Screening Opinion as part of the Appropriate Assessment of the Epsom & Ewell Borough Council Core Strategy Submission Document

The purpose of Appropriate Assessment is to test whether a land use plan, in this case the Core Strategy, in combination with other plans and projects, is likely to have an adverse impact on the integrity of any European *Natura 2000* sites: any Special Area of Conservation (SAC) habitats or any Special Protection Area (SPA) for birds.

The requirement for an Appropriate Assessment is outlined in Article 6(3) and (4) of the European Communities (1992) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. Initially, in the UK, the transposition of the Directive into the UK Habitats Regulations did not specifically require land use plans to be considered under Articles 6(3) and 6(4) of the Directive. However, in October 2005 the European Court of Justice ruled that the UK has not been in compliance with the Habitats Directive, and as a result revisions are being made to the Habitats Regulations that will, at a minimum, require all land use planning documents (Regional Spatial Strategies, Development Plan Documents and Supplementary Planning Documents) to be screened for the effects they may have on European Sites.

An extract from this Directive can be seen below:

Habitats Directive 1992

Article 6(3)
'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 and projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In 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 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.'

Article 6(4)
'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 a social or economic nature, the member states shall take all compensatory measures necessary to ensure that overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or priority species, the only considerations which may be raised are those relating to human health or public safety, of beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.'

This directive applies the precautionary principle to SACs and SPAs, which means that the plan / project may only proceed if it has been ascertained that there will be no adverse effect on the integrity of the site(s) in question. The Directive promotes a

hierarchy of avoidance, mitigation and compensatory measures. Firstly a plan / project should avoid any negative impacts on European sites by identifying possible impacts early on in the process. Secondly, mitigation measures should be applied to eliminate adverse effects. Thirdly, if there are still adverse effects and no mitigation is possible, then the plan / project should not continue in its current format and an assessment should be made of alternative solutions. Finally, compensatory measures are required for any remaining adverse effects.

The DCLG consultation document 'Planning for the Protection of European Sites: Appropriate Assessment' (August 2006), recommended that Appropriate Assessments should be undertaken throughout the production of a Core Strategy. However, by the time this guidance was available the Council had already submitted its Core Strategy. An Appropriate Assessment is being retrospectively conducted for the submission document as a basis for the consideration of future Local Development Documents, and, if appropriate, for a review of the Core Strategy document.

Appropriate Assessment Methodology

The European Commission's Guidance[1] suggests a four stage process:

1) Screening - the process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;

2) Appropriate Assessment – the consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

3) Assessment of alternative solutions - the process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

4) Assessment of compensatory measures - an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed (it is important to note that this guidance does not deal with the assessment of imperative reasons of overriding public interest).

Initially for the assessment of the Council's Core Strategy, stages 1 and 2 will be conducted in combination to assess whether there is a need to continue to stages 3 and 4.

[1] Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC

Overview of Epsom & Ewell Borough Council's Core Strategy and the South East Plan

The Core Strategy sets out the strategic approach for future development within the Borough over the period 2007 to 2022. This includes a commitment to provide 2,715 homes within the Borough over this period (further information on the plan can be found in Appendix 1). The general approach of the Core Strategy is set out below:

- Development is to be concentrated within the existing urban area on previously developed sites; a significant proportion of house building will involve the re-use or refurbishment of existing buildings, notably in the cluster of former hospital sites to the west of Epsom
- It is envisaged that there will be no development of the Metropolitan Green Belt and therefore no loss of countryside is contemplated, and no extension of the urban area
- Policies seek to protect Strategic Open Spaces within the urban area as well as avoiding development in areas of flood risk

The requirement for this provision stems from the submitted South East Plan which sets out the amounts and general location of development throughout the South East. A number of these locations within other authorities may affect SPAs/SACs. This cumulative effect must be taken into account, as even though the Core Strategy for Epsom and Ewell may not directly impact on Natura sites, the combined effect of development may have a detrimental effect. However it must be noted that the South East Plan itself is subject to an Appropriate Assessment.

It is considered that the provisions of the Core Strategy are not directly related or connected to the management of any nearby European site

Identification of European Sites which may be affected

As mentioned previously, the European Sites that are to be considered in the Appropriate Assessment are SACs and SPAs. Below are two maps (figure 1 and figure 2) which show where these designated sites are located within the South East England.

Mole Gap to Reigate Escarpment SAC (Figure 3)
Distance from Borough boundary: Approximately 2km
Most of this site is a mosaic of chalk downland habitats, ranging from open chalk grassland to scrub and broadleaved semi-natural woodland on the scarp slope of the North Downs. Headley Heath is an area of heathland, grassland and woodland located on clay-with-flints on the dip slope. Both box and yew are well represented.
Recreational pressure is high and requires management and monitoring.
Bechstein's bats use the site throughout the year, as a winter hibernacula, autumn 'swarming' site, and as feeding habitat.

Richmond Park and Wimbledon Common SACs (Figure 4)
Distance from Borough boundary: Approximately 5km
The park and the common have a large number of ancient and old trees with decaying / fallen timber. They are 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. The sites are located in an urban area and therefore experience heavy recreational pressure.

South West London Waterbodies (Figure 5)
Distance from Borough boundary: Part of the site is approximately 7 km away, with the majority of the protect areas being approximately 15km.
The site is comprised of a series of discrete waterbodies in the Thames Valley between Windsor and Hampton Court. The site contains a series of reservoirs and former gravel pits that support internationally important numbers of wintering Northern shoveler *Anas clypeata* and Gadwall *Anas strepera.*

Thames Basin Heaths SPA (Figure 6)
Distance from Borough boundary: Part of the SPA is approximately 10km away
This SPA covers thirteen Sites of Special Scientific Interest (SSSI) and is spread over three counties, and within 5 km of fifteen local authorities. The SPA is an internationally important nature conservation site, classified in order to protect three bird species that are rare across Europe: the Dartford warbler, nightjar and woodlark. These birds rely on the heathland habitats, which are also important for a wide range of other wildlife species and for their landscape, historical and cultural values. Three of the SSSIs that comprise the SPA (Chobham Common, Ash to Brookwood Heaths and Colony Bog and Bagshot Heath) are also classified as part of the Thusley, Ash, Pirbright and Chobham Special Area for Conservation (SAC) for the wet and dry heathland habitats and bog communities of the Rhynchosporion vegetation alliance on peat substrates in depressions.

