

*Working towards...  
The Spelthorne Local Development Framework*

# Spelthorne Development Plan Core Strategy and Policies DPD Allocations DPD

## Appropriate Assessment Draft Screening Opinion



April 2007



**Spelthorne Development Plan  
Core Strategy and Policies DPD  
Allocations DPD**

**Appropriate Assessment  
Draft Screening Opinion**

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## List of Abbreviations

AA	Appropriate Assessment
DPD	Development Plan Document
SAC	Special Area of Conservation
SNCI	Site of Nature Conservation Importance
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

## Summary

In October 2005, the European Court of Justice ruled that land-use plans should be subject to an “Appropriate Assessment” of their implications for European Sites, which are nature conservation sites designated as Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), as well as species outlined in Regulation 10 of the Habitats Regulations 1994. This ruling was communicated to Chief Planning Officers in a letter from the ODPM in March 2006.

The purpose of an Appropriate Assessment is to assess the impacts of a land-use plan against the conservation objectives of a European Site. The assessment must determine whether the plan would significantly affect the integrity of the site in terms of its nature conservation objectives. Where negative effects are identified other options should be examined to avoid any potential damaging effects.

This appropriate assessment tests whether Spelthorne’s Core Strategy and Policies DPD and Allocations DPD are likely, on their own, in combination with other plans and projects, to have a significant effect on the integrity of any Special Area of Conservation (SAC) for habitats, or Special Protection Area (SPA) for birds, jointly known as Natura 2000 sites and any Ramsar site.

Spelthorne’s Core Strategy seeks to provide for the SE Regional Plan allocation of 3020 new dwellings to be built by 2026 (average 151 dwellings per year) all within existing urban areas. Employment development would be achieved by redevelopment of existing commercial and employment locations.

An initial list was prepared of possible impacts that the core strategy could have on the European sites. It was possible to conclude at an early stage that the Plan would have no significant affect on integrity of most of the sites identified and these be could ‘screened out’ at an early stage of the assessment. This was mainly because the sites were too far away from Spelthorne Borough Council’s boundaries to be affected by any potential impacts arising from the plan. This initial screening left only the South West London Waterbodies to be considered in more detail: The whole process was subject to consultation with Natural England

The screening process went on to consider in more detail the effects of the Core Strategy and Policies DPD and the Allocations DPD, on the South West London Waterbodies SPA and Ramsar together with any effects on the non-SPA sites which support the integrity of the SPA.

The Appropriate Assessment “screening opinion” concludes that the Spelthorne Development Plan – Core Strategy and Policies DPD and the Allocations DPD will have no significant effect on any European Natura 2000 site and that any further appraisal to consider adverse impacts is not required.



# 1. Introduction

## Requirements of the Habitats Directive

- 1.1 The European Community Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) (commonly known as the “Habitats Directive”) provides legal protection for habitats and species of European importance. Article 2 of the Directive requires maintenance or restoration of habitats and species of European Community (EC) interest, at a favourable conservation status. Articles 3-9 provide the legal means to protect habitats and species of EC interest through the establishment and conservation of a European wide network of sites known as Natura 2000. This network includes Special Areas of Conservation (SAC) designated under the Habitats Directive and Special Protection Areas (SPA) designated under the conservation of wild birds directive (79/409/EEC) (commonly referred to as the Birds Directive)
- 1.2 Appropriate Assessment of plans that could affect Special Protection Areas for birds (SPAs) or Special Areas of Conservation for habitats (SACs) is required by Article 6(3) of the European Habitats Directive<sup>1</sup>:

*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall 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 having obtained the opinion of the general public.*

- 1.3 Article 6(4) of the Habitats Directive goes on to discuss alternative solutions, the test of “imperative reasons of overriding public interest” (IROPI) and compensatory measures:

*If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

- 1.4 The Habitats Directive applies the precautionary principle to SPAs and SACs (‘European sites’). Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the site(s) in question. Plans and projects may still be permitted if there are no alternatives to them and there are imperative reasons of overriding public interest as to why they should go ahead. In such cases, compensation will be necessary to ensure the overall integrity of the site network.

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<sup>1</sup> Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora

- 1.5 The aims of the European legislation are transposed into UK law in the Habitats Regulations 2006. In particular, Regulation 48(1) makes clear that if a plan or project is likely to have a significant effect on a European site, either alone or in combination with other plans or projects, and is not directly connected with the management of the site, the competent authority shall undertake an appropriate assessment of the site in view of its conservation objectives.
- 1.6 Although the Regulations do not define “the integrity of the site”, paragraph 20 of Circular 06/2005 (Biodiversity and Geological conservation) defines it as the coherence of its 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 the species for which it was classified.

### **Methodology used for this Appropriate Assessment**

- 1.7 The DCLG published draft guidance on AA for plans in July 2006 but has yet to publish a final document. Further draft guidance on AA for Regional Spatial Strategies (*The Assessment of Regional Spatial Strategies and Sub-Regional Strategies under the Provisions of the Habitats Regulations*) was prepared for Natural England by David Tyldesley and Associates in August 2006. The methodology used in this report is consistent with that used for the AA of the South East Plan, and generally follows guidance set out in the document: - “*Appropriate Assessment of Plans*” published by Scott Wilson, Levett-Therival Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants, in September 2006.
- 1.8 Guidance on Appropriate Assessment (AA) suggests a process of up to four stages:
- 1) Screening. Determining whether the plan on its own or ‘in combination’ is likely to have a significant effect on a European site
  - 2) Appropriate Assessment. Determining whether, in view of a site’s conservation objectives, the plan on its own or ‘in combination’ would have an adverse effect (or risk of this) on the integrity of the site. If not, the plan can proceed.
  - 3) Assessment of alternative solutions. Where the plan is assessed as having an adverse effect (or risk of this) on the integrity of a site, there should be an examination of alternatives.
  - 4) Assessment where no alternative solutions remain and where adverse impacts remain
- 1.9 This screening opinion covers Stages 1 and 2 of this process. Where a site cannot be clearly screened out in Stage 1 further more detailed information may be required to determine whether any significant effects exist and then whether there would be any adverse effect on integrity. In practice Stage 2 continues the screening process and additional detailed information may help confirm that a site can be “screened out” as having no significant effect, so that formal “Appropriate Assessment” is not required. The two stages have been carried out in an iterative manner between November 2006 and March 2007. Broadly the process has involved:
- Identification of European sites that could possibly be affected by Spelthorne’s core strategy, qualifying features of those sites and key environmental conditions to support the sites’ integrity.

- Identification of possible impacts on the sites arising from the Spelthorne Development Plan - Core Strategy and Policies DPD and Allocations DPD.
- Identification of trends and any “in combination effects”.
- Identification of impacts and sites that could be screened out.
- Early discussions with Natural England to confirm that the proposed approach to the screening opinion was acceptable, and to identify additional information needed to complete the process;
- Collection of more detailed data from various sources;
- Conclusions about the likely impacts of Spelthorne’s Core Strategy and Policies DPD and Allocations DPD and any “in combination” effects on the European sites identified.
- Preparation of a draft screening opinion and report,
- Further consultation with Natural England and other relevant organisations



## 2. Identification of European Sites

2.1 The first stage in the screening process is the identification of European sites which the proposed Core Strategy and Policies DPD and Allocations DPD could affect. In theory it is necessary to consider the effect of the plan on all European Natura 2000 sites, however the core strategy is based on compliance with the development levels proposed within the draft South East Plan which has been subject to a separate Appropriate Assessment. The core strategy has been prepared to be in general conformity with the draft South East Plan and there are accordingly no policies or allocations in the DPDs which would have a greater impact than anything proposed within the SE Plan. For this reason this screening process considers more localised impacts. Taking a precautionary principle, all European sites within the Borough or within 15 kilometres of the Borough boundary were identified for consideration of significant effects. This represents a reasonable maximum distance over which to consider the possible impacts of the Plan and includes the following sites, as shown on Map 1:-

- South West London Waterbodies SPA/Ramsar: important over wintering site for Gadwall and Shoveler
- Burnham Beeches SAC: beech forests with rich lichen communities
- Windsor Forest and Great Park SAC: beech forests with rich lichen communities
- Thames Basin Heaths SPA: lowland heath with important populations of Nightjar, Dartford Warbler and Woodlark.
- Thursley, Ash, Pirbright and Chobham SAC, lowland heaths
- Mole Gap to Reigate Escarpment SAC: calcareous grassland important for its box scrub
- Wimbledon Common SAC; important site for stag beetle
- Richmond Park SAC: important site for stag beetle

2.2 Data was collected and analysed for each of these European sites and included listing the qualifying features and the key environmental conditions. These are set out in Table 1. Further details of each site as set out in the Natura 2000 Standard Data Forms taken from the JNCC web site ([www.jncc.gov.uk](http://www.jncc.gov.uk)). Following early discussion with Natural England it was agreed that the assessment of the South West London Waterbodies SPA and Ramsar site needed to include a number of other waterbodies which, although not formally designated, support the integrity of the whole SPA. More discussion on this aspect of the assessment is set out in Section 6.



