Surrey Hills Area of Outstanding Natural Beauty Management Plan 2020-2025



Habitat Regulations Assessment Report

Report on the assessment of the Surrey Hills AONB Management Plan 2020-2025 in respect of the requirements of the Conservation of Habitats & Species Regulations 2017 (as amended)

Draft for Consultation

September 2019 (09-09-19)

Statement of Purpose

This Habitat Regulations Assessment report has been prepared by Surrey County Council's Principal Environmental Assessment Officer, who is part of the Natural Environment & Assessment Team within the County Council's Planning service. Planning is part of the Community Protection, Transport & Environment Directorate.

The Surrey Hills AONB Office has commissioned the report, and the Habitat Regulations Assessment of which it forms the final output, as part of the review of the Surrey Hills AONB Management Plan for the period from 2020 to 2025.

The report evaluates the extent to which the revised AONB Management Plan has the potential to give rise to 'likely significant effects' on Special Protection Areas (SPAs), Special Areas of Conservation (SACs) (and Ramsar Sites) within the Surrey Hills AONB and the surrounding area. The report is prepared in response to the requirements set out in the Conservation of Habitats & Species Regulations 2017 (Statutory Instrument 2017 No.1012) (as amended by The Conservation of Habitats & Species & Planning (Various Amendments) (England & Wales) Regulations 2018 (Statutory Instrument 2018 No.1307)).

Statement of Limitations

This report has been prepared for the sole use of the Surrey Hills AONB Office ("Client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by the County Council's Natural Environment & Assessment Team.

The preparation of this report was undertaken between July and September 2019, and is based on the information available to the Natural Environment & Assessment Team during that period of time. The scope of this report is accordingly factually limited by these circumstances.

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		Page
Chapter 1	Introduction & Approach	1
Part A	European Sites located wholly or partly within the Surrey Hills Area of Outstanding Natural Beauty (AONB)	11
Chapter 2	Mole Gap to Reigate Escarpment SAC	13
Chapter 3	Thursley, Ash, Pirbright & Chobham SAC	27
Chapter 4	Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA (including Thursley & Ockley Bog Ramsar Site)	47
Chapter 5	Wealden Heaths Phase 2 SPA	67
Part B	European Sites located beyond & within 5 kilometres of the Surrey Hills AONB	79
Chapter 6	East Hampshire Hangers SAC	81
Chapter 7	Ebernoe Common SAC	88
Chapter 8	Thames Basin Heaths SPA	97
Chapter 9	Woolmer Forest SAC	115
Chapter 10	Summary of HRA Conclusions	125



Abbreviations

AA	Appropriate Assessment
AONB	Area of Outstanding Natural Beauty
APIS	Air Pollution Information System
ВС	Borough Council
СС	County Council
COSA	Conservation Objectives Supplementary Advice
СРА	County Planning Authority
DC	District Council
DMRB	Design Manual for Roads & Bridges
DPD	Development Plan Document
EU	European Union
GBC	Guildford Borough Council
HGV	Heavy Goods Vehicle
HRA	Habitat Regulations Assessment
LA	Local Authority
MVDC	Mole Valley District Council
NPA	National Park Authority
PRN	Primary Route Network
RBBC	Reigate & Banstead Borough Council
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SIP	Site Improvement Plan
SPA	Special Protection Area
SPD	Supplementary Planning Document
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
ТСРА	Town & Country Planning Act
TDC	Tandridge District Council
WaBC	Waverley Borough Council



Chapter 1 Introduction & Approach

1.A Introduction & legal context

- 1.1 The requirement for plans and programmes to be assessed in respect of their capacity to give rise to adverse impacts on the features of qualifying interest (e.g. particular habitats or species) of sites that have been designated for protection under the European Union (EU) Habitats Directive¹ or Wild Birds Directive², derives from Articles 6(3) and 6(4) of the Habitats Directive³.
- 1.2 The requirement for 'appropriate assessment' of plans and programmes prior to their adoption or implementation has been transposed into UK domestic legislation via Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (Statutory Instrument 2017 No.1012) (as amended by Statutory Instrument 2018 No.1307).
- 1.3 The revised Management Plan for the Surrey Hills Area of Outstanding Natural Beauty (AONB) for the period 2020 to 2025 covers a geographical area that encompasses a number of Special Protection Areas (SPAs) designated under the Wild Birds Directive and a number of Special Areas of Conservation (SACs) designated under the Habitats Directive. As the Management Plan includes aims and policies that could give rise to schemes or initiatives that could cause direct effects or contribute to indirect effects on the ecological interest and integrity of those SPAs and SACs, and which may require the implementation of mitigation measures to avoid likely significant effects, an 'appropriate assessment' needs to be undertaken before the Management Plan is adopted.

1.B Purpose of the Habitats Regulations Assessment

1.4 Article 6(3) of the Habitats Directive specifies three key questions (see below) that need to be asked of the proposed plan prior to any decision being made as to whether or not it should proceed. The relevant legislation does not specify any particular procedure to be followed when assessing the implications of a plan for the integrity of sites of European

¹ Commission of the European Communities, 1992. *Directive on the Conservation of Natural Habitats & Wild Flora & Fauna* (92/43/EEC). Official Journal of the European Communities: Brussels.

² Commission of the European Communities, 2009. *Directive on the Conservation of Wild Birds* (2009/147/EC). Official Journal of the European Communities: Brussels. Directive 2009/147/EC is the codified version of the original Directive 79/4069/EEC adopted by the EU in 1979.

³ The text of Article 6(3) of the Habitats Directive states that, "Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

nature conservation importance. Methodological guidance⁴ on appropriate assessment produced by the EU identifies four key stages of the process: screening; appropriate assessment; assessment of alternative solutions; and, assessment of compensation and imperative reasons of over-riding public interest.

1.4.1 Is the plan directly connected with or necessary to the management of the SPA or SAC?

If the answer to this question is 'yes' then the plan may proceed with no further assessment. If the answer to this question is 'no' then some level of further assessment is required.

For the Surrey Hills AONB Management Plan, the answer to the question is 'no', as its purpose is to provide for the ongoing protection and management of the Surrey Hills AONB. It should be noted that management of land within the AONB to safeguard the character of the landscape has the potential to be supportive of the positive management of those SPAs and SACs that are located within or close to the AONB.

1.4.2 Is the plan likely to have a significant effect on the SPA or SAC, in view of the site's conservation objectives, either alone or in combination with other plans or projects?

If the answer to this question is 'no' then the plan may proceed with no further assessment. If the answer to this question is 'yes' or 'possibly' then further assessment is required in order to determine whether the likely significant effects would have an adverse impact on the integrity of the SPA or SAC concerned.

For the Surrey Hills AONB Management Plan, the answer to the question is 'possibly', as its aims and policies span a range of activities that have the potential to impact on the ecological integrity of SPAs and SAC. Examples would include changes in land management practices across the agricultural and conservation sectors that

1.4.3 Can it be ascertained that the plan will not adversely affect the integrity of the SPA or SAC concerned?

If the answer to this question is 'yes' then the plan may proceed. If the answer to this question is 'no' then the plan may not proceed, unless in line with Article 6(4) imperative reasons of overriding public importance can be demonstrated and appropriate compensatory measures be put in place to protect the overall integrity and coherence of the SPA or SAC concerned.

1.5 This document provides a record of the appropriate assessment for the Surrey Hills AONB Management Plan, and an answer to the third question listed above (paragraph 1.4.3).

⁴ European Commission - Environment DG, November 2001. Assessment of plans & projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) & (4) of the Habitats Directive 92/43/EEC. Prepared for the Commission by the Impacts Assessment Unit, School of Planning, Oxford Brookes University.

1.C Defining the scope of the Habitats Regulations Assessment

- 1.6 The geographical extent of the Surrey Hills AONB Management Plan is defined by the current boundaries of the AONB. The AONB designation encompasses a number of areas of land that are also covered by one or more European level nature conservation designations (i.e. SPA or SAC). Those SPAs and SACs that are found wholly or partly within the boundaries of the Surrey Hills AONB are listed below.
 - 1.6.1 **Mole Gap to Reigate Escarpment SAC:** Surrey, 887.7 hectares. Designated for the presence of European dry heaths, stable xerothermophilous formations with *Buxus sempervirens* (natural box scrub) on rock slopes (*Berberidion* p.p.), seminatural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites), *Asperulo-Fagetum* beech forests (on neutral to rich soils), *Taxus baccata* (yew) woods of the British Isles, the great crested newt, and the Bechstein's bat. Composed solely of the Mole Gap to Reigate Escarpment SSSI.
 - 1.6.2 **Thursley, Ash, Pirbright & Chobham SAC:** Surrey, 5,138.0 hectares. Designated for the presence of Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, depressions on peat substrates of the *Rhynchosporion*. Composed of the following four SSSIs:
 - Ash to Brookwood Heaths SSSI situated some 2.8 kilometres to the north of the Surrey Hills AONB.
 - Chobham Common SSSI situated some 13.4 kilometres to the north of the Surrey Hills AONB.
 - Colony Bog & Bagshot Heath SSSI situated some 8.2 kilometres to the north of the Surrey Hills AONB.
 - <u>Thursley, Hankley & Frensham Commons SSSI</u> situated within the Surrey Hills AONB.
 - 1.6.3 Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA: Surrey, 1,869.9 hectares. Designated for the presence of breeding populations of the European nightjar, the Woodlark, & the Dartford warbler. Composed solely of the Thursley, Hankley & Frensham Commons SSSI, which is situated within the Surrey Hills AONB. Part of the area of land within the SPA is also covered by the Thursley & Ockley Bog Ramsar Site designation.
 - 1.6.4 **Wealden Heaths Phase 2 SPA:** Hampshire, Surrey & West Sussex, 2,053.8 hectares. Designated for the presence of breeding populations of the European nightjar, the Woodlark, & the Dartford warbler. Composed of the following four SSSIs:
 - Bramshott & Ludshott Commons SSSI situated immediately to the west of the Surrey Hills AONB.
 - Broxhead & Kingsley Commons SSSI situated 2.8 kilometres to the west of the Surrey Hills AONB.
 - <u>Devil's Punch Bowl SSSI</u> situated within the Surrey Hills AONB.

- Woolmer Forest SSSI situated 4.7 kilometres to the west of the Surrey Hills AONB.
- 1.7 The Surrey Hills AONB Management Plan includes policies that support the provision housing, with associated demand for outdoor recreation opportunities, and therefore has the potential to give rise to impacts on SPAs and SACs located within and up to 5 kilometres from the AONB boundary. The distance of 5 kilometres reflects guidance prepared in respect of the Thames Basin Heaths SPA. Those SPAs and SACs that are located within 5 kilometres of the boundaries of the Surrey Hills AONB, but have no part situated within the AONB, are listed below.
 - 1.7.1 **East Hampshire Hangers SAC:** Hampshire, 569.7 ha. Designated for the presence of semi-natural dry grasslands & scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites), *Asperulo-Fagetum* beech forests (on neutral to rich soils), *Tilio-Acerion* forests of slopes, screes & ravines (on baserich soils associated with rocky slopes), *Taxus baccata* woods (yew) of the British Isles, & the Early gentian. Composed of the following seven SSSIs.
 - Coombe Wood & the Lythe SSSI situated 11.0 kilometres to the west of the Surrey Hills AONB
 - Noar Hill SSSI situated 11.6 kilometres to the west south west of the Surrey Hills AONB
 - Selborne Common SSSI situated 12.2 kilometres west south west of the Surrey Hills AONB
 - Upper Greensand Hangers: Empshott to Hawkley SSSI situated 10.1 kilometres west south west of the Surrey Hills AONB
 - Upper Greensand Hangers: Wyck to Wheatley SSSI situated 4.1 kilometres west of the Surrey Hills AONB
 - Wealden Edge Hangers SSSI situated 13.4 kilometres south west of the Surrey Hills AONB
 - Wick Wood & Worldham Hangers SSSI situated 8.0 kilometres west of the Surrey Hills AONB
 - 1.7.2 **Ebernoe Common SAC:** West Sussex, 234.9 ha. Designated for the presence of Atlantic acidophilous beech forests with *Ilex* & sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*) (on acid soils), the Barbastelle bat, & the Bechstein's bat. Composed solely of the Ebernoe Common SSSI, which is situated some 4.0 kilometres to the south of the Surrey Hills AONB.
 - 1.7.3 **Thames Basin Heaths SPA:** Berkshire, Hampshire & Surrey, 8,274.7 hectares. Designated for the presence of breeding populations of the European nightjar, the Woodlark, & the Dartford warbler. Composed of the following thirteen SSSIs.
 - Ash to Brookwood Heaths SSSI situated some 2.8 kilometres to the north of the Surrey Hills AONB.
 - Bourley & Long Valley SSSI situated some 3.3 kilometres north west of the Surrey Hills AONB.

- Bramshill SSSI situated some 17.6 kilometres north west of the Surrey Hills AONB.
- Broadmoor to Bagshot Woods & Heaths SSSI situated some 13.2 kilometres north of the Surrey Hills AONB.
- Castle Bottom to Yateley & Hawley Commons SSSI situated some 9.8 kilometres north west of the Surrey Hills AONB.
- Chobham Common SSSI situated some 13.4 kilometres north of the Surrey Hills AONB.
- Colony Bog & Bagshot Heath SSSI situated some 8.2 kilometres to the north of the Surrey Hills AONB.
- Eelmoor Marsh SSSI situated some 6.7 kilometres north west of the Surrey Hills AONB.
- Hazeley Heath SSSI situated some 14.3 kilometres north west of the Surrey Hills AONB.
- Horsell Common SSSI situated some 10.1 kilometres north of the Surrey Hills AONB.
- Ockham & Wisley Commons SSSI situated some 5.6 kilometres north of the Surrey Hills AONB.
- Sandhurst to Owlsmoor Bogs & Heaths SSSI situated some 14.5 kilometres north west of the Surrey Hills AONB.
- Whitmoor Common SSSI situated some 3.9 kilometres north of the Surrey Hills AONB.
- 1.7.4 **Woolmer Forest SAC:** Hampshire & West Sussex, 666.7 hectares. Woolmer Forest SSSI. Designated for the presence of natural dystrophic lakes & ponds, Northern Atlantic wet heaths with *Erica tetralix*, European dry heaths, transition mires & quaking bogs, depressions on peat substrates of the *Rhynchosporion*. Composed solely of part of the Woolmer Forest SSSI, which is situated some 4.7 kilometres to the west of the Surrey Hills AONB.

1.D Key Principles & Approach

- 1.8 The remainder of this report is divided into two parts, the first dealing with those SACs and SPAs which are located wholly or partly within the boundaries of the Surrey Hills AONB, and the second dealing with those SPAs and SACs located beyond the Surrey Hills AONB but within 5 kilometres of its boundary.
- 1.9 For each SAC and SPA covered by the assessment, their key characteristics (reasons for designation, conservation objectives, condition of constituent SSSIs) are described, and the threats and pressures (impact pathways) to which they are susceptible are identified. The site relevant impact pathways have been drawn from the published Site Improvement Plan (SIP) for each SPA and SAC, prepared by Natural England to provide guidance on the actions

that need to be taken to support the attainment of the published Conservation Objectives for each SPA and SAC.

Other Local Plans relevant to the Surrey Hills AONB and the areas in which the SPAs and SACs are located, the policies and proposals of which could act in-combination with the policies set out in the emerging Surrey Hills AONB Management Plan, have been considered where appropriate.

1.E Key aspects of the Surrey Hills AONB Management Plan (2020-2025)

1.E.1 Background to the preparation of the revised Surrey Hills AONB Management Plan 2020-2025

- 1.12 The primary purpose of the Surrey Hills AONB designation is to conserve and enhance the natural beauty of the Surrey Hills. Under Sections 88 and 89 of the Countryside & Rights of Way Act (CRoW) 2000 each relevant local authority and the relevant AONB Conservation Board must prepare and publish a Management Plan, which must be reviewed at intervals of five years. AONB Management Plans are adopted by all relevant partner local authorities and the policies contained within such plans carry statutory force.
- 1.13 Legislation relating to AONBs places additional responsibilities on local authorities and the planning system:
 - AONBs are defined under Regulation 2 of the Town & Country Planning (Environmental Impact Assessment) Regulations as 'sensitive areas'.
 - Section 85 (Duty of Regard) of the CRoW Act requires all public bodies down to parish council level to consider the protected status given to AONBs in land use decision making, including planning decisions applications and Local or Neighbourhood Plan preparation.
 - AONB Management Plans are considered to be a 'material consideration' in the context of the town and country planning regime, and permitted development rights can not necessarily be relied upon within an AONB.
- 1.14 The revised Surrey Hills AONB Management Plan has been prepared by the Surrey Hills AONB Board, a Joint Committee, on behalf of the six local authorities⁵ that have a statutory duty to adopt the Plan. The AONB Unit was supported in this work by members of the AONB's Officers Working Group, Partnership Members and other stakeholder organisations covering areas such as conservation, land management and tourism. The existing AONB Management Plan (2014 2019) was also reviewed as part of the process, and an on-line survey was used to canvass views on the matters to be covered by the revised Management Plan between November 2018 and January 2019.

