

**Harrow Council
Core Strategy
Habitats Regulations Assessment**

November 2011



Local Development Framework

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1. Introduction

1.1 What is Habitats Regulations Assessment?

- 1.1.1 This report assesses the impact of Harrow's Core Strategy upon designated natural habitats of European importance. No such sites are located within Harrow but a small number exist within the vicinity of the borough boundary. The purpose of the assessment is to consider whether the Core Strategy, alone or in combination with other plans and projects, will have a likely significant effect on any of these sites. If any likely significant effect is detected then an 'Appropriate Assessment' (AA) will be required to determine whether or not the Core Strategy will have an adverse impact on the integrity of the habitats' importance.

1.2 The Habitats Directive

- 1.2.1 Article 3 of the European Directive 92/43/EEC *Conservation of Natural Habitats and of Wild Fauna and Flora* (1992) establishes a Europe-wide network of special areas of conservation (SACs), formally known as 'Natura 2000' sites. The network also extends to special protection areas (SPAs) designated under the 1979 *Conservation of Wild Birds* directive. The purpose of the network is to maintain and, where appropriate, restore to favourable condition certain natural habitats and the habitats of certain species. For consistency with UK legislation and guidance, sites forming part of the Natura 2000 network will be referred to throughout the rest of this report as 'European sites'.
- 1.2.2 Article 6(3) of the directive establishes a requirement for 'Appropriate Assessment' of any plan or project which:
- is not directly connected with, or necessary to, the management of a European site; and
 - would be likely to have a significant effect on a European site, either alone or in combination with other plans or projects.
- 1.2.3 The article places a duty on 'competent national authorities' to agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after public consultation. If, despite a negative assessment, a plan or project must go ahead for reasons of overriding public interest, including social or economic reasons, then compensatory measures must be taken to protect the 'overall coherence' of European sites. However, where the site affected hosts a priority natural habitat type or a priority species, the only considerations that may be raised are those relating to: human health; public safety; beneficial consequences of primary importance to the environment; or other imperative reasons of overriding public interest.

1.3 The Habitats Regulations

- 1.3.1 The habitats directive is implemented in Britain by the Conservation (Natural Habitats, &c) Regulations 1994. The Regulations have been the subject of subsequent amendment including the Conservation (Natural Habitats, &c) (Amendment) Regulations 2007. Regulation 85B provides:

“(1) Where a land use plan—

(a) is likely to have a significant effect on a European site in Great Britain or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site,

the plan-making authority for that plan shall, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s conservation objectives”.

- 1.3.2 In accordance with the directive, the Regulations require the plan making authority to give effect to the plan only having ascertained that it will not adversely affect the integrity of a European site, unless there are considerations of overriding public interest (dealt with by Regulation 85C). The Regulations also require, as part of the assessment, consultation with the appropriate nature conservation body and, at the discretion of the plan making authority, provision for consultation with the general public.

2. Guidance on Habitats Regulations Assessment

2.1 Planning for the Protection of European Sites: Appropriate Assessment (2006)

- 2.1.1 This document, produced by the Department for Communities & Local Government in 2006 provides guidance on the application of the Habitats Regulations to regional spatial strategies and local development documents.

- 2.1.2 The guidance note recommends a three stage approach to the assessment of a plan’s impact upon European sites (Regulation 85B):

- a) Assessment of likely significant effects (AA task 1);
- b) Appropriate assessment and ascertaining the effect on site integrity (AA task 2); and
- c) Mitigation and alternative solutions (AA task 3).

- 2.1.3 In exceptional cases, where likely harm to a European site is identified that cannot be mitigated and where there are no alternative solutions, there would be a fourth stage involving the consideration of imperative reasons of overriding public interest (Regulation 85C).
- 2.1.4 The guidance note goes on to describe the relationship between Appropriate Assessment and the process of developing and refining plan options, before setting out in greater detail the three stages identified above. Key points from the guidance are:

AA task 1: likely significant effects – such effects should be determined in relation to specific features, environmental conditions and the conservation objectives for the European site(s) concerned. The precautionary principle must be used. This means that if significant effects on a European site cannot be excluded, on the basis of objective information, either individually or in combination with other plans and projects, then appropriate assessment must be carried out.

AA task 2: appropriate assessment and effect on site integrity – this should involve an examination of the implications of a plan or project on the conservation objectives for the European site(s) concerned, to ascertain whether there would be an adverse affect on the site(s) integrity. Integrity means “the site’s coherence, ecological structure and function across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of species for which it was classified” (ODPM Circular 06/2005).

AA task 3: mitigation measures and alternative solutions – in relation to plan making this will usually involve modification of an option or consideration of alternative options, and then re-run tasks 1 and 2 of the assessment stages.

2.2 Draft Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact

- 2.2.1 This draft circular, produced jointly by the Departments for Environment, Food & Rural Affairs and Communities & Local Government, was issued in March 2010 for consultation. It will replace existing circulars 06/2005 and 01/2005. Paragraphs 42-47 of the draft Circular summarise the requirements of the Habitats Regulations as they apply to land use plans. *[NB: Although the consultation on this draft Circular closed 1st June 2010 the document has not been progressed as at November 2011].*

3. Habitats Regulations Assessment of the Harrow Core Strategy (2011) incorporating post-hearings proposed modifications

3.1 Summary of Pre-Submission Core Strategy

- 3.1.1 The London Plan (2011) provides the strategic context for spatial planning in the Borough. The Plan provides the basis for formulating the Borough's housing target, establishes designations relating to Harrow's higher-order town centres and industrial locations, and affords continued protection to London's Green Belt and Metropolitan Open Land. It also includes a part of Borough as one of London's areas for intensification. Within this strategic context, Harrow's Core Strategy provides a spatial strategy for the accommodation of growth over the period 2009 to 2026, together with the policies and other actions that will be needed to deliver sustainable growth.

