



Report

Submitted to
Croydon Council

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Habitats Regulations Assessment Screening Report - Croydon Local Plan 1.1 (CLP1.1)

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1 Introduction

1.1 Background to the project

- 1.1.1 AECOM has been appointed by London Borough of Croydon (referred to as “Croydon Council” and “the Authority”) to assist in undertaking a Habitats Regulations Assessment (HRA) of the potential effects of a partial review of the Croydon Local Plan: Strategic Policies (known henceforth as CLP1.1) and the Croydon Local Plan: Detailed Policies and Proposals (known henceforth as CLP2) on the Natura 2000 network and Ramsar sites. **The current document only assesses the changes to CLP1, in the form of CLP1.1. The HRA of CLP2 is contained in a separate report.** Where Policies are not revised, no assessment will be made.
- 1.1.2 The Croydon Local Plan: Strategic Policies (CLP1) was adopted in April 2013 and sets out the framework for the planning and management of development in the borough up to 2031. CLP1 was subject to Habitats Regulations Assessment in 2011, which was able to conclude no likely significant effect on any European sites¹. CLP1.1 aims to prolong the period of the CLP1 through to 2036 and to reflect changes to the London Plan being introduced through the Further Alterations of the London Plan. CLP2 provides further detail to the Strategic Policies and also contains site allocations and will replace the currently saved policies of the Unitary Development Plan (2006).
- 1.1.3 The objective of this assessment is to:
- identify any aspects of the amended Local Plan document (CLP1.1) that would cause an adverse effect on the integrity of Natura 2000 sites, otherwise known as European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of Government policy, Ramsar sites²), either in isolation or in combination with other plans and projects; and
 - to advise on appropriate policy mechanisms for delivering mitigation where such effects are identified.

1.2 Current legislation

- 1.2.1 The need for Habitats Regulations Assessment is set out within Article 6 of the EC Habitats Directive 1992, and interpreted into British law by the Conservation of Habitats and Species Regulations 2010. The ultimate aim of the Directive is to “maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest” (Habitats Directive, Article 2(2)). This aim relates to habitats and species, not the European sites themselves, although the sites have a significant role in delivering favourable conservation status.
- 1.2.2 Within the UK, Protected Areas for nature conservation include, those established under National legislation (e.g. Sites of Special Scientific Interest (SSSI)), areas established under European Union Directives/European initiatives (including the Natura 2000 network of sites), and protected areas established under Global Agreements (e.g. Ramsar sites).
- 1.2.3 With relevance to this report, Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the EC Birds Directive 1979. They are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species. Special Areas of Conservation (SAC) are strictly protected sites designated under Article 3 of the EC Habitats Directive, which requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended)³. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). Ramsar sites are wetlands of international importance designated under the Ramsar Convention.
- 1.2.4 The Conservation of Habitats and Species Regulations 2010 require that land use plans are subject to Appropriate Assessment (AA) where they are likely to have a significant effect on a Natura 2000 site.

¹ Hyder. (2011). London Borough of Croydon. Proposed Submission Core Strategy. Habitats Regulations Assessment Screening

² Wetlands of International Importance designated under the Ramsar Convention 1979

³ <http://jncc.defra.gov.uk/>

- 1.2.5 The Habitats Directive applies the precautionary principle to protected areas; 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. In the case of the Habitats Directive, potentially damaging plans and projects may still be permitted if there are no alternatives to them and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation will be necessary to ensure the overall integrity of the site network is maintained.
- 1.2.6 In order to ascertain whether or not site integrity will be affected, a Habitats Regulations Assessment should be undertaken of the plan or project in question:

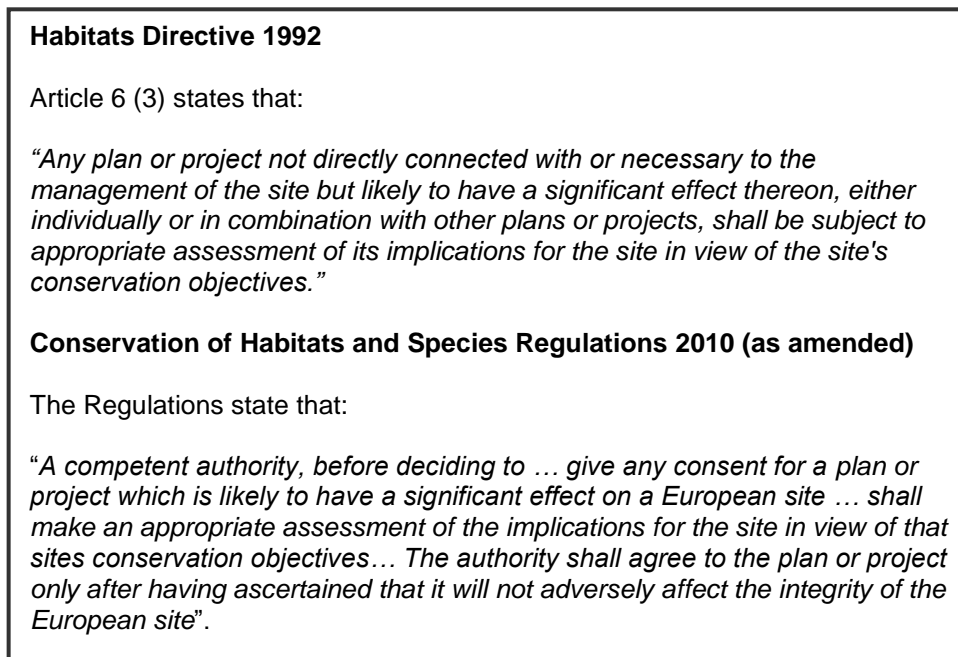


Figure 1: The legislative basis for Appropriate Assessment

- 1.2.7 Over the years the phrase ‘Habitats Regulations Assessment’ has come into wide currency to describe the overall process set out in the Conservation of Habitats and Species Regulations from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an ‘appropriate assessment’. Throughout this report we use the term Habitats Regulations Assessment for the overall process.

1.3 Scope of the Project

- 1.3.1 There is no pre-defined guidance that dictates the physical scope of a HRA of a Local Plan. Therefore, in considering the physical scope of the assessment, we were guided primarily by the identified impact pathways rather than by arbitrary ‘zones’. Current guidance suggests that the following European sites be included in the scope of assessment:
- All sites within the Local Plan area boundary; and
 - Other sites shown to be linked to development within the Borough boundary through a known ‘pathway’.
- 1.3.2 Briefly defined, pathways are routes by which a change in activity within the Local Plan area can lead to an effect upon a European site. In terms of the second category of European site listed above, guidance from the former Department of Communities and Local Government states that the HRA should be ‘*proportionate to the geographical scope of the [plan policy]*’ and that ‘*an AA need not be done in any more detail, or using more resources, than is useful for its purpose*’ (CLG, 2006, p.6).
- 1.3.3 No Internationally designated sites are located within Croydon Council boundary.
- 1.3.4 The following internationally designated sites are located within 20km of the Croydon authority boundary, and as such could potentially have impact pathways present resulting from the changes to CLP1, in the form of CLP1.1:

- Mole Gap to Reigate Escarpment SAC located 5.9km from Croydon authority boundary
- Wimbledon Common SAC located 6.5km from Croydon authority boundary
- Richmond Park SAC located 9.2km from Croydon authority boundary
- Lee Valley SPA and Ramsar site located 17km from Croydon authority boundary
- South West London Waterbodies SPA and Ramsar site located 17.5km from Croydon authority boundary
- Epping Forest SAC located 18.5km from Croydon authority boundary
- Thames Basin Heaths SPA located 19.1km from Croydon authority boundary

1.3.5 During an initial sieving exercise to screen out internationally designated sites (e.g. no realistic impact pathways present), the following internationally designated sites can be sieved out from further assessment due to the distances involved.