Table 1 Site analysis of potential qualifying Natura 2000 sites

Name and Location	Site Area (ha)	Distance from Borough boundary	Qualifying features	Comments on nature conservation importance	Key environmental conditions to support site integrity
South West London Waterbodies SPA LB Hounslow Surrey CC Elmbridge Spelthorne Runnymede	828.14	Within Borough	<ul style="list-style-type: none"> <li>Internationally important wintering population of:-</li> <li><i>Anas clypeata</i> (Northern shoveler) and</li> <li><i>Anas strepera</i> (Gadwall)</li> </ul>	<ul style="list-style-type: none"> <li>Current research indicates that birds are using a range of waterbodies within the area but outside the SPA boundaries and that these sites are relevant to the integrity of the SPA</li> </ul>	<ul style="list-style-type: none"> <li>Lack of disturbance during winter months</li> <li>Areas of open water</li> <li>Areas of shallow water (&lt;300mm) for feeding</li> <li>Presence and abundance of aquatic plant food</li> <li>Presence and abundance of aquatic invertebrate food</li> <li>Adjacent banks for loafing</li> <li>Relevant nearby waterbodies used for feeding and as refuges</li> </ul>

Name and Location	Site Area (ha)	Distance from Borough boundary	Qualifying features	Comments on nature conservation importance	Key environmental conditions to support site integrity
South West London Waterbodies Ramsar	828.14	Within Borough	<ul style="list-style-type: none"> <li>Internationally important wintering population of:-</li> <li><i>Anas clypeata</i> (Northern shoveler) and</li> <li><i>Anas strepera</i> (Gadwall)</li> </ul>	<ul style="list-style-type: none"> <li>Current research indicates that birds are using a range of waterbodies within the area but outside the SPA boundaries and that these sites are relevant to the integrity of the SPA</li> </ul>	<ul style="list-style-type: none"> <li>Lack of disturbance during winter months</li> <li>Areas of open water</li> <li>Areas of shallow water(&lt;300mm) for feeding</li> <li>Presence and abundance of aquatic plant food</li> <li>Presence and abundance of aquatic invertebrate food</li> <li>Adjacent banks for loafing</li> <li>Relevant nearby waterbodies used for feeding and as refuges</li> </ul>
Burnham Beeches SAC South Bucks DC	382.76	Approx 12km	<ul style="list-style-type: none"> <li>Beech forests on acid soils</li> </ul>	<ul style="list-style-type: none"> <li>Wood pasture with veteran trees</li> <li>One of the richest sites for saproxylic invertebrates in the UK including 14 Red Data Book species</li> <li>Nationally important epiphytic communities</li> </ul>	<ul style="list-style-type: none"> <li>Minimal atmospheric pollution – may increase the susceptibility of beech trees to disease and alter epiphytic communities.</li> <li>Restricted public access (extensive public access may compromise ability to retain falling timber associated with old trees).</li> <li>Maintenance of an adequate and stable hydrological system</li> </ul>

Name and Location	Site Area (ha)	Distance from Borough boundary	Qualifying features	Comments on nature conservation importance	Key environmental conditions to support site integrity
Windsor Forest and Great Park SAC  Bracknell Forest, Windsor and Maidenhead, and Surrey	1687.26	Approx 5km	<ul style="list-style-type: none"> <li>• Dry oak-dominated woodland</li> <li>• Beech forests on acid soils</li> <li>• Violet click beetle</li> </ul>	<ul style="list-style-type: none"> <li>• Site has the largest number of veteran oaks in Britain (and probably in Europe). Identified as of potential international importance for its saproxylic (deadwood) invertebrate fauna. The site is thought to support the largest of the known populations of violet click beetle in the UK.</li> <li>• The special invertebrate interest is heavily dependent upon a continuous supply of very old and decaying trees. Trees are suffering, perhaps from combination of drought, higher average temperatures and air quality issues.</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal atmospheric pollution – may increase susceptibility of beech trees to disease and alter epiphytic (lichen) communities.</li> <li>• Managed public access</li> <li>• Appropriate management</li> </ul>
Thames Basin Heaths SPA	•	Approx 6km (nearest part)	<ul style="list-style-type: none"> <li>• Populations of European importance of the following species</li> <li>• Dartford warbler</li> <li>• Nightjar</li> <li>• Woodlark</li> </ul>	<ul style="list-style-type: none"> <li>• Site supports the 2<sup>nd</sup> largest population of Dartford warbler, the 3<sup>rd</sup> largest population of woodlark and the 4<sup>th</sup> largest population of nightjar.</li> </ul>	<ul style="list-style-type: none"> <li>• Acid soils</li> <li>• Minimal air pollution</li> <li>• Unpolluted water</li> <li>• Unfragmented habitat</li> <li>• Minimal recreation pressure and low incidence of wild fires</li> <li>• Appropriate grazing pressure</li> </ul>

Name and Location	Site Area (ha)	Distance from Borough boundary	Qualifying features	Comments on nature conservation importance	Key environmental conditions to support site integrity
Thursley Ash Pribright and Chobham SAC Surrey	5138.00	Approx 6km (nearest part)	<ul style="list-style-type: none"> <li>• Wet Heathland with cross leaved heather</li> <li>• Dry Heaths</li> <li>• Depressions on wet peat substrates</li> </ul>	<ul style="list-style-type: none"> <li>• Important site for invertebrates</li> </ul>	<ul style="list-style-type: none"> <li>• Traditional management; including grazing, bracken control and shrub clearance.</li> <li>• Water levels</li> <li>• Managed recreational disturbance</li> <li>• Absence or management of urbanization effects eg fires, fly tipping, introduction of non-native species.</li> <li>• Minimal atmospheric or direct pollution (nitrogen deposition can affect heathland habitats)</li> <li>• Water quality (there can be problems with diffuse discharges from agricultural fertilization causing eutrophication)</li> </ul>
Mole Gap to Reigate Escarpment SAC Mole Valley Surrey	887.68	Approx 14km	<ul style="list-style-type: none"> <li>• Natural box scrub</li> <li>• Dry grasslands and scrublands on chalk or limestone</li> <li>• Dry grasslands and scrublands on chalk or limestone, including important orchid sites</li> <li>• Yew-dominated woodland</li> <li>• Dry heaths</li> <li>• Beech forests on neutral to rich soils</li> <li>• Great crested newt</li> <li>• Bechtstein's bat</li> </ul>	<ul style="list-style-type: none"> <li>• Supports the only area of stable scrub in the UK (due to natural erosion on steep slope).</li> <li>• Also supports a wide range of calcareous grassland types and is particularly important for orchids including the nationally scarce musk orchid and man orchid.</li> <li>• Also significant in exhibiting transitions to scarce scrub, woodland and dry heath types, notably yew woods and chalk heath.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate management grazing.</li> <li>• Absence of direct fertilization.</li> <li>• Minimal air pollution.</li> <li>• Low recreational pressure.</li> <li>• Absence of urbanization effects, e.g. introduction of invasive nonnative species.</li> <li>• Suitable foraging and refuge habitat within 500m of the pond.</li> <li>• Relatively unpolluted water of roughly neutral pH.</li> <li>• Some ponds deep enough to retain water throughout February to August at least one year in every three.</li> <li>• In a wider context, great crested newts require good connectivity of landscape features (ponds, hedges etc) as they often live as a metapopulation.</li> <li>• In a wider context, bats require good connectivity of landscape features to allow foraging and commuting. to ponds and rivers outside the SAC</li> <li>• Undisturbed bat roost sites</li> </ul>

Name and Location	Site Area (ha)	Distance from Borough boundary	Qualifying features	Comments on nature conservation importance	Key environmental conditions to support site integrity
Wimbledon Common SAC	348.31	Approx 9km	<ul style="list-style-type: none"> <li>• Stag Beetle (Lucanus cervus)</li> <li>• North Atlantic wet heaths</li> <li>• European dry heaths</li> </ul>	<ul style="list-style-type: none"> <li>• Site is at the heart of the South London centre of distribution for stag beetle.</li> <li>• The site supports a number of other scarce invertebrate species associated with decaying timber</li> </ul>	<ul style="list-style-type: none"> <li>• Large number of old trees and fallen decaying timber</li> </ul>
Richmond Park SAC	•	Approx 7km	<ul style="list-style-type: none"> <li>• Stag Beetle (Lucanus cervus)</li> </ul>	<ul style="list-style-type: none"> <li>• Site is at the heart of the South London centre of distribution for stag beetle.</li> <li>• The site is of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees.</li> </ul>	<ul style="list-style-type: none"> <li>• Ancient trees with decaying timber</li> </ul>



### 3. Spelthorne Development Plan Documents

- 3.1 Spelthorne lies approximately 15 miles south west of Central London and is a densely populated District with an area of 5,116 ha and a population of 89,000 (2001 Census). It is bounded by Heathrow Airport to the north, the River Thames to the south and London Boroughs to the east, while the M25 runs close to its western boundary. Its main towns are Ashford, Shepperton, Staines, Stanwell and Sunbury. The Council is currently preparing two Development Plan Documents (DPDs): a Core Strategy and Policies DPD and an Allocations DPD. Except where explicitly stated the process of assessment is based on the overall effects of both DPDs and reference to the “Plan” throughout this report should generally be taken as reference to both documents.

#### Core Strategy and Policies DPD

- 3.2 The overall vision for the Plan is as follows:

“By 2026 Spelthorne will have become a more sustainable place to live and work, the economic and social needs of all residents will be met and the environment will have been successfully protected and where possible enhanced.

There will be an appropriate mix of housing to meet need including more affordable housing and more accommodation for an increasingly ageing population.

The significant flood risks affecting people and property will have been reduced.

Further development will have been confined to the urban area and contributed to its improvement and be sustainable. The Green Belt and other open land will have been maintained and where appropriate enhanced.

Uses with the potential to generate large amounts of traffic will have been located in town and other centres and locations accessible by non-car based travel. Use of non-car based travel will have increased and contributed to reducing congestion and resulted in improved air quality – which in Spelthorne is primarily traffic related.

The economy will be strong with the overall amount of business space maintained and renewed as required to meet business needs and accessible to people and who will be better trained.

Staines will have continued to develop its role as a major shopping centre and location for related services meeting the needs of this part of North Surrey. The other centres of Ashford, Shepperton and Sunbury and other local centres and larger parades will have maintained their role in providing local shopping and other services.

Recycling and renewable energy generation will have significantly increased and contributed to a reduction in the generation of CO<sub>2</sub> and account generally has been taken of the implications of climate change.

The historic and natural environment of the Borough will be in as good a condition as now or better.”

3.3 In order to deliver this overall vision the Plan sets out 21 objectives. In broad terms the Core Strategy and Policies DPD seeks to:-

- Locate all new development within existing urban areas, focussing development that may generate large amounts of traffic in places that are accessible by a choice of travel modes. The strategy seeks to maintain the existing area of Green Belt and make effective use of existing urban land while avoiding unacceptable flood risks.
- Ensure the provision of sufficient housing to meet the allocation to Spelthorne under the draft South East Plan and also to ensure that, within the overall total, the differing housing needs of all sections of the community are met. The Plan provides for an additional 3020 dwellings over the period 2006 to 2026 (an average of 151 dwellings per annum) primarily through the redevelopment of previously developed land.
- Maintain the employment capacity of the Spelthorne economy taking into account anticipated trends in employment demand and labour supply. New employment development will be concentrated in Staines Town Centre, other local centres and in designated existing employment areas. There are no allocations for new employment development sites. A number of older and poorly located employment sites will be redeveloped for housing over the plan period.
- Provide for the continued development of Staines as Spelthorne's principal town centre, while maintaining the role of Ashford, Shepperton and Sunbury Cross as local centres and also maintaining the role of smaller parades in serving their local neighbourhood. Commercial development will not take place outside the defined commercial or town centre boundaries.
- Ensure that development provision meets the needs of all sections of the community and that new development which adds to requirements for infrastructure and services will be expected to contribute to necessary improvements.
- Maintain and improve the quality of the environment, improve air quality and ensure that new development makes a positive contribution to the environment and biodiversity.
- Reduce the impact of climate change through providing development in a way that seeks to minimise additional travel, recognising that transport is a major contributor to global warming, and through containing the use of energy in development and reducing waste. It also aims to take account of the likely future impacts of climate change.

