowland Plain
 -  5C: Frome River Valley
- 6. Undulating Lowlands
 -  6A: Little Avon Basin
 -  6B: Little Avon Mid-Valley
 -  6C: Wooded Lowlands
 -  6D: Lowland Ridges
-  07: Severn Vale Hillocks
-  08: Severn Vale Grazing Marshland
-  09: Sandstone Ridge
-  10: Triassic Ridge
-  11: Wooded Cambrian Ridge
- 12. Kingswood Vale
 -  12A: Kingswood Vale - North
 -  12B: Kingswood Vale - South

Map Scale @A3: 1:120,000



**Stroud District Council
Sustainability Appraisal
of Local Plan Review**

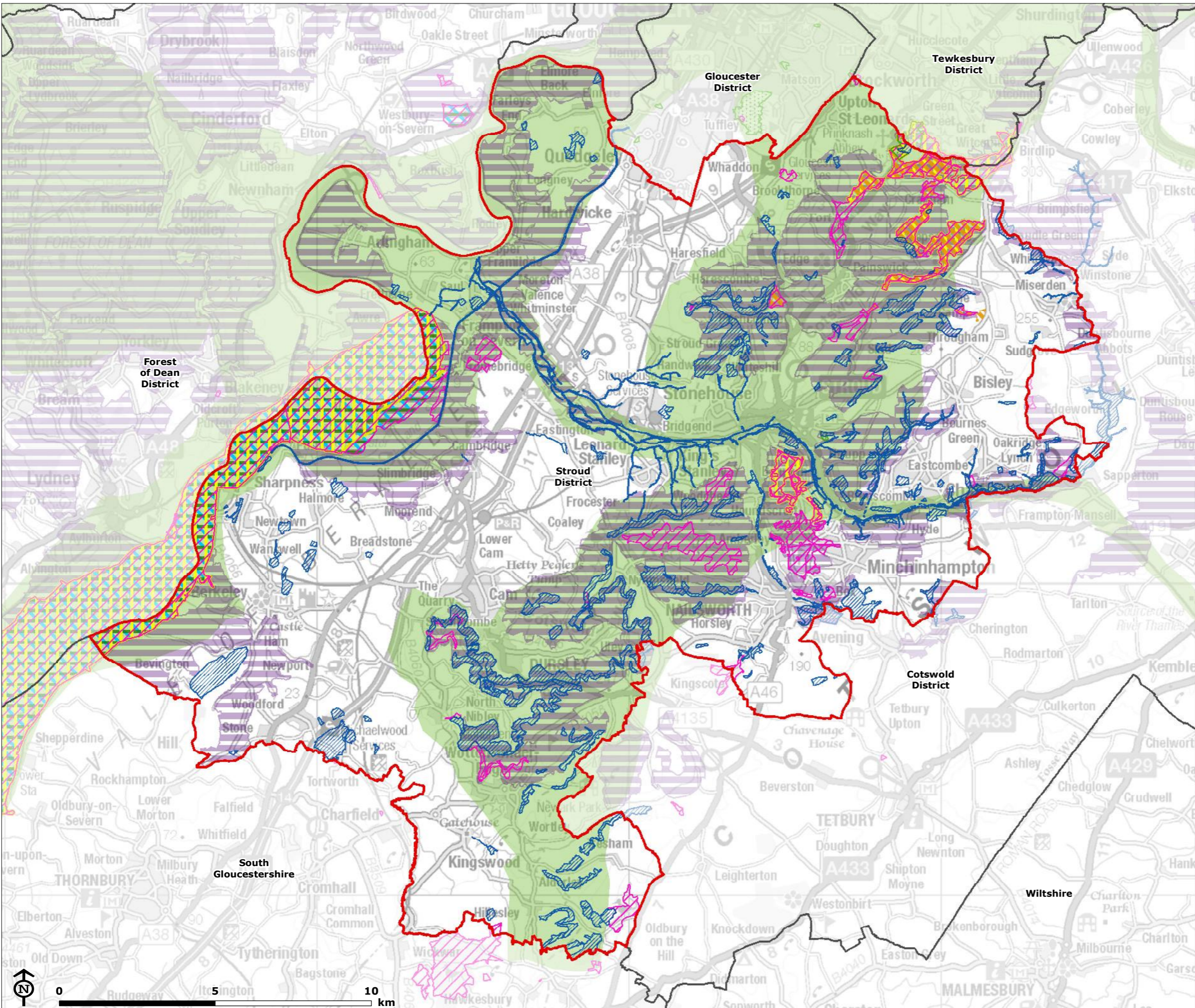
Figure 3.3: Biodiversity Designations

- Stroud District
- Other Local Authority Boundary

- International designations**
- Special Area of Conservation
- Ramsar Site
- Special Protection Area

- National designations**
- Sites of Special Scientific Interest
- National Nature Reserve

- Local designations**
- Key Wildlife Sites
- Local Nature Reserve
- Strategic Green Infrastructure Framework Area
- Strategic Nature Area

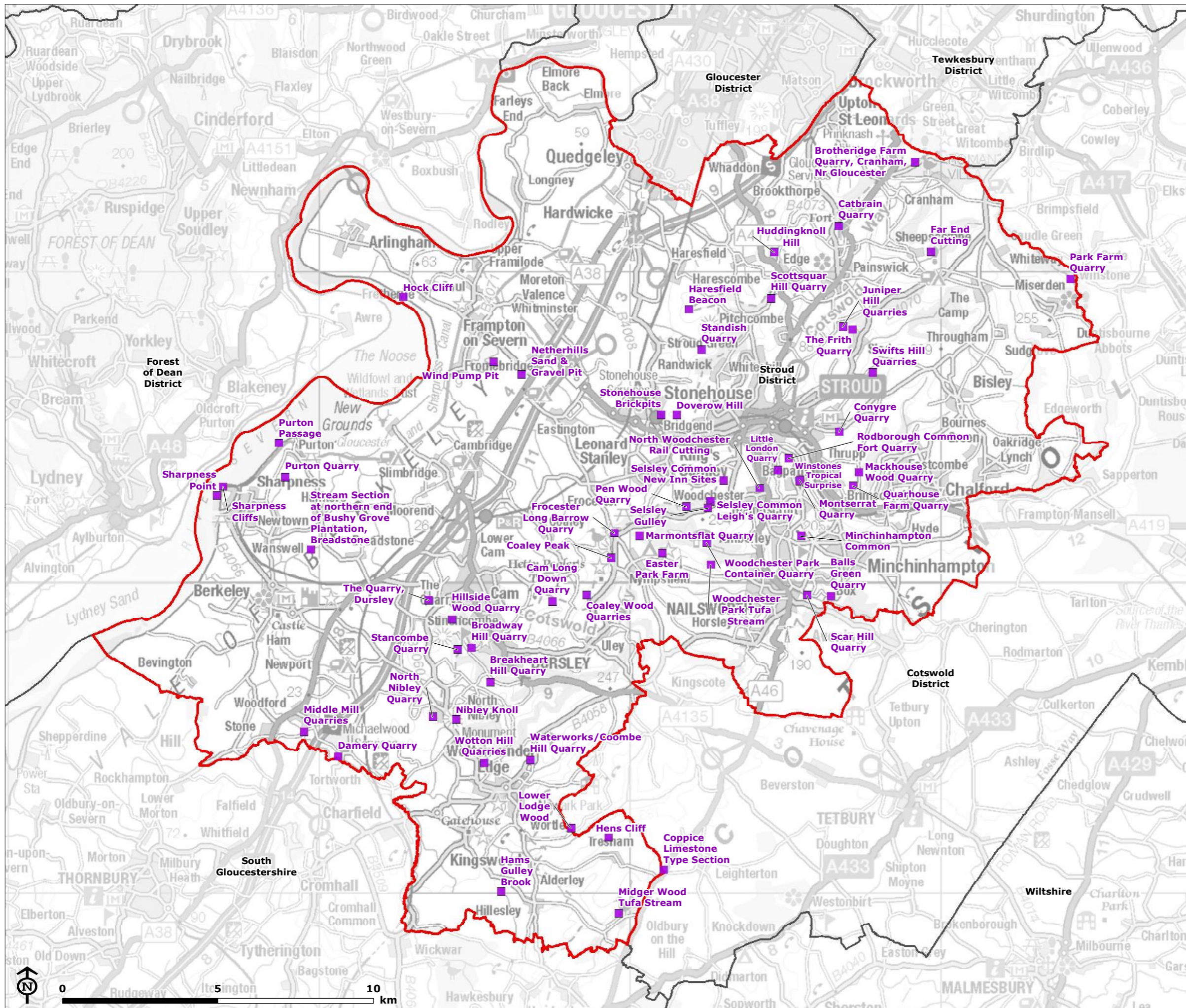


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Figure 3.4: Geodiversity Sites

