

Wokingham Local Plan Update

Reg.19 HRA

Wokingham Borough Council

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1. Introduction

Background

- 1.1 AECOM was appointed by Wokingham Borough Council (hereafter referred to as 'WBC') to undertake a report to inform the Habitats Regulations Assessment (HRA) of its Regulation 19 Wokingham Borough Local Plan Update (WBLPU). The objective of this assessment is to identify any aspects of the WBLPU that may result in Likely Significant Effects (LSEs) and, where these are present, adverse effects on the integrity of Habitats Sites, (formerly referred to as European sites), including Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a matter of Government policy, Ramsar sites. Under the Conservation of Habitats and Species Regulations 2017 (as amended), an Appropriate Assessment (AA; a more detailed stage of analysis) is required, where a plan or project is likely to result in LSEs on Habitats Sites. HRA appraisal considers potential impacts alone and in-combination with other plans and projects. Where adverse effects on site integrity cannot be excluded, the AA also advises on appropriate policy mechanisms to completely avoid or mitigate the impact.
- 1.2 The emerging WBLPU will cover the period between 2023 and 2040, detailing WBC's strategy for managing development to deliver their vision for the borough and providing the legal framework within which new planning applications will be assessed. The WBLPU comprises several components, such as Strategic Policies (identifying the spatial strategy for different parts of Wokingham Borough, such as the delivery of new housing and employment land in Strategic Development Locations) and Design and Connections Policies (stipulating detail on the criteria that future development will have to satisfy).
- 1.3 Wokingham Borough lies in the heart of the Thames Valley, approx. 50km west of London. It covers an area of 17,892ha and is divided into 17 parishes, which comprise a range of settlements including Earley, Winnersh, Woodley and Wokingham. The borough is permeated by good transport connections, both in terms of the available road network and public transport. For example, the M4 runs on a west-east trajectory through the centre and provides good connectivity for commuters travelling to adjoining boroughs and Greater London. The borough supports a population of 177,502, with a population growth of 15% between 2011 and 2021.
- 1.4 The WBLPU seeks to achieve visions of meeting the needs of its community, sustainability and delivering the 'right kind of growth'. Two key targets of the WBLPU with direct relevance to HRA are the delivery of more jobs and homes. For example, it has been identified that Wokingham Borough has a net need of 24,741m³ of industrial floorspace, and net need of 15,531m² of office floor space in the period to 2040, with additional employment floorspace being delivered through consented planning applications. Furthermore, as determined by the nationally calculated local housing need, an additional 12,763 new dwellings are required over the WBLPU timeline. To this end, WBC have identified Strategic Development Locations and further housing allocations that will deliver the housing requirement over the Plan period.

- 1.5 There are no Habitats Sites within Wokingham Borough, although there are several such sites within 15km of the authority boundary, the closest one being the Thames Basin Heaths SPA. The SPA is designated for several breeding bird species (i.e. nightjar, woodlark, and Dartford warbler) that nest on, or close to, the ground. Given the SPA's location in a densely populated landscape, it has been under long-standing pressure from development impacts in relation to recreational pressure and atmospheric pollution. The closest component parts of the SPA to Wokingham Borough are the Bramshill SSSI and Broadmoor to Bagshot Woods and Heaths SSSI.
- 1.6 Other Habitats Sites lie further from Wokingham Borough than the Thames Basin Heaths SPA. Relevant sites are Thursley, Ash, Pirbright & Chobham SAC, Windsor Forest & Great Park SAC, Burnham Beeches SAC and Hartslock Wood SAC. These SAC sites are designated for their habitats and non-avian species.

Legislation

- 1.7 The UK left the European Union (EU) on 31 January 2020 under the terms set out in the EU (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). While the UK is no longer a member of the EU, a requirement for HRA continues as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹.
- 1.8 The HRA process applies the 'Precautionary Principle'² to Habitats Sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the Habitats Site(s) in question. To ascertain whether or not site integrity will be affected, an AA should be undertaken of the relevant Plan or project. Figure 1 below sets out the legislative basis for AA.
- 1.9 Plans and projects for which adverse effects on Habitats Sites cannot be excluded, avoided or mitigated, may still be permitted if there are no reasonable alternatives and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

"A competent authority, before deciding to ... give any consent, permission or other authorisation for, a plan or project which (a) is likely to have a significant effect on a European site ... (either alone or in combination with other plans or projects) ... must make an appropriate assessment of the implications of the plan or project in view of the site's conservation objectives... The competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

Figure 1: The legislative basis for Appropriate Assessment.

- 1.10 Over time the phrase 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Regulations from

¹ These don't replace the 2017 Regulations but are just another set of amendments.

² The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm [to the environment] that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".*

Screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as 'Appropriate Assessment'.

- 1.11 In spring 2018 the 'Sweetman' European Court of Justice ruling³ clarified that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a Habitats Site that would otherwise arise) should **not** be taken into account when forming a view on LSEs. Mitigation should instead only be considered at the AA stage. This HRA is cognisant of that ruling.

Project Scope

- 1.12 There is no pre-defined guidance that dictates the physical scope of an HRA of a Plan document. Current guidance suggests that the following Habitats Sites should be included in the scope:

- All Habitats Sites within the boundary of Wokingham Borough; and,
- Other Habitats Sites shown to be linked to development in Wokingham Borough through a known 'pathway' (discussed below).

- 1.13 Generally, it is uncommon for development plans to result in significant impacts on Habitats Sites situated more than 10km from areas of growth. For example, most core recreational catchments (except for some coastal sites) are under 10km in size and the average vehicle commuting distance of a UK resident is approx. 10km. It should be noted that the presence of a conceivable impact pathway linking a Plan to a Habitats Site does not mean that LSEs will occur.

- 1.14 In some cases, development impacts can extend beyond 10km, particularly where hydrological pathways are involved, which is why the source-pathway-receptor concept is also used to help determine whether there are potential pathways connecting development to Habitats Sites. This takes site-specific sensitivities into account, including issues such as nutrient neutrality or water levels, quantity and flow.

- 1.15 Briefly defined, impact pathways are routes by which the implementation of a policy within a Local Plan document can lead to an effect upon a Habitats Site. An example of this would be new residential development resulting in an increased population and thus increased demand on recreational resources, which could affect Habitats Sites through, for example, disturbance of breeding birds. Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) 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*' (MHCLG, 2006, p.6).

- 1.16 This basic principle has also been reflected in court rulings. The Court of Appeal⁴ has ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to planning permissions (rather than a Plan level document)⁵. In this case the High Court ruled that for '*a multistage process, so long as there is sufficient information at any particular stage to enable the*

³ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

⁴No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015

⁵High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations’.

1.17 Given an initial assessment of the relevant Habitats Sites and the impact pathways present, and referring to the HRA work that was undertaken for the Reg.18 version of the WLP, this HRA will discuss (at least as far as the LSEs stage) the following Habitats Sites:

- Thames Basin Heaths SPA (the closest component part is Bramshill SSSI, located 0.06km from Wokingham Borough at its southern extent, and Broadmoor to Bagshot Woods and Heaths SSSI located 0.01km from Wokingham Borough to the east);
- Chilterns Beechwoods SAC (the closest component part, the Hollowhill and Pullingshill Woods SSSI, lies approx. 2.9km to the north-east of Wokingham Borough);
- Thursley, Ash, Pirbright & Chobham SAC (the closest component part, the Colony Bog and Bagshot Heath SSSI, lies approx. 6.9km to the south-east of Wokingham Borough);
- Windsor Forest & Great Park SAC (located approx. 8.5km to the east of Wokingham Borough);
- Aston Rowant SAC (located approx. 11.3km to the north of Wokingham Borough);
- Hartslock Wood SAC (located approx. 11.8km to the west of Wokingham Borough); and
- Burnham Beeches SAC (located approx. 13.2km to the north-east of Wokingham Borough).

1.18 For the HRA, the views of the statutory nature conservation advisors, namely Natural England, will be sought as part of the consultation process on the identified scope. The distribution of the above Habitats Sites in relation to Wokingham Borough is shown in Appendix A. An introduction, the qualifying features (species and habitats), Conservation Objectives, and threats and pressures to the integrity of these Habitats Sites are set out in Chapter 3.

1.19 In order to fully inform the HRA, several studies and online information databases have been consulted, including:

- Future development proposed in the Local Plans and Core Strategies of the adjoining authorities of South Oxfordshire, Wycombe, Windsor and Maidenhead, Bracknell Forest, Hart, Basingstoke and Dean, West Berkshire and Reading borough;
- HRAs produced for the Reg.18 WBLPU and development plans of adjoining authorities;
- Road traffic statistics from the Department for Transport (<https://roadtraffic.dft.gov.uk>);

- Journey-to-work data from the 2011 Population Census (<https://www.nomisweb.co.uk/census/2011/WU03UK>);
- Natural England's Site Improvement Plans (SIPs) and Supplementary Advice on Conservation Objectives (SACOs) for all identified Habitats Sites;
- The UK Air Pollution Information System (www.apis.ac.uk);
- Traffic and air quality modelling specifically undertaken to inform the HRA; and
- Multi Agency Geographic Information for the Countryside (MAGIC) and its links to SSSI citations and the JNCC website (www.magic.gov.uk).

Quality Assurance

- 1.20 This report was undertaken in line with AECOM's Integrated Management System (IMS). Our IMS places great emphasis on professionalism, technical excellence, quality, environmental and Health and Safety management. All staff members are committed to establishing and maintaining our certification to the international standards BS EN ISO 9001:2008 and 14001:2004 and BS OHSAS 18001:2007. In addition, our IMS requires careful selection and monitoring of the performance of all sub-consultants and contractors.
- 1.21 All AECOM Ecologists working on this project are members (at the appropriate level) of the Chartered Institute of Ecology and Environmental Management (CIEEM) and follow their code of professional conduct (CIEEM, 2022).

2. Methodology

Introduction

- 2.1 The HRA has been carried out with reference to the general EC guidance on HRA⁶ and general guidance on HRA published by government in July 2019⁷. AECOM has also been mindful of the implications of European case law in 2018, notably the Holohan ruling and the People over Wind ruling, both discussed below.
- 2.2 Figure 2 below outlines the stages of HRA according to current EC guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information becoming available, recommendations incorporated and any relevant changes to the Plan being made.

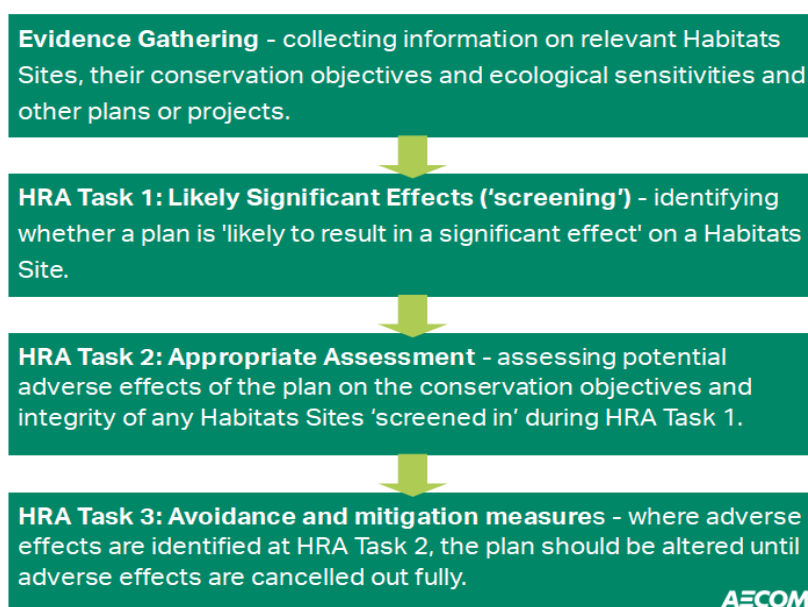


Figure 2: Four Stage Approach to HRA. (Adapted from EC, 2001¹)

Description of HRA Tasks

HRA Task 1 – Screening for Likely Significant Effects (LSEs)

- 2.3 Following evidence gathering, the first stage of any HRA is the screening for LSEs, essentially a high-level assessment to decide whether the full subsequent stage known as AA is required. The essential question is:

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

- 2.4 The objective is to filter out those plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in any impacts upon

⁶ 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.

⁷ <https://www.gov.uk/guidance/appropriate-assessment>

Habitats Sites, usually because there is no mechanism for a negative interaction. This stage is undertaken in Chapter 5 of this report and in Appendix B.

HRA Task 2 – Appropriate Assessment (AA)

- 2.5 Where it is determined that a conclusion of ‘no LSEs’ cannot be drawn, the analysis proceeds to the next stage of HRA known as AA. Case law has clarified that AA is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to AA compared to the Screening stage.
- 2.6 By virtue of the fact that it follows Screening, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during AA is whether there is available mitigation that would entirely address any potential adverse effects. In practice, the AA would take any policies or allocations that could not be dismissed following the high-level screening and assess the potential for an effect in more detail, with a view to concluding whether there would be a potential for an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the Habitats Site(s)).
- 2.7 Also, in 2018 the Holohan ruling⁸ was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that ‘*As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area*’ [emphasis added]. Due account of this decision has been given in this HRA in relation to the Thames Basin Heaths SPA, which is designated for mobile breeding birds.

HRA Task 3 – Avoidance and Mitigation

- 2.8 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate adverse effects on Habitats Sites. There is considerable precedent concerning the level of detail that a Local Plan document needs to contain regarding mitigation for impact pathways on Habitats Sites (e.g. regarding recreational pressure). The implication of this precedent is that it is not necessary for all measures to be fully developed prior to adoption of the Plan, but it must provide an adequate policy framework within which these measures can be delivered.
- 2.9 When discussing mitigation for a high-level development plan, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves.
- 2.10 In any plan, there are numerous policies for which there is a limit to the degree of assessment that is possible at this strategic level. This is because either:
- The policy in question does not contain any specifics as to what will be delivered or where, and so cannot be assessed in detail. In these cases, the AA focusses on precautionary mitigation that can be included in the

⁸ Case C-461/17

plan to ensure that whatever proposals come forward will not result in adverse effects on integrity; or

- The nature of potential impacts (e.g. visual and noise disturbance arising from construction or loss of functionally linked habitat) is related to how the development will be designed and constructed. In these instances, the AA focusses on available mitigation measures, the extent to which such measures would be achievable and effective, and whether an adequate protective framework exists to ensure that the policy would not lead to an adverse effect on the integrity of any Habitats Sites. Typically, the AA will also discuss the requirement of project-level HRAs where detail at the plan-level is insufficient.

2.11 In these instances, the advice of Advocate-General Kokott⁹ is also worth considering. She commented that: *'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure'* [emphasis added].

⁹ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph 49 <http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN>

3. Relevant Habitats Sites

Chilterns Beechwoods SAC

Introduction

- 3.1 The Chilterns Beechwoods represent a very extensive tract of *Asperulo-Fagetum* beech forests in the centre of the habitat's UK range. The SAC comprises a number of semi-natural component woodlands in which beech *Fagus sylvatica* is the most prominent and / or dominant canopy tree. The woodland components occur in a variety of settings, including a variety of soil types ranging from nutrient-poor, highly calcareous soils to clay-rich, poorly drained soils on the plateaus. One distinctive feature in the woodland flora is the occurrence of the rare coralroot *Cardamine bulbifera*.
- 3.2 As a result of the diverse location of the SAC parcels, their woodland character varies substantially and is also greatly influenced by the woodlands' past management histories. Many of the component woodlands were formerly an important source of timber for furniture production. However, in recent times the Chilterns Beechwoods SAC has become a highly valued recreational resource, particularly for hiking and cycling. The closest component part of the Chilterns Beechwoods SAC, Pullingshill Wood, lies approx. 2.8km to the north-east of Wokingham Borough in Buckinghamshire.

Qualifying Features¹⁰

- 3.3 The site was designated as being of European importance for the following features:
- 3.4 Annex I habitats that are a primary reason for selection of this site:
- *Asperulo-Fagetum* beech forests
- 3.5 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site:
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*; important orchid sites)
- 3.6 Annex II species present as a qualifying feature, but not a primary reason for selection of this site:
- Stag beetle *Lucanus cervus*

Conservation Objectives¹¹

- 3.7 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;

¹⁰ <https://sac.jncc.gov.uk/site/UK0012724> [Accessed on the 23/08/2024]

¹¹ <http://publications.naturalengland.org.uk/publication/4808896162037760> [Accessed on the 23/08/2024]

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.”*

Threats & Pressures to Site Integrity

3.8 The following threats and pressures to the site integrity of the Chilterns Beechwoods SAC have been identified in Natural England's Site Improvement Plan (SIP)¹² and Supplementary Advice on Conservation Objectives (SACO)¹³:

- Forestry and woodland management
- Deer
- Changes in species distributions
- Invasive species
- Disease
- Public access / disturbance
- Air pollution: Impact of atmospheric nitrogen deposition

Thames Basin Heaths SPA

Introduction

3.9 The Thames Basin Heaths Special Protection Area (SPA) consists of 8,274ha of lowland heathland spanning 11 authorities. It predominantly comprises dry and wet heath but also includes area of deciduous woodland, gorse scrub, acid grassland and mire, as well as associated conifer plantations. Historically, these habitats were almost continuous, but they are now fragmented by roads, housing and farmland. Most importantly from a conservation perspective, this heathland complex supports important breeding bird populations, such as the ground-nesting species nightjar and woodlark and the Dartford warbler, which nests close to the ground in heather or gorse.

3.10 Around 75% of the SPA has open public access being either common land or designated as open country under the Countryside and Rights of Way Act 2000. The location of the Thames Basin Heaths amidst a highly populated area has resulted in the site being subject to high recreational pressure. Over the last c.

¹² <http://publications.naturalengland.org.uk/publication/6228755680854016> [Accessed on the 23/08/2024]

¹³ [UK0012724_Chilterns Beechwoods SAC Published 10 Jul 2024 \(naturalengland.org.uk\)](https://publications.naturalengland.org.uk/publication/6228755680854016) [Accessed 23/08/2024]

20 years (since 2005) affected local authorities have been working strategically with Natural England to ensure that no adverse impacts result on the SPA as a result of increased recreational pressure stemming from planned residential development in combination with other projects and plans. In May 2006 Natural England published a Draft Delivery Plan for the Thames Basin Heaths SPA. In 2009, the 'Thames Basin Heaths Special Protection Delivery Framework' was published by the Thames Basin Heaths Joint Strategic Partnership Board. Together, these documents allow a strategic approach to accommodating development by providing a method through which local authorities can meet the requirements of the Habitats Regulations through avoidance and mitigation measures. Wokingham Borough Council is an affected borough. The closest component parts of the Thames Basin Heaths SPA lie approx. 58m to the south of Wokingham Borough (in Hart District) and approx. 158m to the south-east of Wokingham Borough (in Bracknell Forest Borough).

Qualifying Features¹⁴

3.11 This site qualifies under Article 4.1 of the Directive (79/409/EEC) by supporting populations of European importance of the following species listed on Annex I of the Directive:

3.12 Annex I breeding species:

- European nightjar *Caprimulgus europaeus*
- Dartford warbler *Sylvia undata*
- Woodlark *Lullula arborea*

Conservation Objectives¹⁵

3.13 With regard to the SPA and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change;

3.14 "Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features *within the site*."

Threats & Pressures to Site Integrity

3.15 The following threats and pressures to the site integrity of the Thames Basin Heaths SPA have been identified in Natural England's SIP¹⁶ and SACO¹⁷:

¹⁴ <http://publications.naturalengland.org.uk/publication/4952859267301376> [Accessed on the 23/08/2024].

¹⁵ <http://publications.naturalengland.org.uk/publication/4952859267301376> [Accessed on the 23/08/2024].

¹⁶ <http://publications.naturalengland.org.uk/publication/6249258780983296> [Accessed on the 23/08/2024].

¹⁷ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9012141.pdf> [Accessed 23/08/2024].

- Public access / disturbance
- Undergrazing
- Forestry and woodland management
- Hydrological changes
- Inappropriate scrub control
- Invasive species
- Wildfire / arson
- Air pollution: Impact of atmospheric nitrogen deposition
- Military
- Habitat fragmentation

Thursley, Ash, Pirbright and Chobham SAC

Introduction

3.16 The Thursley, Ash, Pirbright and Chobham SAC is located in south-east England and comprises various habitats, including heath and scrub (75%), bogs and marshes (10%), coniferous woodland (10%) and inland water bodies (5%). Most important from an HRA perspective is the complex of heaths, which includes both wet and dry heath, acid mire and bog pools. The underlying geology of the SAC allows little drainage, which gives rise to the mire systems. The complex supports an outstanding assemblage of valley mire systems with high diversity of wetland invertebrates, bryophytes and other scarce species. The SAC also provides important habitat to breeding birds such as curlew and snipe. Component heathlands of the SAC are managed as nature reserves with public access, while other parts have military training ranges and are off-limit to the public.

3.17 At Thursley Common the wet heath is NVC 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*. Thursley Common is particularly important for invertebrates, such as the nationally rare white-faced darter *Leucorhinia dubia*.

3.18 The SAC also contains a series of large fragments of dry heathland, a key representative of NVC type H2 *Calluna vulgaris* – *Ulex minor*. The dry heathland components include transitions to wet heath, valley mire, scrub, woodland and acid grassland and harbour numerous rare invertebrate species. They also harbour European nightjar *Caprimulgus europaeus*, Dartford warbler *Sylvia undata*, sand lizard *Lacerta agilis* and smooth snake *Coronella austriaca*. The closest component part of the SAC lies approx. 6.9km to the south-east of Wokingham borough in the authority of Surrey Heath.

Qualifying Features¹⁸

3.19 The site was designated as being of European importance for the following features:

¹⁸ <https://publications.naturalengland.org.uk/file/6503438829486080> [Accessed on the 23/08/2024]

- Northern Atlantic wet heaths with *Erica tetralix*
- European dry heaths
- Depressions on peat substrates of the *Rhynchosporion*

Conservation Objectives¹⁹

3.20 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;

3.21 “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
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely.”

Threats & Pressures to Site Integrity

3.22 The following threats and pressures to the site integrity of the Thursley, Ash, Pirbright and Chobham SAC have been identified in Natural England's SIP²⁰ and SACO²¹:

- Public access / disturbance
- Undergrazing
- Forestry and woodland management
- Hydrological changes
- Inappropriate scrub control
- Invasive species
- Wildfire / arson
- Air pollution: Impact of atmospheric nitrogen deposition
- Military
- Habitat fragmentation

Windsor Forest and Great Park SAC

Introduction

3.23 The Windsor Forest and Great Park SAC is internationally important for its landscape dominated by dry oaks, which supports internationally rare invertebrates, such as beetles and other species associated with ancient trees

¹⁹ <https://publications.naturalengland.org.uk/file/4677991053656064> [Accessed on the 23/08/2024]

²⁰ <http://publications.naturalengland.org.uk/publication/6249258780983296> [Accessed on the 23/08/2024]

²¹ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012793.pdf> [Accessed 23/08/2024]

or dead wood. The SAC comprises damp, shady woodland, open parkland, grazed wood pasture, ponds / wetland, grassland and scrub. Most importantly, the site has one of the largest concentrations of ancient trees, especially oaks, in Europe. Special micro-habitats in ancient trees include rot cavities, sap runs, dead limbs, detached bark, pools and fungal fruiting bodies.

- 3.24 The SAC lies upon alluvial sediments which in turn rest on poorly-draining sandy and silty underlying soils. These soils can be moderately acidic, meaning that a portion of the vegetation is typical for acid grassland and heathland. While large parts of the site are highly modified in character (e.g. planted avenues of trees, broad vistas), some parts of the SAC have a highly characteristic oak – bracken – bramble vegetation, NVC type W10. Parts that are open to the public are very popular tourist destinations, especially for hikers, cyclists and horse riders. The closest part of the SAC lies approx. 8.5km to the east of Wokingham borough in the authority of Windsor and Maidenhead.

Qualifying Features²²

- 3.25 The site was designated as being of European importance for the following features:

- 3.26 Annex I habitats that are a primary reason for selection of this site

- Old acidophilous oak woods with *Quercus robur* on sandy plains

- 3.27 Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

- Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer

- 3.28 Annex II species that are a primary reason for selection of this site

- Violet click beetle *Limoniscus violaceus*

Conservation Objective²³

- 3.29 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;

- 3.30 “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

²² <https://publications.naturalengland.org.uk/file/6277427382714368> [Accessed on the 23/08/2024]

²³ <https://publications.naturalengland.org.uk/file/6569964010209280> [Accessed on the 23/08/2024]

- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site.”*

Threats & Pressures to Site Integrity

3.31 The following threats and pressures to the site integrity of the Windsor Forest & Great Park SAC have been identified in Natural England’s SIP²⁴ and SACO²⁵:

- Forestry and woodland management
- Invasive species
- Disease
- Air pollution: Impact of atmospheric nitrogen deposition

Aston Rowant SAC

Introduction

3.32 The Aston Rowant SAC is located 11.3km from Wokingham Borough. The SAC comprises an area of 124.89ha, including dry grassland / steppes, broad-leaved deciduous woodland (23%), heath / scrub (14%) and ‘other land’ (0.5%). It designated as a SAC because it supports one of the largest remaining populations of juniper in lowland Britain, specifically on chalk formations in the south-east of England. Juniper is present as isolated bushes in chalk grassland, as well as in mixed scrub communities. Successful reproduction and survival of new juniper plants is rare and, therefore, the SAC is heavily dependent on management interventions. The SAC also supports *Asperulo-Fagetum* beech forest.

Qualifying Features²⁶

3.33 Annex I habitats that are a primary reason for selection of this site:

- *Juniperus communis* formations on heaths or calcareous grasslands

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

- *Asperulo-Fagetum* beech forests

Conservation Objectives²⁷

3.35 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;

3.36 “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;*

²⁴ <https://publications.naturalengland.org.uk/file/5106041196904448> [Accessed on the 23/08/24]

²⁵ <https://designatedsites.naturalengland.org.uk/css/buttonImages/Thistle.png> [Accessed 23/08/2024]

²⁶ <https://sac.jncc.gov.uk/site/UK0030082> [Accessed on 23 August 2024]

²⁷ <https://publications.naturalengland.org.uk/publication/5596085330378752> [Accessed on 23 August 2024]

- *The extent and distribution of qualifying natural habitats*
- *The structure and function (including typical species) of qualifying natural habitats, and*
- *The supporting processes on which qualifying natural habitats rely”*

Threats / Pressures to Site Integrity

3.37 The following threats and pressures to the integrity of the Aston Rowant SAC have been identified in Natural England’s SIP²⁸ and SACO²⁹:

- Unsustainable on-site population or habitat
- Changes in species distribution
- Deer
- Conflicting conservation objectives
- Disease
- Air pollution: Risk of atmospheric nitrogen deposition

Hartslock Wood SAC

Introduction

3.38 The Hartslock Wood SAC is located 11.8km from Wokingham Borough. It is 34.16ha in size. It encompasses mixed woodland (87%) and dry grassland / steppes (13%). It hosts the priority habitat type ‘orchid-rich sites’ and is characterised by steep slopes on the chalk of the Chilterns. Habitats supported within the site boundary include chalk grassland, chalk scrub and broadleaved woodland. The chalk grassland is dominated by shorter species (e.g. *Festuca ovina* and *Avenula pratensis*) and some taller *Bromus erectus*. One of only three UK populations of monkey orchid *Orchis simia* is found within the SAC. Recent storms and landslides have diversified the age structure of the yew woodland, with open patches supporting southern wood rush *Luzula forsteri*, wood barley *Hordelymus europaeus* and narrow-lipped helleborine *Epipactis leptochila*.

Qualifying Features³⁰

3.39 Annex I species that are a primary reason for selection of this site:

- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (*important orchid sites)
- *Taxus baccata* woods of the British Isles (*priority feature)

²⁸ <https://publications.naturalengland.org.uk/publication/4960794580090880> [Accessed on 23 August 2024]

²⁹ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030082.pdf> [Accessed 27/08/2024]

³⁰ <https://sac.jncc.gov.uk/site/UK0030164> [Accessed on 23 August 2024]

Conservation Objectives³¹

3.40 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;

3.41 *"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 qualifying natural habitats*
- *The structure and function (including typical species) of the qualifying natural habitats, and,*
- *The supporting processes on which the qualifying natural habitats rely"*

Threats / Pressures to Site Integrity

3.42 The following threats and pressures to the integrity of the Hartslock Wood SAC have been identified in Natural England's SIP³² and SACO³³:

- Air pollution: Risk of atmospheric nitrogen deposition

Burnham Beeches SAC

Introduction

3.43 The Burnham Beeches SAC is located 11.7km from Wokingham Borough. It is 383.71ha in size. It encompasses broad-leaved deciduous woodland (90%), coniferous woodland (5%) and heath/scrub (5%). It constitutes an example of Atlantic acidophilous beech forest in central southern England in an extensive area of former beech wood-pasture. The SAC supports many old pollarded trees, as well as beech *Fagus sylvatica* and oak *Quercus* spp. high forest. It is one of the richest sites for saproxylic invertebrates in the UK, as well as nationally important epiphytic communities (e.g. the moss *Zygodon forsteri*).

Qualifying Features³⁴

3.44 Annex I habitats that are a primary reason for selection of this site:

- Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion roburi-petraeae* or *Ilici-Fagenion*)

Conservation Objectives³⁵

3.45 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;

³¹ <https://publications.naturalengland.org.uk/publication/5307946309255168> [Accessed on 23 August 2024]

³² <https://publications.naturalengland.org.uk/publication/4874314121740288> [Accessed on 23 August 2024]

³³ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030164.pdf> [Accessed 27/08/2024]

³⁴ <https://sac.jncc.gov.uk/site/UK0030034> [Accessed on 23 August 2024]

³⁵ <https://publications.naturalengland.org.uk/publication/6014456282742784> [Accessed on 23 August 2024]

3.46 “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
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely”

Threats / Pressures to Site Integrity

3.47 The following threats and pressures to the integrity of the Burnham Beeches SAC have been identified in Natural England’s SIP³⁶ and SACO³⁷

- Air pollution: Risk of atmospheric nitrogen deposition
- Public access / disturbance
- Habitat fragmentation
- Deer
- Species decline
- Invasive species

³⁶ <https://publications.naturalengland.org.uk/publication/5689860228644864> [Accessed on 23 August 2024]

³⁷ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030034.pdf> [Accessed 27/08/2024]

4. Potential Linking Impact Pathways

Impact Pathways Considered

4.1 The following impact pathways are considered relevant to the WBLPU:

- Recreational pressure;
- Atmospheric pollution;
- Loss of functionally linked land; and
- Water quantity, level and flow.

Background to Recreational Pressure

Disturbance to breeding birds

4.2 There is concern about the cumulative impacts of recreation on key nature conservation sites in the UK, as most sites must fulfill conservation objectives while also providing recreational opportunity. This applies to any habitat, but the key qualifying features in lowland heathland are particularly vulnerable to human disturbance. An English Nature (the predecessor of Natural England) Research Report summarizes the key urban effects on heathland as habitat fragmentation, human disturbance, disturbance by animals linked to human presence (i.e. dogs and cats), increased risk of fires and trampling damage³⁸. Various research reports have provided compelling links between changes in housing and access levels and impacts on Habitats Sites^{39 40}.

4.3 Particular concern applies to recreation effects on ground-nesting birds, with many studies concluding that more urban sites support lower densities of key species, such as stone curlew and nightjar.^{41 42} This is a direct consequence from the fact that birds are expending energy avoiding the stressor and this is time that is not spent feeding or incubating the eggs⁴³. Overall, disturbance is likely to increase energetic output while reducing energetic input, which can adversely affect the 'condition' and ultimately survival of the birds.

4.4 Evidence in the literature suggests that the magnitude of disturbance clearly differs between different types of recreational activities. For example, dog walking leads to a significantly higher reduction in bird diversity and abundance than hiking⁴⁴. Scientific evidence also suggests that key disturbance parameters, such as areas of influence and flush distance, are significantly greater for dog

³⁸ Underhill-Day, J. 2005. A literature review of urban effects on lowland heaths and their wildlife. English Nature Research Reports 623. 56pp.

³⁹ Liley D, Clarke R.T., Mallord J.W., Bullock J.M. 2006a. The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths. Natural England / Footprint Ecology.

⁴⁰ Liley D., Clarke R.T., Underhill-Day J., Tyldesley D.T. 2006b. Evidence to support the appropriate Assessment of development plans and projects in south-east Dorset. Footprint Ecology / Dorset County Council.

⁴¹ Clarke R.T., Liley D., Sharp J.M., Green R.E. 2013. Building development and roads: Implications for the distribution of stone curlews across the Brecks. PLOS ONE. doi:10.1371/journal.pone.0072984.

⁴² Liley D., Clarke R.T. 2003. The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England. Biological Conservation 114: 219-230.

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

⁴⁴ Banks P.B., Bryant J.Y. 2007. Four-legged friend or foe? Dog walking displaces native birds from natural areas. *Biology Letters* 3: 14pp.

walkers than hikers⁴⁵. A UK meta-analysis suggests that important spatial (e.g. the area of a site potentially influenced) and temporal (e.g. how often or long an activity is carried out) parameters differ between recreational activities, suggesting that these are factors that should ideally be considered in ecological assessments⁴⁶. In addition, displacement of birds from one feeding site to others can increase the feeding pressure on available resources, which need to sustain greater numbers of birds⁴⁷. Importantly, recreational disturbance is generally higher in summer than in winter (due to more people engaging in outdoor activities) and this is also when the qualifying bird features are breeding in the SPA.

- 4.5 Disturbance can also arise from a much wider urbanisation effect that presents itself as a much more direct threat to survival, such as in the case of predation by dogs and cats. Dogs are often exercised off-lead and roam out of sight of their owners and have been documented to kill ground-nesting birds. Cats tend to roam freely at night, potentially hunting prey many kilometres away from their home.

Trampling damage, erosion and nutrient enrichment

- 4.6 Most terrestrial sites can be affected by trampling and other mechanical damage, which in turn causes soil compaction and / or erosion. Multiple research studies have experimentally shown the effects of trampling on plant community structure, often comparing several recreational activities:

- Wilson & Seney⁴⁸ 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 al⁴⁹ conducted experimental off-track trampling in 18 closed forest, dwarf scrub and meadow & 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 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. The cover of hemicryptophytes and geophytes

⁴⁵ Miller S.G., Knight R.L., Miller C.K. 2001. Wildlife responses to pedestrians and dogs. 29: 124-132.

⁴⁶ Weitowitz D., Panter C., Hoskin R., Liley D. The spatio-temporal footprint of key recreation activities in European protected sites. Manuscript in preparation.

⁴⁷ Gill, J.A., Sutherland, W.J. & Norris, K. 1998. The consequences of human disturbance for estuarine birds. *RSPB Conservation Review* 12: 67-72

⁴⁸ 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

⁴⁹ 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

(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.

- Cole⁵⁰ 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 the effect on cover.
- Cole & Spildie⁵¹ 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 trampling was found to cause the largest reduction in vegetation cover. The forb-dominated vegetation suffered greatest disturbance but recovered rapidly. Generally, it was shown that higher trampling intensities caused more disturbance.
- In heathland sites, trampling damage can also affect the value of a site to wildlife. For example, heavy use of sandy tracks loosens and continuously disturbs sand particles, reducing the habitat's suitability for invertebrates⁵². Species that burrow into flat surfaces such as the centres of paths, are likely to be particularly vulnerable, as the loose sediment can no longer maintain their burrow. In some instances, nature conservation bodies and local authorities resort to hardening paths to prevent further erosion. However, this is concomitant with the loss of habitat used by wildlife, such as sand lizards and burrowing invertebrates.

4.7 Prolonged or repeated excessive trampling and the resulting erosion may, over time, lead to the exposure of tree roots. It has been demonstrated that recreational trails with high usage are subject to significantly more erosion and root exposure⁵³. Due to their size such root systems might not immediately appear to be sensitive to trampling damage. Indeed, a research study in 2002 showed that recreational trampling led to significant damage in the vegetation layer, particularly the beech seedlings and their fine mycorrhizal roots, but that the roots of mature trees were resilient to trampling⁵⁴. However, it has also been found that tree root exposure is associated with a higher risk of infection and rot. Furthermore, while trampling may not directly damage the tree roots, it does affect the soil structure around the root zones of mature and ancient trees, which in turn determines root growth, associations with mycorrhizal fungi and overall tree growth. Soil compaction leads to a loss of space for air and water molecules,

⁵⁰ 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.

⁵¹ 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

⁵² Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

⁵³ Leung Y.-F. & Marion J. F. (2000). Recreation impacts and management in wilderness: A state-of-knowledge review. *USDA Forest Service Proceedings* 5: 23-48.

⁵⁴ Waltert B., Wiemken V., Rusterholz H.-P., Boller T. & Baur B. (2002). Disturbance of forest by trampling: Effects on mycorrhizal roots of seedlings and mature trees of *Fagus sylvatica*. *Plant and Soil* 243: 143-154.

both of which are integral to tree health⁵⁵. Due to their enhanced ecological value, this can be a particular issue for ancient and veteran tree assemblages, such as those present in Windsor Forest & Great Park SAC. For Chilterns Beechwoods SAC the Site Improvement Plan specifically identifies a target to reduce visitor impact on dead wood, as removal of dead wood by the general public is an issue on some parts of the SAC. However, this is more a matter of individual behaviour, rather than an inevitable corollary of an increasing population.

- 4.8 A major concern for nutrient-poor habitats (e.g. heathlands, bogs and fens) is nutrient enrichment associated with dog fouling, which has been addressed in various reviews (e.g.⁵⁶). It is estimated that dogs will defecate within 10 minutes of starting a walk and therefore most nutrient enrichment arising from dog faeces will occur within 400m of a site entrance. In contrast, dogs will urinate at frequent intervals during a walk, resulting in a more spread out distribution of urine. For example, in Burnham Beeches National Nature Reserve it is estimated that 30,000 litres of urine and 60 tonnes of dog faeces are deposited annually⁵⁷. While there is little information on the chemical constituents of dog faeces, nitrogen is one of the main components⁵⁸. Nutrient levels are the major determinant of plant community composition and the effect of dog defecation in sensitive habitats (e.g. heathland) is comparable to a high-level application of fertiliser, potentially resulting in the shift to plant communities that are more typical for improved grasslands.
- 4.9 The available baseline information suggests that the Thames Basin Heaths SPA and the Thursley, Ash, Pirbright & Chobham SAC (which largely overlaps with the SPA) are the most vulnerable of the sites to recreational pressure. In the SPA the main risk of recreational pressure is a reduced breeding success of nightjar, Dartford warbler and woodlark, all of which nest on or close to the ground. In the SAC recreational disturbance might lead to trampling damage of heathland plants, track erosion and nutrient enrichment. Wokingham borough is only approx. 158m from the SPA and 6.9km from the SAC, and the spatial distribution of residential dwellings is likely to affect the contribution of growth in the borough to this impact pathway, with allocations in the northern part of Wokingham borough likely having a much lower recreational footprint in these Habitats Sites than allocations in the south.
- 4.10 The Thames Basin Heaths SPA is a 8,274ha site in south-eastern England, an area of the country which is highly populated and where housing growth will lead to a further increase in the population of Boroughs and Districts surrounding the SPA. Recognising this as a key issue, English Nature (the predecessor of Natural England) commissioned a visitor survey in 2005 to establish a baseline level of recreational use in the SPA⁵⁹. This initial survey provided an estimate of approx. 5 million annual visits to the SPA, highlighting it as a recreational honeypot resource in the region. Due to the ongoing issue of housing growth in the region,

⁵⁵ Natural England Site Conservation Objectives Supplementary Advice Note for the Windsor Forest & Great Park SAC. Available at:

<https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012586.pdf> [Accessed on the 23/08/2024].

⁵⁶ Taylor K., Anderson P., Taylor R.P., Longden K. & Fisher P. 2005. Dogs, access and nature conservation. English Nature Research Report, Peterborough.

⁵⁷ 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.

⁵⁸ Taylor K., Anderson P., Liley D. & Underhill-Day J.C. 2006. Promoting positive access management to sites of nature conservation value: A guide to good practice. English Nature / Countryside Agency, Peterborough and Cheltenham.

⁵⁹ Liley D., Jackson D.B. & Underhill-Day J.C. (2006). Visitor Access Patterns on the Thames Basin Heaths. English Nature Research Reports, N682, Peterborough. Available at [Microsoft Word - TBH VISITOR REPORT 28nov2005-FINAL.doc](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/111111/tbhppartnership.org.uk) (tbhppartnership.org.uk) [Accessed 04/09/2024]

and to monitor potential changes in recreational pressure within the SPA, subsequent to the 2005 visitor survey, Natural England has commissioned a total of three repeat visitor surveys. These were in 2012 / 2013⁶⁰, 2018⁶¹, with the most recent being in 2023⁶². Across the four visitor surveys, the methodology from the original 2005 visitor survey was followed as much as possible to allow comparisons across the four different years that visitor surveys have been conducted at Thames Basin Heaths SPA. Data from these studies will be used to assess the potential recreational impact of the WBLPU on the Thames Basin Heaths SPA, but also the Thursley, Ash, Pirbright & Chobham SAC (which partly overlaps with the SPA).