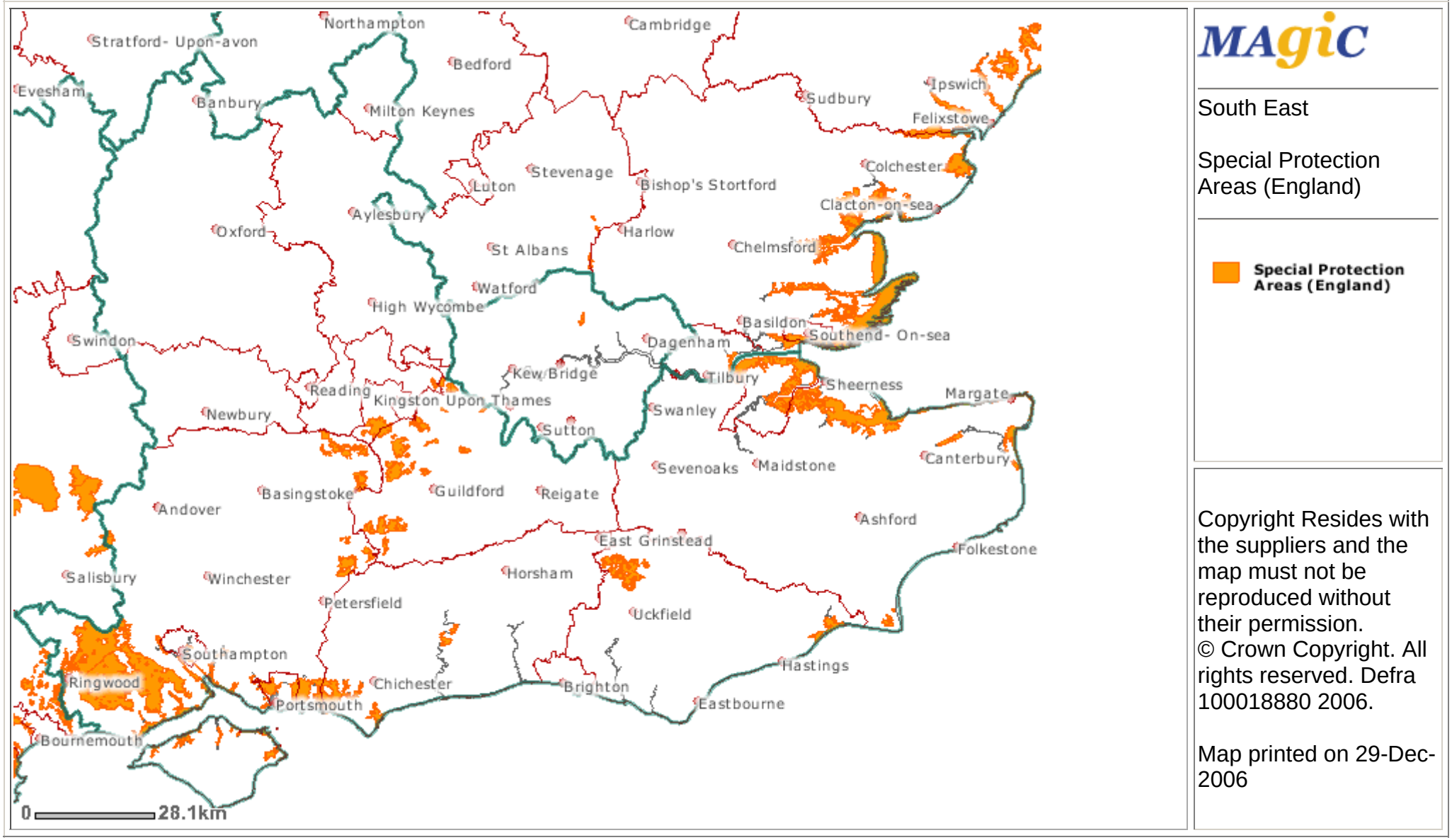
Thursley, Ash, Pirbright and Chobham SAC (Figure 5)
Distance from the Borough: The site is approximately 20km away
The SAC comprises a mosaic of habitats across a large and varied site, which is largely dependent of active heathland management. Insufficient grazing or other tranditional practices, including bracken control and scrub clearance, is therefore a serious potential threat, as is lowering of the water table as a result of water abstraction.

More detailed descriptions of these sites are contained in Appendix 2.

It is recognised that further development within the Borough may have implications for European sites that are located a considerable distance away from the Borough. Therefore an assessment will also be made of the likely impacts of development on these sites.

The next stage of the process is to establish whether the Core Strategy is likely to have a significant effect on these SACs/SPAs. The next section of this report contains the evaluation carried out by the Borough Council.

Figure 1: Special Protection Areas in South East England



MAgiC

South East

Special Protection Areas (England)

Special Protection Areas (England)

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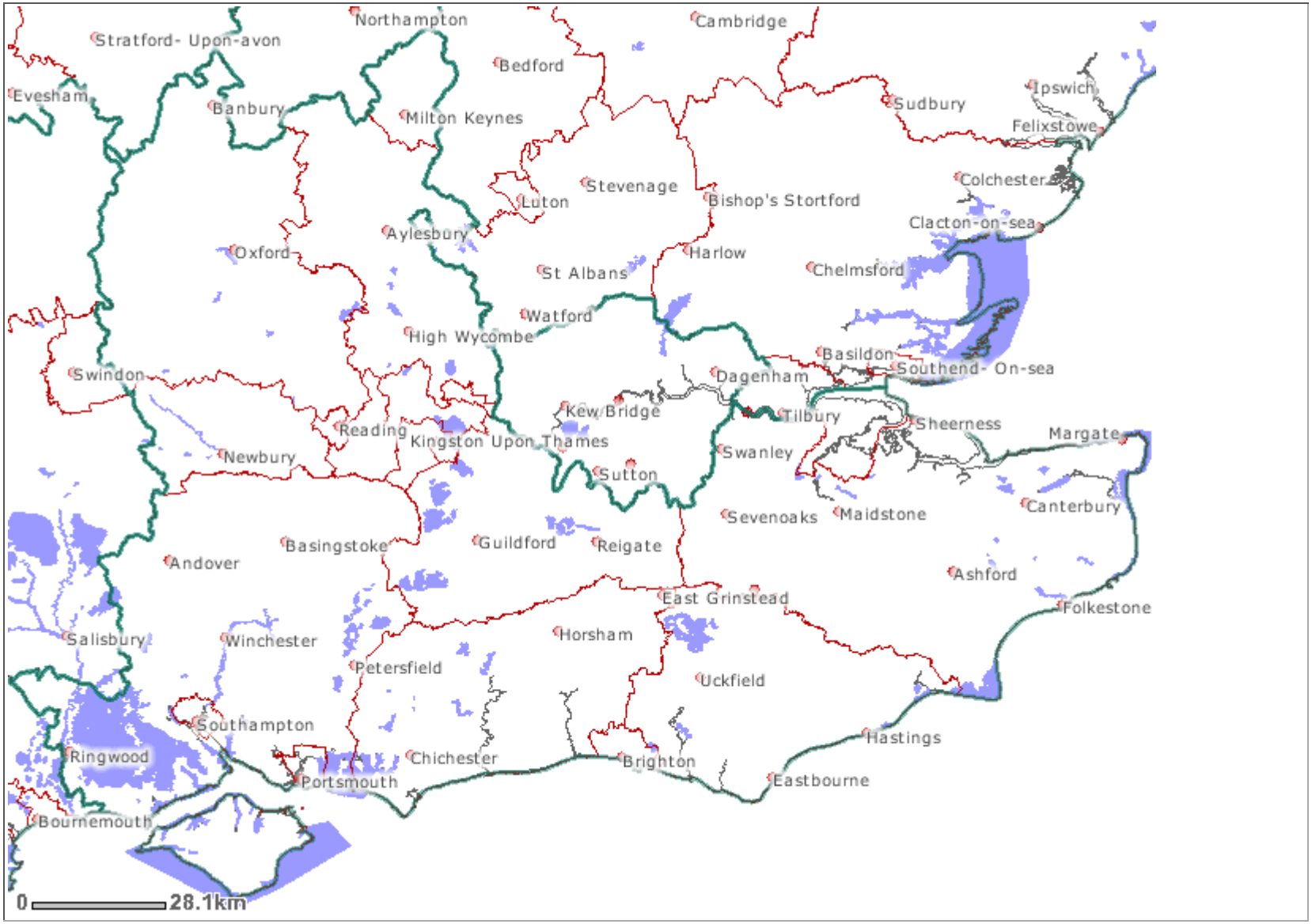
Map printed on 29-Dec-2006