3.4 Overall the main changes over the Plan period are likely to be:-

- Redevelopment of existing urban sites to provide for additional housing, employment, retail, community and leisure needs.
- Avoiding development in high risk areas of flooding and ensuring that all development makes a positive contribution to reducing the risks of flooding.
- A degree of greater urbanisation with increased densities of development within the existing urban areas.
- A greater number of small (1 and 2 bedroom) dwellings
- A small decrease (2.7%) in the total population over the period 2006 to 2026 to a total of 87,000 but a 6.0% increase in total households, reflecting the trend to a smaller average household size.
- A significant 33% increase in one person households.

- An increase in the over 50s population with a significant 105% increase in the number of people in the 85+ age group over the Plan period.
- A fall in the numbers of those of school age.
- No net additional traffic movements arising from new housing development proposed in the Plan.
- General improvements in air quality.
- Safeguarding existing open space, both formal and semi natural, to provide for existing and any increased local demand for recreational facilities and providing additional provision where necessary to meet any deficiencies.
- Increased demand for water resources.

### **Allocations DPD**

- 3.5 The Council has prepared an Allocations DPD which follows from the core strategy and sets out details of specific sites larger than 0.4 ha which, over the plan period, will deliver an additional 624 dwellings as part of the overall requirement of the 3020 dwellings required in the period between 2006 and 2026. All of the residential allocations comprise previously developed land and consist primarily of poorly located commercial sites.
- 3.6 The Allocations DPD also identifies sites for commercial and mixed use development, including residential development, in Staines Town Centre together with one small site for public open space in Ashford.
- 3.7 The potential impact of these specific sites has been included in the assessment in relation to potential impacts on the South West London Waterbodies SPA and the non-SPA sites identified in the study.



## 4. Existing Trends and Future Development

4.1 The South East Plan identifies a range of existing trends that could have an “in combination effect” with the core strategy:

**Negative trends** (where the environment is deteriorating or environmental pressure is increasing)

- Water demand and availability including supply demand imbalance, annual abstraction rates, household consumption, leakage and water demand
- Energy consumption
- Waste arisings
- Road traffic and traffic emissions
- Nitrates in groundwater
- Flood risk
- Effects of climate change and extreme weather effects
- Recreational pressures on open land and natural greenspace

**Positive trends** (where the environment is improving or environmental pressure is decreasing)

- Conservation of water resources due to household water metering
- Concentrations of SO<sub>2</sub>, NO<sub>2</sub> and particulates
- Biological quality of river water
- Levels of phosphates in rivers
- Water pollution incidents
- New homes built on previously developed land
- Area under agri-environment schemes
- Land pollution from agriculture and other sources
- UK greenhouse gas emissions

4.2 In addition to these general trends it is clear that the possible further development and growth of Heathrow will continue to have a significant influence on traffic growth and air pollution in the area. General increases in car ownership and travel demand will continue to exert pressure on the highway network especially the M25 and with it the potential to increase levels of traffic generated air borne pollution. The Airtrack rail link to Heathrow is promoted in the SE Plan and in Surrey’s Local Transport Plan and has the capacity to reduce the volume of traffic accessing Heathrow. This scheme will in due course be subject to a Transport and Works Act application and will require a full EIA. Although the proposed route is acknowledged by the Council in the core strategy, the proposal does not form part of the Allocations DPD and is not formally supported by the Borough Council.

4.3 The South East Plan proposes increased levels of housing within the South East and the impact of such housing growth may, in combination, have implications for Natura 2000 sites across the Region. In addition the London Plan proposes housing growth which will have similar implications. Table 2 sets out the levels of housing in the Borough and in adjoining Local Authority areas, which, together with the Spelthorne DPDs, could give rise to “in combination” effects.

**Table 2 Development in adjoining Local Authorities**

Local Authority	Proposed dwellings	
	SE Plan to 2026	London Plan to 2007/8 – 2016/17
Spelthorne Borough Council	3020	
Elmbridge Borough Council	4620	
Runnymede Borough Council	2920	
Windsor and Maidenhead Council	5620	
Slough Borough Council	4700	
South Bucks District Council	1800	
London Borough of Hillingdon		3650
London Borough of Hounslow		4450
London Borough of Richmond		2700

4.4 The general effects of additional housing in the South East have been assessed as part of the Appropriate Assessment of the South East Plan. Whilst there may be some “in combination” effects due to additional housing on some European Sites in the South East, notably the Thames Basin Heaths, it is clear that where it can be demonstrated that a plan has no significant effects on a particular site in isolation then it follows that the plan cannot have any effects “in combination” on that site.

## 5. Screening out of sites

- 5.1 The first stage in the assessment was to identify from the “long list” those sites which could be “screened out” at an early stage in the process having regard to the key environmental criteria and the aspects of the Plan which have the potential to affect the integrity of those sites.
- 5.2 The following sites were screened out at this first stage:-
- Burnham Beeches SAC: beech forests with rich lichen communities,
  - Windsor Forest and Great Park SAC: beech forests with rich lichen communities,
  - Thames Basin Heaths SPA: lowland heath with important populations of Nightjar, Dartford Warbler and Woodlark,
  - Thursley, Ash, Pirbright and Chobham SAC, lowland heaths,
  - Mole Gap SAC: calcareous grassland important for its box scrub and orchids,
  - Wimbledon Common SAC: important site for stag beetle,
  - Richmond Park SAC: important site for stag beetle.
- 5.3 The screening process summarised in Table 4 indicates four broad areas where the Plan on its own or “in combination” with other plans could have an effect on the integrity of any of the sites having regard to the qualifying features and the key environmental conditions. These broad areas are discussed below and include; recreational pressures, air quality, water quality and water levels.
- 5.4 This section sets out some additional comments on the potential impacts arising from the Plan which have been considered and then briefly comments on each of the sites in order to further clarify the reasons why it has been screened out. The only site not wholly screened out at this initial stage was the South West London Waterbodies SPA and Ramsar together with the non-SPA sites which support its overall integrity. The issues relating to the consideration of this particular SPA are set out in Section 6.

### Recreational Pressures

- 5.5 Over the plan period to 2026 the population of the Borough is forecast to fall. The latest dwelling controlled population forecasts suggest that the overall population will fall by some 2.7% although there will be a 6.0% increase in households. The composition of those households will change with some 40% being single person households. The age characteristics of the population will change with an increase in the over 50s population and a doubling of the 85 and over age group. There will also be a 14% fall in the numbers of school age children. The overall decline in population and the changes in the composition of the population suggest that the demand for recreational facilities and open space over the Plan period from within the Borough is unlikely to rise significantly as a result of population change or policies in the Plan.
- 5.6 An “Open Space, Sport and Recreation Study” carried out for the Council in 2005 concluded that the Borough is well provided for in terms of accessible natural greenspace with a total of 195 hectares, equivalent to a local provision of 2.16 ha per

1000 population, compared to Natural England's recommended standard of 2.0 ha per 1000. Although there are some localised deficiencies the Borough overall is well provided for in terms of natural and semi-natural spaces with all residents being within an accessible catchment of a natural and semi-natural site. A household survey which formed part of the study sought to ascertain what respondents considered to be an acceptable travel distance to reach natural and semi-natural spaces and what their preferred mode of transport would be. The majority indicated travel by car with a drive time of 10 minutes (para 4.20 page 21). This equates to a distance of about 4km and suggests that in general terms the majority of residents in Spelthorne are unlikely to travel more than this distance to reach an area of natural green space on a regular basis.

- 5.7 Studies of visitors to the Thames Basin Heaths SPA (by Liley, Jackson, Underhill-Day et al) have suggested that the use of the SPA was linked to the distance people lived from it, the transport links and the facilities provided. It has been shown that a majority of visitors by car travel less than 5km to access this area for recreation and that almost all come from within a 7km radius. Discussion on this topic is set out in the "Assessor's report on the Thames Basin Heaths SPA and the Draft Delivery Plan" and was accepted as providing the basis for a zonal approach by which to assess visitor disturbance pressures. It was concluded that additional recreational impacts on the Thames Basin Heaths should be assessed in terms of new development within a 5km travel distance and with consideration of larger development (over 50 dwellings) extending to a 7km travel distance.
- 5.8 Given the overall travel distances for visitors to the Thames Basin Heaths which is one of the nearest European Sites to Spelthorne it is clear that Spelthorne lies outside the general catchment area for this and similar sites. Having regard to the general level of open space provision within Spelthorne, it can reasonably be concluded that any additional demand for recreational open space generated by the overall increase in households in Spelthorne over the Plan period will not extend significantly beyond the Borough boundary.
- 5.9 Clearly existing residents visit popular sites in the region at various times during the year and are included in the overall visitor numbers at those sites. There is, however, no evidence to suggest that any aspect of the Plan will increase the incidence of leisure visits to such areas outside the Borough to a significant degree.

### **Air quality**

- 5.10 Air pollution can affect eco-systems in a number of ways on a local, regional or global scale. Concentrations in air and deposition of particles onto vegetation can damage the vegetation directly or affect plant health or vigour. Deposition of pollutants to the ground and on vegetation can alter the characteristics of the soil, affecting the pH and nitrogen availability that can then affect plant health, productivity and species composition. Increased greenhouse gas emissions on a global scale can affect the global climate, such that the ability of species to tolerate local conditions can change.
- 5.11 In the South East air pollution affects European sites through region-wide pollution caused by a range of sources including those from overseas and localised pollution mostly caused by traffic but also airports and industrial processes. Table 3 shows the

current deposition rates of various pollutants at the European sites identified in this assessment and highlights a general problem. It shows exceedences at most sites for the deposition of nitrogen, acid and ozone. Whilst this information is helpful in identifying the main problems it needs to be treated with some caution in that it is based on data from about six years ago and there have been improvements in air quality since then as referred to in the trend data above. The table does not set out the critical loads for individual species, but only for the habitats of European sites. Nevertheless it is clear from Table 3 that Nitrogen deposition, acid deposition and ozone are particular problems for the European sites being assessed and that motor vehicles are the primary contributors to all of these.