4.11 The following Habitats Sites are potentially sensitive to recreational pressure stemming from the Wokingham Borough:

- Thames Basin Heaths SPA (the closest parcel of the SPA lies only approx. 58m to the south of Wokingham Borough in Hart District)
- Thursley, Ash, Pirbright & Chobham SAC (the closest parcel is located approx. 6.9km to the south-west of Wokingham Borough in the authority of Surrey Heath)
- Chilterns Beechwoods SAC (the closest parcel is located approx. 2.8km to the north-east of the authority's boundary)
- Windsor Forest and Great Park SAC (the closest parcel is located approx. 8.5km to the east of Wokingham Borough's boundary)
- Burnham Beeches SAC (the closest parcel is located approx. 9.9km to the north of Wokingham Borough's boundary)

Background to Atmospheric Pollution

4.12 The following table (Table 4-1) sets out the main sources and effects of air pollutants on habitats and species.

Table 4-1: Main sources and effects of air pollutants on habitats and species⁶³

Pollutant	Source	Effects on habitats and species
Sulphur Dioxide (SO ₂)	The main sources of SO ₂ are electricity generation, and industrial and domestic fuel combustion. However, total SO ₂ emissions in the UK have decreased substantially since the 1980's.	Wet and dry deposition of SO ₂ acidifies soils and freshwater and may alter the composition of plant and animal communities. The magnitude of effects depends on levels of deposition, the buffering capacity of soils

⁶⁰ Fearnley H. & Liley D. (2013). Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA). Natural England Commissioned Reports, No. 136. 107pp. Available at <https://www.tbhpartnership.org.uk/index.php?pdf=1&uri=https://www.tbhpartnership.org.uk/content/uploads/2022/04/TBH-SPA-Visitor-Survey-Analysis-2012-13> [Accessed 04/09/2024]

⁶¹ EPR (2018) Visitor Access Patterns on the Thames Basin Heaths SPA. Visitor Questionnaire Survey 2018. Available at <https://www.tbhpartnership.org.uk/?pdf=1&uri=https://www.tbhpartnership.org.uk/content/uploads/2022/04/TBH-SPA-Visitor-Survey-Analysis-2018> [Accessed 04/09/2024]

⁶² Panter, C., Bishop, E. & Rush, E (2024). Thames Basin Heaths Special Protection Area 2023 Visitor Survey. Report by Footprint Ecology for Natural England. Available at <https://www.tbhpartnership.org.uk/content/uploads/2024/04/TBH-visitor-survey-2023-Final.pdf> [Accessed 04/09/2024]

⁶³ Information summarised from the Air Pollution Information System (<http://www.apis.ac.uk/>)

Pollutant	Source	Effects on habitats and species
	Another origin of sulphur dioxide is the shipping industry and high atmospheric concentrations of SO₂ have been documented in busy ports. In future years shipping is likely to become one of the most important contributors to SO₂ emissions in the UK.	and the sensitivity of impacted species. However, SO₂ background levels have fallen considerably since the 1970's and are now not regarded a threat to plant communities. For example, decreases in Sulphur dioxide concentrations have been linked to returning lichen species and improved tree health in London.
Acid deposition	Leads to acidification of soils and freshwater via atmospheric deposition of SO₂, NO_x, ammonia and hydrochloric acid. Acid deposition from rain has declined by 85% in the last 20 years, with most of this as a result of lower sulphate levels. Although future trends in Sulphur emissions and subsequent deposition to terrestrial and aquatic ecosystems will continue to decline, increased N emissions may cancel out any gains produced by reduced S levels.	Gaseous precursors (e.g. SO₂) can cause direct damage to sensitive vegetation, such as lichen, upon deposition. Can affect habitats and species through both wet (acid rain) and dry deposition. The effects of acidification include lowering of soil pH, leaf chlorosis, reduced decomposition rates, and compromised reproduction in birds / plants. Not all sites are equally susceptible to acidification. This varies depending on soil type, bed rock geology, weathering rate and buffering capacity. For example, sites with an underlying geology of granite, gneiss and quartz rich rocks tend to be more susceptible.
Ammonia (NH ₃)	NH₃ is a reactive, soluble alkaline gas that is released following decomposition and volatilisation of animal wastes. It is a naturally occurring trace gas, but NH₃ concentrations are directly related to the distribution of livestock. NH₃ reacts with acid pollutants such as the products of SO₂ and NO_x emissions to produce fine ammonium (NH₄⁺) - containing aerosol. Due to its significantly	The negative effect of NH₄⁺ may occur via direct toxicity, when uptake exceeds detoxification capacity and via N accumulation. Its main adverse effect is eutrophication, leading to species assemblages that are dominated by fast-growing and tall species. For example, a shift in dominance from heath

Pollutant	Source	Effects on habitats and species
	longer lifetime, NH_4^+ may be transferred much longer distances (and can therefore be a significant trans-boundary issue). While NH_3 deposition may be estimated from its atmospheric concentration, the deposition rates are strongly influenced by meteorology and ecosystem type.	species (lichens, mosses) to grasses is often seen. As emissions mostly occur at ground level in the rural environment and NH_3 is rapidly deposited, some of the most acute problems of NH_3 deposition are for small relict nature reserves located in intensive agricultural landscapes.
Nitrogen oxides (NO_x)	Nitrogen oxides are mostly produced in combustion processes. Half of NO_x emissions in the UK derive from motor vehicles, one quarter from power stations and the rest from other industrial and domestic combustion processes. In contrast to the steep decline in Sulphur dioxide emissions, nitrogen oxides are falling slowly due to control strategies being offset by increasing numbers of vehicles.	Direct toxicity effects of gaseous nitrates are likely to be important in areas close to the source (e.g. roadside verges). A critical level of NO_x for all vegetation types has been set to 30 $\mu\text{g}/\text{m}^3$. Deposition of nitrogen compounds (nitrates (NO_3), nitrogen dioxide (NO_2) and nitric acid (HNO_3)) contributes to the total nitrogen deposition and may lead to both soil and freshwater acidification. In addition, NO_x contributes to the eutrophication of soils and water, altering the species composition of plant communities at the expense of sensitive species.
Nitrogen deposition	The pollutants that contribute to the total nitrogen deposition derive mainly from oxidized (e.g. NO_x) or reduced (e.g. NH_3) nitrogen emissions (described separately above). While oxidized nitrogen mainly originates from major conurbations or highways, reduced nitrogen mostly derives from farming practices. The N pollutants together are a large contributor to acidification (see above).	All plants require nitrogen compounds to grow, but too much overall N is regarded as the major driver of biodiversity change globally. Species-rich plant communities with high proportions of slow-growing perennial species and bryophytes are most at risk from N eutrophication. This is because many semi-natural plants cannot assimilate the surplus N as well as many graminoid (grass) species.

Pollutant	Source	Effects on habitats and species
		N deposition can also increase the risk of damage from abiotic factors, e.g. drought and frost.
Ozone (O ₃)	A secondary pollutant generated by photochemical reactions involving NO_x, volatile organic compounds (VOCs) and sunlight. These precursors are mainly released by the combustion of fossil fuels (as discussed above). Increasing anthropogenic emissions of ozone precursors in the UK have led to an increased number of days when ozone levels rise above 40ppb ('episodes' or 'smog'). Reducing ozone pollution is believed to require action at international level to reduce levels of the precursors that form ozone.	Concentrations of O₃ above 40 ppb can be toxic to both humans and wildlife, and can affect buildings. High O₃ concentrations are widely documented to cause damage to vegetation, including visible leaf damage, reduction in floral biomass, reduction in crop yield (e.g. cereal grains, tomato, potato), reduction in the number of flowers, decrease in forest production and altered species composition in semi-natural plant communities.

4.13 As highlighted in Table 4-1, the main pollutants of concern for Habitats Sites are oxides of nitrogen (NO_x), NH₃ and SO₂. NH₃ can have a directly toxic effect upon vegetation even at low concentrations, particularly at close distances to the source such as near road verges⁶⁴. NO_x can also be toxic at high concentrations. Increased NO_x and NH₃ is likely to increase the total N deposition to soils, potentially leading to deleterious knock-on effects in resident ecosystems. Increases in nitrogen deposition from the atmosphere can, if sufficiently great, enhance soil fertility and lead to eutrophication. This often has adverse effects on the community composition and quality of semi-natural, nitrogen-limited terrestrial and aquatic habitats^{65 66}.

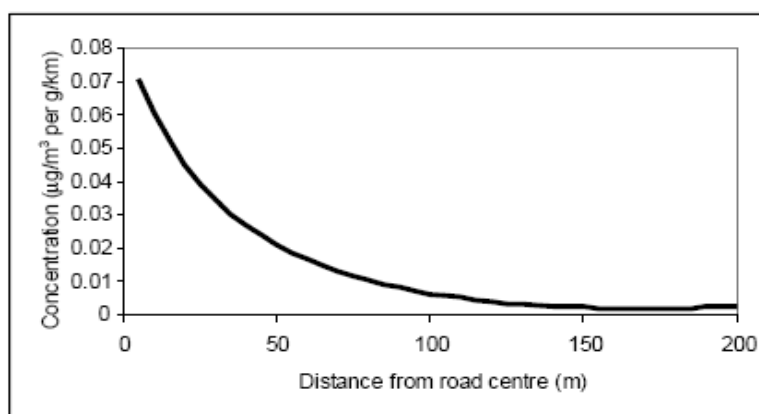
4.14 In woodlands exceedance of the critical nitrogen load may lead to a nutrient imbalance, decrease in mycorrhiza, loss of epiphytic lichens and bryophytes, changes in ground vegetation and a change in soil fauna. In mires and fens increased nitrogen deposition may lead to increase in the abundance and percentage cover of sedges and vascular plants, and the reduction of bryophytes. In heathlands, the primary concern associated with eutrophication is a shift towards the dominance of more competitive graminoids, a decline in lichens, changes in the plant biochemistry and an increased sensitivity to abiotic stress.

⁶⁴ http://www.apis.ac.uk/overview/pollutants/overview_NOx.htm.

⁶⁵ Wolseley, P. A.; James, P. W.; Theobald, M. R.; Sutton, M. A. **2006**. *Detecting changes in epiphytic lichen communities at sites affected by atmospheric ammonia from agricultural sources*. Lichenologist 38: 161-176

⁶⁶ Dijk, N. **2011**. *Dry deposition of ammonia gas drives species change faster than wet deposition of ammonium ions: evidence from a long-term field manipulation* Global Change Biology 17: 3589-3607

- 4.15 Sulphur dioxide emissions overwhelmingly derive from power stations and industrial processes that require the combustion of coal and oil, as well as (particularly on a local scale) shipping⁶⁷. NH₃ emissions originate particularly from agricultural practices⁶⁸, but some chemical processes and certain vehicles also make notable contributions. NO_x emissions are dominated by the output of vehicle exhausts (more than half of all emissions). A 'typical' housing development will contribute by far the largest portion to its overall NO_x footprint (92%) through the associated road traffic. Other sources, although relevant, are of minor importance in comparison⁶⁹. The total nitrogen deposition is a metric that represents the cumulative nitrogen addition from several sources and is perhaps most useful from an HRA perspective, because it allows a habitat-specific assessment of air quality impacts⁷⁰. Given the origin of nitrogen-derived atmospheric pollutants, it is considered that the WBLPU might be associated with an increase in such atmospheric pollutants.
- 4.16 Critical thresholds are now available for most atmospheric pollutants. For example, according to the World Health Organisation, the critical NO_x concentration (critical threshold) for the protection of vegetation is 30 µgm⁻³; while the threshold for sulphur dioxide is 20 µgm⁻³. In addition, ecological studies have determined 'critical loads'⁷¹ of atmospheric nitrogen deposition (that is, NO_x combined with NH₃).
- 4.17 The Department of Transport's Transport Analysis Guidance highlights that, beyond 200m, the contribution of vehicle emissions from the roadside to local pollution levels is not significant⁷² (Figure 3). The same 200m distance is utilised by Highways England in their road assessments⁷³ and is cited in recently published guidance from the Institute of Air Quality Management⁷⁴. This is therefore the distance that has been used throughout this HRA in order to determine whether Habitats Sites are likely to be significantly affected by development outlined in a Plan document.



⁶⁷ http://www.apis.ac.uk/overview/pollutants/overview_SO2.htm.

⁶⁸ Pain, B.F.; Weerden, T.J.; Chambers, B.J.; Phillips, V.R.; Jarvis, S.C. 1998. A new inventory for ammonia emissions from U.K. agriculture. Atmospheric Environment 32: 309-313

⁶⁹ Proportions calculated based upon data presented in Dore CJ et al. 2005. UK Emissions of Air Pollutants 1970 – 2003. UK National Atmospheric Emissions Inventory. <http://www.airquality.co.uk/archive/index.php>

⁷⁰ As opposed to the generic NO_x limit set for all vegetation.

⁷¹ The critical load is the rate of deposition beyond which research indicates that adverse effects can reasonably be expected to occur

⁷² <http://www.dft.gov.uk/webtag/documents/expert/unit3.3.3.php#013>; accessed 12/05/2016

⁷³ [http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/LA 105 Air quality-web.pdf](http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol11/section3/LA%20105%20Air%20quality-web.pdf)

⁷⁴ <http://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2019.pdf>, paragraph 5.3.6

Figure 3: Traffic contribution to concentrations of pollutants at different distances from a road (Source: DfT75)

- 4.18 Exhaust emissions from vehicles are capable of adversely affecting both woodland and heathland habitats. Considering this, an increase in the net population and employment growth within the Wokingham Borough is likely to result in increased traffic flows past Habitats Sites that are sensitive to atmospheric pollution, which is particularly important where major roads lie within 200m of the protected site boundary. Atmospheric pollution is a particularly pertinent issue for Wokingham Borough, because it lies close to Habitats Sites that are designated for heathland and ancient trees. For example, heathland is particularly sensitive to nitrogen deposition, because its component plant species are adapted to very low nutrient conditions and are therefore at a competitive disadvantage to grasses and other plants, which grow much faster under increased nutrient concentrations.
- 4.19 The following Habitats Sites are potentially sensitive to atmospheric pollution resulting from an increase in the number of car-based commuter journeys and these may be affected by changes in vehicle numbers and commuter journeys in Wokingham Borough depending on the key journey to work routes out of the borough and the proximity of sensitive habitats to those routes:
- Chilterns Beechwoods SAC (located approx. 2.3km to the north-east of Wokingham Borough)
 - Thames Basin Heaths SPA (located approx. 58m to the south of Wokingham Borough)
 - Thursley, Ash, Pirbright and Chobham SAC (located approx. 6.9km to the south-east of Wokingham Borough)
 - Windsor Forest & Great Park SAC (located approx. 8.6km to the east of Wokingham Borough)
 - Burnham Beeches SAC (located approx. 9.9km to the north of Wokingham Borough)
 - Hartslock Wood SAC (located approx. 10.9km to the west of Wokingham Borough)
 - Aston Rowant SAC (located approx. 11.2km to the north of Wokingham Borough)
- 4.20 The Air Pollution Information System (APIS)⁷⁵ indicates that some of the qualifying features of the Chilterns Beechwoods SAC are sensitive to atmospheric pollutants. For example, the *Asperulo-Fagetum* beech forests have a critical nitrogen limit of 10-20 kg N/ha/yr. Equally, the semi-natural dry grasslands and scrubland facies on calcareous substrates (important orchid sites) are sensitive to atmospheric pollution, with an empirical critical nitrogen load of 10-20 kg N/ha/yr. In contrast, the stag beetles themselves would not be affected by nitrogen deposition according to APIS.
- 4.21 The Thames Basin Heaths SPA is designated for its breeding populations of specialist heathlands birds, including European nightjar, woodlark and Dartford warbler. APIS classifies the SPA as susceptible to atmospheric pollution, due to

⁷⁵ <http://www.dft.gov.uk/ha/standards/dmrb/vol11/section3/ha20707.pdf>

⁷⁶ [Air Pollution Information System | Air Pollution Information System \(apis.ac.uk\)](#) [Accessed on the 23/08/2024]

negative impacts on the habitats (particularly heathland and acid grassland) in which the qualifying birds' nest. Dwarf shrub heath has a critical load of 5-15 kg N/ha/yr. Nightjar and woodlark also nest within rotationally-managed conifer plantation⁷⁷ but it is likely that plantation management (the sequential process of ground preparation, tree planting, weed suppression, tree thinning and clear-felling) is the primary influence on the suitability of a plantation for nesting by either species.

- 4.22 Thursley, Ash, Pirbright and Chobham SAC is designated for its depressions on peat substrates of the *Rhynchosporion* and its European dry heaths, which are both sensitive to atmospheric pollution. APIS highlights that the peat substrate depressions and European dry heath have a critical nitrogen load of 5-15 kg N/ha/yr⁷⁸.
- 4.23 The large assemblage of veteran and / or ancient trees in the Windsor Forest & Great Park SAC is of particular concern regarding atmospheric pollution, due to its disproportionate ecological value. The old acidophilous oak woods within the site boundary and the Atlantic acidophilous beech forests dominated by *Ilex* and *Taxus* have a relatively low critical nitrogen load of 10-15 kg N/ha/yr⁷⁹. Violet click beetle would not be affected by nitrogen deposition, according to APIS.

Background to Water Quantity, Level and Flow

- 4.24 In addition to water quality, both the water level and flow (and its natural diurnal and annual variation) are important determinants of the ecological status of Habitats Sites. Hydrological processes are critical in influencing habitat characteristics, including current velocity, water depth, dissolved oxygen levels and water temperature in rivers and / or lakes. In turn these habitat features determine the short- and long-term viability of plant and animal species, as well as overall ecosystem composition.
- 4.25 A widely cited review paper summarised the ecological effects of reduced flow in rivers⁸⁰. Droughts (ranging in their magnitude from flow reduction to a complete loss of surface water) have both direct and indirect effects on stream communities. For example, a marked direct effect is the loss of water and habitat for aquatic organisms. Indirect effects include a deterioration in water quality, changes to the food resources and alterations in interspecific interactions. An increased stability of baseflow and a reduction in the natural flow variability of rivers has been linked to the excessive growth of macrophytes and a reduction in fish populations⁸¹.
- 4.26 Furthermore, the flow and water level in surface waterbodies, and the groundwater level affect the water supply to Habitats Sites within their respective hydrological catchments. Abstraction of freshwater for the potable water supply to new dwellings and employment space might result in an overall drop of groundwater and / or surface water levels. This in turn is likely to decrease the wetted area within Habitats Sites that depend on a natural hydrological regime.

⁷⁷ Rotationally-managed conifer plantation is generally suitable for nesting woodlark during the first 5-6 years, and for nesting nightjar during the first c. 20 years, of a typical growth cycle. After that time the woody growth is too mature and dense to be suitable and the birds nest elsewhere until the trees are felled and the plantation cycle starts again.

⁷⁸ [APIS app | Air Pollution Information System](#) [Accessed on the 23/08/2024].

⁷⁹ [APIS app | Air Pollution Information System](#) [Accessed on the 23/08/2024].

⁸⁰ Lake P.S. 2003. Ecological effects of perturbation by drought in flowing waters. *Freshwater Biology* 48: 1161-1172.

⁸¹ Bunn S.E. & Arthington A.H. 2002. Basic principles and ecological consequences of altered flow regimes for aquatic biodiversity. *Environmental Management* 30: 492-507.

According to Natural England's Site Improvement Plans several Habitats Sites depend on hydrological conditions (discussed further in the LSEs section). These SACs lie within resource zones supplied by Thames Water and South East Water. It is therefore important to consider the Water Resource Management Plans (WRMPs, and their HRAs) to determine whether the company's proposed abstraction regimes might result in changes to the flow regimes of waterbodies supplying these SACs.

4.27 The following Habitats Sites are potentially sensitive to changes in the water quantity, level, flow or overall hydrological regime stemming from Wokingham Borough:

- Thursley, Ash, Pirbright & Chobham SAC
- Windsor Forest & Great Park SAC
- Chilterns Beechwoods SAC

Background to Loss of Functionally Linked Land

4.28 While most Habitats Sites have been geographically defined to encompass the key features that are necessary for coherence of their structure and function, and the support of their qualifying features, this is not always the case. A diverse array of qualifying species including birds, bats and amphibians are not confined to the boundary of designated sites.

4.29 For example, the highly mobile nature of both wildfowl and heathland birds implies that areas of habitat of crucial importance to the maintenance of their populations are outside the physical limits of Habitats Sites. Despite not being designated, this area is still integral to the maintenance of the structure and function of the interest feature on the designated site and, therefore, land use plans that may affect such areas should be subject to further assessment.

4.30 The Thames Basin Heaths SPA is the only Habitats Site that supports mobile species, namely nightjar, Dartford warbler and woodlark. Their main habitat requirements are the following:

- Nightjar show a preference for bare patches or areas of very short or sparse vegetation with widely scattered trees where they are able to see predators approaching. These patches may be on open heath, in patchy scrub and in the interface between heath and woodland, as well as in clearings in woodland or plantations. Nightjars are known to forage up to 6 kilometres away from their nesting territory.
- Woodlark are strongly associated with bare ground, especially where this is adjacent to structurally diverse vegetation and short heather. They utilise scattered trees and large bushes as song-posts. Woodlark use a variety of habitats adjacent to heathland for foraging, including short grassland, stubble fields or margins of arable fields, golf courses and bare areas in quarry sites.
- Dartford warbler favour large areas of open terrain, largely free of obstructions, in and around nesting, roosting and feeding areas in lowland heathland with gorse and heather. They benefit from availability of an unobstructed line of sight within nesting, feeding or roosting to enable birds to detect approaching predators, or to ensure visibility of displaying

behaviour. However, they will utilise enclosed features such as clearings in conifer plantations⁸².

- 4.31 The SPA is designated for its breeding nightjar, woodlark and Dartford warbler. Most of these qualifying species forage in a range of different habitats, including common and widespread ones. It is widely considered that the main habitat factor that controls these populations and their breeding success is availability of suitable nesting habitat. The breeding habitat requirements for the SPA bird species are much more specific than their foraging habitats. As such the focus of this assessment is therefore on nesting habitat.
- 4.32 Generally, the long-term substantial loss, degradation and fragmentation of lowland heathland habitats has been the major factor associated with the decline of nightjar and woodlark⁸³. Whilst a large portion of woodland and heathland in the area is located within the Thames Basin Heaths SPA, there are various parcels of such habitats outside the designated site boundary, all of which could provide functionally linked supporting habitat to SPA species.
- 4.33 The most suitable habitats for nesting nightjar and woodlark are heathland, acid grassland and rotationally-managed plantation woodland (meaning any woodland that is cropped and replanted on a regular cycle, creating clearings in which the birds can nest). Woodland that is maintained as continuous-cover forestry is generally unsuitable for nesting nightjar and woodlark, unless they incorporate a sufficient number of large, sparsely vegetated, clearings. Development that would affect areas of rotationally-managed plantation woodland, heathland or acid grassland (irrespective of whether they are part of the Habitats Sites) could potentially affect nightjar and woodlark.
- 4.34 Research undertaken in Breckland Forest⁸⁴ has shown that nightjar are most likely to use conventionally managed plantation during the first 20 years of 60 year forestry cycles, including the initial 2 year 'felled unplanted' period. Population densities are highest during the restock phase (plantation age of 0-5 years), although significant densities can also be supported during the pre-thicket (6-10 years) and thicket (11 – 20 years) stages. Woodlark most likely use conventionally managed plantation during the first seven years (including the initial 2 year felled unplanted period), particularly the restock phase (plantation age of 0-5 years). It is very unlikely that sites with heathland or managed plantations will be allocated as part of the WBLPU. However, if any such sites were considered, the loss of potential nesting habitat for SPA qualifying species would have to be assessed. Habitat mapping on MAGIC shows that there are small off-site fragments of heathland within Wokingham Borough, which might be used by nesting nightjar, Dartford warbler or woodlark.
- 4.35 The stag beetle population for which Chilterns Beechwoods SAC is designated may conceivably be found using habitat outside the SAC boundary. The adult stag beetle lives for just a few weeks and barely feeds at all, drinking from sap runs and fallen soft fruit. The species spends most of its life (up to seven years) in its larval stage, which is dependent on a plentiful supply of partially-buried

⁸² Research examples that support/explore this include: Rose, et al. 2000. Changes in heathland in Dorset, England between 1987 and 1996. Biological Conservation. 121: 93-105. & Langston et al. 2007. Nightjar *Caprimulgus europaeus* and Woodlark *Lullula arborea* – recovering species in Britain? Ibis. 149: 250-260.

⁸³ Research examples that support/explore this include: Rose, et al. 2000. Changes in heathland in Dorset, England between 1987 and 1996. Biological Conservation. 121: 93-105. & Langston et al. 2007. Nightjar *Caprimulgus europaeus* and Woodlark *Lullula arborea* – recovering species in Britain? Ibis. 149: 250-260.

⁸⁴ Dolman PM & Morrison C, 2012. Temporal change in territory density and habitat quality for Breckland Forest SSSI woodlark and nightjar populations, Unpublished report for Forestry Commission and Natural England.

decaying wood (its sole food source). Therefore, the key dependency to sustaining the stag beetle population of the SAC (whether within or beyond the SAC boundary) is to ensure a plentiful supply of large pieces of partially buried dead wood (such as fallen or standing rotting trunks) in a forest or parkland context.

4.36 The following Habitats Sites are potentially sensitive to the loss of functionally linked land due to the emerging Local Plan, because they are designated for mobile species:

- Thames Basin Heaths SPA (the closest parcel of the SPA lies only approx. 58m to the south of Wokingham Borough in the Hart District); and
- Chilterns Beechwoods SAC.

Summary

4.37 In summary, therefore, this HRA will focus upon recreational pressure on the Thames Basin Heaths SPA and atmospheric pollution impacts on the Thames Basin Heaths SPA, the Chilterns Beechwoods SAC, Thursley, Ash Pirbright & Chobham SAC and the Windsor Forest and Great Park SAC. The impact pathways water quantity, level and flow, and loss of functionally linked land are also considered.

5. Test of Likely Significant Effects (LSEs)

Overview of strategic policies providing for residential and employment growth

- 5.1 The following section provides an overview of the strategic policies that provide for residential and employment growth and detail the outcome of the LSEs Screening assessment. This identifies policies and site allocations that (prior to considering the role of mitigation) have a potential to result in LSEs upon European sites.
- 5.2 The full LSEs assessment of strategic policies within the WBLPU can be found in Appendix B.

Strategic policies

- 5.3 The following policies have been identified as providing for residential and employment growth within Wokingham Borough (see Appendix B) for screening of strategic policies). These policies therefore present potential impact pathways through which LSEs on Habitats Sites might arise, prior to the consideration of mitigation measures:
- Policy SS2: Spatial Strategy and Settlement Hierarchy. This policy **specifies the settlements and geographic areas in which growth is likely to be delivered.**
 - Policy SS8: Meeting employment needs. The policy identifies a **quantum and geographic location of employment development.**
 - Policy SS10: Meeting our housing needs. Provides for a minimum of **12,763 net additional dwellings** for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum.
 - Policy SS11: Arborfield Green Strategic Development Location. Provides for **mixed use development, including provision of 3,047 net new dwellings** (2,137 dwellings through extant planning permissions and completions; 600 dwellings at Barkham Square; 300 dwellings by optimizing density at land currently occupied by Arborfield Studios; and 10 dwellings at Westwood Yard, Sheerlands Road), **and 10,000m² of employment floorspace.**
 - Policy SS12: South Wokingham Strategic Development Location. **Provides for 2,975 new dwellings** (1,100 net new dwellings on land south of Waterloo Road (980 dwellings of which are to be delivered by March 2040, and 1,875 dwellings through extant planning permissions and completions)
 - Policy SS13: Loddon Valley Garden Village. **Provides for 3,930 new dwellings** (2,700 dwellings of which are to be delivered by March 2040), **and 100,000m² of research and development floorspace** (or equivalent use class E(g).

- Policy SS14: Sites allocated for residential, including residential as part of mixed-use development. Provides **residential site allocations** including location and quantum of development.
- Policy ER1: Core Employment Areas. Provides for the **possible expansion of existing Core Employment Areas**
- Policy H9: Gypsies and Travellers and Travelling Showpeople provision. Allocates a **minimum of 86 net new gypsy, traveller and travelling showpeople pitches** in Wokingham Borough.

Local plans to be considered ‘in-combination’

- 5.4 It is obligatory to not only assess LSEs of a proposed plan alone, but also to investigate whether there might be ‘in-combination’ effects with plans proposing development in other authorities surrounding a Habitats Site. In practice, such an ‘in-combination’ assessment is of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential.
- 5.5 For the purposes of this HRA, several authorities adjacent to Wokingham Borough have been identified that have developed their own Local Plans, outlining residential and / or employment growth within their boundary. These include Bracknell Forest, Windsor and Maidenhead, Surrey Heath, Hart, Basingstoke and Deane, West Berkshire, South Oxfordshire, Reading and Buckinghamshire (formerly known as Wycombe). Table 5-1 summarises the proposed residential and employment growth allocated within the respective Local Plans for these authorities.
- 5.6 For the purposes of traffic and air quality modelling undertaken with regard to the atmospheric pollution sensitive SPA and SACs, the prediction of changes in traffic flows on relevant links adjacent to Habitats Site boundaries will draw upon data for each surrounding local authority district. As such, growth in other authorities not listed below, is also included in the ‘in combination’ assessment of atmospheric pollution.

Table 5-1: Overview of the extent of residential and employment development to be delivered in authorities adjacent to Wokingham Borough, according to adopted and emerging Core Strategies and Local Plans.

Local Authority	Number of Dwellings	Total Employment Space (ha)
Wycombe (2013-2033) ⁸⁵	10,925	21ha
Windsor and Maidenhead (2013-2033) ⁸⁶	14,240	49.1ha
Bracknell Forest (2020-2037) ⁸⁷	10,438	2.6 ha
Hart (2016-2032) ⁸⁸	7,614	1ha

⁸⁵ Wycombe District Local Plan. Adopted August 2019. Available at: <https://www.wycombe.gov.uk/uploads/public/documents/Planning/Adopted-Wycombe-local-plan/Wycombe-District-Local-Plan-Adopted-August-2019.pdf> [Accessed on the 23/08/2024].

⁸⁶ Windsor & Maidenhead Borough Local Plan. Adopted 2022. Available at: <https://consult.rbwm.gov.uk/file/5967538> Accessed on the 23/08/2024].

⁸⁷ Adopted Bracknell Forest Local Plan. Adopted March 2024. [About the Bracknell Forest Local Plan | Bracknell Forest Council \(bracknell-forest.gov.uk\)](https://www.bracknell-forest.gov.uk/about-the-bracknell-forest-local-plan) [Accessed on the 23/08/2024]

⁸⁸ Hart Local Plan. Adopted April 2020 Available at [Plans and policies | Hart District Council](https://www.hart.gov.uk/plans-and-policies) [Accessed on the 23/08/2024]

Basingstoke and Deane (2011-2029) ⁸⁹	15,300	At least 15.3ha
West Berkshire (2006-2026) ⁹⁰	10,500	At least 8ha
Reading (2013-2036) ⁹¹	15,847	Circa 26 ha
South Oxfordshire (2035) ⁹²	10,469	At least 39.1 ha
Total	95,333	At least 162.1

Recreational Pressure

Thames Basin Heaths SPA

5.7 The delivery of 12,763 net new dwellings in the WBLPU will be accompanied by an increase the local population as well as the demand for recreational resources. Being a local and attractive destination, the Thames Basin Heaths SPA (a composite Habitats Site) is likely to receive some of this additional recreational pressure. The SPA harbours breeding bird populations of nightjar, woodlark and Dartford warbler. All these bird species are ground-nesting (or build their nests close to the ground in gorse) and are therefore highly susceptible to recreational disturbance, particularly from dog walkers. Natural England's Site Improvement Plan highlights that the SPA is already subject to high levels of recreational use, which is likely to affect the distribution and breeding success of its Annex I bird species.

5.8 As detailed in paragraph 3.10, Wokingham Borough Council is an affected council, within which residential development could contribute to in combination recreational pressures on the Thames Basin Heaths SPA. As such, any development within the Borough needs to accord with the agreed mitigation approach, as outlined by Natural England in 2006, the Thames Basin Heaths Joint Strategic Partnership Board in 2009. This is outlined on Wokingham Borough's website⁹³. The strategy identifies mitigation zones as follows:

- Within 400m of the SPA - No net new residential development
- Between 400m and 5km - All residential development to contribute to Strategic Access Management and Monitoring (SAMM) measures, and provision of Suitable Alternative Natural Greenspace (SANG) either bespoke or utilising strategic SANG.
- Between 5km and 7km for developments of 50 dwellings or more - to contribute to Strategic Access Management and Monitoring (SAMM) measures, and provision of Suitable Alternative Natural Greenspace (SANG) either bespoke or utilising strategic SANG.

5.9 The closest component part of the SPA (Bramshill SSSI) lies just outside of Wokingham Borough (0.06km at its closest) but are within the travel distance that

⁸⁹ Basingstoke and Deane Local Plan. Adopted May 2016. Available at: <https://www.basingstoke.gov.uk/content/doclib/1592.pdf> [Accessed on the 27/08/2024].

⁹⁰ West Berkshire Core Strategy Development Plan Document. Adopted July 2012. Available at: <https://info.westberks.gov.uk/CHttpHandler.ashx?id=36374&p=0> [Accessed on the 27/08/2024].

⁹¹ Reading Borough Local Plan. Adopted November 2019. Available at: [Local Plan Adopted November 2019.pdf](https://www.reading.gov.uk/content/doclib/1592.pdf) (reading.gov.uk) [Accessed on the 27/08/2024]

⁹² South Oxfordshire Local Plan. Adopted December 2020. Available at: [SODC-LP2035-Publication-Feb-2021.pdf](https://www.southoxon.gov.uk/content/doclib/1592.pdf) (southoxon.gov.uk) [Accessed on the 27/08/2024]

⁹³ [Thames Basin Heath Special Protection Area \(wokingham.gov.uk\)](https://www.wokingham.gov.uk/content/doclib/1592.pdf) [Accessed 29-08/2024]

residents are expected to travel. Given that proximity to home determines the likelihood of people visiting Habitats Sites, it is likely that the component parcels of the SPA closer to Wokingham Borough are more likely to be visited by residents from the authority. As such, Bramshill Plantation, Yateley and Hawley Common, and Owlsmoor Bogs and Heaths (all to the south-east of Wokingham) are most likely to receive recreational pressure resulting from the LP. **Due to this, LSEs cannot be excluded, and the site is screened in for AA.**

5.10 The following strategic policies and site allocations providing for residential growth in Wokingham Borough have been screened in for AA, because they increase the local population and are likely to intensify recreational pressure in the Thames Basin Heaths SPA:

Policies

- Policy SS2: Spatial Strategy and Settlement Hierarchy. This policy specifies the settlements and geographic areas in which growth is likely to be delivered. This includes settlements and geographical areas within 7km of the SPA.
- Policy SS10: Meeting our housing needs. Provides for a minimum of **12,763 net additional dwellings** for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum.
- Policy SS11: Arborfield Green Strategic Development Location. Provides for **mixed use development, including provision of 3, net new dwellings** (2,137 dwellings through extant planning permissions and completions (all residential development at this location is located between 400m and 5km from the SPA); 600 dwellings at Barkham Square; 300 dwellings by optimizing density at land currently occupied by Arborfield Studios; and 10 dwellings at Westwood Yard, Sheerlands Road), **and 10,000m² of employment floorspace**.
- Policy SS12: South Wokingham Strategic Development Location. **Provides for 2,975 new dwellings** (1,100 net new dwellings on land south of Waterloo Road (980 dwellings of which are to be delivered by March 2040, and 1,875 dwellings through extant planning permissions and completions). All residential development at this location is located between 400m and 5km from the SPA.
- Policy SS13: Loddon Valley Garden Village. **Provides for 3,930 new dwellings** (2,700 dwellings of which are to be delivered by March 2040), **and 100,000m² of research and development floorspace** (or equivalent use class E(g). This is a large allocation. Circa 132ha of the site is located within 400m and 5km from the SPA, circa 536 ha of the site is located within 5km to 7km of the SPA, and circa 67 ha of the site is located more than 7km from the SPA.
- Policy SS14: Sites allocated for residential, including residential as part of mixed-use development. Provides **residential site allocations** including location and quantum of development.
- Policy H9: Gypsies and Travellers and Travelling Showpeople provision. Allocates a **minimum of 86 net new gypsy, traveller and travelling showpeople pitches** in Wokingham Borough.

Site Allocations

5.11 Located between 400m and 5km of the Thames Basin Heaths SPA

- 5WW017, 026, 030, 031 - South Wokingham SDL extension for 1,100 dwellings (980 during the plan period). It is noted that these allocations are provided by Policy SS12: South Wokingham Strategic Development Location.
- 5SH025 - Land north of Arborfield Road for 191 dwellings
- 5FI003 - 31 and 33 Barkham Ride for 80 dwellings
- 5SW019 - Land west of Trowes Lane for 81 dwellings
- 5BA032 - 24 Barkham Ride for 30 dwellings
- 5BA013 - Woodlands Farm, Wood Lane for 15 pitches
- 5WK043 - Land at St Annes Drive for 54 dwellings
- 5SH023, 27 - Land east and west of Hyde End Road for 175 dwellings
- 5WK045 - Land at Bridge Retail Park for 59 dwellings
- 5FI004 - Greenacres Farm, Nine Mile Ride for 100 dwellings
- 5FI024 - Hillside, Lower Wokingham Road for 15 dwellings
- 5BA036 - High Barn Farm, Commonfield Lane, Wokingham, RG40 4PR for 20 pitches
- 5FI032 - Honeysuckle Lodge, Commonfield Lane for 4 pitches
- 5BA010 - Barkham Square for 600 dwellings. It is noted that this allocation is provided by Policy SS13: Loddon Valley Garden Village.
- 5WK011 - Land south of London Road (Western Field) for 12 dwellings

5.12 Located between 5km and 7km from the Thames Basin Heaths SPA and for 50 dwellings or more.

- 5WK051 - Land east of Toutley Depot for 130 dwellings
- 5WK054 - WBC council offices, Shute End, Wokingham for 100 dwellings

Thursley, Ash, Pirbright & Chobham SAC

5.13 The Thursley, Ash, Pirbright & Chobham SAC is designated for its Northern Atlantic wet heaths with *Erica tetralix* and its European dry heaths. Importantly, these habitats also support the ground-nesting birds of the Thames Basin Heaths SPA, which largely overlaps with the SAC. An increase in the number of recreational visits to the SAC, and particularly off-track activities, are likely to lead to trampling damage to heathland plants as well as path widening. Furthermore, an increase in the number of dog walkers in the SAC will lead to nutrient enrichment of the soil and, ultimately, to a change in plant community composition. Heathland plants are adapted to depauperate nutrient conditions and dog fouling might put them at a disadvantage with more competitive grass species. The closest component parcel of the Thursley, Ash, Pirbright and Chobham SAC lies 6.9km to the south-east of Wokingham Borough, which lies beyond the typical core visitor catchment for heathland sites. Within Wokingham Borough, only a very small area (circa 2.2ha) of Pinewood (Crowthorne) is located within the 7km core recreational catchment zone (taken from the Thames

Basin Heaths strategic approach) for the SAC. **As a precautionary measure, the SAC is screened in for AA.**

5.14 The following strategic policies could potentially provide for windfall development for residential growth in Wokingham Borough within the core recreational catchment of the SAC have been screened in for AA, because they could potentially increase the local population and might intensify recreational pressure in the Thursley, Ash, Pirbright and Chobham SAC:

- Policy SS2: Spatial Strategy and Settlement Hierarchy. This policy **specifies the settlements and geographic areas** in which growth is likely to be delivered. This includes mention of Crowthorne within which windfall development could occur.
- Policy SS10: Meeting our housing needs. Provides for a minimum of **12,763 net additional dwellings** within Wokingham Borough for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum. Windfall development could occur within the 7km recreational catchment zone.

5.15 No Site allocations are located within the 7km core recreational catchment zone for the Thursley, Ash, Pirbright and Chobham SAC:

Chilterns Beechwoods SAC

5.16 The Chilterns Beechwoods SAC is designated for its *Asperulo-Fagetum* beech forests, semi-natural dry grasslands and scrubland facies, and its stag beetle populations. The closest component parts of the SAC, and therefore the most likely destination of residents from Wokingham Borough, is Hollowhill and Pullingshill Woods SSSI located 2.9km to the north-east of the authority (within Wycombe District, Buckinghamshire Council) and Bisham Woods SSSI located 4.7km east of the authority within the Royal Borough of Windsor and Maidenhead. Natural England's Site Conservation Objectives Supplementary Advice Note states that the SAC has become an important recreational resource for hiking and cycling⁹⁴. The Site Improvement Plan highlights recreational pressure as a particular threat to the site, specifically the impacts of visitors on dead wood⁹⁵, a critical resource for the stag beetle.