- Stroud District
- Other Local Authority boundary
- Regionally Important Geological Site (RIGS)



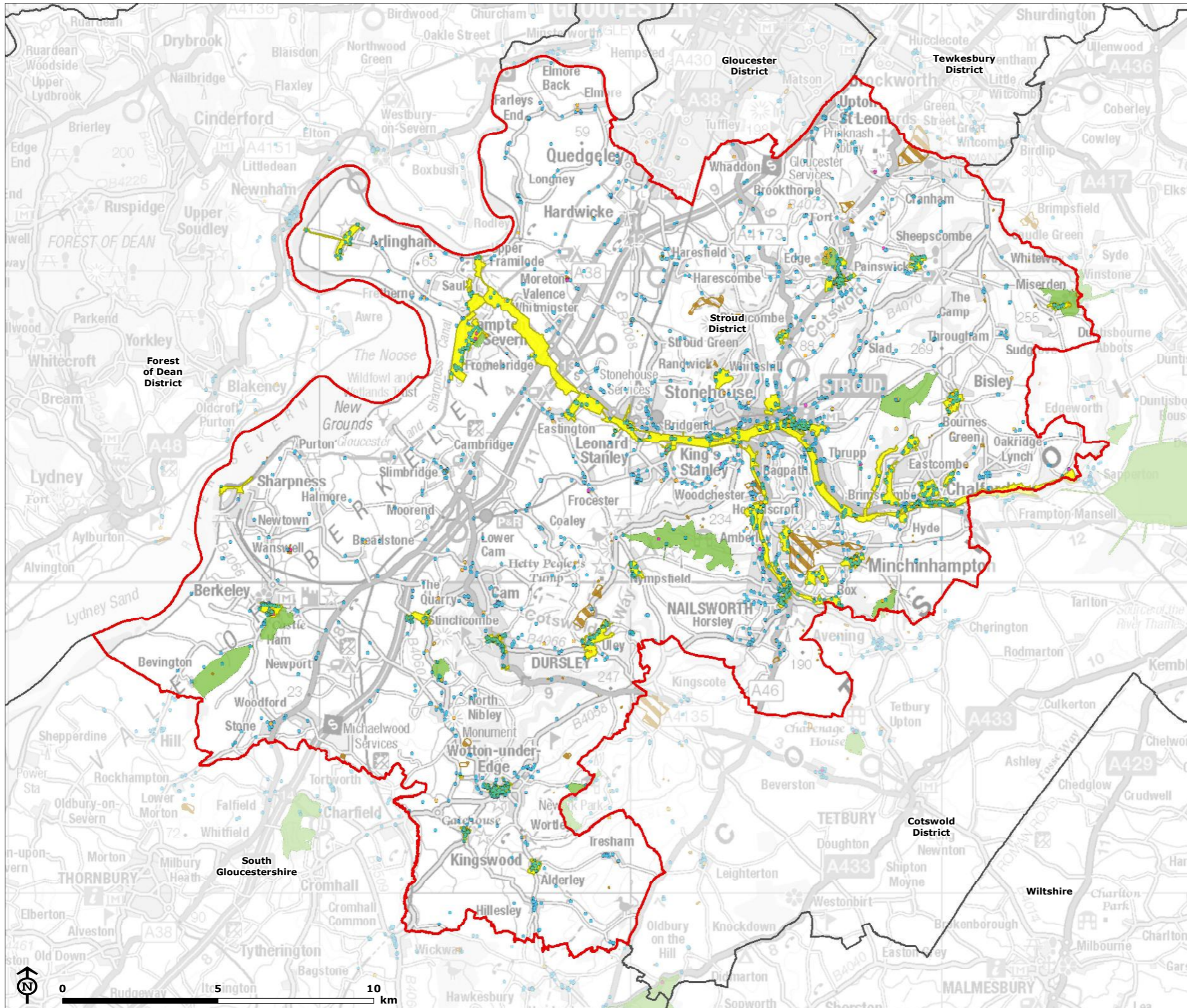
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Sustainability Appraisal
of Local Plan Review**

Figure 3.5: Heritage Assets

- Stroud District
- Other Local Authority boundary
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building
- Scheduled Monument
- Conservation Area
- Registered Park & Garden