- Lee Valley SPA and Ramsar site located 17km from Croydon authority boundary
- South West London Waterbodies SPA and Ramsar site located 17.5km from Croydon authority boundary
- Epping Forest SAC located 18.5km from Croydon authority boundary
- Thames Basin Heaths SPA located 19.1km from Croydon authority boundary

1.3.6 These sites are not considered further within this document.

1.3.7 There are three internationally designated sites that are located within a sufficiently close distance that there could be impact pathways linking to the Croydon Local Plan. These are:

- Mole Gap to Reigate Escarpment SAC;
- Wimbledon Common SAC; and
- Richmond Park SAC.

1.3.8 European site details can be found in Appendix A.

1.3.9 Richmond Park SAC is located 9.2km from Croydon authority boundary. The Site Improvement Plan for the SAC⁴ does not identify any threats or pressures upon the SAC feature (stag beetle)⁵. It is noted within the SAC Citation⁶ that this site is located within Greater London, and as such is subject to high levels of recreational activity. However, the primary requirement for stag beetle habitat is a plentiful supply of partially-buried dead wood, which will not be affected by recreational pressure. As such, this impact pathway can be screened out and this site is not discussed further within this report.

1.3.10 The remainder of this document considers potential for likely significant effects from impact pathways resulting from CLP1.1 upon the following internationally designated sites:

- Mole Gap to Reigate Escarpment SAC; and
- Wimbledon Common SAC.

1.4 This Report

1.4.1 Section 2 of this report summarises the methodology for the assessment. Section 3 identifies the possible pathways by which adverse effects on European protected sites could arise. Section 4 considers each policy in turn, assessing possible pathways upon European sites that may be vulnerable, determine Likely Significant Effects, based on key environmental conditions required to maintain the integrity of these sites. The screening exercise concludes by either screening out any possible impacts or by determining that mitigation or avoidance measures are required. Where mitigation strategies are deemed necessary, potential approaches are discussed. In combination effects with other plans on each European site are also considered within Section 4. Background information on all the European sites discussed in this report is presented within Appendix A. Figure 1 of Appendix B presents a map showing all internationally important wildlife sites discussed.

⁴ <http://publications.naturalengland.org.uk/file/4641498714865664> [Accessed 29/07/2015]

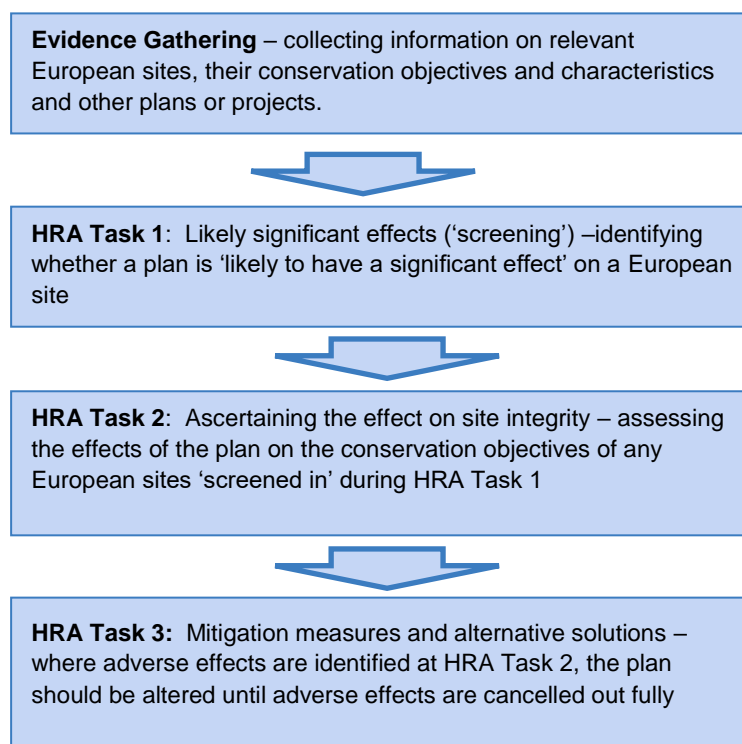
⁵ <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0030246> [Accessed 29/07/2015]

⁶ <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?euocode=UK0030246> [Accessed 29/07/2015]

2 Methodology

2.1 Introduction

- 2.1.1 The HRA has been carried out in the continuing absence of formal central Government guidance, although general EC guidance on HRA does exist⁷. The former Department for Communities and Local Government released a consultation paper on the Appropriate Assessment of Plans in 2006⁸. As yet, no further formal guidance has emerged. However, Natural England has produced its own internal guidance⁹ as has the RSPB¹⁰. Both of these have been referred to alongside the guidance outlined in section 1.2 in undertaking this HRA.
- 2.1.2 Figure 2 below outlines the stages of HRA according to current draft CLG guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the plan until no significant adverse effects remain.



Source: CLG, 2006

Figure 2- Four-Stage Approach to Habitats Regulations Assessment

- 2.1.3 This HRA screening assessment only assesses that changes to CLP1 in the form of CLP1.1 and does not re-consider the whole document.

2.2 HRA Task 1 - Likely Significant Effects (LSE)

- 2.2.1 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the Plan, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

⁷ European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁸ CLG (2006) Planning for the Protection of European Sites, Consultation Paper

⁹ http://www.ukmpas.org/pdf/practical_guidance/HRGN1.pdf

¹⁰ Dodd A.M., Cleary B.E., Dawkins J.S., Byron H.J., Palframan L.J. and Williams G.M. (2007) *The Appropriate Assessment of Spatial Plans in England: a guide to why, when and how to do it*. The RSPB, Sandy.

- 2.2.2 The objective is to ‘screen out’ those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is the subject of Chapter 4 of this report, and goes a step further than the scoping report that was able to scope out sites listed in section 1.3.7. Those particular sites could be scoped out regardless of the nature and scale of any proposed development, whereas screening is needed where there is a potential pathway of impact and the scale, nature and location of development determines whether this actually exists.
- 2.2.3 In evaluating significance, AECOM have relied on our professional judgement as well as the results of previous stakeholder consultation regarding development impacts on the European sites listed in 1.3.3 - 1.3.5.
- 2.2.4 The level of detail in land use plans concerning developments that will be permitted under the plans will never be sufficient to make a detailed quantification of adverse effects. Therefore, we have again taken a precautionary approach (in the absence of more precise data) assuming as the default position that if an adverse effect cannot be confidently ruled out, avoidance or mitigation measures must be provided. This is in line with the former Department of Communities and Local Government guidance that the level of detail of the assessment, whilst meeting the relevant requirements of the Habitats Regulations, should be ‘appropriate’ to the level of plan or project that it addresses.

2.3 Confirming Other Plans and Projects That May Act In Combination

- 2.3.1 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the European site(s) in question.
- 2.3.2 It is neither practical nor necessary to assess the ‘in combination’ effects of the Local Plan within the context of all other plans and projects within this area of England. For the purposes of this assessment, we have determined that, due to the nature of the identified impacts, the key other plans and projects relate to the additional housing, transportation and commercial/industrial allocations proposed for neighbouring and nearby authorities over the lifetime of the Local Plan. A good place to start is the London Plan (2015)¹¹
- 2.3.3 In considering the potential for regional housing development on European sites, the primary consideration for many sites is the impact of visitor numbers – i.e. recreational pressure. Other pathways of impact described in more detail in Chapter 3 include air quality. Whilst these are also strongly related to housing provision, the actual geographic impact must also be considered within the context of relevant infrastructure.

Table 1: Housing levels to be delivered in neighbouring authorities

Local Authority	Total housing (taken from the London Plan, 2015) Minimum ten year target 2015 2025	Total housing (taken from the London Plan, 2015) Annual monitoring target 2015 2025
Lambeth Borough	15,594	1,559
Merton Borough	4,107	411
Sutton	3,626	363
Reigate & Banstead ¹²	6,900 (2012 to 2027)	-
Tandridge ¹³	2,500 (2006 to 2026)	-
Bromley	6,413	641
Lewisham	13,847	1,385
Southwark	27,362	2,736
Wandsworth	18,123	1,812
Richmond upon Thames	3,150	315
Kingston upon Thames	6,434	643
Mole Valley ¹⁴	3,760 (2006 to 2026)	-

¹¹ Mayor of London (March, 2015). The London Plan. The Spatial Development Strategy for London. Consolidated with Alterations Since 2011.