Harrow & Wealdstone Intensification Area

- 3.1.2 The Core Strategy identifies growth of a minimum of 2,800 new homes and non-residential development to provide 3,000 jobs, including provision for up to 22,500m² comparison retail floorspace, 4,000m² convenience floorspace and 8,000m² non-retail uses, as well as office re-provision through the redevelopment of redundant accommodation, regeneration of industrial estates and hotel development. Subject to viability testing through the Area Action Plan, the Core Policy for the Area requires major development to support the installation of a district-wide heat and power network. It also seeks to secure improvements to public transport infrastructure, the creation of coherent public spaces and additions to green space & public open space where opportunities arise. An Area Action Plan is to be prepared jointly with the Greater London Authority to give effect to the Intensification Area in further detail.

Outside of the Intensification Area

- 3.1.3 The Core Strategy provides for at least 3,250 new homes throughout the rest of Borough, and apportions the majority of this growth to major¹ identified, previously developed sites which are expected to come forward over the plan period within the new sub areas. Based on the Borough's housing trajectory, growth² is apportioned to the sub areas as follows: 300 homes in Harrow-on-the-Hill & Sudbury Hill; 406 homes in South Harrow; 425 homes in Rayners Lane & North Harrow; 161 homes in Pinner & Hatch End; 712 homes in Stanmore & Harrow Weald; 1,229 homes in Edgware & Burnt Oak; 25 in Kingsbury & Queensbury and 20 in Kenton & Belmont.

¹ Development sites capable of accommodating 10 or more dwellings.

² Note that the trajectory also identifies sites capable of accommodating 9 units or fewer.

- 3.1.4 Pursuant to the overall Strategy to manage growth, an overarching Core Policy seeks to manage change in suburban areas (including a presumption against garden development) and resists the redevelopment of sites in areas of poor public transport accessibility. The retention and enhancement of open space throughout the Borough is also provided for as part of an emerging 'Green Grid' to create an interconnected network of green infrastructure.

3.2 Habitats Regulations Assessment - AA task 1: assessment of likely significant effects

- 3.2.1 The Core Strategy is not directly connected with or necessary to the management of any European site. It is therefore necessary to consider, firstly, whether the Core Strategy is likely to have a significant effect, either alone or in combination with other plans and projects, upon any European site.

- 3.2.2 There are no European sites in Harrow nor are there any such sites in any immediately adjoining borough. However the following sites are within a 15km radius of Harrow's Borough boundary:

European Site	Status	Distance from Harrow boundary
Richmond Park	Special Area of Conservation (SAC)	12.5km
Wimbledon Common	Special Area of Conservation (SAC)	15km
Lee Valley	Special Protection Area (SPA)	15km
South West London Waterbodies	Special Protection Area (SPA)	15km

- 3.2.3 The features and environment of each of these European sites are set out below. Natural England is in the process of setting out conservation objectives for all SACs and SPAs and are not currently available, except in draft form for the Lee Valley SPA which were included in the Habitats Regulations Assessment for the Lee Valley Park Development Framework published November 2009.

Richmond Park

- 3.2.4 Richmond Park is selected as a European site because it is one of only four known outstanding habitats in the UK for the stag beetle (*Lucanus cervus*), an 'annex II' species for the purposes of the Habitats Directive.
- 3.2.5 The Park comprises a mix of broadleaved deciduous woodland, mixed woodland, wetland and acid grassland. It is the areas of ancient woodland, with retained decaying timber, that provide an important habitat for the stag beetle population and other invertebrates. The woodland pastures are maintained through grazing, coppicing and

leaving fallen trees to form new decaying timber habitats, and by not removing existing decaying timber habitats.

- 3.2.6 Richmond Park is vulnerable to high levels of recreational pressure associated with its situation within a highly populated urban area. Recreational activities include walking, cycling, horse riding, fishing, golf, picnicking and wildlife watching; associated facilities relating to these activities include educational centres, car parking, play grounds, restaurants and toilets.
- 3.2.7 Management requirements and techniques include continued maintenance of woodland pastures, continue to leave decaying timber *in situ* and to control recreational pressure on woodland areas.

Wimbledon Common

- 3.2.8 As with Richmond Park, so too Wimbledon Common is selected as a European site because it is one of only four known outstanding habitats in the UK for the stag beetle (*Lucanus cervus*), an 'annex II' species for the purposes of the Habitats Directive. However, Wimbledon Common is also recognised as comprising two qualifying habitats for the purposes of 'annex I' of the Habitats Directive. These are the Northern Atlantic wet heaths and the European dry heaths.
- 3.2.9 The Common comprises a mix of broadleaved deciduous woodland, dry grassland, improved grassland and heath & scrub. There is also a bog and a number of pond habitats formed by disused gravel pits.
- 3.2.10 The areas of ancient woodland with retained decaying timber provide an important habitat for the stag beetle population and other invertebrates and, as at Richmond Park, the habitat is maintained through management of woodland pasture, the retention of decaying timber and allowing new decaying timber habitats to form. The Northern Atlantic wet heathland includes cross-leaved heath *Erica tetralix* and wet heaths occur on acidic, nutrient poor peat or soil with impeded drainage. European dry heaths occur on freely draining, acidic and nutrient poor soil. Periodic mowing maintains wet and dry acid grassland.
- 3.2.11 Wimbledon Common is also vulnerable to high levels of recreational pressure associated with its highly populated urban setting. Recreational activities and facilities at the Common are akin to those at Richmond Park, described above.
- 3.2.12 As at Richmond Park, management requirements and techniques include maintenance of woodland pastures and control of recreational pressure in woodland areas.

