



Flood Risk: Sequential and Exception Tests

**Core Strategy Information Paper 2
November 2010**

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Glossary

DPD	Development Plan Document
GDS	General Development Site, B&NES Local Plan Oct 2007
LDF	Local Development Framework
PDL	Previously Developed Land
PPS	Planning Policy Statement
RDP	Regeneration Delivery Plan
RSS	Regional Spatial Strategy
SA	Sustainability Appraisal
SFRA	Strategic Flood Risk Assessment
SHLAA	Strategic Housing Land Availability Assessment

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B&NES Flood Risk Sequential /Exception Test

1. Introduction

- 1.1 This paper sets out the sequential test supporting the Draft Core Strategy, Publication Version (Nov. 2010). The methodology is based on guidance and requirements as set out within Planning Policy Statement 25 (PPS25): Development and Flood Risk (March 2010), and the accompanying Practice Guide. This methodology has been discussed with, and the report is agreed by the Environment Agency.
- 1.2 The Interim Sequential/Exception Test (December 2009) was carried out to support the Core Strategy Options Paper (Oct 2009) and this report sets out the Sequential/Exception Test for the Draft Core Strategy Publication Version (Nov 2010).

2. National Policy Context

- 2.1 PPS25 sets the national planning policy context for consideration of flood risk. It sets out an ‘avoid, reduce and manage approach’ by requiring decisions on plans to take full account of present and future flood risk, in both the probability and potential consequences (Para 4 PPS25), and the wider implications of flood risk. The aims of planning policy for development and flood risk are to ensure that flood risk is taken into account at all stages in the planning process to avoid inappropriate development in areas at risk of flooding and to direct development away from areas at highest risk (Para 5 PPS25).
- 2.2 PPS25 sets out that Local Planning Authorities allocating land in Local Development Documents should apply a sequential test to demonstrate that there are no reasonably available sites in areas with a lower probability of flooding that would be appropriate to the type of development or land use proposed. If following the application of the sequential test consistent with wider sustainability objectives, it is not possible for the development to be located in zones of lower probability of flooding, the Exception Test can be applied.

Sequential Test

- 2.3 The sequential test requires that sites should be selected in order starting with Zone 1. Only if there are no reasonably available sites within Zone 1 should sites in Zone 2 be considered and the flood risk vulnerability of land use be taken into account (set out in Table D3 of PPS25), applying the Exception test if required. Only where there are no reasonably available sites in Zone 2 should Zone 3 be considered.

Table 1 PPS25 Flood Risk Vulnerability and Flood Zone ‘Compatibility’ (Vulnerability classification, see Table D.2 of the PPS25)

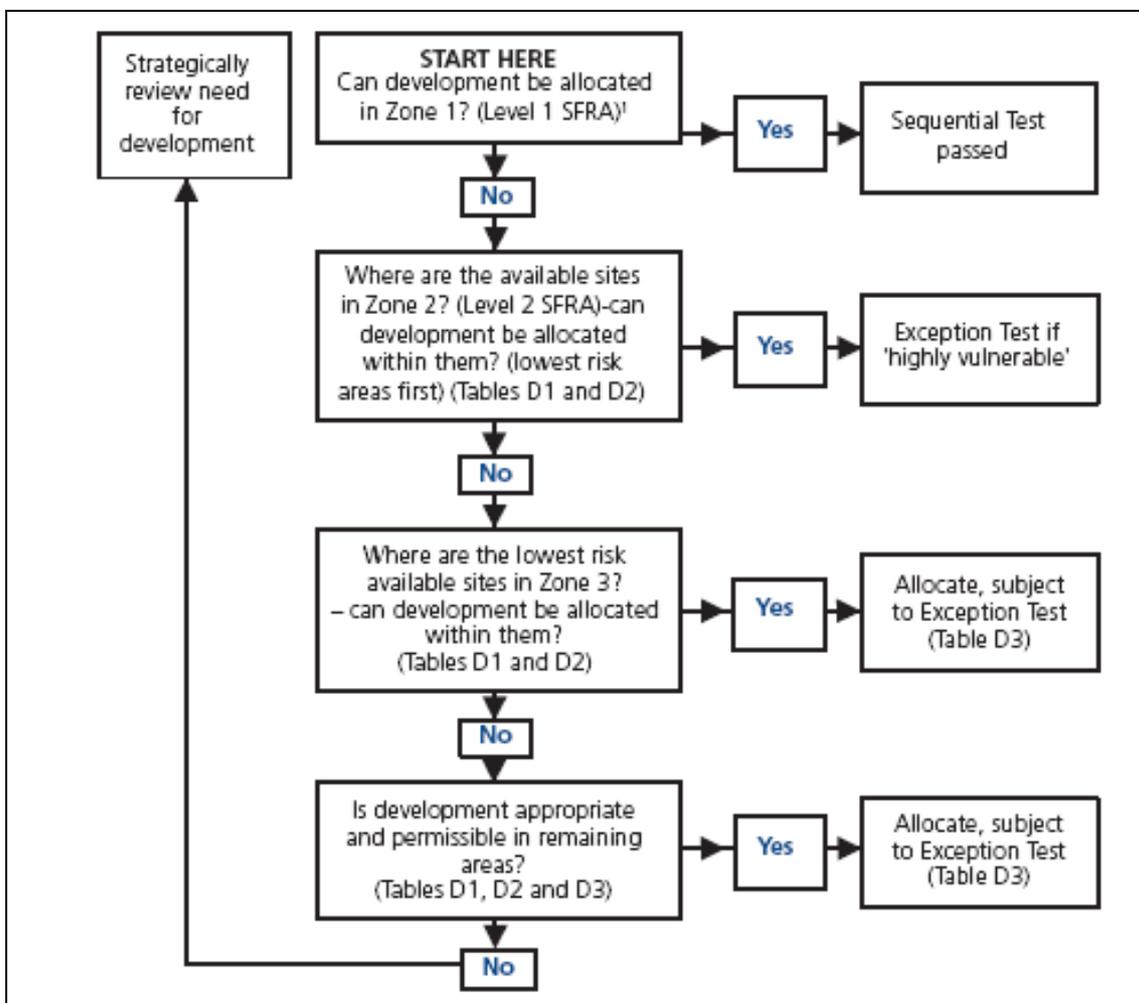
<http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps25/>

Flood risk Vulnerability classification	Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	✓	Exception Test required	✓	✓
Zone 3a	Exception Test required	✓	X	Exception Test required	✓
Zone 3b	Exception Test required	✓	X	X	X

2.4 The Flowchart below identifies the series of questions that need to be answered in undertaking a sequential test.

Table 2 PPS 25 Practice Guide ‘Application of the Sequential Test at the local level for LDD preparation

<http://www.communities.gov.uk/publications/planningandbuilding/pps25guideupdate>



The Exception Test:

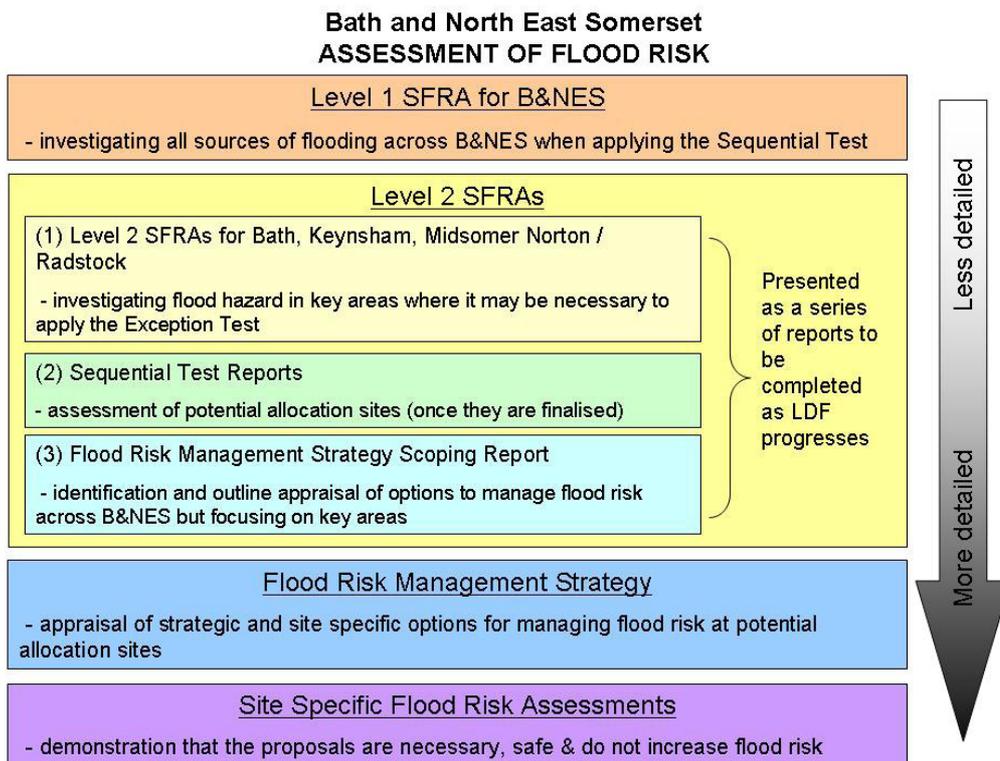
2.5 To pass the Exception Test the following three requirements need to be satisfied:

- a) It must be demonstrated that development provides sustainability benefits to the communities that outweigh flood risk e.g. a town centre site very well located for public transport, services and facilities (lower emissions, higher employment, etc).
- b) Development should be on developable previously-developed land (PDL) or, if it is not, there should be no reasonably available sites on developable PDL (PPS3 para. 54 to 56 defines developable as: available (now), suitable (close to facilities) and achievable (within 5 years).
- c) A Flood Risk Assessment (FRA) is required to demonstrate that development will be safe, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

3. B&NES Assessment of Flood Risk

- 3.1 Core Strategies are required to accord with national policy and to conform generally with Regional Spatial Strategies (RSSs). However, the Government intends to abolish RSSs through the Localism Bill and it expects Local Authorities to have regard to this as a material consideration. Therefore, whilst the Council's Core Strategy Spatial options document was based on the draft RSS, the Draft Core Strategy plans for a level of growth that is based on local evidence (see section 4 below). In accordance with national policy that seeks to direct development to the most sustainable and accessible locations (e.g. PPS1, PPG13) the draft Core Strategy focuses development on the main urban centre of Bath and the towns of Keynsham, Midsomer Norton and Radstock. This also reflects the broad strategy at a Regional level and set out in both the adopted Regional Planning Guidance Note 10 (South West) and the draft RSS for the South West. The draft RSS was supported by Regional Flood Risk Assessment (Feb 2007). The Strategic Flood Risk Assessments undertaken by B&NES relate to the whole of the District (level 1) and more detailed assessments for Bath, Keynsham, Midsomer Norton and Radstock(level 2).
- 3.2 In preparing the B&NES Local Development Framework (LDF), the Strategic Flood Risk Assessment (SFRA) level 1 for Bath and North East Somerset (April 2008) was prepared by Capita Symonds on behalf of the Council to provide flood risk information across the whole District.
- 3.3 PPS 25 states that where the Level 1 SFRA demonstrates that land in Flood Zone 1 cannot accommodate the necessary development then the Exception Test needs to be applied. A more detailed Level 2 SFRA will need to be carried out, including further data collection and/or analysis. Both the Core Strategy Options document and the level 1 SFRA were based on draft RSS and the level of growth it proposed was not accommodated within Flood Zone 1. Therefore, SFRA level 2 assessments for Bath (July 2009), Keynsham(May 2009) and Midsomer Norton and Radstock(July 2009) were undertaken responding to the requirement for the Exception Test following the Regional Flood Risk Assessment and B&NES SFRA level 1. These remain relevant to the Draft Core Strategy (Publication Version) and the level of growth it is planning for and seeking to accommodate in the key settlements in the district.
- 3.5 Flood risk is identified as one of the major constraints to the regeneration of Bath and other market towns within the District. To ensure new development will be safe and does not increase flood risk elsewhere, particularly responding to the Exception Test c), it was necessary to investigate flood risk management options. The Council commissioned a Scoping Study for flood risk management options. The Scoping Study (May 2009) identified a wide range of possible options for flood risk management and provides an initial assessment of these options which informed the preparation of the Flood Risk Management Strategy (Dec 2010).

Table 3 Bath and North East Somerset Assessment of Flood Risk



4. B&NES Spatial Strategy

4.1 The Core Strategy Spatial Options consultation document presented Strategic Site Allocations and policies for Bath City Centre/River Corridor, Keynsham, Midsomer Norton and Radstock town centres. The interim Sequential / Exception Test (Dec 2009) was prepared to test these potential sites/policy areas.

4.2 The Government's intention to abolish Regional Spatial Strategies (RSS) has led to a review of the evidence underpinning the Core Strategy. As a consequence a revised spatial strategy that accords with national policy and reflects the B&NES Sustainable Community Strategy has been prepared based on up-to-date local evidence including Economic Strategy for Bath & North East Somerset 2010-2026, Local Economic Assessment (May 2010), Future Housing Growth Requirements to 2026 Stage 2 Report (Sep 2010), Infrastructure Delivery Programme (Dec 2010) and Strategic Housing Land Availability Assessment (Dec 2010).

4.3 The Council has undertaken assessments of development need and capacity within the District during the plan-period. This includes assessing the space needed for economic growth, housing, retail provision and social needs. This takes account of the Council's objective of promoting smart growth higher value economy rather than only volume growth. The Council has assessed the post recession likely need, both market and affordable housing, over the plan period up to 2026 based on:

- Projected population change arising from births over deaths and increasing life expectancy
- The likely housing requirement this entails, including the rapid decline in household size and increased separation rates
- The need for housing generated by economic growth (net migration), taking into account likely future growth rates, productivity changes and sectoral changes
- Provision for non-economically active migrants

4.4 This assessment identifies the need to make provision for about 11,000 new homes and around 8,700 new jobs.

4.5 The overriding objective of the strategy is to locate new development in the most sustainable and accessible locations in accordance with national policy and the priority is to steer growth to brownfield land in urban areas of Bath, Keynsham and the larger settlements in the Somer Valley. Therefore further analysis of flood risk and Sequential Tests were required to formulate the Core Strategy policies.

4.6 Even though the Core Strategy does not allocate any specific sites, place based policies set out key principles for new development in policy areas. A sequential risk-based approach was taken to formulate these policies and this report demonstrates high level Sequential Test for Policies B2, B3, KE2, SV2 and SV3 in Section 6 and 7.

- Policies B2 and B3: The Central Area, and Newbridge & Twerton Riverside in Bath
- Policy KE2: Town Centre and Somerdale in Keynsham
- Policy SV2: Midsomer Norton Town Centre
- Policy SV3: Radstock Town Centre

5. Strategic Housing Land Availability Assessment (SHLAA)

5.1 The Council’s evidence for B&NES estimated capacity for new homes is set out in the Strategic Housing Land Availability Assessment (SHLAA Dec 2010). The SHLAA has identified suitable, available and deliverable/developable sites, having examined a number of environmental constraints including potential flood risk.

5.2 The SHLAA estimates that suitable, available and deliverable/developable sites could yield about 11,342 homes within the District, 6,213 homes in Bath, 1,636 homes in Keynsham, 2,641 homes in the Somer Valley and 800 homes in other villages. It should be noted that the SHLAA does not allocate sites for housing development, rather it provides important evidence regarding the suitability and achievability of land for housing to support the Core Strategy and subsequent site allocations (Placemaking) Development Plan Documents. The SHLAA is an estimate based on a number of evidence based assumptions about capacity and delivery.

5.3 Table 4 below shows housing potential identified by the SHLAA and analyses their flood risk. Potential housing numbers in Bath are categorised to ‘Bath River Corridor’ and ‘Outer Areas’. Since the Core Strategy housing provision relates to the period from 2006 to 2026, some housing sites are built, have gained planning permissions or are already at an advanced stage in the planning process with site specific flood risk assessments and sequential tests having been undertaken. Therefore this Sequential Test does not apply and Table 4 does not complete the analysis of flood risk for these sites which are not subject to Sequential Test.

5.4 Some sites present different level of flood risk within the site area and site specific analysis is included in Appendix A.