¹² Reigate & Banstead Borough Council (July 2014) Adopted Local Plan: Core strategy. Policy CS13

¹³ Tandridge District Core Strategy. (2008) Adopted October 2008. Policy CSP 2

2.3.4 There are other plans and projects that are relevant to the 'in combination' assessment and the following have all been taken into account in this assessment:

Plans

- London Borough of Croydon. Core Local Plan 1 (CLP1). Adopted April 2013.
- The London Plan. The Spatial Development Strategy for London. Consolidated with Alterations Since 2011. Published March 2015.
- The London Plan. Sub Regional Development Framework – South London. Published May 2006.
- South London Waste Plan. Adopted March 2012
- Surrey Minerals and Waste Development Scheme. Published 2015
- London Borough of Sutton Core Planning Strategy. Adopted December 2009.
- London Borough of Merton Core Planning Strategy. Adopted July 2011
- London Borough of Lambeth Core Strategy. Adopted January 2011.
- London Borough of Wandsworth Council Core Strategy. Adopted October 2010
- Mole Valley Council Core Strategy. Adopted October 2009
- Tandridge District Council Core Strategy. Adopted October 2008
- Richmond upon Thames Council Core Strategy. Adopted April 2009
- Reigate and Banstead Council Local Plan: Core Strategy. Adopted July 2014
- Bromley Council Local Plan Draft Policies and Designations Consultation document.
- Kingston upon Thames Council Core Strategy. Adopted April 2012.

2.3.5 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plans which in themselves have minor impacts are not simply dismissed on that basis, but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.

¹⁴ Mole Valley District Council (2009). Core Strategy. Adopted October 2009. Policy CS

3 Pathways of Impact

3.1 Introduction

3.1.1 In carrying out an HRA it is important to determine the various ways in which land use plans can impact on European sites by following the pathways along which development can be connected with European sites, in some cases many kilometres distant. Briefly defined, pathways are routes by which a change in activity associated with a development can lead to an effect upon a European site.

Other Relevant Supporting Studies

3.1.2 In determining pathway-receptor potential for impacts of CLP1.1 document on European sites, the following data sources have been interrogated:

- The UK Air Pollution Information System (www.apis.ac.uk) and Sussex Air Pollution dataset;
- www.magic.gov.uk and its links to SSSI citations and the JNCC website (www.natureonthemap.org.uk);
- Habitats Regulation Assessments of Core Strategies and Local Plans, where available

3.2 Recreational Pressure

3.2.1 Recreational use of a European site has the potential to:

- Prevent appropriate management or exacerbate existing management difficulties;
- Cause damage through erosion and fragmentation;
- Cause eutrophication as a result of dog fouling; and
- Cause disturbance to sensitive species, particularly ground-nesting birds and wintering wildfowl.

3.2.2 Different types of European sites are subject to different types of recreational pressures and have different vulnerabilities. Studies across a range of species have shown that the effects from recreation can be complex.

Mechanical/abrasive damage and nutrient enrichment

3.2.3 Most types of terrestrial European site can be affected by trampling, which in turn causes soil compaction and erosion. Walkers with dogs contribute to pressure on sites through nutrient enrichment via dog fouling and also have potential to cause greater disturbance to fauna as dogs are less likely to keep to marked footpaths and move more erratically. Motorcycle scrambling and off-road vehicle use can cause serious erosion, as well as disturbance to sensitive species.

3.2.4 There have been several papers published that empirically demonstrate that damage to vegetation in woodlands and other habitats can be caused by vehicles, walkers, horses and cyclists:

- Wilson & Seney (1994)¹⁵ examined the degree of track erosion caused by hikers, motorcycles, horses and cyclists from 108 plots along tracks in the Gallatin National Forest, Montana. Although the results proved difficult to interpret, it was concluded that horses and hikers disturbed more sediment on wet tracks, and therefore caused more erosion, than motorcycles and bicycles.
- Cole et al (1995a, b)¹⁶ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow and grassland communities (each tramped between 0 – 500 times) over five mountain regions in the US. Vegetation cover was assessed two weeks and one year after trampling, and an inverse relationship with trampling intensity was discovered, although this

¹⁵ Wilson, J.P. & J.P. Seney. 1994. Erosional impact of hikers, horses, motorcycles and off road bicycles on mountain trails in Montana. *Mountain Research and Development* 14:77-88

¹⁶ Cole, D.N. 1995a. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. *Journal of Applied Ecology* 32: 203-214

Cole, D.N. 1995b. Experimental trampling of vegetation. II. Predictors of resistance and resilience. *Journal of Applied Ecology* 32: 215-224

relationship was weaker after one year than two weeks indicating some recovery of the vegetation. Differences in plant morphological characteristics were found to explain more variation in response between different vegetation types than soil and topographic factors. Low-growing, mat-forming grasses regained their cover best after two weeks and were considered most resistant to trampling, while tall forbs (non-woody vascular plants other than grasses, sedges, rushes and ferns) were considered least resistant. Cover of hemicryptophytes and geophytes (plants with buds below the soil surface) was heavily reduced after two weeks, but had recovered well after one year and as such these were considered most resilient to trampling. Chamaephytes (plants with buds above the soil surface) were least resilient to trampling. It was concluded that these would be the least tolerant of a regular cycle of disturbance.

- Cole (1995c)¹⁷ conducted a follow-up study (in 4 vegetation types) in which shoe type (trainers or walking boots) and trampler weight were varied. Although immediate damage was greater with walking boots, there was no significant difference after one year. Heavier trampers caused a greater reduction in vegetation height than lighter trampers, but there was no difference in effect on cover.
- Cole & Spildie (1998)¹⁸ experimentally compared the effects of off-track trampling by hiker and horse (at two intensities – 25 and 150 passes) in two woodland vegetation types (one with an erect forb understorey and one with a low shrub understorey). Horse traffic was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance, but recovered rapidly. Higher trampling intensities caused more disturbance.

3.2.5 The total volume of dog faeces deposited on sites can be surprisingly large. For example, at Burnham Beeches National Nature Reserve over one year, Barnard¹⁹ estimated the total amounts of urine and faeces from dogs as 30,000 litres and 60 tonnes respectively. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces²⁰.

Disturbance

- 3.2.6 Concern regarding the effects of disturbance on birds stems from the fact that they are expending energy unnecessarily and the time they spend responding to disturbance is time that is not spent feeding²¹. Disturbance therefore risks increasing energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately survival of the birds. In addition, displacement of birds from one feeding site to others can increase the pressure on the resources available within the remaining sites, as they have to sustain a greater number of birds²².
- 3.2.7 A number of studies have shown that birds are affected more by dogs and people with dogs than by people alone, with birds flushing more readily, more frequently, at greater distances and for longer¹⁰. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals, and can cause eutrophication near paths. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces²³.
- 3.2.8 However the outcomes of many of these studies need to be treated with care. For instance, the effect of disturbance is not necessarily correlated with the impact of disturbance, i.e. the most easily disturbed species are not necessarily those that will suffer the greatest impacts. It has been shown that, in some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain (possibly due to an absence of alternative sites) and thus suffer greater impacts on their

¹⁷ Cole, D.N. (1995c) Recreational trampling experiments: effects of trampler weight and shoe type. Research Note INT-RN-425. U.S. Forest Service, Intermountain Research Station, Utah.

¹⁸ Cole, D.N., Spildie, D.R. (1998) Hiker, horse and llama trampling effects on native vegetation in Montana, USA. *Journal of Environmental Management* 53: 61-71

¹⁹ Barnard, A. (2003) Getting the Facts - Dog Walking and Visitor Number Surveys at Burnham Beeches and their Implications for the Management Process. *Countryside Recreation*, 11, 16 - 19

²⁰ Shaw, P.J.A., K. Lankey and S.A. Hollingham (1995) – Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist*, 74, 77-82.

²¹ Riddington, R. *et al.* 1996. The impact of disturbance on the behaviour and energy budgets of Brent geese. *Bird Study* 43:269-279

²² Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72

²³ Shaw, P.J.A., K. Lankey and S.A. Hollingham (1995) – Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist*, 74, 77-82.

population²⁴. A literature review undertaken for the RSPB²⁵ also urges caution when extrapolating the results of one disturbance study because responses differ between species and the response of one species may differ according to local environmental conditions. These facts have to be taken into account when attempting to predict the impacts of future recreational pressure on European sites.