- 5.12 Whilst seeking to limit the effects of all forms of air pollution within the Borough, in the context of the Plan, the Council can only seek to influence through the Plan locally emitted and short range locally acting pollutants. The primary sources of locally emitted and short range atmospheric pollution arise from construction, industrial processes and from road traffic. The Appropriate Assessment for the SE Plan confirms that modelling carried out by the Environment Agency in relation to hypothetical housing allocations suggests that the level of new housing within the Borough would generate levels of NO<sub>2</sub> that would have no significant effect on any European sites outside the Borough. The Plan has no allocations for industrial development that would give rise to significant levels of pollution
- 5.13 In relation to traffic related pollution, Natural England has advised in a letter to Runnymede Borough Council (May 2006), that core strategies can only be concerned with locally emitted and short range acting pollutants. *"In terms of pollution from vehicular emissions the concentrations decline exponentially from the road edge"*. Thus, although it varies with a range of factors and from pollutant to pollutant, in general terms the effects of emissions should only be considered if a road carrying a significant proportion of new traffic related to a plan runs within 200 metres of a European site. The Plan seeks to restrict the growth of traffic and it has been demonstrated that the effect of new housing development over the Plan period will not increase the level of traffic generation (Transport Statement January 2007 SBC). There are no roads over which the Plan will generate significant levels of additional traffic and that will run close to or through any European sites. Accordingly it is considered that the Plan will have no effect in terms of pollution impacts on any of the European sites assessed.

**Table 3 Existing air pollution problems at European sites around Spelthorne**

Site and Grid Reference	Habitat	Pollutant, Measurement	Critical load range	Deposition	Exceedance
Burnham Beeches SAC 495945 183111	Beech woodland	Nitrogen Deposition	10-25 kg/N/ha/year	26.7	16.7-1.7
		Acid Deposition	1.52 keq/ha/year	3.07	1.55
		Ozone	5000 ppb hours	7327	2327
Mole Gap to Reigate Escarpment SAC 517042 151774	Calcereous grassland	Nitrogen Deposition	10-15 kg/N/ha/year	33.5	23.5-18.5
		Acid Deposition	1.70 keq/ha/year	2.74	1.04
		Ozone	5000 ppb hours	8140	3140
Richmond Park SAC 520831 173177		Nitrogen Deposition	10-15 kg/N/ha/year	49.6	39.6-34.6
		Acid Deposition	1.30 keq/ha/year	4.29	2.99
		Ozone	5000 ppb hours	7511	2511
Wimbledon Common SAC 522777 171846	Northern Wet Heath	Nitrogen Deposition	10-25 kg/N/ha/year	26.7	16.7-1.7
	Dry Heath	Nitrogen Deposition	10-20 kg/N/ha/year	26.7	16.7-6.7
	Low Heath	Acid Deposition	0.10 keq/ha/year	2.59	2.49
	Low Heath	Ozone	3000 ppb hours	4416	1416
Thursley, Ash, Pitbright and Chobham SAC 497072 165189	Northern Wet Heath	Nitrogen Deposition	10-25 kg/N/ha/year	18.1	8.1-(-)6.9
	Dry Heath	Nitrogen Deposition	10-20 kg/N/ha/year	18.1	8.1-(-)1.9
		Acid Deposition	0.75 keq/ha/year	1.70	0.95
		Ozone	3000 ppb hours	4537	1537
Thames Basin Heaths SPA 508030 158737	Lowland Heath (Wet)	Nitrogen Deposition	10-25 kg/N/ha/year	17.4	7.4-(-)7.6
		Acid Deposition	0.10 keq/ha/year	1.55	1.45
		Ozone	3000 ppb hours	4516	1516
Windsor Forest and Great Park SAC 496253 173587	Oak Woodland & Beech Woodland	Nitrogen Deposition	10-15 kg/N/ha/year	34.6	24.6-19.6
		Acid Deposition	2.21 keq/ha/year	2.85	0.64
		Ozone	5000 ppb hours	7467	2467
South West London Waterbodies SPA 504445 173382	Waterbodies	Nitrogen Deposition	-no data available	21.0	-
		Acid Deposition	-no data available	2.06	-
		Ozone	-no data available	4315	-

Source: Air Pollution Information System ([www.apis.ac.uk](http://www.apis.ac.uk))

## Water Quality

- 5.14 Water quality at European sites is an important determinant of the habitats and species they support. Poor water quality can have a range of environmental impacts. Significant deterioration in water quality can result in the death of aquatic life and increased vulnerability of plants and animals to disease. Nutrient enrichment can also significantly affect semi natural habitats.
- 5.15 The primary sources of pollution to water quality are through construction, industrial processes and pollution incidents, although emissions from traffic can also give rise to nitrogen deposition. Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication increase turbidity and decrease light penetration. The decomposition of organic wastes, which often accompanies eutrophication, deoxygenates water further, augmenting the oxygen depleting effects of eutrophication.
- 5.16 Water quality may be indirectly altered as a result of urbanisation through:-
- Pollution from surface water run off from hard surfaces carrying oils, heavy metals and de-icing compounds
  - Pollution from waste water effluent and treatment effluent
  - Waste water effluent with increase nutrient load
  - Diffuse pollution resulting from land management and development
  - Pollution from commercial and industrial effluent discharges

The greatest risk to water quality in the South East is due to high nutrient levels.

- 5.17 Whilst high water quality is a key environmental condition at a number of European sites the Plan does not promote any development which would have an adverse impact on water quality. All new developments will be required to provide sustainable drainage systems and Thames Water has indicated in correspondence with the Council during the preparation on the Plan that there are no overall water treatment capacity problems for the level and scale of development proposed in the plan. It is considered that the Plan will not have any impact on water quality that there would be no significant impact on any of the European sites.

## Water levels

- 5.18 Changes in water levels can affect an ecosystem by damaging the vegetation directly or by affecting plant health and species composition. Work on water supply in relation to the preparation of the South East Plan has not identified any particular problems in terms of water supply for the new development proposed within Spelthorne's part of the Region and there are no abstraction proposals which could have any impact on the adjoining European sites. The issue of the effect of changing water levels on the South West London Waterbodies SPA is discussed in the next section.

## Site specific comments

### Burnham Beeches SAC

5.19 The Burnham Beeches SAC is a large area of woodland lying to the north of Burnham covering an area of 382.76 hectares. It is some 12km from the nearest part of Spelthorne and some 19 km by road. The site is potentially vulnerable to visitor pressure. However, the site is owned by the Corporation of London and is subject to detailed management plans which seek to encourage public access while maintaining the site in favourable condition. The site receives some 550,000 visitors per annum and the impact of a small number of potential additional visitors from Spelthorne would be insignificant.

### Windsor Forest and Great Park SAC

5.20 Windsor Forest and Great Park SAC is a large area of continuous woodland and parkland lying to the south west of Windsor. The SAC covers an area of 1687.26 hectares and the predominant habitat is mixed woodland with small areas of dry grassland.

5.21 Windsor Forest and Great Park is an important recreational resource for the local population. There are large areas open to the public although large tracts have restricted access.

5.22 The nearest part of the site is located approximately 5km from the Borough boundary and some 8 km by road. Whilst the site is within easy reach of the Borough, the forecast change in the population within Spelthorne would have no significant effect on visitor numbers at this site and there are no policies in the core strategy which would affect the integrity of this site.

### Thames Basin Heaths SPA

5.23 The Thames Basin Heaths SPA is an area of land which supports both dry and wet heathland landscape. The SPA comprises a total of 13 SSSIs covering a total area of 8274 hectares. The nearest part of the SPA to Spelthorne are Ockham and Wisley Common, about 6km and by road about 13 km

5.24 There has been much debate over the impact of visitors on the qualifying features of the SPA. The latest discussions set out in the Assessors report to the SE Plan EIP suggest that any housing development outside a 7km drive distance would be considered too remote to have a significant impact. As no part of Spelthorne is within 7km by road it is concluded that no development in Spelthorne would have a significant effect on visitor numbers at this site. There are no policies in the Plan which would affect the integrity of this site.

### **Thursley, Ash, Pirbright and Chobham SAC**

- 5.25 Thursley, Ash, Pirbright and Chobham SAC is an area of open land which supports both a dry and wet heathland habitats. It covers a total area of 5138 hectares with the predominant habitat is wet and dry heaths spread over a number of separate SSSIs most of which lie outside the 15km zone from the Spelthorne boundary. The mosaic of habitats is largely dependant on active heathland management. Urbanisation and recreational pressures represent a threat to habitats and species.
- 5.26 The nearest part of the site is located approximately 7km from the Borough boundary and some 16 km by road. The forecast change in the population within Spelthorne would have no significant effect on visitor numbers at this site and there are no policies in the core strategy which would affect the integrity of this site.

### **Mole Gap to Reigate Escarpment SAC**

- 5.27 Mole Gap supports the only area of stable box scrub in the UK. The site also supports a wide range of calcareous grassland, semi-natural dry grassland and yew woodland. Bechstein's bats use the site throughout the year. Recreational pressure is high and requires management and monitoring.
- 5.28 The nearest part of the site is located approximately 14km from the Borough boundary and some 27 km by road. The forecast change in the population within Spelthorne would have no significant effect on visitor numbers at this site and there are no policies in the core strategy which would affect the integrity of this site.
- 5.29 The Borough is beyond the foraging range of the Bechstein's bats.

### **Wimbledon Common SAC**

- 5.30 Wimbledon Common has a large number of old trees and much fallen timber. It is at the heart of the south London centre of distribution for stag beetle, *Lucanus cervus*. The site supports a number of other scarce invertebrate species associated with decaying timber. Due to its urban location the site experiences heavy recreational pressure.
- 5.31 The site is located approximately 9km from the Borough boundary and some 16 km by road. The forecast change in the population within Spelthorne would have no significant effect on visitor numbers at this site and there are no policies in the Plan which would affect the integrity of this site which depends on maintaining the extent of dead and dying timber.