⁵ Comprising Guildford Borough Council, Mole Valley District Council, Reigate & Banstead Borough Council, Surrey County Council, Tandridge District Council, and Waverley Borough Council.

1.E.2 Vision & strategic aims of the revised Surrey Hills AONB Management Plan 2020-2025

1.15 The over-arching vision for the revised Surrey Hills AONB Management Plan for the period 2020 to 2025 is articulated in section 2.3 (p.15) of the draft document (see Box 1-A).

Box 1-A: Vision for the Revised Surrey Hills AONB Management Plan (2020-2025)

The Surrey Hills AONB is recognised as a national asset in which its natural & cultural resources are managed in an attractive landscape mosaic of farmland, woodland, heaths, downs & commons. It provides opportunities for business enterprise & for all to enjoy & appreciate its natural beauty for their health & well-being.

1.16 The vision for the revised Surrey Hills AONB Management Plan is supported by eight strategic aims (sections 2.4 to 2.11, pp.16-27 of the revised Management Plan), which cover the broad themes of land and woodland management and use, the natural environment, cultural heritage, access and wellbeing, and economic and community prosperity (see Box 1-B). A number of policies are articulated under each of the identified aims.

Box 1-B: Strategic Aims for the Revised Surrey Hills AONB Management Plan (2020-2025)

Aim 1: Agriculture plays a positive role in maintaining the outstanding & diverse character of the Surrey Hills

Policy F1: Farming as a viable & sustainable enterprise, within & adjacent to the AONB, will be supported through the development of initiatives consistent with good management of land, make a positive contribution to increasing biodiversity & conserving or enhancing landscape character.

Policy F2: The availability of advice & financial assistance through the Government's Environmental Land Management schemes will be designed to encourage sustainable land management practices alongside the maintenance & enhancement of traditional landscape features.

Policy F3: Farm diversification schemes will be supported where they help to maintain & enhance the special landscape character of the AONB & have a demonstrable, positive amenity impact, lead to an increase in biodiversity & contribute to the vitality of the Surrey Hills economy.

Policy F4: Development leading to a loss of farmland will normally be resisted unless there is an overriding public interest.

Policy F5: A wider understanding & awareness of agricultural practice will be promoted where this encourages & supports the creation & maintenance of the outstanding landscape character of the Surrey Hills.

Aim 2: Woodlands, hedgerows & veteran trees are sustainably managed & linked to conserve & enhance the landscape, ecological, archaeological & recreational value of the wider Surrey Hills landscape

Policy W1: Woodland owners & managers will be supported to manage all woodlands, hedgerows & veteran trees that contribute to the landscape character.

Policy W2: Markets for timber & other forest products will be identified, promoted & supported in order to generate incomes to help sustain appropriate woodland management.

Aim 2: Woodlands, hedgerows & veteran trees are sustainably managed & linked to conserve & enhance the landscape, ecological, archaeological & recreational value of the wider Surrey Hills landscape

Policy W3: The wider importance of trees & woodlands & the need for their management, including disease control & bio-security, will be promoted through the provision of advice, information on grant schemes & public awareness campaigns.

Policy W4: The benefits of removing inappropriate trees & secondary woodland, particularly for the restoration of heathland & chalk grassland, will be promoted to improve biodiversity & enable the reinstatement of views.

Policy W5: Opportunities will be taken to extend & link woodland / hedgerow habitats for landscape, nature conservation, recreation & educational purposes.

Aim 3: The biodiversity & water resources of the Surrey Hills are conserved & enhanced

Policy B1: Existing designated sites (SSSIs, SPAs & SACs) within the AONB will be conserved, enhanced & managed by partners with the support of Natural England, to ensure that all such sites are brought into or maintained in 'favourable' condition.

Policy B2: Important habitats, such as chalk grassland & heathland, will be managed & used in ways that conserve & enhance their nature conservation value.

Policy B3: Opportunities will be taken to restore, extend & link habitats for nature conservation, & educational purposes, with the creation of new habitats & corridors informed by landscape character to establish functional ecological networks with resilience to climate change.

Policy B4: The enhancement of biodiversity will be maximised through the targeting of advice & grants, & applicants for planning permission will be expected to deliver biodiversity gains as part of their proposals secured through planning conditions or legal agreements where appropriate.

Policy B5: Measures required to meet Water Framework Directive targets for the river catchments will be supported to conserve & enhance the ecological value of river landscapes, wetland habitats & water quality affecting the environmental quality & landscape of the Surrey Hills.

Aim 4: The cultural heritage that defines the distinctive sense of place within the Surrey Hills is recorded, protected, managed & celebrated

Policy HC1: A historic perspective of how the AONB landscape has evolved will be promoted, including its traditions, industries, buildings & settlement patterns.

Policy HC2: Heritage assets, including historic buildings, archaeological sites & historic parks & gardens, will be conserved, managed & recorded.

Policy HC3: Development proposals will have due regard to the locally distinctive character of rural settlements & the setting of historic buildings.

Policy HC4: The rich artistic traditions of the Surrey Hills will be promoted. New artistic interpretations of the landscape & its heritage will be commissioned with the involvement of local communities.

Aim 5: The Surrey Hills will be enjoyed & cherished as an Area of Outstanding Natural Beauty for its own intrinsic qualities & in ways that contribute to people's health & wellbeing

Policy RT1: Visitors & facilities that enhance people's health, enjoyment & understanding of the Surrey Hills will be encouraged, whilst conserving or enhancing the landscape character & biodiversity.

Policy RT2: Information will be made accessible for a diverse range of potential visitors in order to foster a greater understanding & enjoyment of the Surrey Hills AONB.

Policy RT3: Significant viewpoints & vistas will be identified, conserved & enhanced.

Policy RT4: The design & development of new visitor facilities, & the maintenance of existing facilities, will have regard to the needs of people of all abilities to access & enjoy the Surrey Hills landscape.

Aim 6: New development enhances local character & the environmental quality of its nationally important setting

Policy LU1: In balancing different considerations associated with determining planning applications & development plan land allocations, great weight will be attached to any adverse impact that a development proposal would have on the amenity, landscape & scenic beauty of the AONB & the need for its enhancement.

Policy LU2: Development will respect the special landscape character of the locality, giving particular attention to potential impacts on ridgelines, public views & tranquillity. The proposed use & colour of external building materials will be strictly controlled to harmonise within their related landscape & particularly to avoid buildings being incongruous. In remoter locations, with darker skies, development proposals causing light pollution will be resisted.

Policy LU3: Development proposals will be required to be of high quality design, respecting local distinctiveness & complementary in form, setting, & scale with their surroundings, & should take any opportunities to enhance their setting.

Policy LU4: Proposals that would assist in the continuation of direct agricultural & forestry businesses or benefit the social & economic well-being of residents, including small scale affordable housing, will be supported, providing they do not conflict with the aim of conserving & enhancing the beauty of the landscape.

Policy LU5: Proposals to redevelop or convert farm buildings that would render the associated farmed landscape unviable will be resisted

Policy LU6: Development that would spoil the setting of the AONB by harming public views into or from the AONB will be resisted.

Aim 7: Transport measures reinforce the rural character of the area & provide for a range of safe & sustainable travel alternatives

Policy TT1: Measures to ensure opportunities for all members of society to access the Surrey Hills will be supported.

Policy TT2: The impact of development proposals on the surrounding Surrey Hills road network, including any highway mitigation measures, will be given great weight when assessing the acceptability of the development.

Policy TT3: Design & enhancement of the rural road network will conserve & enhance the AONB to influence the behaviour of road users for public safety & enjoyment.

Policy TT4: Transport infrastructure & associated landscaping, including verge management, will respect & enhance the local landscape quality, character & biodiversity.

Policy TT5: Major transport infrastructure will have due regard to the AONB designation. Measures will need to be taken to integrate it into the Surrey Hills landscape.

Aim 8: The Surrey Hills is an attractive & sustainable place to live, work & invest

Policy CE1: The Surrey Hills will be promoted as a destination for sustainable tourism & recreation.

Policy CE2: Initiatives that promote & market high quality Surrey Hills produce & services will be supported.

Policy CE3: The provision & retention of affordable housing for local people & key workers will be supported.

Policy CE4: Initiatives that result in affordable & reliable community transport & infrastructure for recreation, employment & access to local services will be supported.

Policy CE5: Opportunities to develop land management & conservation skills through vocational training, volunteer work & paid employment will be identified & actively promoted.

Policy CE6: Greater awareness of the Surrey Hills AONB will be supported to foster a pride of place that encourages community action to protect, enhance & enjoy its landscape.

Part A Assessment for European Sites located wholly or partly within the Surrey Hills AONB

Part A of the HRA report deals with those European Sites that are located partly or wholly within the boundaries of the Surrey Hills AONB.

The following SACS and SPAs are covered by the chapters that comprise this part of the HRA report.

Chapter 2	Mole Gap to Reigate Escarpment SAC
Chapter 3	Thursley, Ash, Pirbright & Chobham SAC
Chapter 4	Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA
Chapter 5	Wealden Heaths Phase 2 SPA



Chapter 2 Mole Gap to Reigate Escarpment SAC

2.A Geographic & Development Context

2.A.1 Location of the SAC

- 2.1 The Mole Gap to Reigate Escarpment SAC (see map) is located in the county of Surrey and is composed of a single SSSI, the Mole Gap to Reigate Escarpment SSSI. The SAC covers an area of 887.68 hectares, as stated on the SAC citation, and was designated on 1 April 2005. The SAC is situated within an area administered by Mole Valley DC, by Reigate & Banstead BC, and by Surrey CC, and the entirety of the SAC lies within the boundaries of the Surrey Hills AONB.
- 2.2 The SAC is dissected by a number of road links, including the following 'A' class roads, the A24 (London Road) which passes through the SAC to the south of Leatherhead, the M25 motorway which comes within 200 metres of the SAC to the north of Reigate, and the A217 which comes within 200 metres of the SAC to the north of Reigate. The SAC is dissected by a network of public rights of way, including twenty-eight sections of public footpath, twenty-seven sections of public bridleway, and two sections of byways open to all traffic, affording access across the majority of the area covered by the designation.

2.B Key Characteristics of the SAC

2.B.1 Reasons for Designation

2.3 The ecological interest of the SAC, and the particular habitats and species that are given as reasons for its designation, is described as follows in the published citation.

Site Description

Woodland, chalk grassland, chalk scrub & heathland form an interrelated mosaic at this site on the North Downs.

On the generally acidic plateau deposits of the crest of the Downs, the woodland is dominated by beech Fagus sylvatica, pedunculate oak Quercus robur, ash Fraxinus excelsior & yew Taxus baccata. On the lime-rich chalk slopes, the dominant trees are beech, ash & yew, together with field maple Acer campestre & common whitebeam Sorbus aria agg. & occasional large-leaved lime Tilia platyphyllos.

Yew woodland has been formed both by invasion of chalk grassland & from development within beech woodland following destruction of the beech over-storey. Yew occurs in extensive stands, with, in places, an understorey of box *Buxus sempervirens*. This site supports the only area of stable box scrub in the UK, on steep chalk slopes where the River Mole has cut into the North Downs Escarpment, creating the Mole Gap. Here natural erosion maintains the open conditions required for the survival of this habitat type.

The site supports a range of species-rich chalk grassland types on steep slopes, dominated by red fescue Festuca rubra, sheep's-fescue F. ovina, quaking-grass Briza media &, in taller areas, upright brome Bromopsis erecta, tor-grass Brachypodium pinnatum & slender false-brome grass Brachypodium sylvaticum. Typical herbs include salad burnet Sanguisorba minor, yellow-wort Blackstonia perfoliata & field scabious Knautia arvensis. The site supports important populations of the nationally scarce musk orchid Herminium monorchis & man orchid Aceras anthropophorum, the former occurring in areas of shorter turf. A range of more widespread but local orchids are also present, including autumn lady's-tresses Spiranthes spiralis & green-winged orchid Orchis morio, as well as commoner species, such as pyramidal orchid Anacamptis pyramidalis, fragrant orchid Gymnadenia conopsea & bee orchid Ophrys apifera.

The acidic plateau deposits on Headley Heath support acidic heathland, dominated by heather *Calluna vulgaris*, bell heather *Erica cinerea* & dwarf gorse *Ulex minor*, often mixed with grasses such as wavy hair-grass *Deschampsia flexuosa* & common bent *Agrostis capillaris*. Chalk heath occurs on a small area of Headley Heath where the special conditions allow both acid & lime-loving plants to grow side by side. An old chalk mine is used as a winter roost by several species of bats.

Qualifying Habitats

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Taxus baccata woods of the British Isles. (Yew-dominated woodland) (Annex I Priority Habitat).
- Asperulo-Fagetum beech forests. (Beech forests on neutral to rich soils).
- European dry heaths.
- Semi-natural dry grasslands & scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (Dry grasslands & scrublands on chalk or limestone).
- Semi-natural dry grasslands & scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites). (Dry grasslands & scrublands on chalk or limestone, including important orchid sites) (Annex I Priority Habitat).
- Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.). (Natural box scrub).

Qualifying Species

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

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

2.B.2 Conservation Objectives

2.4 The published conservation objectives for the SAC are given below.

Conservation Objectives

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

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

- The extent & distribution of qualifying natural habitats & habitats of qualifying species;
- The structure & function (including typical species) of qualifying natural habitats;

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

Qualifying Features

- H4030. European dry heaths.
- H5110. Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion p.p.*); Natural box scrub.
- H6210. Semi-natural dry grasslands & scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites); Dry grasslands & scrublands on chalk or limestone (important orchid sites) (Annex I Priority Habitat).
- H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils
- H91JO. *Taxus baccata* woods of the British Isles; Yew-dominated woodland (Annex I Priority Habitat)
- S1166. Triturus cristatus; Great crested newt
- S1323. Myotis bechsteinii; Bechstein`s bat

2.B.3 Condition

2.5 Based on the information published by Natural England in the most recent condition survey report for the Mole Gap to Reigate Escarpment SSSI (see Table 2-A), the designated site extends to some 987.97 hectares, of which some 51.4 % is in 'favourable' condition, some 48.1% is in 'unfavourable – recovering' condition, and some 0.5% is in 'unfavourable – no change' condition. The majority of the SSSI is composed of two main habitat types, 'broadleaved, mixed and yew woodland – lowland' (673.11 hectares) and 'calcareous grassland – lowland' (312.80 hectares), with a small area designated for its 'earth heritage' interest (2.06 hectares).

Table 2-A: Mole Gap to Reigate Escarpment SSSI - Condition Survey Findings

Main Habitat Type		Condition Classification			
		Favourable	Unfavourable – Recovering	Unfavourable – No Change	
Broadleaved, Mixed & Yew Woodland – Lowland	673.11 ha	325.78 ha [48.4% of the habitat]	347.33 ha [51.6% of the habitat]	0.0 ha [0.0% of the habitat]	
Calcareous Grassland – Lowland	312.80 ha	180.27 ha [57.6% of the habitat]	127.40 ha [40.7% of the habitat]	5.13 ha [1.6% of the habitat]	
Earth Heritage	2.06 ha	2.06 ha [100.0% of the habitat]	0.0 ha [0.0% of the habitat]	0.0 ha [0.0% of the habitat]	
Totals	987.97 ha	508.11 ha [51.4% of the SSSI]	474.73 ha [48.1% of the SSSI]	5.13 ha [0.5% of the SSSI]	

2.6 For the 5.13 hectares of calcareous grassland habitat (SSSI unit number 37, last surveyed on 14 October 2009) classified as exhibiting 'unfavourable – no change' condition, the condition survey report provides the following explanation.