5.17 For clarity, it is noted that a strategic Mitigation Strategy exists for the Chiltern Beechwoods SAC⁹⁶. This was led by Dacorum Borough Council, signatories include Buckinghamshire Council, Central Bedfordshire Council, and St Albans City and District Council. The Mitigation Strategy was approved by Natural England. The Strategy came about because the Ashridge Commons and Woods SSSI component of the SAC (which is located more than 30km north east of Wokingham Borough boundary) was noted to be subject to very high recreational pressure and was at threat of failing its conservation objectives due to increased recreational pressure stemming from new residential development provided by local plan documents. The Mitigation Strategy identifies a core recreational catchment of 12.6km, from Ashridge Commons and Woods SSSI only. Due to the large distance involved of Wokingham Borough to the Ashridge Commons and Woods SSSI component of the SAC (more than 30km), recreational

⁹⁴ <http://publications.naturalengland.org.uk/publication/4808896162037760> [Accessed on the 27/08/2024]

⁹⁵ <http://publications.naturalengland.org.uk/publication/6228755680854016> [Accessed on the 27/08/2024]

⁹⁶ [Chiltern Beechwoods SAC Mitigation Strategy - accessible \(buckinghamshire-gov-uk.s3.amazonaws.com\)](http://publications.naturalengland.org.uk/publication/6228755680854016) [Accessed 27/08/2024]

pressure on the SAC relating to the Ashridge Commons and Woods SSSI does not require further consideration within this HRA.

- 5.18 Hollowhill and Pullingshill Woods SSSI is not noted to be vulnerable to recreational pressure⁹⁷ and the SSSI Condition Summary identifies that the SSSI is in 100% Favourable condition⁹⁸. Bisham Woods SSSI is similar in that it is not noted to be vulnerable to recreational pressure⁹⁹ and the SSSI Condition Summary identifies that the 97.37% of the SSSI is in Favourable condition, with 2.63% of the SSSI being in Unfavourable- Recovering condition¹⁰⁰. The Unfavourable- Recovering condition is due to historical storm damage¹⁰¹ rather than recreational pressure.
- 5.19 Given the distance of the SAC to Wokingham Borough (more than 30km to the recreationally sensitive Ashridge Commons and Woods SSSI), and the observation in the pathways of impact section that collecting dead wood is a personal behaviour trait rather than an inevitable corollary of an increased population, it is considered that the Local Plan would only result in a relatively small change in recreational pressure in the SAC and only a small fraction of these new visitors would realistically affect the availability of dead wood (e.g. by taking pieces of wood). As such it is concluded that there will be no LSEs and this site is therefore screened out from AA.

Windsor Forest & Great Park SAC

- 5.20 Windsor Forest & Great Park SAC is designated for its oak woods with *Quercus robur* and its beech forests with *Ilex* and *Taxus* in the shrublayer. The closest part of the SAC lies approx. 8.4km to the east of the Wokingham Borough boundary, but the part that is most likely to be accessed (due to the existing road infrastructure) lies over 10km from Wokingham Borough along the A332. The site contains a large number of ancient and / or veteran trees, which are sensitive to trampling damage. The compaction of the soil surrounding the tree can affect its root system, nutrient uptake rates and associations with mycorrhiza. However, Natural England's Site Improvement Plan¹⁰² and Supplementary Advice on Conservation Objectives do not mention recreational pressure as a particular concern for the site notwithstanding the heavy recreational use. Furthermore, the focal points of recreational activity are on the existing paths and open parkland rather than concentrated beneath the canopies of the veteran trees. Finally, most parts of the SAC, especially the ones that are most likely to be accessed, lie beyond 10km. Therefore, Wokingham Borough is unlikely to contribute much to the recreational footprint in the SAC. As such, LSEs can be excluded, and the site is screened out from AA.

Burnham Beeches SAC

- 5.21 Burnham Beechwoods SAC is designated for its Atlantic beech forests with *Ilex* and *Taxus* in the shrub layer. The SIP and SACO for the site identify that part of the site has open public access and has a long history as being used as open space that is managed by the City of London. It receives over 500,000 visitors a year. It is noted that the veteran trees are vulnerable to damage as a result of

⁹⁷ [Site Pressures \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed 05/09/2024]

⁹⁸ [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed 05/09/2024]

⁹⁹ [Site Pressures \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed 05/08/2024]

¹⁰⁰ [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed 05/09/2024]

¹⁰¹ [Site feature condition \(naturalengland.org.uk\)](https://naturalengland.org.uk) [Accessed 05/09/2024]

¹⁰² <https://publications.naturalengland.org.uk/publication/6221375450644480> [Accessed 27/08/2024]

soil compaction due to trampling and vehicle movements within their root zones. To support planned development within Chiltern District and South Bucks District (now under Buckinghamshire Council), a report was commissioned to investigate then current impacts of housing growth from Chiltern District and South Bucks District on the Burnham Beeches SAC¹⁰³. The report identified a core recreational catchment zone of 5.6km. In 2020 a Strategic Access Management and Monitoring Strategy (SAMMS) SPD was adopted¹⁰⁴. The SPD sets out the need for financial contributions for all net new dwellings within 5.6km of the SAC. These contributions will be utilised to fund the Burnham Beeches SAC SAMMS. Wokingham Borough is located more than 13km from the Burnham Beeches SAC and as such is located outside of the core recreation catchment zone. As such, LSEs can be excluded, and the site is screened out from AA.

Summary

5.22 Due to the in-combination nature of recreational pressure, its impacts will be determined by the cumulative effect of all new development that leads to an increase in the number of recreational visitors and associated pressures. The following strategic policies and site allocations are **screened in for AA** in relation to the **Thames Basin Heaths SPA** and **Thursley, Ash, Pirbright & Chobham SAC**:

- Policy SS2: Spatial Strategy and Settlement Hierarchy. This policy specifies the settlements and geographic areas in which growth is likely to be delivered. This includes settlements and geographical areas within 7km of the SPA.
- Policy SS10: Meeting our housing needs. Provides for a minimum of **12,763 net additional dwellings** for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum.
- Policy SS11: Arborfield Green Strategic Development Location. Provides for **mixed use development, including provision of 3,047 net new dwellings** (2,137 dwellings through extant planning permissions and completions (all residential development at this location is located between 400m and 5km from the SPA); 600 dwellings at Barkham Square; 300 dwellings by optimizing density at land currently occupied by Arborfield Studios; and 10 dwellings at Westwood Yard, Sheerlands Road), **and 10,000m² of employment floorspace**.
- Policy SS12: South Wokingham Strategic Development Location. **Provides for 2,975 new dwellings** (1,100 net new dwellings on land south of Waterloo Road (980 dwellings of which are to be delivered by March 2040, and 1,875 dwellings through extant planning permissions and completions). Located between 400m and 5km from the SPA. All residential development at this location is located between 400m and 5km from the SPA.
- Policy SS13: Loddon Valley Garden Village. **Provides for 3,930 new dwellings** (2,700 dwellings of which are to be delivered by March 2040), **and 100,000m² of research and development floorspace** (or equivalent use class E(g)). This is a large allocation. Circa 132ha of the site is located within 400m and 5km from the SPA, circa 536 ha of the site

¹⁰³ [Burnham Beeches Recreation Report.pdf \(buckinghamshire-gov-uk.s3.amazonaws.com\)](#) [Accessed 27/08/2024]

¹⁰⁴ [Covid 19 support offer \(buckinghamshire-gov-uk.s3.amazonaws.com\)](#) [Accessed 27/08/2024]

is located within 5km to 7km of the SPA, and circa 67 ha of the site is located more than 7km from the SPA.

- Policy SS14: Sites allocated for residential, including residential as part of mixed-use development. Provides **residential site allocations** including location and quantum of development.
- Policy H9: Gypsies and Travellers and Travelling Showpeople provision. Allocates a **minimum of 86 net new gypsy, traveller and travelling showpeople pitches** in Wokingham Borough.

Site Allocations

- Located between 400m and 5km of the Thames Basin Heaths SPA
- 5WW017, 026, 030, 031 - South Wokingham SDL extension for 1,100 dwellings.
- 5SH025 - Land north of Arborfield Road for 191 dwellings
- 5FI003 - 31 and 33 Barkham Ride for 80 dwellings
- 5SW019 - Land west of Trowes Lane for 81 dwellings
- 5BA032 - 24 Barkham Ride for 30 dwellings
- 5BA013 - Woodlands Farm, Wood Lane for 15 pitches
- 5WK043 - Land at St Annes Drive for 54 dwellings
- 5SH023, 27 - Land east and west of Hyde End Road for 175 dwellings
- 5WK045 - Land at Bridge Retail Park for 59 dwellings
- 5FI004 - Greenacres Farm, Nine Mile Ride for 100 dwellings
- 5FI024 - Hillside, Lower Wokingham Road for 15 dwellings
- 5BA036 - High Barn Farm, Commonfield Lane, Wokingham, RG40 4PR for 20 pitches
- 5FI032 - Honeysuckle Lodge, Commonfield Lane for 4 pitches
- 5BA010 - Barkham Square for 600 dwellings
- 5WK011 - Land south of London Road (Western Field) for 12 dwellings

5.23 Located between 5km and 7km from the Thames Basin Heaths SPA and for 50 dwellings or more.

- 5WK051 - Land east of Toutley Depot for 130 dwellings
- 5WK054 - WBC council offices, Shute End, Wokingham for 100 dwellings

Atmospheric Pollution

Thames Basin Heaths SPA

5.24 Nightjar, woodlark and Dartford warbler, the qualifying species of the Thames Basin Heaths SPA, are not directly sensitive to atmospheric pollution. However, atmospheric nitrogen deposition has the potential to affect these species through indirect effects on these species' broad habitats, notably areas of heathland or acid grassland, if it is sufficiently extensive to materially change habitat structure,

depending on management. APIS highlights that European dry heaths, which all these species depend on, have a critical nitrogen load of 5-15 kg N/ha/yr. Exceedance of this critical load would lead to a transition from heather to coarse grass dominance and therefore change how the qualifying birds are able to use the micro-habitats in heathland. The current background atmospheric nitrogen deposition rate for the heathland components of the SPA is a maximum of 16 kgN/ha/yr, thus exceeding the critical load. Multiple component parts of the SPA lie directly adjacent to major roads that are likely to constitute significant journey to work routes for residents of Wokingham Borough. For example, there are multiple parcels of lowland heathland within 200m of the A30 in Yateley Common Country Park to the south of Wokingham Borough in Hart District. Another parcel of heathland lies approx. 20m from the A3095 to the east of Wokingham Borough in the adjoining authority of Bracknell Forest. Given that this is a potential commuter route for Wokingham Borough residents, especially those originating in the southern part of the authority, **the Thames Basin Heaths SPA is screened in for AA.**

Thursley, Ash, Pirbright & Chobham SAC

- 5.25 Thursley, Ash, Pirbright & Chobham SAC is designated for its depressions on peat substrates, Northern Atlantic wet heaths and European dry heaths. From an atmospheric pollution perspective, all three designated habitats have a critical nitrogen load of 5-15 kg N/ha/yr)
- 5.26 Considerable parts of the SAC are located near major roads. For example, in the authority of Surrey Heath, the M3 runs directly past the Lightwater Country Park (which contains heathland elements of the SAC). Further along the M3 (and still within Surrey Heath), lowland fen and heathland habitats in Chobham Common also lie directly adjacent to the M3. Review of the Department for Transport's traffic statistics shows that at manual count point 46010, the M3 had an Annual Average Daily Traffic (AADT) for 2022 (the most recent manual count available) of 96,020 cars, 25,124 light goods vehicles and 8,497 heavy goods vehicles¹⁰⁵. However, the 2021 Census Data indicates that 1238 people (c. 1.4% of commuters from Wokingham) commute into Surrey¹⁰⁶. Furthermore, the Transport Assessment Report (2020) has further highlighted how a number of other destinations are more regularly used to commute to, or from Wokingham Borough.
- 5.27 The M3 leads through the authorities of Runnymede, Spelthorne and Hounslow. None of these authorities are on the list of the most popular commuter destinations for residents from Wokingham Borough. Furthermore, only 2.3% (545 out of 23,329 people commuting by car) of the total inflow into Wokingham Borough comes from Surrey Heath. **Nonetheless, Thursley, Ash, Pirbright and Chobham SAC has been screened in for AA.**

Chilterns Beechwoods SAC

- 5.28 The Chilterns Beechwoods SAC is designated for several habitat features that are sensitive to atmospheric pollution. The site's most sensitive habitat feature is *Asperulo-Fagetum* beech forest, which has a critical nitrogen load of 10-15 kg N/ha/yr. To a lesser extent its semi-natural dry grasslands and scrubland facies

¹⁰⁵ <https://roadtraffic.dft.gov.uk/manualcountpoints/46010> [Accessed on the 27/08/2024]

¹⁰⁶ [Origin-destination data, England and Wales: Census 2021 - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://www.nomisweb.co.uk/census/2021) [Accessed 28/08/2024]

(important orchid sites) are also vulnerable to changes in air quality (critical nitrogen load of 10-20 kg N/ha/yr). The current background atmospheric nitrogen deposition rate for the *Asperulo-Fagetum* habitat (maximum of 33.5 kg N/ha/yr) far exceeds this critical load. A Local Plan is only likely to result in air quality changes in a Habitats Site if major roads are located within 200m of the site boundary and these will form significant journey to work routes. A review of the location of Wokingham Borough in relation to adjacent authorities and the road infrastructure highlights that a component part of the SAC (Bisham Woods SSSI) lies immediately adjacent to the A404. To get to Bisham Woods SSSI, a commuter from Wokingham would have to travel c. 17km along the M4 and then A404. The 2021 census data suggests that only 814 people (0.9% of commuters)¹⁰⁷ travel from Wokingham into Buckinghamshire. **Nonetheless, the Chilterns Beechwoods SAC is screened into AA.**

Windsor Forest & Great Park SAC

5.29 Several habitats in the Windsor Forest and Great Park SAC are sensitive to impacts from atmospheric nitrogen deposition, most notably the oak woods with *Quercus robur* (empirical critical nitrogen load of 10-15 kg N/ha/yr) and the Atlantic beech forests with *Ilex* and *Taxus* in the shrublayer (critical nitrogen load of 10-20 kg N/ha/yr). Exceedance effects in the oak woods would include a loss of mycorrhiza, epiphytic lichens and bryophytes. Notably the current deposition rates in the SAC far exceed the critical loads in both the oak woods and the beech forest, equating to a maximum of 28.7 kg N/ha/yr. The SAC and woodland habitat therein lies directly adjacent to the B383 and the A332 in the adjoining authority of Windsor and Maidenhead. Census data¹⁰⁸ indicates that 3,124 commuters travel daily from Wokingham into Windsor & Maidenhead (7% of the total). **The Windsor Forest & Great Park SAC is screened in for AA.**

Aston Rowant SAC

5.30 Designated habitats of Aston Rowant SAC are sensitive to increased atmospheric nitrogen deposition. The Juniper community on dry heaths has a nitrogen critical load of 5-15kg N/ha/yr, the juniper community on semi dry calcareous grassland has a nitrogen critical load of 10-15 kg N/ha/yr, whilst the beach forest is less sensitive, with a nitrogen critical load of 10-20 kg N/ha/yr. Portions of the SAC are located within less than 200m of the M40 road within Buckinghamshire and South Oxfordshire. As such there is a possibility of traffic flows along the A40 affecting the atmospheric nitrogen deposition within the SAC. The SAC is located more than 11km from Wokingham Borough boundary as the crow flies, or c. 38km if travelling via the M4, A404 and M40. Although 1123 people (c 1.25% of commuters)¹⁰⁹, travel from Wokingham to Oxford (the main town located on the M40 in proximity to Wokingham), the M40 past Aston Rowant SAC is not considered to be a primary commuter route. Aston Rowant SAC is screened out from AA.

¹⁰⁷ [Origin-destination data, England and Wales: Census 2021 - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://nomisweb.co.uk) [Accessed 28/08/2024]

¹⁰⁸ [Origin-destination data, England and Wales: Census 2021 - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://nomisweb.co.uk) [Accessed 28/08/2024]

¹⁰⁹ [Origin-destination data, England and Wales: Census 2021 - Nomis - Official Census and Labour Market Statistics \(nomisweb.co.uk\)](https://nomisweb.co.uk) [Accessed 28/08/2024]

Hartslock Wood SAC

5.31 Habitats of Hartslock Woods SAC have been identified as being sensitive to increased atmospheric nitrogen deposition. The calcareous grassland (also an important orchid site), has a critical nitrogen load of 10-20kg N/ha/yr, whilst the *Taxus baccata* woods are more sensitive, with a critical load of 10-15 kg N/ha/yr. However, the SAC is relatively isolated and is not located within 200m of any roads that could be considered a main significant commuter route. Further, as this SAC is located more than 10km from Wokingham Borough, Hartslock Wood SAC is screened out from AA.

Burnham Beeches SAC

5.32 The beech forest on acidic soils for which the SAC is designated have been identified to be sensitive to increased atmospheric nitrogen deposition. They have a nitrogen critical load of 10-15 kg N/ha/yr. The SAC is located more than 13km as the crow flies from Wokingham Borough boundary. The area of Burnham Beeches SAC includes small roads that pass through the SAC itself. These small roads are not considered to be a key commuting route for residents of Wokingham and would more provide local rural connectivity. Burnham Beeches SAC is screened out from AA.

Summary

5.33 Due to the in-combination nature of atmospheric pollution, its impacts will be determined by the cumulative effect of all new development that leads to an increase in the number of car commuter journeys. The following strategic policies are **screened in for AA** in relation to the **Thames Basin Heaths SPA, Thursley Ash Pirbright & Chobham SAC, Chilterns Beechwoods SAC** and the **Windsor Forest & Great Park SAC**:

- Policy SS2: Spatial Strategy and Settlement Hierarchy. This policy **specifies the settlements and geographic areas in which growth is likely to be delivered.**
- Policy SS8: Meeting employment needs. The policy identifies a **quantum and geographic location of employment development.**
- Policy SS10: Meeting our housing needs. Provides for a minimum of **12,763 net additional dwellings** for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum.
- Policy SS11: Arborfield Green Strategic Development Location. Provides for **mixed use development, including provision of 3,047 net new dwellings** (2,137 dwellings through extant planning permissions and completions; 600 dwellings at Barkham Square; 300 dwellings by optimizing density at land currently occupied by Arborfield Studios; and 10 dwellings at Westwood Yard, Sheerlands Road), **and 10,000m² of employment floorspace.**
- Policy SS12: South Wokingham Strategic Development Location. **Provides for 2,975 new dwellings** (1,100 net new dwellings on land south of Waterloo Road (980 dwellings of which are to be delivered by March 2040, and 1,875 dwellings through extant planning permissions and completions)

- Policy SS13: Loddon Valley Garden Village. **Provides for 3,930 new dwellings** (2,700 dwellings of which are to be delivered by March 2040), and **100,000m² of research and development floorspace** (or equivalent use class E(g)).
- Policy SS14: Sites allocated for residential, including residential as part of mixed-use development. Provides **residential site allocations** including location and quantum of development.
- Policy ER1: Core Employment Areas. Provides for the **possible expansion of existing Core Employment Areas**
- Policy H9: Gypsies and Travellers and Travelling Showpeople provision. Allocates a **minimum of 86 net new gypsy, traveller and travelling showpeople pitches** in Wokingham Borough.

Loss of Functionally Linked Land

Thames Basin Heaths SPA

5.34 The Thames Basin Heaths SPA is designated for its mobile breeding bird species, including nightjar, Dartford warbler and woodlark. These species routinely forage beyond the designated site boundary but can also nest in suitable locations (e.g. patches of heathland, acid grassland and plantation woodland) outside the SPA. The closest part of the SPA is only approx. 58m to the south of Wokingham Borough, and any of the qualifying species could use habitats in the southern part of the authority. Section 4.5 has established that neither nightjar nor woodlark has highly specialised prey requirements and as a result they include many common and widespread habitats in their foraging resource. In contrast, they do have highly specialised nesting requirements; suitable habitat for nesting is therefore sparse and the loss of such habitat, even outside the SPA, could affect the overall SPA population (depending on whether the land parcels are actually used for nesting). However, a review of the WBLPU's allocated sites indicates that none of these comprise heathland, acid grassland or plantation woodland. Therefore, it is concluded that the WBLPU will not result in LSEs on the Thames Basin Heaths SPA regarding the impact pathway loss of functionally linked land. The site is screened out from AA.

Water Quantity, Level and Flow

Thursley, Ash, Pirbright & Chobham SAC

5.35 The Thursley, Ash, Pirbright & Chobham SAC is partly designated for its Northern Atlantic wet heaths with *Erica tetralix* and depressions on peat substrates. Both these habitat features require a naturally fluctuating hydrological regime. Natural England's Site Conservation Objectives Supplementary Advice Note highlights that any changes in the source, depth, duration, frequency and magnitude of water supply may affect the site's characteristics assemblage of plant species¹¹⁰. However, the Site Improvement Plan highlights that the main concern regarding the SAC is the presence of drainage ditches that may change the water level within the site. A review of the Phase 2 Water Cycle Study (WCS) for Wokingham

¹¹⁰ <http://publications.naturalengland.org.uk/publication/5141075941392384> [Accessed on the 28/08/2024]

Borough¹¹¹ indicates that the closest part of the SAC to the Borough lies in the Loddon Management Catchment, which forms part of the South East Water Resource Zone. The WCS shows that there is sufficient water availability to accommodate the growing demand in this part of the authority. The WCS did note that water resources are limited due to climate change and that new development would not result in an unsustainable increase in water abstraction. The WCS also noted that development could be provided to ensure that unsustainable abstraction was not needed via the implementation of strategies. Moreover, Thames Water have prepared a Water Resource Management Plan (WRMP) setting out how they would meet the water needs of population growth across their supply area to 2050. This was subject to HRA that specifically considered potential effects on Habitats Sites which confirmed that no significant effects on any Habitats Sites would arise from its implementation¹¹². It is noted that at the time of producing this HRA, Thames Water have produced a revised draft WRMP 2024 (rdWRMP4) which looks ahead to 2075. This has also been subject to its own HRA¹¹³ which concluded no adverse effects on Habitats Sites. The WRMP and rdWRMP24 considered population growth across Thames Water's entire supply area (including Wokingham Borough) and the supply strategy runs well beyond the period covered by the Local Plan Update. Therefore, LSEs arising from the WBLPU can be excluded, and the site is screened out from AA.

Chilterns Beechwoods SAC

5.36 The *Asperulo-Fagetum* beech forests in the Chilterns Beechwoods SAC are sensitive to changes in the water supply. As for the Windsor Forest and Great Park SAC, Natural England's Site Conservation Objectives Supplementary Advice Note¹¹⁴ highlights that maintaining the hydrological regime is a key step in meeting the site's conservation objectives¹¹⁵. The closest component part of the SAC lies 2.8km to the north-east of Wokingham Borough in the Lower Thames operational catchment¹¹⁶. As identified, the northern part of Wokingham Borough is supplied by Thames Water, which extracts water from the Lower Thames operational catchment. Thames Water undertook an HRA¹¹⁷ of their draft Water Resources Management Plan in 2019, which determined that there would be no adverse effects on any Habitats Site. The HRA¹¹⁸ of the rdWRMP24 also concluded no adverse effects on Habitats Sites. Given this evidence, LSEs can be excluded, and the site is screened out from AA.

Windsor Forest and Great Park SAC

5.37 The Windsor Forest and Great Park SAC, designated for its oak woods and its beech forests, lies approx. 8.8km to the east of Wokingham Borough. Natural England's Site Conservation Objectives Supplementary Advice Note states that

¹¹¹ JBA Consulting. (2024). Wokingham Borough Council Water Cycle Study – Phase 2

¹¹² <https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future-2018/Appendices/dWRMP19-Appendix-C---HRA---Stage-1-screening-151217.pdf>

¹¹³ <https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/wrmp24-draft/technical-appendices/habitats-regulation-assessment.pdf> [Accessed 28/08/2024]

¹¹⁴ <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012724.pdf> [Accessed 28/08/2024]

¹¹⁵ <http://publications.naturalengland.org.uk/publication/4808896162037760> [Accessed on the 28/08/2024]

¹¹⁶ <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3285> [Accessed on the 03/12/2019]

¹¹⁷ Ricardo. Thames Water Revised Draft Water Resources Management Plan 2019 Habitat Regulations Assessment (2018). Available at: <https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future2018/Appendices/dWRMP19-Appendix-C---HRA---Stage-1-screening-151217.pdf> [Accessed on the 28/08/2024]

¹¹⁸ <https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/wrmp24-draft/technical-appendices/habitats-regulation-assessment.pdf> [Accessed 28/08/2024]

maintaining an appropriate hydrological regime for the site is a key requirement for meeting the site's conservation objectives¹¹⁹. Specifically, any change to the source, depth, duration, frequency, magnitude and the timing of water supply can alter the assemblage of plant species found in the site. The northern part of Wokingham Borough is supplied by the Henley Water Resource Zone within the Thames Water supply boundary. Water abstractions for this supply zone derive from the Lower Thames operational catchment¹²⁰, the geographic boundaries of which include Windsor Forest and Great Park SAC. However, Thames Water produced a Water Resource Management Plan (WRMP) setting out how they would meet the water needs of population growth across their supply area (including Wokingham Borough) to 2050. They undertook an HRA¹²¹ of the WRMP in 2019, which determined that there would be no adverse effects on any European site. The HRA¹²² of the rdWRMP24 also concluded no adverse effects on Habitats Sites. Given that population growth across their supply area (including Wokingham Borough) was factored into their WRMP and rdWRMP2024 and that their supply strategy runs well beyond the period covered by the Local Plan Update, LSEs of the WBLPU can be excluded, and the site is screened out from AA.

Summary

5.38 Overall, two of the impact pathways and linked Habitats Sites were screened in for AA, because LSEs could not be excluded. The impact pathway recreational pressure was taken forward to AA in relation to the Thames Basin Heaths SPA and Thursley, Ash, Pirbright & Chobham SAC. The impact pathway atmospheric pollution was screened in regarding the Thames Basin Heaths SPA and the Windsor Forest and Great Park SAC.

¹¹⁹ <http://publications.naturalengland.org.uk/publication/5175000009015296> [Accessed on the 28/08/2024]

¹²⁰ River catchments can be identified using the Environment Agency's Catchment Data Explorer. <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3285> [Accessed on the 28/08/2024]

¹²¹ Ricardo. Thames Water Revised Draft Water Resources Management Plan 2019 Habitat Regulations Assessment (2018). Available at: <https://corporate.thameswater.co.uk/-/media/Site-Content/Your-water-future2018/Appendices/dWRMP19-Appendix-C---HRA---Stage-1-screening-151217.pdf> [Accessed on the 03/12/2019]

¹²² <https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/wrmp24-draft/technical-appendices/habitats-regulation-assessment.pdf> [Accessed 28/08/2024]

6. Appropriate Assessment

Recreational Pressure

Thames Basin Heaths SPA and Thursley, Ash, Pirbright & Chobham SAC

- 6.1 The Screening chapter established that LSEs of the WBLPU on the Thames Basin Heaths SPA from an increase in recreational pressure cannot be excluded. Natural England's Site Improvement Plan for the SPA highlights recreational disturbance as a threat to the qualifying birds for the site, particularly because the SPA species nest on (or close to) the ground and are therefore highly sensitive recreational users (such as from dog walkers). The parcels of the SPA that are most likely to be accessed by new residents lie to the south and the south-east of the Wokingham Borough boundary, including the Bramshill SSSI and Broadmoor to Bagshot Woods and Heaths SSSI.
- 6.2 Much of the available evidence base relating to the in-combination recreational pressure in the Thames Basin Heaths SPA, stems from four visitor surveys undertaken in 2005, 2012 / 2013, 2018 and 2023. The 2005 visitor survey was commissioned by English Nature (the predecessor of Natural England) to provide a baseline on recreational pressure in the SPA. Given the significant housing growth in south-east England, a further visitor survey was then undertaken on behalf of Natural England in 2012 / 2013¹²³, 2018¹²⁴ and 2023¹²⁵, replicating the original methodology where possible. The results of these visitor surveys (as relevant to Wokingham Borough) are discussed in the following to assess whether the WBLPU might affect the recreational footprint in the SPA.

Overview of In-Combination Visitor Survey Results as Relevant to Wokingham Borough

- 6.3 The most relevant access points to the SPA for Wokingham Borough's residents covered by the visitor surveys, based on proximity to Wokingham Borough and good accessibility via main road links, are the following:
- Broadmoor to Bagshot Woods & Heaths SSSI, and Bracknell Forest (survey locations 3 and 30 respectively), which are easily accessible via the A322 and the B3430 (in Bracknell Forest);
 - Wildmoor Heath near Sandhurst (covered by survey locations 19 and 20 respectively) (in Bracknell Forest);
 - Bramshill Plantation and Warren Heath (survey locations 7 and 8 respectively) are two parcels of the SPA that lie immediately south of Wokingham Borough and are easily accessible via the A327 and Bramshill Road. (in Hart District); and

¹²³ Fearnley H. & Liley D. (2013). Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA). Natural England Commissioned Reports, Number 135. 107pp.

¹²⁴ Visitor Access Patterns on the Thames Basin Heaths 2018 (EPR for Natural England). Available at: <https://surreyheath.moderngov.co.uk/documents/g3273/Public%20reports%20pack%2019th-Sep-2019%2010.00%20Thames%20Basin%20Heaths%20Joint%20Strategic%20Partnership%20Board.pdf?T=10>

¹²⁵ Panter C., Bishop E. & Rush E. (2024). Thames Basin Heaths Special Protection Area 2023 Visitor Survey. Report by Footprint Ecology for Natural England.

- Castle Bottom to Yateley & Hawley Common (survey locations 9 and 10 respectively) are components of the SPA that lie along the A30 to the south of Wokingham Borough (in Hart District).
- 6.4 The 2012 tally counts indicate that survey points 3 and 30, which provide access to the Broadmoor and Bagshot Woods & Heaths SSSI, are very popular for recreational users. Survey point 3 (The Lookout) was the second most popular of all sites surveyed in the Thames Basin Heaths SPA, totalling 541 adults and 153 dogs entering over a 32-hour survey period. Survey point 30 was slightly quieter with 188 adults and 201 dogs entering over a similar timeframe. The fact that more dogs than adults were counted as entering in this location, likely means that this location is used by professional dog walkers, who are often accompanied by multiple dogs. It is considered that these two locations are among the most likely to be visited by residents from Wokingham Borough, because they can be conveniently reached via the A322 that connects this part of Bracknell Forest with Wokingham Borough.
- 6.5 In contrast, on Warren Heath (survey point 8) just south of Wokingham Borough in Hart District, only 40 adults and 34 dogs were entering over a 32-hour period. No count data were available for the nearby Bramshill Plantation. This area of the SPA appears to be considerably less busy than the 'honeypot' component parcels in Bracknell Forest. Survey points 9 and 10, which are the main access points to Yateley Common Country Park, were slightly busier than the SPA sites around Bramshill. Seventy-six people and 37 dogs were observed entering at survey point 9, whereas 140 people and 87 dogs entered at survey point 10 (both over 16-hour periods). These parts of the SPA are a short distance south of Wokingham Borough but can be relatively easily accessed via the A327 and the A30 road link. It is likely that most recreational use would arise from residents originating from Hart, but due to the proximity of these parts of the SPA to Wokingham Borough, some additional recreational usage might arise from the WBLPU.
- 6.6 More generally, the data from the visitor surveys in May / June and August 2012 indicate that most interviewees visit the SPA daily (929 interviewees, 38%) or more than once a week (833 interviewees, 34%). Notably, most visitors undertake dog walking as their main activity (1,939 interviewees, 66%), followed by walking (614 interviewees, 21%) and cycling (124 interviewees, 4%). Furthermore, only 10% of interviewees have visited the site for less than a year, while 26% have been using the SPA between 1 and 5 years and a further 25% having visited between 5 and 10 years. 75% of interviewees visit the site by car and 22% travel on foot, the latter being local residents that live within walking distance of the SPA. These results are important because they demonstrate that the Thames Basin Heaths SPA is subject to high levels of repeat recreational pressure, most notably from dog walkers, which is the user group that is likely to have the highest disturbance impact to ground-nesting birds.
- 6.7 The 2012 visitor survey showed that of 2,316 interviewees giving a valid postcode, 2,177 (94%) lived within a 5km radius from the SPA. Only 6% of visitors travelled from beyond a 5km catchment zone. Interestingly, in comparison to the earlier visitor survey undertaken in 2005, the number of visitors from within the 5km zone increased from 88% to 93%. This is most likely due to an increase in the number of dwellings within 5km of the Thames Basin Heaths SPA in that 7-year timeframe. 75% of car-based visitors that were on a short visit

from home, lived within 4.61km of the survey location. Importantly, the 2012 visitor survey also identified which Local Planning Authorities interviewees lived in. Unsurprisingly, most visitors originate from districts that include parcels of the SPA, including Surrey Heath (540 interviewees, 23%), Woking (355 interviewees, 15%) and Hart Districts (341 interviewees, 15%). Wokingham Borough's contribution to the overall recreational footprint in the SPA was considerably lower, with only 112 interviewees (5%) coming from this authority. According to the map showing the distribution of visitor postcodes, most visitors from the borough come from the wider area surrounding the market town of Wokingham. While this evidence indicates that Wokingham Borough is not one of the top five contributors to recreational pressure in the SPA, due consideration to its impact must be given, particularly in-combination with the residential growth in other authorities surrounding the SPA.

- 6.8 Cyclical updates to visitor surveys are being undertaken as part of the long-term access monitoring in the SPA and to ensure that the current level of SAMM / SANG provision is effective in protecting the site. Broadly, the interview data presented in the 2024 report are similar to that of previous surveys, except for the following. The number of people entering the SPA per hour was higher than in any of the previous surveys at 23 out of 29 comparable survey points (80%). This ties in with the number of dwellings within 5km of the SPA, which has increased by 11% since December 2011 and 6% since January 2018. Most interviewees were dog walking (74%) or walking without a dog (19%), and around a quarter of interviewees (24%) are visiting the site daily. Visitors travelled a 'typical' (median) distance of 2.4km to the site and 75% lived within 4.6km from the relevant survey point. Importantly, these data indicate that the 5km core catchment of the Thames Basin Heaths SPA, the area within which all new dwellings require SANG and SAMM mitigation, still applies. The proportion of interviewees coming from Wokingham Borough was 4% in 2023, which represented a small decrease to the 5% recorded in the 2012 / 2013 visitor survey.

In-Combination Approach to Mitigation in the Thames Basin Heaths SPA

- 6.9 The evidence base from the aforementioned visitor surveys has fed into Local Plan HRAs of several authorities that contribute to recreational pressure in the Thames Basin Heaths SPA, culminating in the Thames Basin Heaths (TBH) Joint Strategic Partnership Board (JSPB), comprised of eleven local authorities and two County Councils.
- 6.10 Most importantly, visitor catchment data from the visitor surveys have informed several TBH SPA Avoidance Strategies (such as the Guildford Borough Council Avoidance Strategy¹²⁶). These are effectively Supplementary Planning Documents agreed with Natural England), which detail how authorities propose to avoid adverse effects on the site integrity of the SPA. Primarily, these strategies identify buffer zones around the SPA, which are associated with specific conditions and / or mitigation requirements. For the Thames Basin Heaths SPA, these zones have been identified as follows:

- a 400m exclusion zone, where no additional development is permitted;

¹²⁶ Guildford Borough Council. (2017). Thames Basin Heaths Special Protection Area Avoidance Strategy 2017 – Supplementary Planning Document.

- the SPA's primary visitor catchment zone between 400m and 5km, where additional residential development must be mitigated through a combination of Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM); and
- the 5-7km zone where residential development over 50 dwellings must be mitigated as above, on a case-by-case basis.

6.11 To meet the identified housing need in the period to 2040, WBC have allocated several sites for housing development. These include large SDLs (allocated for mixed use), in which the largest proportion of residential growth will be delivered. Furthermore, a series of smaller housing sites have been included to deliver net new dwellings across the smaller settlements within the borough. Table 5-2 assesses each of these allocations regarding their distance to the Thames Basin Heaths SPA and anticipated capacity. For the sites that trigger mitigation requirements, it also specifies the parameters according to which SANG and SAMM mitigation will need to be delivered.

Table 5-2: Number of dwellings and distance to the Thames Basin Heaths SPA of residential allocations (including SDLs) allocated in the WBLPU and mitigation requirements.

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
5WW017, 026, 030, 031	South Wokingham SDL extension	980	5km	• Bespoke (on-site) SANG provision • SAMM contribution according to the latest per-dwelling tariff
NA	Arborfield Green SDL intensification	300	5km	• Bespoke SANG solution provided (Barkham Square adjacent to the allocation) • SAMM contribution according to the latest per-dwelling tariff
NA	Loddon Valley Garden Village SDL	2,700	5km, 5-7km, beyond 7km ¹²⁷	• Bespoke (on-site) SANG provision • SAMM contribution according to the latest per-dwelling tariff

¹²⁷ The Loddon Valley Garden Village SDL stretches over all three buffer zones surrounding the Thames Basin Heaths SPA, including 5km, 5-7km and beyond 7km (the latter being the distance in which no mitigation is required). Therefore, the ultimate mitigation requirements for this SDL will depend on the final distribution of dwellings, with some dwellings not in need of SANG and SAMM measures.

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
5FI028	Westwood Yard, Sheerlands Road	10	5km	- Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment) - SAMM contribution according to the latest per-dwelling tariff
5SH025	Land north of Arborfield Road	191	5km	- Bespoke (on-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff
5FI003	31 and 33 Barkham Ride	80	5km	- Bespoke (on-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff
5SW019	Land west of Trowes Lane	81	5km	- Strategic (off-site) SANG provision. Strategic SANG capacity at University of Reading owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment) - SAMM contribution according to the latest per-dwelling tariff
5BA032	24 Barkham Ride	30	5km	Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment)

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
				SAMM contribution according to the latest per-dwelling tariff
5BA013	Woodlands Farm, Wood Lane	15 pitches	5km	- Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment) - SAMM contribution according to the latest per-dwelling tariff
5WK043	Land at St Annes Drive	54	5km	- Strategic (off-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff
5SH023, 27	Land east and west of Hyde End Road	175	5km	- Strategic (off-site) SANG provision. Strategic SANG capacity at University of Reading owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment). - SAMM contribution according to the latest per-dwelling tariff
5WK045	Land at Bridge Retail Park	59	5km (partially within 5km to 7km Zol)	- Strategic (off-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff
5FI004	Greenacres Farm, Nine Mile Ride	100	5km	- Bespoke (on-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
5FI024	Hillside, Lower Wokingham Road	15	5km	- Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment) - SAMM contribution according to the latest per-dwelling tariff
5BA036	High Barn Farm, Commonfield Lane, Wokingham, RG40 4PR	20 pitches	5km	- Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment) - SAMM contribution according to the latest per-dwelling tariff
5FI032	Honeysuckle Lodge, Commomfield Lane	4 pitches	5km	- Contribution to strategic council-owned SANG (sufficient overall capacity must be present) - SAMM contribution according to the latest per-dwelling tariff
5BA010	Barkham Square	600	5km	- Bespoke (on-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff
5WK011	Land south of London Road (Western Field)	12	5km	Contribution to strategic council-owned SANG (with the specific SANG having sufficient capacity and encompassing the site within its catchment)

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
				SAMM contribution according to the latest per-dwelling tariff
5WK046	Land at Wellington Road, Wokingham	20	5-7km	None
5WI011	Land off Wheatsheaf Close	24	5-7km	None
5SH031	Rustlings', 'The Spring' and land to the rear of 'Cushendall', Shinfield Road	10	5-7km	None
5WK029	Station Industrial Estate, Oxford Road	40	5-7km	None
5WK054	WBC council offices, Shute End, Wokingham	100	5-7km	- Bespoke (off-site) SANG provision (at a lower standard than the 8ha per 1,000 population increase) - SAMM contribution according to the latest per-dwelling tariff
5WK042	Woodside Caravan Park, Blagrove Lane	4 pitches	5-7km	None
5RU008	Land between 39-53 New Road, Ruscombe, RG10 9LQ	20	Beyond 7km	None
5CV002	Land west of Park Lane	61	Beyond 7km	None
5RU007	Land to the rear of 9-17 Northbury Lane, Ruscombe, RG10 9LH	12	Beyond 7km	None
5SO001	Land at Sonning Farm	25	Beyond 7km	None
5WI008	Winnersh Plant Hire	60	Beyond 7km	None
5TW005, 009, 010	Land at Bridge Farm	200	Beyond 7km	None

Site Reference	Site Name	Number of Net New Dwellings	Approx. Distance (m) to the Thames Basin Heaths SPA	Type of Mitigation Required
5SO008	Land east of Pound Lane (Sonning Golf Club)	50	Beyond 7km	None
5WI014	69 King Street Lane, Winnersh, RG41 5BA	28	Beyond 7km	None
5WI009, 019	Land north west of Old Forest Road	50	Beyond 7km	None
5WI012, 021	Land to the rear of Bulldog Garage and the BP filling station	34	Beyond 7km	None
	Land off Poplar Lane and Watmore Lane, Winnersh	111	Beyond 7km	None. Planning permission granted
	Roseary Cottage and 171 Evendons Lane, Wokingham	35	5-7km	None Care home Planning permission granted
	Land adjacent to Amen Corner, north of London Road, Bracknell	45	400m-5km	None Has resolution to grant August 2024. Will provide; - Bespoke (on-site) SANG provision - SAMM contribution according to the latest per-dwelling tariff

6.12 Generally, residential developments of 50 dwellings or more are expected to provide for bespoke SANG. Preference is for this to be provided on-site, but instances exist where this can be provided off-site. The responsibility for this lies with the developer and planning consent will not be granted, unless a project-level HRA demonstrates that sufficient SANG is in place to mitigate adverse effects on the integrity of the Thames Basin Heaths SPA. The Loddon Valley Garden Village SDL (Policy SS13) will be served by a multi-functional country park, comprising an area that is currently not accessible to the public. The country park will facilitate wide public access to the river corridor and open spaces. It will be a focal point for comprehensive habitat management, ecological restoration and enhancement, biodiversity improvement. The Arborfield Garrison

SDL Supplementary Planning Document (SPD)¹²⁸ indicates that a SANG will be made available in the southern part of the site, which is to provide capacity in line with the adopted SANG delivery standards and adequate parking facilities. Additional SANG will also be provided at the adjacent Barkham Square, to mitigate the proposed additional development. Further detail on the provision of bespoke SANGs will come forward as the planning applications and associated masterplans progress towards obtaining planning consent.