### **Richmond Park SAC**

- 5.32 Richmond Park has a large number of old trees and much fallen timber. It is at the heart of the south London centre of distribution for stag beetle, *Lucanus cervus*. The site also supports a number of other scarce invertebrate species associated with

decaying timber. Due to its urban location the site experiences heavy recreational pressure.

- 5.33 The site is located approximately 7km from the Borough boundary and some 12 km by road. The forecast change in the population within Spelthorne would have no significant effect on visitor numbers at this site and there are no policies in the Plan which would affect the integrity of this site which depends on maintaining the extent of dead and dying timber.

**Table 4 Initial screening table for the Spelthorne Development Plan**

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
South West London Waterbodies SPA	<ul style="list-style-type: none"> <li>Internationally important wintering population of :- <i>Anas dypeata</i> (Northern shoveler) and</li> <li><i>Anas strepera</i> (Gadwall)</li> </ul>	<ul style="list-style-type: none"> <li>Lack of disturbance during winter months</li> <li>Areas of open water</li> <li>Areas of shallow water (&lt;300mm) for feeding</li> <li>Presence and abundance of aquatic plant food</li> <li>Presence and abundance of aquatic invertebrate food</li> <li>Adjacent grass banks for loafing</li> </ul>	<ul style="list-style-type: none"> <li>Possible disturbance from recreational pressures</li> <li>None</li> <li>None</li> <li>None</li> <li>None</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>No See Section 6</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>		
LB Hounslow Surrey CC Elmbridge Spelthorne Runnymede						
South West London Waterbodies Ramsar	<ul style="list-style-type: none"> <li>Internationally important wintering population of :- <i>Anas dypeata</i> (Northern shoveler) and</li> <li><i>Anas strepera</i> (Gadwall)</li> </ul>	<ul style="list-style-type: none"> <li>Relevant nearby waterbodies used for feeding and as refuges</li> <li>Lack of disturbance during winter months</li> <li>Areas of open water</li> <li>Areas of shallow water (&lt;300mm) for feeding</li> <li>Presence and abundance of aquatic plant food</li> <li>Presence and abundance of aquatic invertebrate food</li> </ul>	<ul style="list-style-type: none"> <li>Possible disturbance from recreational pressures</li> <li>Possible disturbance from recreational pressures</li> <li>None</li> <li>None</li> <li>None</li> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>No See Section 6</li> <li>No See Section 6</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>		

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
		<ul style="list-style-type: none"> <li>• Adjacent grass banks for loafing</li> <li>• Relevant nearby waterbodies used for feeding and as refuges</li> <li>• Minimal atmospheric pollution – may increase the susceptibility of beech trees to disease and alter epiphytic communities.</li> </ul>	None	No		
Burnham Beeches SAC Bucks	<ul style="list-style-type: none"> <li>• Beech forests on acid soils</li> </ul>	<ul style="list-style-type: none"> <li>• Restricted public access (extensive public access may compromise ability to retain falling timber associated with old trees).</li> <li>• Maintenance of an adequate and stable hydrological system</li> </ul>	<p>The overall increase in the level of development in the Borough will not increase traffic generated pollution generally or affect traffic levels on roads adjoining the site.</p> <p>Spelthorne's open space study shows that visits to open spaces outside the Borough are limited and the population changes are unlikely to affect this situation.</p> <p>None</p>	No		
Windsor Forest and Great Park SAC Bracknell Forest, Windsor and Maidenhead, and Surrey	<ul style="list-style-type: none"> <li>• Dry oak-dominated woodland</li> <li>• Beech forests on acid soils</li> <li>• Violet click beetle</li> </ul>	<ul style="list-style-type: none"> <li>• Minimal atmospheric pollution – may increase susceptibility of beech trees to disease and alter epiphytic (lichen) communities.</li> </ul>	<p>The overall increase in the level of development in the Borough will not increase traffic generated pollution generally or affect traffic levels on roads adjoining the site.</p>	No		

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
		<ul style="list-style-type: none"> <li>Managed public access</li> </ul>	<p>Visitor numbers to the site are large and the additional housing requirement will not have any significant effect on visitors to the site</p>	No		
Thames Basin Heaths SPA	<ul style="list-style-type: none"> <li>Populations of European importance of the following species</li> <li>Dartford warbler</li> <li>Nightjar</li> <li>Woodlark</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate management</li> </ul>	None	No		
		<ul style="list-style-type: none"> <li>Acid soils</li> </ul>	None	No		
		<ul style="list-style-type: none"> <li>Minimal air pollution</li> </ul>	<p>The overall increase in the level of development in the Borough will not increase traffic generated pollution generally or affect traffic levels on roads adjoining the site.</p>	No		
		<ul style="list-style-type: none"> <li>Unpolluted water</li> </ul>	None	No		
		<ul style="list-style-type: none"> <li>Unfragmented habitat</li> </ul>	None	No		

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
		<ul style="list-style-type: none"> <li>Minimal recreation pressure and low incidence of wild fires</li> </ul>	<p>Spelthorne's open space study shows that visits to open spaces outside the Borough are limited and the population changes are unlikely to affect this situation. Spelthorne is outside the 5km buffer set by Natural England for the consideration of visitor pressure.</p>	No		
		<ul style="list-style-type: none"> <li>Appropriate grazing pressure</li> </ul>	None	No		
Thursley Ash Pirbright and Chobham SAC Surrey	<ul style="list-style-type: none"> <li>Wet Heathland with cross leaved heath</li> <li>Dry Heaths</li> <li>Depressions on wet peat substrates</li> </ul>	<ul style="list-style-type: none"> <li>Traditional management, including grazing, bracken control and shrub clearance.</li> <li>Water levels</li> </ul>	None	No		

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
	<ul style="list-style-type: none"> <li>Managed recreational disturbance</li> </ul>	<ul style="list-style-type: none"> <li>Spelthorne's open space study shows that visits to open spaces outside the Borough are limited and the population changes are unlikely to affect this situation. Spelthorne is outside the 5km buffer set by Natural England for the consideration of visitor pressure.</li> </ul>	No			
	<ul style="list-style-type: none"> <li>Absence or management of urbanization effects eg fires, fly tipping, introduction of non-native species.</li> </ul>	<ul style="list-style-type: none"> <li>The Borough is more than 7km by road from the nearest part of the SAC and is too remote for any urbanisation impacts within the Borough to affect this site</li> </ul>	No			
	<ul style="list-style-type: none"> <li>Minimal atmospheric or direct pollution (nitrogen deposition can affect heathland habitats)</li> </ul>	<ul style="list-style-type: none"> <li>The overall increase in the level of development in the Borough will not increase traffic generated pollution generally or affect traffic levels on roads adjoining the site.</li> </ul>	No			
	<ul style="list-style-type: none"> <li>Water quality (there can be problems with diffuse discharges from agricultural fertilization causing eutrophication)</li> </ul>	None	No			

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
Mole Gap to Reigate Escarpment SAC Mole Valley Surrey	<ul style="list-style-type: none"> <li>• Natural box scrub</li> <li>• Dry grasslands and scrublands on chalk or limestone</li> <li>• Dry grasslands and scrublands on chalk or limestone, including important orchid sites</li> <li>• Yew-dominated woodland</li> <li>• Dry heaths</li> <li>• Beech forests on neutral to rich soils</li> <li>• Great crested newt</li> <li>• Bechstein's bat</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate management including grazing.</li> <li>• Absence of direct fertilization.</li> <li>• Minimal air pollution.</li> <li>• Low recreational pressure.</li> <li>• Absence of urbanization effects, e.g. introduction of invasive nonnative species.</li> <li>• Suitable foraging and refuge habitat within 500m of the great crested newts' pond.</li> <li>• Relatively unpolluted water of roughly neutral pH.</li> <li>• Some ponds deep enough to retain water throughout February to August at least one year in every three.</li> </ul>	None	No		
			None	No		
			None	No		
			None	No		
			Spelthorne's open space study shows that visits to open spaces outside the Borough are limited and the population changes are unlikely to affect this situation.	No		
			None	No		
			None	No		
			None	No		
			None	No		

Name and Location	Qualifying features	Key environmental conditions to support site integrity	Possible impacts arising from Core Strategy	Is there a risk of a significant effect?	Possible impacts from other trends, plans etc.	Is there a risk of significant 'in combination' effects?
		<ul style="list-style-type: none"> <li>In a wider context, great crested newts require good connectivity of landscape features (ponds, hedges etc) as they often live as a metapopulation.</li> <li>In a wider context, bats require good connectivity of landscape features to allow foraging and commuting, to ponds and rivers outside the SAC</li> <li>Undisturbed bat roost sites</li> </ul>	None	No		
Wimbledon Common SAC	<ul style="list-style-type: none"> <li>Stag Beetle (Lucanus cervus)</li> <li>North Atlantic wet heaths</li> <li>European dry heaths</li> </ul>		None	No		
Richmond Park SAC	<ul style="list-style-type: none"> <li>Stag Beetle (Lucanus cervus)</li> </ul>	<ul style="list-style-type: none"> <li>Ancient trees with decaying timber</li> </ul>	None	No		



## 6. South West London Waterbodies SPA

- 6.1 After screening out all potential impacts on all other SACs and SPAs within the 15km cordon around the Borough the South West London Waterbodies required more detailed consideration due to the potential for the Core Strategy and Policies DPD and the Allocations DPD to have a more direct impact on the specific waterbodies.
- 6.2 The South West London Waterbodies SPA comprises 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 SPA covers a total area of 828.14 hectares comprising seven separate SSSIs, and is of European importance because it is regularly used by significant percentages of the European populations of Gadwall *Anas strepera* and Shoveler *Anas clypeata*. In addition the site supports nationally important numbers of cormorant, great crested grebe, tufted duck, pochard and coot.
- 6.3 The site was designated as a SPA on 22 September 2000 and at the same time was designated as a Ramsar site because of its international importance for water birds. Only sites which, at the time of designation, supported significant numbers of birds based on average counts over the previous five years were included in the designation. The component SSSIs are:-
- Kempton Park Reservoirs SSSI
  - Knight and Bessborough Reservoirs SSSI
  - Thorpe Park Number 1 Gravel Pit SSSI
  - Wraysbury Number 1 Gravel Pit
  - Wraysbury Reservoir SSSI
  - Staines Moor (part of) SSSI
  - Wraysbury and Hythe End Gravel Pits SSSI
- 6.4 The South West London Waterbodies SPA is unique in consisting of several discrete and widely spaced waterbodies. The SPA designation implies that component sites are biologically integrated, however there are over fifty other waterbodies which were included within the original “area of search” that contribute to the region’s waterfowl interest of which only seven were included in the final designation.
- 6.5 It is clear from counts which have been taken since designation that over wintering populations of Gadwall and Shoveler on the SPA Waterbodies have fluctuated, but that overall populations within the general area have remained stable. Since the period of bird counts (1993 – 1998) for which the site was designated Gadwall numbers in the entire SW London area have increased slightly and Shoveler numbers have decreased slightly. Within the SPA total numbers of both birds have decreased greatly and some of the designated sites appear to support few birds. In contrast some non-designated sites now regularly support nationally important numbers.
- 6.6 Early discussions with Natural England over the Appropriate Assessment of the SPA suggested that it would be necessary to consider the non-SPA waterbodies and other land adjoining the SPA where these areas supported significant populations of gadwall and Shoveler at different times where birds move between the various waterbodies.