<u>Comments</u>: Area remains with several isolated patches of species rich grassland with up to 50% scrub, rabbit grazed, not fenced & very steep. Frequent species include salad burnet, bird's-foot trefoil, dwarf thistle, hairy violet, mouse-ear hawkweed & thyme. Occasional species include rock rose, Squinancywort, rough hawkbit, & fairy flax, species occurring more rarely gentians, carline thistle & autumn lady's-tresses. Torgrass in excess of 10% plus scrub levels in excess of 50%, both negative indicators.

Reasons for adverse condition: Lack of Corrective Works - Inappropriate Scrub Control

2.C Identification of Impact Pathways & Screening Evaluation

- 2.7 The published Site Improvement Plan (SIP) for the SAC (09/10/2014) for identifies the following key pressures and threats to the site's ecological integrity.
 - Changes arising from the incidence of plant disease (box blight) discussed further in section 8.C.1;
 - Changes in scrub control practices—discussed further in section 8.C.2;
 - Changes in land management practices discussed further in section 8.C.3;
 - Changes in the incidence of public access / disturbance discussed further in section 8.C.4;
 - Changes arising from air pollution (atmospheric nitrogen deposition) discussed further in section 8.C.5.

2.C.1 Disease

2.8 The feature of the SAC potentially affected by the spread of plant disease (box blight) is the natural box scrub (H5110) habitat. The SIP (p.4/12) offers the following explanation of the nature of the identified pressure/threat:

"Box blight has been recorded on the site & has been shown to be spreading & affecting the SAC feature 'stable box scrub on steep chalk slopes'. This is the only native site for this feature."

2.9 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with assessing the extent of box blight, and investigating the causes of yew tree deaths, starting discussions around biosecurity and potential exclusion zones, and a possible biosecurity plan, establishing a working group to look at the future of box, and developing a strategic overview of box in the SAC.

- 2.10 <u>Screening Evaluation</u>: Policies W1 and W3 of the Surrey Hills AONB Management Plan (2020-2025) are concerned with the appropriate management of woodlands as components of the character of the AONB, and with raising awareness and understanding of good woodland management, including the control of disease and other bio-security threats. The box scrub woodland of the SAC is an important and distinctive part of the AONB, contributing to the character of the North Downs (the Mole Gap) landscape character area. The application of policies W1 and W3 of the 2020-2025 version of the Management Plan would provide support for schemes or initiatives designed to address the spread of box blight within the SAC.
- 2.11 Policy W5 of the 2020-2025 version of the Surrey Hills AONB Management Plan is concerned with providing support for the planting of new woodlands and hedgerows to link established areas of such habitat. Such activities could create potential for the spread of plant diseases and pests on land situated within, or in close proximity to the SAC. That risk would be countered by the application of policies W1 and W3 of the AONB Management Plan, which make provision for appropriate woodland management and the control of diseases and/or pests.
- 2.12 Policy B1 of the Surrey Hills AONB Management Plan (2020-2025) is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 of the 2020-2025 version of the Management Plan would provide a further means of addressing any risks associated with the implementation of policy W5 (promoting the extension of existing woodlands and hedgerows, or the creation of new woodlands and hedgerows).
- 2.13 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant effects on the SAC as a consequence of the spread of box blight, and no further assessment is required. Any risks associated with the extension of existing or creation of new woodlands and hedgerows would be countered by actions brought forward under Policy W3 to equip land managers with an understanding of good biosecurity and disease control practices, and by actions pursued under Policy B1 to ensure that designated sites achieve or are maintained in 'favourable' condition.

2.C.2 Inappropriate scrub control

2.14 The feature affected by inappropriate scrub control practices is the dry grasslands and scrublands on chalk or limestone (important orchid sites) (H6210) habitat. The SIP (p.5/12) offers the following explanation of the nature of the identified pressure:

"Scrub is encroaching onto the chalk grassland. This can quite quickly shade out more delicate & rare plant species found on the chalk slopes, & any associated insect species are also therefore negatively impacted on."

- 2.15 The actions that have been identified as the principal means of addressing the pressure are concerned with agreeing and implementing a programme of scrub clearance to reverse the effects of encroachment on calcareous grassland, and with identifying future threats from scrub invasion, following a condition assessment programme
- 2.16 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in scrub management in respect of the chalk grasslands both within the SAC and beyond. Those policies would primarily work by means of the promotion of schemes and initiatives designed to raise awareness, understanding and application of appropriate land management practices across the SAC and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character.
 - Policy W4 is concerned with the removal of trees and secondary woodland in the interests of grassland or heathland restoration.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including chalk grasslands.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of chalk grassland.
- 2.17 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to the management of scrub. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of chalk grassland and other sensitive habitats would be expected to contribute to the appropriate management of scrub encroachment across the SAC and similar habitats found within the wider AONB. No further assessment is required as the main effects of the AONB Management Plan on scrub management within the SAC would be beneficial.

2.C.3 Change in land management

2.18 The feature affected by changes in land management practice is the dry grasslands and scrublands on chalk or limestone (important orchid sites) (H6210) habitat. The SIP (p.5/12 to 6/12) offers the following explanation of the nature of the identified threat.

"To maintain a species-rich sward & its associated insects & other invertebrates, chalk grasslands require active management - some parts of the site do not have appropriate active management. Without it the grassland will rapidly become dominated by rank grasses, such as Tor-grass. Together with the build up of dead plant matter, less vigorous species will be suppressed & the diversity of the site will decrease. Eventually, the site will scrub over.

Traditionally, management is achieved by grazing. The timing will vary both between & within sites, according to local conditions & specific species requirements."

- 2.19 The actions that have been identified as the principal means of addressing the threat are concerned with exploring the possibilities of a landscape-scale grazing project to target areas as yet ungrazed, introducing appropriate landscape scale grazing on the site, and with establishing woodland management across the landscape with objectives to meet favourable condition in all woodland plans and subsequent funding streams.
- 2.20 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in land management in respect of the chalk grasslands of the SAC, through the promotion of schemes and initiatives designed to raise awareness and understanding of appropriate land management practices, including the use of suitable grazing stock, across the SAC and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of a viable and sustainable farming sector, with an emphasis on good land management including measures that support biodiversity and its role in landscape character. Policy F3 is concerned with farm diversification, which could include schemes that would deliver biodiversity benefits as a result of the grazing or other appropriate management of chalk grasslands.
 - Policy W4 is concerned with the removal of trees and secondary woodland in the interests of grassland or heathland restoration, which would be supportive of the maintenance of chalk grassland habitats.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition, which provides a clear steer as to the ecological outcomes that need to be attained in respect of chalk grasslands.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including chalk grasslands.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of chalk grassland.
- 2.21 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to changes in land management affecting the chalk grasslands. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of chalk grassland would be expected to contribute to the appropriate management of such habitats across the SAC and the wider AONB. No further assessment is required as the main effects of the AONB Management Plan on chalk grassland management within the SAC would be beneficial.

2.C.4 Public access / disturbance

The features affected by changes in public access arrangements and associated disturbance risks are the dry grasslands and scrublands on chalk or limestone (important orchid sites) (H6210) habitat, the population of Great crested newts (S1166), and the population of Bechstein's bat (S1323). The SIP (p.6/12 to 7/12) offers the following explanation of the nature of the identified threat.

"As a beautiful place to visit, this area of Surrey is heavily populated. Increasing pressure by increased numbers of visitors on protected sites & disturbance on the species which live here can become damaging. Trampling of orchid-rich grasslands, repetitive disturbance to Great crested newt breeding ponds, & spread of disease (such as box blight) are examples."

- 2.23 The actions identified as the principal means of addressing the threat are concerned with:
 - Assessing the scale of impact on key habitats due to public access pressure across the SAC.
 - Ensuring the main Bechstein's bat hibernacula are secure.
 - Assessing the extent of disturbance to ponds with known populations of Great crested newts, and devising plans to prevent disturbance for at least half of the area of each of the disturbed pond.
 - Plan to build five new ponds in rarely visited parts of the site, for the benefit of Great crested newts.
 - Secure improvements to Bechstein's bat hibernacula, and habitat connectivity.
- 2.24 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the incidence of disturbance affecting SAC species and/or physical harm to the SAC habitats as a consequence of recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to increased pressure on habitats and species as a consequence of disturbance from recreational and leisure use of land within and adjoining the SAC.
 - Policy W5 is concerned with the creation of new or the extension of existing woodlands for a range of purposes including recreational uses, which could place sensitive woodland species, including the Bechstein's bat population of the SAC, at risk of disturbance.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors which could, dependent on the location and types of facilities and uses, give rise to increased pressure on habitats and species as a consequence of disturbance.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SAC.

- Policy CE3 is concerned with the retention and provision of affordable housing which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SAC.
- 2.25 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SAC as a consequence of increased public access and associated disturbance. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

2.C.5 Air pollution: impact of atmospheric nitrogen deposition

The features affected by changes in the atmospheric deposition of nutrient nitrogen are the European dry heaths (H4030) habitat, the natural box scrub (H5110) habitat, the dry grasslands and scrublands on chalk or limestone (important orchid sites) (H6210) habitat, the beech forests on neutral to rich soils (H9130) habitat, the yew-dominated woodland (H91J0) habitat, and the habitats of the Bechstein's bat (S1323). The SIP (p.8/12) offers the following explanation of the nature of the identified threat:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection & hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation."

- 2.27 The actions that have been identified as the principal means of addressing the threat are concerned with undertaking further investigation of potential atmospheric nitrogen impacts on the site (based on guidance from the Chief Scientist's Nitrogen Task & Finish Group), and with monitoring the indicators of increased nitrogen deposition, such as vigorous grass growth, increase in Tor-grass and other grasses, and a decrease in orchid species through the use of fixed point quadrat surveys over 5 years.
- 2.28 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to changes in emissions of nitrogen containing compounds to the atmosphere which if deposited within the SAC could contribute to changes in nutrient deposition that would be harmful to the designated habitats.
 - Policy F3 is concerned with farm diversification, which could include schemes that would increase visitor numbers to the AONB, with associated increases in traffic and emissions from vehicles, schemes to add value to farm produce with associated requirements for plant, equipment, processing and the transport of goods and raw materials, and schemes involving changes in the types of crops or stock raised on the land with potential changes in inputs (e.g. fertilisers, pesticides, etc.) or outputs (e.g. slurry, etc.).
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors which could give rise to additional road traffic within the AONB and associated

- emissions of nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the surrounding land as nutrient nitrogen.
- Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could give rise to additional road traffic within the AONB and associated emissions of
 nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the
 surrounding land as nutrient nitrogen.
- Policy CE2 is concerned with the promotion and marketing of goods and services
 produced or provided from within the AONB, which could give rise to emissions of
 nitrogen dioxide associated with the use of plant/equipment/machinery for production
 and with additional road traffic, which could be deposited on sensitive habitats within
 the SAC and the surrounding land as nutrient nitrogen.
- Policy CE3 is concerned with the retention and provision of affordable housing which could give rise to additional road traffic within the AONB and associated emissions of nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the surrounding land as nutrient nitrogen.
- Policy CE4 is concerned with the provision of community transport services give rise to additional road traffic within the AONB and associated emissions of nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the surrounding land as nutrient nitrogen.
- 2.29 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SAC as a consequence of the deposit of nutrient nitrogen arising from a variety of sources. Further assessment is therefore required in respect of the nitrogen deposition impact pathway.

2.D Assessment of Significant Effects

2.30 The screening assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan for the period 2020-2025 has the potential to give rise to likely significant effects on the Mole Gap to Reigate Escarpment SAC with reference to the public access and disturbance impact pathway, and the nutrient nitrogen deposition impact pathway. The purpose of the following section of this report is to consider the extent to which the identified risks of likely significant effects could be appropriately and successfully addressed through mitigation measures.

2.D.1 Public access / disturbance

2.31 The screening assessment concluded that changes in public access arrangements and associated disturbance could give rise to likely significant impacts on the features of interest of the SAC in the absence of mitigation measures. Of particular concern where

activities supported under policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.

- 2.32 In terms of mitigation of the potential impacts of the Management Plan on the SAC, policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of disturbance associated with the implementation of policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 2.33 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Mole Gap to Reigate Escarpment SAC those are policy CS15 (Biodiversity & Geological Conservation) of the Mole Valley Local Plan Core Strategy (2009) and policy CS2 (Valued landscapes & the natural environment) of the Reigate & Banstead Local Plan Core Strategy (2014). All applications for planning permission submitted to the district or borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SAC, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission.

2.D.2 Nutrient nitrogen deposition

2.34 The screening assessment concluded that changes in nutrient nitrogen deposition rates arising from changes in land use or increased vehicle movements within the AONB could give rise to likely significant impacts on the habitats of the SAC in the absence of mitigation measures. Of particular concern where activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes) of the revised AONB Management Plan.

- In terms of mitigation of the potential impacts of the Management Plan on the SAC, policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing the impacts of nutrient nitrogen deposition associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 2.36 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Mole Gap to Reigate Escarpment SAC those are policy CS15 (Biodiversity & Geological Conservation) of the Mole Valley Local Plan Core Strategy (2009) and policy CS2 (Valued landscapes & the natural environment) of the Reigate & Banstead Local Plan Core Strategy (2014). All applications for planning permission submitted to the district or borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SAC, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission.

2.E Assessment Summary

2.37 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Mole Gap to Reigate Escarpment SAC has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance and nutrient nitrogen deposition could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SAC from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.

2.38 The assessment considered the five impact pathways identified by Natural England in the SIP for the SAC as key threats and pressures with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the revised Surrey AONB Management Plan (2020-2025) on the SAC via each pathway are summarised in Table 2-B.

Table 2-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes arising from the incidence of plant disease (box blight) – see section 2.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices – see section 2.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in land management practices – see section 2.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence of public access / disturbance – see section 2.C.4 and section 2.D.1	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SAC. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	Adverse – not significant with mitigation
Changes arising from air pollution (atmospheric nitrogen deposition) – see section 2.C.5 and section 2.D.2	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SAC from a range of sources (recreational / residential / agricultural / transport). Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	Adverse – not significant with mitigation

2.39 The question of in-combination impacts needs to be considered with reference to the likely interactions of the AONB Management Plan with other plans that could also affect land use within the AONB and the SAC. All land allocated for future development under the adopted Local Plans of Mole Valley District Council and Reigate & Banstead Borough Council will have been subject to assessment during the plan preparation process, including under the provisions of the Habitats Regulations. In order for those plans to be found sound and proceed to adoption it would have been necessary for the associated HRAs to conclude that no SPAs or SACs would be subject to significant adverse impacts. Both the Mole Valley Local Plan and the Reigate & Banstead Local Plan include policies that are designed to provide for the protection of the ecological integrity of the Mole Gap to Reigate Escarpment SAC. Those Local Plan policies would work in-combination with Policy B1 of the Surrey Hills AONB Management Plan to protect the SAC from adverse impacts that could arise from development that falls within the ambit of the planning regime.