6.13 The remainder of this AA focuses on residential developments under 50 dwellings, which will need to make financial contributions towards council-owned and -operated strategic SANG. Table 5-3 below summarises the residential allocations of under 50 dwellings within 5km of the Thames Basin Heaths SPA. Overall, 106 net new dwellings on such sites will be delivered, equating to a population growth of 254 people. To mitigate this growth 2ha of strategic SANG capacity will need to be made available (assuming a SANG delivery standard of 8ha per 1,000 population increase, or 0.008ha per person). Moreover, the identified sites must be located in the catchment of any strategic SANG put forward for mitigation. Natural England advise that the following catchment areas should be applied to SANGs:

- SANGs with no car park available – 400m;
- SANGs of 2-12ha in size – 2km;
- SANGs of 12-20ha in size – 4km; and
- SANGs of 20+ha in size – 5km.

Table 5-3: Residential allocations of less than 50 dwellings within 5km of the Thames Basin Heaths SPA that require strategic SANG Capacity, and the resulting strategic SANG mitigation requirements.

Site Reference	Site Name	Capacity
5FI028	Westwood Yard, Sheerlands Road	10
5BA032	24 Barkham Ride	30
5BA013	Woodlands Farm, Wood Lane	15 pitches
5FI024	Hillside, Lower Wokingham Road	15
5BA036	High Barn Farm, Commonfield Lane, Wokingham, RG40 4PR	20 pitches
5FI032	Honeysuckle Lodge, Commonfield Lane	4 pitches
5WK011	Land south of London Road (Western Field)	12
Total number of dwellings		106

¹²⁸ Available at: https://www.wokingham.gov.uk/sites/wokingham/files/2023-06/Arborfield%20Garrison%20Adopt-rv%20Planning%20Document_0.pdf [Accessed on 27 August 2024]

Site Reference	Site Name	Capacity
Total population increase ¹²⁹		254
Total SANG requirement (ha)		2.03

6.14 Rooks Nest Wood SANG is one of the currently operational SANGs in Wokingham Borough. The SANG currently covers 18.3ha and was developed for its current purpose in 2011 to provide informal recreation opportunities for Wokingham residents. The site supports high wildlife and habitat diversity, comprising woodland (primarily oak, ash, silver birch, hazel, aspen and willow), grassland and fen. Its fen component is designated as a Local Wildlife Site, supporting spear thistle, marsh thistle, lesser spearwort and ragged robin. Visitors have access to a network of surfaced (totalling over 2km) and unsurfaced (1km) footpaths, enabling walks of various length. Rooks Nest Wood SANG is accessible on foot, but also has a car park that caters for visitors driving to the site.

6.15 WBC have committed to extend the 18.3ha site by 33ha of council-owned land, which will increase its overall area to 51.3ha. With the proposed extension in place, the catchment of Rooks Nest Wood SANG will increase from 4ha to 5ha. Considering this increase in catchment area, the identified residential sites were further assessed regarding their distance to the SANG (see Table 5-3). Most sites requiring strategic SANG mitigation lie within the 5km catchment of Rooks Nest Wood SANG. The only residential allocation that falls outside the SANG's catchment is 5WK011 (Land south of London Road [Western Field]), for which alternative strategic SANG would need to be identified.

6.16 There are further third-party operated SANGs in Wokingham Borough with residual capacity available. For example, the University of Reading owns and operates The Ridge SANG, which lies off Hyde End Lane to the west of Shinfield. The SANG formally opened in July 2024 and offers enjoyable walks through semi-natural habitats and long-distance views. Within The Ridge SANG there are various internal footpaths that are connected to wider circular walks in surrounding greenspaces. The SANG also provides for the following:

- Dedicated car park with 10 spaces;
- Park ranger as the focal point for all conservation activities and recreational uses;
- Safe off-lead dog walking at all times of the year;
- Footpath connections to other greenspaces (e.g. High Copse, Langley Mead) that enhance connectivity and enable long distance walks; and
- Information boards and waymarkers that promote education and facilitate navigation.

6.17 Overall, given the available evidence base, it is considered that WBC have an adequate inventory of strategic SANG in place to mitigate the residential growth

¹²⁹ Based on an average household size of 2.4.

delivered by the WBLPU, potential windfall development, both in terms of residual capacity and geographic siting of the SANGs.

SAMM Provision

6.18 Aside from the SANG requirements discussed above, a SAMM project is in place to manage recreational pressure in the Thames Basin Heaths SPA. This is needed because a residual proportion of existing and future residents are likely to visit the SPA regardless of available SANG space. The SAMM strategy was first published in 2009 as part of the Thames Basin Heaths SPA Delivery Framework¹³⁰. It encompasses a wide range of measures to manage access, including the following:

- Delivering a consistent SPA / SANG message, such as through signs, leaflets, educational material;
- Modifying access patterns through the presence of rangers, seasonal restrictions and campaigns;
- Prioritising soft measures where possible and providing clear reasons where 'hard' access restrictions are imposed; and
- Undertaking extensive monitoring of the effectiveness of SAMM measures, such as by assessing habitat condition and bird numbers, and completing visitor surveys.

6.19 The SAMM project is delivered by Natural England and overseen by the Joint Strategic Partnership Board (JSPB). Fundamentally, measures in the SAMM inventory are facilitated by financial contributions from housing developments coming forward in the 11 authorities that wholly or partially fall within the core recreational catchment of the SPA.

6.20 Natural England and the JSPB have agreed that an annual uplift to the SAMM contributions is required to counteract inflation. This is to ensure that sufficient income is generated to deliver the SAMM objectives in-perpetuity. Without this cyclical increase in SAMM contributions, some measures may not be deliverable and adequate mitigation for the Thames Basin Heaths SPA could not be guaranteed. The financial SAMM tariffs discussed below are based on the information handed out to the Local Planning Authorities by Natural England for 2024.

6.21 All residential developments within the 5km zone and developments over 50 dwellings in the 5-7km zone are required to make financial contributions to SAMM via s106 agreements. The level of contributions is calculated on a per-bedroom basis and dependent on the buffer zone within which a development falls. WBC provides the following per-dwelling tariffs on their website based at 1 June 2024:

- Within 5km from the SPA – ranging from £563 (1 bedroom property) to £1,400 (5 bedroom property); and
- Within 5-7km from the SPA – ranging from £162 (1 bedroom property) to £401 (5 bedroom property).

¹³⁰ Thames Basin Heaths Partnership Board. (2009). Thames Basin Heaths Special Protection Area Delivery Framework. 14pp. Available at: <https://www.woking2027.info/allocations/sadpdexam/spadelivery> [Accessed on 23 August 2024]

Policy Mitigation Contained in the WBLPU

- 6.22 The previous sections have shown that there is an adequate strategic mitigation solution in place that protects the integrity of the Thames Basin Heaths SPA. This SANG and SAMM approach has been developed in partnership with (and is partially overseen by) Natural England. A comprehensive assessment of all policies in the WBLPU was undertaken to establish whether the essential policy mechanisms are in place to ensure that new development proposals will align with these legal requirements.
- 6.23 The WBLPU encompasses to key policies that address recreational pressure impacts in the Thames Basin Heaths SPA. **Policy NE1 (Biodiversity and geodiversity)** extends general protection to biodiversity in Wokingham Borough, including internationally designated sites. It places Habitats Sites at the top of the conservation priority hierarchy and specifies that *‘Development proposals likely to result in a significant effect on internationally designated sites either alone or in combination with other plans or projects, will not be permitted unless it can be demonstrated that the adverse effects on the integrity of the designated site can be fully avoided, mitigated and/or compensated.’*
- 6.24 Regarding the protection of ground-nesting birds in the SPA from recreational pressure, **Policy NE3 (Thames Basin Heaths Special Protection Area)** is the most important Plan element. The policy states that development proposals which are likely to result in adverse effects on the integrity of the SPA will be refused of appropriate avoidance or mitigation measures are not delivered. Furthermore, the policy also highlights the three zones of influence surrounding the SPA (<400m, 400m-5km and 5-7km) and specifies precise SANG / SAMM requirements in each of the zones (while also accounting for the size of developments). Importantly, the policy also prevents the loss of SANG land for other uses, which is a key mechanism for ensuring that the borough's SANG inventory remains sufficient and functional.

Conclusion

- 6.25 Overall, it is considered that the WBLPU provides an adequate policy framework to protect the Thames Basin Heaths SPA from the increase in recreational pressure that will occur due to residential growth in the borough. The relevant policies discussed above provide for the general protection of Habitats Sites and reference the SANG / SAMM requirements of the formally adopted mitigation strategy for the SPA. Furthermore, WBC has secured sufficient capacity at various SANGs (e.g. Rooks Nest Wood SANG, The Ridge SANG) to absorb the additional footfall at the agreed SANG delivery standard. Therefore, adverse effects of the WBLPU on the integrity of the Thames Basin Heaths SPA regarding recreational pressure can be excluded, both alone and in-combination.

Atmospheric Pollution

- 6.26 Traffic and air quality modelling of the Thursley, Ash, Pirbright & Chobham SAC, Thames Basin Heaths SPA, Windsor Forest & Great Park SAC and Chilterns Beechwoods SAC was undertaken to inform the Local Plan HRA. A large number of transects (63 transects across the four sites) were modelled. The full results are provided in Appendix D. The results are summarised and discussed below, taking each pollutant in turn.

NO_x

- 6.27 The annual average critical level for NO_x is 30 µgm⁻³ and this applies to all Habitats sites. If this figure is not forecast to be exceeded then no likely significant effect can arise either alone or in combination with other projects and plans because the critical level is defined as the '*concentration of pollutants in the atmosphere above which direct adverse effects on receptors may occur*'. Therefore, if the critical level is not exceeded there is no basis on which to conclude negative effects could occur. At no point on any transect is annual average NO_x forecast to exceed the critical level by 2040 even in combination with other projects and plans (Table A-6 of the air quality technical note in Appendix D).
- 6.28 Although the air quality technical note in Appendix D has calculated 24hr NO_x, this is generally not considered in traffic-related assessments because point sources fluctuate much more on a short-term basis due in particular to changes in meteorology over the impact zone of the stack (which is much larger than that of a vehicle exhaust). In contrast, conditions close to the roadside fluctuate relatively little such that the annual average NO_x is the focus of assessment.

Ammonia (NH₃)

- 6.29 Table A-3 of Appendix D presents the 'in isolation' NH₃ results for the WBLPU for all Habitats sites. This is relevant because it has been agreed with Natural England on other projects that if a plan or project is too small to show in the model (which only reports results to two decimal places to avoid false precision) then it will effectively make no contribution to 'in combination' effects. This fits with the ruling in *Wealden v SSCLG* [2017] EWHC 351 (Admin) (2017), which specifically concerned the need for in combination assessment in air quality modelling for European sites. Mr. Justice Jay accepted that if the contribution of an individual plan or project to traffic growth or resulting air quality effects was 'very small indeed', it could be legitimately and legally excluded from in combination assessment. A contribution that is too small to show in the model would fall within the definition of 'very small indeed'.
- 6.30 Throughout the modelling, for all Habitats sites, the lower critical level of 1 µgm⁻³ applicable to lichens and bryophytes has been used as a precaution. Ecological interpretation of air quality modelling results typically commences with data for 10m from the roadside, because close to the road edge effects dominate and air quality models are less reliable due to the role of air turbulence. At 10m from the roadside, the contribution of the WBLPU to NH₃ concentrations by 2040 is modelled to be less than 0.01 µgm⁻³ and thus too small to show in the model for most transects. This is reported as '0.00', or as '0.01' where the third decimal place has been rounded up. If rounding is not applied these would also read '0.00'.
- 6.31 The exceptions are the following transects: TAP11, TAP14, TAP6, TAP7, TBH15, TBH16, TBH19, TBH20, TBH26, TBH28, TBH36, TBH38 and WG8.
- 6.32 However:
- For the transects which relate purely to the Thames Basin Heaths (i.e. those starting TBH, which do not overlap with Thursley, Ash, Pirbright & Chobham SAC) it is appropriate to use the upper NH₃ critical level of 3 µgm⁻³ because

lichen and bryophyte interest is not relevant to the ability of these areas to support SPA birds. When the higher critical level is applied none of these transects are forecast to have their total NH_3 concentrations exceed the critical level even 'in combination' with other projects or plans (Table A-8).

- For the sole Windsor Forest & Great Park transect (WG8) the contribution of the WBLPU becomes too small to show in the model by 15m from the roadside. Moreover, the in combination effect at this location (Table A-8) is slightly positive (being $-0.3 \mu\text{gm}^{-3}$ at 10m from the roadside) presumably because a reduction in traffic from other sources more than offsets the slight increase in traffic due to the WBLPU.

6.33 This leaves transects TAP11, TAP14, TAP6 and TAP7. These are all transects off the M3. Transects TAP11, TAP6 and TAP7 are all into Chobham Common, while TAP14 is into Lightwater Country Park. For Chobham Common, it has been established for other projects (e.g. the Surrey Heath Local Plan HRA) that a minimum 35m belt (wider in many places) of the SAC adjacent to the M3 is regularly mown as a firebreak, which is clearly visible on the ground and on Google Earth. The process of regular close mowing will have a much greater effect on ground flora and habitat structure than atmospheric nutrients.

6.34 Beyond the firebreak, NH_3 due to the WBLPU is still perceptible in the model and exceeds 1% of the critical level (Table A-3) throughout transect TAP11, being a maximum of $0.02 \mu\text{gm}^{-3}$ at 35m (i.e. at the edge of the closest part of the firebreak) and at 40m (i.e. 5m past the mown firebreak). In contrast, after 35-40m (i.e. 5-10m past the mown firebreak) the contribution of the WBLPU on TAP14 and TAP6 becomes imperceptible in the model, while TAP7 becomes imperceptible after 50m (10-15m past the mown firebreak). The fact that TAP11 (Chobham Common north of the M3) continues to be perceptible in the model throughout the transect while TAP6 and TAP7 (both Chobham Common south of the M3) fall to imperceptible by 40-50m from the M3 (5-15m past the firebreak) suggests meteorology is the main factor in the difference and illustrates the small contribution of the WBLPU.

6.35 Moreover, the M3 is one of the major strategic routes in south-east England. As such, traffic-related changes in air quality on the M3 are not a local (Wokingham) issue but a South-East England issue and is the responsibility of National Highways. This is relevant because Joint Nature Conservation Committee (JNCC) guidance on the issue¹³¹ states (pages 20/21) that: *'The trunk road network forms the core of the national transport system. Trunk roads are central to long distance travel and connectivity across the UK and traffic patterns on trunk roads are a consequence of predicted growth across the UK generally. The effects of development on traffic flows on trunk roads are more appropriately taken into account as part of national and regional strategic plan level HRAs.'* As such, this is considered to be an issue to be addressed at a strategic national scale rather than through the WBLPU.

Nitrogen (N)

Chilterns Beechwoods

6.36 At 10m from the road on transect CB1 the contribution of the WBLPU is 0.04 kg N/ha/yr (0.4% of the critical load) which is inconsequential by itself. The in combination effect at the same distance is 0.53 kg N/ha/yr (5.3% of the critical

¹³¹ [Main Report: Guidance on Decision-making Thresholds for Air Pollution \(jncc.gov.uk\)](#)

load). Approximately 93% of the forecast 'in combination' effect therefore derives from other plans or projects, particularly those authorities with population centres closer to or more directly connected with the SAC such as Windsor & Maidenhead and Buckinghamshire. Moreover, the air quality modelling indicates that, in the absence of traffic growth, nitrogen deposition on this transect is expected to have improved by 7.8 kg N/ha/yr by 2040. The contribution of the WBLPU would therefore retard this improvement by the equivalent of approximately 1 month¹³².

- 6.37 Therefore, while the designated beech woodland interest feature of Chilterns Beechwoods SAC would be affected by in combination nitrogen deposition, Wokingham Local Plan will make a sufficiently small contribution to the in combination effect (a one month delay in the improvement which would otherwise occur being 'very small indeed' as identified by Mr Justice Jay) that it will not make a material contribution to any adverse effect on integrity.

Thursley Ash Pirbright & Chobham SAC

- 6.38 For the vast majority of Thames Basin Heaths SPA transects the forecast nitrogen due to the WBLPU is effectively zero being between 0.00 and 0.04 kg N/ha/yr. This is almost too small to show in the model and is well within the limits of normal background variation in deposition rates. The exceptions are transects TAP11, TAP14, TAP6 and TAP7, where deposition due to the Local Plan varies from 0.08 kg N/ha/yr (TAP14) to 0.17 kg N/ha/yr (TAP11) at 10m from the roadside. As already discussed for NH₃, these four transects are all off the M3 into either Chobham Common or Lightwater Country Park.
- 6.39 A minimum 35m belt (wider in many places) of the SAC adjacent to the M3 is regularly mown as a firebreak, which is clearly visible on the ground and on Google Earth. The main negative effect of nitrogen deposition on heathlands is that it promotes excessive woody growth and an increased abundance of grasses, outcompeting the wildflower species that are less able to utilise the additional nitrogen and shading them out of the sward. However, a process of regular close mowing to maintain the firebreak removes growth and keeps the sward short and open.
- 6.40 This process of regular cutting will therefore have a more controlling effect on habitat structure and botanical diversity in this location than nitrogen deposition. As such, nitrogen deposition within the mown firebreak is not likely to materially affect botanical diversity or structure. At 35m from the road nitrogen deposition due to the WBLPU has reduced to a maximum of 0.11 kg N/ha/yr (on transect TAP11). The in combination effect is 0.30 kgN/ha/yr which is 6% of the critical load. Therefore, even allowing for the existence of the firebreak an in combination effect on the heathland in the SAC cannot be dismissed. Without any traffic growth the modelling undertaken for the Local Plan indicates that nitrogen deposition rates at 35m from the M3 would have reduced by 13 kgN/ha/yr by 2040. The contribution of the WBLPU would therefore retard this improvement by the equivalent of approximately 2 months¹³³. Therefore, while the designated heathland interest feature of the SAC would be affected by in combination nitrogen deposition, Wokingham Local Plan will make a sufficiently small contribution to the in combination effect (a two month delay in the improvement

¹³² 7.8/19 = 0.41 kgN/ha/yr per annum or 0.03 kgN/ha/yr per month

¹³³ 13/19 = 0.68 kgN/ha/yr per annum or 0.06 kgN/ha/yr per month

which would otherwise occur being ‘very small indeed’ as identified by Mr Justice Jay) that it will not make a material contribution to any adverse effect on integrity.

- 6.41 Moreover, the M3 is one of the major strategic routes in south-east England. As such, traffic-related changes in air quality on the M3 are not a local (Wokingham) issues but a South-East England issue and is the responsibility of National Highways. This is relevant because Joint Nature Conservation Committee (JNCC) guidance on the issue¹³⁴ states (pages 20/21) that: *‘The trunk road network forms the core of the national transport system. Trunk roads are central to long distance travel and connectivity across the UK and traffic patterns on trunk roads are a consequence of predicted growth across the UK generally. The effects of development on traffic flows on truck roads are more appropriately taken into account as part of national and regional strategic plan level HRAs.’* As such, this is considered to be an issue to be addressed at a strategic national scale rather than through the WBLPU.

Thames Basin Heaths SPA

- 6.42 The nature and distribution of habitat, in other words the ecological context, is particularly relevant to interpreting effects on the integrity of Thames Basin Heaths SPA because this site is designated for breeding nightjar, woodlark, and Dartford warbler rather than for its vegetation or habitats. Nightjar and woodlark will nest in rotationally managed commercial forestry but not in mature permanent woodland and, in this SPA, they nest primarily in areas of heathland. This is relevant because much roadside habitat within this SPA constitutes permanent woodland. Nightjar will probably forage within permanent woodland and it is possible that any net increase in nitrogen deposition might somewhat reduce the abundance of some invertebrates (such as moths) in that belt.
- 6.43 However, nightjar do not have highly specialised foraging requirements, foraging in a wide range of common and widespread habitats well beyond the SPA wherever they can obtain a supply of insects of sufficient size including heathland, plantation woodland, deciduous woodland, rough pasture, arable field margins and gardens. This is supported by Natural England’s Supplementary Advice on Conserving and Restoring Site Features¹³⁵ for the Thames Basin Heaths SPA, which states on page 4 that *‘Within this SPA the principal habitats supporting these qualifying species are lowland heathland and rotationally managed coniferous plantation woodland’*.
- 6.44 Although nightjar and woodlark do nest in rotationally managed commercial plantations, research in Breckland Forest¹³⁶ has identified that the amount of plantation in each growth stage and (for woodlark) the planting and restock period management regime (such as whether the area was de-stumped or ploughed, and factors such as brash cover and weed control) explain the vast majority of the recorded spatial and temporal variation in nightjar and woodlark abundance. Provided these aspects of management are appropriate, other factors are therefore less likely to influence the achievement of biodiversity objectives for these species in rotational forestry than they do in more natural habitats.

¹³⁴ [Main Report: Guidance on Decision-making Thresholds for Air Pollution \(jncc.gov.uk\)](https://www.jncc.gov.uk/main-report-guidance-on-decision-making-thresholds-for-air-pollution)

¹³⁵ <http://publications.naturalengland.org.uk/file/4590853229117440>

¹³⁶ Probably the largest commercial plantation in England. Reference: Dolman, P. and Morrison, C. (2012). *Temporal change in territory density and habitat quality for Breckland Forest SSSI woodlark and nightjar populations*. Report to Forestry Commission and Natural England, number ENV103/11/19.

- 6.45 This is supported locally by the Site Improvement Plan for the Thames Basin Heaths SPA which states that '*Large parts of Thames Basin Heaths are occupied by commercial forestry plantations where the maintenance of suitable conditions for Annex 1 birds is dependent upon rotational felling*'. Therefore, impacts on heathland are most relevant to the consideration of whether the ability of the SPA to achieve its Conservation Objectives will be compromised. The minimum critical load for heathland is 5 kg N/ha/yr. However, this was lowered from 10 kg N/ha/yr because of emerging evidence that botanical changes can arise below 10 kg N/ha/yr. For impacts on the SPA, however, coarse habitat structure is much more relevant to suitability for nightjar/woodlark than the more subtle botanical and structural changes and 10 kg N/ha/yr is therefore considered appropriate for those heathland areas which are solely SPA and not also SAC.
- 6.46 For the vast majority of the Thames Basin Heaths SPA transects the forecast nitrogen due to the WBLPU is effectively zero being between 0.00 and 0.05 kg N/ha/yr. This is almost too small to show in the model and is well within the limits of normal background variation in deposition rates. The exceptions are transects TBH13, TBH15, TBH16, TBH19, TBH20, TBH26, TBH29, TBH36, TBH38 and TBH39, where nitrogen deposition due to the WBLPU at 10m from the road ranges from 0.06 kg N/ha/yr (TBH13) to 0.15 kg N/ha/yr (TBH36). However, there is no heathland on any of these transects, with the habitat being entirely woodland. This is based upon examination of habitat mapping on MAGIC (www.magic.gov.uk), cross-referenced to aerial photography on MAGIC and Google Maps. In all instances, the area of woodland is extensive managed plantation, and there is no indication it is to be cleared and put to heathland.

Windsor Forest & Great Park

- 6.47 For transects WG1 to WG5 the forecast nitrogen due to the WBLPU at 10m from the roadside is effectively zero or very slightly positive being between -0.01 and 0.00 kg N/ha/yr. On transect WG7 the contribution of the WBLPU is 0.04 kgN/ha/yr, which is greater than zero, but the 'in combination' deposition (Table A-9) is 0.01 kgN/ha/yr and thus less than 1% of the critical load¹³⁷. Therefore no adverse effect on integrity will arise either alone or in combination with other plans or projects.
- 6.48 For transect WG6 the contribution of WBLPU is 0.05 kgN/ha/yr. This is very small and well within the limits of normal background variation in deposition rates and therefore falls within the definition of 'very small indeed' which Mr Justice Jay identified plans or projects could be excluded from 'in combination' assessment. The in combination nitrogen impact at 10m from the roadside on transect WG6 is 0.30 (3% of the critical load). Therefore, 83% of the 'in combination' impact arises from other sources, particularly Windsor & Maidenhead and Bracknell Forest. In the absence of any growth Table A-9 indicates that a net improvement in nitrogen 5.9 kgN/ha/yr is forecast to arise at 10m from the roadside. Therefore the deposition due to WBLPU will retard (delay) this improvement by less than 2 months. This is considered sufficiently small that it will not be material and therefore the WBLPU will not contribute materially to any adverse in combination effect.
- 6.49 Deposition on transect WG8 is 0.09 kg N/ha/yr or 0.9% of the critical load) but the in combination nitrogen deposition is slightly positive (being '-0.03 kg N/ha/yr')

¹³⁷ This suggests that net reductions in forecast traffic from other sources offset the small increase in deposition due to the WBLPU

at 10m from the roadside) presumably because a reduction in traffic from other sources more than offsets the slight increase in traffic due to the WBLPU.

Acid deposition

6.50 Since vehicle exhausts do not emit sulphur dioxide the only source of acid is the nitrogen deposition. Therefore, the patterns for acid deposition reflect those for nitrogen deposition and the conclusions are the same.

Conclusion

6.51 It is therefore concluded that the WBLPU will not have an adverse effect on the integrity of any Habitats sites, either alone or in combination with other projects and plans.

7. Conclusions

- 7.1 Following completion of this HRA, it is concluded that the WBLPU will not have an adverse effect on the integrity of any Habitats sites, either alone or in combination with other plans or projects.

Appendix A Figures

Figure 4: Residential sites allocated in the WBLPU and Habitats Sites within the Zol of Wokingham Borough.

Appendix B LSEs Screening of Policies

Table 5-4: Likely Significant Effects (LSEs) Screening Assessment of policies included in the WBLPU. Where the LSEs Screening Outcome column is shaded green, LSEs on Habitats Sites can be excluded. Where this column is shaded orange, LSEs cannot be excluded and the policy is screened in for AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
Chapter 5: Delivering the Spatial Strategy		
Policy SS1: Sustainable development principles	1. As appropriate to their nature, development proposals will be expected to: a) Contribute to meeting identified development needs; b) Be located so as to offer the choice of active means of travel and/or public transport, reducing the need to travel by private car for day-to-day activities; c) Make efficient use of land/buildings, especially suitable previously developed land; d) Maintain, enhance or create a high quality and safe environment which contributes positively to the character and identity of the area; e) Conserve and enhance the significance of heritage assets, including their wider settings; f) Conserve and enhance the landscape character of the area, with particular attention paid toward significant landmarks and landscape attributes and features; g) Conserve and enhance the biodiversity of the area, and achieving a measurable net gain; h) Maintain the separate identity of settlements and places, avoiding physical or perceived coalescence; i) Promote healthy lifestyles, well-being and social inclusion;	There are no LSEs of this policy on Habitats Sites. This is a development management policy that provides sustainable development principles for new planning proposals in Wokingham. For example, it expects developments to offer active and public transport means to new residents. Furthermore, areas associated with high flood risk are to be avoided. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS1 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	j) Reduce energy demand in line with the principles of the energy hierarchy, considering the orientation, layout and design of development to maximise passive heating and cooling systems opportunities and implement a fabric first approach to construction; k) Respond to climate hazards, incorporating appropriate adaptation and resilience measures; l) Avoid the unplanned loss of best and most versatile agricultural land, except in exceptional circumstances; m) Avoid high risk flood areas, or where necessary provide appropriate mitigation measures; n) Avoid areas where pollution may impact upon the amenity of future occupiers; and o) Provide or contribute to the provision of social, physical, transport, and green and blue infrastructure to support communities.	
Policy SS2: Spatial Strategy and Settlement Hierarchy	1. Growth should create strong, cohesive and inclusive communities that provide for a high quality of life, larger numbers of people to access jobs, services and facilities locally so helping to minimise unnecessary travel and adapt to and mitigate against the impact of climate change. Growth should not undermine the separate identity of places and settlements. 2. The distribution of growth will be based on the following actions: a) Making the most efficient use of previously developed land within defined settlements; b) The sustainable extension of defined major and modest settlements; c) The evolution and sustainable extension of existing planned developments at South Wokingham and Arborfield Green (the former Arborfield Garrison); d) The delivery of a new sustainable garden village on land between Shinfield, Sindlesham and Arborfield, known as Loddon Valley Garden Village; and e) The proportionate and sustainable extension of defined minor settlements. 3. Town and other centres will continue to play a vital role in the heart of communities and will be supported to evolve and adapt to the changing needs of residents, visitors and business. Higher densities will be	LSEs of this policy on Habitats Sites cannot be excluded. This is a development management policy that specifies the spatial strategy and settlement hierarchy for Wokingham. For example, it identifies that growth will be delivered by maximising efficient use of previously developed land, such as in major and modest settlements. While no specific growth quanta are identified, the policy specifies the settlements and geographic areas in which growth is likely to be delivered. The geographic location of development plays an important contributing role in influencing impact factors, such as determining which dwellings fall within established core recreational catchments of Habitats Sites or the likely commuter routes used by future residents. The policy has the potential to shape the following impact pathways: • Recreational pressure • Atmospheric pollution

Policy Number / Name	Policy Text	LSEs Screening Outcome
	sought in town and other centres, having regard to the sustainability of the location and the character and amenity of the surroundings. Core employment areas will be retained and their evolution and adaptation to the economic demands of businesses will be supported. 4. The Green Belt will be protected from inappropriate development. 5. The Detailed Emergency Planning Zone surrounding AWE Burghfield is not a location where additional development is planned. Any development proposals will be determined with regard to public safety, emergency response and national security and defence requirements. 6. Decisions on the location and scale of development should be informed by the settlement hierarchy as set out below and defined on the policies map. <u>Major settlements</u> 7. Major settlements are places which provide a higher range of services and facilities that serve the needs of those that live there and the wider area. In general, they are towns and large villages. These places will be the focus of housing growth, where opportunities exist, supported by existing levels of employment, retail and wider service provision. The following places are defined as major settlements: Arborfield Green, Earley, Green Park, Shinfield (north of M4), Twyford, Winnersh, Wokingham and Woodley. <u>Modest settlements</u> 8. Modest settlements are places which provide a reasonable range of services and facilities that serve the needs of those that live there. In general, they are medium sized villages. To maintain and enhance their role, these places will accommodate an appropriate level of housing growth, where opportunities exist. The following places are defined as modest settlements: Finchampstead North, Pinewood (Crowthorne), Ruscombe, Shinfield (south of M4), Spencers Wood, Three Mile Cross and Wargrave. The Loddon Garden Village (Policy SS13) is expected to be a modest settlement. <u>Minor settlements</u>	Overall, Policy SS2 is screened in for AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	9. Minor settlements are places which have limited services and facilities. In general they are small villages. These places will receive an appropriate level of planned housing growth, where opportunity exists, to support the evolution of the community in a way which respects its rural character. Beyond planned development through site allocations made in this plan or any applicable neighbourhood development plan, development will be limited to exception sites which accord with Policy H4. The following places are defined as minor settlements: Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield. <u>Countryside</u> 10. The countryside is defined as the area beyond the settlements defined in the settlement hierarchy. Except specific allocations identified in this plan, the countryside is not a location where additional development is planned, although limited types of development to support local needs and the rural economy will be supported in accordance with Policy XXX. Residential development proposals for rural exception affordable housing and First Homes will be supported in principle where they accord with any adopted local design policies.	
Policy SS3: Development within or adjacent to major and modest settlements	1. Within major and modest settlements, development proposals in addition to those specifically identified as allocations or areas of change in this plan, will be supported in principle. 2. Outside of the Green Belt, residential development proposals on unallocated sites adjacent to major and modest settlements will generally be refused unless all the following exceptional circumstances are met: a) The Housing Delivery Test indicates that the delivery of housing was below 75% of the housing requirement over the previous three years (unless permissions for housing in excess of 115% of the requirement over the same period have been granted); and b) The development proposal: i. Is relative to the scale of the shortfall evidenced in the Housing Delivery Test; ii. Is demonstrably deliverable within 5 years and will contribute towards addressing the shortfall evidenced in the Housing Delivery Test; iii. Is consistent with the role and function of the relevant settlement in the settlement hierarchy;	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates development criteria in relation to proposals within or adjacent to major and modest settlements. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS3 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	iv. Would integrate successfully with the community it adjoins having regard to core shape, form and size of the settlement, the mix of uses proposed and the design, layout and accessibility of the scheme; v. Is sustainably located where future residents would have realistic opportunities to use active and sustainable modes of transport for day-to-day travel and would not be reliant on private motor-vehicles; vi. Would not unacceptably compromise the visual or perceived separation of settlements; vii. Would not compromise the delivery of any other site allocations. 3. Proposals involving the partial or full redevelopment of previously developed land or providing exception housing in accordance with Policy H4 will be supported in principle where development would not unacceptably harm the character and appearance of the surrounding countryside and accord with any adopted local design policies.	
Policy SS4: Development within and adjacent to minor settlements	1. Within minor settlements, residential development proposals of up to 9 dwellings will be supported in principle. 2. Residential development proposals outside the Green Belt and on unallocated sites immediately adjacent to minor settlements will be refused. This includes circumstances where the Housing Delivery Test indicates that the delivery of housing was below 75% of the housing requirement over the previous three years. 3. As an exception, limited residential development proposals will only be supported where one of the following circumstances is met: a) The proposal involves the partial or full redevelopment of previously developed land which would not unacceptably harm the character and appearance of the surrounding countryside or the rural setting of the village; b) The proposal represents limited infilling of an otherwise built-up frontage and where the site is compatible with the core shape, form and size of the settlement; or c) The proposal constitutes exceptions housing in accordance with Policies H4.	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates development criteria in relation to proposals within or adjacent to minor settlements. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS4 is screened out from AA.
Policy SS5: Development in the countryside	1. The countryside, as defined on the policies map, will be recognised for its intrinsic character and beauty, and the wider benefits from natural capital and ecosystem services, in accordance with national policy. 2. Development proposals in the countryside will in general only be supported for the types of development set out below: a) The construction of new dwellings which accord with Policy H4: Exceptions sites, Policy H5: Rural workers' dwellings and Policy H10: Traveller sites; b) Development proposals for which land is allocated; c) Development which supports the rural economy and equestrian uses in accordance with Policy ER3: Supporting the rural economy and Policy DH7: Equestrian development; d) Low carbon and renewable energy generation schemes in accordance with Policy CE7: Low carbon and renewable energy generation;	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates development criteria in relation to proposals within the countryside. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	e) The re-use or conversion of existing buildings of permanent and substantial construction which would not require extensive reconstruction; f) The replacement, extension or alteration (including sub-division) of existing buildings of permanent and substantial construction, and which do not lead to disproportionate increases in scale, form or footprint beyond the original building; g) Redevelopment or infilling of previously developed land; h) Agricultural and forestry development that is demonstrated to be reasonable and proportionate to the need; i) Outdoor sports, recreation, leisure and nature conservation development that is demonstrated to be necessary, reasonable and proportionate for the use; j) The provision of essential community facilities which cannot be located within settlement boundaries and are demonstrated to be necessary, reasonable and proportionate to the use; k) The provision of essential utilities and infrastructure (including development for strategic transport infrastructure which can demonstrate a requirement for a countryside location), and cemeteries and burial grounds; or l) Minerals and waste development in accordance with relevant policies in the minerals and waste local plan. 3. All development proposals within the countryside must take a landscape led approach to development in accordance with Policy NE5 and, where applicable: a) Contribute to and enhance the local, natural and historic environment; and b) Be of a scale, nature and location within the countryside that is appropriate with regard to its use; and c) Be sited and designed to minimise visual impact; and d) Not lead to the physical, visual or perceived coalescence of existing settlements either individually or cumulatively; and e) Not lead to isolated new dwellings; and f) Not lead to the need for additional buildings; and g) Maximise opportunities to make the location more sustainable; and h) Have no unacceptable adverse impacts on highway safety or have a severe residual cumulative impact on network capacity; and i) Maximise opportunities to improve public access to the countryside.	Overall, Policy SS5 is screened out from AA.
Policy SS6: Development in the Green Belt	1. The Green Belt, as defined on the policies map, will continue to be protected against inappropriate development in accordance with national planning policy. 2. Development proposals will only be permitted for the limited types of appropriate development set out below, unless very special circumstances can be demonstrated. 3. The construction of new buildings are considered inappropriate development in the Green Belt. Exceptions to this are: a) Buildings for agriculture and forestry; b) The provision of appropriate facilities (in connection with the existing use of land or a change of use) for outdoor sport, outdoor recreation, cemeteries and burial grounds and allotments; as long as the facilities preserve the openness of the Green Belt and do not conflict with the purposes of including land within it; c) The extension or alteration of a building provided that it does not result in disproportionate additions over and above the size of the original building;	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates development criteria in relation to proposals within the Green Belt. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS6 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	d) The replacement of a building, provided the new building is in the same use and not materially larger than the one it replaces; e) Limited infilling in villages; f) Limited affordable housing for local community needs; and g) Limited infilling or the partial or complete redevelopment of previously developed land, whether redundant or in continuing use (excluding temporary buildings), which would: i. Not have a greater impact on the openness of the Green Belt than the existing development; or ii. Not cause substantial harm to the openness of the Green Belt, where the development would re-use previously developed land and contribute to meeting an identified affordable housing need within the borough. 4. Other forms of development are also not inappropriate in the Green Belt, provided they preserve its openness and do not conflict with the purposes of including land within it. These are: a) Mineral extraction; b) Engineering operations; c) Local transport infrastructure which can demonstrate a requirement for a Green Belt location; d) The re-use or conversion of buildings provided that the buildings are of permanent and substantial construction; e) Material changes in the use of land (such as changes of use for outdoor sport or recreation, or for cemeteries and burial grounds); and f) Development brought forward under a Community Right to Build Order or Neighbourhood Development Order. 5. All development proposals should be carefully managed to minimise visual impacts and preserve the openness of the Green Belt and, where relevant, also meet the following criteria: a) For agriculture and forestry dwellings: i. There is a demonstrable essential and permanent need for the new dwelling based on the functional requirements of the enterprise it is intended to serve that cannot be met elsewhere; and ii. The dwelling is commensurate in scale and size to the needs of the enterprise it is intended to serve. b) For replacement buildings: i. The replacement building would be sited on or close to the position of the existing building, except where an alternative siting within the curtilage does not adversely affect the character of the area and demonstrably improves the openness of the Green Belt. c) For extensions and alterations to existing buildings: i. The existing building is of permanent and substantial construction and would not require extensive reconstruction; and ii. The scale, form and footprint of the proposed use would not have an adverse impact on the character of the area or openness of the Green Belt. d) For the re-use of buildings: i. The existing building is of permanent and substantial construction and its form is in keeping with its surroundings and would not require extensive reconstruction or a material change in size or scale;	