Figure 2: Special Areas of Conservation in South East England



MAGIC

South East

Special Areas of Conservation (England)

Special Areas of Conservation (England)

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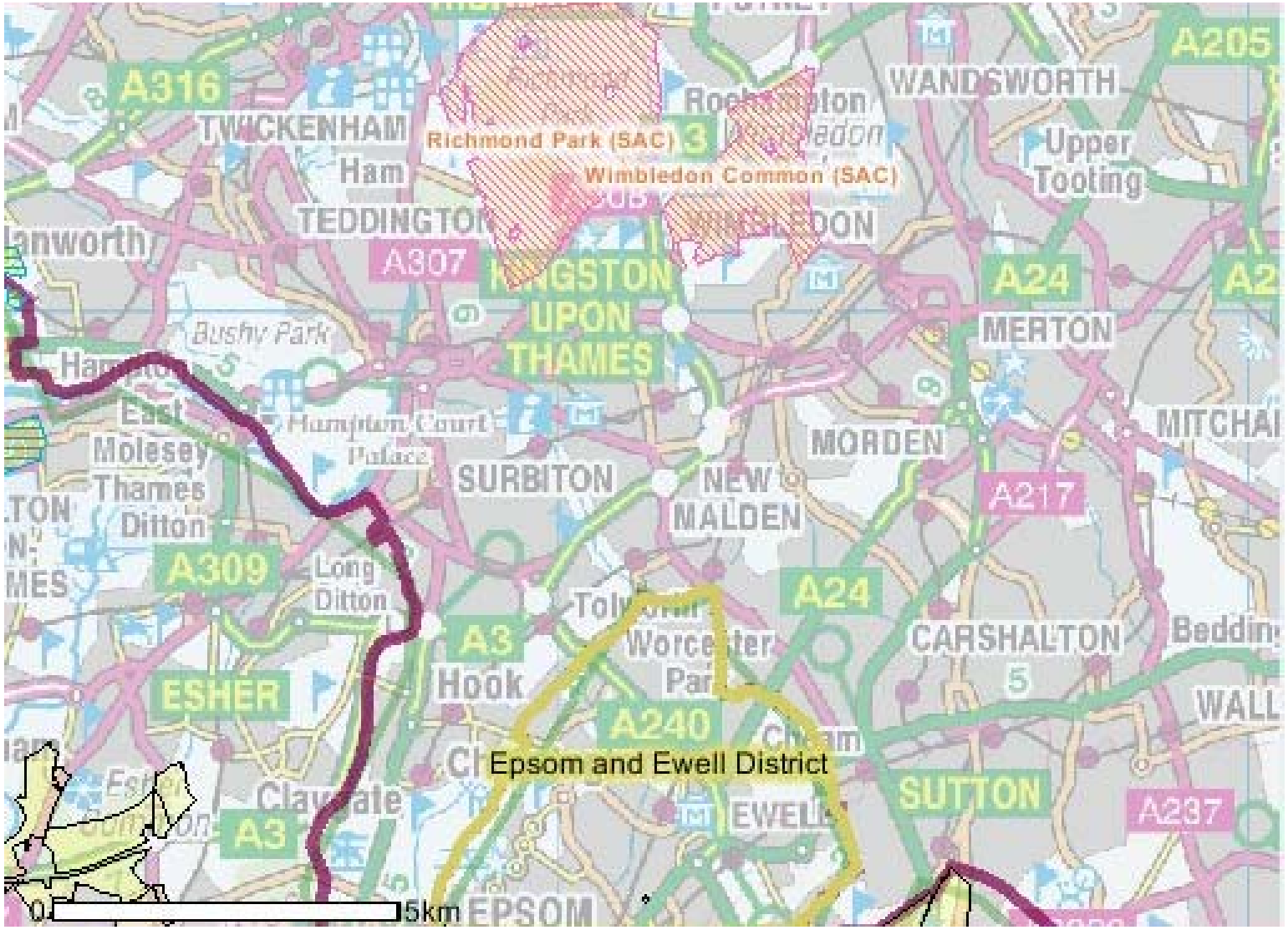
Map printed on 29-Dec-2006

Figure 3: *Mole Gap to Reigate Escarpment (SAC)*

Source: www.natureonthemap.org.uk

Figure 4: *Wimbledon Common and Richmond Park (SACs)*

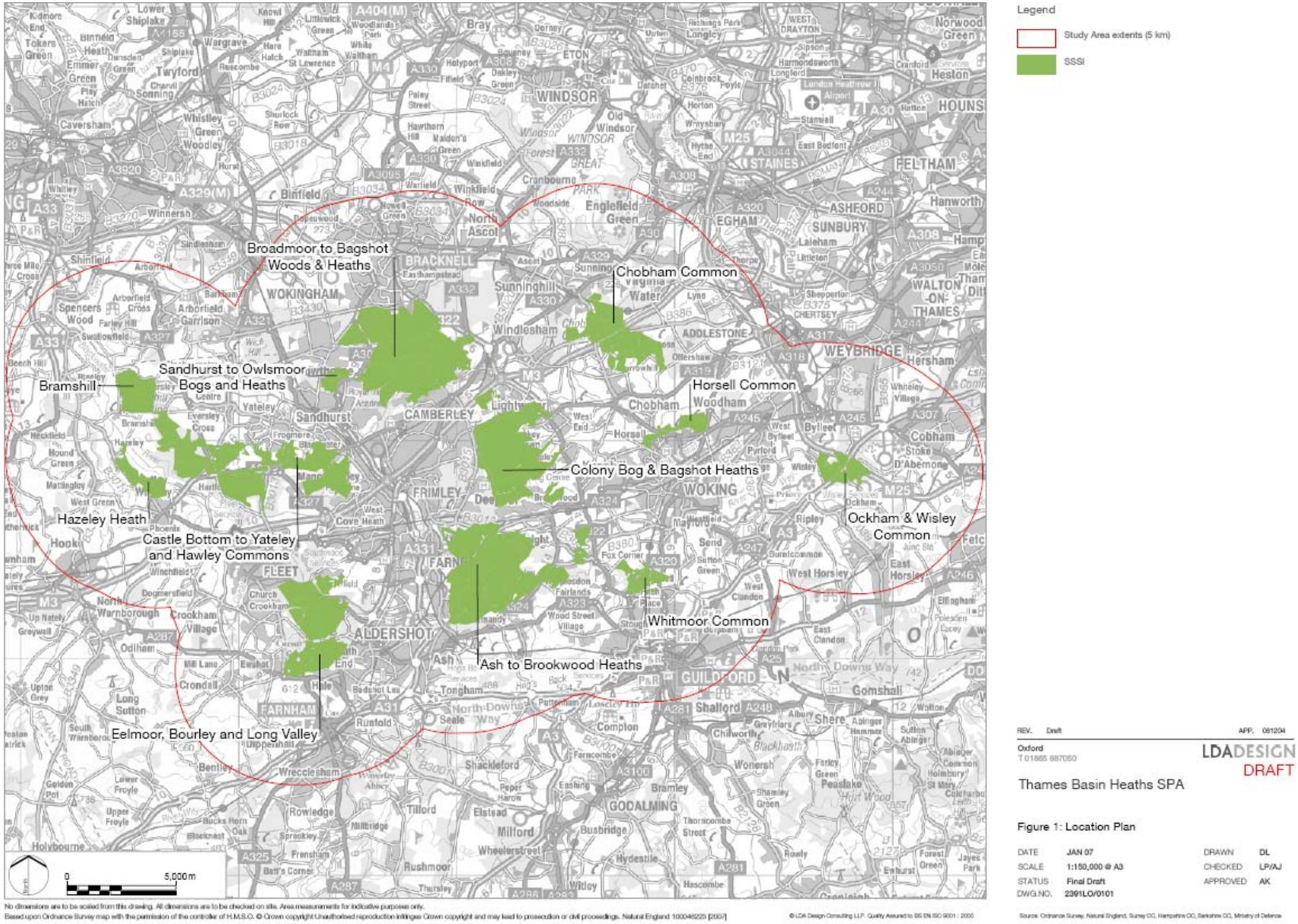


Source: www.natureonthemap.org.uk

Figure 5: *Overview of International and European protected sites within the vicinity of Epsom and Ewell*