2.F References

- 2.40 The following sources of information have been referred to as part of the assessment process for the Mole Gap to Reigate Escarpment SAC.
 - 2.40.1 EC Directive 92/43 on the Conservation of Natural Habitats & of Wild Fauna and Flora: Citation for Special Area of Conservation (SAC) Mole Gap to Reigate Escarpment SAC (Natural England (English Nature), May 2005).
 - 2.40.2 NATURA 2000 Standard Data Form: Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance & designated SACs) Mole Gap to Reigate Escarpment SAC (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 2.40.3 European Site Conservation Objectives for Mole Gap to Reigate Escarpment Special Area of Conservation (Site Code: UK0012804) (Natural England, 30 June 2014, v.2).
 - 2.40.4 Site Improvement Plan: Mole Gap to Reigate Escarpment SAC (Natural England, 9 October 2014).
 - 2.40.5 Mole Gap to Reigate Escarpment SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Chapter 3 Thursley, Ash, Pirbright & Chobham SAC

3.A Geographic & Development Context

3.A.1 Location of the SAC

- 3.1 The Thursley, Ash, Pirbright & Chobham SAC (see map) was designated on 1 April 2005 and according to the SAC citation covers an area of 5,138.00 hectares. The SACs component parts are situated within areas administered by Surrey County Council, Guildford Borough Council, Surrey Heath Borough Council, and Waverley Borough Council. The SAC is composed of the following four SSSIs, of which the two highlighted in **bold text** are situated within the Surrey Hills AONB or within 5 kilometres of the closest boundary of the AONB.
 - Ash to Brookwood Heaths SSSI, located in Surrey and covering some 1,576.35 hectares. The SSSI also forms part of the Thames Basin Heaths SPA (see Chapter 8 of this report). The SSSI is located some 2.8 kilometres to the north of the Surrey Hills AONB.
 - Chobham Common SSSI, located in Surrey and covering some 655.73 hectares. The SSSI also forms part of the Thames Basin Heaths SPA (see Chapter 8 of this report). The SSSI is located some 13.4 kilometres to the north of the Surrey Hills AONB and is therefore not considered further in this assessment.
 - Colony Bog & Bagshot Heath SSSI, located in Surrey and covering some 1,130.51
 hectares. The SSSI also forms part of the Thames Basin Heaths SPA (see Chapter 8 of
 this report). The SSSI is located some 8.2 kilometres to the north of the Surrey Hills
 AONB and is therefore not considered further in this assessment.
 - Thursley, Hankley & Frensham Commons SSSI, located in Surrey and covering some 1,876.41 hectares. The SSSI is also covered by the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA designation, with part of the SSSI also covered by the Thursley & Ockley Bogs Ramsar Site designation (see Chapter 4 of this report). The whole of the SSSI is situated within the Surrey Hills AONB.
- 3.2 The following 'A' class roads pass through, or within 200 metres of the two components of the SAC that lie within the Surrey Hills AONB, or within 5 kilometres of the AONB: the A3 (Portsmouth Road), A287 (Farnham Road), A286 (Haslemere Road) and A3100 (Portsmouth Road) all pass through the Thursley, Hankley & Frensham Commons SSSI; The A322 (Bagshot Road) and the A324 (Pirbright Road) pass within 200 metres of the Ash to Brookwood Heaths SSSI. The Thursley, Hankley & Frensham Commons SSSI is dissected by a network of public rights of way, including seventeen sections of public footpath, thirty-nine sections of public bridleway, and five sections of byways open to all traffic, affording access across the majority of the area covered by the designation. The majority of the area covered by the Ash to Brookwood Heaths SSSI is owned by the Ministry of Defence and is not accessible to the public, although the eastern part of the SSSI is less constrained and is dissected by ten sections of public footpath, four sections of public bridleway and two sections of byways open to all traffic.

3.B Key Characteristics of the SAC

3.B.1 Reasons for Designation

3.3 The ecological interest of the SAC, and the particular habitats and species that are cited as reasons for its designation, is described as follows in the published citation.

Site Description

The heathland is a series of large fragments of previously more continuous areas & is principally dominated by heather – dwarf gorse (*Calluna vulgaris – Ulex minor*) dry heathland. There are transitions to wet heath & valley mire, scrub, woodland & acid grassland, including types rich in annual plants. This habitat supports an important assemblage of animal species, including numerous rare & local invertebrate species, including the nationally rare white-faced darter *Leuccorhinia dubia*, as well as sand lizard *Lacerta agilis* & smooth snake *Coronella austriaca*.

This site supports the sole area of lowland northern Atlantic wet heath in south-east England. The wet heath at Thursley is mainly cross-leaved heath – bog-moss (*Erica tetralix – Sphagnum compactum*) & contains several rare plants, including great sundew *Drosera anglica*, bog hair-grass *Deschampsia setacea*, bog orchid *Hammarbya paludosa* & brown beak-sedge *Rhynchospora fusca*.

Depressions on peat substrates are widespread, both in bog pools, mires & in flushes where they occur as part of a mosaic associated with valley bog & wet heath. They show extensive representation of brown-beak sedge & are also important for great sundew and bog orchid *Hammarbya paludosa*.

Qualifying Habitats

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Depressions on peat substrates of the Rhynchosporion
- European dry heaths
- Northern Atlantic wet heaths with Erica tetralix. (Wet heathland with cross-leaved heath)

3.B.2 Conservation Objectives

3.4 The published conservation objectives for the SAC are given below.

Conservation Objectives

With regard to the natural habitats &/or species for which the site has been designated ("the Qualifying Features"): Avoid the deterioration of the qualifying natural habitats & the habitats of qualifying species, & the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained & the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features. Subject to natural change, to maintain or restore:

- The extent & distribution of qualifying natural habitats & habitats of qualifying species;
- The structure & function (including typical species) of qualifying natural habitats & habitats of qualifying species;
- The supporting processes on which qualifying natural habitats & habitats of qualifying species rely;

- The populations of qualifying species;
- The distribution of qualifying species within the site.

Qualifying Features

- H4010. Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath
- H4030. European dry heaths
- H7150. Depressions on peat substrates of the Rhynchosporion

3.B.3 Condition

3.5 Based on the information published by Natural England in the most recent condition survey reports for the two SSSIs that form parts of the SAC and are located within the Surrey Hills AONB or within 5 kilometres of the AONB (see Table 3-A for a summary), some 71.5% is in 'favourable' condition, some 28.0% is in 'unfavourable – recovering' condition, and some 0.5% is in 'unfavourable – no change' condition. The majority of the two SSSIs relevant to the Surrey Hills AONB are composed of 'dwarf, shrub heath –lowland' habitat (3,140.87 hectares), with the remainder composed of a mixture of broadleaved, mixed and yew woodland (136.36 hectares), standing open water and canals (15.46 hectares), acid grassland (29.69 hectares), and neutral grassland (6.90 hectares).

Table 3-A: Thursley, Ash, Pirbright & Chobham SAC component SSSIs within the Surrey Hills AONB or within 5 km of the AONB – Condition Survey Findings

Main Habitat Type		Area (ha) subject to each condition classification		
		Favourable	Unfavourable – Recovering	Unfavourable – No Change
Lowland dwarf shrub heath Total 3,140.87 ha	In AONB	1270.80	293.97	-
	<5km AONB	967.47	593.32	15.31
Lowland broadleaved, mixed & yew woodland Total 136.36 ha	In AONB	116.28	20.08	-
Standing open water & canals Total 15.46 ha	In AONB	-	15.21	-
	<5km AONB	-	0.25	-
Lowland Acid Grassland Total 29.69 ha	In AONB	23.57	4.07	2.05
Lowland Neutral Grassland Total 6.90 ha	In AONB	-	6.90	-
Totals (3,329.28 h	a)	2,378.12 71.5%	933.80 28.0%	17.36 0.5%

3.6 The 15.31 hectares of lowland dwarf shrub heath habitat classified as exhibiting 'unfavourable – no change' condition is located within the Ash to Brookwood Heaths SSSI (unit 12, last surveyed on 15 May 2017) component of the SAC. The Ash to Brookwood Heaths SSSI is located within 5 kilometres of the boundary of the Surrey Hills AONB, and Unit 12 is located some 7 kilometres from the boundary of the AONB. The condition survey report for Unit 12 recorded the reasons for the unit's adverse condition as being a 'Lack of corrective works - inappropriate scrub control & inappropriate weed control'.

3.7 The 2.05 hectares of lowland acid grassland habitat classified as exhibiting 'unfavourable – no change' condition is located within the Thursley, Hankley & Frensham Commons SSSI (unit 19, Field at Half Moon Public House, last surveyed on 17 July 2008) component of the SAC which is located within the Surrey Hills AONB. The condition survey report for Unit 19 provides the following explanation and analysis.

<u>Comments</u>: This is a small unit in private ownership on the edge of Thursley Common, the owner is unknown. Assessment is the same as in 2002, the site is 20% bracken & the remainder species poor acid grassland dominated by ragwort. Does include birds-foot trefoil, common centaury, hard rush & marsh thistle. There are no signs of any management having been carried out, the unit does not contain any of the interest features or buffer the rest of the site.

Reasons for adverse condition: Agriculture - undergrazing

3.C Identification of Impact Pathways & Screening Evaluation

- 3.8 The published Site Improvement Plan for the SAC (03/11/2014) identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in grazing practices discussed further in section 3.C.1;
 - Changes in forestry and woodland management practices discussed further in section 3.C.2;
 - Changes in local hydrological conditions discussed further in section 3.C.3;
 - Changes in scrub control practices—discussed further in section 3.C.4;
 - Changes due to the introduction of invasive species discussed further in section 3.C.5;
 - Changes in the incidence of wildfire / arson discussed further in section 3.C.6;
 - Changes arising from air pollution (atmospheric nitrogen deposition) discussed further in section 3.C.7;
 - Changes in the use of the land for military activities discussed further in section 3.C.8;
 - Changes due to habitat fragmentation discussed further in section 3.C.9.

3.C.1 Undergrazing (Land Management)

3.9 The features affected by deficiencies in the grazing regime are the wet heathland with cross-leaved heath (H4010) habitat, the European dry heaths (H4030) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (pp.6/20 to 8/20) offers the following explanation of the nature of the identified pressure:

"Parts of the complex are undermanaged. Limitations are such that traditional stock cannot be used (because they are live firing ranges), or resistance to the fencing of common land. The excessive cost of disposal of arisings from cutting management is a significant factor making it impractical for large scale use. Controlled burning is not considered a practical alternative in this complex. Lack of grazing over a long period has resulted in poor habitat quality &

restoration will take a long time. Grazing may actually be having negative impacts in some cases & improved management is required in these instances. There is scope to improve efficiency in use of resources through improved coordination, sharing of equipment & improved partnership working."

- 3.10 The actions that have been identified as the principal means of addressing the pressure are concerned with:
 - Implementing appropriate alternative management where grazing is not practical;
 - Investigating possible economic uses of material arising from habitat management, such as biomass to bioenergy;
 - Developing a heathland management partnership which seeks to share resources, expertise and equipment in order to increase efficiencies in management delivery;
 - Producing agreed management plans for key sites which identify priority actions to improve condition of Natura 2000 features;
 - Improving long-term management of power line wayleaves with power suppliers to avoid damaging impacts and improve habitat condition and connectivity.
- 3.11 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in land management in respect of the heathland habitats of the SAC where those are located within the AONB, through the promotion of schemes and initiatives designed to raise awareness and understanding of appropriate land management practices, including the use of suitable grazing stock and grazing practices.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character. Policy
 F3 is concerned with farm diversification, which could include schemes that would
 deliver biodiversity benefits as a result of the grazing or other appropriate management
 of heathlands and associated habitats.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition, which provides a clear steer as to the ecological outcomes that need to be attained in respect of heathland habitats.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathlands and associated habitats.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland including by means of grazing.
- 3.12 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to changes in land management practices affecting the heathland habitats. The aims and intentions of the Management Plan, articulated across a range of

policies, for the management of heathland habitats would be expected to contribute to the appropriate management of such habitats across the SAC and the wider AONB, including by means of grazing. The AONB Management Plan would not be expected to influence land management practices on land situated beyond the boundaries of the AONB and therefore any beneficial effects would be limited to those parts of the SAC (Thursley, Hankley & Frensham Commons SSSI) that are situated within the AONB. No further assessment is required as the main effects of the AONB Management Plan on land management in those parts of the SAC located within the AONB would be beneficial.

3.C.2 Forestry & Woodland Management

3.13 The features affected by changes in forestry and woodland management practices are the wet heathland with cross-leaved heath (H4010) habitat, and the European dry heaths (H4030) habitat. The SIP (p.8/20) offers the following explanation of the nature of the identified pressure:

"Large parts ...are occupied by commercial forestry plantations where the maintenance of suitable conditions ... is dependent upon rotational felling. However, there is no coordination or overall management plan & felling is dependent upon market forces. Climate change is also causing change in thinking amongst managers with introduction of broadleaves being considered & change from rotational to continuous cover management."

- 3.14 The actions that have been identified as the principal means of addressing the pressure are concerned with undertaking a review of long-term forestry management policy in the complex to ensure suitable habitat conditions for Annex 1 birds are consistently maintained.
- 3.15 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in forestry and woodland management practices in those parts of the SAC (Thursley, Hankley & Frensham Commons SSSI) that are situated within the AONB. The main mechanism of effect would be the promotion of schemes and initiatives designed to raise awareness and understanding of appropriate forestry and woodland management practices across the AONB.
 - Policies W1 to W5 are concerned with the management of existing woodlands within
 the AONB and the creation of new woodlands as part of the management of the
 landscape character of the AONB. Those policies cover matters including the
 appropriate management of woodlands, the development of markets for wood and
 woodland derived products to generate funds for woodland management, and the
 control of diseases and pests that adversely affect woodlands.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition, which provides a clear steer as to the ecological outcomes that need to be attained in respect of all designated habitats, including woodlands.

- Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of a range of habitats, including woodland.
- 3.16 Screening Conclusion: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to changes in management practices affecting the woodland habitats of the SAC. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of woodlands would be expected to contribute to the appropriate management of such habitats across the SAC and the wider AONB. The AONB Management Plan would not be expected to influence woodland or forestry management practices on land situated beyond the boundaries of the AONB and therefore any beneficial effects would be limited to those parts of the SAC (Thursley, Hankley & Frensham Commons SSSI) that are situated within the AONB. No further assessment is required as the main effects of the AONB Management Plan on woodland management within those parts of the SAC located within the AONB would be beneficial.

3.C.3 Hydrological Changes

3.17 The features affected by changes in hydrology are the wet heathland with cross-leaved heath (H4010) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (pp.8/20 to 9/20) offers the following explanation of the nature of the identified pressure:

"Part of Thursley, Ash Pirbright & Chobham SAC (Elstead Common) has evidence of damaging impacts due to drainage. Drains are also present on Thursley & Ockley Commons but it is not clear whether these are having adverse impacts — more research is needed here. This is becoming more urgent in the face of changing weather patterns and prolonged droughts but it is not clear at present what intervention, if any, should be put in place."

- 3.16 The actions that have been identified as the principal means of addressing the pressure are concerned with commissioning hydrological studies of Elstead, Ockley and Thursley Commons to determine whether drainage is having adverse impacts, and of the mires on Ash Ranges (including Whitepatch Bog), to ascertain the effects of past drainage and evaluate the potential for habitat restoration, and with commissioning and implementing mire restoration plans to bring these into favourable condition.
- 3.17 <u>Screening Evaluation</u>: The area of the SAC, Elstead Common, where there is evidence of land drainage management having adverse effects of the condition of the designated habitats is located within the Surrey Hills AONB. The two other areas, Thursley Common and Ockley Common, identified as potentially affected by drainage are also located within the AONB. The heathland habitats of those three commons form key elements of the Greensand Plateau: Witley and Churt landscape character area of the AONB, and the AONB Management Plan would therefore be relevant to the management of that land.

- 3.18 The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing the impacts of land drainage on the heathland habitats of the SAC within the AONB. The listed policies would provide support for the commissioning of studies designed to investigate the hydrology of Elstead, Thursley and Ockley Commons, as such information would help to inform appropriate management of the land and the safeguarding of its landscape character.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition, which provides a clear steer as to the ecological outcomes that need to be attained in respect of heathland habitats.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathlands and associated habitats.
 - Policy B3 makes reference to the opportunities for habitat restoration and creation to build ecological network resilience to the impacts of climate change, which could include the effects of drought on wet and dry heathlands.
 - Policy B5 is concerned with the appropriate management of aquatic and wetland habitats throughout the AONB, and the safeguarding of the quality and contribution to landscape character.
- 3.19 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to hydrological changes that affect heathland habitats. The aims and intentions of the Management Plan, articulated through the policies relating to biodiversity and the management of the water environment, would be expected to contribute to the appropriate management of drainage matters within those heathland habitats situated within the boundaries of the AONB. No further assessment is required as the main effects of the AONB Management Plan on hydrological changes within those parts of the SAC located within the AONB would be beneficial.

3.C.4 Inappropriate Scrub Control

3.20 The features affected by a lack of appropriate scrub control are the wet heathland with cross-leaved heath (H4010) habitat, and the European dry heaths (H4030) habitat. The SIP (p.10/20) offers the following explanation of the nature of the identified pressure:

"Ineffective or lack of scrub control affects some areas of dry & wet heath, especially at Colony Bog, & at Bourley & Long Valley. The absence of scrub management plans at most sites is of concern as it is often viewed as a negative aspect with little consideration given for its value to Annex 1 birds. There is also concern that scrub management is a constant, significant drain on resources – there is a need for investigation of options which give an economic return on scrub management."