Policy Number / Name	Policy Text	LSEs Screening Outcome
	ii. The proposal would not result in the need to construct additional agricultural or other buildings, unless it can be demonstrated that the building to be re-used is no longer suitable for use; and iii. The proposed use is low employment or low traffic generating activity, suitable to its location and level of accessibility. 6. Development proposals outside the Green Belt, but conspicuous when viewed from it, should minimise any detrimental impacts to visual amenity and preserve the openness of the Green Belt.	
Policy SS7: Development in the vicinity of Atomic Weapons Establishments (AWE)	1. Development proposals within consultation zones surrounding AWE Burghfield and AWE Aldermaston as set by the Office for Nuclear Regulation or other relevant national and local agencies, and exceptionally beyond, will be managed in the interests of public safety, emergency response, and national security and defence requirements. 2. Development proposals will not be supported unless all the following criteria are met: a) The development, individually or cumulatively: i. Will not pose an external hazard to the current and future operation of AWE Burghfield and/or AWE Aldermaston; and ii. Will not adversely affect the current or future operation and security of AWE Burghfield and/or AWE Aldermaston. b) The increase in the number of people living, working, shopping and/or visiting the proposal (including at different times of the day), individually and cumulatively: i. Will not have an unacceptable risk to human health; and ii. Will not have an adverse impact on the AWE Off-Site Emergency Plan. 3. The assessment of development proposals will in particular have regard to the following: a) The nature, character and vulnerability of the proposed use; b) The potential increase in population; c) The scale of proposed development; d) The location of the proposed development; and e) Any specific advice from the emergency planners, AWE plc, and the Office for Nuclear Regulation.	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates development criteria in relation to proposals in the vicinity of Atomic Weapons Establishments (AWEs). However, the protection of AWEs has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS7 is screened out from AA.
Policy SS8: Meeting employment needs	1. The sustainable growth of office and industrial space will be supported to meet the diverse needs of the local economy. The appropriate intensification, redevelopment and upgrading of existing sites and premises will be encouraged and supported to ensure the efficient use of land, help meet future demands and respond to modern business needs. <u>Core Employment Areas</u> 2. Core Employment Areas will be retained and protected, and development proposals that facilitate their ongoing regeneration and evolution in accordance with economic needs and Policy ER1 will be supported. 3. The provision of new employment floorspace will be support by extensions to the following Core Employment Areas: a) Thames Valley Science and Innovation Park, Shinfield, for approximately 100,000 m² of research and development floorspace or equivalent trip generating activity within Class E(g), B2 and B8 uses; and	LSEs of this policy on Habitats Sites cannot be excluded. This is a development management policy that seeks to meet employment needs in Wokingham Borough. The required employment floorspace will be delivered through a range of committed developments, as well as a range of allocated employment / mixed use sites. Overall, a total of xxm² net employment floorspace will be delivered across the borough. By allocating specific quanta and geographic locations of employment development, the policy will influence the commuter routes taken by future residents. This could result in a net increase in traffic flows

Policy Number / Name	Policy Text	LSEs Screening Outcome
	b) Hogwood Farm Industrial Estate, Arborfield, for approximately 6,000 m² floorspace of B2 uses. <u>Other sites</u> 4. Development proposals for employment uses will also be supported by: a) Encouraging new employment uses within town, district and local centres, at an appropriate scale to those centres; b) Appropriate intensification, redevelopment and upgrading of existing sites in employment use, to make more efficient use of land, and support meeting future economic needs; 5. Outside Core Employment Areas, town, district and local centres and allocated sites, economic development will typically be limited to small scale proposals which satisfy the requirements of Policies ER3 and ER4.	within 200m of sensitive Habitats Sites, such as the Thames Basin Heaths SPA. The policy has the potential to shape the following impact pathway: Atmospheric pollution Overall, Policy SS8 is screened in for AA.
Policy SS9: Whiteknights Campus	1. The University of Reading is a national and international educational establishment of strategic importance, which will continue to adapt and expand over the plan period. The Whiteknights Campus as shown on the policies map will continue to be a focus for development associated with the University of Reading. Such development may include additional student, staff, teaching, research and enterprise accommodation, infrastructure and services, and sports and leisure facilities, among other uses. Access to and within the site will be improved where necessary. 2. Wokingham Borough Council will continue to work proactively with the University of Reading and Reading Borough Council to support the continued development of Whiteknights Campus as a focus for the University of Reading, to allow the University to continue to fulfil its important role in the economic success of the area. 3. Where development would result in a material need for additional students to be housed, it should be supported by an appropriate increase in existing or planned student accommodation. Provision of new student accommodation on the Whiteknights Campus, or as a reconfiguration or extension of nearby dedicated accommodation, will therefore be acceptable subject to other policies in the Plan. 4. Development proposals will accord with the following criteria: a) Conserve and where possible enhance the historic parkland landscape, heritage assets and their settings; b) The open areas and the character of the area are respected; c) Areas of wildlife significance (including Local Wildlife Sites) and current or potential green and blue infrastructure networks will be retained and enhanced, and will not be detrimentally affected by development, including through light effects; d) The safety of those using the campus (including pedestrian and highway safety issues and designing out crime) will be maintained or enhanced; e) No significant detrimental impacts on the amenity of neighbouring residential properties from the development, including from noise and parking; and f) The loss of undeveloped areas on the site will be weighed against the benefits of development to the wider community.	LSEs of this policy on Habitats Sites cannot be excluded. This policy recognises the national and international importance of the University of Reading. It specifies that the Whiteknights Campus will be the focus of future development, such as additional staff / student accommodation, infrastructure and sports and leisure facilities. While the policy does not stipulate a specific quantum of growth, it clearly identifies the geographic location of additional accommodation. This would lead to an increase in the local population (with associated higher demand on recreational spaces) and car-based traffic. The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Overall, Policy SS9 is screened in for AA.
Policy SS10: Meeting our housing needs	Provision will be made for a minimum of 12,763 net additional dwellings for the period 1 April 2023 to 31 March 2040, an average of 751 dwellings per annum.	LSEs of this policy on Habitats Sites cannot be excluded.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		This policy provides for a minimum of 12,763 net additional dwellings in Wokingham Borough between 2023 and 2040, equating to an average of 751 dwellings annually. The increase in Wokingham Borough's population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. Whereas, an increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds. The policy has the potential to shape the following impact pathway: • Recreational pressure • Atmospheric pollution Overall, Policy SS10 is screened in for AA.
Policy SS11: Arborfield Green Strategic Development Location	1. The area identified as Arborfield Green Strategic Development Location, as shown on the Policies Map, is allocated for a sustainable, well designed mixed-use development. 2. The development will be delivered in accordance with the development, place shaping and delivery principles set out below. Development principles 3. Phased delivery of a) Around 3,047 dwellings comprising: i. 2,137 dwellings through extant planning permissions, resolutions to grant planning permission; ii. 600 dwellings on land to the north of Arborfield Studios, known as Barkham Square; iii. 300 dwellings by optimizing density at land currently occupied by Arborfield Studios; iv. 10 dwellings at Westwood Yard, Sheerlands Road. and including: i. 40% affordable homes in accordance with Policy H3; ii. 25 self and custom build service plots;	LSEs of this policy on Habitats Sites cannot be excluded. This policy specifies the Arborfield Green Strategic Development Location as a focal point for mixed-use development, including the delivery of the following: • 600 dwellings at Barkham Square • 300 dwellings through optimising density at Arborfield Studios • 10 dwellings at Westwood Yard, Sheerlands Road • 10,000m² of employment floorspace • 5 Gypsy and Traveller pitches

Policy Number / Name	Policy Text	LSEs Screening Outcome
	iii. 5 Gypsy and Traveller pitches ; and iv. Specialist accommodation, including accommodation for the older persons. b) Around 6,000m2 of employment floorspace. c) One 2-form entry primary school (including appropriate onsite early years provision) with potential to expand to 3-form entry in the future. The school should include space for the integrated teaching of pupils with special educational needs and disabilities. d) A district centre providing a range of services and facilities in a location central to the planned housing, to include retail, leisure, employment, cultural, and health uses. e) Two local centres providing day to day retail and other local community uses. f) A solution to avoid and mitigate the impact of development upon the Thames Basin Heaths Special Protection Area through provision of sufficient Suitable Alternative Natural Greenspace (SANG) (subject to monitoring of the quality and quantity standards). Place shaping principles 4. The siting, layout and form of development, including landscape should: a) Protect and retain the physical, visual and perceived separation of the defined settlements of Arborfield Cross, Barkham Hill and Finchampstead North; b) Achieve climate resilient neighbourhoods through the application of adaptation and mitigation methods, including embedding passive design principles and energy demand reduction measures in the sustainable design and construction of buildings and homes; c) Incorporate measures to conserve and enhance heritage assets and their settings, through appropriate design and the provision of sufficient space; and d) Locate new buildings outside areas of flood risk, with development planned for sequentially, by placing the most vulnerable development in the lowest areas of flood risk. e) Draw on the recreational and ecological opportunities of watercourses. Delivery principles 5. The delivery of the site must be supported by a comprehensive package of infrastructure to support a thriving and healthy community, including the following: Masterplanning 6. To ensure ensure that development comes forward in a strategic, coordinated and comprehensive manner, delivery should be led by a masterplan that demonstrates how the principles established in this policy and any supplementary guidance have been considered so as to ensure high quality development with a distinctive character. The masterplan must provide: a) A coordinated and comprehensive approach to development, which demonstrates how the proposed development will integrate with the planned and permitted development within the SDL; b) A strategy for the quantum and distribution of land uses, access points, design and layout principles (including a design code), which draws on a detailed understanding of the area's characteristics, opportunities and constraints; and	The increase in the local population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. Whereas, an increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds. The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Importantly, the policy also specifies that the development must deliver measures to mitigate recreational pressure in the Thames Basin Heaths SPA, such as by providing sufficient SANG space on-site. The policy also stipulates that the development should prioritise active travel modes by providing connected greenways throughout the site. These policy mechanisms help address the impact pathways identified above. Overall, Policy SS11 is screened in for AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	c) A strategy for the timely delivery of facilities and infrastructure necessary to support the delivery of the SDL. Drainage and flood alleviation 7. Development proposals should respond to and implement a comprehensive drainage and flood alleviation strategy that: a) Provides high quality sustainable drainage systems (SuDS) that are integrated into the wider landscape and green and blue infrastructure strategy, including mitigation at source and makes a positive contribution to attractive open spaces, and improvements to biodiversity and water quality; and b) Establishes clear and robust arrangements for future maintenance. Biodiversity 8. Development proposals should respond to and implement a comprehensive ecological strategy that: a) Achieves a measurable biodiversity net gain of at least 10% as calculated using the latest statutory metric; and b) Provide measures to avoid and mitigate the impact of development on the Thames Basin Heaths Special Protection Area. This will include the provision of sufficient and accessible Suitable Alternative Natural Greenspace within the SDL (as set out in Policy NE3). Transport 9. Development proposals should respond to and implement a sustainable transport and movement strategy that has been informed by a detailed Transport Assessment and provides: a) Improvements to the quality and frequency of public transport services, such as corridor routes to Bracknell, Reading, Winnersh and Wokingham; b) Prioritisation of cycle and pedestrian movements through the site, supported by an internal network of Greenways to connect to existing and new communities at Arborfield SDL, at Finchampstead North and Crowthorne and local employment opportunities; c) Prioritisation of cycle and pedestrian movements through the SDL to maximise connectivity and accessibility to the district centre and planned education provision; d) Prioritisation of pedestrian movements to maximise connectivity to the Hazebrouck Meadows Suitable Alternative Natural Green Space (SANG); e) Improvements to transport capacity along Barkham Road, the A327 (to both the M3 and Reading) and routes towards Bracknell and Wokingham; and f) Improvements to the management of general traffic, including the consideration of traffic calming measures.	
Policy SS12: South Wokingham Strategic	1. The area identified as South Wokingham Strategic Development Location, as shown on the Policies Map, is allocated for a sustainable, well-designed, mixed-use development. 2. The development will be delivered in accordance with the development, place shaping and delivery principles set out below.	LSEs of this policy on Habitats Sites cannot be excluded.

Policy Number / Name	Policy Text	LSEs Screening Outcome
Development Location	Development principles: 3. Phased delivery of: a) Around 2,975 dwellings comprising: i. 1,875 dwellings through extant planning permissions and completions; ii. 1,100 dwellings on land south of Waterloo Road, of which at least 980 dwellings are to be delivered by 31st March 2040. and including: iii. 40% affordable homes in accordance with Policy H3; iv. 25 self-build and custom serviced plots; v. 6 Gypsy and Traveller pitches; and vi. Specialist accommodation, including accommodation for older persons. b) Two primary schools (including appropriate onsite early years provision: i. One 2-form entry primary school within the area that has planning permission; and ii. One 1-form entry primary school within the planned development on land south of Waterloo Road. Each school should include space for the integrated teaching of pupils with special educational needs and disabilities. c) Appropriate retail centres providing appropriate day-to-day retail facilities. d) A sports hub at Gray's Farm providing open space, sports and leisure facilities and other community uses. e) A solution to avoid and mitigate the impact of the development upon the Thames Basin Heaths Special Protection Area through provision of sufficient Suitable Alternative Natural Greenspace (SANG) (subject to monitoring of the quality and quantity standards). Place shaping principles 4. The siting, layout, form, design and landscaping of development should: a) Protect and maintain the physical, visual and perceived separation of the defined settlements of Wokingham, Crowthorne / Pinewood (Crowthorne), Finchampstead North and Bracknell; b) Achieve climate resilient neighbourhoods through the application of adaptation and mitigation methods, including embedding passive design principles and energy demand reduction measures in the sustainable design and construction of buildings and homes; c) Incorporate measures to respect the setting of Holme Green Lane; d) Incorporate measures to conserve and enhance heritage assets and their settings, through appropriate design and the provision of sufficient space; e) Locate new buildings outside areas of flood risk, with development planned for sequentially, by placing the most vulnerable development in the lowest areas of flood risk; and f) Draw on the recreational and ecological opportunities of the Emm Brook and its tributary by utilising its role and function in natural flood management and biodiversity enhancement; and	This policy specifies the South Wokingham Strategic Development Location as a focal point for mixed-use development, including the delivery of the following: 1,100 dwellings on land south of Waterloo Road (980 dwellings of which are to be delivered by March 2040) The increase in the local population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. An increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds. The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Importantly, the policy also specifies that the development must deliver measures to mitigate recreational pressure in the Thames Basin Heaths SPA, such as by providing sufficient SANG space within and adjacent to the site. The policy also stipulates that the development should prioritise active travel modes by providing new and improved off-site connections to / from surrounding communities, services and employment opportunities. These policy mechanisms help address the impact pathways identified above. Overall, Policy SS12 is screened in for AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	increasing accessibility to watercourses as part of the provision of a continuous, high quality and attractive and accessible open space network. Delivery principles 5. The delivery of the SDL must be supported by a comprehensive masterplan and package of infrastructure to support a thriving and healthy community, including the following: Masterplanning 6. To ensure that development comes forward in a strategic, coordinated and comprehensive manner, delivery should be led by a masterplan that demonstrates how the principles established in this policy and any supplementary guidance have been considered so as to ensure high-quality development with a distinctive character. The masterplan must provide: a) A coordinated and comprehensive approach to development, which demonstrates how the proposed development will integrate with the planned and permitted development within the SDL; b) A strategy for the quantum and distribution of land uses, access points, design and layout principles (including a design code), which draws on a detailed understanding of the area's characteristics, opportunities and constraints; and c) A strategy for the timely delivery of facilities and infrastructure necessary to support the delivery of the SDL. Drainage and flood alleviation 1. Development proposals should respond to and implement a comprehensive drainage and flood alleviation strategy that: a) Provides high quality sustainable drainage systems (SuDS) that are integrated into the wider landscape and green and blue infrastructure strategy, including mitigation at source and makes a positive contribution to attractive open spaces, and improvements to biodiversity and water quality; and b) Establishes clear and robust arrangements for future maintenance. Biodiversity 2. Development proposals should respond to and implement a comprehensive ecological strategy that: a) Achieves a measurable biodiversity net gain of at least 10% as calculated using the latest statutory metric; and b) Provide measures to avoid and mitigate the impact of development on the Thames Basin Heaths Special Protection Area. This will include the provision of sufficient and accessible Suitable Alternative Natural Greenspace within the SDL (as set out in Policy NE3). Transport	

Policy Number / Name	Policy Text	LSEs Screening Outcome
	3. Development proposals should respond to and implement a sustainable transport and movement strategy that has been informed by a detailed Transport Assessment and provides: - New and improved off-site connections for pedestrians and cyclists, providing safe, suitable and convenient access to surrounding communities, facilities, services and employment opportunities, including those in Wokingham, Crowthorne and Bracknell; and - Highway improvements along the A321 and A329 corridors and route of the South Wokingham Distributor Road (SWDR), such as introducing suitable and focused congestion management measures to control access by general traffic, other than by active travel and public transport services;	
Policy SS13: Loddon Valley Garden Village	- The area identified as Loddon Valley Garden Village Strategic Development Location, as shown on the policies map, is allocated for a beautifully and imaginatively designed community including housing, employment, social and physical infrastructure. - The garden village will be delivered in accordance with the development, place shaping, and delivery principles set out below. <u>Development principles</u> Phased delivery of: - Around 3,930 dwellings, of which at least 2,700 dwellings will be delivered by 31st March 2040, including: 40% affordable homes, in accordance with Policy H3; 100 custom and self build serviced plots; 20 Gypsy and Traveller pitches; and - Specialist accommodation, including accommodation for older persons. - Around 100,000 m² of research and development floorspace or equivalent trip generating activity within use class E(g) and other complementary uses, through an extension to the Thames Valley Science and Innovation Park. - Schools, including: - Two 3-form entry primary schools (including appropriate onsite early years provision); and - An 8-form entry secondary school, with additional land reserved to enable expansion to 12-form entry with sixth form. Each school should include space for the integrated teaching of pupils with special educational needs and disabilities. - A district centre providing a range of services and facilities in a location central to the planned housing, to include retail, leisure, employment, cultural, and health uses;	LSEs of this policy on Habitats Sites cannot be excluded. This policy specifies the South Wokingham Strategic Development Location as a focal point for mixed-use development, including the delivery of the following: 3,930 dwellings (2,700 dwellings of which are to be delivered by March 2040) 100,000m² of research and development floorspace (or equivalent use class E(g)) The increase in the local population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. An increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds. The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Importantly, the policy also specifies that the development must deliver a multi-functional country park (incorporating the River Loddon and Barkham Brook; also accessible to settlements beyond the garden

Policy Number / Name	Policy Text	LSEs Screening Outcome
	e) Two local centres providing day to day retail and other local community uses; and f) A multi-functional country park which is accessible to settlements beyond the garden village. <u>Place shaping principles</u> 3. The siting, layout, and form of development, including landscaping should: a) Draw on and enhance the site's context, changes in topography and its considerable natural assets such as the River Loddon and Barkham Brook, irreplaceable habitats, and hedgerows, trees, woodland and other features; b) Protect and retain the permanent physical and visual sense of separation of Arborfield and the defined settlements of Arborfield Cross and Shinfield; c) Be designed around a series of walkable neighbourhoods, each providing a range of accessible services and facilities. Where important local facilities are necessarily located beyond the neighbourhood, these should be linked by accessible and attractive routes which support and encourage active travel. The promotion of community facilities for shared use, such as outdoor and indoor sports and leisure provision will be strongly encouraged; d) Establish a comprehensive and integrated network of high-quality and attractive active travel routes, greenways and bus services within the garden village and to destinations in the wider area; e) Incorporate measures to protect the separate identity of Carter's Hill; f) Prioritise the conservation and enhancement of heritage assets, including listed buildings, through appropriate design and the provision of sufficient space; g) Locate district and local centres where they are accessible to the planned housing, and are of an appropriate scale to meet the day-to-day needs with a range of retail (including food store of around 2,500m²), leisure, cultural, community, health and service facilities; h) Locate higher development densities around the district and local centres, transport nodes, and along public transport routes subject to site specific sensitivities such as landscape, character and heritage; i) Locate new buildings, except those for water compatible uses, outside areas of flood risk, with development planned for sequentially, by placing the most vulnerable development in the lowest areas of flood risk; and j) Draw on the recreational and ecological opportunities of the River Loddon and Barkham Brook to create a multi-functional country park which provides coherent ecological networks, recreational opportunities and active travel connectivity. <u>Delivery principles</u> 4. The delivery of the garden village must be supported by a comprehensive package of infrastructure to support a self-sustaining, thriving and healthy community including the following. Masterplanning	village), connected and accessible high-quality open spaces and a network of attractive PRowS that permeate the site. The policy also stipulates that the development should prioritise active travel modes and high-quality public transport services. These policy mechanisms help address the impact pathways identified above. Overall, Policy SS13 is screened in for AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	5. To ensure that development comes forward in a strategic, coordinated and comprehensive manner, delivery should be led by a single agreed vision and masterplan for the whole garden village. The masterplan must be produced in partnership between the council, developers, landowners and key stakeholders, and involve consultation with the local community. Development proposals on individual land parcels must accord with the principles and requirements set out in the agreed masterplan. The masterplan must provide: a) A coordinated and comprehensive landscape led approach to development of the whole Loddon Valley Garden Village to avoid piecemeal and ad-hoc development proposals; b) A strategy for the quantum and distribution of land uses, access points, design and layout principles (including a strategic design code) which draws on a detailed understanding of the area's characteristics, opportunities and constraints; c) A strategy for the timely delivery of facilities and infrastructure necessary to support each phase of delivery and the garden village as a whole; d) A strategy for creating a distinctive and sustainable community, embracing the best of town and country and that delivers climate resilience; and e) A strategy for integrating and implementing arts and cultural activities including public art. Landscape and green and blue infrastructure 6. Development proposals should respond to and implement a comprehensive strategic landscape and green and blue infrastructure strategy that: a) Provides a new country park incorporating the River Loddon and Barkham Brook that contributes to, and enhances, coherent ecological networks and habitats, which are integrated into the wider green and blue infrastructure beyond the garden village; b) Protects and enhances the identified attributes of the River Loddon Valued Landscape and Barkham and Bearwood Valued Landscape; c) Provide a network of connected, accessible and high-quality open spaces that includes tree lined streets, opportunities for local food growing and natural play, that integrate with the wider green and blue infrastructure network; d) Retains, and incorporates appropriate buffers for, ancient woodland, ancient or veteran trees, watercourses, hedgerows, and other trees into the connected green and blue infrastructure of the site; e) Provides a network of safe, attractive, landscaped and accessible public rights of way across the site, and where appropriate demonstrates how they connect into the existing rights of way network; f) Contributes to establishing the Loddon long distance footpath for active travel; and g) Establishes clear and robust arrangements for future maintenance. Drainage and flood alleviation 7. Development proposals should respond to and implement a comprehensive drainage and flood alleviation strategy that:	

Policy Number / Name	Policy Text	LSEs Screening Outcome
	a) Provides high quality sustainable drainage systems (SuDS) that are integrated into the wider landscape and green and blue infrastructure strategy, including mitigation at source and makes a positive contribution to attractive open spaces, and improvement to biodiversity and water quality; b) Considers and takes opportunity as appropriate to improve the management of flood risk and reduce the risk of flooding to areas beyond the garden village; and c) Establishes clear and robust arrangements for future maintenance. Biodiversity 8. Development proposals should respond to and implement a comprehensive ecological strategy that: a) Achieves a measurable biodiversity net gain of at least 20% as calculated using the latest statutory metric; b) Shows how priority habitats and ecological features will be protected and enhanced, having particular regard to any Biodiversity Action Plan and Local Nature Recovery Strategy priorities; c) Provide a suitable buffer between the built development and ecological areas, including (but not limited to) Local Wildlife Sites, areas of irreplaceable habitat and areas of priority habitat; and d) Provide measures to avoid and mitigate the impact of development on the Thames Basin Heaths Special Protection Area. This will include the provision of sufficient and accessible Suitable Alternative Natural Greenspace on-site (as set out in Policy NE3). Housing 9. Development proposals should respond to and implement a comprehensive housing strategy that: a) Provides a mix of housing types, sizes (including those suitable for extended family living), and tenures that reflect the identified housing needs and demands as set out in the council's most up to date evidence of housing need; b) Applies designs which support spaces suitable for home working; and c) Shows how the mix of housing types, sizes and tenures will be coordinated through each phase of delivery. Employment and Jobs 10. Development proposals should contribute towards a wide range and mix of employment, skills and training opportunities in different sectors of the economy, including small-scale business space and small/medium sized flexible units, within district and local centres as appropriate. Sustainable design and construction 11. Development proposals should respond to and implement a comprehensive energy and sustainability strategy that:	

Policy Number / Name	Policy Text	LSEs Screening Outcome
	a) Applies passive design principles to ensure that form, orientation, building typologies, development densities and green and blue infrastructure are appropriately used to reduce energy demand and deliver climate resilient neighbourhoods; b) Implements the energy hierarchy at all scales and demonstrates a fabric first approach; c) Ensures that the total operational energy demand at completion of the Loddon Valley Garden Village is met from renewable or low-carbon sources on site, prioritising opportunities for heat networks, community energy initiatives or other solutions which take advantage of the scale of the development; d) Provides measures to reduce the whole-life impacts by creating adaptable, durable buildings and employing construction methods and materials which minimise embodied emissions; and e) Provide measures to reduce water consumption. Transport 12. Development proposals should respond to and implement a comprehensive sustainable transport strategy that has been informed by a detailed Transport Assessment and: a) Provides layouts, street designs and associated measures that are safe, suitable and convenient for all users, that prioritise active travel, and facilitates high quality public transport services both within and to key destinations beyond the garden village. This will include: i. The phased delivery of active travel and public transport measures; ii. An on-site dedicated network of segregated facilities for pedestrians and cyclists that integrate with active travel networks, including the Public Rights of Way network; and iii. The provision of new and improved off-site connections for pedestrians and cyclists, providing safe, suitable and convenient access to the surrounding communities, facilities, services and employment opportunities including the Thames Valley Science and Innovation Park, Mere oak Park and Ride, Green Park, Green Park Station, Shinfield, Lower Earley, Winnersh and Winnersh Triangle Station. b) Demonstrates that the design of the access arrangements and the associated highway improvements take into account all the planned development; and c) Ensures that development will not have a severe adverse impact on the local and strategic highway networks, nor an unacceptable impact upon highway safety, following the inclusion of suitable measures to mitigate the impact. Utilities 13. Development proposals should respond to and implement a comprehensive utility and digital infrastructure and communications strategy. This will include the: a) The phased delivery of water, foul water, sewerage and electricity upgrades; and b) The phased delivery of Fibre to the Premises (FTTP) connectivity, including access to full-fibre gigabit-capable broadband; and 4G and 5G mobile technologies.	

Policy Number / Name	Policy Text	LSEs Screening Outcome																												
	Minerals and waste 14. The potential for on-site minerals resources which may be winnable through prior extraction should be informed by minerals resource assessments. Where viable, development proposals should respond and implement a strategy for prior extraction. Stewardship 15. Development proposals should proceed in accordance with an agreed strategy for the long-term governance and stewardship arrangements for community assets, including country park, open spaces, public realm areas and community and other relevant facilities.																													
Policy SS14: Sites allocated for residential, including residential as part of mixed-use development	1. The sites listed below and defined on the policies map, are allocated for residential development (including residential as part of mixed-use development). 2. Development proposals should be in accordance with the site specific requirements set out in the development guidelines, as set out in Appendix E. In meeting the requirements and consideration, flexibility may be applied to allow for material changes in circumstance as a result of the passage of time or to enable alternative solutions that will deliver the same, or preferably, a better planning outcome. 3. Development proposals are expected to come forward through a design led approach, involving the local community. For the larger sites, and where outlined in the development guidelines, it will be necessary for a masterplan and a strategic design code to be prepared. <table><tr><th>Ref</th><th>Site name</th><th>Approx No. dwellings</th><th>Permission / resolution to grant</th></tr><tr><td>SS14.1</td><td>High Barn Farm, Commonfield Lane, Barkham*</td><td>20</td><td>-</td></tr><tr><td>SS14.2</td><td>Honeysuckle Lodge, Commonfield Lane, Barkham*</td><td>4</td><td>-</td></tr><tr><td>SS14.3</td><td>Woodlands Farm, Wood Lane, Barkham*</td><td>15</td><td>-</td></tr><tr><td>SS14.4</td><td>Land west of Park Lane, Charvil</td><td>61</td><td>-</td></tr><tr><td>SS14.5</td><td>24 Barkham Ride, Finchampstead</td><td>30</td><td>-</td></tr><tr><td>SS14.6</td><td>31-33 Barkham Ride, Finchampstead</td><td>80</td><td>Yes</td></tr></table>	Ref	Site name	Approx No. dwellings	Permission / resolution to grant	SS14.1	High Barn Farm, Commonfield Lane, Barkham*	20	-	SS14.2	Honeysuckle Lodge, Commonfield Lane, Barkham*	4	-	SS14.3	Woodlands Farm, Wood Lane, Barkham*	15	-	SS14.4	Land west of Park Lane, Charvil	61	-	SS14.5	24 Barkham Ride, Finchampstead	30	-	SS14.6	31-33 Barkham Ride, Finchampstead	80	Yes	LSEs of this policy on Habitats Sites cannot be excluded. This policy allocates dwellings in a range of residential sites throughout Wokingham Borough, both in sites of 1ha or more or sites less than 1ha. All developments will come forward through a design-led approach, with larger sites requiring a detailed masterplan. The increase in the local population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. An increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Overall, Policy SS14 is screened in for AA.
Ref	Site name	Approx No. dwellings	Permission / resolution to grant																											
SS14.1	High Barn Farm, Commonfield Lane, Barkham*	20	-																											
SS14.2	Honeysuckle Lodge, Commonfield Lane, Barkham*	4	-																											
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SS14.6	31-33 Barkham Ride, Finchampstead	80	Yes																											

Policy Number / Name	Policy Text				LSEs Screening Outcome
	SS14.7	Greenacres Farm, Nine Mile Ride, Finchampstead	100	-	
	SS14.8	Hillside, Lower Wokingham Road, Finchampstead	15	-	
	SS14.9	39-53 New Road, Ruscombe	20	-	
	SS14.10	Land to the rear of Northbury Lane, Ruscombe	12	-	
	SS14.11	Land north of Arborfield Road, Shinfield	191	-	
	SS14.12	Land east and west of Hyde End Road, Shinfield	175	-	
	SS14.13	Rustlings, The Spring and land rear of Cushendall, Shinfield Road, Shinfield (North)	10	-	
	SS14.14	69 King Street Lane, Sindlesham	28	Yes	
	SS14.15	Land off Wheatsheaf Close, Sindlesham	24	-	
	SS14.16	Land east of Pound Lane, Sonning	50	Yes	
	SS14.17	Land at Sonning Farm, Sonning	25	-	
	SS14.18	Land west of Trowes Lane, Swallowfield	81	Yes	
	SS14.19	Land at Bridge Farm, New Bath Road, Twyford	200	Yes	
	SS14.20	Land west of Old Forest Road, Winnersh	50	-	
	SS14.21	Land off Poplar Lane and Watmore Lane, Winnersh	111	Yes	
	SS14.22	Land rear of the Bulldog garage and BP garage, Reading Road, Winnersh	34	-	
	SS14.23	Winnersh Plant Hire, Reading Road, Winnersh	60	-	

Policy Number / Name	Policy Text				LSEs Screening Outcome
	SS14.24	Woodside, Blagrove Lane, Wokingham*	4	-	
	SS14.25	Rosery Cottage and 171 Evendons Lane, Wokingham**	35	Yes	
	SS14.26	Bridge Retail Park, Finchampstead Road, Wokingham	59	-	
	SS14.27	Land south of London Road, Wokingham	12	-	
	SS14.28	Land adjacent to Amen Corner, north of London Road, Bracknell	45	Yes	
	SS14.29	Station Industrial Estate, Oxford Road, Wokingham	40	-	
	SS14.30	Wokingham Borough Council offices, Shute End, Wokingham	100	-	
	SS14.31	Land at the north corner of Wellington Road and Station Road, Wokingham	20	-	
	*Sites allocated for Gypsy and Traveller pitches or Travelling Showpeople plots. **Site capacity based on or includes a care home adjustment factor.				
Policy SS15: Securing Infrastructure	- Development proposals will only be supported where the impacts are mitigated through the timely provision of necessary local or strategic infrastructure. - Development proposals must: - Secure necessary new, and/or improvements to existing, infrastructure via direct provision or an appropriate contribution that makes the development acceptable; - Ensure appropriate arrangements are in place to secure the future management and maintenance of infrastructure that is or will be provided; and - Plan and design utilities from the outset to minimise future disruption when upgrades and / or repairs are required. Legal obligations and/or planning conditions will be used to secure the necessary improvements to, or the provision of, infrastructure to the required standard. - Where full mitigation measures and contributions are not delivered or provided, a development proposal is likely to be unsustainable and will only be permitted where:				There are no LSEs of this policy on Habitats Sites. This is a development management policy that secures the timely provision of adequate infrastructure for new developments. For example, infrastructure upgrades should be directly provided, or an appropriate contribution made, by planning proposals. Arrangements must also be in place to secure the future management and maintenance of essential infrastructure.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	a) The application is supported by a viability assessment that has been produced in accordance with national guidance and which has been assessed by the Council as appropriate and based on reasonable assumptions; b) The value of the legal obligations that are to be secured have been maximised having regard to likely viability; c) Where appropriate, a clawback mechanism has been incorporated into the legal obligation to ensure that additional mitigation is secured in the event that final development is more viable than anticipated at the time of permission; and d) If following a viability assessment process, the benefits of the development outweigh the ability to mitigate the impacts in full having regard to other material considerations.	Securing adequate infrastructure (e.g. sewerage capacity) is in place is generally regarded as positive for the environment, including Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS15 is screened out from AA.
Policy SS16: Safeguarded routes	1. Land is safeguarded to support the delivery of strategic transport infrastructure as listed below and shown on the Policies Map. a) Improvements to highway capacity along A327 (including Eversley Bypass, subject to review by Hampshire County Council as lead authority); and b) Land for a Third Thames Crossing from Thames Valley Park Drive/A3290 into South Oxfordshire. The Council will work with appropriate partners, stakeholders, and other bodies to deliver these schemes. 2. Development proposals which would prejudice the delivery of these schemes, or their effective operation, will generally be refused.	There are no LSEs of this policy on Habitats Sites. This is a development management policy that safeguards land for the provision of strategic transport infrastructure, such as improvements to highway capacity along the A327 and a third Thames Crossing into South Oxfordshire. However, the policy merely safeguards land rather than explicitly allocating such land for development. Any planning applications that are progressed in the future will be subject to project-level ecological assessments, including an HRA (where relevant). Overall, Policy SS16 is screened out from AA.
Policy SS17: Transport improvements	1. The council will work with appropriate partners, stakeholders, and bodies to deliver the following ambitions where suitable and viable: <u>Active travel</u> a) Measures which tackle severance and enhance active travel networks to improve access to services and facilities, particularly in town and village centres; b) Delivery of Greenways to link new developments to the existing settlements and points of interest; c) Improvements to increase active travel, including new or enhanced infrastructure and measures that improve the safety and/or amenity of travel, having regard to relevant cycling and walking strategies as appropriate;; d) Delivery of facilities that support the efficient shift between different active and sustainable transport modes; <u>Public transport</u> e) Access improvements to train stations by active and sustainable modes of transport, as well as potential parking improvements where this is appropriate;	There are no LSEs of this policy on Habitats Sites. This is a development management policy that identifies transport improvements across Wokingham Borough. The identified measures predominantly focus on active travel and public transport services. For example, active travel networks will be enhanced to reduce severance between settlements. Furthermore, cycling and walking infrastructure will be improved to increase the proportion of active travel (e.g. through cycling and walking strategies). It is noted that this policy is positive for Habitats Sites that are sensitive to atmospheric pollution from vehicular traffic. Reducing the

Policy Number / Name	Policy Text	LSEs Screening Outcome
	f) Improvements to the Reading to London Paddington Great Western Mainline; g) Improvements to the Reading to London Waterloo line ; h) Support for western rail link to Heathrow Airport from Great Western Mainline; i) Support for southern rail link to Heathrow Airport from South West Mainline; j) Improvements to the quality and frequency of bus services along any part of the network, having regard to relevant strategies as appropriate; k) Improvements to bus infrastructure including priority measures as set out in the most up to date Bus Service Improvement Plan; l) Improvements to create transport hubs at appropriate locations within the borough, which may include provision or expansion of Park and Ride facilities; m) Measures to maintain the operation of the rail and road network during times of flooding; <u>Road network</u> n) Opportunities to reduce traffic in defined settlements and centres within the retail hierarchy potentially including diversion of traffic onto (new or existing) alternative routes; o) Targeted highway improvements to reduce congestion and tackle the adverse environmental impacts of traffic.	overall volume of cars on local roads will likely help decrease the number of cars driving within 200m of sensitive habitats. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy SS17 is screened out from AA.
Chapter 6: Climate Change and Energy		
Policy CE1: Design Principles for Efficient Buildings	1. Development proposals should adequately demonstrate the following design principles have been considered, in the order listed: a) Orientation of buildings – positioning buildings to maximise opportunities for useful solar gain and minimising winter cold wind heat loss; b) Form of buildings – creating buildings that are more efficient to heat and stay warm in colder conditions and stay cool in warmer conditions because of their shape and design; c) Fabric of buildings – a) minimising the operational impacts of development through use of materials and building techniques that reduce heat and energy needs and b) reducing the embodied impacts of development by specifying materials with a lower embodied carbon content and/or high practical recyclable content and designing for durability, adaptability and deconstruction; d) Heat supply – meeting a building's space-heating needs without direct use of fossil fuels. This means no connection to the gas network or use of oil, bottled gas, coal or other fossil fuels; and e) Renewable energy generation – generating enough energy from renewable sources onsite (and preferably on plot) to meet reasonable estimates of all regulated and unregulated total annual energy demand across the year. An Energy and Sustainability statement, as required by Policies CE2 and CE3, must set out all practical steps taken to meeting each of the above principles.	There are no LSEs of this policy on Habitats Sites. This is a development management policy that specifies design principles for efficient buildings to help tackle the climate crisis. It encompasses a range of parameters, such as the orientation and fabric of buildings. While increasing the energy efficiency of buildings is considered positive for the environment, it has no bearing on the condition of Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE1 is screened out from AA.
Policy CE2: Environmental	<u>Energy Standards</u> 1. Non-residential development proposals involving new buildings must be supported by an Energy and Sustainability Statement which confirms that the proposals satisfy the following requirements:	There are no LSEs of this policy on Habitats Sites.