Source: www.natureonthemap.org.uk

Figure 6: *Thames Basin Heaths (SPA) also showing the 5km buffer zone*



Source: Natural England Thames Basin Heaths SPA Access Management Plan (Draft January 2007)

Core Strategy and South East Plan Influence on the European Sites

Implications of Development

Core Strategy

Proposed residential development within the Borough will result in more intensive development within the urban areas, and potential increased tourism and recreational demands on the European sites. This may result in pressure on key habitats and species, such as sensitive heathlands and the rare stag beetle *Lucanus cervus*. Impacts may not only be restricted to sites nearby the authority, but development could also have implications for European sites that are located a considerable distance away. For example, increased levels of pollution and waste may be generated and increased water demand will all impact on the environment. It is particularly important to consider the cumulative impact of development for these issues. Recreational impacts would become more significant the closer development is to the European sites, while pollution may have a wider sphere of influence.

To summarise, the potential impacts of the Core Strategy could be:

- Urbanisation generally – more development, more noise, more activity
- Recreation – increased visits to the protected sites
- Increased traffic, leading to increased air pollution
- Increased water use

South East Plan

An Appropriate Assessment has been conducted for the South East Plan and this is a useful source of information for identifying potential 'in-combination effects' of plans on the protected sites.

The particular issues identified from this assessment for the level of growth envisaged in the South East Plan as a whole included:

- The imbalance between water demand and supply, possibly leading to reduced water ground- and surface-water levels. This would be exacerbated with climate change.
- Traffic growth and the associated worsening of air quality
- More recreational pressure on green areas throughout the South East from increased population predicted in the South East Plan and London Plan, leading to increased disturbance of wildlife, trampling of habitats, etc.
- Climate change and resulting extreme events, leading to problems of drought and flooding

In the local context of Epsom and Ewell, the impacts of increased urbanisation and recreation are likely to raise issues that are better dealt with through consideration of impact on the individual European sites, while the issues of air pollution and increased water use will be discussed in a broader context, considering 'in combination effects'.

Mole Gap to Reigate Escarpment

It is the authority's opinion that the Core Strategy in isolation will have a negligible effect on this SAC. The strategy for the period 2007 to 2022 directs all future development towards the built up areas of the Borough. As can be seen in the key diagram (figure 7) the built up area is predominantly located towards the northern part of the Borough with the southern area being designated as Green Belt. The Core Strategy contains a policy to protect the Green Belt and PPG2 severely restricts the amount and type of development that is permitted within this designation. There are a number of major developed sites within the Green Belt which will accommodate a significant proportion of the Borough's housing requirement. These sites are known as the 'hospital cluster' and are situated in the western part of the Green Belt. The distance from the Mole Gap to Reigate Escarpment to the main urban area is approximately 4km.

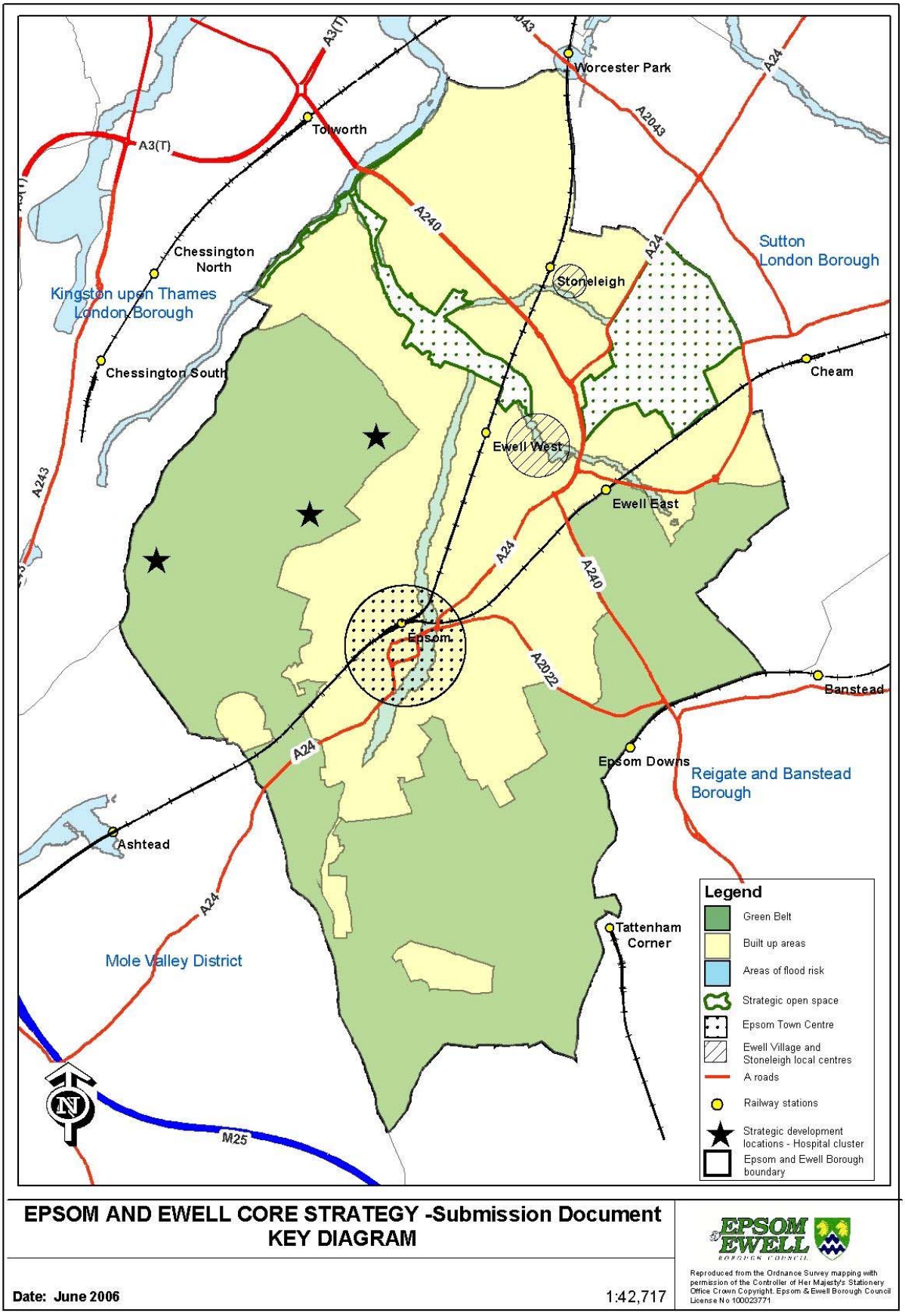
Urbanisation
As the SAC is located directly south of the Borough beyond the Metropolitan green Belt, the majority of future development within the Borough will be at least 5km from the SAC. Any increase in noise or activity generated by such development within the urban areas will have no noticeable impact on the SAC.