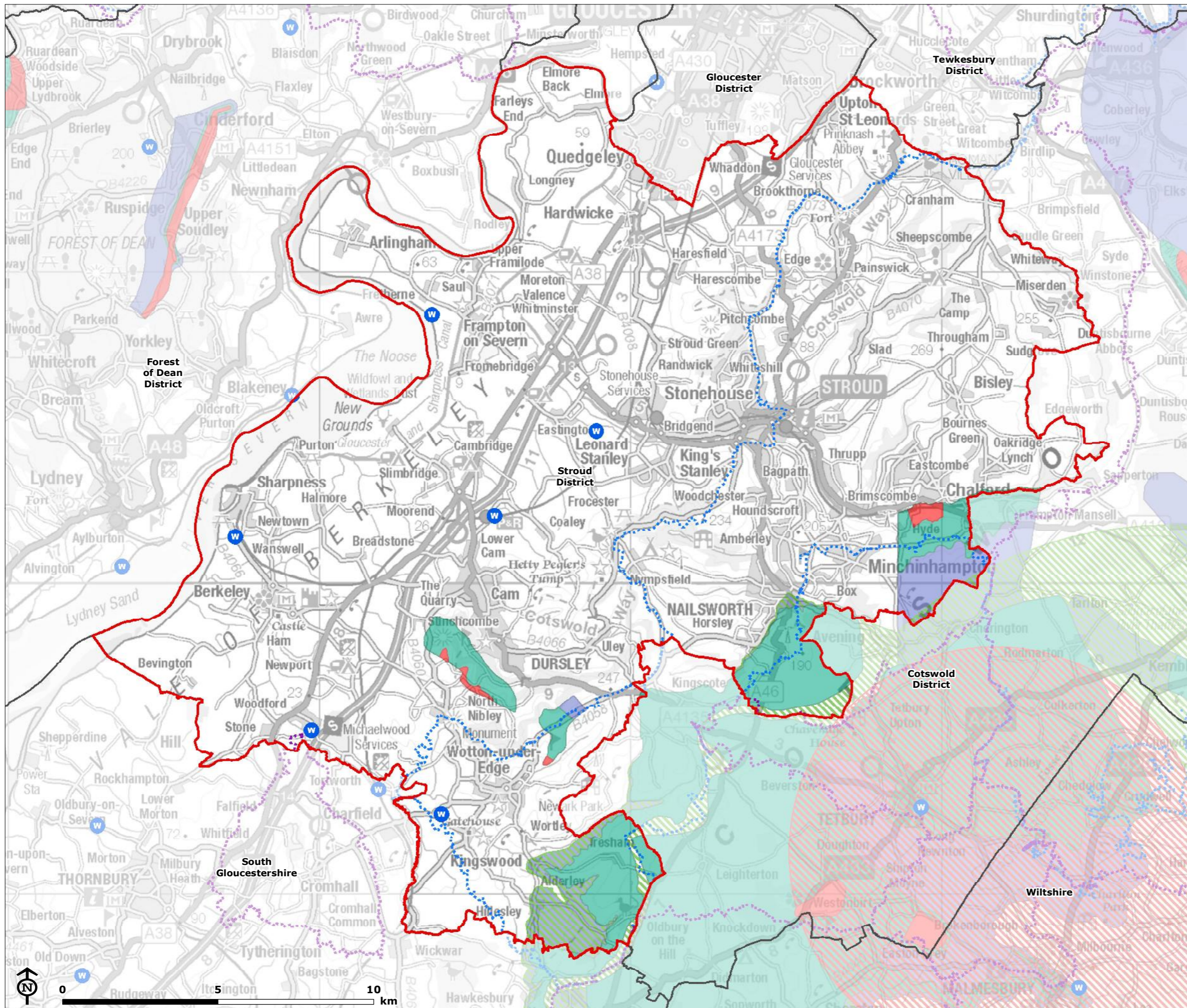


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Figure 3.6: Water Quality

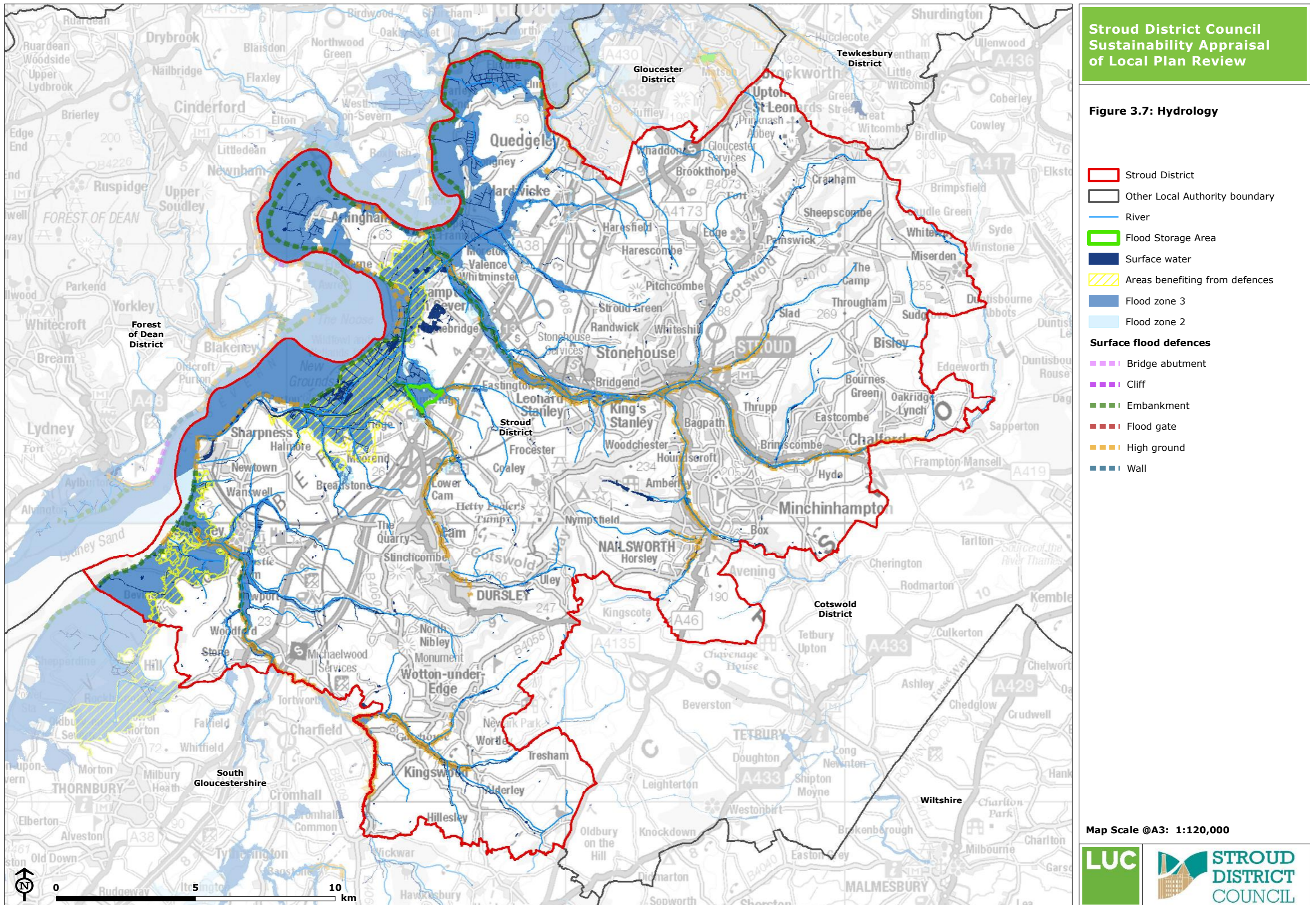


- Stroud District
- Other Local Authority boundary
- W Wastewater Treatment Plant
- Nitrate Vulnerable Zones**
- Groundwater
- Surface Water
- Source Protection Zone**
- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)

Map Scale @A3: 1:120,000



Figure 3.7: Hydrology



- Stroud District
- Other Local Authority boundary
- River
- Flood Storage Area
- Surface water
- Areas benefiting from defences
- Flood zone 3
- Flood zone 2
- Surface flood defences**
- Bridge abutment
- Cliff
- Embankment
- Flood gate
- High ground
- Wall

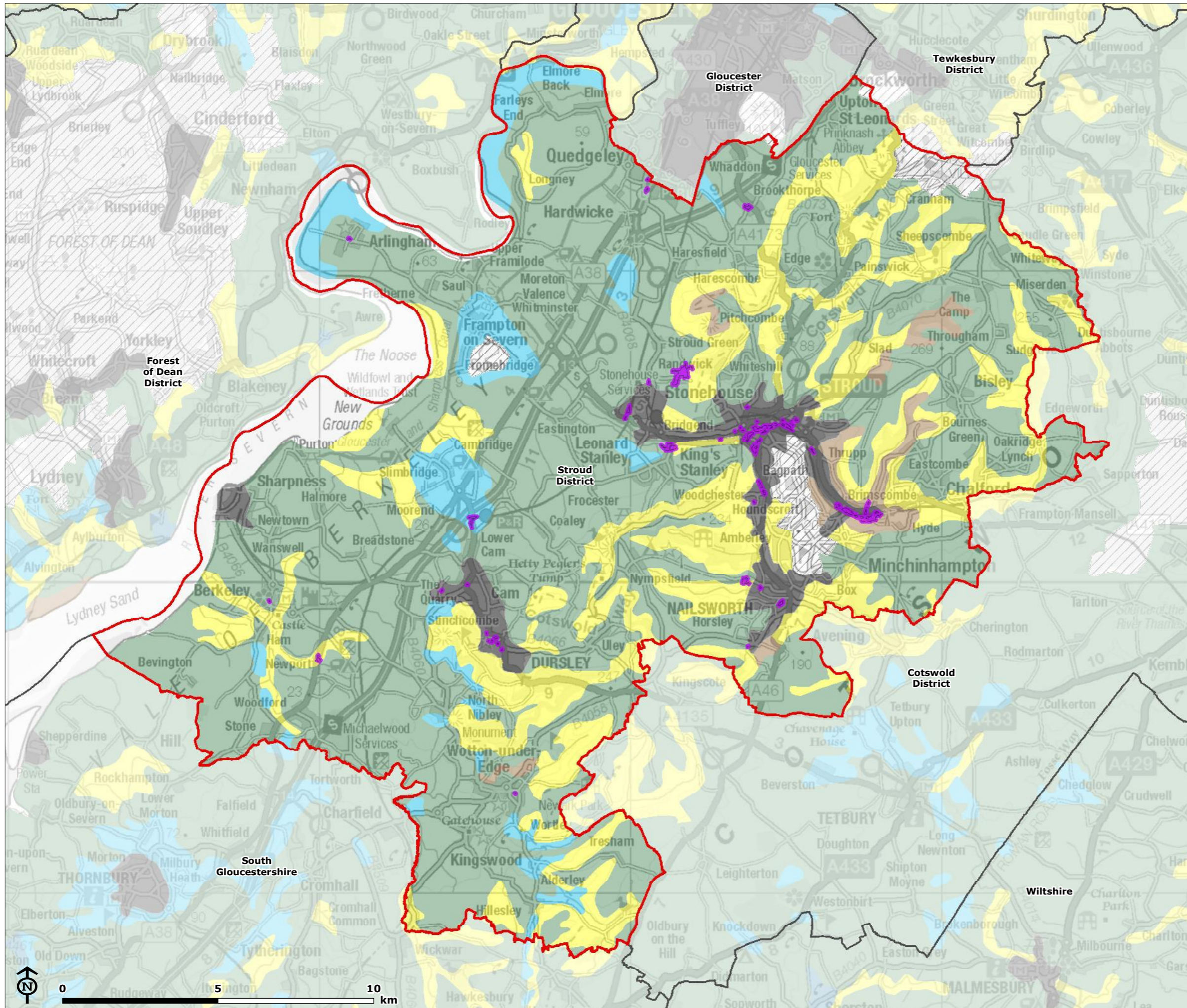
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of Local Plan Review**