Lee Valley

- 3.2.13 The Lee Valley is selected as a European site because it provides wetland habitats which support wintering wildfowl including Gadwell and Shoveler which occur in numbers of European importance. Areas of reedbed within the site also support significant numbers of wintering Bittern.
- 3.2.14 The Valley comprises embanked water supply reservoirs, sewage treatment lagoons and former gravel pits that support a range of man-made, semi-natural and valley bottom habitats. The wetlands and reservoirs occupy about 450ha of the valley. The habitats are maintained through the management of recreational activity and control of water extraction.
- 3.2.15 The area is vulnerable to high levels of recreational pressure and associated disturbance to the habitats of nesting birds, particularly during the winter months. Other threats include eutrophication³ of water quality and over-extraction of water for public supply.
- 3.2.16 Management requirements and techniques include lack of disturbance during winter months and to allow for nesting birds, managed recreational activity, ensuring that water levels and water quality are sufficient to maintain water bodies and surrounding marginal habitats.
- 3.2.17 Natural England's draft conservation objectives for Lee Valley are to maintain in a favourable condition the open water and surrounding marginal habitats.

South West London Waterbodies

- 3.2.18 The South-West London Water Bodies are selected as a European site because they provide open water habitats which support wintering wildfowl including Gadwell and Shoveler which occur in numbers of European importance.
- 3.2.19 The Water Bodies comprise a series of embanked water supply reservoirs and former gravel pits that support a range of man-made and semi-natural open water habitats. The designated area provides a total of 830ha open water and marginal grasslands.
- 3.2.20 The reservoirs are vulnerable to repair and maintenance activity, including water draw-down to facilitate this activity, and in the longer term potential decommissioning. The marginal grasslands are vulnerable to vegetation succession, but this can be managed. Use of the water bodies for recreational activity also poses a potential threat to the conservation interest of these sites.

³ Eutrophication is a damaging increase in the concentration of chemical nutrients in an ecosystem.

3.2.21 Management requirements and techniques include lack of disturbance during winter months, managed recreational activities and control of water levels and quality.

3.2.22 Having regard to the above primary and non-primary qualifying features of the four sites identified, it is now necessary to consider the potential effects of the Core Strategy upon the key environmental conditions of each site to maintain the habitat's integrity, and the significance of these effects.

Richmond Park and Wimbledon Common – Stag Beetle habitat

3.2.33 In relation to the Stag Beetle populations at Richmond Park and Wimbledon Common, the principal management technique for the protection of their habitat is the continued maintenance of woodland pastures, leaving existing decaying timber *in situ* and allowing new decaying timber habitats to form. The Harrow Core Strategy would have no direct or indirect impact upon the continuation of this management technique for the preservation and renewal of the Stag Beetle's habitat at these sites.

3.2.34 Both sites are recognised as being vulnerable to human recreational activity and the consequences for the Stag Beetle's habitat in terms of damage and general wear & tear within the woodland areas. It is therefore necessary to also consider the potential of the Core Strategy to lead to increased use of Richmond Park and/or Wimbledon Common for recreational activity.

3.2.35 Harrow's Core Strategy provides for housing growth within the Borough *inter alia* to accommodate forecast population growth. The Strategy uses the GLA Revised Mid-Year Estimates (2010) to forecast a population increase of 5,200 to 233,300 by 2031. This is equivalent to 2.3% increase but would lead to an overall increase of 12.8% upon the population of the Borough recorded by the 2001 Census.

3.2.36 Richmond Park covers an area of 845ha and Wimbledon Common covers an area of 350ha. Both may be regarded as 'regional parks' likely to attract visitors from a wider catchment than their immediate locality. The possibility that population growth in Harrow, planned for in the Core Strategy, could lead to additional visitor numbers to these sites cannot therefore be excluded. However, as noted above, Richmond Park is some 12.5km distance from the Borough boundary and Wimbledon Common is 15km away. Within Harrow there are opportunities for 'access to nature' recreation at Stanmore Common (49ha), Stanmore Country Park (32ha), Bentley Priory Open Space (66ha) and Harrow Weald Common (19ha) (all in the Green Belt). In the surrounding area, within 1-2km of the Borough boundary, there are further such recreational opportunities: Fryent Country Park (100ha) and the Welsh Harp (100ha) to the south east,

Aldenham Country Park (134ha) to the north east and Ruislip Woods & Common (305ha) to the west.

3.2.37 Further a field, major regional park alternatives include Hyde Park (142ha), Regents Park (166ha) and Hampstead Heath (320ha).

3.2.38 Within Harrow there are 27 public parks and gardens, providing the equivalent 1.21ha per 1,000 population, but the distribution of open space is not proportionate to that of the population resulting in some areas of local park and access to nature deficiency. The Core Strategy seeks to address such deficiencies, particularly within the Harrow & Wealdstone Intensification Area, through new provision or re-provision of space, and through enhancements to the accessibility of existing open space.

3.2.39 In view of the modest level of population growth over the plan period, the availability of suitable alternatives within the Borough, just outside of the Borough and within the wider London region, and the provision made within the Core Strategy to address the open space requirements of occupiers of new development, it is considered that the number of additional visits to Richmond Park and Wimbledon Common is unlikely to be substantial. The impact of such additional visits that do occur on the stag beetle can, it is considered, be controlled by the implementation of suitable management plans and techniques for the protection of decaying timber habitats within the woodland areas of the sites.