Recreational / Tourism Pressure
A large swathe of Green Belt (both in Epsom & Ewell and Mole Valley), serves as a buffer to the Mole Gap and Reigate Escarpment SAC. The Council's Open Space Audit 2006 has shown the area is well provided for in terms of types and levels of provision of open space and it is therefore unlikely that many people will travel from Epsom to the SAC for recreational purposes. The authority is maintaining an adequate provision of open space in the future, which will help ensure that development does not place additional recreational pressure on the more sensitive sites.

Although supportive of tourism, the Council is not actively promoting the Borough as a tourist destination. Hotel accommodation is limited although overnight accommodation is being encouraged, with a particular focus on the overnight conference market. The Borough does host the Epsom Derby, an annual event which attracts a large influx of visitors. The impact of this event is limited to a few days and unlikely to place an increased pressure on the protected European areas for the reasons outlined above.

Future Development Plan Documents to be produced by the Council will consider in more detail issues surrounding tourism. The Council will ensure that the sustainability appraisal of this document considers any potential impacts on the protected sites.

Figure 7: Key Diagram from Core Strategy Submission Document



Wimbledon Common & Richmond Park

Again it is the authority's view that in isolation the Core Strategy will not have an adverse effect on these SACs for many of the reasons outlined above. The SACs are located 5km from the Borough's boundaries and with adequate open space provision within the Borough, it is unlikely that development in the authority will result in additional recreational pressure and disturbance of key species in these areas.

Thames Basin Heaths

In 2005 English Nature initiated a Thames Basin Heaths Delivery Plan. This established a strategic, sub regional approach to the delivery of housing allocations across 11 local planning authorities in the Thames Basin.

Natural England believes that housing developments at a distance of up to 5km away from an SPA will create disturbance to rare bird populations. This is believed to be the distance that many people will travel to visit the heaths for leisure and recreation, especially for dog walking, thus potentially increasing the disturbance of the birds and the pressure on their habitats. At a distance of approximately 10km from the nearest part of the Thames Basin Heath SPA, it is considered that housing development within the Borough will not add to the recreational pressure on the SPA.

South West London Waterbodies SPA and Thursley, Ash, Pirbright & Chobham SAC

Recreational pressures and disturbance from development within Epsom & Ewell are unlikely to impact on these sites due to their distance from the Borough.

Air Pollution

New development can result in increased levels of air pollution which can impact on the European Sites and many are already known to be suffering from poor air quality. Air pollution can not only have effects locally but can be transported far from its source. The main types of air pollutants which have an effect include oxides of nitrogen (NOx) (principle source from road traffic), ammonia (NH3) (sources from agriculture and also cars fitted with 3 way catalysts), sulphur dioxide (SO2) (sources from industry, power stations and coal fuelled domestic heating) and low level ozone (O3) (a secondary pollutant formed through a complex reaction between NO2, hydrocarbons and sunlight).

The issue of diffuse air pollution has been assessed by the AA for the South East Plan, and a number of recommendations which will feed in to the development of this document. Therefore the issue of diffuse air pollution has been scoped out of this assessment, although the potential impact of emissions locally will be investigated, as advised by a letter from English Nature (now Natural England) to Runnymede Borough Council[2].

Within the Borough of Epsom and Ewell, the most likely source of air pollution will be from traffic. New development within the Borough may increase the demand for transport and lead to a rise in the use of privately owned cars. English Nature considers that pollution concentrations from vehicular emissions have localised impacts up to 200m from the roadside. Development within the Borough would not be within this range of any of the European sites, although consideration must be given to the volume of traffic generated by developments and whether this would be likely to add to traffic levels passing close by to the protected sites.

The sites most likely to be affected are those which are located close to a major road. The Mole Gap to Reigate Escarpment lies within 200m of the M25, while Richmond and Wimbledon Commons are in built up areas surrounded by busy roads. However it is difficult to assess the extent to which development within Epsom and Ewell will give rise to traffic that will pass by these sites. It is therefore important that the Core Strategy ensures that development is located in sustainable locations with good access to public transport. The Core Strategy achieves this by directing future development towards the Borough's built up areas which have good public transport links.

Mitigation Measures

Policy CS8 in the Core Strategy aims to ensure that development results in a sustainable environment, having a neutral impact upon pollution and climate change, or where possible reducing the impact. Further detailed requirements and guidance on this policy willbe provided in later DPDs, which will set specific targets. Policy CS18 aims to reduce the need to travel and encourage a choice of transport options with a focus on non car modes. Again further detail will be added to this policy in later DPDs.

[2] English Nature (16 May 2006) letter to Runnymede Borough Council

Water use

The increase in the number houses within the Borough will lead to an increase in the demand for water and in combination with development in other areas, this demand for greater water abstraction may have an impact on the protected sites. The issue of increased water abstraction was assessed in the AA for the South East Plan and is discussed below.

It was considered that reduced water levels can affect European sites and the species they support in a variety of ways including:

- Shallow rooted trees like beech can be damaged and die;
- Heathlands can become more prone to fire damage;
- Reduced river flows can affect fish, and can lead to algal blooms which can kill fish;
- Wetlands can dry out, affecting the birds that feed and nest in them;
- Reduced water levels in ditches, rivers, ponds and wetlands can reduce the number of insects available for bats and birds to feed on;
- A loss of freshwater habitats can cause the loss of amphibians that depend on such habitats

Therefore it is important that the growth in demand for water generated by new development can be accommodated, without any adverse impact on the European sites and taking into account the impacts of climate change.

As reported in the AA for the South East Plan, the Regional Assembly, in conjunction with the Environment Agency and water companies have carried out considerable research regarding the availability of water to support the growth described in the South East Plan. It was concluded that this growth can be accommodated providined a twin track approach is followed:

- if new homes achieve 8% water efficiency savings, and
- if water company resource development proposals are implemented

The water resource proposals are set out in policy NRM2 of the South East Plan and there are no proposals within the Borough of Epsom and Ewell. The Environment Agency and Natural England have regulatory control of any new abstraction or water transfer proposals, which would protect the European Sites. Through this approach it is considered that the impact from water abstraction on the European sites is likely to be limited.

The Water Resources in the South East Group (WRSE) produced a report[3] which examined different scenarios of water efficiency saving measures in new buildings, amongst other factors. The report states that the average per capita consumption of the SEERA region currently lies between 160 & 170 litres per person per day. The report concluded that the 'growth of 28,900 per annum new homes over the period 2006 to 2026 can be accommodated in all the supply-demand balance scenarios we have considered, except in the Milton Keynes area which could have some deficits at 2025/26 if only low water efficiency is achieved'. Further information regarding specific areas of the region was provided, details of which are provided below.

The water supply for the Borough of Epsom and Ewell is provided by two companies; Sutton and East Surrey, and Thames Water. Data from the WRSE report shows the impact of the housing figures on the water supply-demand balance. For Epsom and

[3] Report on the latest South East Plan housing provision and distribution, May 2006

Ewell, it is estimated there will be a balance between water supply-demand in 2016 provided 8% water efficiency savings are achieved in new build homes and if water company resource development proposals are implemented. In 2026 the situation is slightly improved with the portion of the Borough supplied by Thames Water being in 'surplus', while the Sutton and East Surrey area remains neutral (Appendix 3 provides a map of these scenarios for the South East Region).