Figure 3.8: Land Classification

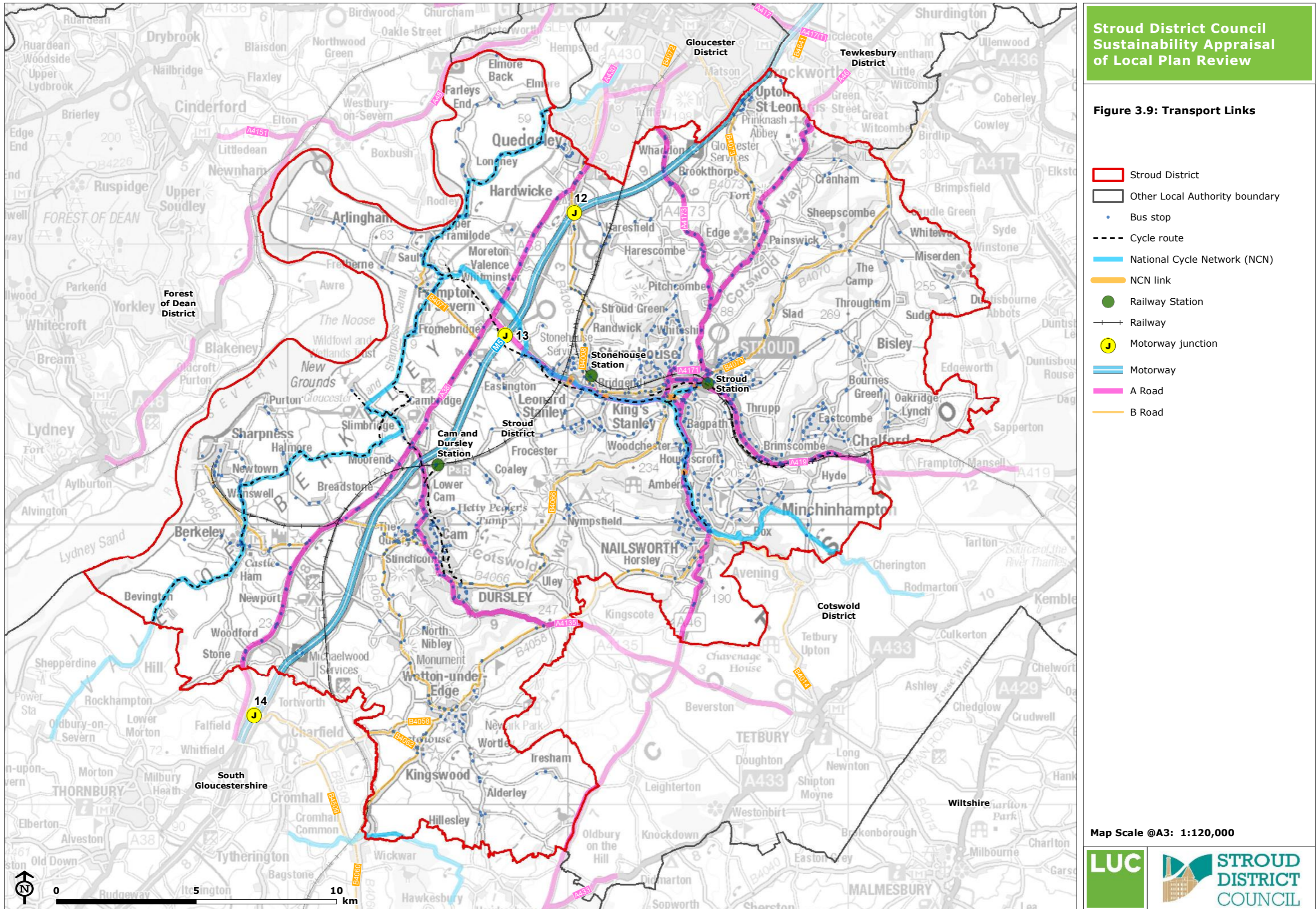
- Stroud District
 - Other Local Authority boundary
 - Brownfield Register site
- Agricultural Landscape Classification**
- Grade 1 (excellent)
 - Grade 2 (very good)
 - Grade 3 (good to moderate)
 - Grade 4 (poor)
 - Grade 5 (very poor)
 - Non agricultural
 - Urban



Map Scale @A3: 1:120,000



Figure 3.9: Transport Links



- Stroud District
- Other Local Authority boundary
- Bus stop
- Cycle route
- National Cycle Network (NCN)
- NCN link
- Railway Station
- Railway
- J Motorway junction
- Motorway
- A Road
- B Road

Map Scale @A3: 1:120,000



4 Key Sustainability Issues and Likely Evolution without the Plan

- 4.1 Analysis of the baseline information has enabled a number of key sustainability issues facing Stroud to be identified. Identification of the key sustainability issues and consideration of how these issues might develop over time if the Local Plan Review is not implemented help to meet the requirements of Annex 1 of the SEA Directive to provide information on:

“the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan; and any existing environmental problems which are relevant to the plan.”

- 4.2 Key sustainability issues identified in the 2013 Interim SA Report for the Stroud Local Plan (April 2013) have been reviewed and revised in light of the updated policy review and baseline information. The updated set of key sustainability issues for Stroud District is presented in **Table 4.1** overleaf.
- 4.3 It is also a requirement of the SEA Directive that consideration is given to the likely evolution of the environment in the plan area (in this case Stroud District) if the Local Plan Review was not to be implemented. This analysis is also presented in **Table 4.1** in relation to each of the key sustainability issues.
- 4.4 The information in **Table 4.1** shows that, in general, the current trends in relation to the various social, economic and environmental issues affecting Stroud would be more likely to continue without the implementation of the Local Plan Review, although the policies in the adopted Stroud District Local Plan (2015) would still go some way towards addressing many of the issues. In most cases, the Local Plan Review offers opportunities to directly and strongly affect existing trends in a positive way, through an up-to-date plan which reflects the requirements of the NPPF.

Table 4.1: Key Sustainability Issues for Stroud District and Likely Evolution without the Local Plan Review