Policy Number / Name	Policy Text	LSEs Screening Outcome
standards for Non-Residential development	a) The development proposal generates at least the same amount of renewable electricity on-site (and preferably on-plot) as it demands over the course of a year, such demand including all energy use (regulated and unregulated), calculated using a methodology proven to accurately predict a building's actual energy performance; and b) To help achieve point a) above, non-residential development proposals are expected to achieve a site average space heating demand of around 15-20kWh/m²/year and a site average total energy demand of no more than 70 kWh/m²/year through a 'fabric first' approach to construction. No individual unit is to have a total energy demand in excess of 90 kWh/m²/year, irrespective of amount of on-site renewable energy production. (For the avoidance of doubt, 'total energy demand' means the amount of energy used as measured by the metering of that building, with no deduction for renewable energy generated on site). 2. The Energy and Sustainability Statement must include details of assured performance arrangements, calculated using a methodology proven to accurately predict a buildings true energy performance, such as CIBSE TM54 or the PHPP, against 1 a) and b) above. As a minimum, this will require: a) The submission of 'pre-built' estimates of energy performance; and b) Prior to each building being occupied, the submission of updated, accurate and verified 'as built' calculations of energy performance. Such a submission should also be provided to the first occupier (including a Non-Technical Summary of such estimates). 3. Proposals should demonstrate a deliverable commitment to on-going monitoring of energy consumption, post occupation, which has the effect, when applicable, of notifying the occupier that their energy use appears to exceed significantly the expected performance of the building, and explaining to the occupier steps they could take to identify the potential causes of such high energy use. Exceptional Basis Clauses 4. In those circumstances where 1 a) and/or b) are not met (though in all cases the energy performance arrangements of points 2 a) and b) are still required), the development must be considered against the following exception clauses: a) Clause 1 (technical or policy reasons): Where, on an exceptional basis, points 1 a) and/or b) cannot be met for technical (e.g. overshadowing), other policy reasons (e.g. heritage), or other technical reason linked to the unique purpose of the building (e.g. a building that is, by the nature of its operation, an abnormally high user of energy), then the Energy and Sustainability Statement must demonstrate both why they cannot be met, and the degree to which each of points 1 a) and b) are proposed to be met. A lack of financial viability will not be deemed either a technical or policy reason to trigger this exceptional basis clause. Where this exceptional basis clause is utilised, and where it the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more, then the applicant must either: i. Enter into an appropriate legal agreement which will either provide renewable energy infrastructure offsite equivalent to at least offsetting the additional energy requirements not achieved on site; or	This is a development management policy that stipulates energy and water standards for non-residential development. For example, proposals must be supported by an Energy and Sustainability Statement. Furthermore, developments must incorporate greywater recycling and rainwater harvesting measures, as well as permeable hard surfaces and green roofs (where feasible). Improving the water efficiency of future developments is associated with various positive environmental impacts. For example, it reduces the volume of polluted surface runoff and limits runoff to pre-development greenfield rates. However, there are no Habitats Sites with a strong dependency on water quality and adequate flow volumes in the ZoI of Wokingham Borough. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE2 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	ii. Enter into an appropriate legal agreement to provide a financial contribution to the council's carbon offset fund to enable the offsetting of the remaining performance not achieved on site; or iii. Demonstrate that the building/s will be connected to a decentralised energy network or combined heat and power unit. b) Clause 2 (use of an accredited certification scheme): To simplify (and hence speed up) the decision-making process, applicants are able to demonstrate, as an alternative to policy requirements 1 a) and b), that the development proposal achieves one of the following certifications: i. BREEAM: Outstanding or Excellent; ii. Passivhaus: Plus or Premium; iii. Passivhaus Classic, provided this is supplemented with evidence to demonstrate how point 1 of this policy will also be met; or iv. Any other recognised national independent accreditation scheme, provided such scheme is demonstrated to be consistent with the requirements of this policy. c) Clause 3 (viability): It is acknowledged that for development proposals on previously developed land, the full delivery of requirements 1 a) and b) may not be possible in some cases for viability reasons. Consequently, in such circumstances, an Energy and Sustainability Statement will still be required, and, if full delivery of requirements 1 a) and b) are not proposed to be met, must set out the degree to which the requirements are proposed to be met in order to enable the development to become viable. <u>Water standards</u> 5. To minimise impact on the water environment, all non-residential development proposals must: a) Incorporate greywater recycling and rainwater harvesting measures, where practicable; b) Incorporate measures such as smart metering, water saving and recycling measures, including retrofitting, to help to achieve lower water consumption rates and to maximise future-proofing; c) Ensure external hard surfacing is permeable (unless there are technical and unavoidable reasons for not doing so in certain areas) thereby reducing energy demand on the water recycling network; and d) Consider the potential to incorporate a green roof and/or walls as part of wider sustainable water management.	
Policy CE3: Environmental standards for Residential Development	<u>Energy Standards</u> 1. Residential development proposals involving new buildings must be supported by an Energy and Sustainability Statement which confirms that the proposals satisfy the following requirements: a) The development proposal generates at least the same amount of renewable electricity on-site (and preferably on-plot) as it demands over the course of a year, such demand including all energy use (regulated and unregulated), calculated using a methodology proven to accurately predict a building's actual energy performance; and b) To help achieve point 1 above, residential development is expected to achieve a site average space heating demand of around 15-20kWh/m²/year and a site average total energy demand of 35 kWh/m²/year, through a 'fabric first' approach to construction. No single dwelling is to have a total energy demand in excess of 60 kWh/m²/year, irrespective of amount of on-site	There are no LSEs of this policy on Habitats Sites. This is a development management policy that stipulates energy and water standards for residential development. For example, proposals must be supported by an Energy and Sustainability Statement. Furthermore, developments must meet a higher water efficiency of 105 litres per person per day (with 85 litres per person per day being encouraged). Residential developments should also integrate

Policy Number / Name	Policy Text	LSEs Screening Outcome
	renewable energy production. (For the avoidance of doubt, 'total energy demand' means the amount of energy used as measured by the metering of that home, with no deduction for renewable energy generated on site). 2. The Energy and Sustainability Statement must include details of assured performance arrangements, calculated using a methodology proven to accurately predict a buildings true energy performance, such as CIBSE TM54 or the PHPP, against 1 a) and b) above. As a minimum, this will require: a) The submission of 'pre-built' estimates of energy performance; and b) Prior to each dwelling being occupied, the submission of updated, accurate and verified 'as built' calculations of energy performance. Such a submission should also be provided to the first occupier (including a Non-Technical Summary of such estimates). 3. Proposals should demonstrate a deliverable commitment to on-going monitoring of energy consumption, post-occupation, which has the effect, when applicable, of notifying the occupier that their energy use appears to significantly exceed the expected performance of the building, and explaining to the occupier steps they could take to identify the potential causes of such high energy use. Exceptional Basis Clauses 4. In those circumstances where 1 a) and/or b) are not met (though in all cases the energy performance arrangements of points 2 a) and b) are still required), the development must be considered against the following exception clauses: a) Clause 1 (technical or policy reasons): Where, on an exceptional basis, points 1 a) and/or b) cannot be met for technical (e.g. overshadowing) or other policy reasons (e.g. heritage), then the Energy and Sustainability Statement must demonstrate both why they cannot be met, and the degree to which each of points 1 a) and b) are proposed to be met. A lack of financial viability will not be deemed either a technical or policy reason to trigger this exceptional basis clause. Where Clause 1 is utilised, and where the proposal is of 10 or more homes, then the applicant must either: i. Enter into an appropriate legal agreement which will either provide renewable energy infrastructure offsite equivalent to at least offsetting the additional energy requirements not achieved on site; or ii. Enter into an appropriate legal agreement to provide a financial contribution to the council's carbon offset fund to enable the offsetting of the remaining performance not achieved on site; or iii. Demonstrate that the residential units will be connected to a decentralised energy network or combined heat and power unit. b) Clause 2 (use of accreditation certification scheme): To simplify (and hence speed up) the decision-making process, applicants are able to demonstrate that they have met the requirements of points 1 a) and b) if they provide certified demonstration of compliance that the development proposal achieved one of the following certifications: i. Passivhaus Plus or Premium; or ii. Passivhaus Classic, provided this is supplemented with evidence to demonstrate how point 1 of this policy will also be met;	greywater recycling and rainwater harvest, as well as permeable hard surfaces and green roofs (where feasible). Improving the water efficiency of future developments is associated with various positive environmental impacts. For example, it reduces the volume of polluted surface runoff and limits runoff to pre-development greenfield rates. Reducing the water demand in residential developments also implies that there would be lower abstraction pressures on freshwater bodies. However, there are no Habitats Sites with a strong dependency on water quality and adequate flow volumes in the ZoI of Wokingham Borough. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE3 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	iii. Home Quality Mark; or iv. Any other recognised national independent accreditation scheme, provided such scheme is demonstrated to be consistent with the requirements of this policy. c) Clause 3 (viability): it is acknowledged that for development proposals on previously developed land the full delivery of requirements 1 a) and b) in this policy may not be possible in some cases for viability reasons. Consequently, in such circumstances, an Energy and Sustainability Statement will still be required, and, if full delivery of requirements 1 a) and b) are not proposed to be met, must set out the degree to which the requirements are proposed to be met in order to enable the development to become viable. <u>Water standards</u> 5. To minimise impact on the water environment, all residential development proposals must: a) Meet the higher water efficiency standard of 105 litres or less per person per day (excluding allowance of up to five litres for external water consumption). Development proposals which go further than this (to, for example, 85 litres per day per person) are encouraged. b) Incorporate greywater recycling and rainwater harvesting measures, where practicable; c) Incorporate measures such as smart metering, water saving and recycling measures, including retrofitting, to help to achieve lower water consumption rates and to maximise future-proofing; d) Ensure external hard surfacing is permeable (unless there are technical and unavoidable reasons for not doing so in certain areas) thereby reducing energy demand on the water recycling network; e) Consider the potential to incorporate a green roof and/or walls as part of wider sustainable water management; and f) Ensure, where possible, that residential garden areas include a rain harvesting water butt(s) of minimum 100 litre capacity.	
Policy CE4: Supporting a Circular Economy	1. In order to understand and reduce the lifecycle impacts of development, development proposals which demonstrate compatibility with, or furthering of, a strong circular economy in the local area will be supported in line with wider sustainable development objectives. 2. Residential development proposals of 10 dwellings or more, or non-residential development proposals of 1,000 m² or greater gross internal area, will be required to submit a circular economy strategy as part of the Energy and Sustainability Statement. Where the development proposal includes the demolition of existing buildings or structures, the circular economy strategy should include a pre-demolition audit quantifying the material to be deconstructed and identifying suitable recovery routes.	There are no LSEs of this policy on Habitats Sites. This development management policy supports a circular economy for Wokingham Borough, such as by requiring developments above a certain capacity / size to submit a circular economy strategy. While promoting the principles of circular economy is considered positive for the environment, it has no direct bearing on the condition of Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE4 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
Policy CE5: Embodied Carbon	- Development proposals should, where practical and viable, take opportunities to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials. Sustainability statements submitted in support of applications should detail how the need to reduce embodied carbon has influenced the design. - Residential development proposals of 50 dwellings or more, or non-residential development proposals of 5,000 m² or more gross internal area, will be required to submit a whole-life carbon assessments through a nationally recognised Whole Life-Cycle Carbon Assessment methodology and demonstrate actions taken to reduce life-cycle carbon emissions. This should explicitly set out what opportunities to lower a building's embodied carbon content have been considered, and which opportunities, if any, are to be taken forward. <u>Demolition</u> - To avoid the wastage of embodied carbon in existing buildings and avoid the creation of new embodied carbon in replacement buildings, there is a presumption in favour of repairing, refurbishing, re-using and re-purposing existing buildings over their demolition. Development proposals that would result in the demolition of a building (in whole or a significant part) should be accompanied by a full justification for the demolition per the requirements of Policy CE4: Supporting a circular economy. Demolition will only be acceptable where it is demonstrated that: - The building proposed for demolition is in a state of such disrepair that it is not practical or viable to be repaired, refurbished, re-used, or re-purposed; or - Repairing, refurbishing, re-using, or re-purposing the building would likely result in similar or higher up-front embodied carbon cost than if the building is demolished and a new building is constructed; or - Repairing, refurbishing, re-using, or re-purposing the building would create a building with such poor fabric performance that on a whole-life basis (i.e. considering embodied and operational emissions) a lower net carbon solution would result from demolition and re-build; or - Demolition of the building and construction of a new building or space would demonstrably deliver significant public benefits that outweigh the carbon savings which would arise from the building being repaired, refurbished, re-used, or re-purposed. - Applications within the countryside relating to the re-use or conversion of existing buildings will only be acceptable where they also meet the requirements of Policy SS5 or ER3 as applicable.	There are no LSEs of this policy on Habitats Sites. This development management policy stipulates that planning proposals should reduce their embodied carbon content, such as through the careful choice and sourcing of materials. Developments above a certain size / capacity must submit a Whole Life Cycle Carbon Assessment. While reducing the volume of embodied carbon content in developments is considered positive for the environment, it has no direct bearing on the condition of Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE5 is screened out from AA.
Policy CE6: Reducing Energy Consumption in Existing Buildings	- Development proposals which would result in improvements to the energy efficiency, carbon emissions and/or general suitability, condition and longevity of existing buildings will be supported in principle, with weight attributed to measures in proportion to the scale of improvement in fabric performance. - The sensitive retrofitting of energy efficiency measures and the appropriate use of micro-renewables in historic buildings, including listed buildings and buildings within conservation areas will be supported, providing no unacceptable impact to the significance of the heritage asset. - Development proposals which involve the change of use or redevelopment of an existing building, or an extension to an existing building, should take all opportunities to improve the energy efficiency (including the original building, if it is being extended).	There are no LSEs of this policy on Habitats Sites. This development management policy that seeks to reduce energy consumption in existing buildings, such as by sensitive retrofitting. While reducing energy consumption is considered positive for the environment, it has no direct bearing on the condition of Habitats Sites.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE6 is screened out from AA.
Policy CE7: Low Carbon and Renewable Energy Generation	<u>Energy generation schemes</u> 1. Development proposals for new standalone low carbon and renewable energy generation schemes and associated infrastructure, or extensions to existing schemes, will be supported where: a) They are of an appropriate size and scale, and do not give rise to unacceptable impacts on landscape, biodiversity, agricultural land quality and food production, heritage assets, and the character of the area; b) There are no unacceptable impacts on residential amenity, or the amenity of other sensitive neighbouring uses, by virtue of matters including noise, vibration, overshadowing, or shadow flicker; c) They demonstrate that a minimum of 10% biodiversity net gain will be achieved through the development actions; and d) Where relevant, they include a satisfactory scheme to restore the site to a quality of at least its original condition once operations have ceased. Where necessary, this will be secured by bond, legal agreement, or condition. Adverse effects will be weighed against the wider environmental, economic, social and community benefits provided by the proposal. In this regard, and as part of the planning balance, significant additional weight in favour of the proposal will arise for any proposal which is community-led for the benefit of that community. <u>End of life removal</u> 2. Development proposals will be required to make satisfactory provision for removal through the preparation of an 'End of Life Removal Scheme'. A scheme should demonstrate how any biodiversity net gain that has arisen on the site will be protected or enhanced further, and how the materials to be removed would, to a practical degree, be re-used or recycled. The scheme should be implemented within one year of the facility becoming non-operational.	There are no LSEs of this policy on Habitats Sites. This development management policy that pertains low carbon and renewable energy generation in Wokingham Borough. For example, it supports new standalone low carbon and renewable energy generation schemes, provided that a range of criteria is met. However, there should be no unacceptable impacts on biodiversity, which would include Habitats Sites. While promoting low carbon and renewable energy generation is considered positive for the environment, it has no direct bearing on the condition of Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy CE7 is screened out from AA.
Policy CE8: Protecting Renewable Energy Infrastructure	1. Development proposals should not significantly harm: a) The technical performance of any existing or approved renewable energy generation installation; b) The potential for optimisation of strategic renewable energy installations; and c) The availability of the resource, where the operation is dependent on uninterrupted flow of energy to the installation.	There are no LSEs of this policy on Habitats Sites. This development management policy that protects the existing renewable energy infrastructure. While protecting such infrastructure is considered positive for the environment, it has no direct bearing on the condition of Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		Overall, Policy CE8 is screened out from AA.
Chapter 7: Connections		
Policy C1: Active and sustainable transport and accessibility	1. Development proposals must support the delivery of active and sustainable transport measures. 2. Development proposals should prioritise travel by active means (including walking, cycling and wheeling), public transport, and incorporate inclusive infrastructure which provides connections to and within the development. This should focus on making the most efficient use of existing highway, including, where appropriate, reallocation of space to more sustainable modes. 3. Development proposals should support the increased uptake of electric and zero emissions vehicles, in accordance with Policies C4 and C5. 4. Development proposals must contribute to the delivery of an integrated transport system that is safe and accessible to all by implementing a proportionate package of measures that: a) Ensure development is located where people of all ages and level of physical ability are able, or will be able, to access a wide range of essential social, community, and cultural facilities; b) Optimise accessibility and connectivity both within the proposed development and in the surrounding area, which includes having regard to schemes identified in cycling and walking strategies; c) Make active travel (including walking, cycling and wheeling) the mode of choice for shorter journeys, both within and outside the site, including safe and attractive links to new and existing facilities, services, bus stops, train stations and existing non-motorised routes; d) Ensure buildings and spaces are inclusively designed to be legible and permeable for all, and provide for the delivery of, and improvement to, walking and cycling routes that serve the site, the wider area and adjoining development parcels; e) Reduce reliance on single occupancy car trips and prioritise and increase the use of sustainable transport modes; f) Maximise opportunities to provide improved and viable public and community transport and other mobility services and routes, including through active engagement with providers as appropriate; g) Maximise integration of, and interchange between, sustainable transport modes; h) Embrace opportunities to minimise congestion and delay, as part of an effective strategy to manage harmful emissions and improve air quality; and i) Facilitate transport innovations and solutions which reduce greenhouse gas emissions. Development proposals should show how they have met criteria 4a) to 4i) above and, where appropriate, demonstrate how they support the objectives and policies of the most up to Local Transport Plan (and its supplementary and supporting strategies) or any successor strategy.	There are no LSEs of this policy on Habitats Sites. This development management policy requires new development proposals to deliver active and sustainable transport measures, such as by prioritising active travel means (e.g. walking, cycling and wheeling), supporting the uptake of electric and zero emissions vehicles and reducing reliance on single occupancy car trips. Thereby, the policy content plays an important role in mitigating the impact pathways that are relevant to the Wokingham Borough Local Plan. Enhancing existing or providing new active travel networks in proximity to new developments has the potential absorb recreational pressure locally. Furthermore, promoting the use of electric vehicles and reducing reliance on cars helps reduce atmospheric pollution impacts, including in Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C1 is screened out from AA.
Policy C2: Mitigation of transport impacts	1. Development proposals must fully assess the transport impacts of the development and provide for appropriate mitigation to minimise the adverse effects. Specifically, development proposals are required to: a) Ensure that any material adverse impacts on existing and forecast traffic conditions are mitigated;	There are no LSEs of this policy on Habitats Sites. This development management policy seeks to mitigate transport impacts and addresses highways safety and design. For example,

Policy Number / Name	Policy Text	LSEs Screening Outcome
and highways safety and design	b) Provide, or make reasonable contributions towards providing, the transport infrastructure necessary to address the needs arising from the proposal, having regard to the cumulative impacts of development, secured either as a requirement of planning conditions or by the payment of financial contributions through planning obligations, and/or the Community Infrastructure Levy; c) Prepare and submit Transport Assessments or Statements alongside development proposals in accordance with the council's Local Validation requirements; and d) Implement measures to promote and improve sustainable travel through agreed travel plans or through making an appropriate contribution to the borough wide My Journey initiative or any successor scheme. Travel plans should include appropriate monitoring to ensure targets are met. 2. With regards to highways safety and design, all development proposals must implement a proportionate package of measures that: a) Ensure safe and suitable access to the site for all users; b) Contribute towards a high quality public realm designed in accordance with Living Streets (or any successor document), user access hierarchy and demonstrate how the relevant principles of Healthy Streets have been incorporated; c) Prioritise pedestrian, cycling and sustainable transport in accordance with Policy C1; d) Design roads to optimise traffic flows to avoid adverse environmental impacts; and e) Provide effective, convenient and safe delivery, collection, servicing and refuse, and recycling collection arrangements. Proposals for new roads should be tracked for larger vehicles and, if served by bus routes, would need to accommodate bus stop infrastructure to an agreed standard with the local highway authority.	Transport Assessments will need to be submitted in support of planning applications. Furthermore, developments are required to implement measures that promote and improve sustainable travel throughout the borough (e.g. the My Journey initiative). Thereby, the policy content plays an important role in mitigating the impact pathways that are relevant to the Wokingham Borough Local Plan. For example, delivering measures to enhance active travel modes will help reduce atmospheric pollution impacts, including in Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C2 is screened out from AA.
Policy C3: Active travel	1. Development proposals must promote sustainable transport by prioritising active travel, including walking, wheeling, and cycling. <u>Walking and Wheeling</u> 2. Development proposals should: a) Prioritise and improve the pedestrian environment and contribute towards achieving a high-quality public realm, including the provision of facilities for pedestrians to rest and relax (including seating) and high-quality and safe road environment (including safe crossings, where needed). b) Be permeable, easy and safe to walk and wheel through, and enhance existing routes which are adequately lit, create step-free legible access and entrance points whilst providing direct links to other pedestrian movement corridors. c) Avoid severance and, where necessary, provide for routes and crossings close to desire lines, particularly those to everyday facilities. d) Maintain and enhance walking and wheeling routes identified in the most up to date walking and cycling strategy and create high quality links to connect to these routes where appropriate. e) Provide or contribute towards improved wayfinding, including signposted links to key infrastructure, public transport hubs, green spaces and Green Routes and Greenways networks, where appropriate. f) Consider the needs of all users through inclusive design.	There are no LSEs of this policy on Habitats Sites. This development management policy requires new development proposals to prioritise active travel, including walking, wheeling and cycling. For example, the pedestrian environment is to be improved by providing benches, safe crossings, adequate lighting and enhanced wayfinding. Cycle routes are to be upgraded through the provision of supporting facilities, such as pick-up points, cycle parking, electric bike charging facilities and enhanced safety measures. Thereby, the policy content plays an important role in mitigating the impact pathways that are relevant to the Wokingham Borough Local Plan. For example, delivering measures to enhance active travel modes will help reduce atmospheric pollution impacts, including in Habitats Sites. Safe and attractive active travel routes also have the

Policy Number / Name	Policy Text	LSEs Screening Outcome
	<u>Cycling</u> 3. Development proposals should: - Contribute towards the improvement of the public realm to support cycling, including the provision of facilities to support cyclists. Care should be taken to ensure the safety of cyclists and avoid conflict with other users of the public realm; - Maintain and enhance the quality of cycle routes as appropriate, including those identified in the most up-to-date walking and cycling strategy, as well as maximising opportunities to add to or extend these, in order to support a high quality integrated cycle network; - Provide supporting facilities including pick-up points, secure and sheltered cycle parking (for both occupiers and visitors), electric bike charging facilities, and shower, changing and storage facilities to support target mode shares as appropriate; - Provide or contribute towards, improved wayfinding, including signposted links to key infrastructure, public transport hubs, green spaces and Green Routes and Greenways networks, where appropriate; and - Consider the needs of all users through inclusive design.	potential to absorb recreational pressure locally, reducing visitor volume in Habitats Sites that are sensitive to recreational pressure No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C3 is screened out from AA.
Policy C4: Green and blue infrastructure and public rights of way	<u>Green and blue infrastructure</u> - Green and blue infrastructure will be protected and enhanced for their biodiversity, recreational, amenity, health, townscape and landscape value, and their contribution towards mitigating and adapting to climate change. - Development proposals should plan for a network of publicly accessible green and blue infrastructure from the outset as appropriate. New development should: - Avoid the loss, fragmentation, isolation or other adverse impacts on networks of habitats and existing green and blue infrastructure (including green routes and long-distance riverside paths as shown on the Policies Map), unless replacement provision can be provided which will improve the green and blue infrastructure network in terms of its quantity, quality and accessibility; - Provide opportunities for, or contribute towards, improvements and enhancements to the quality and quantity of the wider multi-functional green and blue infrastructure network and other open spaces (for example extending spaces and connections and/or better management), in particular by integrating existing green and blue infrastructure assets into the proposed development through high-quality design; - Promote accessibility, linkages and permeability between and within existing green and blue corridors, for people and wildlife by strengthening ecological networks and connecting settlements to the countryside via a network of Greenways, green routes, public open spaces, footpaths, riverside paths, bridleways and cycle routes. This includes connections to local services and facilities, public transport and green spaces; and - Provide clear arrangements for the long-term maintenance and management and/or enhancement of the green and blue infrastructure assets. <u>Public Rights of Way</u>	There are no LSEs of this policy on Habitats Sites. This development management policy protects and enhances green and blue infrastructure, as well as integrating PRoWs into the design of new developments. For example, development proposals should avoid the loss, fragmentation or isolation of such infrastructure, and promote accessibility / permeability of green and blue infrastructure corridors. Thereby, the policy content plays an important role in mitigating the impact pathways that are relevant to the Wokingham Borough Local Plan. For example, protecting and enhancing green / blue infrastructure will make the borough more attractive for active travel modes, thereby reducing atmospheric pollution impacts, including in Habitats Sites. Such infrastructure is also appealing as a focal point for recreation, potentially drawing visitor pressure away from more sensitive Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	- Development proposals must integrate with the Public Rights of Way network to promote connectivity and contribute towards the delivery of prioritised routes in the council's rights of way improvement plan where appropriate. New Public Rights of Way will be supported where they are designed to be safe, inclusive and inviting spaces. - Development proposals in the vicinity of the Emm Brook and River Loddon should contribute towards the achievement of a multi-use riverside footpath, cycleway and bridleway as defined on the Policies Map and in the council's rights of way improvement plan. - Development proposals for new, extended or enhanced green routes will be supported. Green routes and green route enhancement areas are set out on the Policies Map.	Overall, Policy C4 is screened out from AA.
Policy C5: Parking and electric vehicle charging	- Development proposals should provide and retain vehicle parking (including motorcycles) and cycle parking that caters for the needs of all users (including people with disabilities and visitors) that is appropriate to the location and the scale of development. The assessment of requirements will have particular regard to the following factors: - The accessibility of the proposed development; - The type, mix, occupancy and use of the proposed development; - The availability of and opportunities for public transport; - The level of car ownership in the area; and - Other locally specific issues including availability of parking and enforcement nearby. <u>Electric vehicle charging</u> - All development proposals should provide electric vehicle charging points in line with adopted standards. - Proposals to retrofit charging points into existing areas will be encouraged providing this would not result in any adverse impact on highway, pedestrian or cycle safety. - All charging points should be appropriately located to allow for easy and convenient access from the charge point to the parking space(s), and be designed and located in a way which: - Minimises the intrusion of the charge point on the wider use and access of the land; - Minimises the risk of vehicle collision with the charge point; and - Has ease of access for maintenance and replacement of electric vehicle charging infrastructure. Residential development proposals of 10 dwellings or more, or non-residential development proposals of 1,000 m² or greater gross internal area will be required to submit an Electric Vehicle Charging Strategy to demonstrate that the provision of electric vehicle charging facilities in developments are in a safe, convenient and accessible location, in accordance with requirements 4a) – c) above.	There are no LSEs of this policy on Habitats Sites. This development management policy safeguards existing vehicle parking and requires development proposals to provide electric vehicle charging points in accordance with adopted standards. Proposals above certain capacity / area thresholds must submit an Electric Vehicle Charging Strategy. By ensuring that an adequate number of electric vehicle charging points is delivered across Wokingham Borough, this policy aids the transition towards a more sustainable vehicle fleet. Over time, this will assist in reducing atmospheric pollution levels, including potential negative impacts in air quality sensitive Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C5 is screened out from AA.
Policy C6: Technology and innovation in transport	<u>Technological innovation</u> - Technology and innovation in transport which is designed to improve mobility, reduce congestion and improve emissions and air quality will be supported provided it does not have an unacceptable impact on highway safety or amenity, and does not give rise to other unacceptable environmental concerns. <u>Existing refuelling stations</u> - Existing refuelling stations will be retained, unless demonstrated to be operationally unviable. Opportunities to incorporate new technologies into existing refuelling stations, (such as hydrogen	There are no LSEs of this policy on Habitats Sites. This development management policy supports the delivery of technology innovations in transport to reduce emissions and improve air quality. Furthermore, no refuelling stations providing for fossil fuels

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	refuelling, electric vehicle charging facilities) should be maximised and should be fully explored before a change to an alternative use is considered for the site. 3. Complementary uses at refuelling stations will be considered favourably where this would support their evolution, providing there would be no unacceptable impact on the vitality and viability of centres defined in the retail hierarchy. <u>New refuelling stations</u> 4. There will be a presumption against development proposals for new refuelling stations providing for fossil fuels. New or replacement refuelling facilities will be directed to accessible locations on the highway network and must incorporate the latest refuelling technologies from the outset. The layout and design of new or replacement facilities should be as flexible as possible to allow incorporation of, and adaptation to, future technological innovations.	will be permitted. There is a potential for positive impacts on Habitats Sites that are sensitive to atmospheric pollution. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C6 is screened out from AA.
Policy C7: Digital infrastructure and communications technology	1. The roll out and continued improvement of digital infrastructure and communications technology will be supported, including full-fibre gigabit-capable broadband, 4G and 5G technologies. 2. Development proposals for new residential, employment and retail uses must demonstrate how gigabit-capable broadband and mobile connectivity have been incorporated. <u>New digital and communications technology infrastructure</u> 3. Development proposals for digital infrastructure or communications technology will be supported where they: a) Minimise adverse impacts on local character, amenity, heritage assets, the quality of the public realm or pedestrian / highway safety; b) Explore innovative design and technology solutions, such as concealment/camouflage options, to minimise visual impact; c) Explore opportunities to make the most efficient use of existing telecommunication sites, such as mast sharing or use of existing buildings or structures; and d) Demonstrate no preferable alternative sites are potentially available which would result in a development that would be less visually intrusive. <u>Fibre to the Premises (FTTP):</u> 4. New residential and non-residential development proposals must provide access to full fibre gigabit capable broadband or, where it has been demonstrated not to be achievable, the fastest possible connection at first occupation. 5. In locations where full fibre connectivity is not currently available, development proposals must: a) Provide clear evidence of engagement with a range of digital infrastructure providers at the earliest opportunity in the planning process on the upgrading or roll-out of digital infrastructure; b) Where one or more providers have agreed to provide access to superfast broadband connectivity or full fibre, be designed to connect into the new service and be made available to occupiers; and c) Utilise dedicated telecommunications ducting to enable the future provision of full fibre connectivity.	There are no LSEs of this policy on Habitats Sites. This development management policy supports the roll-out and continued improvement of digital infrastructure and communications technology, such as the provision of fibre to new developments. However, a general support for the delivery of such technology has no relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C7 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	<u>Telecommunications Infrastructure:</u> 6. Development proposals should consider mobile telecommunications requirements to ensure that there is suitable coverage.	
Policy C8: Utilities	1. Development proposals must demonstrate that there is sufficiency capacity for electricity, water supply and waste water collection and treatment infrastructure on and off site to service the development, and that agreement has been or will be sought from the appropriate utility / service providers. 2. Development proposals which results in the need for off-site upgrades to the existing utility network should ensure the occupation of the development is aligned with the delivery of the necessary infrastructure. <u>Accounting for existing infrastructure</u> 3. Development proposals should be carefully designed to take account of existing infrastructure and minimise the potential for future disruption from maintenance and upgrading of infrastructure by: a) Utilising service margins/corridors for external installations; b) Minimising the number of underground road crossings; and c) Inside buildings, utilising serviceable ducting to enable future upgrading. <u>New infrastructure schemes</u> 4. Development proposals for new utilities infrastructure, or the extension or upgrading of existing utilities infrastructure, will be supported provided that any adverse impacts on amenity, character and the highway network can be minimised.	There are no LSEs of this policy on Habitats Sites. This development management policy requires development proposals to demonstrate that there is sufficient capacity in utilities to serve the development, including electricity, water supply and sewage collection and treatment infrastructure. Generally, this is considered to be positive for Habitats Sites, as the policy will ensure that sufficient headroom is available at Wastewater Treatment Works to accommodate the increase in sewage effluent generated by developments. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy C8 is screened out from AA.
Chapter 8: Economy, Employment and Retail		
Policy ER1: Core Employment Areas	1. Core Employment Areas will be protected for continued economic use. Development proposals will be supported where they provide a range of types and sizes of units, including flexible space that can be easily adapted to meet current and future needs, and encourages start ups and grow on space. 2. Development proposals for business, industry or warehousing will be supported in principle at Core Employment Areas, as defined on the policies map and listed below: a) Green Park Business Park, Reading; b) Headley Road East Industrial Estate, Woodley; c) Hogwood Industrial Estate, Finchampstead; d) Molly Millars Industrial Estate, Wokingham; e) Ruscombe Business Park, Ruscombe; f) Suttons Industrial Estate, Earley; g) Thames Valley Business Park, Earley; h) Thames Valley Science and Innovation Park, Shinfield; i) Toutley Industrial Estate, Wokingham; and j) Winnersh Triangle Business Park, Winnersh. 3. Expansion and intensification of employment uses within Core Employment Areas will be supported where:	LSEs of this policy on Habitats Sites cannot be excluded. This policy identifies Core Employment Areas that will be protected for continued economic use and where employment proposals will be supported. The policy also explicitly protects against the loss of existing employment land. By identifying the geographic location of future employment opportunities, the main parameter in determining future commuter routes to work, the policy has the potential to result in increased atmospheric pollution of Habitats Sites. The policy has the potential to shape the following impact pathway:

Policy Number / Name	Policy Text	LSEs Screening Outcome
	a) It is appropriate to the character of the area; and b) It does not have an unacceptable impact on nearby residential uses, other employment uses and other uses, including impacts caused by traffic movements, noise, emissions, odour, hours of operation and lighting. 4. Development proposals for new uses that are complimentary to the successful operation of Core Employment Areas and that support rejuvenation or regeneration will be supported provided that: a) Non-employment uses would support the character and economic function of the Core Employment Area and not lead to a significant reduction in employment uses; and b) The replacement use does not undermine the continued economic function of the wider Core Employment Area. <u>Loss of employment floorspace</u> 5. Development proposals involving non-employment uses within Core Employment Areas will only be acceptable in the following exceptional circumstances: a) It does not hinder or undermine the continued operation and role of the Core Employment Area; b) It is evidenced that there is no market interest in the site for employment purposes following genuine, active and effective marketing; and c) There is evidence of need for the proposed development, and the need for it to be located within a Core Employment Area.	Atmospheric pollution Overall, Policy ER1 is screened in for AA.
Policy ER2: Employment uses outside Core Employment Areas	<u>New employment floorspace</u> 1. Employment development proposals of less than 1,000m² gross internal area within a defined settlement but outside Core Employment Areas will be supported provided: a) It is appropriate to the character of the area; and b) It does not have an unacceptable impact on nearby residential uses, other employment uses and other uses, including impacts caused by traffic movements, noise, emissions, hours of operation, odour and lighting. 2. Employment development proposals of 1,000m² or greater gross internal area within a defined settlement but outside Core Employment Areas must demonstrate: a) Compliance with a sequential approach to location that demonstrates there are no suitable and available opportunities within Core Employment Areas; b) How it is appropriate in nature and scale to its location; c) The number and type of jobs likely to be created, including how they are to be sourced; and d) It does not have an unacceptable impact on nearby residential uses, other employment uses and other uses, including impacts caused by traffic movements, noise, emissions, hours of operation, odour and lighting. <u>Loss of employment floorspace</u> 3. Development proposals involving the loss of employment uses or land outside of Core Employment Areas will only be supported where: a) It is appropriate to the character of the area; b) It does not have unacceptable impacts on nearby uses;	There are no LSEs of this policy on Habitats Sites. This development management policy that supports employment development proposals outside Core Employment Areas, provided that several criteria are met. It also prevents the loss of employment land outside these areas. However, the policy content has no relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER2 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	c) There is strong evidence that there is no market interest for employment purposes, following genuine, active and effective marketing; and d) It would not lead to an unacceptable piecemeal change.	
Policy ER3: Supporting the rural economy	1. Development proposals that contribute towards supporting a prosperous rural economy will be encouraged. 2. Development proposals for economic development in the countryside will only be supported where: a. There is a genuine need to support an existing or new rural business or enterprise; b. The scale and nature of the proposed development is appropriate to its rural location; c. The reuse or adaptation of existing buildings has been incorporated into the development, and where appropriate buildings which are derelict or offer no opportunity for beneficial use have been removed; d. Any conversions, buildings or structures are of a high quality design that is of a scale which is proportionate to its use and reflects and respects the character of the rural setting; e. There would be no significant adverse impacts to the amenity of nearby residents, including through odour, noise, lighting or operations; f. Environmental improvements are incorporated into the design of the development, for example additional landscaping and biodiversity enhancements; and g. Any traffic generated would not be inappropriate for the rural road network. 3. Development proposals will generally be supported which facilitate the introduction of or improvement to electronic communications networks and digital infrastructure to help support local businesses, including the expansion of full fibre gigabit capable broadband. 4. Development proposals for live-work units within the countryside will be supported where they allow buildings to be appropriately converted and where they would not lead to the isolated development of dwellings. <u>Farm diversification</u> 5. Small scale retail development associated with farm shops and horticultural nurseries will be supported where proposals are ancillary to the main use of the farm/nursery and do not cause significant harm to the vitality and viability of retail centres. 6. Development proposals for farm diversification must be accompanied by a comprehensive whole farm diversification plan, which establishes how the proposed changes will assist in retaining the viability of a farm and its agricultural enterprise.	There are no LSEs of this policy on Habitats Sites. This development management policy supports the rural economy by enabling adequate employment development in the countryside, provided that several criteria are met. It also supports proposals for farm diversification under certain circumstances. However, a broad support for such proposals has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER3 is screened out from AA.
Policy ER4: Employment and Skills Plans	1. Development proposals for 10 or more dwellings or 1,000m² of non-residential floorspace should be accompanied by an Employment and Skills Plan to show how the proposal provides opportunities for training, apprenticeships or other vocational initiatives to develop local employability skills required by developers, contractors or end users of the proposal.	There are no LSEs of this policy on Habitats Sites. This development management policy requires planning applications beyond a certain capacity or floorspace to deliver an Employment and

Policy Number / Name	Policy Text	LSEs Screening Outcome
	2. Where it is demonstrated that an Employment and Skills Plan either cannot be implemented, or is inappropriate for the proposal, an in lieu financial contribution will be sought to fund relevant employment, skills and training initiatives elsewhere.	Skills Plan. However, this requirement has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER4 is screened out from AA.
Policy ER5: The hierarchy of centres	1. All centres will be supported and strengthened to ensure they continue to be the focus of local communities. Development proposals that protect and enhance their role and function will be supported in principle. 2. The hierarchy of centres in the borough is defined on the policies map and listed below: a. Major town centre: i. Wokingham town centre. b. Small town and district centres (listed alphabetically by location): i. Arborfield Green district centre (being delivered through the SDL); ii. Lower Earley district centre; iii. Shinfield Road district centre; iv. Twyford village centre; v. Winnersh centre; and vi. Woodley town centre. c. Local centres (listed alphabetically by location): i. Crowthorne Station, Dukes Ride, Crowthorne (Pinewood); ii. Greenwood Road, Crowthorne (Pinewood); iii. Maiden Place, Earley; iv. Silverdale Road, Earley; v. Shepherd's Hill, Earley and Woodley; vi. California Crossroads, Finchampstead North; vii. School Green, Shinfield; viii. Basingstoke Road near the junction for Beech Hill Road, Spencers Wood; ix. Basingstoke Road, Three Mile Cross; x. Wargrave High Street, Wargrave; xi. Ashridge Road, Wokingham; xii. Clifton Road / Emmbrook Road, Wokingham; xiii. Bean Oak Road, Wokingham; xiv. Rances Lanes, Wokingham; xv. Howlett Grove, Matthewsgreen, Wokingham; xvi. Beechey Place, Montague Park, Wokingham; xvii. Woosehill Centre, Woosehill, Wokingham; - xviii. Woosehill Lane, Woosehill, Wokingham; xix. Brecon Road, Woodley; xx. Coppice Road, Woodley; and	There are no LSEs of this policy on Habitats Sites. This development management policy supports the hierarchy of centres across Wokingham Borough, including Wokingham's major town centre, small town and district centres, and local centres. However, no development in these centres is proposed and strategic developments are adequately assessed in Policy SS12 and SS13. Defining the main centres in Wokingham Borough has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER5 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	xxi. Loddon Vale, Woodley. 3. New district and local centres are planned as part of the South Wokingham Strategic Development Location (Policy SS12) and Loddon Valley Garden Village (Policy SS13) allocations, where they are suitable in scale to the level of growth proposed. 4. Primary Shopping Areas are defined on the policies map in Lower Earley, Twyford, Wokingham and Woodley. 5. Development proposals for main town centre uses will be supported in accordance with the hierarchy and a 'town centre first' sequential approach, where they are suitable in terms of scale and design.	
Policy ER6: Town, district and local centres and shopping parades	<u>New development</u> 1. Development proposals in town, district and local centres, and shopping parades must: a) Maintain or enhance the vitality and viability of the centres as places to shop, work and spend leisure time, including into the evening where appropriate to the role and function of the centre; b) Be of a scale, type and format that reflects and enhances the character of the centre including its role and function within the hierarchy; c) Enhance the provision of day-to-day shopping facilities, where appropriate in relation to the role and function of the centre; d) Maximise opportunities to improve accessibility for all users; and e) Maximise opportunities to improve digital infrastructure within the centre and promote smart technology, where practicable. 2. Development proposals for the following uses will be supported within Primary Shopping Areas: a) Retail uses and the retention of prominent shop fronts; b) Main town centre uses and services, providing they support the overall function of the centre and maintain an active frontage; and c) Office and residential development on the upper floors of units. <u>Loss of retail in Primary Shopping Areas</u> 3. Changes of use within the Primary Shopping Areas from retail to non-Class E uses will only be permitted where they do not result in a disproportionate concentration of non-Class E units that would be harmful to the vitality of that centre. <u>Loss of shopping facilities in local centres</u> 4. The loss of day-to-day shopping facilities in local centres will only be permitted where: d) Alternative day-to-day shopping facilities are available via convenient and safe walking routes and within reasonable walking distance from the existing retail use; or e) The existing retail use is demonstrated to no longer be viable through evidence that genuine sustained efforts to promote, improve and market the facility at a reasonable value have been undertaken.	There are no LSEs of this policy on Habitats Sites. This development management policy sets out a general support for development in Primary Shopping Areas, provided that several criteria are met. It also prevents the loss of retail and shopping facilities in Primary Shopping Areas and local centres. However, a general support for development in principle has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER6 is screened out from AA.
Policy ER7: Strengthening the role of centres	1. Main town centre uses should be located within the centres defined in the hierarchy set out in Policy ER5, where sites are suitable, available and viable. 2. Development proposals for main town centre uses outside of a defined centre must comply with the sequential test and the retail impact assessment, where they meet the threshold identified below.	There are no LSEs of this policy on Habitats Sites. This development management policy strengthens the role of centres by stipulating that main town centre uses should be located within the