Mitigation Measures

From the above it can be seen that it is imperative for new development across the South East region to achieve at least 8% water efficiency savings in new buildings if the European Sites are not to suffer any adverse impacts. It is therefore important that the Council targets water efficiency savings of at least 8% in any new developments within the Borough. Policy CS8 in the Core Strategy aims to ensure that development results in a sustainable environment, reducing and, wherever possible, having a neutral impact upon pollution and climate change. Water quality, conservation and sustainable urban drainage issues are also covered to help ensure efficient use of this scare resource. Further detailed policies which will include specific water efficiency targets will be developed in forthcoming Development Plan Documents to ensure this requirement is met.

It must be noted that adverse impact on the European sites will only be avoided if the water company resource development proposals are implemented and in a timely manner.

The AA for the South East Plan states that it is not possible to conclude that the SEP is unlikely to have a significant impact on the integrity of some European Sites, but these are the ones located in the South Hampshire area.

South East Plan & Future Action

It is therefore concluded that in isolation, the Core Strategy's impact on the European sites is likely to be negligible.

However, the increased level of development across the South East, as set out in the South East Plan, may cumulatively have a impact. An Appropriate Assessment has been conducted for the draft South East Plan which has concluded that there is already a conflict between European sites and existing urban centres, and there is a clear risk of further adverse effects from the levels of growth described. It is considered that the potential adverse affects can be controlled by the implementation of appropriate avoidance or mitigation measures at a regional or local level, but there must be a firm commitment and sufficient funding towards implementing such measures. The correct timing of provision is also essential. Should the required infrastructure not be forthcoming, it has been recognised that there may be a need to consider revising the housing figures for the South East region.

It is essential that at the local level each authority conducts an Appropriate Assessment for their plans to ensure development is located sensitively and that any potential impacts are identified and are eliminated or adequately mitigated.

Conclusion

It has been demonstrated from the discussion that the Core Strategy in isolation will not impact on the European sites that are in proximity to the Borough's boundaries. However, in combination with other plans, namely the South East Plan, there may be effects. Should the South East Plan require revision following its examination and consideration of its Appropriate Assessment, the Council is committed to reviewing the Core Strategy accordingly. Therefore at this stage for the Core Strategy there is not a need to progress to stages 3 & 4 of the Appropriate Assessment.

Appendix 1: Description of plan

Authority: Epsom and Ewell Borough Council
Area: 3,411 ha.
Area description: The area is comprised of 42% Green Belt with the remainder being predominantly urban
Name of Plan: Core Strategy
Period of Plan: 2007 to 2022
Description of Plan: As part of the Local Development Framework the Core Strategy provides a long term planning vision for the area, drawing upon the aims and objectives contained in the Borough's Community Strategy. It contains broad strategic policies aimed at meeting that vision and sets the overall framework in which more detailed plans will be drawn up and decisions made. It does not deal with specific development sites, nor does it deal with the most detailed policy issues; these will follow in later documents. All subsequent Local Development Documents must be in conformity with the Core Strategy.
Allocated number of new residential units over plan period: 2,715 (as required by the South East Plan)
Strategy of the Plan: The Core Strategy directs future development towards the built up areas of the Borough and seeks to preserve the Green Belt.

Appendix 2: Description of designated sites in proximity to the Borough's boundaries

Name: Mole Gap to Reigate Escarpment
Authority: Mole Valley District Council
Site Designation: Special Area of Conservation
Distance from Epsom & Ewell Borough Council Boundary: Approximately 2 km
Site Description:
The site was designated as an SAC on 20 April 2005. It is 887.68 ha in area.
Habitat classes: approximately 60% of the site is covered by Broad-leaved deciduous woodland, 25% Heath, Scrub, Maquis and garrigue. Phygrana and 15% Bogs, Marshes, water fringed vegetation, Fens.
The existence of Annex 1 habitats are the primary reasons for the selection of this site.
Annex I habitats that are a primary reason for selection of this site:
Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)
The Mole Gap supports the only areas of stable box scrub in the UK. Natural erosion maintains the open conditions that are required for the survival of this habitat type and therefore supports a stable formation and has good conservation of habitat structure and function.
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia)
The area on the North Downs escarpment supports a wide range of calcareous grassland types on steep slopes including CG2 *Festuca ovina – Avenula pratensis,* CG3 *Bromus erectus,* CG4 *Brachypodium pinnatum,* CG5 *Brachypodium pinnatum – Bromus erectus* and CG6 *Avenula pubescens* grasslands. The area is also particularly important for rare vascular plants, including orchids and exhibits transitions to scarce scrub, woodland, dry heath types and chalk heath.
Semi-natural dry grasslands and scrubland facies: on calcareous substrates (Festuco-Brometalia) (important orchid sites) ***** *Priority feature*
A large site on the North Downs escarpment supports a range of semi natral grassland types on steep slopes including CG2 *Festuca ovina – Avenula pratensis,*

CG3 *Bromus erectus,* CG4 *Brachypodium pinnatum,* CG5 *Brachypodium pinnatum – Bromus erectus* and CG6 *Avenula pubescens* grasslands. The site also supports important populations of the nationally scarce musk orchid *Herminium monorchis* and man orchid *Aceras anthropophorum,* the fromer occurring in areas of shorter turf. A range of more widespread but local orchids are also present, including autumn lady's-tresses *Spiranthes spiralis* and green-winged orchid *Orchis morio*, as well as commoner species, such as pyramidal orchid *Anacamptis pyramidalis*, fragrant orchid *Gymnadenia conopsea* and bee orchid *Ophrys apifera*.

Taxus baccata woods of the British Isles * *Priority feature*

At Mole Gap to Reigate Escarpment yew *Taxus baccata* woodland has been formed both by invasion of chalk grassland and from development within beech *Fagus sylvatica* woodland following destruction of the beech overstorey. Yew occurs here in extensive stands, with, in places, an understorey of box *Buxus sempervirens* at one of its few native locations.

Annex I Habitats: European dry heaths and *Asperulo-Fagetum* beech forests

Annex II Species present as a qualifying feature, but not a primary reason for site selection: Great crested newt *Triturus cristatus* and Bechstein's bat *Myotis bechsteinii*

Name: Wimbledon Common

Authority: Merton / Wansworth

Site Designation: Special Area of Conservation

Distance from Epsom & Ewell Borough Council Boundary: Approximately 5 km

Site Description:

The site was designated as an SAC on 20 April 2005. It is 348.31 ha in area.

Habitat classes: approximately 45% of the site Broad-leaved deciduous woodland and 45% is Dry grassland, Steppes. The remainder of the site is classified as 5% Heath, Scrub, Maquis and garrigue. Phygrana, 3.5% Improved grassland, 1% inland water bodies and 0.5% Bogs, Marshes, water fringed vegetation, Fens.