3.2.40 On this evidence it is concluded that the likelihood of significant effects arising from the Core Strategy upon these two European sites can be excluded.

3.2.41 It remains, therefore, to consider the 'in combination' effects of other plans and projects.

3.2.42 All neighbouring boroughs and districts will also be producing Local Development Frameworks which include core strategies for the spatial management of growth and development in their area. Within London, the context for growth and spatial planning is provided by the London Plan (2011), the preparation of which was accompanied by a Habitats Regulations Assessment screening report (Oct. 2009). The London Plan sets a housing target of 32,210 per annum over the ten year life of the plan (2011-2021) and advises that LDFs, which must span 15 years, should roll forward the annualised target pending a planned London wide review and revision of the targets in 2015/16. Therefore the combination of all LDFs across London should provide for growth of at least 483,150 new homes over the period 2011 to 2026. Housing growth beyond the Greater London area, within the south-east region, may also contribute to 'in combination' effects. The South East Plan⁴,

⁴ All Regional Spatial Strategies have now been abolished.

published May 2009, had set a housing target of 32,700 per annum which equated to 555,900 homes over the period 2009-2026.

3.2.43 The Habitats Regulations Assessment screening report (2009) for the London Plan (2011) recognises, in respect of a number of European sites across London, that "...increased visitor accessibility and disturbance are considered to be the main issue for consideration, reflecting one of the key themes of the London Plan to accommodate growth but only on the basis that the policies support the improving quality of Londoners' lives..." (para 3.2.6). The report goes on to recommend that the London Plan Policy 3.3 *Increasing housing supply* and certain opportunity/intensification areas be the subject of lower tier assessment⁵, but these did not include the proposed Harrow & Wealdstone Intensification Area.

3.2.44 As part of planned housing growth in London and the wider south-east region, Harrow's Core Strategy could lead to significant 'in combination' visitor pressure at these sites. However, the London Plan Habitats Regulations Assessment screening report (2009) recommends lower tier assessment of the South Wimbledon/Colliers Wood Intensification Area in relation to Richmond Park and Wimbledon Common and this will inform the relevant LDF and any specific, local mitigation measures required. In terms of the overall housing growth of London and the south east, the extent of additional visitor pressure will be diluted by the availability of existing and new alternative open spaces provided for in LDF documents, whilst on-site management as described above will mitigate the impact of increased visitor numbers upon the habitat of the stag beetle.

3.2.45 It is therefore concluded that the Core Strategy, on its own and in combination with other plans and projects, would not be likely to lead to significant effects upon the primary conservation interest of the Richmond Park and Wimbledon Common Special Areas of Conservation.

⁵ "It will be appropriate to consider relying on the Habitats Regulations Assessments of lower tier plans, in order for a LPA to ascertain a higher tier plan would not have an adverse effect on the integrity of a European site, only where:
A) The higher tier plan assessment cannot reasonably assess the effects on a European site in a meaningful way; whereas
B) The Habitats Regulations Assessment of the lower tier plan, which will identify more precisely the nature, scale or location of development, and thus its potential effects, will be able to change the proposal if an adverse effect on site integrity cannot be ruled out, because the lower tier plan is free to change the nature and/or scale and/or location of the proposal in order to avoid adverse effects on the integrity of any European site (e.g. it is not constrained by location specific policies in a higher tier plan); and
C) The Habitats Regulations Assessment of the plan or project at the lower tier is required as a matter of law or Government policy" Revised Draft Guidance *The Habitats Regulations Assessment of Local Development Documents* David Tyldesley and Associates for Natural England, February 2009

Wimbledon Common – Northern Atlantic wet heathland and European dry heathland

- 3.2.46 Although not the primary reason for the designation of the site, the heathlands at Wimbledon Common are also of conservation interest and are susceptible to recreational pressure (trampling) and deterioration of air quality.
- 3.2.47 For the reasons identified above and with management plans to safeguard the heaths from trampling, it is not considered that the Core Strategy either alone or in combination with other plan and projects would have a significant effect in terms of recreational pressure.
- 3.2.48 Air pollution poses a risk to heathland habitats through nitrogen deposition and acidification; the major contributor to air pollution is vehicle emissions. Harrow's Air Quality Action Plan (2004) provides policies and proposals, grouped into the following sections, to control air quality in the Borough:
- reducing emissions from vehicles;
 - reducing road traffic;
 - encouraging walking and cycling as means of travel;
 - encouraging development that does not impact upon air quality; and
 - public information and education.
- 3.2.49 The Core Strategy will contribute to the delivery of the Borough's Air Quality Action Plan. The overall spatial strategy would see Harrow's growth focused within the Harrow & Wealdstone Intensification Area, and encourage development outside of the Intensification Area to take place in the Borough's network of district and local centres and on other previously developed sites with good public transport accessibility. One of the objectives of this spatial strategy is to reduce the overall need to travel and to encourage a modal shift from car use (currently dominant) in favour of walking, cycling and public transport. In relation to the impact of development, the Core Strategy also seeks to reduce the impact of development through sustainable design. Policies seek a combined heat and power network within the proposed Harrow & Wealdstone Intensification Area, where the feasibility of such a scheme is proven through the Area Action Plan. The Core Strategy also provides an undertaking that the Development Management Policies DPD and the Area Action Plan will establish local requirements for the sustainable design and construction of buildings.
- 3.2.50 With the mitigation measures identified, the Core Strategy should deliver growth without a corresponding increase in air pollutants. Taken together with the distance from Wimbledon Common it is not considered likely that the Harrow Core Strategy, on its own, would significantly effect the Wimbledon Common heaths.