Table 4 SHLAA sites flood risk analysis

		SHLAA sites considered	FZ1	FZ2	FZ3a	FZ3b
Bath River Corridor	Sites built or with planning permissions	119 homes	0.08 Ha (2 sites)	5.2 Ha (1 site)	-	0
Policy B2 area	Sites without planning permissions	714 homes	7.54 Ha (8 sites)	4.30 Ha (10 sites)	3.76 Ha (7 sites)	0
Bath River Corridor	Sites built or with planning permissions	-	-	-	-	-
Policy B3 area	Sites without planning permissions	247 homes	2.06 Ha (2 sites)	1.86 Ha (4 sites)	0.7 Ha (3 sites)	0
Bath River Corridor	Bath Western Riverside (06/01733/EOUT and 06/04013EFUL)	2281 homes				
	Sites without planning permissions	311 homes	1.39 ha (7 sites)	1.77 ha (6 sites)	0.36 ha (5 sites)	0
Bath Outer	Sites built or with planning permissions	1,310 homes	The majority is within FZ1			
	Sites without planning permissions	1,231 homes	1,157 homes	74 homes		
Bath subtotal		6,213 homes				

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Keynsham							
Policy KE2 Town Centre & Somerdale	Sites built or with planning permissions	35 homes		0.27 Ha (2 sites)	0	0	0
	Sites without planning permissions	775 homes		17.55 Ha (7 sites)	10.12 Ha (1 site)	0	0
Keynsham Outer	Sites built or with planning permissions	245 homes		The majority is within FZ1			
	Sites without planning permissions	581 homes		All in FZ1			
Keynsham Total		1,636 homes					

Somerset Valley							
Midsomer Norton	Sites built or with planning permissions	20 homes		0.55 Ha (3 sites)			
	Sites without planning permissions	160homes		0.55 Ha (5 sites)			
Midsomer Norton Outer	Sites built or with planning permissions	426 homes		9.62 Ha			
	Sites without planning permissions	310 homes		Majority in FZ1			
Radstock	Sites built or with planning permissions	139 homes		4.8 Ha (1 site)	0	0	0
	Sites without planning permissions	135 homes		3.73 Ha (7 sites)	0.46 Ha (3 sites)	0.65 Ha (1 site)	0
Radstock Outer	Sites built or with planning permissions	109 homes		4.8 Ha			
	Sites without planning permissions	136 homes		4.1 Ha			
	Small sites built	148 homes					
Paulton & Peasedown St John	Sites built or with planning permissions	1058 homes		Majority in FZ1			
Sub total		2,641 homes					

Rural	Sites built or with planning permissions	483 homes
	Sites without planning permissions	78 homes
	Sites to be identified	239 homes
		800 homes
	Total	11,342 homes

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- 5.5 The draft RSS proposed a greater housing requirement including urban extensions to Bristol and Bath. The Core Strategy Spatial Options Consultation (Oct 2009) discussed potential new neighborhoods in urban extensions at south/south west Bath and South East Bristol. Two locations were considered for Bath, West of Twerton and Odd Down/South Stoke Plateau which are both located within flood zone 1. (Please see the Interim Report for details.)
- 5.6 The review of the evidence of need underpinning the Core Strategy and the urban capacity work indicates that the majority of the level of new housing and economic development to be planned for in the Publication Core Strategy can be accommodated within Bath and the other key settlements within the district.
- 5.7 The choice of the preferred District-wide Spatial Strategy has also been informed by the results of the Sustainability Appraisals (SA) which identified a number of significant negative effects of the urban extensions. A large number of objections for potential urban extensions were received from local residents and stakeholders including statutory consultees. Therefore the council is not pursuing urban extensions. It is on this basis that the Publication Core Strategy Spatial Strategy has been prepared.
- 5.8 The SA Report Annex E Appraisal for the Publication Core Strategy, Urban Extensions Commentary (Nov 2010) has been prepared in order to reflect and consider the implications of changes in the policy approach from the Core Strategy Spatial Options document to the draft Core Strategy (Publication Version).
- 5.9 This will be further discussed as part of the Sequential Test in Section 6.

6. Sequential Test for policy areas

6.1 The Sequential Tests have been applied to key areas of change within the District which include the central area/river corridor of Bath and the town centres of Keynsham, Midsomer Norton and Radstock. This is further supported by the Sustainability Appraisal, which provides some information required for the Exceptions Test, referred to in Section 7 below.

6.2 For the River Corridor in Bath, the Core Strategy identifies three broad areas, Central area (Policy B2), Newbridge and Twerton (Policy B3) and Western Riverside area. The Bath Western Riverside proposals (06/01733/EOUT and 06/04013EFUL) were considered by the Development Control Committee on 7th July 2010. The Committee resolved to ‘Delegate Approval to Officers’, subject to consultation with the Chairman and Party Spokespersons of the Committee, therefore it is not subject to the Sequential Test below.

Question 1 Can development be allocated in Flood Zone 1	
Yes:	<p>Policy SV2 Midsomer Norton Town Centre</p> <p><i>This policy area is appropriate and there is no need to proceed with the Sequential Test.</i></p>
No:	<p style="background-color: #000080; color: white; padding: 2px;">Policies B2 and B3 The River Corridor (Central / Newbridge and Twerton), Bath Policy KE2 Town Centre/ Somerdale, Keynsham Policy SV3 Radstock Town Centre</p> <p><i>Justifications for proceeding to Questions 2, i.e. why development can not be accommodated within Flood Zone 1.</i></p> <p style="background-color: #000080; color: white; padding: 2px;">Policies B2 and B3 The River Corridor (Central / Newbridge and Twerton), Bath</p> <p>Bath, as the economic driver in the district is the primary focus for new development. Local evidence prepared following the Government’s intention to abolish the RSS shows that the successful delivery of the residential, social and commercial aspects of the city’s growth will also play a vital role in the future prosperity of the sub-region.</p> <p>The Council’s Economic Strategy states that Bath’s prosperity depends on enabling the growth of existing business, attracting high value employers and jobs and moving towards a low carbon economy. It will have to compete with other cities and large towns also wishing to attract growing sectors. This will require a new phase of investment in modern offices and other workspaces within and adjoining the city centre.</p> <p>Alongside measures to diversify the economy, industrial enterprise must be allowed to compete in the land market in order to sustain a mixed employment offer for a multi-skilled workforce. Further, the development strategy for the city must support tourism and the visitor economy, including the accommodation offer.</p> <p>Business Growth and Employment Land Study (March 2009) and Update (June 2010) set out forecasts of job growth in B&NES and the March 2009 study assessed the current supply of land and estimated land/floorspace requirements for offices,</p>

industrial and warehousing uses and non-business employment to accommodate forecast growth up to 2026. The June 2010 update revised forecasts of job growth taking account of the recent economic recession and suggested job growth in BANES of between 8,700 and 11,200 between 2006 and 2026. The June 2010 update did not estimate land/floorspace requirements (see GWE Business West study below).

GWE Business West High Growth Business Interventions (Oct 2010) uses the economic growth forecasts set out in the Business Growth and Employment Land Study update (June 2010) and the Future Housing Growth Requirements to 2026 Stage 2 Report (Sep 2010) and assesses prospects for economic sectors in B&NES and estimates future land/floorspace requirements by sector between 2006 and 2026. It has identified that the district's future economic growth could be constrained by its shortage and decline of commercial space impeding the growth of indigenous businesses and the ability of the locality to attract new inward investors. Much of the floorspace needed to meet the requirements of key sectors within Bath requires a central location. The study also states that although a number of city centre sites are constrained by their location, there are a number of sites in the river corridor to the south and west of the city centre which could present the opportunity to create new employment sites.

There are few sites which could bring forward significant employment-led (office) development within flood zone 1. That which is available does not suit market preferences nor satisfy the accessibility thrust of PPG13. Ministry of Defence land at Foxhill and Warminster Road could be contenders for small amounts of employment space in the context of housing-led redevelopment. However, against the background of PPS25, earmarking Ministry of Defence land for significant employment floorspace would displace residential capacity/development (a more vulnerable use) to land within Policy areas B2 and B3. Other reasons for concentrating economic development within and adjoining the city centre are discussed later in this section.

Proposal for a B&NES Retail Strategy(Dec 2008) sets out a proposed strategy for retailing and retail development in the district. It states that Bath is a unique, world renowned major retail centre and the City Centre has built a strong reputation for its high quality independent retail offer generating a unique character not present in other centres and virtually impossible to recreate elsewhere. But it also identifies that Bath has fallen in the national retail ranking and needs to improve to keep its competitiveness ensuring that an appropriate balance of provision is made across the district to meet community needs and reduce the need to travel.