The existence of Annex II species are the primary reasons for the selection of this site:

Annex I habitats that are a primary reason for selection of this site: Not applicable

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Northern Atlantic wet heaths with *Erica tetralix* and European dry heaths

Annex II species that are a primary reason for selection of this site: Stag beetle *Lucanus cervus*

Wimbledon Common has a large number of old trees and much fallen decaying timber. It is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus*, and a relatively large number of records were received from this site during a recent nationwide survey for the species (Percy *et al*. 2000). The site supports a number of other scarce invertebrate species associated with decaying timber

Annex II habitats present as a qualifying feature, but not a primary reason for selection of this site: Not applicable

Name: Richmond Park

Authority: Richmond upon Thames

Site Designation: Special Area of Conservation

Distance from Epsom & Ewell Borough Council Boundary: Approximately 5 km

Site Description:

The site was designated as an SAC on 20 April 2005. It is 846.68 ha in area.

Habitat classes: approximately 25% of the site Broad-leaved deciduous woodland and 25% is Heath, Scrub, Maquis and garrigue Phygrana. 18% is Dry grassland, Steppes, 5% Humid grassland, Mesophile grassland, 5% Mixed woodland, 1.5% inland water bodies and 0.5% Bogs, Marshes, water fringed vegetation, Fens.
The existence of Annex II species are the primary reasons for the selection of this site:
Annex I habitats that are a primary reason for selection of this site: Not applicable
Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Not applicable
Annex II species that are a primary reason for selection of this site: Stag beetle *Lucanus cervus*
Richmond Park has a large number of ancient trees with decaying timber. It is at the heart of the south London centre of distribution for stag beetle *Lucanus cervus*, and is a site of national importance for the conservation of the fauna of invertebrates associated with the decaying timber of ancient trees.
Annex II habitats present as a qualifying feature, but not a primary reason for selection of this site: Not applicable

Name: South West London Water bodies
Authority: Berkshire / Greater London / Surrey / Windsor and Maidenhead
Site Designation: Ramsar
Distance from Epsom & Ewell Borough Council Boundary: Approximately 8 km to nearest part of Ramsar site. The majority of the site is approximately 15km away
Site Description:
The site was designated as Ramsar site on 22 September 2000. It is 828.14 ha in area.
The site comprises a series of reservoirs and former gravel pits that support internationally important numbers of wintering *Anus strepera* and *Anas clypeata*
The existence of species/populations occurring at levels of international importance are the primary reasons for the selection of this site:

Qualifying Species present on site:
Northern shoveler, *Anas clypeata,* 397 individuals, representing an average of 2.6% of the GB population (species with peak counts in spring/autumn)
Gadwell, *Anas strepea strepera,* 487 individuals, representing an average of 2.8% of the GB popluation (species with peak counts in winter)

Other noteworthy species occurring at levels of international importance:
Species with peak counts in spring / autumn:
Great crested grebe , *Podiceps cristatus cristatus*, 318 individuals, representing an average of 2% of the GB population
Great cormorant , *Phalacrocorax carbo carbo*, 318 individuals, representing an average of 1.3% of the GB population
Tufted duck , *Aythya fuligula*, 2731 individuals, representing an average of 3% of the GB population
Species with peak counts in winter:
Black-necked grebe , *Podiceps nigricollis nigricollis*, 2 individuals, representing an average of 1.6% of the GB population
Smew , *Mergellus albellus*, 29 individuals, representing an average of 7.8% of the GB population

Name: Thames Basin Heaths
Authority: Bracknell Forest, Hampshire, Surrey
Site Designation: Special Area of Conservation

Distance from Epsom & Ewell Borough Council Boundary: Approximately 20 km
Site Description:
The site was designated as an SAC on 20 April 2005. It is 5138 ha in area.
The Thames Basin Heaths SPA is a composite site that is located across the counties of Surrey, Hampshire and Berkshire. The open heathland habitats overlie sand and gravel sediments which give rise to sandy or peaty acidic soils, supporting dry heathy vegetation on well drained slopes, wet heath on low lying shallow slopes and bogs in valleys. The site consist of tracts of heathlands, scrub and woodlands, once almost continuous, but now fragmented into separate blocks by roads, urban development and farmland. Less open habitats of scrub, acidic woodland and conifer plantations dominate, within which are scattered areas of open heath and mire. The site supports important breeding populations of an number of birds of lowland heathland, especially Nightjar *Caprimulgus europaeus* and Woodlark *Lullula arborea,* both of which nest on the ground, often at the woodland/heathland edge, and Dartford Warbler *Sylvia undata,* which often nests in gorse *Ulex sp.* Scattered trees and scrub are also used for roosting.
The existence of populations of European importance, listed in Annex 1 of the Directive (79/409/EEC).
Qualifying Species present on site:
Dartford Warbler *Sylvia undata,* 445 pairs representing at least 27.8% of the breeding population in Great Britain (Count as at 1999)
Nightjar *Caprimulgus europaeus,* 264 pairs representing at least 7.8% of the breeding population in Great Britain (Count mean (1998-99))
Woodlark *Lullula arborea,* 149 pairs representing at least 9.9% of the breeding population in Great Britain (Count as at 1997)

Name: Thursley, Ash, Pirbright & Chobham
Authority: Bracknell Forest, Hampshire, Surrey
Site Designation: Special Protection Area
Distance from Epsom & Ewell Borough Council Boundary: Approximately 10 km
Site Description:
Habitat classes: approximately 75% of the site is Heath, Scrub, Maquis and garrigue Phygrana, 10% Bogs, Marshes, water fringed vegetation, Fens, 10% Coniferous woodland and 5% Inland water bodies.
The existence of Annex I habitats are the primary reasons for the selection of this site:
Annex I habitats that are a primary reason for selection of this site:
Northern Atlantic wet heaths with *Erica tetralix:*
This site represents lowland **northern Atlantic wet heaths** in south-east England. The wet heath at Thursley is NVC (National Vegetation Classification) type M16 *Erica tetralix – Sphagnum compactum* and contains several rare plants, including great sundew *Drosera anglica*, bog hair-grass *Deschampsia setacea*, bog orchid *Hammarbya paludosa* and brown beak-sedge *Rhynchospora fusca*. There are transitions to valley bog and dry heath. Thursley Common is an important site for invertebrates, including the nationally rare white-faced darter *Leuccorhinia dubia*.
European Dry Heaths:
This south-east England site contains a series of large fragments of once-continuous heathland. It is selected as a key representative of NVC type H2 *Calluna vulgaris – Ulex minor* dry heathland. This heath type has a marked south-eastern and southern distribution. There are transitions to wet heath and valley mire, scrub, woodland and acid grassland, including types rich in annual plants. The **European dry heaths** support an important assemblage of animal species, including numerous rare and local invertebrate species, European nightjar *Caprimulgus europaeus*, Dartford warbler *Sylvia undata*, sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*.