- 3.2.9 Disturbing activities are on a continuum. The most disturbing activities are likely to be those that involve irregular, infrequent, unpredictable loud noise events, movement or vibration of long duration. Birds are least likely to be disturbed by activities that involve regular, frequent, predictable, quiet patterns of sound or movement or minimal vibration. The further any activity is from the birds, the less likely it is to result in disturbance.
- 3.2.10 The factors that influence a species response to a disturbance are numerous, but the three key factors are species sensitivity, proximity of disturbance sources and timing/duration of the potentially disturbing activity.
- 3.2.11 It should be emphasised that recreational use is not inevitably a problem. Many European sites are also nature reserves managed for conservation and public appreciation of nature. At such sites, access is encouraged and resources are available to ensure that recreational use is managed appropriately.
- 3.2.12 Where increased recreational use is predicted to cause adverse impacts on a site, avoidance and mitigation should be considered. Avoidance of recreational impacts at European sites involves location of new development away from such sites; Local Development Frameworks (and other strategic plans) provide the mechanism for this. Where avoidance is not possible, mitigation will usually involve a mix of access management, habitat management and provision of alternative recreational space.
- *Access management* – restricting access to some or all of a European site - is not usually within the remit of the District Council and restriction of access may contravene a range of Government policies on access to open space, and Government objectives for increasing exercise, improving health etc. However, active management of access may be possible, for example as practised on nature reserves.
 - *Habitat management* is not within the direct remit of the Council. However the Council can help to set a framework for improved habitat management by promoting cross-authority collaboration and S106 funding of habitat management.
 - *Provision of alternative recreational space* can help to attract recreational users away from sensitive European sites, and reduce pressure on the sites. For example, some species for which European sites have been designated are particularly sensitive to dogs, and many dog walkers may be happy to be diverted to other, less sensitive, sites. However the location and type of alternative space must be attractive for users to be effective.
- 3.2.13 Mole Gap to Reigate Escarpment SAC and Wimbledon Common SAC are subject to high levels of recreational pressure due to their locations in and in close proximity to Greater London. Within the HRA for CLP1, all impacts upon both Mole Gap to Reigate Escarpment SAC and Wimbledon Common SAC were screened out alone and in combination with other projects or plans. The impact of CLP1.1 upon these two SACs is discussed within the following chapter.

3.3 Atmospheric Pollution

- 3.3.1 The main pollutants of concern for European sites are oxides of nitrogen (NO_x), ammonia (NH₃) and sulphur dioxide (SO₂). NO_x can have a directly toxic effect upon vegetation. In addition, greater NO_x or ammonia concentrations within the atmosphere will lead to greater rates of nitrogen deposition to soils. An increase in the deposition of nitrogen from the atmosphere to soils is generally regarded to lead to an increase in soil fertility, which can have a serious deleterious effect on the quality of semi-natural, nitrogen-limited terrestrial habitats.

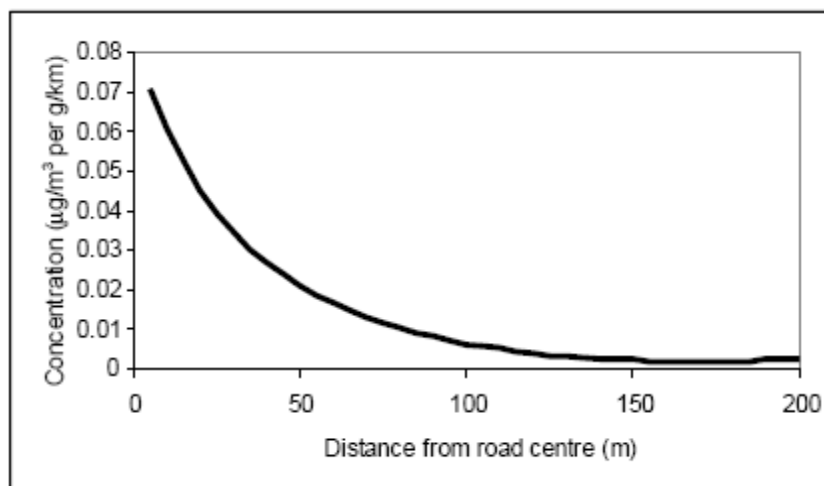
²⁴ Gill et al. (2001) - Why behavioural responses may not reflect the population consequences of human disturbance. *Biological Conservation*, **97**, 265-268

²⁵ Woodfield & Langston (2004) - Literature review on the impact on bird population of disturbance due to human access on foot. *RSPB research report* No. 9.

Local air pollution

3.3.2 According to the Department of Transport's Transport Analysis Guidance, "Beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant"²⁶. This is therefore the distance that has been used throughout this HRA in order to determine whether European sites are likely to be significantly affected by development under the Local Plan.

Figure 3: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT)



3.3.3 . Given that sites detailed in Table 2 lie within 200m of major roads that may be regularly used by vehicle journeys within the Local Plan area as a result of the increased population, and potentially other development plans, it was concluded that air quality should be included within the scope of this assessment. The location of these roads in relation to the European sites is illustrated in Appendix B, Figure 1.

Table 2: Major roads within 200m of the European sites

Site	Proximity to major roads
Mole Gap to Reigate Escarpment SAC	Within 200m of the M25 (for approximately 500m), and adjacent to the A24 for small sections.
Wimbledon Common SAC	Adjacent to the A219 and A3 for sections

Table 3: Critical Loads of SAC features and existing Nitrogen deposition rates upon SAC features.

If hi-lighted in red, the feature is already in exceedance of its Critical Load. If hi-lighted in orange, the feature is within its Critical Load limits.

Site	Site Feature	Critical Load ²⁷	Current levels of N deposition ²⁸
Mole Gap to Reigate Escarpment SAC	Stable xerothermophilous formations with Buxus sempervirens on rock slopes (Berberidion p.p.)	15-25kg N/ha/ya	N depositions 29.54 to 36.12kg N/ha.yr
	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	15-25kg N/ha/ya	N deposition 16.24to 19.32kg N/ha.yr
	Taxus baccata woods of the British Isles	5-15kg N/ha/ya	N depositions 29.54 to 36.12kg N/ha.yr
	European dry heaths	10-20kg N/ha/ya	N deposition 16.24to 19.32kg N/ha.yr

²⁶ <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013>; accessed 13/04/12

²⁷ www.APIS.ac.uk [accessed 30/07/2015]

²⁸ www.APIS.ac.uk [accessed 30/07/2015]

	Asperulo-Fagetum beech forests	10-20kg N/ha/ya	N depositions 29.54 to 36.12kg N/ha.yr
	Great crested Newt	no critical loads available for this feature	N deposition: 15.68 to 17.22 kg N/ha/yr
	Bechstein's bat	10-20kg N/ha/ya	N depositions 29.54 to 36.12kg N/ha.yr
Wimbledon Common SAC	Northern Atlantic wet heaths with Erica tetralix•	10-20kg N/ha/ya	14.56kg N/ha/yr
	European dry heaths	10-20kg N/ha/ya	14.56kg N/ha/yr
	Stag beetle	10-20kg N/ha/ya	28.42kg N/ha/yr

3.3.4 Whilst the above table demonstrates that much of the SACs are in exceedance of their critical loads, the SACs are not located within the Croydon authority boundary and are far beyond 200m from Croydon authority boundary. It is approximately 8km by road from the urban area of Croydon to Mole Gap to Reigate Escarpment SAC and Wimbledon Common SAC. This is deemed sufficient distance that traffic originating from Croydon is likely to have dispersed As such; it is considered that there are no realistic pathways present. Air quality issues relating to direct deposition upon either Mole Gap to Reigate Escarpment SAC or Wimbledon Common SAC is not considered further.