It states that a key role for Bath City Centre should be primarily to serve the local community, whilst also operating as a first class visitor experience. Bath's catchment is significant but has suffered from residents shopping elsewhere over the past years. Bath should exemplify how a high quality experience is created through integrated activities, improved public realm and better connectivity. Retail activities contribute significantly to the economy, function and distinctiveness of the City.

In terms of flood risk, there are some local and town centres in the district within FZ1, but this city centre retail role cannot be met elsewhere in the district. The benefits which city centre retail development brings are critical to keep Bath competitive, meeting local residents needs while reducing the need to travel, maintaining its international reputation, and realising its full potential as a vibrant

<p>modern city. Therefore, additional small to medium sized comparison retail development that helps to improve the shopping offer should be accommodated in the city centre.</p> <p>B&NES Destination Management Plan (Oct 2007) states that tourism plays an important role in terms of the Bath economy, generating employment, underpinning other economic sectors and supporting a more varied range of facilities than the local population could support alone. It also identified some weaknesses such as poor quality run down areas. These include areas around the gateways to Bath which are particularly addressed by Policy B3. The quality of the public realm and ease of movement in and around the city falls below the standard one might expect from a place of this significance.</p> <p>There are considerable areas of derelict or underperforming land within the city in need of redevelopment in order to enhance the World Heritage Site and protect its setting, the Green Belt from incursion and the high quality of the landscape recognised by the designation of two Areas of Outstanding Natural Beauty. Also the Council has made it clear that regeneration of previously developed land within the urban areas should be the priority before the development of greenfield land.</p> <p>The Council has identified the River Corridor including the Central area (Policy B2) and Newbridge & Twerton Riverside (Policy B3) as a regeneration priority area which is a key to the success of the city, and a Regeneration Delivery Plan is being prepared alongside the Core Strategy.</p> <p>The River corridor comprises Bath city centre and land adjoining to the west. This area, particularly the city centre is the most accessible part of the district. It is a key public transport node and hosts Bath Spa rail station, Oldfield Park rail station, Bath bus station and is the terminus for a number primary/express bus routes to/from Bristol and neighbouring towns). Congestion on the main radial routes, the city's air quality management areas and climate change require that the spatial strategy makes the most of existing public transport infrastructure and planned investment. In this way growth can enable people to travel to and around the city with less environmental impact and greater efficiency.</p> <p>The Core Strategy spatial vision for Bath states that the realisation of a range of development opportunities within the Central Area and Western Corridor will greatly improve the city aesthetically and also enable Bath to position itself as a more entrepreneurial, innovative, creative and business friendly place. Economic development and productivity will therefore be facilitated, whilst upgrading the townscape. The delivery of new housing on brownfield sites will help to create a more sustainable relationship between the city's labour and jobs markets and support Bath's economic potential whilst retaining the integrity of its landscape setting which forms the setting of the World Heritage Site and is mostly designated as Cotswold AONB.</p> <p>Table 5 below summarises the SHLAA analysis for Bath which estimates that 6,213 homes could be delivered within the City, of which 3,672 are within the River Corridor and 2,541 homes are within the outer neighbourhoods.</p> <p>The majority of the Bath Outer Neighbourhood areas (2,467 homes) are within FZ 1 or are not subject to the sequential test since they are already built or have gained planning permission. 74 homes cannot be accommodated within FZ 1.</p>

The SHLAA indicates that there is capacity for 3,672 homes within the River Corridors. This includes 2,281 homes proposed by the Bath Western Riverside schemes (06/01733/EOUT and 06/04013EFUL) which the Committee resolved to 'Delegate Approval to Officers' at the Development Control Committee on 7th July 2010, and 119 homes which are already built or with planning permissions, leaving capacity to accommodate 1,272 homes in the rest of the River Corridor area (including that part of bath Western Riverside not subject to (06/01733/EOUT and 06/04013EFUL

The SHLAA indicates that only 20 dwellings are within the sites entirely within the FZ1, leaving capacity to accommodate 1,252 homes within sites which contain some higher risk area. The SHLAA is an important evidence source to inform plan-making, but does not in itself determine whether a site should be allocated for housing development. The SHLAA has identified more capacity than the Core Strategy plans for but this is an estimate covering many sites. The sequential approach can be to be applied to sites within the River Corridor during the Placemaking DPD preparation process.

Table 5 SHLAA Analysis Bath

Area		Not subject to the Sequential Test	Flood Zone 1	Flood Zone 2 (partly*)	Flood Zone 3 a (partly*)	Flood Zone 3b
Bath River Corridor						
Policy BA2 Central and Policy B3 Newbridge and Twerton	Sites without planning permissions	-	20	29	912	0
	Sites built or with planning permissions	119				
Western Riverside Area	Sites without planning permissions	-	-	127	184	0
	Sites built or with planning permissions	2,281				
Sub total		2,400	20	156	1,096	
Bath Outer						
	Sites without planning permissions	-	1157	74	0	0
	Sites built or with planning permissions	1,310				
Sub total		1,310	1,157	74	0	0
Total	6,213	3,710	1,177	230	1,096	0

*Some sites present different levels of flood risk within the site area and they are categorised using their highest risk area for this table. Please see site specific analysis included in Appendix A.

The SHLAA also considers other sites for housing within Flood Zone 1 elsewhere, however these are neither suitable nor available and do not meet the objectives of sustainable development. The Core Strategy Options document considered a new neighbourhood as an Urban Extension. Urban extensions would cause significant harm to the landscape, much of which will be difficult to mitigate and would require significant infrastructure provision. They could also affect the distinctiveness of nearby villages, such as South Stoke and Newton St Loe. The Twerton option is a visually prominent location and would cause significant harm to the integrity of the setting of the Bath World Heritage Site. The Sustainability Appraisal states that urban extensions have potential for negative effects on biodiversity since all locations considered are Greenfield and could result in the loss of habitats. (See the SA Report Annex E Appraisal for the Publication Core Strategy, Urban Extensions Commentary Nov 2010)

Even if all sites with planning permissions (Policy B2 119homes, Western riverside 2,281 homes, Bath outer 1,310) and all the flood zone 1 sites are developed (Policy B2 20homes, Bath outer 1,157 homes), this does not meet the identified need for housing (about 6,000 homes), therefore some sites within the river corridor need to be considered.

In addition it should be noted that market housing in Bath is particularly expensive leading to dislocation of workers from their workplace and this exacerbates the level of in-commuting from lower cost locations. More housing and more affordable housing is needed to support economic growth, increase the co-location of jobs and workers, and address the needs of households on the housing register.

There are no alternative areas elsewhere within flood zone 1 in the district which could facilitate the level and type of development required in the policy areas to support regeneration of the City Centre and wider Sustainable Development principles.

Proceed to question 2

Keynsham Town Centre:

The market town of Keynsham occupies a strategic location between Bath and Bristol with a population of around 15,500 and is linked to the two cities by the A4 and the mainline railway. The physical geography is influenced by the two rivers that traverse the area, the Avon and the Chew, which converge to the north of the town at Somerdale.

The town provides important services such as shopping, employment, leisure, cultural and health facilities to local residents and surrounding communities.

Previous consultation on the **Core Strategy Spatial Options document (Oct 2009)** highlighted a number of key issues facing the town such as recent and future job losses, desire for town centre regeneration, affordable housing shortage, traffic congestion, sewage and storm water capacity issues and the ongoing threat of development on green belt.

The ‘**Future for Keynsham (2006)**’ described the town as having been ‘coasting’ since the 1970s, implying that Keynsham has received minimal attention in terms of development and is losing ground economically against nearby competing centres. The declining town centre is creating an overall poor image of the town. **The Local Economic Assessment** also shows that there is currently a strong element of out-commuting, significantly in professional workers, managers, senior officials and administrative workers.

The Business Growth and Employment Land Study Update (June 2010) and Future Housing Growth Requirements to 2026 Stage 2 Report (Sep 2010) identify that 1,500 new jobs could be created in Keynsham between 2006 and 2026 primarily by increasing the stock of office floorspace in the town.

