

Borough

<p style="text-align: center;">AMR 2006/07</p>	<p style="text-align: center;">Appropriate Assessment 2008</p>	<p style="text-align: center;">Sustainable Community Strategy 2008</p>
<p>P.44, Table 8.2 - no loss in the amount of wildlife sites in Dacorum.</p>	<p>[The document strictly makes reference to the core strategy. However, there would be links back to the site allocations where there are references to development opportunities in the core strategy.]</p>	<p>P.4, para 4 - The Dacorum vision seeks to protect our natural resources for the future, whilst encouraging growth and activity.</p>
<p>P.45, Table 8.4 - identifies a significant increase in the no. of butterflies and general stability in the variety of species over the 6 year period 2000-2006.</p>	<p>P. ii - Non-technical study: Development not expected within 3km buffer zones of the Special Areas of Conservation, and development potential would predominantly consist of brownfield sites within settlements and small scale greenfield development required for determined affordable housing need.</p> <p>P. ii - Non-technical study: The biggest, if indirect, threat to the Chilterns Beechwoods SAC would come from development to the west of Hemel Hempstead and/or the implementation of the HH Northern Bypass and the associated increases in recreational use.</p> <p>P. ii - Non-technical study: It has been concluded that a full Appropriate Assessment and any associated mitigation measures (to be agreed with Natural England) would be necessary if, large scale greenfield development were to occur within the 3km buffers and if accessibility to the SAC was improved in conjunction with the development of one or more neighbourhoods outside the SAC buffers.</p>	<p>P.9, Para 5 - Lists actions towards reducing consumption of natural resources.</p>

Borough

East of England Plan 2008	Gypsies and Travellers Study 2007	SFRA 2007 - 08
<p>Policy ENV4: Agriculture, Land and Soils - requires us to promote the expansion of agri-environment schemes, respond to changes taking place in agriculture, promote the sustainable use of soil resources and encourage more sustainable use of water resources.</p>	<p>Para 5.4: Sites should be capable of receiving the supply of essential services including water, sewerage, drainage and water disposal.</p>	<p>P. 62: River Ver, Gade and Bulbourne: In undeveloped areas, Zone 3b is assumed to be the same as Zone 3a. In developed areas Zone 3b has been estimated from the topographical model and available soil maps.</p>
<p>Policy ENV5: Woodlands Requires us to seek to achieve an increase in woodland cover; identify ancient and important woodland in LDDs to prevent their loss or deterioration. Conserve aged and veteran trees Woodland lost should be replaced with at least an equivalent area, preferably in the same landscape unit.</p>		<p>River Thames: Zone 3b is assumed to be the same as Zone 3a.</p>
<p>Policy M1 - Land won Aggregates and Rock - requires LDDs to identify and safeguard mineral resources.</p>		<p>P. 68: We have 20 potential allocated sites that intersect with Zone 3b, 3 with Zone 3a and 3 with Zone 2.</p>
<p>Policy WAT4 - Flood Risk Management Emphasises need for development decisions to be based upon results of SFRA i.e. guide development away from floodplains.</p>		<p>P. 68: Specific policy issues: 1 - manage residual risk through emergency planning, site design and protection measures. Key issues are blockage/collapse scenarios in Hemel and overtopping/ Breach of GUC in Berkhamsted. 2 - deculvert and restore river corridor. 3 - protect functional floodplain.</p>
<p>Policy WAT2 - Water Infrastructure Requirement to ensure timely provision of appropriate additional water infrastructure. LDDs should plan to site new development so as to maximise the potential of existing water / waster water treatment infrastructure and minimise the need for new / improved infrastructure.</p>		<p>Para. 8.1 Recommends outputs from study are used as an evidence base from which to direct new development to areas of low flood (Flood Zone 1). Where development cannot be located in Flood Zone 1, each planning authority should use the flood maps to apply the Sequential Test to their remaining land use allocations.</p> <p>Para. 8.2 Where the need to apply the Exception Test is identified the scope of the SFRA will need to be widened to a Level 2 assessment. It is recommended that as soon as the need for the Exception test is established, Level 2 SFRA(s) are undertaken so as to provide timely input to the overall LDF process.</p> <p>P.30 - SFRA Level 2. Page 30 Use the Sequential test to locate all new development (site allocations) in least risky areas, giving highest priority to Flood Zone 1. Where the Sequential Test alone cannot deliver acceptable sites, the Exception test will need to be applied (see section 1.3.2).</p>

Hemel Hempstead

SFRA 2007 - 08

P. 89, Para 8.2 - Further assessment should be made of the Hemel Hempstead flood relief culvert for risk of blockage or collapse.

P. 35: Overbank flooding is known to occur in Gadebridge Park (recent event in March 2007). There is also some evidence of historical flooding in 1879 and 1947. Both of these events occurred before the Hemel Hempstead Flood relief scheme was constructed in 1959. This offers significant protection to Hemel Hempstead to beyond a 100 year standard of protection as well as some protection to Apsley and Kings Langley. No fluvial flooding has occurred since this became operational.

P. 40: The junction of Buncefield Lane/Green Lane is affected by surface water flooding. It has been suggested that the clearing of ditches and gullies may solve the problem. Entec, who represent the land owners of a potential housing proposal site (H38) have informed DBC that the balancing Pond is flooding over the site. They have also engaged other water experts to investigate solutions to this including the creation of a new balancing pond on or off site to the south.

P. 41: Flooding, resulting in the disruption of traffic, occurs at the junction of Cupid Green Lane and Dodds Lane. Mainly surface water ponding.

P. 53: The status if the Flood Relief Culvert in Hemel is unknown. Given that much of the flows are diverted through the culvert it is reasonable to assume that considerable flooding of residential, commercial and industrial properties could occur in the event of failure. See level 2 study for further analysis.