4 Screening Assessment

4.1 Summary

The following sections provide assessment of modifications to policies, e.g. CLP1.1

4.2 Chapter 3: We are Croydon

4.2.1 Policy SP1: The Places of Croydon

Growth

Growth in homes, jobs and services that constitutes sustainable development will be welcomed; provided growth is directed to places with good concentrations of existing infrastructure or areas where there is capacity to grow with further sustainable infrastructure investment within the plan period to ~~2034~~ **2036**. Croydon Opportunity Area will be the primary location for growth, with the Places of ~~Wadden Purley, Coulsden~~ **and** Broad Green and Selhurst also playing a substantial role (see the Key Diagram).

- 4.2.2 This policy provides for sustainable development, which by definition will ensure no likely significant effects upon European designated sites. As noted within The HRA for CLP1 in 2011²⁹ this policy ‘seeks to ensure development is directed to places with existing infrastructure (or areas where there is capacity to grow with further sustainable infrastructure) and to ensure growth creates a network of connected, sustainable and high quality places. This would ensure growth within the borough would not exacerbate current congestion problems and ensure that facilities are in place to meet the needs of an increased population’. Due to the distances involved (Mole Gap to Reigate Escarpment SAC is 6.0km from Croydon authority boundary, and Wimbledon Common SAC is 6.7km from Croydon authority boundary), the CLP1 HRA determined that there were no feasible impact pathways present resulting from Policy SP1: The Places of Croydon.
- 4.2.3 The main modification of this Policy are to SP1.3; this is the delivery timeframe, changed from 2031 to 2036 and the removal of the settlements of Wadden and Coulsden. This will not result in any changes to the previous screening outcome of this policy by Hyder in 2011³⁰. This policy can remain screened out from further consideration alone and in combination with other projects and plans.

4.3 Chapter 4: A Place of Opportunity

4.3.1 Policy SP2: Homes (Preferred Option)

Policy SP2: Homes (Preferred Option)	<p>SP2.1 In order to provide a choice of housing for people in socially-balanced and inclusive communities in Croydon the Council will apply a presumption in favour of development of new homes provided applications for residential development meet the requirements of Policy SP2 and other applicable policies of the development plan.</p> <p><u>Quantities and Locations</u></p> <p>SP2.2 In order to provide a choice of housing for people in Croydon the Council will seek to deliver a minimum of 13,300 31,765 homes between 2014 2016 and 2021 2036 in line with London Plan target for new homes. Between 2021 and 2031 it will seek to deliver a further 6,900 homes –. Therefore, overall,</p>
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²⁹ Hyder. (2011). London Borough of Croydon. Proposed Submission Core Strategy. Habitats Regulations Assessment Screening

³⁰ Hyder. (2011). London Borough of Croydon. Proposed Submission Core Strategy. Habitats Regulations Assessment Screening

~~the Council will seek to deliver 20,200 homes over the plan period (2011 – 2031). This will be achieved by:~~

- a) Concentrating development in the places with the most capacity to accommodate new homes whilst respecting the local distinctiveness of the Places and protecting the borough's physical, natural and historic environment, **whilst recognising that Places change and in particular suburbs will sustainably grow;** and
- b) **Allocation of 9,243 homes in the** ~~Preparing a Croydon Local Plan: Detailed Policies and Proposals DPD~~ **beyond the Croydon Opportunity Area,** ~~to allocate at least 5,600 net additional homes in the borough outside of the Croydon Opportunity Area.~~
- ~~b)c)~~ c) Within the Croydon Opportunity Area, the Croydon Local Plan: Detailed Policies and Proposals DPD ~~will be~~ **has been** informed by ~~an~~ **the Croydon Opportunity Area Planning Framework** and ~~will~~ **allocates** sites for at least ~~7,300~~ **9,852** net additional homes; and
- d) **10,575 homes being delivered across the borough on windfall sites;** and
- ~~e)~~ e) Seeking to return ~~940~~ **190** vacant homes back into use by ~~2024~~ **2026** and ~~providing 200 additional non-self contained bed spaces by 2021 in line with the London Plan;~~ and
- ~~d)f)~~ f) ~~In conjunction with the Croydon Local Plan: Strategic Policies prepare a Croydon Local Plan: Detailed Policies and Proposals DPD (supported by the Strategic Housing Land Availability Assessment) to guide the development of housing on windfall sites across the borough to ensure delivery of at least 6,100 homes (2011 – 2031), that~~ **Ensuring** land is used efficiently, and that development addresses the need for different types of homes in the borough and contributes to the creation or maintenance of sustainable communities; and
- ~~e)g)~~ g) Not permitting developments which would result in a net loss of homes or residential land.

Affordable Homes

SP2.3 The Council will seek to ensure that a choice of homes is available in the borough that will contribute to addressing the borough's need for affordable homes. This will be achieved by a strategic policy target of:

- a) **25%** of all new homes developed in the borough over the plan period to be either affordable rented homes (homes which are up to 80% market rent) or homes for social rent to meet the borough's need; and
- b) **15%** of all new homes in the borough developed over the plan period to be intermediate affordable housing for low cost shared home ownership managed by a Registered Social Landlord.

SP2.4 ~~The Council will apply the following criteria on a site specific basis to~~ **To deliver affordable housing in the borough on sites of 10 or more dwellings, the Council will:**

- a) Negotiate to achieve up to 50% affordable housing provision ~~on sites with ten or more units on the basis set out in Table 4.1~~ **subject to viability;**
- b) **Seek a 60:40 ratio between affordable rented homes and intermediate (including starter) homes unless there is agreement between Croydon Council and a Registered Provider that a different tenure split is justified and;**
- c) **Require a minimum provision of affordable housing as set out in DM2.5. and**

SP2.5 The Council will require a minimum provision of affordable housing to be provided either as:

- a) 25% of units or habitable rooms are on the same site as the proposed development;
- b) **If the scheme is within the Croydon Opportunity Area then a donor sites may be used to provide affordable housing provided policy compliant on-site provision has been explored fully, that a minimum of 10% affordable housing will be on the same site as the proposed development and the donor site is located within either the Croydon Opportunity Area or one of the neighbouring Places of Addiscombe, Broad Green & Selhurst, South Croydon or Waddon;**
- c) **If the scheme is within a District Centre then donor sites may be**

used to provide affordable housing provided policy compliant on-site provision has been explored fully, that a minimum of 10% affordable housing will be on the same site as the development and the donor site is located within the same Place as the District Centre; or

a)d) If 25% on-site provision is not viable or, in the case of developments in the Croydon Opportunity Area or District Centres, there is no suitable donor site, then 10% of the units are on the same site as the proposed development on-site, it is not possible to provide the units on a donor site and a Review Mechanism is entered into for the remaining affordable housing up to the equivalent of 50% overall provision to be provided through a commuted sum subject to review of actual sales values and build costs of completed units.

b) The Council will require a commuted sum from developments of nine or fewer units to cover the cost of providing the equivalent percentage of affordable units. The commuted sum will be used to provide affordable homes through Croydon Council's New Build Affordable Homes programme or by a Registered Provider.

SP2.7 The Council will only accept commuted sums on sites with ten or more units in lieu of on-site provision of affordable housing (or provision on a donor site) if it is not possible to find a Registered Provider to manage the on-site affordable homes.