- 3.21 The actions that have been identified as the principal means of addressing the pressure are concerned with implementing a programme of scrub clearance to reverse effects of encroachment of heathland to follow on from investigation of the potential for sustainable use of the waste arising.
- 3.22 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in scrub management in respect of the heathlands both within the SAC and beyond. Those policies would primarily work by means of the promotion of schemes and initiatives designed to raise awareness, understanding and application of appropriate land management practices across the SAC and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character.
 - Policy W4 is concerned with the removal of trees and secondary woodland in the interests of grassland or heathland restoration.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathland.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland.
- 3.23 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to the management of scrub. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of heathland and other sensitive habitats would be expected to contribute to the appropriate management of scrub encroachment across those parts of the SAC, and similar habitats, found within the AONB. No further assessment is required as the main effects of the AONB Management Plan on scrub control within those parts of the SAC located within the AONB would be beneficial.

3.C.5 Invasive Species

3.24 The features affected by the incursion of invasive plant species are the wet heathland with cross-leaved heath (H4010) habitat, and the European dry heaths (H4030) habitat. The SIP (p.10/20) offers the following explanation of the nature of the identified pressure:

"Rhododendron & Gaultheria control is on-going in parts but difficult to control where access for management is constrained. It is unclear what the scale of threat is posed by piri-pri bur to open heathland but monitoring of its spread is desirable. Possibly more of a threat to dry heath than wet."

- 3.25 The actions that have been identified as the principal means of addressing the pressure are concerned with the preparation and implementation of invasive species control plans for all sites where these remain a problem or pose a significant threat.
- 3.26 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing the spread of invasive plant species within the SAC and beyond. Those policies would primarily work by means of the promotion of schemes and initiatives designed to raise awareness, understanding and application of appropriate land management practices across the SAC and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathland.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland.
- 3.27 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to the management of invasive plant species. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of heathland and other sensitive habitats would be expected to contribute to the appropriate management of invasive plant species across those parts of the SAC, and supporting habitats, found within the AONB. No further assessment is required as the main effects of the AONB Management Plan on the control of invasive plant species within those parts of the SAC located within the AONB would be beneficial.

3.C.6 Wildfire / Arson

3.28 The features affected by changes in the risk or incidence of wildfires or arson are the wet heathland with cross-leaved heath (H4010) habitat, the European dry heaths (H4030) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (p.11/20 and 12/20) offers the following explanation of the nature of the identified pressure:

"Uncontrolled fires are very damaging as they can have profound impacts on reptile populations, invertebrates & plant diversity & can result in significant habitat loss for Annex 1 birds. They can affect forestry areas as well as open heath. Damaging impacts can last for many years for example by the wholesale removal of all gorse from a site. Strategies are in place in parts of the complex to reduce risk but more attention is needed to properly address this issue. Increasing threat of extensive fires is of great concern to the fire services & there is

a desire for greater link up between efforts to protect property & roads from fire, & habitat management."

- 3.29 The actions that have been identified as the principal means of addressing the pressure are concerned with completing and implementing fire strategies and risk management plans for all sites, with undertaking a public fire awareness campaign, and with embedding wildfire mitigation and adaptation into local authority Local Development Plan policies.
- 3.30 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the risk of arson or accidental fire affecting SAC habitats as a consequence of increased recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to greater recreational and leisure use of land within and adjoining the SAC with an associated increase in the risk of arson or accidental fire.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors
 which could contribute to greater recreational and leisure use of land within and
 adjoining the SAC with an associated increase in the risk of arson or accidental fire.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to greater recreational and leisure use of land within and adjoining the
 SAC with an associated increase in the risk of arson or accidental fire
 - Policy CE3 is concerned with the retention and provision of affordable housing which could contribute to greater recreational and leisure use of land within and adjoining the SAC with an associated increase in the risk of arson or accidental fire
- 3.31 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SAC as a consequence of increased risks of arson or accidental fire associated with greater public access to land within or adjoining the SAC. Further assessment is therefore required in respect of the arson / wildfire impact pathway.

3.C.7 Air pollution: impact of atmospheric nitrogen deposition

3.32 The features affected by changes in the amounts of nutrient nitrogen deposited from the atmosphere are the wet heathland with cross-leaved heath (H4010) habitat, the European dry heaths (H4030) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (p.12/20) offers the following explanation of the nature of the identified pressure/threat:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards Molinia & sedge dominated systems rather than Sphagnum dominated; spread of Molinia into wet & dry heath also appears to be promoted by high nitrate levels. This is most likely to be a current

issue at Chobham Common but may represent a chronic adverse impact over the complex as a whole."

- 3.33 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with controlling and reducing nitrogen emissions and deposition, and with ameliorating the impacts of that deposition.
- 3.34 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to changes in emissions of nitrogen containing compounds to the atmosphere which if deposited within the SAC could contribute to changes in nutrient deposition that would be harmful to the designated habitats.
 - Policy F3 is concerned with farm diversification, which could include schemes that would increase visitor numbers to the AONB, with associated increases in traffic and emissions from vehicles, schemes to add value to farm produce with associated requirements for plant, equipment, processing and the transport of goods and raw materials, and schemes involving changes in the types of crops or stock raised on the land with potential changes in inputs (e.g. fertilisers, pesticides, etc.) or outputs (e.g. slurry, etc.).
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors
 which could give rise to additional road traffic within the AONB and associated
 emissions of nitrogen dioxide which could be deposited on sensitive habitats within the
 SAC and the surrounding land as nutrient nitrogen.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could give rise to additional road traffic within the AONB and associated emissions of
 nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the
 surrounding land as nutrient nitrogen.
 - Policy CE2 is concerned with the promotion and marketing of goods and services
 produced or provided from within the AONB, which could give rise to emissions of
 nitrogen dioxide associated with the use of plant/equipment/machinery for production
 and with additional road traffic, which could be deposited on sensitive habitats within
 the SAC and the surrounding land as nutrient nitrogen.
 - Policy CE3 is concerned with the retention and provision of affordable housing which could give rise to additional road traffic within the AONB and associated emissions of nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the surrounding land as nutrient nitrogen.
 - Policy CE4 is concerned with the provision of community transport services give rise to additional road traffic within the AONB and associated emissions of nitrogen dioxide which could be deposited on sensitive habitats within the SAC and the surrounding land as nutrient nitrogen.
- 3.35 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant

adverse impacts on the SAC as a consequence of the deposit of nutrient nitrogen arising from a variety of sources. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

3.C.8 Military Uses

3.36 The features affected by changes in the military uses made of land within the SAC are the wet heathland with cross-leaved heath (H4010) habitat, the European dry heaths (H4030) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (p.13/20) offers the following explanation of the nature of the identified threat:

"None of the military training areas in the complex currently have integrated management plans which seek to integrate management of the estate for military training with nature conservation management. There is a need for improved communication between partners over common objectives."

- 3.37 The actions that have been identified as the principal means of addressing the threat are concerned with completing integrated management plans for all military training sites in the complex.
- 3.38 <u>Screening Evaluation</u>: Some 615.9 hectares of the Thursley, Hankley & Frensham Commons SSSI component of the SAC are owned by the Ministry of Defence (MoD) and are subject to access management restrictions. As the SSSI is located within the Surrey Hills AONB, and contributes to the landscape character of the AONB, a number of the policies (see below) set out in the revised AONB Management Plan are relevant to the management of that land by the MoD.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathland.
- 3.39 The majority of the Ash to Brookwood Heaths SSSI component of the SAC is owned by the MoD and is either subject to no public access or to managed access. That SSSI is not located within the Surrey Hills AONB and its management would not be influenced by the AONB Management Plan.
- 3.40 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SAC with reference to the management of land in military ownership or use. The Management Plan includes a number of policies that would relevant to the MoDs management of land that forms part of the Thursley, Hankley & Frensham Commons SSSI component of the SAC. No further assessment is required as the main effects of the AONB Management Plan on the management of land under military control within those parts of the SAC located within the AONB would be supportive of positive management. No further assessment is required in respect of the military uses impact pathway.

3.C.9 Habitat Fragmentation

3.41 The features affected by habitat fragmentation are the wet heathland with cross-leaved heath (H4010) habitat, the European dry heaths (H4030) habitat, and the depressions on peat substrates (H7150) habitat. The SIP (p.14/20) offers the following explanation of the nature of the identified pressure:

"Fragmentation of the complex means that recovery after devastating impacts such as fires & severe winters is restricted or prevented altogether. This has implications for the ability of species such as Dartford warbler, smooth snake, marsh clubmoss, specialist invertebrates to recolonise parts of the complex. There is currently high risk of local extinctions in parts of the complex because of this."

- 3.42 The actions that have been identified as the principal means of addressing the pressure are concerned with commissioning a study to identify priorities for habitat management that are able to ameliorate the effects of habitat fragmentation.
- 3.43 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to habitat fragmentation as a consequence of recreational use giving rise to physical changes in the SAC habitats.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to the risk of physical harm to, and therefore fragmentation of, the habitats of the SAC as a consequence of increased recreational and leisure use.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors which could, dependent on the location and types of facilities and uses, give rise to increased risk of physical harm to, and therefore fragmentation of, the habitats of the SAC.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to risks of physical harm to, and therefore fragmentation of, the
 habitats of the SAC as a consequence of increased recreational and leisure use.
 - Policy CE3 is concerned with the retention and provision of affordable housing which
 could contribute to risks of physical harm to, and therefore fragmentation of, the
 habitats of the SAC as a consequence of increased recreational and leisure use.
- 3.44 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SAC as a consequence of habitat fragmentation associated with recreational use of the SAC. Further assessment is therefore required in respect of the habitat fragmentation impact pathway.

3.D Assessment of significant effects

3.45 The screening assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan for the period 2020-2025 has the potential to give rise to likely significant effects on the Thursley, Ash, Pirbright & Chobham SAC with reference to the wildfire/arson impact pathway, and the nutrient nitrogen deposition impact pathway. The purpose of the following section of this report is to consider the extent to which the identified risks of likely significant effects could be appropriately and successfully addressed through mitigation measures.

3.D.1 Wildfire / Arson

- 3.46 The screening assessment concluded that increased public access to the SAC could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of an increased risk of arson / accidental fire. Of particular concern where activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- 3.47 In terms of mitigation of the potential impacts of the Management Plan on the SAC, policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of arson / accidental fire associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 3.48 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or provision of visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Ash Pirbright & Chobham SAC those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018) and policy ID4 (Green & Blue Infrastructure) of the Guildford Local Plan (2019). All applications for planning permission submitted to the district or borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SAC, and would be subject to assessment under the provisions of Regulation 63 of the

Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of arson / accidental fire.

3.D.2 Nutrient nitrogen deposition

- 3.49 The screening assessment concluded that changes in nutrient nitrogen deposition rates arising from changes in land use or increased vehicle movements within the AONB could give rise to likely significant impacts on the habitats of the SAC in the absence of mitigation measures. Of particular concern were activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SAC, policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing the impacts of nutrient nitrogen deposition associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 3.51 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Ash Pirbright & Chobham SAC those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018) and policy ID4 (Green & Blue Infrastructure) of the Guildford Local Plan (2019). All applications for planning permission submitted to the district or borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SAC, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the likely impact of the scheme of nutrient nitrogen deposition.

3.D.3 Habitat Fragmentation

- 3.52 The screening assessment concluded that increased public access to the SAC could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of habitat fragmentation. Of particular concern where activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- 3.53 In terms of mitigation of the potential impacts of the Management Plan on the SAC, policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of habitat fragmentation associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 3.54 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or provision of visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Ash Pirbright & Chobham SAC those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018) and policy ID4 (Green & Blue Infrastructure) of the Guildford Local Plan (2019). All applications for planning permission submitted to the district or borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SAC, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of habitat fragmentation.

3.E Conclusions

3.55 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thursley, Ash, Pirbright & Chobham SAC has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, nutrient nitrogen deposition and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies

in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SAC from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.

3.56 The assessment considered the nine impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey AONB Management Plan on the SAC via each pathway are summarised in Table 3-B.

Table 3-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in grazing practices – see section 3.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in forestry and woodland management practices – see section 3.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in local hydrological conditions – see section 3.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices – see section 3.C.4	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes due to the introduction of invasive species – see section 3.C.5	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SAC. Mitigation to be achieved through existing planning	Adverse – not
of wildfire / arson – see section 3.C.6 and 3.D.1	policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	

Impact Pathway	Conclusion	
Changes arising from air pollution (atmospheric nitrogen deposition) – see section 3.C.7 & section 3.D.2	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SAC from a range of sources (recreational / residential / agricultural / transport). Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	Adverse – not significant with mitigation
Changes in the use of the land for military activities – see in section 3.C.8	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes due to habitat fragmentation — see section 3.C.9 & section 3.D.3	Potential for likely significant adverse impacts as a consequence of increased recreational use of land within the SAC Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	Adverse – not significant with mitigation

3.57 The question of in-combination impacts needs to be considered with reference to the likely interactions of the AONB Management Plan with other plans that could also affect land use within the AONB and the SAC. All land allocated for future development under the adopted Local Plans of Waverley Borough Council and Guildford Borough Council will have been subject to assessment during the plan preparation process, including under the provisions of the Habitats Regulations. In order for those plans to be found sound and proceed to adoption it would have been necessary for the associated HRAs to conclude that no SPAs or SACs would be subject to significant adverse impacts. Both the Waverley Local Plan and the Guildford Local Plan include policies that are designed to provide for the protection of the ecological integrity of the Thursley, Ash, Pirbright & Chobham SAC. Those Local Plan policies would work in-combination with Policy B1 of the Surrey Hills AONB Management Plan to protect the SAC from adverse impacts that could arise from development that falls within the ambit of the planning regime.

3.F References

- 3.58 The following sources of information have been referred to as part of the assessment process for the Thursley, Ash, Pirbright & Chobham SAC.
 - 3.58.1 EC Directive 92/43 on the Conservation of Natural Habitats & of Wild Fauna and Flora: Citation for Special Area of Conservation (SAC) Thursley, Ash, Pirbright & Chobham SAC (Natural England (English Nature), May 2005).
 - 3.58.2 NATURA 2000 Standard Data Form: Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance & designated SACs) Thursley, Ash, Pirbright & Chobham SAC (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 3.58.3 European Site Conservation Objectives for Thursley, Ash, Pirbright & Chobham Special Area of Conservation (Site Code: UK0030080) (Natural England, 30 June 2014, v.2).
 - 3.58.4 Site Improvement Plan: Thursley, Ash, Pirbright & Chobham SAC (Natural England, 24 November 2014).
 - 3.58.5 Condition Survey Report for the Ash to Brookwood Heaths SSSI (Natural England, Designated Sites website, accessed 30 May 2018).
 - 3.58.6 Condition Survey Report for the Thursley, Hankley & Frensham Commons SSSI (Natural England, Designated Sites website, accessed 30 May 2018).
 - 3.58.7 Habitat Regulations Assessment for the emerging Local Plan, AECOM for Waverley Borough Council, 2016, 2017 and 2018.
 - 3.58.8 Habitats Regulations Assessment for Guildford Borough Proposed Submission Local Plan: Strategy & Sites, 2017 Update, AECOM for Guildford Borough Council, April 2017.

Thursley, Hankley & Frensham Commons (Wealden Chapter 4 Heaths Phase 1) SPA & Thursley & Ockley Bog Ramsar Site

4.A Geographic & Development Context

4.A.1 Location of the SPA & Ramsar Site

- 4.1 The Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA (see map) is located in Surrey, and is composed of a single SSSI, the Thursley, Hankley & Frensham Commons SSSI. The SPA covers an area of 1,879.93 hectares, as stated on the SPA standard data form, and was designated in February 1994. The SPA is wholly located within the boundaries of the Surrey Hills AONB.
- 4.2 Part of the area, some 256.2 hectares, covered by both the SSSI and SPA designations is also designated as a Ramsar Site (see map), under the 1971 Ramsar Convention on wetlands of international importance. That area is known as the Thursley & Ockley Bogs Ramsar Site, and was designated under Ramsar criterion 2 for the community of rare wetland invertebrate species including notable numbers of breeding dragonflies, and under Ramsar criterion 3 for the presence of all six reptile species native to the UK, and for the nationally important breeding populations of European nightjar and woodlark. The Ramsar Site is wholly located within the boundaries of the Surrey Hills AONB.
- 4.3 The SPA is dissected by a number of road links, including the following 'A' class roads the A3 (Portsmouth Road), the A287 (Farnham Road), the A286 (Haslemere Road) and the A3100 (Portsmouth Road). The SPA is dissected by a network of public rights of way, including seventeen sections of public footpath, thirty-nine sections of public bridleway, and five sections of byways open to all traffic, affording access across the majority of the area covered by the designation.