Policy Number / Name	Policy Text	LSEs Screening Outcome
	<u>Sequential test</u> 3. Development proposals for 500m² (gross) or more of town centre uses on new sites or extensions to existing sites in locations outside a defined centres or allocations including town centre uses, must comply with the sequential test. 4. The sequential test should assess in-centre sites in the order of preference of the hierarchy of centres, unless a development proposal is intended to meet a particular local need in a specific area. 5. Robust evidence will be required to demonstrate that there are not more sequentially preferable locations which could accommodate the floorspace. <u>Retail impact assessment</u> 6. Development proposals for 500m² (gross) or more of retail or leisure uses on new sites or extensions to existing sites in locations outside of a defined centres or allocations including retail and leisure uses, will submit a retail impact assessment. 7. The assessment must demonstrate that the proposal will not have an adverse impact on the vitality and viability of existing and future identified centres.	defined centres. For example, for proposals located outside centres, a sequential test and retail impact assessment must be completed. However, strengthening the role of centres has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER7 is screened out from AA.
Policy ER8: Wokingham town centre	1. Development proposals within or nearby Wokingham town centre should promote and enhance its role, vitality and viability. Development proposals should retain and enhance the historic market town character of Wokingham town centre and support its role as a centre by: a) Retaining prominent shopfronts within the primary shopping area as far as is practicable; b) Providing and maintaining complementary town centre uses (including offices and residential) within the defined town centre boundary; c) Expanding the food, entertainment and leisure, and cultural offer within Wokingham town centre including into the evening as appropriate; d) Supporting the regeneration of sites for main town centre uses; e) Supporting the appropriate development of upper floors within the town centre, where possible access should be on the street frontage; f) Supporting higher density development where appropriate; g) Conserving and enhancing historic quality and interest; h) Improving the attractiveness and usability of the existing public realm, including through public art, materials, street furniture and way finding; i) Providing an environment that allows people to easily move around by active travel; j) Ensuring appropriate car parking; k) Maintaining and enhancing important public spaces in the town centre; and l) Providing quality spaces for outdoor events.	There are no LSEs of this policy on Habitats Sites. This development management policy specifies criteria for development proposals within or nearby Wokingham town centre. For example, prominent shopfronts will need to be retained and higher density of development delivered. However, safeguarding the role of Wokingham town centre has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER8 is screened out from AA.
Policy ER9: Woodley town centre and Lower Earley district centre	1. Development proposals that seek to enhance the vitality and viability of Woodley town centre and Lower Earley district centre will be supported where they incorporate: a) Improvements to the cohesion of the centre, including links through and around the centres by active travel; b) Improvements to permeability and legibility to support easy and safe movement; c) Remediation and enhancement of shop fronts and building facades; and	There are no LSEs of this policy on Habitats Sites. This development management policy seeks to enhance the vitality and viability of Woodley town centre and Lower Earley district centre by specifying several requirements for new planning applications.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	d) Improvements to the public realm, including open space and green infrastructure.	However, safeguarding the role of these centres has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy ER9 is screened out from AA.
Chapter 9: Housing		
Policy H1: Housing mix, density and standards	1. Residential development proposals will contribute to the delivery of sustainable, inclusive and mixed communities by providing an appropriate mix of housing types, tenures, densities and sizes, to meet the existing and future housing needs of all sectors of the community, including those with specialist requirements. <u>Mix and Density</u> 2. The mix of housing provided should reflect and respond to the identified housing needs and demands as set out in the council's most up to date evidence of housing need. 3. Development proposals should optimise density, make efficient use of land and achieve high quality design, that responds to the size, location, opportunities and constraints of the site, and is appropriate to the character and amenity of the area. Development proposals within the defined town and district centres and in urban locations with a good standard of accessibility to public transport will be expected to achieve higher densities as appropriate. <u>Accessibility</u> 4. All residential development proposals, including those providing a form of specialist accommodation for older people (including extra care housing) will be accessible and adaptable in line with M4(2) of the Building Regulations, unless it is built in line with M4(3) (see below). 5. On development proposals providing 20 or more new build dwellings, at least 5% of all new housing will be wheelchair accessible and adaptable in line with M4(3) of the Building Regulations. 6. On development proposals providing specialist accommodation for older people (including extra care housing), at least 25% of all new housing will be constructed to M4(3) standard. 7. Development proposals that do not meet the accessibility standards will need to provide robust evidence to justify that exceptional circumstances exist. <u>Internal Space Standards</u> 8. Residential development proposals must meet the up to date nationally described space standard for minimum internal space.	There are no LSEs of this policy on Habitats Sites. This development management policy specifies the housing mix, density and standards to be provided across Wokingham Borough. However, these parameters have no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H1 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome													
Policy H2: Presumption against residential losses	1. Development proposals that would result in the net loss of existing residential units of accommodation, land allocated for residential accommodation, or land with planning permission for residential accommodation will only be supported where one or more of the following criteria are met: a) The safeguarding of the residential use would be undesirable due to proven existing environmental considerations; b) The development proposal would replace or improve substandard accommodation to a suitable standard, including meeting residential space standards; c) The development proposed would provide, or enable the delivery of, an essential social, community or cultural facility or service where it has been demonstrated that no suitable and available alternative exists; d) The loss of residential units would be linked to a wider comprehensive scheme of development which would not lead to an overall net loss of residential units. Where the net loss is acceptable in principle, the loss in the number of residential units of accommodation should be minimised. 2. Development proposals that would result in the partial loss or change of use of an existing unit of residential accommodation to non-residential use will only be supported provided all the following criteria are met: a) The resultant development would provide satisfactory levels of residential amenity for future occupiers of the retained residential use, and would not unacceptably impact on the amenity of the occupiers of nearby properties and land uses; and b) The retained residential accommodation would provide acceptable standards of accommodation including compliance with up-to-date residential space standards, appropriate layout of rooms, appropriate noise insulation, and quality internal and external environment including usable outdoor amenity space.	There are no LSEs of this policy on Habitats Sites. This development management policy stipulates that the loss of residential sites will not be permitted unless several criteria are met. However, the retention of extant dwellings has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H2 is screened out from AA.													
Policy H3: Affordable housing	1. All residential development proposals for at least 5 units of accommodation (gross), 5 bedspaces (gross), or covering a site area of at least 0.16 ha will provide affordable housing, where viable. The minimum percentages of affordable housing sought are: <table border="1"> <thead> <tr> <th>Location</th><th>Land type</th><th>%</th></tr> </thead> <tbody> <tr> <td rowspan="2">Major settlements: Arborfield Garrison, Earley, Green Park, Shinfield (North of M4), Twyford, Winnersh, Wokingham, Woodley</td><td>Previously developed land</td><td>30</td></tr> <tr> <td>Greenfield</td><td>40</td></tr> <tr> <td rowspan="2">Modest settlements: Pinewood (Crowthorne), Finchampstead North, Ruscombe, Shinfield (south of M4, Three Mile Cross and Spencers Wood), and Wargrave; and Minor settlements: Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield</td><td>Previously developed land</td><td>40</td></tr> <tr> <td>Greenfield</td><td>40</td></tr> </tbody> </table>	Location	Land type	%	Major settlements: Arborfield Garrison, Earley, Green Park, Shinfield (North of M4), Twyford, Winnersh, Wokingham, Woodley	Previously developed land	30	Greenfield	40	Modest settlements: Pinewood (Crowthorne), Finchampstead North, Ruscombe, Shinfield (south of M4, Three Mile Cross and Spencers Wood), and Wargrave; and Minor settlements: Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield	Previously developed land	40	Greenfield	40	There are no LSEs of this policy on Habitats Sites. This development management policy identifies the affordable housing requirements for a range of settlements across Wokingham Borough. However, the provision of affordable housing has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H3 is screened out from AA.
Location	Land type	%													
Major settlements: Arborfield Garrison, Earley, Green Park, Shinfield (North of M4), Twyford, Winnersh, Wokingham, Woodley	Previously developed land	30													
	Greenfield	40													
Modest settlements: Pinewood (Crowthorne), Finchampstead North, Ruscombe, Shinfield (south of M4, Three Mile Cross and Spencers Wood), and Wargrave; and Minor settlements: Arborfield Cross, Barkham Hill, Charvil, Finchampstead, Hurst, Riseley, Sindlesham, Sonning and Swallowfield	Previously developed land	40													
	Greenfield	40													

Policy Number / Name	Policy Text			LSEs Screening Outcome
	Outside defined settlements	Any	40	
	Loddon Valley Garden Village	Any	40	
	Arborfield Green Strategic Development Location	Any	40	
	South Wokingham Strategic Development Location	Any	40	
	2. The expectation is that all development proposals for housing will be able to meet the above policy requirement. In exceptional circumstances applicants may submit an independently produced, open book viability assessment to justify any relaxation of the requirement. Any relaxation will require compelling reasons.			
	3. Affordable housing must reflect the sizes and types that meet the proven needs of people whose needs are not met by the general housing market. The council will negotiate the tenure, size and type of affordable units on a site by site basis having regard to housing needs, site specifics and other factors.			
	4. The delivery of affordable housing will be provided in accordance with the following order of priority:			
	a) On-site as part of the development. On strategic developments affordable housing should be distributed across the development to create a mixed and balanced community,			
	b) In exceptional circumstances on an alternative site, and only if:			
	i. Provision would result in a more effective use of available resources, or			
	ii. It would meet an identified housing need, such as providing a better social mix and wider housing choice, or			
	iii. Site specific considerations mean it is more feasible to provide an offsite contribution.			
	5. An affordable home ownership product should be delivered as part of all applicable development proposals. First Homes should provide 25% of the affordable housing proposed where it is demonstrated that a discount of 50% makes the homes affordable. Where this level of discount does not make First Homes affordable, another form of affordable ownership product should be delivered.			
	6. Planning obligations will be used to ensure that affordable housing will remain at an affordable price for future eligible households, or for the subsidy to be recycled to alternative affordable housing provision.			
	Policy H4: Exception sites	Rural Exception Sites		
	1. Development proposals for Rural Exception Sites that provide affordable housing to meet local needs will be permitted provided that:			
	a) Dwellings are designed to meet an established local affordable housing need as evidenced through a Local Housing Need survey of the town/parish or a specific local survey using a methodology agreed by the council;			
	b) The number, size, type and tenure of dwellings proposed are suitable to meet the identified need and will usually be limited to small scale sites of up to 10 dwellings unless it can be demonstrated that a larger development will not have an adverse impact on the other criteria;			
	c) Affordable homes are secured in perpetuity for those with a local connection to the town/parish within which the scheme is located; and			
	d) The site is situated outside defined settlements but adjoins, or is well related to, the existing settlement pattern, is in keeping with the character of the local area.			
	There are no LSEs of this policy on Habitats Sites.			
	This development management policy relates to the provision of Rural Exception Sites, First Home Exception Sites and community-led development. For example, Rural Exception Sites that address an identified affordable housing need will be permitted, provided that several criteria are met. However, the general support of Exception Sites has no bearing on Habitats Sites.			

Policy Number / Name	Policy Text	LSEs Screening Outcome
	2. A limited number of market dwellings for the sole purpose of making a development proposal financially viable will be supported, subject to site specific viability testing, and be limited to up to 20% of the gross number of total dwellings. Any market housing included within a proposal should demonstrate how it will be integrated with the rural exception development and take into account the local character of the area. <u>First Home Exception sites</u> 3. Development proposals for First Home exception sites for affordable housing will be supported where they meet criteria 1a) to 1d) for rural exception sites. Where other affordable housing tenures are proposed on a First Homes exception site, applicants are expected to provide robust evidence of an identified need for the mix proposed. <u>Community-led development</u> 4. Development proposals for community-led housing that provide limited affordable housing will be permitted provided that: a) The site is adjacent or well related to an existing defined settlement; b) The site is less than 1ha in size and does not exceed 5% of the total size of the adjacent defined settlement; c) It does not compromise areas or assets of particular importance; d) It complies with local design policies and standards; and e) An up-to-date assessment shows that the need for the dwellings proposed will not be met through housing allocations or development with extant planning permission.	No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H4 is screened out from AA.
Policy H5: Rural workers' dwellings	1. Development proposals in the countryside for a rural worker dwelling which serves an existing agricultural, forestry or similar land based rural business requiring a countryside location, will be supported where all the following criteria are met: a) There is an essential need for one or more permanent full-time worker(s) to be accommodated at all times on the site of a rural enterprise in order for the enterprise to operate; b) The rural enterprise has been established for at least 3 years and has been demonstrated to be economically sustainable and financially viable for the foreseeable future; c) The functional need for the rural worker dwelling cannot be accommodated in suitable existing accommodation available in an existing defined settlement within a reasonable distance of the rural enterprise in the first instance, or within another existing building on the site which is suitable for conversion or extension; d) The size and scale of the dwelling is commensurate with the functional requirement of the intended occupant and their connection with the rural enterprise; e) The dwelling is sited close to existing buildings as far as is practicable and is appropriately designed and landscaped to avoid unacceptable impact on the countryside character; and f) No dwelling serving or associated with the rural business has been either sold or converted from a residential use or otherwise separated from the holding within the last 10 years. The act of severance may override the evidence of need. 2. Where rural worker accommodation is essential to support a new rural enterprise, it should be provided temporarily by a caravan, mobile home, or other temporary accommodation for the first three years. It will be required to satisfy the functional tests set out at 1a), c), d), and e) and additionally demonstrate that the following financial tests are satisfied:	There are no LSEs of this policy on Habitats Sites. This development management policy allows for the provision of rural workers' dwellings to serve existing agricultural and forestry businesses, provided that various criteria are met. However, the general support for such dwellings has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H5 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	a) There is clear evidence of a firm intention and ability to develop the enterprise concerned; and b) There is clear evidence that the proposed enterprise has been planned on a sound financial basis. 3. Permission for all rural workers dwellings, including temporary accommodation, will be subject to a condition which restricts occupation of the dwelling to a person directly employed or last employed on a permanent full-time basis in rural enterprise, or to their surviving partner or dependents. 4. Agricultural Occupancy conditions will be retained unless robust evidence is provided that the condition is no longer necessary.	
Policy H6: Self-build and custom housebuilding	1. Development proposals for self and custom build plots consistent with the policies of this local plan and the identified needs shown on the self and custom build housing register will be supported in principle. 2. The delivery of self-build and custom build housing will be: a) Provided as serviced plots; b) Subject to an agreed design code; c) Required to be completed within 3 years of a self/custom builder purchasing a plot; and d) Made available and marketed appropriately at a reasonable value, for at least 12 months. For the first two months of this period priority will be given to individuals and associations of individuals on the council's self-build register. Any unsold plot(s) must remain on the open market as self-build or custom build whilst being offered to the council and Registered Providers. Only after these options have been exhausted can the plot(s) be delivered as market housing. 3. Development proposals on self and custom build plots should demonstrate innovative, high quality design that accords with the agreed design code and takes into account the character of the local area. 4. Delivery of market-led self and custom build plots will be in addition to, and not in lieu of, an affordable housing provision requirement in accordance with Policy H3..	There are no LSEs of this policy on Habitats Sites. This development management policy provides in principle support for self-build and custom housebuilding across Wokingham Borough. However, the general support for such developments has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H6 is screened out from AA.
Policy H7: Specialist accommodation	New specialist accommodation: 1. The council will work positively and collaboratively with statutory and voluntary agencies and the private sector to support households who require additional support or form of specialist accommodation to meet their needs. The council's preference is to encourage self-reliance and independent living, but recognises that providing the right type of accommodation can enable these communities to live successfully. 2. The delivery of specialist accommodation will be supported and met by: a) Requiring strategic scale development to include an appropriate onsite provision of specialist accommodation as part of a mixed community; b) Approving applications for additional provision in accordance with H17 3 below; and c) Protecting existing specialist accommodation in accordance with Policy H17 4 below. 3. Development proposals related to housing with care or housing with support for will be supported, provided the following criteria are met: a) Local commissioning priorities or a local need has been evidenced through a specific survey / assessment using a methodology agreed with the council; b) The accommodation is well located with regard to the type of accommodation being proposed. Locations within and close to an identified town or district centre are considered suitable for all types of accommodation.	There are no LSEs of this policy on Habitats Sites. This development management policy supports the delivery of specialist accommodation across Wokingham Borough, such as housing with care. However, the general support for such accommodation has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H7 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	c) The site has access to a good range of services and facilities, including existing public transport routes, or incorporates essential community facilities and services, such as healthcare services or day care for older people; d) The site has safe and suitable access to the highway network for vehicles and pedestrians and adequate space can be provided for emergency vehicles; ; and e) Incorporate gardens and areas of amenity green space of an appropriate size and quality as an integral part of the development proposal. Loss of specialist accommodation: 4. Development proposals that would result in the loss of specialist accommodation (including residential, nursing or dementia care premises) will not be supported unless it can be clearly demonstrated that: a) The proposal leads to the significant improvement of an existing premise / facility or the replacement of an existing premise / facility, of equal accessibility and convenience for the local community, with equivalent or improved facilities; or b) The premise / facility no longer meets the needs of the community; or c) The premise / facility is no longer economically viable.	
Policy H8: Conversion and sub-division of buildings	1. Development proposals for the conversion or sub-division of buildings into self-contained flats or houses of multiple occupation, or their subsequent extension, will be supported within defined settlements provided that all the following criteria are met: a) The character and appearance of the existing building is respected in terms of materials, design, and principal architectural features; b) The proposal would provide acceptable levels of residential amenity for future occupiers of the development, and would not unacceptably impact on the amenity of the occupiers of nearby properties; c) The proposal would provide an acceptable standard of accommodation, including adequate living space (including any communal areas), appropriate layout of rooms between units of accommodation, appropriate noise insulation, and a high quality internal and external environment including natural lighting and ventilation; d) The proposal provides acceptable access to the highway, vehicle parking and secure cycle storage and parking. All parking should be provided on-site and provision offered relative to accessibility; e) The proposal provides adequate on-site space for refuse and recycling storage facilities which is conveniently located for collection. Facilities should be contained within a covered storage area; and f) The proposal would not, either individually or cumulatively, unduly dilute or harm an existing mixed and sustainable community through the significant overconcentration of flats or HMOs.	There are no LSEs of this policy on Habitats Sites. This development management policy supports the conversion or sub-divisions of buildings into self-contained flats or houses in multiple occupation within defined settlement boundaries. However, the general support for such sub-divisions has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H8 is screened out from AA.
Policy H9: Gypsies and Travellers and Travelling	1. Provision will be made for a minimum 86 net additional pitches for Gypsies and Travellers* in the period 1 April 2023 to 31 March 2040. 2. The accommodation needs of Gypsies and Travellers, and Travelling Showpeople will be supported and met by: a) Protecting existing Gypsy and Traveller and Travelling Showpeople accommodation from redevelopment or change of use to other uses; b) Allocating the sites listed in Part 3) below for additional Gypsy and Traveller pitches;	LSEs of this policy on Habitats Sites cannot be excluded. This policy provides for a minimum of 86 net additional pitches for gypsies and travellers in Wokingham Borough between 2023 and

Policy Number / Name	Policy Text	LSEs Screening Outcome																											
Showpeople provision	c) Requiring strategic scale development to include appropriate onsite provision of Gypsy and Traveller pitches as part of a mixed community; and d) Approving applications for additional provision which accord with Policy H10. Site allocations and delivery as part of strategic scale development 3. The sites listed below, and defined on the Policies Map, are allocated for residential caravan site use to be occupied by Gypsy and Travellers and should be used only for this purpose: <table border="1"> <thead> <tr> <th>Ref</th><th>Site name</th><th>Approx no. pitches</th></tr> </thead> <tbody> <tr> <td>SS14.1</td><td>High Barn Farm, Commonfield Lane, Barkham</td><td>20</td></tr> <tr> <td>SS14.2</td><td>Honeysuckle Lodge, Commonfield Lane, Barkham</td><td>4</td></tr> <tr> <td>SS14.3</td><td>Woodlands Farm, Wood Lane, Barkham</td><td>15</td></tr> <tr> <td>SS14.24</td><td>Woodside, Blagrove Lane, Wokingham</td><td>4</td></tr> </tbody> </table> 4. The sites listed below, and defined on the Policies Map, are allocated for sustainable, well designed mixed-use development, which includes the provision of Gypsy and Traveller pitches as per Policy SS12 and Policy SS13: <table border="1"> <thead> <tr> <th>Ref</th><th>Site name</th><th>Approx no. pitches</th></tr> </thead> <tbody> <tr> <td>SS11</td><td>Arborfield Green Strategic Development Location</td><td>5</td></tr> <tr> <td>SS12</td><td>South Wokingham Strategic Development Location</td><td>6</td></tr> <tr> <td>SS13</td><td>Loddon Valley Garden Village</td><td>20</td></tr> </tbody> </table> 5. All residential development proposals for 500 or more dwellings (gross) will provide 1 Gypsy and Traveller pitch per 200 dwellings, rounded up to the nearest whole figure, as part of inclusive mixed communities. *In accordance with the definition at Annex 1 of the Planning Policy for Traveller Sites (2015) as updated 19 December 2023.	Ref	Site name	Approx no. pitches	SS14.1	High Barn Farm, Commonfield Lane, Barkham	20	SS14.2	Honeysuckle Lodge, Commonfield Lane, Barkham	4	SS14.3	Woodlands Farm, Wood Lane, Barkham	15	SS14.24	Woodside, Blagrove Lane, Wokingham	4	Ref	Site name	Approx no. pitches	SS11	Arborfield Green Strategic Development Location	5	SS12	South Wokingham Strategic Development Location	6	SS13	Loddon Valley Garden Village	20	2040. It also allocates six specific sites (both within and outside of strategic development sites) where these pitches will be delivered. The increase in Wokingham Borough's population will magnify the pressure on local resources, such as recreational spaces and the road network. Higher footfall in Habitats Sites (e.g. the Thames Basin Heaths SPA) may increase disturbance to qualifying bird species. Furthermore, an increase in AADT vehicle flows past Habitats Sites may result in changes to botanical community composition and knock-on effects to ground-nesting birds. The policy has the potential to shape the following impact pathway: - Recreational pressure - Atmospheric pollution Overall, Policy H9 is screened in for AA.
Ref	Site name	Approx no. pitches																											
SS14.1	High Barn Farm, Commonfield Lane, Barkham	20																											
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SS11	Arborfield Green Strategic Development Location	5																											
SS12	South Wokingham Strategic Development Location	6																											
SS13	Loddon Valley Garden Village	20																											
Policy H10: Traveller sites	1. Development proposals for new Gypsy and Traveller pitches and Travelling Showpeople plots will be supported where all of the criteria are met: - The site is located in a defined settlement or if in countryside, is well related to a defined settlement within or adjoining the borough; - The proposal is of a scale which does not dominate nearby settlements whether singly or cumulatively with any existing or permitted sites in the area; - Safe and suitable access to the highway network for vehicles, caravans and pedestrians can be provided and there is adequate space for the parking and manoeuvring of caravans within the site;	There are no LSEs of this policy on Habitats Sites. This development management policy supports new gypsy and traveller pitches, and travelling showpeople plots, provided that various development criteria are met. However, setting out these criteria has no bearing on Habitats Sites. The policy also protects against the loss of existing pitches and plots.																											

Policy Number / Name	Policy Text	LSEs Screening Outcome
	d) The scheme is sensitively and appropriately designed, including landscaping, to respect landscape character in accordance with Policies NE4, NE5 and NE6; e) The proposal should be adequately serviced, or be capable of being adequately serviced, preferably by mains connections; and f) The proposal provides acceptable standards of amenity for the site's occupants and does not have unacceptable impact on the amenity of neighbouring properties in accordance with Policy DH2. In addition, Travelling Showpeople sites should demonstrate that the site has adequate space and is designed to allow for the manoeuvring, storage and maintenance of show equipment and associated vehicles. 2. Proposals for sites of mixed residential and business use will only be considered appropriate if the business use accords with Policy ER4 and would not result in an unacceptable loss of amenity to the residential occupiers or surrounding properties in accordance with DH2. <u>Loss of pitches or plots</u> 3. Development proposals that would result in the net loss of existing pitches /plots, land allocated for pitches / plots, or land with planning permission for pitches / plots will only be supported when one or more of the following criteria are met: a) The pitch, plot or site is no longer suitable for such use and that alternative provision on a site that is of equal or better quality is provided; or b) It is clearly demonstrated that there is no current or foreseeable future need for pitches or plots in the borough. 4. Development proposals for pitches specifically to accommodate transit movements will be permitted, subject to satisfying parts 1, 2, and 3 of this policy.	No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H10 is screened out from AA.
Policy H11: Houseboat moorings	1. Development proposals for new permanent residential moorings will be supported where: a) There would be no unacceptable impact on the operational requirements of the watercourse; b) There would be no unacceptable impact on navigation of the watercourse or navigational safety; c) Adequate access for emergency services to the mooring(s) exists or can be provided as part of the development to ensure safety; d) There is good access to services and facilities by walking, cycling and public transport; e) There is adequate car parking, where relevant, taking into account the number of moorings and the location of the site; f) The site is connected or is capable of being connected to suitable utilities and on site services including water supply, electricity and disposal facilities for sewage and waste, as far as is practicable; g) There is no obstruction to the use of adjacent tow paths and no impediment to the safety of their use; h) There would be no unacceptable impact on biodiversity of the water course, its margins and nearby areas of nature conservation; i) There would be no unacceptable visual or amenity impacts to the watercourse and nearby land uses; and	There are no LSEs of this policy on Habitats Sites. This development management policy supports proposals for new permanent houseboat moorings, provided that various development criteria are met. However, expressing a general support for residential moorings has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H11 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	j) There would be no restriction on the desire for increased access and opportunities to enjoy enhanced water related infrastructure facilities for all residents and visitors. 2. Development proposals for transit moorings will be supported provided they satisfy criteria 1a) – 1e) and 1g) – 1j) set out above, and: a) Make appropriate provision for refuse and sewage disposal facilities which should be sited so as not cause adverse visual or amenity impact. 3. Permission for all temporary visitor moorings will be subject to a temporary occupancy condition which restricts usage to a maximum period of 14 days.	
Policy H12: Residential development of existing private gardens	1. The inappropriate development of private residential gardens will be resisted. 2. Development proposals for new residential development that includes land within the curtilage (or the former curtilage), of private residential gardens will be supported where they: a. Optimise the efficient and effective use of land, particularly in locations where higher densities are appropriate; b. Make a positive contribution to the character of the area in terms of: i. The relationship of the existing built form, setting and spaces around buildings and compatibility with the general building height within the surrounding area; ii. A design and layout which integrates with existing landscape features and the surrounding area, with regard to the built up footprint of each plot, building line(s), rhythm of plot frontages, parking areas; iii. Existing pattern of openings and boundary treatments on the site frontage iv. Minimising the exposure of private to public spaces and avoiding the need for additional physical security measures, such as incorporating appropriate hard and soft landscaping, particularly at site boundaries. This includes features such as the variety of trees, hedges and hardstanding/lawn etc.; v. The materials and elevational detail are of high quality, and where appropriate distinctive and/ or complementary; and vi. The arrangement of doors, windows and other principal architectural features and their rhythm between buildings; c. Incorporate access and parking arrangements which meet appropriate highway standards; d. Do not lead to unacceptable tandem development; and e. Do not prejudice the satisfactory development of the wider area.	There are no LSEs of this policy on Habitats Sites. This development management policy prevents the inappropriate development of private residential gardens. Such development will only be permitted provided several criteria are met. However, protecting private gardens has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy H12 is screened out from AA.
Policy H13: Retention of mobile home parks	1. Development proposals that would result in the loss of a mobile home park site, either in part or full, will only be supported if it will provide 100% affordable housing which will meet locally identified needs.	There are no LSEs of this policy on Habitats Sites. This development management policy prevents the loss of mobile home parks, unless any proposals provide 100% affordable housing. However, protecting mobile home parks has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		Overall, Policy H13 is screened out from AA.
Chapter 10: Flooding and Drainage		
Policy FD1: Development and flood risk (from all sources)	1. Development proposals must take into account at all stages of development, and at the appropriate stage of the planning application process, all sources of flood risk, including historic flooding, current and future impacts of climate change, and cumulative impacts. Development proposals must be consistent with national policy and guidance and demonstrate how they have used, and where relevant comply with the site specific recommendations of, the Strategic Flood Risk Assessment (SFRA) to help determine the suitability of the proposal. 2. Development proposals in Flood Zones 2 or 3 must take into account the vulnerability of proposed development. <u>Sequential Test</u> 3. Development must be guided to areas of lowest flood risk, in the first instance, by applying the sequential approach, taking into account the effects of climate change and flooding from all sources. Development proposals should ensure flood risk is not worsened for the application site and elsewhere, and ideally that betterment of existing conditions is achieved. Storm water attenuation areas should be located outside of Flood Zones 2 and 3. 4. The sequential test will not be required if one or more of the following applies: a) Minor non-residential extensions: industrial/commercial/leisure etc. extensions with a footprint of less than 250m²; b) Alterations: development that does not increase the size of buildings e.g. alterations to external appearance; c) Householder development: for example, sheds, garages, games rooms etc. within the curtilage of the existing dwelling, in addition to physical extensions to the existing dwelling itself. This definition excludes any proposed development that would create a separate dwelling within the curtilage of the existing dwelling e.g. subdivision of houses into flats; or d) Changes of use, except where the change of use is to a caravan, camping or chalet site, or to a mobile home or park home site. <u>Exception Test</u> 5. In exceptional circumstances, development proposals in areas of flood risk will be supported where all of the following can be demonstrated: a) The development proposal provides wider sustainability benefits to the community that outweigh flood risk; b) The development proposal will: i. Be safe for its lifetime, taking account of the vulnerability of its users ii. Not increase flood risk in any form elsewhere and, where possible, will reduce flood risk overall iii. Incorporate flood resilient and resistant measures into the design; and	There are no LSEs of this policy on Habitats Sites. This positive development management policy specifies that planning applications must take account of all sources of flood risk in all stages of development. Developments should be supported by a Strategic Flood Risk Assessment to help determined the suitability of the proposal. Furthermore, Sequential Tests, Exception Tests and Flood Risk Assessments should be undertaken. Avoiding the areas of highest flood risk will help protect the aquatic environment, including any Habitats Sites with hydrological dependencies, from aquatic pollution and changes in flow. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy FD1 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	c) Appropriate evacuation and flood response procedures are in place to manage the residual risk associated with an extreme flood event. <u>Flood Risk Assessment</u> 6. An appropriately detailed, site-specific Flood Risk Assessment (FRA) is required: a) For all development proposals in areas of known historic flooding from any sources; b) Where there is evidence of a risk from any sources of flooding; c) For all development proposals in Flood Zones 2 and 3; d) For development proposals in Flood Zone 1, an assessment should accompany all proposals involving: i. Sites of 1 hectare or more; ii. Land which has been identified by the Environment Agency as having critical drainage problems; iii. Land identified in a strategic flood risk assessment as being at increased flood risk in future; or iv. Land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.	
Policy FD2: Sustainable drainage	1. Development proposals must ensure surface water arising, including the impact of climate change, is managed in a sustainable manner which must be demonstrated through either a: a) Site-specific Flood Risk Assessment; or b) Surface Water Drainage Strategy. a) Development proposals will only be supported where the proposal would reproduce greenfield runoff characteristics and return run-off rates and volumes back to the original greenfield levels for greenfield sites; and for brownfield sites both run-off rates and volumes be reduced to as near greenfield as practicably possible, or 40% betterment of existing, whichever is achievable; 2. The provision of SuDS should: a) Be of an appropriate design (in line with the principles and local standards set out in the council's latest SuDS strategy and technical guide and any current national technical standards) to meet the long term needs over the lifetime of the development and which achieve wider social, ecological and environmental benefits; b) Include a clear strategy for adoption and maintenance to the satisfaction of the council, as the Lead Local Flood Authority (LLFA); c) Do not cause adverse impacts on the public sewerage network serving the development where discharging surface water to a public sewer. Any discharges should be agreed in writing by the local sewerage undertaker; d) Incorporate guidance set out in the Wokingham SuDS strategy to effectively manage flood risk, improve the water environment, enhance biodiversity and mitigate and adapt to the effects of climate change; e) Incorporate SuDs solutions that will contribute towards water quality treatment and biodiversity enhancements in line with the Water Framework Directive (WFD) and the Thames River Basin Management Plan; and f) Avoid the use of underground tanks and conveyance, except when all other reasonable alternatives to provide a sustainable drainage solution have been exhausted.	There are no LSEs of this policy on Habitats Sites. This positive development management policy specifies that planning applications must deliver sustainable drainage measures on site, demonstrated through a site-specific Flood Risk Assessment or a Surface Water Drainage Strategy. For example, runoff volumes from brownfield sites should be restored to pre-development greenfield rates. Developments should also incorporate SuDS solutions in accordance with Wokingham's SuDS Strategy. Delivering SuDS measures will help protect the aquatic environment, including any Habitats Sites with hydrological dependencies, from aquatic pollution and changes in flow. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy FD2 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	3. In addition, residential development proposals of 10 dwellings or more, or non-residential development proposals of 1,000 m² or greater gross internal area, and developments in areas at risk of flooding from all sources, must incorporate SuDS as an intrinsic part of the design and layout of the proposal, unless it can be effectively demonstrated that it is not feasible within the constraints of the site.	
Policy FD3: River corridors and watercourses	1. Development proposals should conserve and enhance the function, character, setting, biodiversity and historical significance of rivers and water courses. 2. Where appropriate, development proposals in vicinity to rivers and watercourses will be required to: - Meet the principles of high-quality design set out in PolicyDH1, having special regard to riverside setting and water frontage character, and consider views of the proposals from all public vantage points, including from the river or watercourse; - Maintain, and where possible enhance, public access for walking, wheeling and cycling (including Greenways, and Green Routes), and tourism and leisure activities, such as fishing and boating; - Maintain tree cover, conserve and enhance natural watercourse banks and their associated bankside and marginal vegetation and the ecological value of the area including its role as a wildlife network. Opportunities for the restoration and enhancement of natural elements of the environment should be incorporated within the design of developments proposals; - Provide or retain a minimum undeveloped buffer zone measured from the top of the river or watercourse bank at the point at which the bank meets the level of the surrounding land. A buffer of 8m should be provided for rivers. The buffer for watercourses should reflect the type, size and nature of the watercourse; and - Demonstrate how the development proposal will support the achievement of Water Framework Directive (WFD) objectives, and guidance set out in the Thames River Basin Management Plan or any local catchment management plans; 3. Appropriate proposals for sport, leisure and river-related employment, infrastructure and renewable energy generation will be supported where they meet the above criteria and where they do not obstruct access along or to the river or watercourse for any users, or harm its ecological value. 4. The culverting of any watercourses should be avoided where possible, and opportunities for the de-culverting of watercourses should be actively explored and pursued. River Thames - The ecological value of the River Thames will be maintained and in appropriate circumstances restored and enhanced together with natural elements of the riparian environment. Development proposals should seek to promote the healthy growth in the use of the River Thames for communities, wildlife, leisure, business and tourism in ways that are compatible with its character, setting and ecology, and in line with the objectives of the River Thames Waterways Plan and the Environment Agency's Thames River Basin Management Plan. - Particular care will be taken to ensure developments within the setting of the River Thames complement the distinctive character of the water frontage and important views. Existing riverside access will be maintained and opportunities to improve or extend access to the river and adjoining sites will be supported.	There are no LSEs of this policy on Habitats Sites. This positive development management policy specifies that planning applications must conserve and enhance the biodiversity of rivers and water courses. It sets a range of parameters for development proposals, including the maintenance of public access, retention of an 8m undeveloped buffer zone and support of WFD objectives. The ecological value of the River Thames is also protected. While this policy is positive for aquatic habitats, the Habitats Sites relevant to the Wokingham Borough Local Plan are not fundamentally dependent on water courses. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy FD3 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
Chapter 11: Natural Environment		
Policy NE1: Biodiversity and geodiversity	- Development proposals should protect and enhance biodiversity and/or geodiversity features of conservation value and implement appropriate conservation management. The degree of protection will be proportionate to the status of the site or species in terms of its international, national and/or local importance. - Development proposals should demonstrate through a suitable level of ecological survey information and assessment how they conserve and enhance biodiversity and/or geodiversity including their long-term management. - Development will only be permitted where it: - Avoids fragmentation of existing habitats and provides coherent ecological connectivity and permeability that is integrated and linked to the wider green and blue infrastructure network, through the restoration, enhancement and connection of: linear features such as wildlife corridors; stepping stones; and any nature recovery networks (including links to habitats outside the borough); - Incorporates beneficial biodiversity and/or geodiversity conservation features and enhances existing features through design, layout and landscaping; - Provides or retains appropriate buffer zones between development proposals and designated sites, protected species, priority species or priority habitats or main rivers, which are informed by detailed site-based assessment; - Seeks to eradicate or control any invasive non-native species present on site; and - Is compatible with any national, regional, county, and local biodiversity action plans, Local Nature Recovery Strategy and/or other strategic conservation management plans for species or habitats. In addition to the above, where specific identified sites are likely to be affected, the following will be taken into account: Internationally Designated Sites: - Development proposals likely to result in a significant effect on internationally designated sites either alone or in combination with other plans or projects, will not be permitted unless it can be demonstrated that the adverse effects on the integrity of the designated site can be fully avoided, mitigated and/or compensated. Nationally Designated Sites: - Development proposals that are likely to have an adverse effect on the notified features of a nationally designated site will only be permitted in exceptional circumstances, and provided it has been clearly demonstrated that: - A suitable alternative site with a lesser impact than that proposed is not available; - The on-site biodiversity or geodiversity benefits of the proposal including, where applicable, the overall site or wider habitats network, clearly outweigh the impacts on the notified features of the site; and - All appropriate avoidance and mitigation measures have been proposed and secured.	There are no LSEs of this policy on Habitats Sites. This positive development management policy protects the biodiversity and geodiversity across Wokingham Borough, including internationally designated sites (i.e. Habitats Sites), nationally designated sites, irreplaceable habitats and sites of local importance. This policy is the key mechanism that ensures the integrity of Habitats Sites is safeguarded. Development proposals will only be permitted where it can be demonstrated that there will be no adverse effects on the integrity of Habitats Sites, both alone and in-combination. Where this cannot be excluded, the policy requires proposals to fully avoid, mitigate or compensate for any adverse effects. While the policy does not refer to specific impact pathways in Habitats Sites, its text would automatically include recreational pressure and atmospheric pollution impacts. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE1 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	Irreplaceable Habitats: 6. Development proposals that are likely to result in the loss or deterioration of an irreplaceable habitat, (such as ancient woodland, ancient or veteran trees) will only be permitted in exceptional circumstances, where: a) A suitable alternative with a lesser impact than that proposed is not available; b) It has been adequately demonstrated that the irreplaceable habitat cannot be retained within the proposed development scheme; c) The need and benefits of the proposed development in that location and form clearly outweigh the loss or deterioration; and d) Adequate compensation measures are provided on site wherever possible, and off-site where this is not feasible. The scale and quality of the compensation measures required will be commensurate to the loss or deterioration of the irreplaceable habitat and will be considered on a site-by-site basis, including their long-term management and maintenance. Sites of Local Importance: 7. Development proposals which are likely to have an adverse effect on a site of local importance (including priority species or priority habitats, and sites that meet the criteria for designation as a Local Wildlife Site or Local Geological Site) will only be permitted where they accord with the following sequential approach: a) No alternative with a lesser impact is available; b) The need and benefits of the proposed development in that location and form clearly outweigh the loss or deterioration; c) All proportionate mitigation measures to minimise adverse effects are included within the development proposal; and d) As a last resort, secure appropriate compensation measures on-site wherever possible, and off-site where this is not feasible, including their long-term management and maintenance.	
Policy NE2: Biodiversity net gain	1. All development proposals should demonstrate a minimum biodiversity net gain of 10% (unless specified in another site allocation policy) calculated via the most up-to-date national biodiversity accounting metric and provide details of the long-term maintenance and management of the net gain. This should be delivered on site in the first instance, or through biodiversity off-setting where appropriate.	There are no LSEs of this policy on Habitats Sites. This development management policy requires all development proposals to achieve a minimum of 10% biodiversity net gain, preferably on-site. While positive for overall biodiversity, the delivery of net gain has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE2 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
Policy NE3: Thames Basin Heaths Special Protection Area	1. Development proposals, which either alone or in combination with other plans or projects, are likely to have a significant adverse effect on the ecological integrity of the Thames Basin Heaths Special Protection Area (SPA) without appropriate avoidance and mitigation measures will be refused. 2. Development proposals that are likely to have a significant adverse effect on the integrity of the SPA must demonstrate that adequate measures will be put in place to avoid or mitigate any such effects. Such measures must be agreed with the council and Natural England. To assist the council in carrying out a Habitats Regulations Assessment, the applicant will be required to provide such information as the council may reasonably require for the purpose of the assessment. Development proposals for larger residential development may need to undertake an air quality assessment of the likely significant effects on the SPA and other habitats sites. Applications for non-residential development will be considered on a case by case basis. <u>Zones of influence</u> 3. Where Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM) mitigation measures are required for residential development proposals, a consistent approach will be taken regarding mitigation, based on the following zones of influence, as measured in a straight line distance from the SPA boundary, and as defined in the Policies Map: a) 0-400m; b) 400m-5km; and c) 5km-7km. 4. Within the 0-400m zone, mitigation is unlikely to be capable of protecting the integrity of the SPA. Development proposals for a net increase in dwellings within this zone will not be supported unless it can be demonstrated through a Habitats Regulations Assessment that there will be no adverse effect on the integrity of the SPA. 5. Within the 400m-5km and 5km-7km zone, development proposals for a net increase in dwellings will be supported which secure the SANG and SAMM standards set out below. <u>SANG Standards</u> 6. The provision of SANG will meet the following standards and arrangements: a) Within the 400m – 5km zone a minimum of 8 hectares of SANG land (after discounting to account for current access and capacity) will be provided per 1,000 new occupants. i. Development proposals of net 9 dwellings or fewer will not be required to be within a specified distance of SANG land provided a sufficient quantity of SANG land is in place to cater for the consequent increase in residents. ii. Development proposals of 10 or more net dwellings will need to be within the catchment of a specified SANG and a sufficient quantity of SANG land must be in place to cater for the consequent increase in residents. iii. Development proposals for a net increase of fewer than 50 dwellings will be required to provide financial contributions towards strategic SANG facilitated by the council subject to available capacity, unless there are other material considerations.	There are no LSEs of this policy on Habitats Sites. This positive development management policy protects the Thames Basin Heaths SPA from adverse effects of development proposals, both alone and in-combination. This policy is the key mechanism that safeguards the Thames Basin Heaths SPA, both from recreational pressure and atmospheric pollution impacts. It duly recognises the three buffer zones surrounding the SPA (0-400m, 400m-5km and 5-7km), specifically setting out the zones in which residential developments will need to provide SANG and SAMM mitigation. The SANG requirements for various sizes of residential developments are clearly identified. Moreover, the policy also requires larger developments to undertake air quality assessments regarding their potential impacts on the SPA. Where air quality modelling indicates that adverse effects on site integrity cannot be excluded, contributions to strategic mitigation measures would be required in line with Policy NE1. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE3 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	iv. Development proposals for a net increase of more than 50 dwellings are expected to provide their own bespoke SANG. b) Development proposals for a net increase of more than 50 dwellings within the 5-7km zone may be required to provide mitigation measures based on a combination of SAMM and the provision of SANG to a lower standard than within the 400m - 5km zone. This will be assessed on a case-by-case basis in consultation with Natural England and, where appropriate, a Habitats Regulations Assessment may be required to ascertain whether the proposal could have an adverse effect on the SPA. c) Development proposals for non-residential development will be assessed on a case by case basis. Development proposals which wish to rely on SANG in third party ownership must demonstrate that this has been agreed and secured with the landowner and that there is sufficient capacity in the correct location to mitigate the proposal. <u>SAMM contributions</u> 7. A developer contribution will be made towards the SAMM Project for each net additional dwelling. This will provide an SPA wide wardening and education service and monitor the effectiveness of the avoidance and mitigation measures and visitor pressure on the SPA. <u>Loss of SANG</u> 8. There is a presumption against the loss of SANG land for other uses. The loss of SANG will only be accepted where the applicant can demonstrate that sufficient alternative avoidance measures for all relevant submitted and/or approved plans and projects within the borough taking account of Natural England's advice on SANGs.	
Policy NE4: Trees, woodland, hedges and hedgerows	1. Development proposals should protect and incorporate existing trees, woodland, hedges and hedgerows and ensure they are well integrated within the public realm, in a suitably landscaped setting. 2. Development proposals should ensure the existing pattern of fields, hedges and hedgerows, woodland, trees, watercourses, water bodies, underlying topography and other landscape features are retained and that the design of the scheme is integrated into the landscape. 3. The design and layout of new development should: a) Provide sufficient space to enable existing trees to thrive by maintaining adequate root protection areas and space for the trunk and branches to grow; b) Ensure buildings are carefully sited to limit excessive shading to residential properties; c) Provide appropriate buffer zones around woodlands, including semi-natural ancient woodlands, planted ancient woodland sites, orchards, hedgerows and individual trees; d) Provide enhanced and additional tree and hedgerow planting wherever possible, but particularly where there are opportunities to restore or develop habitat and landscape links between woodlands and hedgerows and between these features and other landscape or habitat features such as river corridors;	There are no LSEs of this policy on Habitats Sites. This development management policy protects trees, woodland, hedges and hedgerows across Wokingham Borough, requiring development proposals to incorporate these features in their public realm and landscape plans. Proposals likely affecting trees, irreplaceable habitats, hedges and hedgerows should undertake an Arboricultural Impact Assessment and Arboricultural Method Statement. While positive for the environment, the protection of these natural features has no direct bearing on the Habitats Sites that are relevant to the Wokingham Borough Local Plan.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	e) Maximise opportunities for planting urban trees, shrubs and hedges within streets and greenspace to create rich urban landscapes; and f) Proposals must also demonstrate sufficient rooting volume of soil, irrigation and drainage for trees to thrive in the long term. 4. Development proposals that are likely to affect trees, irreplaceable habitats (such as ancient woodland, ancient or veteran trees), hedges or hedgerows either on-site or nearby, should: a. Assess the health of all trees, woodland, hedges and hedgerows affected, describing and assessing their value and the potential impact of the development as part of an Arboricultural Impact Assessment submitted with a planning application; b. Provide an appropriate Arboricultural Method Statement, including a Tree Constraints Plan and Tree and Woodland Protection Plan; and c. Ensure all tree and hedge/hedgerow protection measures are in place prior to works commencing on site, commensurate with any pre-commencement planning conditions. 5. The loss, threat or damage to any tree, woodland, hedge or hedgerow of visual amenity, heritage or nature conservation value, will not be permitted unless all the following criterion are met: a) The development proposal has been designed to avoid, reduce or minimise impact, and b) Mitigation measures are incorporated as part of a development proposal, that provide equivalent character, visual amenity, heritage value, as well as habitat connectivity. 6. The natural capital of sites should be protected. Any trees, woodland, hedges or hedgerows that are damaged as a result of the construction process should be reported and replaced with indigenous tree species and native hedgerow species, by agreement with the council. The developer must bear all associated costs.	No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE4 is screened out from AA.
Policy NE5: Landscape and design	1. Development proposals will be supported where they adopt a landscape led approach which protects and enhances the character and distinctiveness of landscapes using the most up-to-date landscape studies (including the Landscape Character Assessment and Design Guide and any successor document). 2. Development proposals should be demonstrably informed by, and respond to, the distinctive characters set out in the Landscape Character Assessment and other relevant assessments, which provide an understanding of the valued characteristics, features and quality of local landscape character areas. 3. Development proposals should be accompanied by a landscape and visual impact assessment. The level of information provided should be proportionate to the scale and nature of the development proposed and should be sufficient to allow an informed assessment of the potential landscape and visual effects of the proposed development. 4. Landscape schemes should be set within an overall masterplan for the proposed development, and should: a) Include a structural tree, hedge and shrub planting schedule; b) Incorporate landscape spaces, public realm and green and blue infrastructure to achieve a sense of place, improve health and wellbeing and mitigate and adapt to the impacts of climate change; c) Incorporate effective built form and landscape transitions for rural-urban transition areas; and	There are no LSEs of this policy on Habitats Sites. This development management policy sets out criteria in relation to landscape and design (such as requiring a landscape and visual impact assessment). However, the provision of such criteria has no direct relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE5 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	d) Set out a long-term landscape establishment and management plan, which prescribes and protects planting and its sustainability. 5. Development proposals on or in proximity to a Green Route will only be supported where existing trees, hedgerows and hedges are retained in depth and contribute to the improvement of Green Routes through landscape schemes, including tree and hedge planting.	
Policy NE6: Valued landscapes	1. The following areas, as defined on the Policies Map, are designated as valued landscapes in recognition of their distinctive character to the borough's landscape. • Alexander Pope; • Bearwood and Barkham; • Billingbear; • Bowsey Hill; • Farley Hill; • Forest and Rides; • Haines Hill; • Remenham Chalk; • Ridge and Rivers; • Riseley Woods; • River Blackwater; • River Loddon; • River Thames. 2. Development proposals located within a valued landscape should have particular regard to the following attributes: a) Landscape quality (condition); b) Scenic quality; c) Rarity; d) Representativeness; e) Conservation interests; f) Recreation value; g) Perceptual aspects; and h) Associations. 3. Development proposals affecting Valued Landscapes will only be supported where they protect and, where appropriate, enhance the special features, characteristics and qualities of the landscape, unless the benefits of the development in that location clearly outweigh the harm.	There are no LSEs of this policy on Habitats Sites. This development management policy identifies valued landscapes across Wokingham Borough in which particular attributes must be considered by development proposals. However, the delineation of such landscapes has no relevance to Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE6 is screened out from AA.
Policy NE7: Sites of Urban Landscape Value	1. Sites of Urban Landscape Value are defined on the Policies Map. 2. Development proposals within or affecting Sites of Urban Landscape Value will only be supported where they demonstrate that they: a) Retain and enhance the special landscape features and qualities that make the site valuable to the character, townscape and urban form; b) Minimise the visual impact of the development site on the Sites of Urban Landscape Value; and c) Protect, manage and enhance the sites' capacity for informal recreation.	There are no LSEs of this policy on Habitats Sites. This development management policy protects sites of Urban Landscape Value across the borough. However, the preservation of these sites has no relevance to Habitats Sites.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy NE7 is screened out from AA.
Chapter 12: Design, Heritage and the Built Environment		
Policy DH1: Placemaking and quality design	1. All new development must be of high-quality design to endure over the lifetime of the development and create a strong sense of place. A development proposal will be considered of high quality design where it achieves the following design principles: <u>Context</u> a) Reinforces or creates a positive sense of place and local distinctiveness through design that reflects and enhances the local natural, cultural and historic character of the area; b) Does not prejudice by way of design and layout, the comprehensive development of a wider opportunity; c) Where relevant, takes an integrated approach to placemaking which allows people to safely and conveniently access the services they need within and beyond the site; <u>Identity</u> d) Respects and enhances the local, natural and historic character of the area, paying particular attention to siting, layout, urban grain, rhythm, density, height, scale, bulk, massing, proportion, enclosures, materials and detailing; e) Embraces opportunities for innovative design and new technologies, where appropriate, which sympathetically complement or contrast with the character and appearance of an area; <u>Built form</u> f) Provides a layout and form that delivers energy efficient buildings in accordance with Policy CE1; g) Optimises the efficient use of land, with higher development densities provided in town centres and other sustainable locations; <u>Movement</u> h) Provides safe and easy access and movement for pedestrians, cyclists, public transport, cars and service vehicles. The layout of a site must be connected, permeable, legible and inclusive, with good natural surveillance and maximise opportunities for, and prioritisation of, active and sustainable travel in accordance with Policies C1, C2, and C3; i) Delivers secure and conveniently located cycle parking facilities, public transport infrastructure (where relevant), and well-considered vehicle parking (including factors such as their location and ease of access for users) where this is required, including suitable Electric Vehicle charging points, that accords with the requirements of Policies C5 and C6 and which minimises the visual impact of the parking arrangements; j) Provides service access to commercial uses which makes efficient use of space, is well integrated with other land uses, and ensures highway safety; <u>Nature</u>	There are no LSEs of this policy on Habitats Sites. This development management policy sets out placemaking and quality design criteria for new development proposals, including their built form, movement, nature, public spaces and resources. However, setting design criteria has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH1 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	k) Retains, protects and integrates existing natural features including trees and hedgerows, water bodies, and landscape features; l) Includes appropriate new landscaping and green infrastructure as an integral part of the proposal, maximising opportunities to deliver diverse ecosystems and biodiverse habitats and strengthens wildlife corridors in a manner consistent with achieving net biodiversity gain in accordance with Policy NE2; m) Pay particular attention to ensuring new streets are tree-lined in a manner that enhances identity and the attractiveness of active travel routes; n) Where appropriate, incorporates SuDS that have been considered by the applicant early in the design process and that are well integrated into development layout, in accordance with Policy FD2; <u>Public spaces</u> o) Delivers streets and public spaces that are attractive, particularly at the pedestrian level, incorporating features of visual interest (including public art) wherever possible. Streets and public spaces must be designed to be functionally inclusive with the ability to be managed for the long term; p) Provides sufficient levels of high-quality, usable private and public amenity space which is clearly delineated through the incorporation of high-quality soft and hard boundary treatments; q) Creates safe spaces that are designed to encourage positive social interaction and to discourage crime and disorder, and the fear of crime. Places with strong levels of natural surveillance and active frontages are expected; <u>Uses</u> r) Creates places that foster active healthy lifestyles in accordance with Policy HC1; s) Includes a suitable mix of uses, depending on the scale and location of the development; t) Delivers places that are accessible to all, including people of all ages, those with disabilities, and other vulnerable members of the community; <u>Homes and buildings</u> u) Provides acceptable standards of amenity, privacy and daylight for occupiers, and does not unacceptably affect the amenity of the locality or surrounding properties in accordance with Policy DH2; v) Provides good quality internal environments with adequate space for users. In the case of residential buildings, this should include adaptable spaces suitable for home working and compliance with internal space standards as set out at Policy H1; w) Makes the most efficient use of land and existing buildings. New development should be designed to be adaptable, so that, wherever possible, it can be used with flexibility over time; <u>Resources</u> x) Minimises energy demand and maximise energy efficiency in accordance with Policies CE1, CE2 and CE3; y) Provides adequate measures for the storage of waste, including recycling waste bins, in a manner that is integrated into the proposal to be conveniently located for occupants and for collections, and to minimise visual impact; z) Maximises opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land;	