This supports the vision of establishing Keynsham as a more significant business location and enabling the town to recover from recent job losses caused by the closure of Cadbury’s Somerdale Factory. Attracting more Higher Value Added jobs will help to reduce the current pattern of out-commuting by groups such as professional workers, managers, senior officials and administrative workers, allowing better opportunities to live and work in the town.

The Core Strategy (policies KE1 and KE2) seeks to focus new employment development in the central area of Keynsham including the town centre, 25 hectare Somerdale Factory site and the transitional area between the northern end of the High Street and the Somerdale factory, which includes Keynsham mainline rail station. The Town Centre (Flood Zone 1 except the Town Park area) has been identified by the Council as a regeneration priority area which is key to the success of the local economy and the district as a whole. Therefore, a Regeneration Delivery Plan is being prepared alongside the Core Strategy. Some land within the Somerdale site falls within Flood Zone 2, however, there is no alternative site to offer the same level and type of opportunity to serve the town as a whole. Allocation of the Somerdale site for mixed use development and Masterplanning of the site has not yet taken place. A sequential approach will need to be followed when this process is undertaken.

The role of the town centre and Somerdale as the main focus for business activity will be complemented by the Broadmead/Ashmead/Pixash Industrial Estates areas which are primarily within Flood Zone 1.

The Core Strategy proposes that 1,500 new homes will be built between 2006 and 2026 to support the economic growth of the town and accommodate a growing population. Approximately 800 homes are already accounted for, having either already been built since 2006, with planning permission, or allocated in the Local Plan. About 700 dwellings are directed towards the town centre/Somerdale policy area (Policy KE2) which will serve as the focus of future development within Keynsham.

Table 6 below summaries the SHLAA analysis for Keynsham which indicates that capacity for about 1,636 homes is available within Keynsham. 280 homes are already built or have gained planning permissions, leaving 1,356 homes. The only potential housing site affected by flood risk is Somerdale, a site of 25ha, of which 10ha falls within flood zone 2 with a fringe of the site within flood zone 3a. The SHLAA indicates an estimated housing potential of this site as being about 600 dwellings as part of a mixed use development.

Master planning for the Somerdale site has yet to be undertaken. A number of options are being considered. A sequential approach should be taken within the site which should seek to direct the most vulnerable uses to flood zone 1. However, the preferred layout also needs to ensure that optimum use of the site is made from an urban design perspective. The SFRA also identified that part of the area is subject to increased risk from climate change. This needs to be taken into account through the Masterplanning process.

Table 6 SHLAA Analysis Keynsham

Area		Not subject to the Sequential Test	Flood Zone 1	Flood Zone 2 (partly*)	Flood Zone 3 a (partly*)	Flood Zone 3b
Policy KE2 Town Centre & Somerdale	Sites without planning permissions		175	600	0	
	Sites built or with planning permissions	35				
Sub total		35	175	600	0	
Keynsham Outer	Sites without planning permissions		581	0	0	0
	Sites built or with planning permissions	245				
Sub total		245	581	0	0	0
Total	1,636	280	756	600	0	0

*Some sites present different levels of flood risk within the site area and they are categorised using their highest risk area for this table. Please see site specific analysis included in Appendix A.

There are no alternative areas within Flood Zone 1 to facilitate the level and type of development required to support regeneration of Keynsham Town Centre and redevelop the Somerdale site and wider Sustainable Development principles.

Proceed to question 2

Radstock Town Centre:

Radstock is located approximately 12 miles south west of Bath and 16 miles south east of Bristol. The town is connected to Bath by the A367 and to Bristol via the A362 and the A37. Radstock lies only 8 miles from Frome and Shepton Mallet. The town, together with Midsomer Norton provides important services such as shopping, employment, cultural and health facilities to local residents and the surrounding communities.

Radstock is located on the northern edge of the Mendip Hills in the Wellow Brook Valley. The town lies at the confluence of five steep-sided valleys and the tributaries of the Wellow Brook.

The Spatial Strategy for Radstock is considered within the wider context of the Somer Valley in the Core Strategy.

The Somer Valley has a number of challenges which the Core Strategy seeks to address in order to realise the area's potential. These challenges include;

- a vulnerable local economy dependent on a narrow range of industries and a few large employers,
- a number of large vacant, underused or ageing factory sites,
- high levels of out-commuting due to lack of local employment opportunities,
- perceived difficulty in attracting economic investment in the area,
- transport congestion and limited opportunities for large scale transport intervention,
- competition with neighbouring towns in Somerset,
- a high level of existing housing commitments and
- poor town centre environments and an insufficient retail offer.

Recent incremental housing development and a decline in the manufacturing sector has led to an imbalance between jobs and homes in the Somer Valley area. The area provides a high quality environment to live with good accessibility to services, particularly highly successful schools and open countryside. However in order for the Somer Valley to continue to thrive, it is necessary to create a more sustainable balance by enhancing economic activities and wealth creation. Tourism opportunities to build upon a mining and industrial heritage and rich natural environment are not yet realised.

The B&NES Economic Strategy seeks to improve the prosperity and well being of Bath and North East Somerset residents through a more productive, competitive and expanded economy. It includes priority actions to bring forward new employment space in Radstock town centre and identifies a new strategic employment location in the Somer Valley.

The Vision for the Somer Valley seeks to achieve greater self-reliance of the southern part of the District, facilitated by economic-led revitalisation alongside local energy generation, building on its industrial expertise and improving skill levels. The roles of Midsomer Norton and Radstock Town Centres will be complementary, providing key employment opportunities, services and leisure provision in accessible locations to the communities in the Somer Valley area. Radstock will continue to provide a focal point for local communities and realise its potential for tourism based on its green infrastructure, mining heritage cycle ways and attractive rural hinterland.

The Council has identified Radstock Town Centre as a regeneration priority area which is key to the success of the local economy facilitating more self reliant communities in the Somer Valley area as well as within the District.

The Policy SV3 area includes Radstock town centre, part of Radstock Railway Land (already gained planning permissions) and sustainable transport routes. Radstock Railway Land (Local Plan site GDS.1/NR2) forms part of the proposed Core Strategy policy area for Radstock. This site already has outline planning permission for residential-led mixed use development.

B&NES Flood Risk Sequential /Exception Test

Table 7 below summaries the SHLAA analysis for the Somer Valley which indicates that capacity for about 2,641 homes is available within the Somer Valley. Of these, 1,900 homes are built or have gained planning permissions, leaving 741 homes to be planned up to 2026. 701 homes can be accommodated within FZ1 and the sites for 40 homes involve higher flood risk areas.

Table 7 SHLAA Analysis - Somer Valley

Area		Not subject to the Sequential Test	Flood Zone 1	Flood Zone 2 (partly*)	Flood Zone 3 a (partly*)	Flood Zone 3b
Policy SV3 Radstock Town Centre	Sites without planning permissions	-	75	20	40	0
	Sites built or with planning permissions	139				
Radstock Outer	Sites without planning permissions	-	136	0	0	0
	Sites built or with planning permissions	109				
Policy SV2 Midsomer Norton Town Centre	Sites without planning permissions	-	160	0	0	0
	Sites built or with planning permissions	20				
Midsomer Norton Outer	Sites without planning permissions	-	310	0	0	0
	Sites built or with planning permissions	426				
Small sites built/with planning permissions		148				
Paulton & Peasedown St John		1,058				
Total	2,641	1,900	681	20	40	0

* Some sites present different levels of flood risk within the site area and they are categorised using their highest risk area for this table. Please see site specific analysis included in Appendix A.