P's. 14, 15 and 16: The level 2 report investigates the flood risk posed to centre of Hemel Hempstead resulting from the failure of the culvert. Areas of potential risk have been identified between Dacorum Way and Leighton Buzzard Road; land adjacent to Moor End Road and Two Waters Road.

P. 29: Hemel Hempstead Town Centre and Moor End Road. Will require application of Sequential Test to ensure more vulnerable development is situated in least risky areas. Recommends that highly vulnerable areas are preserved for open space.

P. 29: Two Waters Road: Serious restrictions on land use in this area. Further investigation may be required to ascertain extent of functional floodplain in this location.

P's. 31-35: The report makes a series of recommendations for future planning in this location. These include: protecting the functional floodplain, enhancing and restoring the river corridor, setting development back from rivers and reducing surface water runoff. Much of these are generic points.

Berkhamsted

SFRA 2007 - 08

P.89, 8.2 - Further detailed assessment required to assess the potential of flooding from the overtopping or breach of the canal.

P. 40: Surface water flooding occurs Two Ponds Lane, Tring Road, Boswick Lane and Dudswell Lane. This is thought to be attributed to the land owner making modifications to the land at the end of two ponds lane. As a result water weirs over two ponds lane and cuts over Tring Road and down Boswick Lane and into the River Bulbourne. These roads are regularly flooded. Herts Highways are investigating.

P. 49: The GUC has a number of interactions with the River Bulbourne. No historical records of canal overtopping or breach exist in the area. There are no canal embankments with a high probability or consequence of failure as defined by British Waterways. All canal embankments are designated as having a low to medium risk of failure.

P. 50: Although British Waterways consider the risk of breach to be relatively low, there are significant sections of embankment in Berkhamsted which are up to 3m higher than surrounding ground levels. If this failed or overtopped there could be significant damage to adjacent residential properties and commercial premises, as well as the potential for loss of life.

P. 18: The Level 2 study looks into the flood risk to Berkhamsted as a result of a Breach of the Canal. Although the risk is very small there is the potential for an event to cause significant damage and possible loss of life. P. 19: Four areas were identified as being the most likely to cause more damage.

P. 23, 24, 25 and 26: Breach 1: North of Mandelyns Road where rapid inundation would occur to the surrounding area. It is advised to read p. 23 for further information. Breach 2: North of Valley Road (p. 24). Breach 3: North of Delton Road (p. 25). Breach 4: North of Bridge Road (p. 26).

P. 27: The results show that the area bound between the GUC and the River Bulbourne can be classified as 'Danger for most' following breach of the canal, as a result of relatively high water velocities. The low lying areas adjacent to the River Bulbourne can also be classified as 'danger for most' as a result of significant water depths. There is also a risk of existing flood management infrastructure becoming overwhelmed causing water to back up and further flooding.

P. 35: Planning Recommendations: It is advised that a sequential approach is applied to locate all development in least risky areas. If the sequential test was satisfied then applicants would be expected to undertake an FRA looking at, amongst other things, the condition of the canal. This will require consultation with British Waterways.

Tring

SFRA 2007 - 08

P. 35: Flooding occurred in 1992 at Cow Lane, Western Road, Park Road, Wingrave Road and Rosebury Way. Flooding also occurred in 1996 but as attributed to surface water rather than fluvial.

P. 35: No recorded flooding in the headwaters of the Thames although the area has a number of drainage ditches that contribute to surface water flooding.

P. 36: Some groundwater flooding has been observed.

P. 50: re reservoirs: The most significant raised embankment with the potential for loss of life is Startopend. It is likely that should any major development be proposed in the area to the north of the reservoir that further investigation is undertaken.

Bovingdon

SFRA 2007 - 08

P. 41: Church Street, Bovingdon: Flooding from surface water drainage occurs at the confluence of Church Street and Green Lane. This is attributed to the convergent topography of the area. Flooding from this mechanism occurred in 1946 and is known as the 'Great Flood of Bovingdon'. There is an important pond feature at this location known as 'the Dock', which should be retained to reduce the likelihood of future surface water flooding.

Markyate

SFRA 2007 - 08

P. 33: Markyate was affected by flooding in June 1993 and October 1993. A total of 39 properties in Roman Way, London Road, Hicks Road and Church End were flooded. This was thought to have been caused by the capacity of the culvert in Markyate being inadequate to pass flows resulting from heavy rain. A flood alleviation scheme was built in 2003 consisting of a large earth dam. No reported flooding has occurred in Markyate since.

P. 52 Overall condition of Markyate Flood Storage Area is 'good'. This is located at the upstream end of the River Ver. It provides protection to property within Markyate.

Countryside

SFRA 2007 - 08

P. 35: Flood events have also been noted in 1977 and 1988 in Aldbury. Flooding also occurred here and in Chaulden in 1992.

P. 38: Puddephats Farm, Gaddesdon Row; regularly flooded from groundwater. Issue raised in the (IWP).

P. 38 Nettledden Road is regularly flooded from groundwater.

P. 40: Regular flooding at junction 9 of M1. Cause unknown. The A5 roundabout also experiences some flooding.

P. 40: Bede Cottage, Frithsden regularly floods. Investigated by Herts Highways.

P. 40: Properties on Parsons Close, Flamstead are frequently flooded.

P. 41: Long Marston has flooded twice, most recently in May 2007. The exact causes are however unknown. The flooded properties were located opposite an open drainage ditch although the suspected cause was overland flow from surrounding agricultural land. 7 Properties and the local pub were flooded. Flooding from the same mechanism also occurred in 2003 where 15-20 properties were affected.