- 6.7 An initial schedule and map of potentially relevant non-SPA sites was drawn up and refined in consultation with Natural England, Dr David Hill of RPS and Brian Briggs who is carrying out a three year doctorate research study on ornithological issues related to the South West London Waterbodies SPA. RPS is managing the project on behalf of a consortium comprising Brett Aggregates, Thames Water, Natural England and the Environment Agency who are all sponsoring the project. The project is being carried out because of the lack of understanding of how the SPA citation species Gadwall and Shoveler use the component waterbodies and thus what constitutes site "integrity". The aim of the study is to identify the use made by Gadwall and Shoveler of the waterbodies within and around the SPA and to provide information on the state of the SPA and establish a strategic basis for the long term management of the sites. The study also seeks to document new findings on wildfowl behaviour, habitat choice and population ecology.
- 6.8 The work has identified a total of 74 sites including the designated SPA sites and which for the purposes of the study have been divided into three broad complexes, Wraysbury, Shepperton and Walton. All the sites are shown on Map 2. Table 5 sets out details all the sites and confirms whether they are relevant or not in terms of the numbers of birds which have been recorded as present on the site during survey periods. Only sites with significant populations or with the necessary habitat requirements have been included as relevant and in turn it is only these sites which have been assessed in the consideration of how any plans or proposals may affect the integrity of the SPA as a whole. The notes accompanying the table explain the particular considerations or factors which have been taken into account for some sites. Whilst the list is as comprehensive as it can be from the information currently available it cannot be regarded as definitive because the status of some sites may change as further information becomes available from field survey or other sources.
- 6.9 The two species use sites differently and display different feeding strategies. Gadwall prefer a mosaic of water depths with a depth of 1 metre for feeding. Their main food source is macrophytes and Gadwall occasionally associate with, and take food from, coot which are able to bring food up from greater depths (kleptoparasitism). Gadwall appear to remain on the same site throughout a 24 hour day. The three complexes are used independently by Gadwall with little movement of populations between complexes. Thus, increases in the population in one complex do not result in concurrent decreases in another.
- 6.10 On the other hand Shoveler use the entire area as a more integrated unit such that decreases in one complex are matched by increases in another. Shoveler use larger water areas where their main food source is zooplankton. Shoveler tend to use some sites predominately for feeding, others for roosting and others for mixed behaviours.

### **Conservation Objectives**

- 6.11 The Conservation Objectives for the European interest on this SPA are understood to be, to maintain, in favourable condition, the habitats for the population of migratory bird species (Gadwall and Shoveler) of European importance, with particular reference to open water and surrounding marginal habitats.
- 6.12 Typical targets for these objectives are as follows:-

- During the period October to March no significant reduction in numbers or displacement of wintering birds from current level.
- Extent and distribution of habitat should not deviate significantly from current state, outside an acceptable range of increase/decrease and at an acceptable rate, from October to March.
- Extent of water depth should not deviate significantly from current state, outside an acceptable range of increase/decrease and at an acceptable rate, from October to March.
- Presence and abundance of food species should not deviate significantly from reference level, during winter season (October to March)
- Presence and abundance of prey species should not deviate from reference level, during the winter season (October to March).

6.13 Favourable condition is achieved when the targets are met. At present the latest condition summaries (compiled 01 May 2007 – [www.english-nature.org.uk](http://www.english-nature.org.uk)) for the component SSSI parts of the SPA indicate that with two exceptions all parts of the SPA are in favourable condition. Wraysbury Number 1 Gravel Pit is reported to be “unfavourable declining” although it is in favourable condition for Gadwall but unfavourable for Shoveler. A small part (14.5%) of Wraysbury and Hythe End Gravel Pits is reported as “unfavourable recovering”.

### **Potential Effects of the Core Strategy and Policies and Allocations DPDs**

6.14 In assessing the individual policies and allocations set out in the Development Plan Documents the following checklist was used to test and identify if there was a potential mechanism through which an adverse effect on integrity might occur.

- That the area of annex 1 habitats (or composite features) will not be reduced?
- That there will be no direct effect on the population of the species for which the site was designated?
- That there will be no indirect effects on the population of species for which the site was designated or classified due to loss or degradation of their habitat (quantity/quality)?
- That there will be no changes to the composition of the habitats for which the site was designated (e.g. reduction in species structure, abundance or diversity that comprises the habitat over time)?
- That there will be no interruption or degradation of the physical, chemical or biological processes that support habitats and species for which the site was designated or classified?

6.15 Following this process of individual policy assessment it was concluded that none of the policies or allocations had potential mechanisms to cause an adverse effect on integrity. However, in addition, the effect of the Plan as a whole has been considered in relation to the key environmental conditions as set out below.

### **Key Environmental Conditions**

6.16 The key environmental conditions are set out in Table 4 and from these the likely impacts on the SPA can be identified under four main areas:-

- Water levels
- Water quality
- Supporting habitats for feeding and as refuges
- Disturbance during winter months

### **Water Levels**

- 6.17 The Appropriate Assessment of the South East Plan suggests that the impact of additional housing in the area will have implications for water resources and increased demand may lead to significant draw-down effects on water supply reservoirs. However, studies by the Environment Agency for the South East Plan show that there will not be a problem with water supply in Spelthorne over the plan period to 2026. Water supply in the Borough is provided by Thames Water, who also manages the main supply reservoirs in the area, and Three Valleys Water Company. Both have confirmed that the overall level of housing proposed in the Borough and none of the housing allocations in particular present a problem in terms of water supply over the plan period. It may be assumed that the overall level of housing development in the area will not present supply difficulties in the area served by the reservoirs.
- 6.18 Evidence based on the last draining of the Staines North reservoir in 2004 suggests that as water levels decrease the large areas of shallow food-rich water become more popular as feeding grounds and attract huge numbers of many species including Gadwall and Shoveler. In contrast numbers declined significantly as recharge took place. A general lowering of water levels in all the reservoirs as a result of heavy demand or prolonged drought is unlikely to occur during the winter months when the Gadwall and Shoveler are present and would only have a significant effect if levels dropped below an acceptable range identified in the conservation objectives.
- 6.19 The Core Strategy and Policies DPD and Allocations DPD would not have any significant effect the integrity of the SPA or Ramsar site through any changes in water levels

### **Water Quality**

- 6.20 Water quality can affect species directly or indirectly through impacts on the food chain. The primary sources of pollution to water quality are through commercial and industrial processes, construction and direct pollution incidents. Water quality may also be affected by nutrient enrichment which affects the growth of vegetation and micro organisms. Discharges from sewage treatment works can be a source of nutrient enrichment but Thames Water has indicated in correspondence with the Council during the preparation on the Plan that there are no overall water treatment capacity problems for the level and scale of development proposed in the plan. The principal sites within the SPA are water supply reservoirs and it is not anticipated that water quality would be an issues. The quality of groundwater which feeds existing gravel pits could be subject to enrichment through agricultural practices but there are no policies in the Plan which will have any adverse effect on the quality of groundwater. The plan includes, in policy, requirements for new development to provide sustainable drainage systems.

## Supporting habitats for feeding and as refuges

6.21 It is clear from current studies that the integrity of the SPA relies to a large extent on water bodies and other marginal habitats which are not formally designated as SPA sites, and that Gadwall and Shoveler numbers fluctuate on different sites at different times and from year to year. Given current evidence it is unlikely that the loss any one of the 41 non SPA sites could significantly affect the integrity SPA although the cumulative impact of the loss of several sites could be have an impact. The Plan directs all new development to previously developed land within existing urban areas and there are no policies or allocations which would result n the direct loss of any supporting waterbodies or habitats. The Plan seeks to safeguard all sites which are important for nature conservation.

## Disturbance during winter months

6.22 The extent to which Shoveler and Gadwall are susceptible to disturbance is the subject of the current study and final conclusions are awaited. However, interim findings and the results of earlier studies (Hill et al 1997) suggest that disturbance levels are difficult to quantify. In addition there are also difficulties in determining the extent to which disturbance may cause temporary displacement of birds or have significant long term impacts on populations. There is also a need to distinguish between disturbance effects, where there may be local site movements, and disturbance impacts, where the whole population is affected. A disturbance event at one site may cause a reaction whilst having no effect at another. There are two main sources of disturbance which need to be considered in the context of this assessment, firstly recreational pursuits, particularly water based, and secondly development and construction projects.

6.23 Different types of disturbance may cause different levels of response. Initial work by Briggs (South West London Waterbodies SPA Wildfowl Study - 1<sup>st</sup> year Annual Report) has shown that dogwalkers and birdwatchers were the most common disturbance types causing a reaction in just over 20% of events, whereas predators triggered the highest proportion of reactions (76%). Regular noises, fishermen, and sailing were all common disturbance types but were never observed to cause a reaction. Vehicles, waterskiing/motorboats and sudden noises were also disturbance types to cause reactions.