3.2.51 In terms of 'in combination' effects, the policies and proposals in the London Plan seek an overall reduction in air pollution. By implementing the London Plan, the combined effect of boroughs' LDFs will be to achieve regional air pollution reduction. LDFs covering the areas of European sites will need to build-in specific mitigation measures to control vehicle emissions within the vicinity of the site, informed by the relevant local Habitats Regulations Assessment.

3.2.52 It is therefore concluded that the Core Strategy, on its own and in combination with other plans and projects, would not be likely to lead to significant effects upon the non-primary conservation interest of the Richmond Park and Wimbledon Common Special Areas of Conservation.

Lea Valley and South West London Water Bodies – Gadwell, Shoveler and Bittern habitat

3.2.53 Both the Lea Valley and South West London Water Bodies European sites are identified as wintering habitats for the Gadwell, Shoveler and Bittern bird populations. Both sites are vulnerable to human recreational activity and associated disturbance to nesting birds, the extraction of water and deterioration of water quality. Therefore the principal management techniques are the control of water extraction, in order to safeguard water levels and quality, and control of recreational activity. The Core Strategy would have no direct or indirect impact upon the continuation of these management techniques.

3.2.54 As noted above for Richmond Park and Wimbledon Common, Harrow's Core Strategy provides for housing growth within the Borough *inter alia* to accommodate forecast population growth. The Strategy uses the GLA Revised Mid-Year Estimates (2010) to forecast a population increase of 5,200 to 233,300 by 2031. This is equivalent to 2.3% increase but would lead to an overall increase of 12.8% upon the population of the Borough recorded by the 2001 Census.

3.2.55 The South West London Water Bodies comprise a total area of 830ha and, in addition to their primary function of public water supply, are used recreationally for angling, sailing and bird watching. Lee Valley covers an area of 450ha and is used for a variety of formal and informal recreational activity including athletics, golf, horse riding, ice skating, fishing, cycling, bird watching and camping. Lee Valley is a regional park likely to attract visitors from a wider catchment area than its immediate locality; the possibility that population growth in, Harrow planned for in the preferred option Core Strategy, could lead to additional visitor numbers at Lee Valley cannot therefore be excluded. The South West London Water Bodies provide for more specific, water-focused recreational activity and as the sites are privately owned do not automatically provide general public access;

nevertheless, the possibility of additional visits arising from population growth in Harrow also merits further consideration.

3.2.56 As noted above for Richmond Park and Wimbledon Common, there are within Harrow opportunities for alternative 'access to nature' recreation at Stanmore Common (49ha), Stanmore Country Park (32ha including Forty Acre Pond), Bentley Priory Open Space (66ha including Summerhouse Lake and Boot Pond) and Harrow Weald Common (19ha) (all in the Green Belt). In the surrounding area, within 1-2km of the Borough boundary, there are further such recreational opportunities: Fryent Country Park (100ha) and the Welsh Harp (100ha including the Brent Reservoir) to the south east, Aldenham Country Park (134ha including a 65 acre lake) to the north east and Ruislip Woods & Common (305ha including Ruislip Lido) to the west.

3.2.57 Further a field, major regional park alternatives include Hyde Park (142ha), Regents Park (166ha) and Hampstead Heath (320ha).

3.2.58 The Core Strategy seeks to address such identified open space deficiencies, particularly within the proposed Harrow & Wealdstone Intensification Area, through new provision or re-provision, and through enhancements to the accessibility of existing open space. However it is unlikely that significant new surface water areas for water-based recreational activity will be created.

3.2.59 In view of the modest level of population growth over the plan period, the availability of suitable alternatives within the Borough, just outside of the Borough and within the London region, and the provision made within the Core Strategy to address the open space requirements of occupiers of new development, the number of additional visits to the Lee Valley Regional Park and South West London Water Bodies is unlikely to be substantial. The impact of such additional visits that do occur on the wintering habitats of the Gadwall, Shoveler and Bittern bird species can, it is considered, be controlled by the implementation of suitable management plans and techniques for the surface water areas and supporting marginal habitats of both sites.

3.2.60 The reservoirs at Lea Valley and at the South West London Water Bodies are owned by Thames Water, which serves much of the capital excluding north-west London. Harrow and adjoining parts of north-west London are served by Veolia Water (formerly Three Valleys Water) which sources ground water from a number of locations within its wider operating area, and from rivers (notably the River Thames)⁶. Therefore, population growth in Harrow should have no direct impact on water extraction levels and consequent water quality at the two European sites under consideration here. Nevertheless, it is worth noting that the Core Strategy provides an undertaking that the

⁶ The Plan forecasts the demand/supply balance for water to 2030, assuming no increase in the quantity of water extracted from the environment in line with the Environment Agency's position on water extraction licenses.

Development Management Policies DPD and the Area Action Plan will establish local requirements for the sustainable design and construction of buildings to, inter alia, minimise the use of mains water.

3.2.61 On this evidence it is considered that the likelihood of significant effects arising from the Core Strategy upon these two European sites can be excluded.

3.2.62 It remains, therefore, to consider the 'in combination' effects of other plans and projects.

3.2.63 In terms of recreation pressure, the London Plan Habitats Regulations Assessment screening report (2009) recommends lower tier assessment of the Upper & Lower Lea Valley, Haringey Heartlands and Wood Green Intensification Areas in relation to the Lea Valley and this will inform the relevant LDFs and any specific, local mitigation measures required. In terms of the overall housing growth of London and the south east, the extent of additional visitor pressure will be diluted by the availability of existing and new alternative open spaces provided for in LDF documents, whilst continued on-site management will mitigate the impact of increased visitor numbers upon the winter habitat of the Gadwell, Shoveler and Bittern bird populations.