	<p>In the northern part of the policy area the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b unless further work is undertaken. Master planning for the Radstock town centre has yet to be concluded. The preferred layout may or may not involve placing residential uses within flood zone 2. A sequential approach should be taken within the area.</p> <p>There are no alternative areas within Flood Zone 1 to facilitate the level and type of development required to support regeneration of Radstock Town Centre and wider Sustainable Development principles.</p> <p><i>Proceed question 2</i></p>
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Question 2	
Where are the available sites in Flood Zone2? can development be allocated within them? (lowest risk areas first) (Table D1 and D2)	
Yes	<p>No sites</p> <p><i>Exception Test if 'highly vulnerable'. Otherwise appropriate development.</i></p>
No	<p>Policy B2 and B3 The River Corridor (Central / Newbridge and Twerton) Policy KM2 Town Centre/ Somerdale, Keynsham Policy SV3 Radstock Town Centre</p> <p><i>Justifications for proceeding to Question 3, ie why development can not be accommodated within Flood Zone 2.</i></p> <p>Policy B2 and B3 The River Corridor (Central / Newbridge and Twerton)</p> <p>The principles of Bath's strategic importance and need for economic growth supported by appropriate infrastructure and housing provision outlined in question 1 also apply to question 2.</p> <p>According to Table 5 above, about 1,252 homes cannot be accommodated entirely within FZ1, of which 156 homes are partly or entirely within FZ 2. The remaining 1,096 homes involve sites which contain some higher risk area.</p> <p>Master planning for the River Corridor (along Lower Bristol Road) is being prepared and this will help to identify the best land uses for the area. A sequential approach should be taken within the areas.</p> <p>There are no alternative areas elsewhere within flood zone 1 and 2 in the district which could facilitate the level and type of development required to support regeneration of the City Centre and wider Sustainable Development principles.</p> <p><i>Proceed to question 3</i></p> <p>Policy KE2 Town Centre/ Somerdale, Keynsham</p> <p>The principles of Keynsham's strategic importance and the Somerdale site</p>

	<p>outlined in question 1 apply to question 2. However, FZ3 only follows a fringe of the Somerdale site and along the River Chew, therefore no residential development should be located within FZ3. A sequential approach should be taken within the site.</p> <p>However, the SFRA has identified that the risk of flooding at the northern part of the Somerdale site will increase taking into account the effect of climate change which needs to be addressed through the Masterplan process. It is also identified that there is insufficient drainage /sewerage capacity in the area which needs to be taken into account.</p> <p><i>Proceed to question 3</i></p> <p>Policy SV3 Radstock Town Centre</p> <p>The principles of Radstock’s strategic importance outlined in question 1 also apply to question 2.</p> <p>According to Table 7 above, about 60 homes cannot be accommodated entirely within FZ1, of which 20 homes are partly or entirely within FZ 2. The remaining 40 homes involve sites which contain some higher risk area. A sequential approach should be taken within the sites.</p> <p>There are no alternative areas elsewhere in the district which could facilitate the level of development required.</p> <p><i>Proceed to question 3</i></p>
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Question 3	
Where are the lowest risk available sites in Flood Zone 3? can development be allocated within them? (Table D1 and D2)	
Yes	<p>Policy B2 and B3 The River Corridor (Central / Newbridge and Twerton) Policy KE2 Town Centre/ Somerdale, Keynsham Policy SV3 Radstock Town Centre</p> <p>Policy B2 and B3 The River Corridor (Central / Newbridge and Twerton)</p> <p>The principles of Bath’s strategic importance and need for economic growth supported by appropriate infrastructure and housing provision outlined in question 1 also apply to question 3.</p> <p>According to Table 5 above, about 1,096 homes cannot be accommodated in the sites entirely within FZ1 or FZ2. There are different levels of flood risk within the SHLAA sites considered. 1,096 homes are based on 10 sites, of which FZ 3a amounts 4.46 ha. The area of the sites without planning permissions is 23.74 ha (21 sites). Therefore a sequential approach should be taken within the areas using the further information provided in the SFRA level 2 such as depth and velocity information.</p>

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	<p>Master planning for the River Corridor (along Lower Bristol Road) is being prepared and this will help to identify the best land use for the area.</p> <p><i>Exception Test required for these areas. Please see section 7.</i></p> <p>Policy KE2 Town Centre/ Somerdale, Keynsham</p> <p>FZ3 only follows a fringe of the Somerdale site and along the River Chew therefore no residential development should be located within FZ3.</p> <p><i>Exception Test required for these areas. Please see section 7.</i></p> <p>Policy SV3 Radstock Town Centre</p> <p>There is currently no data available to define FZ 3b for the north part of the proposed site, therefore the precautionary principle should be applied as all of FZ3 should be assumed to be FZ3b until further work is completed. A sequential approach should be taken within the site.</p> <p>According to Table 7 above, about 40 homes cannot be accommodated in the sites entirely within FZ1 or FZ2. There are different levels of flood risk within the SHLAA sites considered. Therefore a sequential approach should be taken within the areas using the further information provided in the SFRA level 2 such as depth and velocity information.</p> <p><i>Exception Test required for these areas. Please see section 7.</i></p>
No	No need to proceed to Question 4

<p>Question 4 Is development appropriate and permissible in remaining areas? (Table D1, D2 and D3)</p>	
N/A	

7. Exception Test for Policy Areas

7.1 The Sequential Test above indicates that the proposed developments in the following study sites can not be located in zones of lower probability of flooding. Therefore the Exception Tests are applied.

- **Policy B2 and B3** The River Corridor (Central / Newbridge and Twerton)
- **Policy KE2** Town Centre/ Somerdale, Keynsham
- **Policy SV3** Radstock Town Centre

Policy B2 and B3 The River Corridor (Central / Newbridge and Twerton)
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Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The development within this area will provide the major regeneration opportunities in Bath in a highly accessible location.
- The development within this area will provide the majority of new office and commercial space for the district, contributing to economic prosperity.
- The development within this area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district and addressing a significant imbalance in the ratio between resident workforce and jobs.
- The development within this area will provide redevelopment of areas of derelict or underperforming land within the city in order to enhance the World Heritage Site and protect its setting and the Green Belt from incursion.
- The development within this area will provide the opportunity to protect and enhance the linear nature of the river corridors multi functional role e.g. wildlife habitat, public access and recreation and sustainable cycle routes.
- The development within this area are located in and close to the centre of Bath and are accessible to a variety of services by a sustainable transport mode.
- The development within this area will help to maintain Bath as a tourist destination.
- The development within this area present potentials for district heating networks based on development density and location, which makes significant contribution toward reducing carbon emissions.

Exception test b)

The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and

- These areas are located on previously developed land.
- These areas are considered to be developable.

Exception Test c)

A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.

- The Council has completed the Flood Risk Management Strategy (Dec 2010) which considers potential flood risk mitigation options for Bath including raised defences and floodplain storage. Development within the Policy area must be safe through out its

B&NES Flood Risk Sequential /Exception Test

lifetime and informed by the B&NES SFRA and Flood Risk Management Strategy as CP5 Flood Risk Management Policy of the Core Strategy.

- Even though the SHLAA considers sites located within FZ2 and 3a, some sites are partially located within these higher risk areas. Therefore there are some flexibility and the sequential approach should be taken through site allocations and Development Management process.
- Site Specific Flood Risk Assessment should be undertaken where necessary.
- Site specific Sequential Test reports must be prepared through site allocations and Development Management process where necessary.
- SUDS techniques should be incorporated into drainage design.

Policy KE2 Town Centre/ Somerdale, Keynsham

Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The development within this area will help revitalise the town centre, improving the shopping environment and creating more employment.
- The development provides important services such as shopping, employment, leisure, cultural and health facilities to local residents and surrounding communities in a highly accessible location.
- The development within this area helps to enhance the Conservation Area.
- The development within this area assists in the regeneration of the large Somerdale factory site
- The development within this area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district.
- These areas present potentials for district heating networks based on development density and location, which makes significant contribution toward reducing carbon emissions.

Exception test b)

The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and

- These areas are located on previously developed land.
- These areas are considered to be developable.

Exception Test c)

A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.

- The Council has completed the Flood Risk Management Strategy (Dec 2010) which considers potential flood risk mitigation options for Keynsham including raised defences and floodplain storage. Development within the Policy area must be safe through out its lifetime and informed by the B&NES SFRA and Flood Risk Management Strategy as CP5 Flood Risk Management Policy of the Core Strategy.
- Site Specific Flood Risk Assessment should be prepared and the sequential approach should be taken within the Somerdale site.

B&NES Flood Risk Sequential /Exception Test

- Site specific Sequential Test reports must be prepared through site allocations and Development Management process where necessary.
- SUDS techniques should be incorporated into drainage design.

Policy SV3 Radstock Town Centre

Exception test a)

The development must provide wider sustainability benefits for the community that outweigh the flood risk:

- The development within this area will help revitalise the town centre, improving the shopping environment within this area and creating more jobs.
- The development within this area helps to consolidate social and community facilities.
- The development within this area helps to enhance the Conservation Area,
- The development within this area helps to facilitate a better transport interchange and will improve links to sustainable transport routes
- The development within this area will provide more housing including a proportion of affordable housing, for which there is a significant identified need in the district.
- This area presents potentials for district heating networks based on development density and location, which makes significant contribution toward reducing carbon emissions.