4.B Key Characteristics of the SPA

4.B.1 Reasons for Designation

4.4 The ecological interest of the SPA and the species that are given as reasons for its designation is described as follows in the published citation.

Site Description

Thursley, Hankley & Frensham Commons together incorporate a heath & valley mire complex. Broadleaved & coniferous woodland covers large parts of the site with scattered scrub & trees present over much of the heath, & several areas of permanent grassland. Areas of open water ranging from acidic boggy pool & ditches to large ponds also contribute significantly to the overall diversity of the site.

Thursley, Hankley & Frensham Commons qualify under Article 4.1 of the EC Birds Directive as a site of international importance by regularly supporting in the summer the following populations of birds listed under Annex I:

- About 20 pairs of nightjars Caprimulgus europeaus, (1% of the British breeding population);
- Up to 27 pairs of woodlark Lullula arborea, (12% of the British breeding population); and,
- In excess of 20 pairs of Dartford warblers *Sylvia undata*, (4% of the British breeding population in 1984).0

The numbers of these species fluctuate considerably from year to year; the figures given above relate to peak numbers recorded over the last 10-15 years. This site makes a substantial contribution to the maintenance of the traditional breeding ranges of these species within Britain, where habitat has become greatly fragmented & degraded in recent decades, & in the EC.

Notable also are regular breeding kingfishers *Alcedo atthis*, & wintering hen harriers *Circus cyaneus*, species also listed under Annex I of the EC Birds Directive.

4.B.2 Conservation Objectives

4.5 The published conservation objectives for the SPA are given below

Conservation Objectives

"With regard to the individual species &/or assemblage of species for which the site has been classified ("the Qualifying Features" listed below): Avoid the deterioration of the habitats of the qualifying features, & the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained & the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore:

- The extent & distribution of the habitats of the qualifying features;
- The structure & function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features

- A224 Caprimulgus europaeus; European nightjar (Breeding)
- A246 Lullula arborea; Woodlark (Breeding)
- A302 Sylvia undata; Dartford warbler (Breeding)

4.B.3 Condition

4.6 Based on the information published by Natural England in the most recent condition survey reports for the SSSI that is coincident with the SPA designation, the designated site extends to some 1,876.41 hectares, of which some 81.8 % is in 'favourable' condition, some 18.1% is in 'unfavourable – recovering' condition, and some 0.1% is in 'unfavourable – no change' condition (see Table 4-A). The majority of the SSSI is composed of five main habitat types,

'dwarf shrub heath-lowland' (1,656.88 hectares), 'broadleaved, mixed & yew woodland – lowland' (136.36 hectares), 'standing open water & canals' (48.64 hectares), 'acid grassland – lowland' (29.69 hectares), and 'neutral grassland – lowland' (6.90 hectares).

Table 4-A: Thursley, Hankley & Frensham Commons SSSI - Condition Survey Findings

Main Habitat Type		Condition Classification		
		Favourable	Unfavourable – Recovering	Unfavourable – No Change
Broadleaved, Mixed & Yew Woodland – Lowland	136.36 ha (7.3%)	116.28 ha (6.2%)	20.08 ha (1.1%)	0.00 ha (0%)
Dwarf Shrub Heath –	1,656.88 ha	1,362.91 ha	293.97 ha	0.00 ha
Lowland	(88.3%)	(72.6%)	(15.7%)	(0%)
Acid Grassland –	29.69 ha	23.57 ha	4.07 ha	2.05 ha
Lowland	(1.6%)	(1.3%)	(0.2%)	(0.1%)
Neutral Grassland -	6.90 ha	0.00 ha	6.90 ha	0.00 ha
Lowland	(0.4%)	(0%)	(0.4%)	(0%)
Standing Open Water	48.64 ha	33.43 ha	15.21 ha	0.00 ha
& Canals	(2.6%)	(1.8%)	(0.8%)	(0%)
Totals	1,876.41 ha	1,536.18 ha (81.8%)	340.22 ha (18.1%)	2.05 ha (0.1%)

4.7 For the 2.05 hectares of acid grassland habitat (SSSI unit number 19, last surveyed on 17 July 2008) classified as exhibiting 'unfavourable – no change' condition, the condition survey report provides the following explanation and analysis.

<u>Comments</u>: This is a small unit in private ownership on the edge of Thursley Common, the owner is unknown. Assessment is the same as in 2002, the site is 20% bracken & the remainder species poor acid grassland dominated by ragwort. Does include birds-foot trefoil, common centaury, hard rush & marsh thistle. There are no signs of any management having been carried out, the unit does not contain any of the interest features or buffer the rest of the site.

Reasons for adverse condition: Agriculture - Undergrazing

4.C Identification of Impact Pathways & Screening Evaluation

- 4.8 The published Site Improvement Plan (SIP) for the SPA (3 November 2014) identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in the incidence of public access / disturbance discussed further in section 4.C.1;

- Changes in grazing practices discussed further in section 4.C.2;
- Changes in scrub control practices—discussed further in section 4.C.3;
- Changes in the incidence of wildfire / arson discussed further in section 4.C.4;
- Changes arising from air pollution (atmospheric nitrogen deposition) discussed further in section 4.C.5;
- Changes in the condition, location and extent of the features of qualifying interest discussed further in section 4.C.6;
- Changes in the use of the land for military activities discussed further in section 4.C.7;
- Changes due to habitat fragmentation discussed further in section 4.C.8.

4.C.1 Public access / disturbance

4.9 The features affected by changes in the incidence of public access and associated disturbance are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.5/20) offers the following explanation of the nature of the identified pressure/threat.

"Parts of ... Thursley, Hankley & Frensham Commons SPA...are subject to high levels of recreational use & dog walkers make up a large proportion of visitors. This is likely to be affecting the distribution & overall numbers of ground-nesting Annex 1 birds (& breeding success). An 'avoidance strategy' is in place to help manage this pressure, including the provision of Suitable Accessible Natural Green Space (SANGS). However, recreational pressure may be hampering the potential for the sites to achieve their full contribution to sustainable national populations. Further work is desirable to determine the scale of impact from recreational disturbance. There is also concern at the growing use of parts of the complex by commercial dog walkers & desire to control this. Improved habitat management to increase suitability for Annex 1 birds & better coordination of habitat provision across the complex is also needed to better offset the effects of disturbance."

- 4.10 The actions that have been identified as the principal means of addressing the pressure/ threat are concerned with the production of an over-arching habitat management strategy to help offset/decrease the effects of recreational disturbance on the Annex 1 birds, with the production of coherent and consistent access management strategy for the designated site, and with implementing a wardening strategy to reduce the impacts of recreational disturbance on the Annex 1 birds.
- 4.11 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the incidence of disturbance affecting SPA species and/or physical harm to the habitats on which the SPA species depend as a consequence of recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to increased pressure on habitats and species as a consequence of disturbance from recreational and leisure use of land within and adjoining the SPA.

- Policy W5 is concerned with the creation of new or the extension of existing woodlands for a range of purposes including recreational uses, which could place sensitive woodland species, including the woodlark population of the SPA, at risk of disturbance.
- Policy RT1 is concerned with the provision of new or improved facilities for visitors which could, dependent on the location and types of facilities and uses, give rise to increased pressure on habitats and species as a consequence of disturbance.
- Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SPA.
- Policy CE3 is concerned with the retention and provision of affordable housing which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SPA.
- 4.12 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased public access and associated disturbance. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

4.C.2 Undergrazing

4.13 The features affected by undergrazing of the SPA habitats are populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (pp.6/20 to 8/20) offers the following explanation of the nature of the identified pressure:

"Parts of the complex are undermanaged. Limitations are such that traditional stock cannot be used (because they are live firing ranges), or resistance to the fencing of common land. The excessive cost of disposal of arisings from cutting management is a significant factor making it impractical for large scale use. Controlled burning is not considered a practical alternative in this complex. Lack of grazing over a long period has resulted in poor habitat quality & restoration will take a long time. Grazing may actually be having negative impacts in some cases & improved management is required in these instances. There is scope to improve efficiency in use of resources through improved coordination, sharing of equipment & improved partnership working."

- 4.14 The actions that have been identified as the principal means of addressing the pressure are concerned with:
 - Implementation of appropriate alternative management where grazing is not practical;
 - Investigation of possible economic uses of material arising from habitat management such as biomass to bioenergy;
 - Development of a heathland management partnership which seeks to share resources, expertise and equipment in order to increase efficiencies in management delivery;

- Production of agreed management plans for key sites which identify priority actions to improve condition of Natura 2000 features;
- Improve long-term management of power line wayleaves with power suppliers to avoid damaging impacts and improve habitat condition and connectivity.
- 4.15 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in land management in respect of the heathland habitats of the SPA bird species, through the promotion of schemes and initiatives designed to raise awareness and understanding of appropriate land management practices, including the use of suitable grazing stock, across the SPA and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of a viable and sustainable farming sector, with an emphasis on good land management including measures that support biodiversity and its role in landscape character. Policy F3 is concerned with farm diversification, which could include schemes that would deliver biodiversity benefits as a result of the grazing or other appropriate management of heathlands and associated habitats.
 - Policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition, which provides a clear steer as to the ecological outcomes that need to be attained in respect of heathland habitats.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathlands and associated habitats.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland including by means of grazing.
- 4.16 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the habitats of the SPA bird species with reference to changes in land management affecting the heathland. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of heathland habitats would be expected to contribute to the appropriate management of such habitats across the SPA and the wider AONB, including by means of grazing or other scrub and secondary woodland control measures.

4.C.3 Inappropriate scrub control

4.17 The features affected by a lack of appropriate scrub control measures are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.10/20) offers the following explanation of the nature of the identified pressure:

"Ineffective or lack of scrub control affects some areas of dry and wet heath, The absence of scrub management plans ... is of concern as it is often viewed as a negative aspect with little consideration given for its value to Annex 1 birds. There is also concern that scrub

management is a constant, significant drain on resources - there is a need for investigation of options which give an economic return on scrub management."

- 4.18 The actions that have been identified as the principal means of addressing the pressure are concerned with implementing a programme of scrub clearance to reverse the effects of the encroachment of the heathland, following on from investigation of the options for use of the material arising from clearance.
- 4.19 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in scrub management in respect of the heathland habitat both within the SPA and beyond. Those policies would primarily work by means of the promotion of schemes and initiatives designed to raise awareness, understanding and application of appropriate land management practices across the SPA and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character.
 - Policy W4 is concerned with the removal of trees and secondary woodland in the interests of grassland or heathland restoration.
 - Policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including the heathlands on which the SPA bird species depend.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland habitats.
- 4.20 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SPA with reference to the management of scrub on the heathland habitats of the SPA bird species. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of heathland and other sensitive and important habitats would be expected to contribute to the appropriate management of scrub encroachment across the SPA and similar areas of SPA bird species habitat found within the wider AONB.

4.C.4 Wildfire / arson

4.21 The features affected by wildfire or fire arising from arson are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.11/20 to 12/20) offers the following explanation of the nature of the identified threat:

"Uncontrolled fires are very damaging as they can have profound impacts on reptile populations, invertebrates & plant diversity & can result in significant habitat loss for Annex 1 birds. They can affect forestry areas as well as open heath. Damaging impacts can last for many years for example by the wholesale removal of all gorse from a site. Strategies are in place in parts of the complex to reduce risk but more attention is needed to properly address this issue. Increasing threat of extensive fires is of great concern to the fire services & there is a desire for greater link up between efforts to protect property & roads from fire, & habitat management."

- 4.22 The actions that have been identified as the principal means of addressing the threat are concerned with completing and agreeing the implementation of a fire strategy and risk management plan for the SPA in order to reduce fire risk, with undertaking public fire awareness campaigns, and with embedding wildfire mitigation and adaptation into local authority Local Development Plan policies.
- 4.23 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the risk of arson or accidental fire affecting SPA bird species and their habitats as a consequence of increased recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to greater recreational and leisure use of land within and adjoining the SPA with an associated increase in the risk of arson or accidental fire.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors
 which could contribute to greater recreational and leisure use of land within and
 adjoining the SPA with an associated increase in the risk of arson or accidental fire.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which could contribute to greater recreational and leisure use of land within and adjoining the SPA with an associated increase in the risk of arson or accidental fire
 - Policy CE3 is concerned with the retention and provision of affordable housing which could contribute to greater recreational and leisure use of land within and adjoining the SPA with an associated increase in the risk of arson or accidental fire
- 4.24 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased risks of arson or accidental fire associated with greater public access to land within or adjoining the SPA. Further assessment is therefore required in respect of the arson / wildfire impact pathway.

4.C.5 Air pollution: impact of atmospheric nitrogen deposition

4.25 The features affected by changes in nutrient nitrogen deposition from the atmosphere are the habitats of the populations of the European nightjar A224(B), the Woodlark A246(B),

and the Dartford Warbler A302(B). The SIP (p.12/20) offers the following explanation of the nature of the identified pressure/threat:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards Molinia & sedge dominated systems rather than Sphagnum dominated; spread of Molinia into wet & dry heath also appears to be promoted by high nitrate levels. This...may represent a chronic adverse impact over the complex as a whole."

- 4.26 The actions that have been identified as the principal means of addressing the pressure are concerned with controlling and reducing nitrogen emissions and deposition, and with ameliorating the impacts of that deposition.
- 4.27 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to changes in emissions of nitrogen containing compounds to the atmosphere which if deposited within the SPA could contribute to changes in nutrient deposition that would be harmful to the habitats on which the SPA bird species rely.
 - Policy F3 is concerned with farm diversification, which could include schemes that would increase visitor numbers to the AONB, with associated increases in traffic and emissions from vehicles, schemes to add value to farm produce with associated requirements for plant, equipment, processing and the transport of goods and raw materials, and schemes involving changes in the types of crops or stock raised on the land with potential changes in inputs (e.g. fertilisers, pesticides, etc.) or outputs (e.g. slurry, etc.).
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors
 which could give rise to additional road traffic within the AONB and associated
 emissions of nitrogen dioxide which could be deposited on the habitats of the SPA bird
 species within the designated site and in the surrounding land as nutrient nitrogen.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could give rise to additional road traffic within the AONB and associated emissions of
 nitrogen dioxide which could be deposited on the habitats of the SPA bird species within
 the designated site and in the surrounding land as nutrient nitrogen.
 - Policy CE2 is concerned with the promotion and marketing of goods and services
 produced or provided from within the AONB, which could give rise to emissions of
 nitrogen dioxide associated with the use of plant/equipment/machinery for production
 and with additional road traffic, which could be deposited on the habitats of the SPA
 bird species within the designated site and in the surrounding land as nutrient nitrogen.
 - Policy CE3 is concerned with the retention and provision of affordable housing which
 could give rise to additional road traffic within the AONB and associated emissions of
 nitrogen dioxide which could be deposited on the habitats of the SPA bird species within
 the designated site and in the surrounding land as nutrient nitrogen.

- Policy CE4 is concerned with the provision of community transport services give rise to additional road traffic within the AONB and associated emissions of nitrogen dioxide which could be deposited on the habitats of the SPA bird species within the designated site and in the surrounding land as nutrient nitrogen.
- 4.28 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of the deposit of nutrient nitrogen arising from a variety of sources on the sensitive heathland habitats of the SPA bird species. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

4.C.6 Monitoring of feature condition, location & extent

4.29 The features affected by gaps in knowledge and understanding of the way in which the SPA species use the site and the surrounding area are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.13/20) offers the following explanation of the nature of the identified threat:

"There are significant gaps in the knowledge of key aspects such as where woodlarks are overwintering & whether these sites are in need of protection, & coverage of the complex in terms of monitoring of Annex 1 birds is not comprehensive so recorded bird numbers are not representative of total numbers. Also, current monitoring does not provide information on breeding success, only territory numbers."