6.24 Whilst human activity will modify waterbird distribution and abundance in an area one is not mutually exclusive of the other. Disturbance levels vary considerably with the type of activity. Continuous or frequent high intensity activities such as motorised power boats using a lake constantly throughout the day or people getting in and out of vehicles at a car park adjacent to feeding or roosting sites cause more disturbance than continuous low intensity disturbances. Studies at Wraysbury and Thorpe Park gravel pits (Wetlands Advisory Service report 2003) showed that powered boats water skiers and birdwatchers were the most likely activities to result in a reaction by the key species.

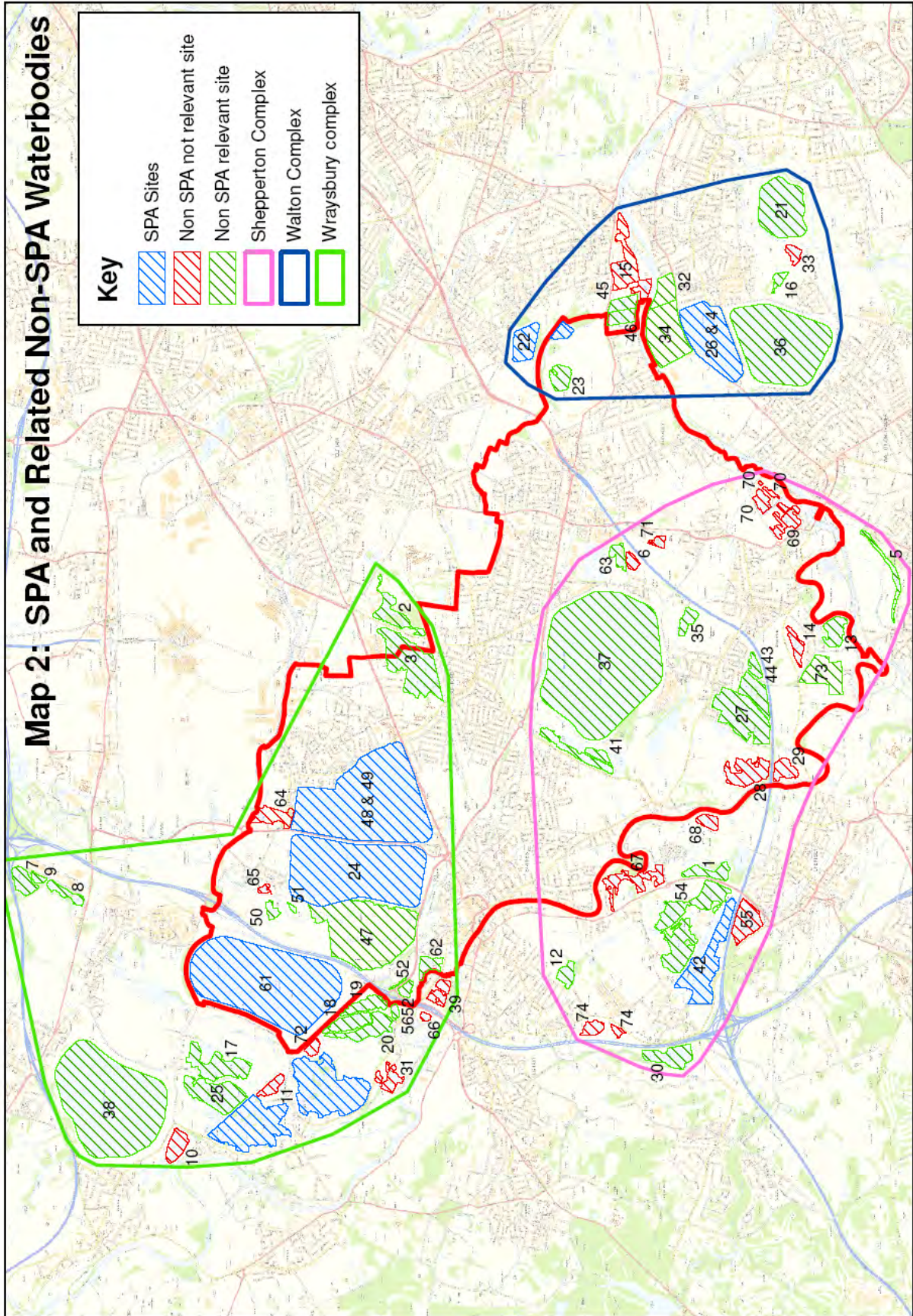
6.25 Disturbance from development, either by construction processes or by the introduction of new activities into an area will vary considerably depending on the construction programme, use of heavy plant, presence of site operators and generation of noise and dust. Natural England has concluded that as a general principle temporary disturbance

at any one site of up to a year may be regarded as acceptable and would be unlikely to have a significant effect on the integrity of the SPA as a whole.

6.26 The majority of the designated sites within the SPA have either restricted, or no public access, because of their water storage function. There are no proposals in the plan to change the levels of access on these sites. Some of the non SPA sites are in private ownership with no public access while others have unrestricted public access for a range of formal or informal recreation activities. There are no policies or allocations in the Plan which have a direct impact on any of the sites by way of land take or direct disturbance.

6.27 It is considered that the levels of housing development proposed within Spelthorne and forecast changes in the structure of the population will not generate any significant increase in the recreational demand. Whilst some sites within the SPA, including the supporting non-SPA sites, may experience some disturbance due to recreational activity at different times in the future there is no evidence to indicate that such effects will arise from the Plan nor that it would be at a scale or intensity over and above any disturbance activity which currently exists that that would result in any significant effect on the integrity of the SPA.

**Map 2: SPA and Related Non-SPA Waterbodies**



**Table 5 South West London Waterbodies SPA and other non-SPA waterbodies**

SITE	NAME	AREA (hectares)	COMPLEX	LOCAL AUTHORITY	STATUS	SNCI STATUS (in Spelthorne)	GADWALL OR SHOVELER INTEREST	WeBS COUNT	ADDITIONAL INFORMATION OR QUERIES
1	A320 GP	9.40	Shepperton	RBC	Relevant		Both		
2	Bedfont Lakes	15.09	Wraysbury	LBH	Relevant		Gadwall		
3	Princes Lake (part)	49.52	Wraysbury	LBH (part)	Relevant	n8	Both		Combined area
3	Princes Lake (part)		Wraysbury	SBC (part)	Relevant	n8	Both		Combined area
4	Bessborough		Walton	EBC	SPA		Both		
5	Broadwater	7.82	Shepperton	EBC	Relevant		Shoveler		
6	Charlton Village	3.60	Shepperton	SBC	Not Relevant		Neither		
7	Colnbrook North	9.67	Wraysbury	SLOUGH	Relevant		Gadwall		
8	Colnbrook South	6.63	Wraysbury	SLOUGH	Relevant		Gadwall		
9	Colnbrook small	2.30	Wraysbury	SLOUGH	Relevant		Both		
10	Datchet GP	10.35	Wraysbury	RBWM	Not Relevant		Neither		
11	Douglas Lane	5.74	Wraysbury	RBWM	Not Relevant		Neither		
12	Egham Hythe Pond	6.44	Shepperton	RBC	Relevant		Gadwall		
13	Ferry Lane BRPS	10.49	Shepperton	SBC	Relevant	n21	Both		
14	Halliford Mere	6.80	Shepperton	SBC	Not Relevant		Neither		
15	Hampton WW	27.52	Walton	LBRuT	Not Relevant		Neither		
16	Hersham GP	3.32	Walton	EBC	Relevant		Gadwall		
17	Horton GP	25.25	Wraysbury	RBWM	Relevant		Gadwall		

SITE	NAME	AREA (hectares)	COMPLEX	LOCAL AUTHORITY	STATUS	SNCI STATUS (in Spelthorne)	GADWALL OR SHOVELER INTEREST	WeBS COUNT	ADDITIONAL INFORMATION OR QUERIES
18	Hythe End C	11.98	Wraysbury	RBWM	Relevant		Both		Site is SSSI but not part of the SPA
19	Hythe End E	9.79	Wraysbury	RBWM	Relevant		Both		
20	Hythe End West	15.82	Wraysbury	RBWM	Relevant		Both		Site is SSSI but not part of the SPA
21	Island Barn	50.45	Walton	EBC	Relevant		Both		
22	Kempton East	16.16	Walton	LBH	SPA	n23	Both		
23	Kempton Racecourse	9.25	Walton	SBC	Relevant		Gadwall		
24	King George VI	170.43	Wraysbury	SBC	SPA		Both		
25	Kingsmead	28.52	Wraysbury	RBWM	Relevant		Gadwall		
26	Knight		Walton	EBC	SPA		Both		
27	Littleton Lane East	40.51	Shepperton	SBC	Relevant	n18	Gadwall		
28	Littleton Lane West (N)	18.89	Shepperton	SBC	Not Relevant	n17	Neither		May become relevant once works cease and water clears
29	Littleton Lane West (S)	8.17	Shepperton	SBC	Not Relevant	n17	Neither		
30	Longside Lake	16.25	Shepperton	RBC	Relevant		Both		
31	Lower Hythe GP	8.19	Wraysbury	RBWM	Not Relevant		Neither		
32	Molesey East	11.77	Walton	EBC	Relevant		Both		
33	Molesey GP	4.26	Walton	EBC	Not Relevant		Neither		
34	Molesey West	42.73	Walton	EBC	Relevant		Shoveler		
35	Old Charlton Road	6.35	Shepperton	SBC	Relevant	n15	Both		
36	Queen Elizabeth II	128.32	Walton	EBC	Relevant		Both		