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>Climate change is likely to affect biodiversity, increase hazards from fluvial flooding and also affect the social and economic aspects of life. The rural character and dispersed nature of development in Stroud means that there are likely to be difficulties with regards the delivery of reductions in greenhouse gas emissions.</p>	<p>Climate change is likely to have on-going effects regardless of the Local Plan Review. The adopted Stroud District Local Plan already includes policies seeking to address this issue, and these would continue to apply in the absence of the Local Plan Review. These policies include Core Policy CP2: Strategic growth and development locations, which seeks to provide most of the District’s development at the most sustainable locations; ES1: Sustainable Construction and Design, which supports increased energy efficiency and integrating the use of renewable and low carbon energy sources; and ES2: Renewable or low carbon energy generation which seeks to maximise the generation of energy from renewable or low carbon sources.</p> <p>The Local Plan Review offers the opportunity to update these policies to meet the current circumstances of the District in light of new development and updated growth requirements and provide further policy to address climate change if required.</p>
<p>New development in the District will mean there will be increasing demands for energy provision in the future. A significant proportion (30%) of existing homes in the District require energy efficiency improvements and the District is located within the region which has the highest regional percentage of fuel poverty in England. It is noted that the percentage of homes suffering from fuel poverty in the District is slightly less than the regional percentage, however.</p>	<p>The delivery of new homes and other development over the plan period could increase demand for and energy consumption in Stroud. At present the adopted Stroud District Local Plan includes policies seeking to address this issue, and these could continue to apply in the absence of the Local Plan Review. The policies include ES1: Sustainable Construction and Design, which supports increased energy efficiency and integrating the use of renewable and low carbon energy sources; and ES2: Renewable or low carbon energy generation which seeks to maximise the generation of energy from renewable or low carbon sources.</p> <p>The Local Plan Review offers the opportunity to update these policies to meet the current circumstances of the District and provide further policy to encourage improved energy efficiency and increase the proportion of energy which is supplied by renewable sources if required.</p>
<p>Stroud District contains many areas of high ecological value including sites of international and national importance. These are under threat from urbanising pressures, including disturbance and damage from recreational use.</p>	<p>Pressures on the natural environment in Stroud are likely to continue regardless of the Local Plan Review particularly given the requirement for more housing and employment development to meet growth projections. The adopted Stroud Local Plan (2015) already includes policies seeking to address these pressures, including ES6: Providing for biodiversity and geodiversity which safeguards internationally, nationally and locally designated biodiversity and geodiversity sites as well as protecting undesignated sites and protected sites.</p> <p>However, without the site allocations to be made through the Local Plan Review, further development may not come forward in the most appropriate locations and impacts on biodiversity could be amplified. The Local Plan review also offers the opportunity to update planning policy in relation to the protection of areas which are of importance in</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
	<p>terms of their biodiversity and geodiversity with consideration for the future evolution of development in the District. The SA for the Local Plan Review will incorporate the findings of HRA which will provide further insight into biodiversity impacts specifically at European sites presenting the opportunities to limit adverse impacts at such locations.</p>
<p>The countryside is under pressure from urbanising influences which are driven by a need for new housing provision and economic growth and infrastructure improvements to support new growth in Stroud.</p>	<p>Pressures on the countryside are likely to continue regardless of the implementation of the Local Plan Review. The adopted Stroud District Local Plan (2015) has already set out strategic growth areas, within or adjacent to larger settlements which will focus much of the new development in the District in those areas which have been subject to SA and selected by the Councils as the most sustainable and appropriate locations for development.</p> <p>However, without the new allocations to be made through the Local Plan Review, further development may not come forward in the most sustainable and appropriate locations and impacts on the countryside could be more significantly adverse.</p>
<p>The District has significant areas of landscape importance, most notably to the east within the boundaries of the Cotswolds AONB.</p>	<p>The adopted Stroud District Local Plan (2015) already includes policies to protect and enhance the landscape, including ES7: Landscape Character, which seeks to conserve and enhance the natural and scenic beauty of landscape character in the District including that of the Cotswolds AONB and its setting.</p> <p>The Local Plan Review offers the opportunity to update the current policy position in responses to the evolution of the District and development pressures it currently faces through more specific development management policies and site allocations that are selected following consideration of their impacts on landscape character through the SA. The emerging Cotswolds AONB Management Plan will provide further context to the development set out through the Local Plan Review and allow the updated pressures which the AONB is now facing to be appropriately considered.</p>
<p>The large area of Grade 3 Agricultural Land is a significant asset to the District; however pressures from development and climate change threatened the viability and productivity of such soils.</p>	<p>The pressures for new development in the District are likely to result in some development occurring in areas where high quality agricultural soils are present. The adopted Stroud District Local Plan (2015) contains policy to promote development at locations which would result in the re-use of previously developed land most notably through Core Policy CP14: High Quality Sustainable Development.</p> <p>The Local Plan Review presents the opportunity to update planning policy in the District to specifically protect higher value agricultural soils in the District in addition to promoting the re-use of previously developed land. The Local Plan Review might also be used to allocate sites for development which do not make use of higher quality agricultural soils (with consideration for the other principles of sustainable development).</p>
<p>The River Severn and its tributaries pass through the District and these</p>	<p>The adopted Stroud Local Plan (2015) already includes policies to reduce flood risk in</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>have the potential to cause serious flooding.</p>	<p>the District including ES4: Water resources, quality and flood risk, which seeks to reduce flood risk in the District through appropriate siting of development, support for the provision of SuDS and other proposals which would reduce vulnerability to flood risk in Stroud.</p> <p>New development supported through the Local Plan Review can increase the risk of flooding; however the Local Plan Review offers the opportunity to provide development at locations which present the lowest flood risk and drafting new planning policy which will address the evolving flood risk situation in Stroud.</p>
<p>Much of the western portion of the District falls within Surface Water NVZs and/or Ground Water NVZs which indicates that different water bodies which pass through Stroud are exposed to significant levels of nitrates with a potential adverse impact on local water quality. Areas of the District also fall within SPZs.</p>	<p>The adopted Stroud Local Plan (2015) already includes policies seeking to protect and enhance water quality including Core Policy CP14: High Quality Sustainable Development which seeks to protect, conserve and enhance the built and natural environment including exposure to water pollution and ES4: Water resources, quality and flood risk, which seeks to maintain water quality encouraging the use of SuDS and appropriate recycling of water.</p> <p>The Local Plan Review presents the opportunity to allocate new development at sites which are less likely to have adverse impacts in terms of local water quality following their consideration through the SA process. There is also the opportunity through the Local Plan Review to include new development management policies thereby updating the planning policy position to directly address the updated water quality situation in Stroud.</p>
<p>The age structure of the population shows that currently there is a higher proportion of older people in the South West than nationally. There is expected to be an increasingly disproportionate number of older people in the area. This will have implications for the economy, service provision, accommodation and health.</p>	<p>The Stroud Local Plan (2015) through Core Policies CP7: Lifetime communities and CP8: New housing development expects new development to contribute to the provision of sustainable and inclusive communities meeting needs of residents including older people and also provide range of different types, tenures and sizes of housing, to create mixed communities.</p> <p>The Local Plan Review offers the opportunity to build on this policy approach through development management and site allocation policies which will help to meet the requirements of the future age structure of the District. In addition to development management policies which promote the provision of homes suitable for all sections of the community this will include the consideration of sites in terms of access to existing services centres and services and facilities through the SA process.</p>
<p>Stroud generally displays higher levels of public health than the national average however there is a requirement to address health inequalities as well as specific health problems such as obesity in the District.</p>	<p>Although not explicit in the adopted Stroud District Local Plan (2015), opportunities to consider access to healthcare, open spaces and other recreational facilities would have been taken into account during identification and allocation of the strategic development locations in Core Policy CP2: Strategic growth and development locations. The Local Plan Review presents further opportunities to allocate new housing development sites at locations which are in close proximity to existing healthcare</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
	facilities, open spaces and other facilities which might encourage healthier lifestyle choices including increased levels of physical activity. The Local Plan Review might also be used to allocate open spaces and local green spaces to protect them from development.
<p>House prices have increased by the highest percentage within the South West when compared to the other regions of England.</p>	<p>The adopted Stroud District Local Plan (2015) seeks to increase house building to address historic undersupply and the needs of concealed households by exceeding the minimum housing requirement (11,400) set out in Core Policy CP2: Strategic Growth and Development Locations. The proportion of new development at larger sites which is to be delivered as affordable housing where viability is demonstrated is set out in the adopted Stroud District Local Plan (2015) through Core Policy CP9: Affordable housing, which requires a minimum of 30% of housing to be affordable.</p> <p>Meeting the future housing requirements identified in the new national methodology to 2036 through the Local Plan Review is intended to address national historic undersupply and resultant house price increases. Without the implementation of the site allocations to be included as part of the Local Plan Review there may be less certainty about the delivery of affordable housing at site allocations.</p>
<p>Much of the housing stock in the District is quite old and the worst housing conditions are most evident in the private rented sector.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out the level of housing (11,400) and that which should be provided at the strategic sites in the District. As such the assessed need for housing is to be met up to 2031. Core Policy CP8: New housing development sets out that new housing development should be well designed to address local housing needs, incorporating a range of different types, tenures and sizes of housing. As such the current Local Plan would help to provide high quality housing to meet local need up to 2031.</p> <p>The Local Plan Review presents the opportunity to allocate housing up to 2036 to meet future requirements and to update the planning policy position to ensure that future housing provision is of the highest quality.</p>
<p>Stroud on average is one of the least deprived districts/unitary authorities in the country. However, there are pockets of deprivation particularly in relation to housing and service provision.</p>	<p>Without the implementation of new site allocations to be included in the Local Plan Review there may be less certainty about the delivery of housing and employment land and therefore deprivation in Stroud would be less likely to be addressed.</p>
<p>Economic productivity in the District in terms of the GVA per hour worked indices is slightly lower than the national figure. There is a requirement to make appropriate use of the District's strong strategic transport links along the M5 corridor to facilitate future economic growth. Furthermore there is a net flow of commuters out of the District.</p>	<p>Without the implementation of new site allocations to be included in the Local Plan review there may be less certainty about the delivery of employment land and necessary transport infrastructure and therefore any potential for economic stagnation would be less likely to be addressed.</p>
<p>The town centres of the District face evolving pressures in terms of</p>	<p>The adopted Stroud District Local Plan (2015) through Policy CP12 Town centres and</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>outside retail offers of the surrounding areas and the continued importance of e-retailing and provision of services online. Service uses and to a lesser extent comparison and convenience uses have seen a decline at many of the town centres while there has been a growth in leisure uses in recent years up to the end of 2016. There is a requirement to protect and enhance the role of town centres as economic drivers and employment supporters in a sustainable manner which is responsive to the evolving situation in Stroud.</p>	<p>retailing seeks to protect and bolster the role that the District's town centres play in providing jobs and contributing to a strong local economy. This includes supporting Stroud town centre as the principal town centre with priority to be given to improving retail facilities in Dursley, Stonehouse, Nailsworth and Wotton-under-Edge after this. Retail and other uses (including leisure, entertainment, cultural and tourist uses as well as other mixed-uses) that would support the vitality and viability of the centres in the hierarchy below Stroud town centre are to be directed in a sequential manner.</p> <p>The Local Plan Review presents the opportunity to incorporate updated policy to protect the evolving role of the town centres in the District. The Local Plan policy position may be updated to reflect the current strengths and opportunities at these town centres with consideration for existing weaknesses and emerging pressures to protect these centres in terms of their importance for economic growth and job provision.</p>
<p>While a high proportion of residents in the District make use of alternative modes of transport such as cycling to commute, car ownership in the area is high, and there are serious congestion problems in key locations. The re-establishment of the Cotswold Canals presents opportunities for the promotion of alternative modes of transport however there is a need to handle this sensitively.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out development to be provided at the strategic sites in the District with development to take place in accordance with the settlement hierarchy beyond these locations. As such the adopted Local Plan seeks to guide development to locations which have been appraised as part of the SA process and are the more sustainable locations in the District. Core Policy CP13: Demand management and sustainable travel measures furthermore requires that all development is located where there are choices in modes of transport available and where the distance people need to travel is minimised. Policies EI12: Promoting transport choice and accessibility; EI13: Protecting and extending our cycle routes and EI14: Provision and protection of rail stations and halts, further help to promote sustainable transport options in the District. Policy ES11: Maintaining, restoring and regenerating the District's canals protects the future improvement, reconstruction, restoration or continued use of the canals or towpaths in Stroud.</p> <p>The Local Plan Review presents the opportunity to incorporate support for the establishment of stronger sustainable transport links and the provision of new development at allocated sites where these links will be accessible. Furthermore the policy position of Local Plan can be updated to reflect the evolved situation of the restoration of the canals in Stroud and progress with cycling and walking capital projects.</p>
<p>The Industrial Heritage Conservation Area (IHCA) which covers 23km of the Cotswold Canals is currently one of several heritage assets which are included on Historic England's Heritage at Risk list. Within the District areas of significant built historic importance and aesthetic quality are under pressure due to new development in the District and there is a</p>	<p>The adopted Stroud District Local Plan (2015) already includes policies seeking to protect and enhance the historic environment, including ES10: Valuing our historic environment and assets, which requires development to enhance the heritage significance and setting of the Districts heritage assets.</p> <p>The Local Plan Review presents the opportunity to guide new development to locations</p>