Mix of Homes by Size

SP2.8 The Council will seek to ensure that a choice of homes is available in the borough that will address the borough's need for homes of different sizes. For both market and affordable housing, this will be achieved by:

a) Setting a strategic target for ~~60~~**50%** of all new homes ~~outside the Croydon Opportunity Area up to 2034~~ **2036** to have three or more bedrooms; and

b) Setting a preferred unit mix on individual sites ~~through~~ **in** the Croydon Local Plan: Detailed Policies and Proposals DPD, **applicable to sites of ten or more homes across the borough including sites within Croydon Opportunity Area;** and

~~c) Aspiring to 20% of all new homes within the Croydon Opportunity Area having three or more bedrooms by 2031 and aspiring to 35% of all two bedroom homes providing four bed spaces. An Opportunity Area Planning Framework will provide more detail regarding the mix of homes of different sizes across the Croydon Opportunity Area; and~~

~~d)~~**c) Working with partners to facilitate the provision of specialist and supported housing for elderly and vulnerable people.**

Quality and Standards

SP2.6 The Council will seek to ensure that new homes in Croydon meet the needs of residents over a lifetime and contribute to sustainable communities with the borough. This will be achieved by:

a) Requiring that all new homes achieve the minimum standards set out in the Mayor of London's Housing Supplementary Planning Guidance **and National Standards (2015) or equivalent;** and

b) Ensuring that all new homes designed for families meet minimum design and amenity standards ~~to be set out in a~~ **the** Croydon Local Plan: Detailed Policies and Proposals DPD **and other relevant London Plan and National Technical Standards (2015) as appropriate.**

Gypsies and Travellers

SP2.7 The Council will ~~seek to deliver ten~~ **36** additional Gypsy and Travellers pitches in the borough by ~~2024~~**36** to meet the need of Croydon's Gypsy and Traveller community. ~~Land is This will be achieved by allocating~~ **allocated** land for Gypsy and Traveller pitches in the Croydon Local Plan: Detailed Policies and Proposals DPD. ~~Any p~~**Proposals for additional sites that are not allocated** should meet the following criteria:

a) Should be available and deliverable; and

b) Should have good access to essential services including health and

education facilities and access to local shops; and
 c) Have good means of access from roads ~~and be near bus routes and other transport nodes~~; and
 d) Not be located in areas of high flood risk (Flood Risk Zone 3); and
 e) Should not have unacceptable adverse impact on the biodiversity of the borough.

4.3.2 This policy outlines the provision for the number of houses to be provided during the time of the amended plan period. The plan period has changed from 2011- 2031 to 2016 to 2036. The most notable change to this policy is the large increase in provision of homes from 13,300 to 31,765 during the lifetime of the plan. 10,575 of these new homes will be delivered across the borough at windfall sites. Additional changes are made to the percentage of affordable houses and the number of bedrooms to be included in each new dwelling. In addition there is an increase from 10 to 36 new Gypsy and Travellers pitches.

4.3.3 The HRA for CLP1 (13,300 new homes and ten new Gypsy and Travellers pitches) determined no likely significant effect upon any European site either alone or in combination with other projects or plans. This was because the European sites in question are not located within the Croydon authority boundary, are at least 6km (in a straight line) from the authority boundary and alternative greenspace provision is available within Croydon. Due to these distances involved (e.g. at least 6km (in a straight line) between Croydon authority boundary and any SAC), it was considered and agreed by Natural England that there were no impact pathways present when CLP1 is considered alone. The subsequent paragraphs assess the impact of 31,765 net new dwellings in combination upon Mole Gap to Reigate Escarpment SAC and Wimbledon Common SAC.

Mole Gap to Reigate Escarpment SAC

4.3.4 . The Appropriate Assessment of Mole Valley's LDF Core Strategy was published in 2008³¹ and led to Mole Valley Core Strategy Policy CS15 which safeguards a buffer zone extending 800m beyond the boundary of the SAC, within which there is “a presumption against any increase in residential or employment related development ... unless its impact can be mitigated”.

4.3.5 Following correspondence with Natural England, Natural England confirmed that recreational pressure at the Mole Gap to Reigate Escarpment is focused mainly around ‘honeypot’ sites, primarily visited by tourists although some local and regular visits are made. These include Box Hill located within the SAC. The Appropriate Assessment states:

4.3.6 *‘Survey information on visitor numbers and origin is scant but Professor Culver at Bournemouth University undertook a survey of on behalf of the National Trust during the summer of 2006. Survey locations included car parks at Box Hill, Headley Heath and Gatton Park, immediately adjacent to the Mole Gap to Reigate Escarpment SAC. The vast majority of visitors surveyed at the car parks had travelled from further afield, via the M25 and that there was a large visitor impact within 100m of the car parks, but beyond approximately 1km the impact was very low. He reported that the Wray Lane Car Park was hardly used by local people...’*

4.3.7 *Further survey data from the National Trust also appears to support the work of Professor Culver. In 2004 visitors to Box Hill were asked to note down the postcode from which they had travelled. There were over 5,300 responses. The results showed that there was a considerable spread in terms of visitor origin but that the main sources were Leatherhead and South London including Sutton, Carshalton and Croydon.’* The National Trust survey determined that 107 (2%) of the respondents from the 2004 survey at Box Hill came from within the Croydon postcode CR0.

4.3.8 The update to CLP1.1 provides for 31,765 new homes within Croydon during the lifetime of CLP1.1 (to 2036). This could equate to a worst-case population increase within Croydon of approximately 76,236 new people during the lifetime of CLP1.1, assuming that all new dwellings are occupied by people not already living in Croydon and that each new property has an average occupancy of 2.4 residents per dwelling.

4.3.9 By 2011 (the closest Census to the date of CLP1.1), the population of Croydon was 363,378³². The proposed increase in new dwellings from 13,300 (as proposed within CLP1) to 31,765 (as proposed to CLP1.1) could therefore be associated with a population increase of approximately 76,236 people.

³¹ http://www.molevalley.gov.uk/media/pdf/4/8/Appropriate_Assessment.pdf [Accessed 30/07/2015]

³² Croydon Observatory <http://www.croydonobservatory.org/dataviews/view?viewId=22> [Accessed 10/08/2015]

By the end of the Plan period (e.g. 2036), CLP1.1, the population of Croydon could therefore be approximately 439,614 people³³. This equates to a population increase of approximately 21%. If one assumes that the balance between different points of visitor origin to the SAC remains similar (i.e. that approximately 2% of visitors are expected to arise from Croydon) and that patterns of behaviour from Croydon residents remain broadly similar to the present, it can be determined that the numbers of net new dwellings within Croydon during the lifetime of the plan will result in an increase in visitors to Box Hill of 0.42% (0.21 x 2%). This is a small percent increase and can be deemed insignificant even in combination. This also assumes that the limited parking opportunities are not a restriction on visits to the SAC, whereas in reality they are likely to be a considerable constraint to increased visits from places as far afield as Croydon where driving is the only realistic method of access.

- 4.3.10 As a safeguard, to ensure no likely significant effects upon European designated sites Policy SP7 (Green Grid) of CLP1.1, ensures that the pace of delivery of new accessible greenspace will match that of population growth by committing to '*new and enhanced green infrastructure commensurate with growth*' and stating that the Council will '*protect and safeguard the extent of the borough's Metropolitan Green Belt, Metropolitan Open Land and local green spaces*'. It makes additional provisions for improving the connectivity of and access to green infrastructure. Policy SP7 (Green Grid) is a commitment to the enhance biodiversity. It includes the following text: '*Reducing the pressures on wildlife and sensitive sites by improving the wider environment around wildlife sites by establishing buffer areas; and... Promoting the naturalisation of landscapes and the enhancement of Croydon's natural landscape signatures*'
- 4.3.11 The combination of the Policy SP7 and the small increase (0.42%) in recreational pressure upon Mole Gap to Reigate Escarpment SAC, it is considered that there will be no likely significant effects upon the SAC in-combination as a result of the increase in provision of new dwellings to 31,765 new dwellings with other projects or plans.