Depressions on peat substrates of the Rhynchosporion

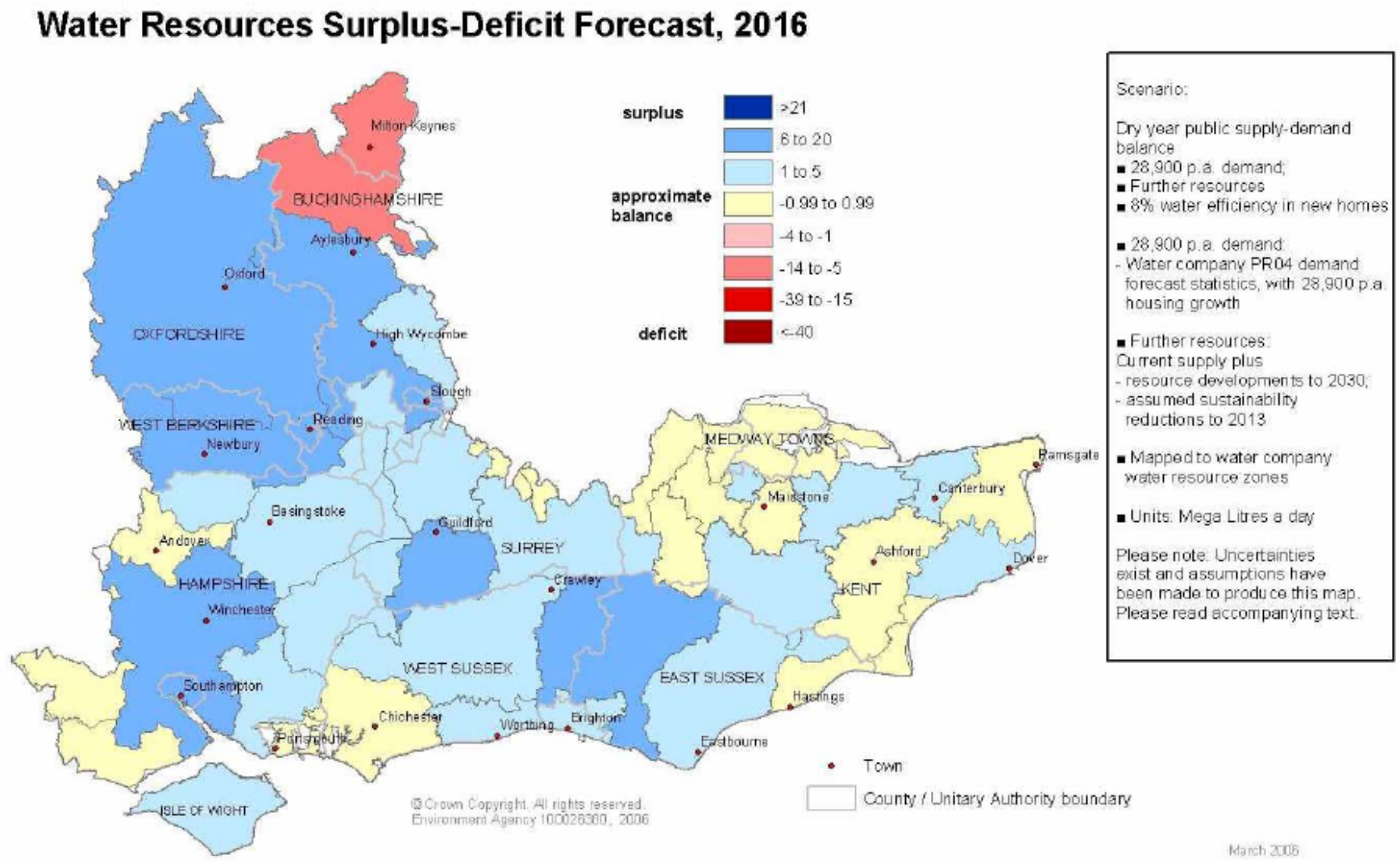
This site contains examples of **Depressions on peat substrates of the *Rhynchosporion*** in south-east England, where it occurs as part of a mosaic associated with valley bog and wet heath. The vegetation is found in natural bog pools of patterned valley mire and in disturbed peat of trackways and former peat-cuttings.

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: Not applicable

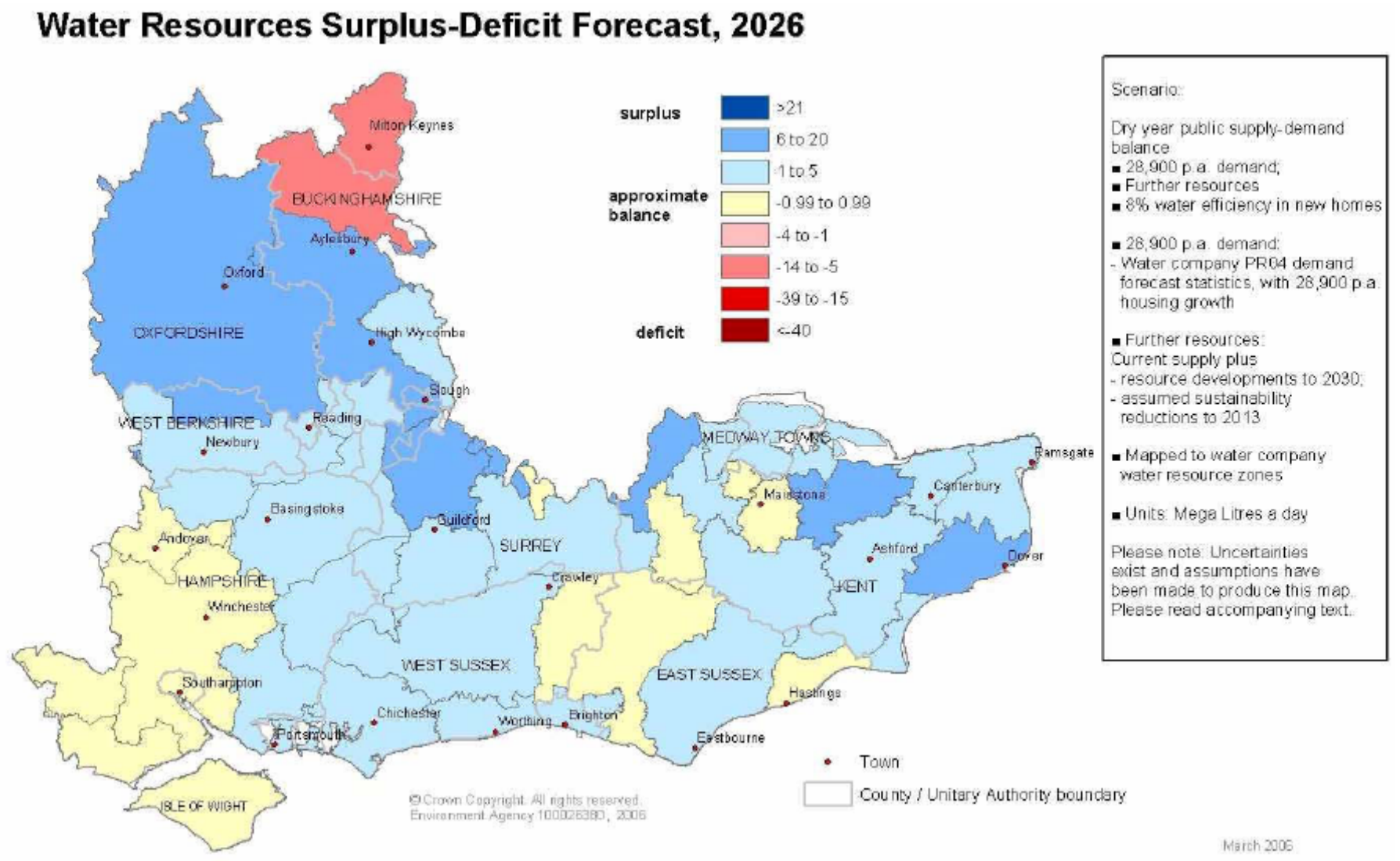
Annex II species that are a primary reason for selection of this site: Not applicable

Annex II habitats present as a qualifying feature, but not a primary reason for selection of this site: Not applicable

Appendix 3:



Source: WRSE report on the latest South East Plan housing provision and distribution , May 2006



Source: WRSE report on the latest South East Plan housing provision and distribution , May 2006