3.2.64 In terms of water levels and quality, as the reservoirs concerned do not supply Harrow, and will not therefore be affected by the Harrow Core Strategy, there is no need to consider any 'in combination' impacts of other plans and projects.

3.2.65 It is therefore concluded that the Core Strategy, on its own and in combination with other plans and projects, would not be likely to lead to significant effects upon the primary conservation interest of the Lea Valley and South West London Water Bodies Special Protection Areas.

Cross-Cutting Effects – Climate Change

3.2.66 A cross cutting issue affecting all sites is that of climate change. UK climate change projections, for London, forecast an increase in mean summer temperature of 2.7 degrees, an increase in mean winter rainfall of 15 per cent and a decrease in mean summer rainfall of 18 per cent over a 1961-1990 baseline⁷. In short, the capital is likely to experience hotter, drier summers and mild, wetter winters.

3.2.67 There are a range of potential direct consequences for these European sites: drier summers could see increased demand for water extraction at the South West London Water Bodies and Lea Valley, could dry the decaying timber habitat of the stag beetle, or lead to

⁷ The London Plan (2011)

increased incident of woodland and heathland fires. Wetter winters could lead to increased incidence of flooding at European sites. As temperatures and climate conditions change, the ability of species to find appropriate alternative habitats is likely to be prevented by urban barriers and fragmentation of natural spaces in London, whilst adaptation to new environmental conditions could be impeded by the pace of climate changes.

3.2.68 It is now generally accepted that climate change is inevitable, but that there remains scope to manage the degree of change and to mitigate some of the environmental consequences. Chapter 5 of the London Plan (2011) contains policies to tackle climate change and its effects, including a target to reduce London's carbon dioxide emissions by 60% (below 1990 levels) by 2025, a requirement for new development to follow the energy hierarchy, and a requirement for LDFs to include policies on sustainable building design.

3.2.69 The spatial strategy promoted in the Core Strategy would direct growth to the central part of the Borough with the highest public transport accessibility levels, and to other centres/locations well served by public transport. Higher density development would be encouraged within these areas, commensurate with the degree of accessibility and other considerations, to ensure that growth can be accommodated in a way that reduces the need to travel and encourages more sustainable modes of transport. Such a strategy, encouraging high density and mixed uses, would increase the feasibility of local heat & power networks (to be tested through the Area Action Plan). The Core Strategy also provides an undertaking to bring forward policies in other DPDs to promote sustainable building methods to reduce the need for energy, increase the efficiency of energy used and to promote the use of renewable energy. In these ways the Core Strategy will contribute to the London Plan (2011) target to reduce London's carbon dioxide emissions.

3.2.70 In terms of the consequences of climate change upon development, the principal risks in Harrow are the urban heat island effect (as a result of warmer summers) and flooding (as a result of wetter winters). The Core Strategy seeks to safeguard and promote open space, *inter alia*, as an environmental resource for natural drainage and to counter the urban heat island effect. The Overarching Policy (Core Policy CS1) details specific policy provisions relating to climate change and sustainable food risk management. In these ways the Core Strategy will contribute to the mitigation of climate change consequences upon the built environment.

Findings of AA task 1: assessment of likely significant effects

3.2.71 This Habitats Regulations Assessment has considered the potential reach of Harrow's Core Strategy in relation to European sites and has identified four sites at or within 15km distance of the Borough

boundary. Three of the sites are at the threshold of 15km, the fourth site is 12.5km away.

3.2.72 The Harrow Core Strategy provides the spatial strategy for reconciling forecast population growth with economic development, social equity and environmental protection. It provides for housing growth of at least 6,050 new homes over the period 2009 to 2026, alongside an increase in employment of 3,000 jobs within the proposed Harrow & Wealdstone Intensification Area (and 4,000 jobs across the Borough as a whole), an expansion of 26,500m² retail floorspace, as well as office, hotel and leisure development. The Strategy seeks to accommodate much of the growth within a central Intensification Area covering Harrow town centre, Wealdstone district centre and the Station Road 'corridor' which links the two centres. However development activity will also take place elsewhere in the Borough, notably within the network of district and local centres and on other, previously developed sites that are well served by public transport. Open space will be protected, maintained and enhanced to form an integrated grid of green infrastructure. New development will be required to achieve higher environmental standards and will be designed to mitigate the anticipated effects of climate change.

3.2.73 The Core Strategy has been assessed for possible impacts on the identified European sites. Taking into account the mitigation measures built into the Strategy (and into the higher level London Plan, which will influence other boroughs' plans and projects) and established conservation & management techniques at European sites, it is concluded that the Core Strategy would not have an adverse impact on the integrity of any European site. This conclusion has been reached having regard to the conservation objectives of the sites concerned and their vulnerabilities which comprise visitor pressure, water consumption and water quality, and - as a cross-cutting issue - climate change.

3.2.74 The Core Strategy's constituent policies have been assessed and this supports the finding of no adverse impact upon the integrity of any European site (see **Appendix B**).

3.2.75 It is therefore not necessary to progress beyond AA task 1 (screening) to full appropriate assessment of the plan.