Exception test b)

The development should be on developable, previously developed land or, if it is not on previously developed land, that there are no reasonable alternative sites on developable previously-developed land; and

- These areas are located on previously developed land.
- These areas are considered to be developable.

Exception Test c)

A FRA must demonstrate that the development will be safe, without increasing flood risk elsewhere, and where possible, will reduce flood risk overall.

- The Council has completed the Flood Risk Management Strategy (Dec 2010) which considers potential flood risk mitigation options for Keynsham including raised defences and floodplain storage. Development within the Policy area must be safe through out its lifetime and informed by the B&NES SFRA and Flood Risk Management Strategy as CP5 Flood Risk Management Policy of the Core Strategy.
- The sequential approach should be taken within the site.
- Site specific Sequential Test reports must be prepared through site allocations and Development Management process where necessary.
- Site Specific Flood Risk Assessment should be undertaken.
- SUDS techniques should be incorporated into drainage design.

8. Sequential Test Conclusion

8.1 The high level Sequential Test has been applied to the Core Strategy particularly for policies BA2, BA3, KE2, SV2 and SV3.

Table 8

	FZ	High level Sequential Test	Further notes
SV2: Midsomer Norton Town Centre	1	Pass	Deemed suitable for residential and mixed use development without the need for further consideration apart from sustainable urban drainage. Site specific flood risk assessment must be prepared to consider all kinds of flood risk where necessary. All development should be informed by the information and recommendations of the BANES SFRA and FRMS.
Policies B2 and B3 Central / Newbridge and Twerton Policy KE2 Keynsham Town Centre/Somerdale Policy SV3 Radstock Town Centre	1,2 and 3a	Pass and Exception Test has been applied.	High level sequential and exception tests are passed. However, a sequential approach should be taken within the areas. Development must be safe through its lifetime by incorporating on-site mitigation measures with or without upstream storage proposed in the Flood Risk Management Strategy. Sustainable Drainage (SUDS) must be incorporated. Site Specific Sequential Test reports must be prepared through site allocations and Development Management process where necessary. A Site Specific Flood Risk Assessment must be undertaken where necessary. All development should be informed by the information and recommendations of the BANES SFRA and FRMS.

9. B&NES Core Strategy Policies

9.1 The Core Strategy will set out the long term spatial vision for B&NES up to 2026 and provide the context for other development plan documents in the LDF. It also sets out the broad locations for new housing, employment and other strategic developments. The Draft Core Strategy Publication Version has been informed by the B&NES SFRAs, Flood Risk Management Strategy and the Sequential/Exception test.

9.2 The Draft Core Strategy includes;

Spatial Objectives 1

Pursue a low carbon and sustainable future in a changing climate

-shaping places so as to minimise vulnerability and provide resilience to impacts arising from climate change including increased flood risk

Policy DW1: District-wide spatial Strategy

The overarching strategy for B&NES is to promote sustainable development by:

1. focussing new housing, jobs and community facilities in Bath, Keynsham, Midsomer Norton and Radstock particularly ensuring;
 - a. there is the necessary modern office space in Bath within or adjoining the city centre to enable diversification of the economy whilst maintaining the unique heritage of the City
 - b. sufficient space is available in Keynsham to reposition the town to become a more significant business location whilst retaining its separate identity
 - c. there is deliverable space to enable job growth in the towns and principal villages in the Somer Valley to create a thriving and vibrant area which is more self-reliant socially and economically.
 - e. development in rural areas is located at settlements with a good range of local facilities and with good access to public transport
2. making provision for a net increase of 8,700 jobs and 11,000 homes between 2006 and 2026, of which 3,400 homes are affordable,
3. prioritising the use of brownfield opportunities for new development in order to limit the need for development on greenfield sites.
4. retaining the general extent of Bristol - Bath Green Belt within B&NES with no strategic change to the boundaries,
5. requiring development to be designed in a sustainable way and is resilient to the impacts of climate change,
6. ensuring infrastructure is aligned with new development

In order to respond to changing circumstances, flexibility in the nature, density and mix of uses in the Western Corridor of Bath and on MoD sites will provide contingency in line with the principles of the overall strategy.

B&NES Flood Risk Sequential /Exception Test

9.3 The Core Strategy makes provision for around 11,000 new homes and around 8,700 to 10,000 new jobs. This level of development within the district is required to achieve the District's prosperity retaining regional competitiveness and importance based on up-to-date local evidence including Economic Strategy for Bath & North East Somerset 2010-2026, Future Housing Growth Requirements to 2026 Stage 2 Report (Sep 2010), Infrastructure Delivery Programme (Dec 2010) and Local Economic Assessment (May 2010) and SHLAA (Nov 2009). The Strategy locates new development in the most sustainable locations on previously developed land and in urban areas of Bath, Keynsham and settlement in the Somer Valley. Detailed breakdown is shown in Table 9.

Table 9

	Homes	Jobs
Bath	6,000	5,700
Keynsham	1,500	1,500
Somer Valley	2,700	1,000
Rural areas	800	500
Total	11,000	8,700

9.5 Flood risk should be taken into account at all stages in the planning process and the sequential approach should still be taken within these policy areas to minimise risk by directing the most vulnerable development to areas of lowest flood risk, matching vulnerability of land use to flood risk at a site level. Therefore site specific Sequential/Exception Test reports should be undertaken when determining future site allocations in the Placemaking Plan or a planning application where necessary.

9.6 The Core Strategy sets out place based development principles and 'the Scope and Scale of Change' are summarised in the Table 10.

Table 10 Area based policies

Policy	Policy area	Scope and Scale of Change
BA2	The Central Area:	<ul style="list-style-type: none"> • Small to medium sized city centre retail projects • 75 - 100,000 sq.m of modern office floorspace • 2,000 sq.m of convenience shopping space • 500 - 750 hotel bedrooms • About 500 new homes • A rejuvenated public transport interchange • Public realm enhancement • A new sports stadium • Leisure/cultural facilities enhancement • Major riverside access and habitat enhancement • District heating network
BA3	Newbridge and Twerton Riverside	<ul style="list-style-type: none"> • An employment-led mixed use development • Newbridge Riverside will retain its principal function as a place for industrial activity • Twerton riverside will function primarily as a multi-use economic development area • Residential and other non economic development uses will be considered as part of mixed-use employment led proposals, or where economic development proposals fail the sequential and impact tests of PPS4

B&NES Flood Risk Sequential /Exception Test

		<ul style="list-style-type: none"> • District heating network
KA2	Town Centre/ Somerdale in Keynsham	<ul style="list-style-type: none"> • Up to 700 new homes • New Council office development including a new library, retail, leisure and residential at the Centre/town Hall site • Medium to large retail units • A mixed use development at Somerdale providing significant employment floorspace, new homes, leisure and recreational uses. • District heating network • Public realm enhancement • Leisure and recreation enhancement • Green infrastructure network improvement • Public transport improvement
SV2	Midsomer Norton Town Centre	<ul style="list-style-type: none"> • About 200 new homes including existing commitments • Medium to large retail units including a modern food store • Modern office space to offset the loss of manufacturing jobs • Public realm improvement • Leisure and visitor attraction improvement • Town Park and associated green linkages • A district heating network
SV3	Radstock Town Centre	<ul style="list-style-type: none"> • About 200 dwellings including existing commitments through the NRR scheme • A mixed development - offices and community facilities • Public realm and connectivity improvement • Green Infrastructure enhancement • A district heating network

9.6 SFRA and Flood Risk Management Strategy have informed formulation of Policy CP5 local specific flood risk management policy supplementing PPS25.

Policy CP5 : Flood Risk Management

Development in the district will follow a sequential approach to flood risk management, avoiding inappropriate development in areas at risk of flooding and directing development away from areas at highest risk in accordance with national planning policy (PPS 25). Any development in areas at risk of flooding will be expected to be safe throughout its lifetime, by incorporating mitigation measures, which may take the form of on-site flood defence works and / or a contribution towards or a commitment to undertake such off-site measures as may be necessary.