Key Sustainability Issues for Stroud	Likely Evolution without the Local Plan Review
<p>requirement for them to be preserved and enhanced.</p>	<p>which are less sensitive in terms of their impact on heritage assets (with consideration for other sustainability issues) through the SA process applied to potential site allocations. The Local Plan Review provides a way of delivering elements of the new Heritage Strategy and will also allow for any update required to be made to the policy position the Council has taken with regards the protection of heritage assets and their setting through appropriate development policies.</p>
<p>The District needs to capitalise further on the tourism industry so that this sector continues to contribute fully to economic growth. There is also a need to consider how links to the wider Cotswolds area can be made most use of profitably and how these links can be promoted. There may be opportunities to grow the tourism market at the District's town centres particularly where there are existing links to the Cotswolds AONB and Cotswolds Way. Recent years have seen a rise in the number of leisure uses at town centre locations and identified strengths at the various centres include independent cafes and shops, traditional markets and the attractive landscape setting.</p>	<p>The adopted Stroud District Local Plan (2015) through Policy E110 Provision of new tourism opportunities sets out the approach to tourism development in Stroud. This is to protect and enhance landscapes and environmentally sensitive sites, whilst aiming to provide adequate facilities and enhancing enjoyment and profitability. The policy position of the current Local Plan thereby seeks to protect and enhance the functioning of the tourism sector in the District. Policy CP12 Town centres and retailing seeks to protect and bolster the role that the District's town centres play in providing jobs and contributing to a strong local economy. This includes supporting Stroud town centre as the principal town centre with priority to be given to improving retail facilities in Dursley, Stonehouse, Nailsworth and Wotton-under-Edge after this. Retail and other uses (including leisure, entertainment, cultural and tourist uses as well as other mixed-uses) that would support the vitality and viability of the centres in the hierarchy below Stroud town centre are to be directed in a sequential manner.</p> <p>The Local Plan Review presents the opportunity to provide updated development policy to guide future tourism development in light of the evolving situation in the District and the evolution of its town centres. This may include the potential to support the role of market town centres, build on current links to the Cotswolds AONB or to support development which would help to reposition the appeal of the District to attract new tourists.</p>
<p>The transport infrastructure is strong in the west along the M5 and A38 from north to south, although there are signs of peak congestion, but weaker to the east with areas of congestion prevalent. Access from east to west is more limited.</p>	<p>The adopted Stroud District Local Plan (2015) through Core Policy CP2: Strategic Growth and Development Locations sets out development to be provided at the strategic sites in the District with development to take place in accordance with the settlement hierarchy beyond these locations. As such the adopted Local Plan seeks to guide development to locations which have been appraised as part of the SA process and therefore to the more sustainable locations in the District.</p> <p>The Local Plan Review presents the opportunity to guide future development through new site allocations and development management policies to the more sustainable and accessible locations of the District. In this manner it will be possible for the future development in Stroud to make use of existing transport links and future investment plans. The Local Plan Review will also present the opportunity to provide support for increased north-south and east-west connectivity where this is required.</p>

5 Sustainability Appraisal Framework

- 5.1 The development of a set of SA objectives (known as the SA framework) is a recognised way in which the likely environmental and sustainability effects of a plan can be described, analysed and compared.
- 5.2 Stroud District's latest SA framework, used for the appraisal of the adopted Stroud District Local Plan (2015), provided the starting point for the development of a set of SA objectives for the Local Plan Review. Those SA objectives have been reviewed in light of the revised and updated review of plans, policies and programmes, baseline information and key sustainability issues for Stroud (as presented in **Chapters 2, 3 and 4**) and amendments have been made to a number of the objectives to ensure that they are appropriate for the SA of the Local Plan Review.
- 5.3 The proposed SA framework for the Local Plan Review is presented in **Table 5.1** overleaf. All of the topics specifically required by the SEA Regulations (set out in Schedule 2 of the SEA Regulations) are clearly addressed by the headline SA objectives, as shown in the final column of the table.
- 5.4 The review of the SA objectives has sought to avoid duplication and any single SA objective covering too many issues (as this would result in a high number of mixed effects being identified for that SA objective). The SA objectives are now also positively structured emphasising what the Local Plan Review should set out to achieve. Where further rewording has been undertaken in relation to the SA objectives this has been done to more directly address topic requirements of the SEA Regulations and the key sustainability issues for Stroud. Updates also reflect the changing context in which the Local Plan Review is being undertaken.
- 5.5 The SA objectives have been reordered to fit more appropriately under the three sustainability themes 'Social', 'Environmental' and 'Economic'. Sub-objectives have now been included and these demonstrate how the SA objectives address the key issues identified for the District. These are sub-questions which will be used to assist in making judgements about the likely effects of options and policies on the headline SA objectives.