SITE	NAME	AREA (hectares)	COMPLEX	LOCAL AUTHORITY	STATUS	SNCI STATUS (in Spelthorne)	GADWALL OR SHOVELER INTEREST	WeBS COUNT	ADDITIONAL INFORMATION OR QUERIES
37	Queen Mary	289.81	Shepperton	SBC	Relevant	n13	Gadwall		
38	Queen Mother	193.39	Wraysbury	RBWM	Relevant		Gadwall		
39	Queensmead	7.01	Wraysbury	RBWM	Not Relevant		Neither		
40	Red House	5.07	Walton	SBC	SPA		Gadwall		
41	Reservoir Aggregates	16.91	Shepperton	SBC	Relevant	n12	Gadwall		
42	RMC HQ	23.93	Shepperton	RBC	Relevant		Gadwall		Initially poor for Shoveler and Gadwall but improved in 2006 with > 10 birds counted
43	Sheepwalk East	4.50	Shepperton	SBC	Relevant		Gadwall		<10 birds but reasonable habitat and potential for improvement
44	Sheepwalk West	14.93	Shepperton	SBC	Relevant	n44	Gadwall		
45	Stain Hill East	7.47	Walton	LBRuT	Relevant		Both		
46	Stain Hill East	7.88	Walton	LBRuT	Relevant		Both		
47	Staines Moor	110.49	Wraysbury	SBC	Relevant		Shoveler		Site is SSSI but not part of the SPA – used by birds at night
48	Staines North	196.15	Wraysbury	SBC	SPA		Both		Combined area
49	Staines South		Wraysbury	SBC	SPA		Both		Combined area
50	Stanwell Moor North	3.41	Wraysbury	SBC	Relevant		Both		
51	Stanwell Moor South	0.90	Wraysbury	SBC	Relevant		Gadwall		
52	The Moor GP	3.95	Wraysbury	SBC	Relevant		Gadwall		Formerly known as Hilda May lake

SITE	NAME	AREA (hectares)	COMPLEX	LOCAL AUTHORITY	STATUS	SNCI STATUS (in Spelthorne)	GADWALL OR SHOVELER INTEREST	WeBS COUNT	ADDITIONAL INFORMATION OR QUERIES
53	Thorpe GP (St Anne's Lake)	40.98	Shepperton	RBC	SPA		Gadwall		
54	Thorpe Amusement	25.98	Shepperton	RBC	Relevant		Gadwall		Thorpe Park
55	Twyneish angling	17.30	Shepperton	RBC	Not Relevant		Neither		
56	Wraysbury Hilton	2.01	Wraysbury	RBWM	Relevant		Both		<10 birds but reasonable habitat and potential for improvement
57	Wraysbury 1 North		Wraysbury	RBWM	SPA		Gadwall		
58	Wraysbury 1 South		Wraysbury	RBWM	SPA		Gadwall		
59	Wraysbury II North		Wraysbury	RBWM	SPA		Both		
60	Wraysbury II South		Wraysbury	RBWM	SPA		Both		
61	Wraysbury Reservoir	205.22	Wraysbury	SBC	SPA	n2	Gadwall		
62	Church Lammas	6.89	Wraysbury	SBC	Relevant		Both		< 10 but is a maturing site likely to attract greater numbers in the future
63	Charlton Village (TWU)	5.95	Shepperton	SBC	Relevant	n14	Both		Undisturbed site not included in original study assessment but supports >10 of both species
64	Stanwell Place (Cemex)	11.66	Wraysbury	SBC	Not Relevant	n7	Neither		To be looked at again in future

SITE	NAME	AREA (hectares)	COMPLEX	LOCAL AUTHORITY	STATUS	SNCI STATUS (in Spelthorne)	GADWALL OR SHOVELER INTEREST	WeBS COUNT	ADDITIONAL INFORMATION OR QUERIES
65	EA Lake west of Hithermoor Road Stanwell Moor	1.78	Wraysbury	SBC	Not Relevant		Neither		Small and heavily disturbed
66	Lake west of M25	1.54	Wraysbury	RBWM	Not Relevant		Neither		
67	Penton Hook Marina and lakes	15.94	Shepperton	RBC	Not Relevant		Neither		
68	Reservoir (name?) adjoining River Thames	5.30	Shepperton	RBC	Not Relevant		Neither		
69	Former gravel pits south of Fordbridge Road (Swan sanctuary)	10.88	Wraysbury	SBC	Not Relevant		Neither		
70	Ashmere Fisheries	6.66	Wraysbury	SBC	Not Relevant		Neither		
71	Lake west of Upper Hallford Road (adj Bugle Nurseries)	2.82	Shepperton	SBC	Not Relevant		Neither		
72	Blenheim Angling Lake	3.63	Wraysbury	RBWM	Not Relevant		Neither		
73	The Ranges Ferry Lane	23.05	Shepperton	SBC	Relevant		Shoveler		Over 40 birds recorded in flooded field winter 2007
74	Lakes east of M25	7.30	Shepperton	RBC	Not Relevant		Neither		

### Notes:- Criteria used for inclusion/exclusion of supporting sites

1. The main criterion used for including or excluding sites as part of the wetland 'resource' linked to the SPA, was whether sites had ever supported 10 or more Gadwall or Shoveler during the course of the South West London Waterbodies wildfowl study being undertaken by Brian Briggs at the Edward Grey Institute University of Oxford and supervised by David Hill. However, certain sites were included despite never holding 10 birds simply because their environmental characteristics were deemed attractive to birds or were, according to our judgement, becoming more attractive to the species over time. This judgement was informed by habitat sampling and qualitative comparison to other sites used extensively by birds.
2. Three sites were retained on the list because although they did not reach the 10 bird criterion they had habitat similar to the better sites or showed evidence of improving. These sites are RMC (Cemex HQ, site 42), Sheepwalk East (site 43), and Wraysbury Hilton (site 56). It is possible that some of the excluded sites might eventually become more attractive to Gadwall and Shoveler, if disturbance levels or habitat characteristics were to change in the future.
3. Church Lammas(now numbered 62)(restored gravel workings owned by Bretts) located north east of site 39, is a relatively new site and has held a maximum of 6 Gadwall and 5 Shoveler during the study – which demonstrates poor use by these species. Despite these low numbers however, it is considered that it should be included on the relevant list as it is still maturing as a site and is likely to attract more birds in the future.
4. Lake on Thames Water(now numbered 63) site immediately north of site 6 is the Ashford Common waterworks. This lagoon should actually be included on the relevant list as it has held up to 27 Gadwall and 13 Shoveler and is particularly undisturbed.
5. The gravel pit lakes at Stanwell Place (now numbered 64) immediately north of site 48 have been visited on occasion in previous years and were found to hold no birds, probably as a result of the high levels of disturbance. A recent visit confirmed this position with 2 Gadwall and 0 Shoveler. We are unaware of the intentions of Cemex regarding the future of this site. It presently has very little value to waterfowl but this could change rapidly, especially given the sites' proximity to the Staines Reservoirs which are obviously important sites. We are intending to visit the site this winter to determine whether environmental characteristics have changed since last winter.
6. Regarding Staines Moor, if the land up to the SSSI boundary has been included, that should be sufficient. The area north west of the boundary is poor quality improved grassland and as such has little value. No more than 12 Shoveler and no Gadwall have ever been observed on this area of meadow at night and the site is considered to be of very low importance to the SPA populations, in contrast to Staines Moor itself. In theory, the habitat could become more attractive after flooding but in practice this has not yet been observed despite regular nocturnal visits. The reasons for this are not clear.
7. The new waterbody (now numbered 65) to the east of site 50 has held a maximum of 8 Gadwall and no Shoveler. It is a small, heavily disturbed site with limited food

availability. It is unlikely to be important to either species in the near future and should be excluded from the relevant list.

8. The following sites were excluded from the provisional list of 'relevant' list in respect of provision of suitable habitat for SPA waterfowl populations because they had fewer than 10 birds of either Gadwall or Shoveler at all times surveyed and did not appear as though they would improve in condition.:

<b>Site No.</b>	<b>Site name</b>
10	Datchet gravel pit
11	Douglas Lane
14	Halliford Mere
15	Hampton Water Works
28	Littleton Lane West (S), and Littleton Lane West (N)
31	Lower Hythe gravel pits
33	Molesey gravel pit
55	Twynersh angling

9. Further details of specific considerations are given in the notes column in the schedule of sites.

Brian Briggs  
Professor David Hill  
13 November 2006

## **7. Conclusions and Formal Screening Opinion**

- 7.1 The screening exercise was carried out to establish whether the Spelthorne Development Plan – Core Strategy and Policies DPD and the Allocations DPD would alone or in combination with any other plans or projects have any significant effect on the integrity of any Natura 2000 site in or within 15 kilometres of Spelthorne Borough.
- 7.2 Neither the Core Strategy and Policies DPD nor the Allocations DPD is directly connected with or necessary to the management of any Natura 2000 site and therefore needs to be subject to an “appropriate assessment”.
- 7.3 From the available evidence the Council has concluded that there are no aspects of the Core Strategy and Policies DPD or the Allocations DPD which indicate that either document, on its own or “in combination”, will have any significant effect on the integrity of the any of the Natura 2000 sites assessed. Accordingly there is no requirement to proceed to the next stage of appropriate assessment to consider potential adverse impacts, or the “in combination effects of other plans”, on the integrity of the sites concerned.



## DOCUMENTS REFERRED TO

Planning for the Protection of European Sites: Appropriate Assessment	Department for Communities and Local Government	Aug 2006
Appropriate Assessment of Plans	Scott Wilson et al	Sept 2006
The Assessment of Regional Spatial Strategies and Sub-Regional Strategies under the Provisions of The Habitats Regulations (Draft Guidance)	David Tyldesley & Associates	Aug 2006
The Southwest London Waterbodies SPA Wildfowl Study – First Year Annual Report	Brian Briggs	Nov 2005
The Southwest London Waterbodies SPA Wildfowl Study – Progress report for Steering Group - 12 July 2006	Brian Briggs	July 2006
Bird Disturbance: improving the quality and utility of disturbance research	David Hill et al Journal of Applied Ecology	1997
Appropriate Assessment of Horsham District Council's Core Strategy	Levett-Therivel Sustainability Consultants	Aug 2006
Core Strategy & Policies Development Plan Document Submission Document Draft Appropriate Assessment Report	Royal Borough of Windsor & Maidenhead	Nov 2006
Draft Screening Report to assess the need for an Appropriate Assessment of The Surrey Heath Core Strategy 2006-2026	Surrey Heath Borough Council	Jan 2007
Draft Screening Opinion and Introductory Note for Runnymede Borough Council's Core Strategy LDF	Runnymede Borough Council	Nov 2006
Appropriate Assessment of the Draft South East Plan Final Report	Scott Wilson & Levett-Therivel	Oct 2006
Report to the Panel for the Draft South East Plan EIP on The Thames Basin Heaths Special Protection Area and Natural England's Draft Delivery Plan	Assessor: Peter Burley	Feb 2007