All development will be expected to incorporate sustainable drainage systems to reduce surface water run-off and minimise its contribution to flood risks elsewhere.

All development should be informed by the information and recommendations of the B&NES Strategic Flood Risk Assessments and Flood Risk Management Strategy.

Appendix A

Strategic Housing Land Availability Assessment findings in relation to Flood Risk

Policy B2 Central Area, Bath

SHLAA ref	Site	Ha	Planning Permissions or Built	Total Dwellings	Flood Zones	FZ1	FZ2	FZ3a	Climate change
Abb1	Avon Street Car Park	0.9 Ha		90	FZ2 35%, FZ3a 65%		0.32 Ha	0.58ha	✓
King 1	Coach Park	0.5 Ha			FZ2		0.5 Ha		✓
Abb 2	Southgate	5.2 Ha	✓	99	FZ2		5.2 Ha		✓
Abb 3-5	Manvers Street Royal Mail Site	1.25 Ha		30	FZ1 25% FZ2 35% FZ3a 40%	0.31ha	0.44 ha	0.5 ha	✓
Abb6	Hilton Hotel/Podium /Cattle market	1.96 Ha		80	FZ 1 85% FZ2 11% FZ3a 4%	1.66 Ha	0.21 Ha	0.09 ha	✓
Abb 7	Walcot Yard	0.28 Ha		8	FZ 1 50% FZ2 25% FZ3a 25%	0.14 Ha	0.07 Ha	0.07 Ha	✓
Abb 10	Nos 7-9 Broad Street	0.05 Ha	✓	10	FZ1	0.05 Ha			
King 4	James Street	0.07 Ha		10	FZ2		0.07 Ha		✓
King 5	Saw Close	0.4 Ha		10	FZ1	0.4Ha			
King 6	Green Park Station	2.4 ha		97	FZ1 80% FZ2 8% FZ3a 12%	1.92 ha	0.2 Ha	0.28Ha	✓
King 7	Alexander House	0.08 Ha		19	FZ1 67% FZ2 33%	0.054Ha	0.026Ha		
Wid 8/9	Travis Perkins and Renault	1.10Ha		120	FZ 1 5% FZ2 10% FZ3 85%	0.06 Ha	0.11Ha	0.93Ha	✓
Wid 23	BWR East and Helphire	6.67 Ha		250	FZ 45 % FZ 35 % FZ 20 %	3 Ha	2.36 Ha	1.31 Ha	✓
	Post office	0.03 Ha	✓	10	FZ1	0.03 Ha			
Total		21.00 Ha				7.74 Ha	9.50 Ha	3.76 Ha	
	Total 859 homes	Sites built or with Planning Permissions 119 homes			Sites without Planning Permissions 714 homes				

Policy B3 Newbridge and Twerton Area

SHLAA ref	Site	Ha	PPs or built	Dwellings	Flood Zone	FZ1	FZ2	FZ3a	Climate Change
Wes 2	Bath Press	2.15 Ha		10	FZ1 94% FZ2 6%	2.02Ha	0.13Ha	-	
Wes 5	LBR Eastern Part	1.44Ha		132	FZ1 3% FZ2 72% FZ3a 25%	0.04Ha	1.03Ha	0.36 Ha	✓
Wes 6	Unigate Dairy	0.6 Ha		60	FZ2 64% FZ3a 36%		0.38Ha	0.22 Ha	✓
Wes 16	Lower Bristol Road Carrs Mill	0.45 Ha		45	FZ2 73% FZ 3 27%		0.32Ha	0.12 Ha	✓
Total		4.64 Ha		247 Homes		2.06 Ha	1.86 Ha	0.7 Ha	

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Bath Western Riverside (not including Bath Western Riverside scheme)

SHLAA ref	Site	Ha	Planning permissions	Dwellings	Flood zones	FZ1	FZ2	FZ3a	Climate Change
King 10	Hinton Garage	0.45Ha		54	FZ1 45% FZ2 42% FZ3a 13%	0.20Ha	0.18Ha	0.07Ha	✓
King 11	Onega Centre	0.30 ha		36	FZ1 80% FZ2 13% FZ3a 7%	0.24 ha	0.04 ha	0.02 ha	
King 12	Comfortable Place	0.62 ha		61	FZ1 31% FZ2 45% FZ3a 24%	0.19 ha	0.28 ha	0.15 ha	
King 13	Argos River Frontage	0.30 ha		19	FZ1 77% FZ2 7% FZ3a 16%	0.23 ha	0.02 ha	0.05 ha	
King 14	Kelso Place	0.18 ha		14	FZ1 100%	0.18 ha			
King 15	Westmark	0.73 ha		120	FZ1 29% FZ2 62% FZ3a 9%	0.21 ha	0.45 ha	0.07 ha	
Wes 4	BF I Waste System	0.94 ha		7	FZ1 15% FZ2 85%	0.14 ha	0.80 ha		
		3.52 ha		311 homes		1.39 ha	1.77 ha	0.36 ha	

Policy KE 2 Keynsham

SHLAA ref	Site	Ha	PPs or built	Homes	Flood Zone	FZ1	FZ2	FZ3a	Climate Change
K1	Somerdale	25.3 Ha		600	FZ1 60% FZ2 40%	15.18 Ha	10.12	-	✓
K4	St John's Court			13	FZ1	✓	-	-	
K9	Nursery/Car Park and land off the Park	0.28 Ha		16	FZ1	0.28Ha	-	-	
K11	Labbott Car Park North and South	0.18 Ha		10	FZ1	0.18 Ha	-	-	
K13A	Town Hall	1.1 Ha		50	FZ1	1.1 Ha	-	-	
K13B	Riverside	0.45 Ha		75	FZ1	0.45 Ha	-	-	
K15	Rear of 94-96 Temple St	0.14 Ha	✓	14	FZ1	0.14 Ha	-	-	
K39	Temple Infant School	0.13 Ha	✓	10	FZ1	0.13 Ha	-	-	
K41	Yard at Pool Barton	0.16 Ha		11	FZ1	0.16Ha	-	-	
K42	Temple Junior School	0.2 Ha		11	FZ1	0.2 Ha	-	-	
		27.94Ha		810 homes		17.82 Ha	10.12 Ha		

B&NES Flood Risk Sequential /Exception Test

Policy SV2: Midsomer Norton

SHLAA ref	Site	Ha	PPs or built	Homes	Flood Zone	FZ1	FZ2	FZ3a	Climate Change
MSN.1a	52 High Street	0.12 Ha	✓	10	FZ1	0.12 Ha	-	-	-
MSN1b	52 High Street	0.20 Ha	✓	10	FZ1	0.20 Ha	-	-	-
MSN2	Chesterfield House	0.10 Ha		10	FZ1	0.10 Ha	-	-	-
MSN3	Martines Block	0.07 Ha		10	FZ1	0.07 Ha	-	-	-
MSN4	South Road Car Park	3.6 Ha		10	FZ1	3.6 Ha	-	-	-
MSN5	Casswells	0.23 Ha	✓	4	FZ1	0.23 Ha	-	-	-
MSN6	The Hollies	1.55 Ha		80	FZ1	1.55 Ha	-	-	-
MSN14b	Town Park	4.3 Ha		50	FZ1	4.3 Ha	-	-	-
		10.17 Ha		184 Homes		10.17 Ha			

Policy SV3 Radstock Town Centre

SHLAA ref	Site	Ha	PPs or built	Homes	Flood Zone	FZ1	FZ2	FZ3a	Climate Change
Rad 1	Radstock Railway Area 1 and 2	4.8 Ha	✓	139	FZ1	4.8 Ha	-	-	
Rad 3	Chartons	0.42 Ha		50	FZ1	0.42 Ha	-	-	✓
Rad 4	Old Bakery and Car Park	0.65 ha		40	FZ1 37% FZ2 43% FZ3 20%	0.24 Ha	0.28 Ha	0.13 Ha	✓
Rad 5	Post Office	0.12 Ha		20	FZ1 20% FZ2 80%	0.02 Ha	0.1 Ha	-	-
Rad 6	Library Youth Club	1 Ha		15	FZ1	1 Ha	-	-	-
Rad 7	Fortescue Road	0.11 Ha		10	FZ1	0.11 Ha	-	-	-
		9.5 Ha		274		8.29 Ha	0.46 Ha	0.75 Ha	