4.3 AA task 2: appropriate assessment and effect on site integrity

4.3.1 Not required – see above.

4.4 AA task 3: mitigation measures and alternative solutions

4.4.1 Not required – see above.

Sources of Information

LB Brent Habitats Regulations Assessment of the Core Strategy DPD
Proposed Submission Version (2009)

Natura 2000 Standard Data Forms (for the sites referred to)

Joint Nature Conservation Committee website (<http://www.jncc.gov.uk>)

Habitats Regulations Assessment for the Lee Valley Park Development
Framework published November 2009 (UE Associates for Lee Valley
Regional Park Authority)

Habitats Regulations Assessment screening report for the Consultation Draft
Replacement London Plan (2009) ERM Limited for the Greater London
Authority

Appendix A: Summary of Harrow Core Strategy Habitats Regulations Assessment

Site	Qualifying Features (species and habitats)	Primary Qualifying Feature?	Key environmental conditions to support site integrity	Possible impacts from the Core Strategy	Is there a risk of a significant effect from the Core Strategy alone?	Possible impacts in combination with other plans or projects	Is there a significant effect in combination with other plans or projects?
Richmond Park	Stag Beetle	Y	Maintain decaying timber habitat	No direct impact on woodland management to maintain decaying timber habitats	N/A	No direct impact on woodland management to maintain decaying timber habitats	N/A
			Manage visitor wear and tear upon habitat	Potential increase in visitor numbers to Richmond Park and associated wear and tear upon woodland habitat	Unlikely	Potential for 'in combination' increase in visitor numbers to Richmond Park and associated wear and tear upon woodland habitat	Unlikely
			Maintain	Potential to increase	Unlikely	Potential for 'in	Unlikely

			favourable climatic conditions	Borough's carbon dioxide output and contribute to climate extremes		combination' increase in London's carbon dioxide output and contribution to climate change extremes	
Wimbledon Common	Stag Beetle	Y	Maintain decaying timber habitat	No direct impact on woodland management to maintain decaying timber habitats	N/A	No direct impact on woodland management to maintain decaying timber habitats	N/A
			Manage visitor disturbance to habitat	Potential increase in visitor numbers to Wimbledon Common and associated wear and tear upon woodland habitat	Unlikely	Potential for 'in combination' increase in visitor numbers to Wimbledon Common and associated wear and tear upon woodland habitat	Unlikely
			Maintain	Potential to increase	Unlikely	Potential for 'in	Unlikely

			favourable climatic conditions	Borough's carbon dioxide output and contribute to climate extremes		combination' increase in London's carbon dioxide output and contribution to climate change extremes	
	Wet and dry heath	N	Maintain/improve air quality	Potential to increase Borough's output of nitrogen dioxide and particulates	Unlikely	Potential for 'in combination' increase in London's output of nitrogen dioxide and particulates	Unlikely
			Maintain favourable climatic conditions	Potential to increase Borough's carbon dioxide output and therefore contribute to climate extremes	Unlikely	Potential for 'in combination' increase in London's carbon dioxide output and contribution to climate change extremes	Unlikely
Lee Valley	Wintering birds –	Y	Maintain water levels and	Potential to increase water extraction and	No	Potential for 'in combination'	No

	Bittern, Shoveler and Gadwell		water quality	therefore contribute to reduced water levels and eutrophication		increase in water extraction and therefore to contribute to reduced water levels and eutrophication	
			Manage visitor disturbance to habitat	Potential increase in visitor numbers to Lee Valley regional park and associated disturbance to nesting birds	Unlikely	Potential for 'in combination' increase in visitor numbers to Lee Valley regional park and associated disturbance to nesting birds	Unlikely
			Maintain favourable climatic conditions	Potential to increase Borough's carbon dioxide output and therefore contribute to climate extremes	Unlikely	Potential for 'in combination' increase in London's carbon dioxide output and therefore contribute to climate extremes	Unlikely

South-West London Waterbodies	Wintering birds – Bittern & Shoveler	Y	Maintain water level and water quality	Potential to increase water extraction and therefore contribute to reduced water levels and eutrophication	Unlikely	Potential for 'in combination' increase in water extraction and therefore contribute to reduced water levels and eutrophication	Unlikely
			Manage visitor disturbance to habitat	Potential increase recreational use of water bodies and associated disturbance to nesting birds	Unlikely	Potential for 'in combination' increase in recreational use of water bodies and associated disturbance to nesting birds	Unlikely
			Maintain favourable climatic conditions	Potential to increase Borough's carbon dioxide output and therefore contribute to climate extremes	Unlikely	Potential for 'in combination' increase in London's carbon dioxide output and contribution to climate change extremes	Unlikely

Appendix B: Harrow Pre-Submission Core Strategy Policy Analysis

Core Strategy	Summary of Principal Policy Elements	Impact on European sites
Core Policy 1: Overarching Policy	This policy gives effect to the spatial vision by directing major growth to the Harrow & Wealdstone Intensification Area and seeking to manage growth throughout the rest of the Borough. It goes on to establish the overarching principles that will apply throughout the rest of the Borough: the protection and enhancement of open space; provision for housing to meet residents' needs; the protection of local character including gardens; strengthening the role of town centres; promotion of economic development; management of development and parking to achieve a modal shift away from private car use; a basis for more detailed sustainable design and construction policies in other DPDs; the management of development to reduce flood risk and increase resilience; the sustainable management of waste; the provision of criteria the selection of Gypsy & Traveller sites; and the provision of critical infrastructure needed to support the spatial strategy.	<p><u>Housing and Recreational Pressure</u>: By giving effect to the spatial strategy the policy will secure the delivery of the Borough's share of London's growth and, in so doing, contribute to the strategic distribution of growth throughout the capital in a way which helps to manage pressure around European sites. By providing for housing growth and green infrastructure within the Borough, the policy will help to limit recreational pressure on European sites.</p> <p><u>Mitigating Climate Change</u>: By providing for retail leisure and employment growth in the Borough that helps to meet residents' needs without the need to travel, by matching development to public transport accessibility, by supporting the sustainable design and construction of buildings, and by seeking to achieve a modal shift away from car use, the policy will help to manage the Borough's contribution to climate change.</p>
Core Policy 2: Harrow & Wealdstone Intensification Area	This policy undertakes to allocate sites to deliver at least 2,800 homes across the Intensification Area and promotes other forms of development to deliver the objective to create up to 3,000 new jobs. It undertakes to consider the consolidation of the Wealdstone Strategic Industrial Location through the	<u>Housing and Recreational Pressure</u> : The Intensification Area is a central component of Harrow's spatial strategy for accommodating growth within the Borough, and in so doing will give a strong direction for housing growth to take place away from European sites and will help to avoid placing