- 4.30 The actions that have been identified as the principal means of addressing the threat are concerned with establishing a long-term bird monitoring strategy that covers of all parts of the SPA, and commissioning research to determine critical factors in the breeding success of woodlark in this complex, particularly focussing on possible effects of climate change and changing weather patterns
- 4.31 <u>Screening Evaluation</u>: The Surrey Hills AONB Management Plan may present or give rise to opportunities for the collection or collation of evidence about the features of qualifying interest (woodlark, Dartford warbler and nightjar) for which the SPA is designated. Schemes or initiatives brought forward under a number of the policies (see below) set out in the Management Plan may present opportunities for surveys to be undertaken that would provide evidence about the way in which the SPA bird species make use of their preferred habitats within the SPA and the surrounding area.
 - Policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including the heathlands on which the SPA bird species depend.

- Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland habitats.
- 4.32 <u>Screening Conclusion</u>: The implementation a number of the policies set out in the Surrey Hills AONB Management Plan could give rise to opportunities for evidence collection or collation in respect of the area of land covered by the SPA. No further assessment is required in respect of the features of qualifying interest impact pathway as the effects of the Management Plan would be beneficial.

4.C.7 Military activities / uses

4.33 The features affected by changes in the military use of the designated site are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.13/20) offers the following explanation of the nature of the identified threat:

"None of the military training areas in the complex currently have integrated management plans which seek to integrate management of the estate for military training with nature conservation management. There is a need for improved communication between partners over common objectives."

- 4.34 The actions that have been identified as the principal means of addressing the threat are concerned with completing integrated management plans for all military training sites in the complex.
- 4.35 <u>Screening Evaluation</u>: Some 615.9 hectares of the SPA are owned or controlled by the Ministry of Defence (MoD) and are subject to access management restrictions. As the SPA is located within the Surrey Hills AONB, and those parts in MoD ownership contribute to the landscape character of the AONB, a number of the policies (see below) set out in the revised AONB Management Plan are relevant to the management of that land by the MoD.
 - Policy B1 is concerned with the management of existing designated sites, including SACs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including heathland.
- 4.36 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SPA with reference to the management of land in military ownership or use. The Management Plan includes a number of policies that would relevant to the MoDs management of land that forms part of the SPA. No further assessment is required as the main effects of the AONB Management Plan on the management of those parts of the SPA under military control. No further assessment is required in respect of the military uses impact pathway.

4.C.8 Habitat fragmentation

4.37 The features affected by habitat fragmentation are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.14/20) offers the following explanation of the nature of the identified pressure:

"Fragmentation of the complex means that recovery after devastating impacts such as fires & severe winters is restricted or prevented altogether. This has implications for the ability of species such as Dartford warbler, smooth snake, marsh clubmoss, specialist invertebrates to recolonise parts of the complex. There is currently high risk of local extinctions in parts of the complex because of this."

- 4.38 The actions that have been identified as the principal means of addressing the pressure are concerned with commissioning a study to identify priorities for habitat management which reduce the adverse impacts of habitat fragmentation
- 4.39 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to habitat fragmentation as a consequence of recreational use giving rise to physical changes in the habitats of the SPA bird species and disturbance of the SPA bird species.
 - Policy F3 is concerned with farm diversification, which could include schemes that would
 provide additional accommodation or other facilities for visitors to the AONB,
 contributing to fragmentation as a consequence of increased recreational and leisure
 use giving rise to physical harm to the habitats of the SPA bird species, or disturbance of
 the bird species.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors which could, dependent on the location and types of facilities and uses, give rise to fragmentation as a consequence of increased recreational and leisure use giving rise to physical harm to the habitats of the SPA bird species, or disturbance of the bird species.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to fragmentation as a consequence of increased recreational and
 leisure use giving rise to physical harm to the habitats of the SPA bird species, or
 disturbance of the bird species.
 - Policy CE3 is concerned with the retention and provision of affordable housing which could contribute to fragmentation as a consequence of increased recreational and leisure use giving rise to physical harm to the habitats of the SPA bird species, or disturbance of the bird species.
- 4.40 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of habitat fragmentation associated with recreational use of the SPA. Further assessment is therefore required in respect of the habitat fragmentation impact pathway.

4.D Assessment of significant effects

4.41 The screening assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan for the period 2020-2025 has the potential to give rise to likely significant effects on the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA with reference to the public access and disturbance impact pathway, the wildfire/arson impact pathway, and the nutrient nitrogen deposition impact pathway. The purpose of the following section of this report is to consider the extent to which the identified risks of likely significant effects could be appropriately and successfully addressed through mitigation measures.

4.D.1 Public access / disturbance

- 4.42 The screening assessment concluded that changes in public access arrangements and associated disturbance could give rise to likely significant impacts on the features of interest of the SPA in the absence of mitigation measures. Of particular concern where activities supported under policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of disturbance associated with the implementation of policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 4.44 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of

Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the impacts of public access and disturbance.

4.D.2 Wildfire / Arson

- The screening assessment concluded that increased public access to the SPA could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of an increased risk of arson / accidental fire. Of particular concern where activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of arson / accidental fire associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 4.47 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of arson / accidental fire.

4.D.3 Nutrient nitrogen deposition

- The screening assessment concluded that changes in nutrient nitrogen deposition rates arising from changes in land use or increased vehicle movements within the AONB could give rise to likely significant impacts on the habitats of the SPA bird species in the absence of mitigation measures. Of particular concern were activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing the impacts of nutrient nitrogen deposition associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination), CE2 (promotion of local products and services), CE3 (provision of affordable housing) and CE4 (community transport schemes). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 4.50 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the likely impact of the scheme of nutrient nitrogen deposition.

4.D.4 Habitat Fragmentation

4.51 The screening assessment concluded that increased public access to the SPA could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of habitat fragmentation. Of particular concern where activities

supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.

- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of habitat fragmentation associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 4.53 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or provision of visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of habitat fragmentation.

4.E Thursley & Ockley Bog Ramsar Site

4.54 The Thursley & Ockley Bog Ramsar Site (see map) covers an area of some 256.2 hectares, also covered by the Thursley, Hankley & Frensham Commons SSSI, the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA and the Thursley, Ash, Pirbright & Chobham SAC (see Chapter 3 of this report) designations.. The Ramsar Site was designated under criterion 2 of the Ramsar Convention for the community of rare wetland invertebrate species including notable numbers of breeding dragonflies, and under criterion 3 of the Ramsar Convention for the presence of all six reptile species native to the UK, and for the nationally important breeding populations of European nightjar and woodlark.

4.55 The Ramsar Site designation covers only 256.2 hectares of the SSSI, with that area made up of the following six SSSI units.

Units in 'Favourable' Condition			
Unit 32	96.50 ha	Lowland dwarf shrub heath habitat	
Unit 33	30.82 ha	Lowland dwarf shrub heath habitat	
Unit 37	3.47 ha	Lowland broadleaved mixed and yew woodland habitat	
Unit 39	65.96 ha	Lowland dwarf shrub heath habitat	
Units in 'Unfavourable – recovering' Condition			
Unit 21	64.35 ha	Lowland dwarf shrub heath habitat	
Unit 40	4.65 ha	Lowland dwarf shrub heath habitat	

The implementation of the aims and policies set out in the Surrey Hills AONB Management Plan is not expected, subject to mitigation, to give rise to significant adverse impacts on the ecological integrity of the Thursley, Hankley & Frensham Common (Wealden Heaths Phase 1) SPA, or of the Thursley, Ash, Pirbright & Chobham SAC (see Chapter 3 of this report). Given the conclusions reached in respect of the SPA and SAC designations that are coincident with the Ramsar Site designation it is concluded that the ecological integrity of the Ramsar Site would be unaffected by the implementation of the aims and policies of the AONB Management Plan.

4.F Conclusions

- 4.56 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA and the Thursley & Ockley Bogs Ramsar Site has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, wildfire and arson, nutrient nitrogen deposition, and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SPA and the Ramsar Site from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.
- 4.57 The assessment considered the eight impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA and the features of interest of the Ramsar Site. The conclusions reached in respect of the likely impacts of the Surrey AONB Management Plan on the SPA and Ramsar Site via each pathway are summarised in Table 4-B.

Table 4-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in the incidence of public access / disturbance– see section 4.C.1 & section 4.D.1	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA and/or Ramsar Site.	
	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	
Changes in grazing practices – see section 4.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices—see section 4.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence of wildfire / arson – see section 4.C.4 & section 4.D.2	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA and/or Ramsar Site.	
	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	
Changes arising from air pollution (atmospheric nitrogen deposition) – see section 4.C.5 & section 4.D.3	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SPA and/or Ramsar Site from a range of sources (recreational / residential / agricultural / transport).	
	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	

Impact Pathway	Conclusion	
Changes in the condition, location & extent of the features of qualifying interest – see section 4.C.6	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the use of the land for military activities – see section 4.C.7	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes due to habitat fragmentation – see in section 4.C.8 & section 4.D.4	of Habitats & Species Regulations 2017) for development	

4.58 The question of in-combination impacts needs to be considered with reference to the likely interactions of the AONB Management Plan with other plans that could also affect land use within the AONB and the SPA and /or Ramsar Site. All land allocated for future development under the adopted Local Plan of Waverley Borough Council will have been subject to assessment during the plan preparation process, including under the provisions of the Habitats Regulations. In order for that plan to be found sound and proceed to adoption it would have been necessary for the associated HRA to conclude that no SPAs, SACs or Ramsar Sites would be subject to significant adverse impacts. The Waverley Local Plan includes policies that are designed to provide for the protection of the ecological integrity of the Thursley, Hankley & Frensham Common (Wealden Heaths Phase 1) SPA and the Thursley & Ockley Bogs Ramsar Site. Those Local Plan policies would work incombination with Policy B1 of the Surrey Hills AONB Management Plan to protect the SPA and the Ramsar Site from adverse impacts that could arise from development that falls within the ambit of the planning regime.

4.G References

- 4.59 The following sources of information have been referred to as part of the assessment process for the Thursley, Hankley & Frensham Common (Wealden Heaths Phase 1) SPA.
 - 4.59.1 EC Directive 79/409 [92/43] on the Conservation of Wild Birds: Citation for Special Protection Area (SAC) Wealden Heaths Phase 1 (Thursley, Hankley & Frensham Commons) (Natural England (English Nature), January 1996).

- 4.59.2 NATURA 2000 Standard Data Form: Special Protection Areas under the EC Birds Directive (includes proposed SPAs, Sites of Community Importance & designated SPAs) Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) (Joint Nature Conservation Committee (JNCC), 25 January 2016).
- 4.59.3 Information Sheet on Ramsar Wetlands (RIS) for Thursley & Ockley Bog Ramsar Site (JNCC, 14 February 1994).
- 4.59.4 European Site Conservation Objectives for Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) Special Protection Area (Site Code: UK9012131) (Natural England, 30 June 2014, v.2).
- 4.59.5 Site Improvement Plan: Thames Basin Heaths SPA, Thursley, Ash, Pirbright & Chobham SAC, & Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA (Natural England, 3 November 2014).
- 4.59.6 Thursley, Hankley & Frensham Commons SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).
- 4.59.7 Habitat Regulations Assessment for the emerging Local Plan, AECOM for Waverley Borough Council, 2016, 2017 and 2018.

Chapter 5 Wealden Heaths Phase 2 SPA

5.A Geographic & Development Context

5.A.1 Location of the SPA

- 5.1 The Wealden Heaths Phase 2 SPA (see map) is located in Surrey, Hampshire and West Sussex. The SPA citation states that the designation covers an area of 2,053.83 hectares, and was designated on 16 March 1998. The SAC is composed of the following four SSSIs, all of which are situated within the Surrey Hills AONB or within 5 kilometres of the closest boundary of the AONB.
 - Bramshott & Ludshott Commons SSSI, located in Hampshire and covering some 374.44 hectares. The SSSI adjoins the Surrey/Hampshire county boundary along 150 metres of the SSSI boundary. Located immediately to the west and adjoining the boundary of the Surrey Hills AONB.
 - Broxhead & Kingsley Commons SSSI, located in Hampshire and covering some 105.13 hectares. The SSSI lies some 1.1 kilometres to the south west of the Surrey/Hampshire county boundary. Located some 2.8 kilometres to the west of the Surrey Hills AONB.
 - **Devil's Punch Bowl SSSI**, located in Surrey and covering some 282.22 hectares. Located within the Surrey Hills AONB.
 - Woolmer Forest SSSI, located in Hampshire and West Sussex and covering some 1,298.52 hectares. The SSSI lies some 3.7 kilometres to the south west of the Surrey/West Sussex county boundary. Located some 4.7 kilometres to the west of the Surrey Hills AONB.
- 5.2 The SPA is dissected by a number of road links, including the following 'A' class roads: the A3 (Portsmouth Road / London Road) which passes through the Woolmer Forest SSSI, and within 200 metres of the Bramshott & Ludshottt Commons SSSI, and of the Devil's Punch Bowl SSSI; the A325 (Petersfield Road / Farnham Road) which passes through the Woolmer Forest SSSI, and through the Broxhead & Kingsley Common SSSI. The Devil's Punch Bowl SSSI is dissected by a network of public rights of way, including five sections of public footpath, seven sections of public bridleway, and five sections of byways open to all traffic, affording access across the majority of the SSSI. The Bramshott & Ludshottt Commons SSSI is dissected by a network of public rights of way, including four sections of public footpath, and eleven sections of public bridleway affording access across the majority of the SSSI. The Broxhead & Kingsley Common SSSI is dissected by a network of public rights of way, including eight sections of public footpath, and three sections of public bridleway affording access across the majority of the SSSI. The majority of the area covered by the Woolmer Forest SSSI is owned by the Ministry of Defence and is not accessible to the public, although there are four sections of public footpath, seven sections of public bridleway and one section of a byway open to all traffic distributed around the SSSI (mainly on the perimeter).

5.B Key Characteristics of the SPA

5.B.1 Reasons for Designation

5.3 A description of the ecological interest of the SPA, and the particular habitats and species that are given as reasons for its designation, is described as follows in the published citation.

Qualifying Features

Wealden Heaths Phase 2 SPA is of European importance because it is used regularly by at least 1% of the GB population of threes species listed in Annex 1 of the Birds Directive (79/409/EEC):

- Dartford warbler Sylvia undata 16 pairs (1.7% GB) 5 year peak mean for 1989-1993;
- Nightjar Caprimulgus europeaus 43 pairs (1.4% GB) 5 year peak mean for 1989-1993;
- Woodlark Lullula arborea 15 pairs (4.3% GB) 5 year peak mean for 1989-1993.

5.B.2 Conservation Objectives

5.4 The published conservation objectives for the SPA are given below.

Conservation Objectives

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.

Qualifying Features

- A224 Caprimulgus europaeus; European nightjar (Breeding)
- A246 Lullula arborea; Woodlark (Breeding)
- A302 Sylvia undata; Dartford warbler (Breeding)

5.B.3 Condition

5.5 Based on the information published by Natural England in the most recent condition survey reports for the four SSSIs (see Table 5-A for a summary) that together comprise the SPA, the designated site extends to some 2,060.42 hectares, of which some 43.5% is in 'favourable' condition, and some 56.5% is in 'unfavourable – recovering' condition. The SAC is composed of four main habitat types, 'dwarf shrub heath - lowland' (1,568.59 hectares), 'coniferous woodland' (313.23 hectares), 'broadleaved, mixed & yew woodland' (175.80 hectares) and 'standing open water & canals' (2.80 hectares).

Table 5-A: Wealden Heaths Phase 2 SPA - Condition Survey Findings

Main Habitat Type		Condition Classification		
		Favourable	Unfavourable – Recovering	
Broadleaved, mixed & yew woodland	Within AONB	58.55 ha	-	
– lowland 175.70 ha	Within 5km of AONB	79.52 ha	37.73 ha	
Dwarf shrub heath – lowland	Within AONB	223.7 ha	-	
1,568.59 ha	Within 5km of AONB	356.19 ha	988.7 ha	
Coniferous woodland	Within AONB	-	-	
313.23 ha	Within 5km of AONB	176.25 ha	136.98 ha	
Standing open water & canals	Within AONB	-	-	
2.80 ha	Within 5km of AONB	2.8 ha	-	
			T	
Totals	Within AONB	282.25 ha	0.0 ha	
(2,060.42 ha)	Within 5km of AONB	614.76 ha	1,163.41 ha	

5.C Identification of Impact Pathways & Screening Evaluation

- 5.6 The published Site Improvement Plan (SIP) for the SPA (23 October 2014) identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in land management discussed further in section 5.C.1;
 - Changes in the condition, location or extent of the qualifying features discussed further in section 5.C.2;
 - Changes in the incidence of public access / disturbance discussed further in section 5.C.3;
 - Changes in the use of the land for military activities discussed further in section 5.C.4;
 - Changes in the incidence of wildfire / arson discussed further in section 5.C.5.