Policy Number / Name	Policy Text	LSEs Screening Outcome
	<u>Lifespan</u> aa) Uses high quality materials and external finishes that are durable and will weather attractively. 2. Masterplans and Design Codes will be required for larger and more complex developments to agree an overall vision and strategy for a development as a whole, which demonstrates a comprehensive and inclusive approach to design.	
Policy DH2: Safeguarding amenity	- Development proposals must ensure there are no unacceptable impacts on the amenity of existing or future occupiers. This includes the impact of individual development or, cumulatively, in combination with other development. - Development proposals should be sensitively designed and provide measures to avoid and/or mitigate against existing or potential impacts, in terms of: - Loss of privacy and overlooking; - Unacceptable overshadowing and a loss of daylight/sunlight; - Visual intrusion, dominance or undue sense of enclosure, or an overbearing impact or harmful loss of outlook; - Noise, vibration and disturbance; - Artificial light pollution; - Odour, dust and fumes; and - Crime or the perception of unsafe environments. - Development proposals that would generate regular movements of HGVs and commercial traffic in residential areas must demonstrate how the impacts of noise, vibration, dust and fumes will be minimised in both the construction and operational phases. - Where necessary and appropriate, to protect the amenity of neighbouring occupiers planning conditions will be used to restrict hours, area(s) and the type(s) of use or operation.	There are no LSEs of this policy on Habitats Sites. This development management policy safeguards the amenity of all existing and future occupiers, such as by protecting their privacy, preventing visual intrusions, and reducing noise, vibration and disturbance. However, safeguarding of amenity has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH2 is screened out from AA.
Policy DH3: Shopfronts	- Development proposals for new shopfronts or alterations to existing shopfronts will be supported where: - They maintain or create an active frontage; - They respect the character, materials, design, scale and proportions of the building, frontages and/or local area; and - They retain, protect or integrates important architectural or historic features on existing buildings. Historic features should where necessary be restored and not concealed. Security measures should be well designed and integrated with the frontage.	There are no LSEs of this policy on Habitats Sites. This development management policy supports proposals for new shopfronts and alterations to existing shopfronts, provided that certain criteria are met. However, the provision of new shopfronts has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH3 is screened out from AA.
Policy DH4: Advertisements and signage	- Development proposals for advertisements and signage will be supported where: - The design, including materials, size, colour, noise, lettering amount and type of text, illumination and luminance, and location of the advertisement respects the scale and character of the building on which it is situated and the surrounding area, especially in the case of a heritage asset or within a conservation area;	There are no LSEs of this policy on Habitats Sites. This development management policy supports proposals for advertisements and signage, provided that certain criteria are met.

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	b) They will not have a harmful impact on the amenity of adjoining uses, and c) They will not have a detrimental effect on public and highways safety. The cumulative impact of advertisements and signage will be taken into account, and a proliferation that detrimentally affects visual or aural amenity, or a cluttered street scene will not be acceptable.	However, the provision of such infrastructure has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH4 is screened out from AA.
Policy DH5: The Historic Environment	- Designated heritage assets, including Listed Buildings, Scheduled Monuments, Conservation Areas and Registered Parks and Gardens, are irreplaceable resources that, subject to their significance, should be conserved for the benefit of future generations. - Development proposals should conserve and, wherever possible, seek to enhance, the archaeological, architectural, artistic or historic interest of all heritage assets, including the contribution made by their setting. This will be achieved through: - Identifying and understanding the heritage assets that may be affected by the proposed works, at an early stage in the design process; - Supporting works that secure the sensitive use, enjoyment, conservation and/or enhancement of heritage assets and their settings, particularly in relation to designated assets identified as being at risk; and - Retaining and/or incorporating existing features or details of historic or architectural interest and/or design quality into the scheme through the sensitive design of development. - Where development proposals have the potential to affect a heritage asset and/or its setting, a heritage assessment should be prepared in a level of detail proportionate to the asset's importance. This assessment should be submitted as part of a planning application and should describe the significance of the heritage asset and its setting, before assessing the potential impact of the proposal on its significance. - Development proposals that would cause substantial harm to, or total loss of significance of a designated heritage asset, will not be supported unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that out-weigh that harm, or where all the following criteria apply: - The nature of the heritage asset prevents all reasonable uses of the site; - No viable use of the heritage asset can be found through appropriate marketing that will enable its conservation; - Conservation by grant-funding or another form of not-for-profit, charitable or public ownership is demonstrably not possible; and - The harm or loss is outweighed by the benefit of bringing the site back into use. - Where a development proposal would cause less than substantial harm to the significance of a designated heritage asset, clear and convincing justification will need to be provided to demonstrate the public benefits of the proposal that could not otherwise be achieved. The level of public benefit must outweigh any harm to a designated heritage asset. - Local Historic Parks and Gardens and Areas of Special Character are included on the Policies Map. All non-designated heritage assets are identified and recorded on the council's website.	There are no LSEs of this policy on Habitats Sites. This development management policy conserves the historic environment of Wokingham Borough, including Listed Buildings, Scheduled Monuments, Conservation Areas, and Registered Parks and Gardens. However, the protection of historic sites has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH5 is screened out from AA.

Policy Number / Name	Policy Text	LSEs Screening Outcome
	7. Development proposals should demonstrate how the traditional, historical, local and special character of a building, area, park or garden and its setting has been preserved and enhanced. This will enable an assessment of the degree of harm to, or loss of, non-designated heritage assets, balanced against their significance, the positive contribution made by the development and the extent to which any harm can be justified or mitigated.	
Policy DH6: Archaeology	- Development proposals should be accompanied by a detailed archaeological assessment where: - The development has the potential to affect a scheduled monument or a non-designated heritage asset of archaeological interest; - The site is within or in proximity to an Area of High Archaeological Potential, or - The site is within a location where archaeological remains are known or suspected to exist. - The archaeological assessment should be in the form of a desk-based study that explains the significance of any archaeological remains, using suitable references such as the Historic Environment Record and, where necessary, a field evaluation. The assessment must explore and explain any likely impact of development upon the archaeological remains. - Development proposal should take appropriate measures to protect any archaeological remains by preservation in situ. Where an assessment of archaeological potential demonstrates this is not justified or proportionate, applicants will be responsible for the excavation, recording and archiving of remains.	There are no LSEs of this policy on Habitats Sites. This development management policy requires development proposals to undertake a detailed archaeological assessment under specific circumstances. However, the protection of archaeological features has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH6 is screened out from AA.
Policy DH7: Equestrian Development	- Equestrian development proposals will be supported in principle, as a means of boosting the rural economy, provided it has been demonstrated all the following criteria have been met: - The scale and intensity of the proposed development, including any subdivision of field(s) and earthworks, is compatible with the site's location and satisfactorily relates to existing field accesses, tracks and bridleways; - The proposal includes the re-use of existing building(s) wherever practicable and viable; - The location of new buildings, stables, yard areas and associated facilities respect the amenities of surrounding occupiers; - Site layout, highways and parking arrangements demonstrate safe access and egress for horse boxes, delivery vehicles and specialist waste collection vehicles; and - Estimated trip generation rates are provided to assess the impact on local highways, including from feed/hay deliveries, livery visitors including owners and farriers. Where the proposed development is located in the Green Belt, it will additionally be expected to accord with Policy SS6.	There are no LSEs of this policy on Habitats Sites. This development management policy provides support to new equestrian developments in principle, provided that a set of criteria is met. While horse riding can significantly contribute to recreational pressures in Habitats Sites, it is noted that this policy does not formally allocate any such developments. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy DH7 is screened out from AA.
Chapter 13: Healthy and Safe Communities		
Policy HC1: Promoting Healthy Communities	Vibrant, healthy and safe communities will be promoted through a high-quality environment with local services to support health, social and cultural wellbeing and help contribute to reducing deprivation and inequalities in the borough.	There are no LSEs of this policy on Habitats Sites. This development management policy supports vibrant, healthy and safe communities, such as by aligning with the Berkshire West Health

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	2. Development proposals should consider impacts on the health and wellbeing of new and existing residents, by including measures that contribute to healthier communities and reduce inequalities. This includes making a positive contribution to creating high quality, active, safe and accessible places. 3. Development proposals will be supported which: a) Contribute to the health and wellbeing priorities of the borough, including those outlined in the Berkshire West Health and Wellbeing Strategy and Wokingham Health and Wellbeing Strategy (and any other successor or associated document); b) Support the provision of new or improved health facilities, in consultation with the borough's Health and Wellbeing Board, Integration Partnership, the Buckinghamshire, Oxfordshire and Berkshire West (BOB) Integrated Care Board and NHS England; c) Protect existing health facilities in line with Policy HC2: Community Facilities. 4. Residential development proposals of 10 dwellings or more, or non-residential development proposals of 1,000 m² or greater gross internal area must include a Health Impact Assessment (HIA).	and Wellbeing Strategy, providing improved health facilities and undertaking Health Impact Assessments. However, the promotion of healthy communities has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC1 is screened out from AA.
Policy HC2: Community Infrastructure	New Facilities 1. Development proposals for the provision of new or extended community facilities will be supported where there is an identified present or future need, and should be: a) Of a suitable nature and scale to meet identified needs, be compatible with the character of the area and be sufficiently flexible to meet changing needs over time; b) Designed to accommodate a range of community uses. The co-location of facilities, including access for appropriate organisations and the local community will be strongly encouraged; c) Accessible by the community and promote social inclusion; and d) Provided as part of a large residential schemes where development increases demand beyond current capacity, or generates a newly arising need. 2. New community facilities must be supported by appropriate arrangements to secure the future management and maintenance of the facility. Existing Facilities 3. Existing community facilities should be retained, improved and enhanced. 4. Proposals that result in the loss of a community facility or service will only be supported where detailed and robust evidence has been provided to demonstrate: a) It would lead to the significant improvement of an existing facility, or the replacement of an existing facility of equal accessibility and convenience for the local community, with equivalent or improved facilities; or b) It has been demonstrated and determined that the facility no longer meets the needs of the local community; or c) It would provide better outcomes for the community outweighing the loss of the existing facility; or d) It is no longer economically viable.	There are no LSEs of this policy on Habitats Sites. This development management policy supports the provision of new or extended community facilities across Wokingham Borough. However, the general support for such infrastructure has no bearing on Habitats Sites. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC2 is screened out from AA.
Policy HC3: Local Green Space	1. Local Green Space as defined on the policies map, or in made neighbourhood plans, will be protected from inappropriate development, unless very special circumstances are demonstrated. 2. Development proposals on Local Green Space should be compatible with the area's designation.	There are no LSEs of this policy on Habitats Sites. This development management policy protects Local Green Spaces from impacts of new planning proposals. It is considered positive for

Policy Number / Name	Policy Text	LSEs Screening Outcome								
	3. Development proposals for facilities associated with the recreational use of a Local Green Space will normally be supported provided there are no unacceptable adverse impacts on the area's use or function.	Habitats Sites that are sensitive to recreational pressure (e.g. the Thames Basin Heaths SPA), as this maintains an adequate inventory of alternative recreation destinations. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC3 is screened out from AA.								
Policy HC4: Open space, sports, recreation and play facilities	Existing Facilities 1. Existing open space, sports and recreation and play facilities will be protected, maintained and where possible enhanced. 2. Development proposals on existing open space, sports and recreation and play facilities will only be permitted when one or more of the following is met: a) An assessment has been undertaken which clearly shows the open space, facilities or land are surplus to requirements and alternative facilities are available within a reasonable distance; or b) It can be demonstrated that alternative facilities of equivalent or superior quality and quantity will be provided in an accessible and suitable location; or c) The development is for alternative sport and recreational provision, the needs and benefits of which outweigh the loss of the current or former use; or d) It is ancillary to the main use of the site and enhances its function. New Facilities and Residential Development 3. Development proposals for open space, sport and recreation and play facilities will be encouraged and supported, in line with other policies in the local plan and Sport England guidance. New open space, sports, recreation and play facilities should be well related to the communities they serve and should, where possible, promote their dual use by being co-located with other community uses, such as schools. 4. Development proposals for residential development involving a net increase in the number of dwellings, will be required to provide or contribute to the provision of open space, sport and recreation and play facilities and must demonstrate how they meet the standards in the table below. <table><tr><th>Type</th><th>Borough standard (ha per 1,000 population)</th></tr><tr><td>Parks and public gardens</td><td>1.1</td></tr><tr><td>Natural/ semi natural greenspace (excluding country parks*)</td><td>2.84</td></tr><tr><td>Amenity greenspace</td><td>0.98</td></tr></table>	Type	Borough standard (ha per 1,000 population)	Parks and public gardens	1.1	Natural/ semi natural greenspace (excluding country parks*)	2.84	Amenity greenspace	0.98	There are no LSEs of this policy on Habitats Sites. This development management policy protects against the loss of existing open space, sports and recreation sites, and play facilities. It also supports new proposals for such sites. The expected delivery standards for each of these types of sites are also provided (ha per 1,000 population increase). This policy is considered positive for Habitats Sites that are sensitive to recreational pressure (e.g. the Thames Basin Heaths SPA), as such facilities contribute to an adequate inventory of alternative recreation destinations. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC4 is screened out from AA.
Type	Borough standard (ha per 1,000 population)									
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Natural/ semi natural greenspace (excluding country parks*)	2.84									
Amenity greenspace	0.98									

Policy Number / Name	Policy Text	LSEs Screening Outcome																								
	<table><tr><td>Provision for children and young people (Neighbourhood Equipped Areas of Play; Local Equipped Areas of Play; Local Areas of Play)</td><td>0.25</td></tr><tr><td>Civic Space</td><td>0.01</td></tr><tr><td>Outdoor sports facilities</td><td>1.44</td></tr><tr><td>Cemeteries/ Burial grounds**</td><td>14.4 grave plots per 1,000 population</td></tr><tr><td>Allotments</td><td>0.39</td></tr><tr><td colspan="2"></td></tr><tr><td>Type (indoor sports)</td><td>Borough standard (m² per 1,000 population)</td></tr><tr><td>Sports hall (4-badminton court) including indoor bowls (2 rinks) and Health & Fitness gyms (20 stations)</td><td>65.43</td></tr><tr><td>Swimming pool</td><td>8.26</td></tr><tr><td>Activity halls</td><td>41.31</td></tr><tr><td colspan="2">* Where Suitable Alternative Natural Greenspace (SANG) also meets the definition of natural greenspace it can also count towards this provision, i.e., at least 2.84ha per 1,000 population of the SANG could also contribute towards the natural greenspace standard and vice versa.</td></tr><tr><td colspan="2">**Assumes a grave plot can accommodate 2.5 burials on average.</td></tr></table> 5. Open space, sports, recreation and play facilities should be provided on-site. Where this is not possible or achievable, a financial contribution will be sought towards off-site provision. 6. Clear arrangements for the long-term future maintenance and management of public open spaces should be provided and agreed with the Council during the early stages of the planning process. New public open spaces created as part of development should be transferred to the Council or by agreement, to a Town or Parish Council for adoption once it has been designed and implemented to a suitable standard. Financial contributions will be secured from the developer through a Section 106 legal agreement towards the maintenance of public open spaces for up to a 30-year period.	Provision for children and young people (Neighbourhood Equipped Areas of Play; Local Equipped Areas of Play; Local Areas of Play)	0.25	Civic Space	0.01	Outdoor sports facilities	1.44	Cemeteries/ Burial grounds**	14.4 grave plots per 1,000 population	Allotments	0.39			Type (indoor sports)	Borough standard (m² per 1,000 population)	Sports hall (4-badminton court) including indoor bowls (2 rinks) and Health & Fitness gyms (20 stations)	65.43	Swimming pool	8.26	Activity halls	41.31	* Where Suitable Alternative Natural Greenspace (SANG) also meets the definition of natural greenspace it can also count towards this provision, i.e., at least 2.84ha per 1,000 population of the SANG could also contribute towards the natural greenspace standard and vice versa.		**Assumes a grave plot can accommodate 2.5 burials on average.		
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**Assumes a grave plot can accommodate 2.5 burials on average.																										

Policy Number / Name	Policy Text	LSEs Screening Outcome
Policy HC5: Environmental Protection	- Development proposals will only be supported where it can be demonstrated that individually, or cumulatively in combination with other schemes, they do not have an unacceptable impact, either during the construction phase, or when completed, on: - Human health, well-being or safety; - Residential and public amenity; - The quality of land, including soils and the subsurface; - Air and Water quality (including surface water and groundwater); and - Other sensitive receptors, including the natural environment. - Development proposals should demonstrate how an assessment of all potential environmental risks has been undertaken.	There are no LSEs of this policy on Habitats Sites. This development management policy ensures that development proposals do not result in unacceptable impacts on a range of receptors, including the natural environment. This policy is considered positive as it covers the natural environment, which would include Habitats Sites. It augments the protection of Habitats Sites provided by Policy NE1 and NE3. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC5 is screened out from AA.
Policy HC6: Air Pollution and Air Quality	- Development proposals should maintain, and where possible improve air quality. - Development proposals should consider the prevailing air quality and potential impacts upon air quality arising from airborne particulates, dust and odour associated with the construction and operation of a proposal (including vehicular traffic). - Air Quality Assessments can demonstrate how prevailing air quality and potential impacts upon air quality have been considered and how air quality will be maintained at an acceptable standard through avoidance and mitigation measures. Development proposals are likely to require an Air Quality Assessment where: - The site is located within an Air Quality Management Area (AQMA); or - The development has the potential to impact on air quality within an AQMA; or - It has the potential to impact on the implementation of Air Quality Action Plans or Local Air Quality Strategies, either on its own or in combination with other development; - The site is located within or close to an urban area that is known to experience higher levels of airborne particulates from vehicle emissions; or - The site is within proximity to a source of air pollution which could present a significant risk to human health or irreplaceable habitats; or - The type of development would mean its occupiers would be particularly sensitive to air pollution, such as schools, health care establishments or specialist accommodation.	There are no LSEs of this policy on Habitats Sites. This development management policy requires development proposals to consider their potential impacts on air quality, both in the construction (i.e. from airborne dust and emissions from construction vehicles) and operational phases (i.e. emissions from vehicular traffic, such as car-based commuters). Planning applications need to be accompanied by Air Quality Assessments. This policy is considered positive for Habitats Sites that are sensitive to atmospheric pollution (e.g. the Thames Basin Heaths SPA), as Air Quality Assessments will ensure that there are no adverse effects on site integrity. It is to be noted that the Wokingham Borough Local Plan HRA is accompanied by an in-combination Air Quality Impact Assessment, which is discussed in the relevant section on atmospheric pollution. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		Overall, Policy HC6 is screened out from AA.
Policy HC7: Light Pollution	1. Development proposals that include outdoor lighting should be sensitively designed and appropriately located to avoid obtrusive light, such as excessive glare and intrusive live spillage, and protect the amenity of immediate and wider neighbouring residential properties (both existing and proposed). 2. Development proposals that include outdoor lighting should submit a Lighting Appraisal in accordance with current guidance from the Institute of Lighting Professionals (ILP) (or similar body), national guidance and British Standards. Lighting schemes should adopt the minimum level of luminance to adequately serve the needs of end users. 3. All reasonable steps should be taken to avoid obtrusive light, including sky glow, on sensitive receptors such as wildlife corridors, Local Wildlife Sites and protected species. Where avoidance is not possible, adverse impacts must be identified and mitigated.	There are no LSEs of this policy on Habitats Sites. This development management policy ensures that lighting pollution across Wokingham Borough is minimised, such as through sensitive design, appropriate siting and minimising the level of luminance. Reducing light pollution is positive for the general environment because it protects wildlife corridors, Local Wildlife Sites and particular species (e.g. bats). However, it is noted that there are no Habitats Sites relevant to the Wokingham Borough Local Plan that are designated for bats. No quantum or geographic location of additional residential / employment development is allocated. Overall, Policy HC7 is screened out from AA.
Policy HC8: Noise Pollution	1. Development proposals must demonstrate how noise impacts have been addressed, to protect sensitive receptors, including existing and proposed dwellings. 2. The noise impact of the development must be assessed. Where there is no adverse impact (no observed effect level), noise pollution will not be a material consideration. 3. Where there is an adverse effect (ranging from the lowest observed adverse effect level to a significant observed adverse effect level), then the following hierarchical approach should be taken: a) The development layout must be reviewed. Where this results in there no longer being an adverse impact then design and mitigation measures should be incorporated accordingly; b) Where there is still an adverse impact, the internal layout must be reviewed. Where this results in there no longer being an adverse impact, then design and mitigation measures should be incorporated accordingly; c) Where there is still an adverse impact, physical mitigation measures such as barriers/mechanical ventilation must be considered. Where this results in there no longer being an adverse impact, these measures should be incorporated accordingly; d) Where there is still an adverse impact and the development falls within the significant observed adverse effect level, then planning permission will normally be refused. 4. Adverse impacts on sensitive environmental receptors, such as wildlife corridors, should be avoided or comprehensively mitigated where avoidance is not possible.	There are no LSEs of this policy on Habitats Sites. This development management policy minimises noise pollution, such as by ensuring that potential adverse noise impacts on sensitive environmental receptors (e.g. wildlife corridors) are adequately avoided or mitigated. While reducing noise pollution is positive for sensitive environmental features (e.g. ground-nesting birds), the qualifying birds in the Thames Basin Heaths SPA will not be impacted by the Wokingham Local Plan. No development is permitted within 400m of the SPA (the area within which noise disturbance represents a potential issue) and nightjar are not strongly associated with functionally linked habitats. No quantum or geographic location of additional residential / employment development is allocated.

Policy Number / Name	Policy Text	LSEs Screening Outcome
		Overall, Policy HC8 is screened out from AA.
Policy HC9: Contaminated Land and Water	- Development proposals on or near sites which are known, or suspected to be potentially contaminated, or proposals for sensitive land uses, will only be supported where it can be demonstrated that the following sensitive receptors would not be exposed to levels of potential contamination that would give rise to unacceptable risks or harm to health, or other adverse impacts: - People; including future or existing occupiers or neighbours of development; - The natural environment; including but not limited to areas of ecological value such as Local Wildlife Sites, Local Nature Reserves, Sites of Special Scientific Interest; - Property; including future or existing dwellings or businesses; - Water bodies; including both surface water and groundwater bodies; and - Any other sensitive receptors as identified on a case-by-case basis. - A preliminary assessment should be undertaken, which includes: - Details of any historic contamination, - The extent, scale and nature of the potential contamination, - The potential risks to human health, property, nature conservation, water quality or other receptors, and - Any preventative, mitigation or remedial measures and supporting assessments. - Development proposals must demonstrate how any pollution arising from previous land uses or from the proposed development itself can be sufficiently mitigated.	
Policy HC10: Odour, fumes, and dust	- Development proposals must demonstrate how the impacts of odour, fumes, and dust have been addressed to protect sensitive receptors, including existing and proposed dwellings and other sensitive land uses during both construction and operational phases. Factors such as the direction of prevailing winds and the location of and proximity to neighbouring sensitive receptors including housing, should influence the site layout and design of development. - Development proposals that are likely to result in unpleasant odours, fumes and dust must be carefully designed to include on-site mitigation and actively reduce impacts on nearby land uses. This includes development proposals that would intensify or substantially alter an existing industrial or agricultural use. - Proposals for new residential development must consider odour, fumes, and dust emitted from existing land uses and implement appropriate mitigation to protect the amenity of future occupiers.	

Appendix C LSEs Screening of Site Allocations

Table 5-5: Likely Significant Effects (LSEs) Screening Assessment of Site Allocations included in the WBLPU. Where the LSEs Screening Outcome column is shaded green, LSEs on Habitats Sites can be excluded. Where this column is shaded orange, LSEs cannot be excluded and the policy is screened in for AA.

Site Reference	Site Name	LSE Screening outcome
5WW017, 026, 030, 031	South Wokingham SDL extension For 1,100 dwellings (980 during the plan period)	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5FI028	Westwood Yard, Sheerlands Road for 10 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5SH025	Land north of Arborfield Road for 191 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5FI003	31 and 33 Barkham Ride for 80 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5SW019	Land west of Trowes Lane for 70 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5BA032	24 Barkham Ride for 30 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5BA013	Woodlands Farm, Wood Lane for 15 pitches	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK043	Land at St Annes Drive for 54 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.

Site Reference	Site Name	LSE Screening outcome
5SH023, 27	Land east and west of Hyde End Road for 175 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK045	Land at Bridge Retail Park for 59 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5FI004	Greenacres Farm, Nine Mile Ride for 100 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5FI024	Hillside, Lower Wokingham Road for 15 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5BA036	High Barn Farm, Commonfield Lane, Wokingham, RG40 4PR for 20 pitches	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5FI032	Honeysuckle Lodge, Commonfield Lane for 4 pitches	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5BA010	Barkham Square for 600 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK011	Land south of London Road (Western Field) for 12 dwellings	Located between 400m and 5km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK046	Land at Wellington Road, Wokingham for 20 dwellings	Allocation for 20 dwellings located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present

Site Reference	Site Name	LSE Screening outcome
5WI011	Wheatsheaf Close for 24 dwellings	Allocation for 24 dwellings located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present
5SH031	Rustlings', 'The Spring' and land to the rear of 'Cushendall', Shinfield Road for 10 dwellings	Allocation for 10 dwellings located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present
5WK029	Station Industrial Estate, Oxford Road for 40 dwellings	Allocation for 40 dwellings located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present
5WK051	Land east of Toutley Depot for 130 dwellings	Located for 130 dwellings and located 5km and 7 km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK053	Lee Springs, Latimer Road for 42 dwellings	Allocation for 42 dwellings located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present
5WK054	WBC council offices, Shute End, Wokingham for 100 dwellings	Located for 100 dwellings and located 5km and 7 km of the Thames Basin Heaths SPA. Potential linking impact pathway: recreational pressure.
5WK042	Woodside Caravan Park, Blagrove Lane for 4 pitches	Allocation for 4 pitches located between 5km and 7km of the Thames Basin Heaths SPA. There are no linking impact pathways present
5RU008	Land between 39-53 New Road, Ruscombe, RG10 9LQ for 20 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present

Site Reference	Site Name	LSE Screening outcome
5CV002	Land west of Park Lane for 61 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5RU007	Land to the rear of 9-17 Northbury Lane, Ruscombe, RG10 9LH for 12 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5SO001	Land at Sonning Farm for 25 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5WI008	Winnersh Plant Hire for 60 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5TW005, 009, 010	Land at Bridge Farm for 200 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5SO008	Sonning Golf Club for 50 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5WI014	69 King Street Lane, Winnersh, RG41 5BA for 28 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5WI009, 019	Land north west of Old Forest Road for 50 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present
5WI012, 021	Land to the rear of Bulldog Garage and the BP filling station for 34 dwellings	Located more than 7km from the Thames Basin Heaths SPA. There are no linking impact pathways present

Appendix D Air quality modelling