	<p>Area Action Plan for the Intensification Area, taking account of assessments for industrial land and strategic objectives for the Area. The policy promotes a consolidated local office market and additional retail floorspace within Harrow town centre. Subject to viability testing through the Area Action Plan, it seeks a district-wide combined heat and power network for the area and to make the public realm more attractive to pedestrians and cyclists, as well as accessibility and qualitative improvements to Harrow town centre's bus and Underground station. Provisions for green travel planning, on-street electric car charging points and contributions to improve the quality and accessibility of public open space are also made in the policy.</p>	<p>additional housing and recreational pressure on other parts of London.</p> <p><u>Mitigating Climate Change:</u> It also provides for a mix of uses in the Area to serve the employment, retail and recreational needs of future residents without the need to travel by unsustainable modes. The Intensification Area coincides with the Borough's area of highest public transport accessibility and, alongside the management of parking provision with new development, will contribute to achieving a modal shift away from the car for journeys outside of the Intensification Area. Together, these policy provisions will help to minimise transport-related emissions associated with growth and therefore manage the Borough's contribution to climate change.</p>
Core Policy 3: Harrow-on-the-Hill and Sudbury Hill	<p>This policy undertakes to accommodate at least 300 homes through the redevelopment of identified, previously developed sites within the sub area. It also seeks appropriate mixed-use redevelopment of employment sites for economic diversification and employment generating uses. Opportunities to improve connectivity between the Capital Ring strategic walking group and the Borough's emerging Green Grid are sought.</p>	<p><u>Housing and Recreational Pressure:</u> As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.</p>
Core Policy 4: South Harrow	<p>This policy undertakes to accommodate at least 406 homes through the redevelopment of identified, previously developed sites within the sub area. It also makes provision for improvements to Newton</p>	<p><u>Housing and Recreational Pressure:</u> As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid</p>

	Park and Newton Farm Ecology Park which enhance community access to these areas of natural and semi-natural greenspace, and seeks opportunities to achieve appropriate public access as part of river restoration.	placing additional pressure on other parts of London. Provision for improvements to local natural and semi-natural greenspaces, and access to river corridors, will help to limit increased recreational pressure on European sites.
Core Policy 5: Rayners Lane and North Harrow	This policy undertakes to accommodate at least 425 homes through the redevelopment of identified, previously developed sites within the sub area and provides for mixed use redevelopment including retail and office rejuvenation with the Rayners Lane district centre. It also makes provision for local public rights of way to be safeguarded and enhanced as part of the Borough's Green Grid.	<u>Housing and Recreational Pressure</u> : As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.
Policy 6: Pinner and Hatch End	This policy undertakes to accommodate at least 161 homes through the redevelopment of identified, previously developed sites within the sub area. It also makes provision to maintain and enhance public access to and the biodiversity of watercourses which flow through the area, as part of the Borough's Green Grid.	<u>Housing and Recreational Pressure</u> : As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.
Policy 7: Stanmore and Harrow Weald	This policy undertakes to accommodate at least 712 homes through the redevelopment of identified, previously developed sites within the sub area. It also seeks appropriate mixed-use redevelopment in Stanmore district centre. Opportunities to improve connectivity between the London Loop strategic	<u>Housing and Recreational Pressure</u> : As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally

	walking group and the Borough's Green Grid are sought.	accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.
Policy 8: Edgware and Burnt Oak	This policy undertakes to accommodate at least 1,229 homes through the redevelopment of identified, previously developed sites within the sub area. It also makes provision for river restoration and deculverting projects as part of new development, where these would achieve integrated flood management, biodiversity and public access benefits as part of the Borough's Green Grid.	<u>Housing and Recreational Pressure</u> : As part of the spatial strategy for managed change outside of the Intensification Area, the policy provides for the accommodation of housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally accessible open space, through the Green Grid, and river restoration will help to limit increased recreational pressure on European sites.
Policy 9: Kingsbury and Queensbury	This policy undertakes to accommodate at least 25 homes through the redevelopment of identified, previously developed sites within the sub area. It also makes provision to maintain and enhance public access to and the biodiversity of watercourses which flow through the area, as part of the Borough's Green Grid.	<u>Housing and Recreational Pressure</u> : Although no major development sites are identified in the sub area, the policy provides for windfall housing sites that may come forward within the area's district and local centres. In so doing, it provides for housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected network of locally accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.
Policy 10: Kenton and Belmont Circle	This policy undertakes to accommodate at least 20 homes through the redevelopment of identified, previously developed sites within the sub area. It also makes provision for improvements to the Belmont trail walking route to help connect the area's green spaces with others, as part of the Borough's Green Grid.	<u>Housing and Recreational Pressure</u> : Although no major development sites are identified in the sub area, the policy provides for windfall housing sites that may come forward within the area's district and local centres. In so doing, it provides for housing growth that would avoid placing additional pressure on other parts of London. Provision for an interconnected

		network of locally accessible open space, through the Green Grid, will help to limit increased recreational pressure on European sites.
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