Wimbledon Common SAC

- 4.3.12 Wimbledon Common SAC is located 6.7km from Croydon, within the London boroughs of Merton and Wandsworth. There is no information available that indicates visitors to the SAC or the key points of visitor origin. However, the site can be compared to other designated sites with similar habitat features (all be it site located within a less urban environment. Wimbledon Common SAC is a large heathland site surrounded by urban development. This is broadly similar to other SACs such as Thames Basin Heaths SAC, and Wealden Heaths Phase II SPA (Woolmer Forest SAC) and these sites have had visitor surveys. However, Wimbledon Common is a much more urban site than these other heathlands and is time consuming to reach if one does not live very locally. It is therefore probable that its core catchment is more local.
- 4.3.13 Visitor studies undertaken at the rural Thames Basin Heaths SPA³⁴ and Wealden Heaths Phase II SPA³⁵ identified that whilst some local visitors arrived by foot, the majority originated within 5km of the SPAs. This 5km core catchment was agreed by Natural England, indicating that any new housing beyond 5km of these SPAs would not result in a likely significant effect alone or in combination with any project or plan. Whilst it is acknowledged that this does not identify the core catchment for Wimbledon Common SAC, it gives a broad indicator of core catchment for heathland habitats within the south of England. Wimbledon Common is located beyond the indicative 5km core catchment. In addition, it can be considered that the urban setting of Wimbledon Common SAC (lack of ease of access to the SAC from a wider area) will reduce the catchment of the site further. It can be concluded that 31,765 new residential properties proposed within the Croydon CLP1.1 will not result in a likely significant effect upon Wimbledon Common SAC as a result of increased recreational pressure stemming from the 31,765 net new dwellings.
- 4.3.14 In addition to this, the HRA for the Merton Sites and Policies and Policies Map (Part of Merton's local plan) Submission³⁶ identified that, although vulnerable to increases in recreational pressure, the

³³ 2011 Census population (363, 378) plus the addition of the anticipated change in the population of Croydon resulting from 30,013 new dwellings as outlined within CLP1.1 (e.g. 30,014 x 2.4). Assuming that all new dwellings will be occupied by residents new to Croydon.

³⁴ Liley, D. et al. 2005. Visitor access patterns on the Thames Basin Heaths. *English Nature Research Report*, English Nature, Peterborough

³⁵ This comes from two separate studies – the Whitehill & Bordon visitor surveys undertaken by UE Associates and a separate piece of work undertaken by Footprint Ecology for The National Trust in relation to the Hindhead Common/Devil's Punchbowl section of the SPA

³⁶ Merton Sites and Policies and Policies Map (Part of Merton's local plan) Submission (September 2013) http://www.merton.gov.uk/sp4.10_hra.pdf [Accessed 12/08/2015]

management of the site by the Wimbledon Common and Putney Heath Conservators with the use of bylaws such as dog control orders, mitigate against the potential impacts from increased recreational use, thus result in no likely significant effects upon the SAC. The emerging Wandsworth Local Plan Habitats Regulations Assessment (2015)³⁷ screened out any impacts from the emerging Wandsworth Local Plan. Correspondence with Natural England confirmed that they agreed with this determination based on the fact that *'other suitable open/green spaces are available, there are new open/green spaces due to be provided in the area and that alternative methods of transport, such as walking and cycling, are to be promoted as far as possible'*³⁸.

- 4.3.15 Based on the fact that that the authorities containing Wimbledon Common SAC were able to screen out any likely significant effects upon the SAC resulting from increases in recreational pressure resulting from increases in housing numbers within their authority boundaries, and the fact that the SAC is considered to have a core catchment of 5km or less, it is determined that Croydon's CLP2 will not result in any likely significant effects upon Wimbledon Common SAC resulting from an increase in recreational pressure.
- 4.3.16 This policy can remained screened out from further consideration alone and in combination with other projects and plans. This is in line with Strategy/Plan level Habitats Regulations Assessment Screening for neighbouring authorities.
- 4.3.17 **Policy SP3: Employment**

Policy SP3: Employment

SP3.4 The Council will promote the remodelling of the Fairfield ~~Halls for its retention and ongoing development~~ as a performance facility.

SP3.5 The Council will support the temporary occupation of empty buildings and cleared sites by creative industries and cultural organisations **and other meanwhile uses** where they contribute to regeneration ~~vitality~~ and enhance the character **and vitality** of the area.

Town Centres

SP3.13 The Council will promote and support the development of new and refurbished office floor space in Croydon Metropolitan Centre, **particularly around East Croydon Station and within New Town**, and the District Centres as follows :

- a) Up to ~~95,000~~**92,000**m² to be located in Croydon Metropolitan Centre
- b) **Within the Office Retention Area in the Croydon Metropolitan Centre the loss of office floor space will be permitted only if it is demonstrated that there is no demand for the office building, refurbished floorspace and that there is no demand for a mixed use development that includes a proportionate level of office floor space;**
- b) **c) Up to 7,000m² to be spread across the borough's District Centres**
- b) _____

- 4.3.18 Policy SP3.4, and SP3.5 contain minor text changes which do not fundamentally change the policy, not resulting in any impact pathways.
- 4.3.19 SP3.13 a) reduces the amount of new and refurbished office and floor space within Croydon Metropolitan Centre and the District Centres, to 92,000m². This will not result in any new impact pathways. SP3.4 b); this is a new point within the policy. It relates to the retention of office floor space. There are no impact pathways present.
- 4.3.20 SP3 (Employment) can remain screened out from any further assessment, alone and in combination with other projects and plans.

³⁷ Wandsworth LDF/ Local Plan Document Habitats Regulations Assessment (2015)
http://www.wandsworth.gov.uk/download/downloads/id/10743/lpr422_habitats_regulations_assessment_2015.pdf [Accessed 12/08/2015]

³⁸ Natural England Correspondence (2015)
http://www.wandsworth.gov.uk/download/downloads/id/10745/lpr424_natural_england_comments_on_wandsworth_hra_29-5-15.pdf [Accessed 12/08/2015]

4.4 Chapter 5: A Place to belong

4.4.1 Policy SP4: Urban Design & Local Character

Policy SP4: Urban Design & Local Character	<p>SP4.13 The Council and its partners will strengthen the protection of and promote improvements to the following heritage assets and their settings :</p> <ul style="list-style-type: none"> a) Statutory Listed Buildings; b) Conservation Areas; c) Historic Parks and Gardens; d) Scheduled Monuments; e) Archaeological Priority Areas Zones; f) Local List of Buildings; g) Local List of Historic Parks and Gardens; h) Local Areas of Special Character Heritage Areas i) Local Designated Views; j) Croydon Panoramas; and k) Local Designated Landmarks
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4.4.2 Policy SP4.13 contains minor text changes which do not fundamentally change the policy. SP4 (Urban Design & Local Character) can remain screened out from any further assessment, alone and in combination with other projects or plans.

4.4.3 Policy SP5: Community Facilities

4.4.4 There are no changes to SP5: Community Facilities. This policy can remain screened out from any further assessment, alone and in combination with other projects or plans.

4.5 Chapter 4: A Place with a Sustainable Future

4.5.1 Policy SP6: Environment and Climate Change

Policy SP6: Environment and Climate Change	<p><u>Energy and carbon dioxide (CO2) reduction</u></p> <p>SP6.2 The Council will ensure that future development makes the fullest contribution to minimising carbon dioxide emissions in accordance with the London Plan energy hierarchy (use less energy, supply energy efficiently and use renewable energy), to assist in meeting local, London Plan and national CO2 reduction targets. The Council will promote the development of district energy networks where opportunities exist due to high heat density or an increase in heat density brought about by new development. This will be achieved by:</p> <ul style="list-style-type: none"> a) Requiring high density residential developments of 20 or more units to incorporate site wide communal heating systems b) Requiring major development to be enabled for district energy connection unless demonstrated not to be feasible or financially viable to do so. <p><u>Sustainable design and construction</u></p> <p>SP6.3 The Council will seek high standards of sustainable design and construction from new development, conversion and refurbishment to assist in meeting local and national CO2 reduction targets. This will be achieved by:</p> <ul style="list-style-type: none"> a) Requiring new-build residential development of fewer than 10 units to achieve the national technical standard for energy efficiency in new homes (2015). This is set at a minimum of 19% CO2 reduction beyond the Building Regulations Part L (2013); b) requiring new-build residential development of 10 units and more to achieve the London Plan requirements or National Technical Standards (2015) for energy performance , whichever the higher standard;. c) Requiring all new-build residential development to meet a minimum water efficiency standard of 110 litres/person/day as set out in Building Regulations Part G. . d) Requiring conversions and changes of use of existing buildings providing more than 10 new residential units to achieve a minimum of BREEAM Domestic Refurbishment Very Good rating or equivalent; e) Requiring new build non-residential development of 500m2 and
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above to achieve a minimum of BREEAM Excellent standard or equivalent;

f) Requiring conversions and changes of use to non-residential uses with an internal floor area of 500m² and above to achieve a minimum of BREEAM Very Good standard or equivalent;

g) Requiring new build, conversions and change of use non-residential development of 1000m² and above to achieve a minimum of 35% CO₂ reduction beyond the Building Regulations Part L (2013); and

h) Requiring development to positively contribute to improving air, land, noise and water quality by minimising pollution, with detailed policies to be included in the Croydon Local Plan: Detailed Policies and Proposals DPD.