Table 5.1: SA Framework

SA Objective	Sub-Objective	Relevant SEA Topics
Social		
SA 1: To provide affordable, sustainable and decent housing to meet local needs.	SA 1.1: Does the Plan deliver the range of types, tenures and affordable homes the District needs over the Plan Period? SA 1.2: Does the Plan increase the supply of affordable homes in urban and rural areas? SA 1.3: Does the Plan reduce the percentage of unfit/ non-decent homes?	Population; Human Health; and Material Assets
SA 2: To maintain and improve the community's health with accessible healthcare for residents, including increasing levels of physical activity, especially among the young.	SA 2.1: Does the Plan improve access to doctors' surgeries and health care facilities? SA 2.2: Does the Plan encourage healthy lifestyles and provide opportunities for sport and recreation?	Population; and Human Health
SA 3: To encourage social inclusion, equity, the promotion of equality and a respect for diversity and meet the challenge of a growing and ageing population	SA 3.1: Does the Plan promote equality of access and opportunity and social inclusion through adequate provision and distribution of local community services? SA 3.2: Does the Plan meet the challenge of a growing and ageing population? SA 3.3: Does the Plan help to limit the potential for fuel poverty in the District?	Population; and Human Health
SA 4: To reduce crime, anti-social behaviour and disorder and the fear of crime.	SA 4.1: Does the Plan promote principles of good urban design to reduce the potential for crime in the District? SA 4.2: Does the Plan assist in reducing the fear of crime?	Population; and Human Health
SA 5: To create and sustain vibrant communities.	SA 5.1: Does the Plan help to improve residential amenity (including potential to reduce light, smell and noise pollution) and sense of place? SA 5.2: Does the Plan help to improve the satisfaction of people with their neighbourhoods as places to live and encourage ownership? SA 5.3: Does the Plan safeguard and enhance the identity of the District's existing communities and settlements? SA 5.4: Does the Plan promote regeneration in the District? SA 5.5: Does the Plan provide, protect or enhance locations for cultural activities, including the arts?	Population; Human Health; and Material Assets
SA 6: To maintain and improve access to all services and facilities.	SA 6.1: Does the Plan promote compact, mixed-use development? SA 6.2: Does the Plan promote the provision of new and the protection of existing services and	Population; and Material Assets

SA Objective	Sub-Objective	Relevant SEA Topics
	<p>facilities at sustainable locations?</p> <p>SA 6.3: Does the Plan encourage the protection of existing ton centres including their vitality and viability?</p>	
Environmental		
<p>SA 7: To create, protect, enhance, restore and connect habitats, species and/or sites of biodiversity or geological interest.</p>	<p>SA 7.1: Does the Plan avoid adverse effects on designated and undesignated biodiversity and geodiversity assets within and outside the District, including the net loss and fragmentation of green infrastructure?</p> <p>SA 7.2: Does the Plan outline opportunities for improvements to the conservation, connection and enhancement of ecological assets, particularly at risk assets?</p> <p>SA 7.3: Does the Plan provide and manage opportunities for people to come into contact with resilient wildlife places whilst encouraging respect for and raising awareness of the sensitivity of such locations?</p>	<p>Biodiversity; Flora; Fauna; and Landscape</p>
<p>SA 8: To conserve and enhance the local character and distinctiveness of landscapes and townscapes and provide sustainable access to countryside in the District.</p>	<p>SA 8.1: Does the Plan protect and enhance the District's sensitive and special landscapes (including the Cotswolds AONB), and townscapes?</p> <p>SA 8.2: Does the Plan prohibit inappropriate development that will have an adverse effect on the character of the District's countryside and settlements?</p> <p>SA 8.3: Does the Plan promote the accessibility of the District's countryside in a sustainable and well-managed manner?</p> <p>SA 8.4: Does the Plan prevent coalescence between settlements?</p> <p>SA 8.5: Does the Plan protect and enhance the District's natural environment assets (including parks and green spaces, common land, woodland and forest reserves) public realm?</p>	<p>Landscape; Biodiversity; Flora; and Fauna</p>
<p>SA 9: To conserve and/or enhance the significant qualities, fabric, setting and accessibility of the District's historic environment.</p>	<p>SA 9.1: Does the Plan avoid adverse effects on the District's designated and undesignated heritage assets (e.g. Scheduled Ancient Monuments, Listed buildings, Historic Parks and Gardens and Conservation Areas), including their setting and their contribution to wider local character and distinctiveness?</p> <p>SA 9.2: Does the Plan outline opportunities for improvements to the conservation, management and enhancement of the District's heritage assets, particularly at risk assets?</p> <p>SA 9.3: Does the Plan promote sustainable and appropriately managed access to as well as enjoyment and understanding of the local historic environment for the District's residents and visitors?</p> <p>SA 9.4: Does the Plan help to preserve and record archaeological features?</p>	<p>Cultural Heritage, including architectural and archaeological heritage</p>
<p>SA 10: To ensure that air quality</p>	<p>SA 10.1: Does the Plan avoid, minimise and mitigate the effects of poor air quality?</p>	<p>Air; Climatic Factors; and</p>

SA Objective	Sub-Objective	Relevant SEA Topics
continues to improve.	<p>SA 10.2: Does the Plan promote more sustainable transport patterns and reduce the need to travel, particularly in areas of high congestion, including public transport, walking and cycling?</p> <p>SA 10.3: Does the Plan promote more sustainable transport patterns in rural areas?</p> <p>SA 10.4: Does the Plan facilitate the continued restoration, management and promotion the canal towpaths as part of the transport infrastructure</p>	Human Health
SA 11: To maintain and enhance the quality of ground and surface waters and to achieve sustainable water resources management in the District.	<p>SA 11.1: Does the Plan seek to improve the water quality of the district's rivers and inland water?</p> <p>SA 11.2: Does the Plan enable the use of recycled water and generally reduce the need to make use of water resources?</p> <p>SA 11.3: Does the Plan minimise inappropriate development in Nitrate Vulnerable Zones, Drinking Water Safeguard Zones and Source Protection Zones?</p>	Water; Biodiversity; Fauna; and Flora
SA 12: To manage and reduce the risk of flooding in new and existing development and resulting detriment to public wellbeing, the economy and the environment.	<p>SA 12.1: Does the Plan reduce the risk of flooding from rivers, watercourses and sewer flooding to people and property?</p> <p>SA 12.2: Does the Plan minimise development in areas prone to flood risk and areas prone to increasing flood risk elsewhere, taking into account the impacts of climate change?</p> <p>SA 12.3: Does the Plan increase the provision of sustainable drainage at new developments?</p>	Water; Soil; Climatic Factors; and Human Health
SA 13: To improve efficiency in land use and protection of soil quality through the re-use of previously developed land and existing buildings and encouraging urban renaissance.	<p>SA 13.1: Does the Plan maximise the provision of housing development on previously developed land as opposed to greenfield sites?</p> <p>SA 13.2: Does the Plan maximise the provision of employment development on previously developed land as opposed to greenfield sites?</p> <p>SA 13.3: Does the Plan maximise housing densities to make efficient use of land?</p> <p>SA 13.4: Does the Plan ensure land is remediated where appropriate?</p> <p>SA 13.5: Does the Plan reduce the loss of soil and high grade agricultural land to development?</p>	Soil; and Climatic Factors
SA 14: To implement strategies that help mitigate global warming by actively reducing greenhouse gases and adapt to unavoidable climate change within the District.	<p>SA 14.1: Does the Plan promote energy efficiency and the generation of clean, low carbon, decentralised and renewable electricity and heat?</p> <p>SA14.2. Does the Plan promote the incorporation of small-scale renewable in developments?</p> <p>SA 14.3: Does the Plan promote and facilitate the use of electric cars and sustainable modes of transport?</p> <p>SA 14.4: Does the Plan encourage the use of designs and materials which will promote energy efficiency at new development in the District?</p> <p>SA 14.5: Does the Plan promote the use of locally and sustainably sourced, and recycling of materials in construction and renovation?</p>	Climatic Factors; and Air