Flooding, urban blue corridors and water management

SP6.4 The Council, as a Lead Local Flood Authority, will work in partnership with the Environment Agency, community groups, water and highways infrastructure providers, developers and other Lead Local Flood Authorities to reduce flood risk, protect groundwater and aquifers, and minimise the impact of all forms of flooding in the borough. This will be achieved by:

a) Applying the Sequential Test and Exception Test where required;

~~a~~b) Requiring major developments in Flood Zone 1 and all new development within Flood Zones 2 and 3 to provide site specific Flood Risk Assessments proportionate with the degree of flood risk posed to and by the development, taking account of the advice and recommendations within the Council's Strategic Flood Risk Assessment and Surface Water Management Plan;

~~b~~c) Requiring all development, including refurbishment and conversions, to utilise sustainable drainage systems (SuUDs) to reduce surface water run off and provide water treatment on site; and

~~c~~d) Requiring development proposals to account for possible groundwater contamination in Source Protection Zones 1 and 2.

4.5.2 Policies SP6.2 and SP6.3 contains minor text changes which do not fundamentally change the policy SP6.4 a) is a new point within the policy. The addition of this policy does not provide impact pathways. SP6 (Environment and Climate Change) can remain screened out from any further assessment, alone and in combination with other projects or plans.

4.5.3 **Policy SP7: Green Grid**

4.5.4 There are no changes to SP7: Green Grid. This policy can remain screened out from any further assessment, alone and in combination with other projects or plans.

4.5.5 **Policy SP8: Transport and Communication**

4.5.6 There are no changes to SP8: Transport and Communication. This policy can remain screened out from any further assessment, alone and in combination with other projects or plans.

5 Discussion

- 5.1.1 Notwithstanding the extension of the plan period from 2031 to 2036, the majority the changes to CLP1 in the form of CLP1.1 are minor changes that do not change the previous screening outcome, i.e. screening out an impacts upon any European designated sites alone or in-combination with other projects and/or plans.
- 5.1.2 Policy SP2: Homes (Preferred Option) provides for an increase in the provision of net new dwellings from 13,300 to 31,765 new houses. This is a large increase. A detailed analysis was undertaken to investigate any likely significant effects upon Mole Gap to Reigate Escarpment SAC in combination with other projects or plans. The assessment concluded that CLP1.1 contained sufficient in-built mitigation, combined with a low increase in recreational pressure upon the SAC resulting from CLP1.1. As such all CLP1.1 policies were screened out from having likely significant effects upon any European designated sites.

Appendix A. Background of European Designated Sites

A.1 Mole Gap to Reigate Escarpment SAC

A.1.1 Introduction

The site is located partially within the Mole Valley District Council and Reigate & Banstead Borough Council, located in Surrey. It is approximately 888ha in size. It contains Mole Gap to Reigate Escarpment SSSI. The SSSI site contains the largest part of the North Downs in Surrey which has remained relatively undisturbed. It includes a range of outstanding wildlife habitats representative of the best of those found on the North Downs. Woodland, chalk grassland, chalk scrub and heathland form an interrelated mosaic which supports a wide diversity of characteristic plants and animals, of which many are local or rare. The site includes the Mole Gap, Box Hill and Headley Heath areas by the pressures of modern farming and building³⁹.

A.1.2 Qualifying Features⁴⁰

The site is designated as an SAC for the following Annex I habitats:

- Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion p.p.*)
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites)
- *Taxus baccata* woods of the British Isles
- European dry heaths
- *Asperulo-Fagetum* beech forests

The site is designated as an SAC for the following Annex II species:

- Great crested newt *Triturus cristatus*
- Bechstein's bat *Myotis bechsteini*

A.1.3 Conservation Objectives⁴¹

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

A.1.4 Environmental Vulnerabilities

- Box disease – a threat/ pressures to: Natural Box Scrub
- Inappropriate scrub control - a pressure to: Dry grasslands and scrublands on chalk or limestone (important orchid sites)
- Change in land management - a threat to: Dry grasslands and scrublands on chalk or limestone (important orchid sites)

³⁹ http://www.sssi.naturalengland.org.uk/citation/citation_photo/1000977.pdf [Accessed 29/07/15]

⁴⁰ <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0012804> [Accessed 29/07/15]

⁴¹ <http://publications.naturalengland.org.uk/file/5374121487630336> [Accessed 29/07/]

- Public access/ disturbance - a threat to: Dry grasslands and scrublands on chalk or limestone (important orchid sites), Great crested newt, Bechstein`s bat
- Air pollution: nitrogen deposition – a threat to: European dry heaths, Natural box scrub, Dry grasslands and scrublands on chalk or limestone (important orchid sites), Beech forests on neutral to rich soils, Yew-dominated woodland, Bechstein`s bat

A.2 Wimbledon Common SAC

A.2.1 Introduction

The site is located within the London Boroughs of Wandsworth and Merton, located in Greater London. It is approximately 350ha in size. It contains Wimbledon Common SSSI. Wimbledon Common supports the most extensive area of open, wet heath on acidic soil in Greater London. The site also contains a variety of other acidic heath and grassland communities reflecting the variations in geology, drainage and management. Associated with these habitats are a number of plants uncommon in the London area.⁴²

A.2.2 Qualifying Features⁴³

The site is designated as an SAC for the following Annex I habitats:

- Northern Atlantic wet heaths with *Erica tetralix*
- European dry heaths

The site is designated as an SAC for the following Annex II species:

- Stag beetle *Lucanus cervus*

A.2.3 Conservation Objectives⁴⁴

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

A.2.4 Environmental Vulnerabilities⁴⁵

- Public access/ disturbance – a pressure on: Wet heathland with cross-leaved heath, European dry heaths, Stag beetle
- Habitat fragmentation – a threat to: Stag beetle
- Invasive species - a threat to: Wet heathland with cross-leaved heath, European dry heaths, Stag beetle
- Air pollution: nitrogen deposition - a pressure on: Wet heathland with cross-leaved heath, European dry heaths

A.3 Richmond Park SAC

⁴² http://www.sssi.naturalengland.org.uk/citation/citation_photo/1004317.pdf [Accessed 29/07/2015]

⁴³ <http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030301> [Accessed 29/07/2015]

⁴⁴ <http://publications.naturalengland.org.uk/file/6449586067472384> [Accessed 29/07/2015]

⁴⁵ <http://publications.naturalengland.org.uk/file/5097829219434496> [Accessed 29/07/2015]

A.3.1 Introduction

The site is located within the London Borough of Richmond on Thames in Greater London. It is approximately 850ha in size. It contains Richmond Park SSSI. Richmond Park has been managed as a royal deer park since the seventeenth century, producing a range of habitats of value to wildlife. In particular, Richmond Park is of importance for its diverse deadwood beetle fauna associated with the ancient trees found throughout the parkland. In addition the Park supports the most extensive area of dry acid grassland in Greater London⁴⁶

A.3.2 Qualifying Features⁴⁷

The site is designated as an SAC for the following Annex II species:

- Stag beetle *Lucanus cervus*

A.3.3 Conservation Objectives⁴⁸

With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of the habitats of qualifying species
- The structure and function of the habitats of qualifying species
- The supporting processes on which the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

⁴⁶ http://www.sssi.naturalengland.org.uk/citation/citation_photo/1002388.pdf [Accessed 29/07/2015]

⁴⁷ <http://jncc.defra.gov.uk/protectedsites/sacselecion/sac.asp?euocode=UK0030246> [Accessed 29/07/2015]

⁴⁸ <http://publications.naturalengland.org.uk/file/6608768628424704> [Accessed 29/07/2015]

Appendix B. Figure 1: Locations of European Designated Sites

About AECOM

AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 100,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and collaborative technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments. A Fortune 500 company, AECOM serves clients in more than 100 countries and has annual revenue in excess of \$6 billion.

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