SA Objective	Sub-Objective	Relevant SEA Topics
SA 15: To minimise the amount of waste produced, maximise the amount that is reused or recycled, and seek to recover energy from the largest proportion of the residual material, and achieve the sustainable management of waste.	SA 15.1: Does the Plan seek to promote the handling of waste in line with the waste hierarchy? SA 15.2: Does the Plan reduce the production of hazardous waste?	Soil; and Climatic Factors
Economic		
SA 16: To deliver, maintain and enhance sustainable and diverse employment opportunities, to meet both current and future needs.	SA 16.1: Does the Plan allow for an adequate supply of land and the delivery of infrastructure to meet the District's employment needs? SA 16.2: Does the Plan provide for accessible employment opportunities? SA 16.3: Does the Plan support the prosperity and diversification of the District's rural economy? SA 16.4: Does the Plan support equality of opportunity for young people and job seekers and opportunity for the expansion and diversification of business?	Population; and Material Assets
SA 17: To allow for sustainable economic growth within environmental limits and innovation, an educated/ skilled workforce and support the long term competitiveness of the District.	SA 17.1: Does the Plan seek to promote business development and enhance productivity? SA 17.2: Does the Plan maintain and enhance the economic vitality and vibrancy of the District's town centres and tourist attractions? SA17.3: Does the Plan promote the image of the District as an area for investment and will it encourage inward investment? SA17.4: Does the Plan promote access to education facilities for residents?	Population; and Material Assets

Use of the SA Framework

- 5.6 The SA will be undertaken in collaboration with the Stroud District Council officers responsible for drafting the Local Plan Review in order to fully integrate the SA process with the production of the Local Plan Review.
- 5.7 The findings of the SA of the policy and site options for the Local Plan Review will be presented in SA matrices and/or summary text as appropriate. Where matrices are used they will include a colour coded symbol showing score for the option against each of the SA objectives along with a concise justification for the score given. The detailed SA matrices will be presented as an appendix to the full SA report.
- 5.8 The colour coding to be used for the appraisal matrices is shown below.

Key to SA scores

++	Significant positive effect likely
++/-	Mixed significant positive and minor negative effects likely
+	Minor positive effect likely
+/-	Mixed minor effects likely
-	Minor negative effect likely
--/+	Mixed significant negative and minor positive effects likely
--	Significant negative effect likely
0	Negligible effect likely
?	Likely effect uncertain

- 5.9 The dividing line between sustainability scores is often quite small. Where significant effects are distinguished from more minor effects this is because the effects of the option on the SA objective are considered to be of such magnitude that it will have a noticeable and measurable effect compared with other factors that may influence the achievement of that objective.
- 5.10 In determining the significance of the effects of the options for potential inclusion in the Local Plan Review it will be important to bear in mind its relationship with the other documents in the planning system such as the NPPF, as these may provide additional safeguards or mitigation of potentially significant adverse effects.
- 5.11 SA inevitably relies on an element of subjective judgement. However, in order to ensure consistency in the appraisal of the site options, detailed sets of assumptions will be developed and applied for each of the types of sites considered (these will be presented in the full SA Report). For each of the SA objectives in the SA framework, a clear set of decision-making criteria and assumptions for determining significance of the effects will be set out. These assumptions will be applied through the use of Geographical Information Systems (GIS) data.

Proposed Structure of the SA Report

- 5.12 A Sustainability Appraisal Report for each of the relevant consultation stages of the Local Plan Review still to be undertaken will be produced as a key output of the appraisal process. The SA Report will contain information on the effects of the proposed plan options, policies or site allocations (depending on the stage) and will be published for formal public consultation. It will

include the updated table 'signposting' where each of the requirements of the SEA Directive has been met (as shown in **Table 1.1** of this Scoping Report).

- 5.13 The SA Report will be written in a user-friendly way in order to ensure that it will be understood by as wide an audience as possible. It will include a non-technical summary and is likely to be structured as set out below:

Non-technical Summary

- Non-technical summary of the whole report as required by the SEA Directive.
- A statement of the likely significant effects of the plan.
- Statement on the difference the process has made.
- How to comment on the SA Report.

Introduction

- Purpose of the SA and the SA Report.
- Local Plan Review objectives and an outline of its contents.
- Compliance with the SEA Directive.
- Appraisal methodology
- Approach to the SA.
- When the SA was carried out.
- Who carried out the SA.
- Who was consulted, when and how.
- Difficulties encountered in compiling information or carrying out the assessment.

Sustainability objectives, baseline and context

- Links to other strategies, plans and policies and sustainability objectives and how these have been taken into account.
- Description of the social, environmental and economic baseline characteristics and the predicted future baseline.
- Difficulties in data collection and its limitations.
- The SA framework, including objectives, targets and indicators.
- Main social, environmental and economic issues and problems identified and the likely evolution of those issues without implementation of the Local Plan Review.

Local Plan Review Options

- Policy and site options considered and how they were identified.
- Comparison of their social, environmental and economic effects.
- How social, environmental and economic effects were considered in choosing the preferred options.
- Other options considered and why these were rejected.
- Any proposed mitigation measures.

Local Plan Review policies/site allocations

- Significant social, environmental and economic effects of the draft policies and site allocations. Reference will also be made to the HRA findings as relevant.
- How social, environmental and economic problems were considered in developing the policies and proposals.

- Proposed mitigation measures.
- Uncertainties and risks.

Conclusions and monitoring

- Conclusions regarding the SA findings, including summary of the potential significant effects.
- Proposals for monitoring.

- 5.14 As described above, the detailed SA matrices presenting the assessment of certain options, policies or site allocations against each of the SA objectives will be presented as appendices to the main SA Report. Information about how any consultation responses received in response to earlier stages of the SA have been addressed will also be presented in an appendix.
- 5.15 Once the appraisal work is undertaken, it may be necessary to make refinements to the proposed report structure described above, in order to present the findings of the SA in the most easily understandable way. However, the content of the report will reflect the above list of issues, and will be fully compliant with the reporting requirements of the SEA Directive and Regulations.

6 Next Steps

- 6.1 In order to meet the requirements of the SEA Directive, the views of the three statutory environmental bodies (Natural England, Historic England and the Environment Agency) are being sought in relation to the scope and level of detail to be included in the SA Report.
- 6.2 This SA Scoping Report is being published for consultation with the three statutory bodies for a five week period between April and May 2018.
- 6.3 In particular, the consultees are requested to consider:
- Whether the scope of the SA generally is appropriate as set out.
 - Whether there are any additional plans, policies or programmes that are relevant to the SA and should be included in **Chapter 2**.
 - Whether the information provided in **Chapter 3** is robust and comprehensive, and provides a suitable baseline for the SA of the Local Plan Review.
 - Whether there are any additional key sustainability issues (**Chapter 4**) that should be included.
 - Whether the SA framework (**Chapter 5**) is appropriate and includes a suitable range of objectives.
- 6.4 As the Local Plan Review is drafted, it will be subject to the later stages of the SA using the SA framework presented in **Chapter 5**. A full SA Report (incorporating the later stages of the SA process) will then be produced and made available to other stakeholders and the general public for wider consultation alongside the emerging Local Plan Review.

LUC
April 2018