5.C.1 Change in land management

5.7 The features affected by changes in land management practices are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.4/15 to 5/15) offers the following explanation of the nature of the identified threat:

"Parts of the complex have suffered from management neglect in the past & there are ongoing management issues. Common issues are lack of structural diversity, bracken encroachment & scrub development. Grazing is not practical in parts of the complex but viable alternative means of management to meet objectives are not yet in place. Grazing may also be constrained in parts because of resistance to fencing of common land."

5.8 The actions that have been identified as the principal means of addressing the threat are concerned with:

- Implementing habitat management which delivers effective heather management, scrub control and bracken control.
- Establishing site-based partnerships to improve communication over management priorities and to advise and agree on annual work programmes.
- Making changes to existing Higher Level Stewardship agreements in order to fit with impending changes in use of military training areas.
- Investigating possible biomass to bioenergy use of material produced as a result of annual vegetation cutting and clearance.
- 5.9 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan would provide means of addressing deficiencies in land management in respect of heathland habitat both within the SPA and beyond. Those policies would primarily work by means of the promotion of schemes and initiatives designed to raise awareness, understanding and application of appropriate land management practices across those parts of the SPA (Devil's Punch Bowl SSSI) located within the AONB, and the wider AONB designation.
 - Policies F1 and F2 are concerned with supporting the development and maintenance of
 a viable and sustainable farming sector, with an emphasis on good land management
 including measures that support biodiversity and its role in landscape character.
 - Policy W4 is concerned with the removal of trees and secondary woodland in the interests of grassland or heathland restoration.
 - Policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including the heathlands on which the SPA bird species depend.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland habitats.
- 5.10 <u>Screening Conclusion</u>: On balance it is concluded that the Surrey Hills AONB Management Plan (2020-2025) would be unlikely to give rise to likely significant adverse effects on the SPA with reference to the management of land, and in particular the heathland habitats of the SPA bird species. The aims and intentions of the Management Plan, articulated across a range of policies, for the management of land, including heathland and other sensitive and important habitats, would be expected to contribute to the appropriate management of land within those parts of the SPA (Devil's Punch Bowl SSSI) that are situated within the AONB and across similar areas of SPA bird species habitat found within the wider AONB.

5.C.2 Monitoring of feature condition, location & extent

5.11 The features affected by a lack of monitoring and evidence are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (pp.6/15 and 7/15) offers the following explanation of the nature of the identified threat and pressure:

"There is only partial coverage of the SPA for monitoring of Annex 1 birds & those areas are reliant on volunteer recorders; there is a need for a more strategic, long-term approach to monitoring."

"Work is needed by Natural England to clarify the conservation objectives for designated features at Woolmer Forest, to improve the evidence base on the interest features, to identify where these occur, & to provide greater linkage between objectives & military training use."

- 5.12 The actions that have been identified as the principal means of addressing the threat and the pressure are concerned with:
 - Establishing a structured long-term monitoring strategy for Annex 1 birds across the complex, similar to Thames Basin Heaths SPA model;
 - Developing and implementing a coordinated access strategy for the complex which provides a basis for effective management of recreational use;
 - In respect of Woolmer Forest, commissioning a study to identify core areas utilised by Annex 1 birds for breeding and feeding, and to identify priorities for habitat enhancement.
 - In respect of Woolmer Forest, providing clear advice on nature conservation objectives and habitat management priorities.
- 5.13 Screening Evaluation: The Surrey Hills AONB Management Plan may present or give rise to opportunities for the collection or collation of evidence about the features of qualifying interest (woodlark, Dartford warbler and nightjar) for which the SPA is designated in respect of those parts of the SPA (Devil's Punch Bowl SSSI) that are located within the AONB. Schemes or initiatives brought forward under a number of the policies (see below) set out in the Management Plan may present opportunities for surveys to be undertaken that would provide evidence about the way in which the SPA bird species make use of their preferred habitats within those parts of the SPA (Devil's Punch Bowl SSSI) that are located within the AONB.
 - Policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition.
 - Policy B2 is concerned with supporting and enabling the conservation and appropriate management of sensitive habitats, including the heathlands on which the SPA bird species depend.
 - Policy CE3 is concerned with the development of land management and conservation skills amongst those living and working in the Surrey Hills AONB, which could include training in the appropriate management of heathland habitats.

5.14 <u>Screening Conclusion</u>: The implementation a number of the policies set out in the Surrey Hills AONB Management Plan could give rise to opportunities for evidence collection or collation in respect of those parts of the SPA (Devil's Punch Bowl SSSI) that are located within the AONB. No further assessment is required in respect of the features of qualifying interest impact pathway as the effects of the Management Plan would be beneficial.

5.C.3 Public access / disturbance

The features affected by changes in the frequency or extent of visitor access to the SPA are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.7/15) offers the following explanation of the nature of the identified threat:

"Visitor access provision is not currently coordinated between sites or managed so as to reduce impacts on ground-nesting birds."

- 5.16 The actions that have been identified as the principal means of addressing the threat are concerned with the development and implementation of a coordinated access strategy for the complex which provides a basis for effective management of recreational use
- 5.17 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the incidence of disturbance affecting SPA species and/or physical harm to the habitats on which the SPA species depend as a consequence of recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would
 provide additional accommodation or other facilities for visitors to the AONB,
 contributing to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SPA.
 - Policy W5 is concerned with the creation of new or the extension of existing woodlands for a range of purposes including recreational uses, which could place sensitive woodland species, including the woodlark population of the SPA, at risk of disturbance.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors which could, dependent on the location and types of facilities and uses, give rise to increased pressure on habitats and species as a consequence of disturbance.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SPA.
 - Policy CE3 is concerned with the retention and provision of affordable housing which
 could contribute to increased pressure on habitats and species as a consequence of
 disturbance from recreational and leisure use of land within and adjoining the SPA.

5.18 Screening Conclusion: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased public access and associated disturbance. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

5.C.4 Military activities / uses

5.19 The features affected by changes in the nature and extent of military activities on the SPA are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.8/15) offers the following explanation of the nature of the identified pressure:

"There is currently poor coordination between management for military training purposes & nature conservation management at Woolmer Forest & scope for significant gains with closer working between partners. The production of an integrated management plan is needed."

- 5.20 The actions that have been identified as the principal means of addressing the pressure are concerned with completing integrated management plans for all military training areas.
- 5.21 Screening Evaluation: There is no mechanism by which the Surrey Hills AONB Management Plan would impact, either negatively or positively, on the ways in which the Ministry of Defence (MoD) manages those areas of land that it owns within the SPA designation. The Surrey Hills AONB Management Plan is concerned with the provision of guidance in respect of the management of land within the AONB boundary over the 5 year plan period, to protect the natural beauty of the AONB, and has no locus to influence the land use management practices employed by the military on MoD land outside the AONB. The only part of the SPA that is located within the AONB is the Devil's Punch Bowl SSSI, which is not subject to MoD ownership or control. Part of the Bramshott & Ludshott Commons SSSI and part of the Woolmer Forest SSSI are subject to the ownership and control of the MoD, but both areas of land are located outside the Surrey Hills AONB and beyond the influence of the AONB Management Plan.
- 5.22 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SPA with reference to the use of land within the SPA designation for military purposes. No further assessment is required in respect of the military uses impact pathway.

5.C.5 Wildfire / arson

5.23 The features affected by changes in the incidence or wildfire or arson are the populations of the European nightjar A224(B), the Woodlark A246(B), and the Dartford Warbler A302(B). The SIP (p.8/15 to 9/15) offers the following explanation of the nature of the identified threat:

"Wildfire is a natural hazard identified in the National Risk Assessment / Register & Community Risk Registers. Wildfires in the south of England are likely to increase as identified in the Climate Change Risk Assessment (CCRA). Wildfires can be a serious risk to human life, residential & commercial property & critical national infrastructures, as well as being a high risk threat to reptile populations, invertebrates & plant diversity resulting in significant habitat loss for Annex 1 birds. Open heath is the predominant risk (dry & wet heath, peat habitats) as well as young coniferous woodland. Impacts can last for many years for example by the wholesale removal of all gorse & heather seedbank."

- 5.24 The actions that have been identified as the principal means of addressing the threat are concerned with completing wildfire risk assessments for all sites and preparing and implementing wildfire management plans, and with embedding wildfire mitigation and adaptation into local authority Local Development Plan policies and community risk registers.
- 5.25 <u>Screening Evaluation</u>: The application of a number of the policies (see below) set out in the 2020-2025 version of the Surrey Hills AONB Management Plan could contribute to the risk of arson or accidental fire affecting SPA bird species and their habitats as a consequence of increased recreational use.
 - Policy F3 is concerned with farm diversification, which could include schemes that would provide additional accommodation or other facilities for visitors to the AONB, contributing to greater recreational and leisure use of land within and adjoining the SPA with an associated increase in the risk of arson or accidental fire.
 - Policy RT1 is concerned with the provision of new or improved facilities for visitors
 which could contribute to greater recreational and leisure use of land within and
 adjoining the SPA with an associated increase in the risk of arson or accidental fire.
 - Policy CE1 is concerned with the promotion of the AONB as a visitor destination which
 could contribute to greater recreational and leisure use of land within and adjoining the
 SPA with an associated increase in the risk of arson or accidental fire
 - Policy CE3 is concerned with the retention and provision of affordable housing which could contribute to greater recreational and leisure use of land within and adjoining the SPA with an associated increase in the risk of arson or accidental fire
- 5.26 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased risks of arson or accidental fire associated with greater public access to land within or adjoining the SPA. Further assessment is therefore required in respect of the arson / wildfire impact pathway.

5.D Assessment of significant effects

5.27 The screening assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan for the period 2020-2025 has the potential to give rise to likely significant effects on the Wealden Heaths Phase 2 SPA with reference to the public access and disturbance impact pathway, and the wildfire/arson impact pathway. The purpose of the following section of this report is to consider the extent to which the identified risks of likely significant effects could be appropriately and successfully addressed through mitigation measures.

5.D.1 Public access / disturbance

- 5.28 The screening assessment concluded that changes in public access arrangements and associated disturbance could give rise to likely significant impacts on the features of interest of the SPA in the absence of mitigation measures. Of particular concern where activities supported under policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of disturbance associated with the implementation of policies F3 (farm diversification), W5 (woodland creation), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 5.30 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Wealden Heaths Phase 2 SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of

Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the impacts of public access and disturbance.

5.D.2 Wildfire / Arson

- 5.31 The screening assessment concluded that increased public access to the SPA could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of an increased risk of arson / accidental fire. Of particular concern where activities supported under policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of arson / accidental fire associated with the implementation of policies F3 (farm diversification), RT1 (enhancement of visitor facilities/experience), CE1 (promotion of the AONB as a visitor destination) and CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, development of new processing facilities or visitor accommodation as part of an on-farm value adding scheme, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Wealden Heaths Phase 2 SPA those are policy NE1 (Biodiversity & Geological Conservation) of the Waverley Local Plan Part 1 (2018). All applications for planning permission submitted to the borough council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of arson / accidental fire.

5.E Conclusions

5.34 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Wealden Heaths Phase 2 SPA has concluded that overall the potential for 'likely significant effects' in respect of

access and disturbance, wildfire and arson, nutrient nitrogen deposition, and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SPA from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.

5.35 The assessment considered the five impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA. The conclusions reached in respect of the likely impacts of the Surrey AONB Management Plan on the SPA via each pathway are summarised in Table 5-B.

Table 5-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in land management – see section 5.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the condition, location or extent of the qualifying features – see section 5.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence of public access / disturbance – see section 5.C.3 & section 5.D.1	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	Adverse – not significant with mitigation
Changes in the use of the land for military activities – see section 5.C.4	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence of wildfire / arson – see section 5.C.5 & section 5.D.2	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	Adverse – not significant with mitigation

The question of in-combination impacts needs to be considered with reference to the likely interactions of the AONB Management Plan with other plans that could also affect land use within the AONB and the SPA or across the wider SPA. All land allocated for future development under the adopted Local Plans of Waverley Borough Council, East Hampshire District Council, Chichester District Council or the South Downs National Park will have been subject to assessment during the plan preparation process, including under the provisions of the Habitats Regulations. In order for those plans to be found sound and proceed to adoption it would have been necessary for the associated HRAs to conclude that no SPAs or SACs would be subject to significant adverse impacts. All the relevant Local Plans include policies that are designed to provide for the protection of the ecological integrity of the Wealden Heaths Phase 2 SPA. Those Local Plan policies would work in-combination with Policy B1 of the Surrey Hills AONB Management Plan to protect the SPA from adverse impacts that could arise from development that falls within the ambit of the planning regime.

5.E References

- 5.37 The following sources of information have been referred to as part of the assessment process for the Wealden Heaths Phase 2 SPA.
 - 5.37.1 EC Directive 79/409/EC on the Conservation of Wild Birds: Citation for Special Protection Area (SPA) Wealden Heaths Phase 2 SPA (Natural England (English Nature), March 1998).
 - 5.37.2 NATURA 2000 Standard Data Form: Special Protection Areas under the EC Wild Birds Directive Wealden Heaths Phase 2 SPA (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 5.37.3 European Site Conservation Objectives for Wealden Heaths Phase 2 Special Protection Area (Site Code: UK9012132) (Natural England, 30 June 2014, v.2).
 - 5.37.4 Site Improvement Plan: Wealden Heaths Phase 2 SPA & Woolmer Forest SAC (Natural England, 23 October 2014).
 - 5.37.5 Bramshott & Ludshott Commons SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).
 - 5.37.6 Broxhead & Kingsley Commons SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).
 - 5.37.7 Devils Punch Bowl SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).
 - 5.37.8 Woolmer Forest SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Part B Assessment for European Sites located within 5 kilometres of the Surrey Hills AONB

Part A of the HRA report deals with those European Sites that are located partly or wholly within the boundaries of the Surrey Hills AONB.

The following SACS and SPAs are covered by the chapters that comprise this part of the HRA report.

Chapter 6 East Hampshire Hangers SAC

Chapter 7 Ebernoe Common SAC

Chapter 8 Thames Basin Heaths SPA

Chapter 9 Woolmer Forest SAC



Chapter 6 East Hampshire Hangers SAC

6.A Geographic & Development Context

6.A.1 Location of the SAC

- 6.1 The East Hampshire Hangers SAC (<u>see map</u>) is located in Hampshire, covers an area of 569.68 hectares, and was designated on 1 April 2005. The SAC is composed of the following seven SSSIs, of which the one highlighted in **bold text** is situated within 5 kilometres of the closest boundary of the Surrey Hills AONB.
 - Coombe Wood & the Lythe SSSI, located in Hampshire and covering some 43.98 hectares. The SSSI lies some 6.8 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 11.0 kilometres to the west of the Surrey Hills AONB.
 - Noar Hill SSSI, located in Hampshire and covering some 63.05 hectares. The SSSI lies some 11.6 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 11.6 kilometres to the west south west of the Surrey Hills AONB.
 - Selborne Common SSSI, located in Hampshire and covering some 99.85 hectares. The SSSI lies some 12.1 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 12.2 kilometres to the west south west of the Surrey Hills AONB.
 - Upper Greensand Hangers: Empshott to Hawkley SSSI, located in Hampshire and covering some 37.65 hectares. The SSSI lies some 10.5 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 10.1kilometres to the west south west of the Surrey Hills AONB.
 - Upper Greensand Hangers: Wyck to Wheatley SSSI, located in Hampshire and covering some 13.23 hectares. The SSSI lies some 2.8 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 4.1 kilometres to the west of the Surrey Hills AONB.
 - Wealden Edge Hangers SSSI, located in Hampshire and covering some 222.24 hectares.
 The SSSI lies some 13.2 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 13.4 kilometres to the south west of the Surrey Hills AONB.
 - Wick Wood & Worldham Hangers SSSI, located in Hampshire and covering some 91.85 hectares. The SSSI lies some 6.1 kilometres to the west of the Surrey/Hampshire county boundary. The SSSI is some 8.0 kilometres to the west of the Surrey Hills AONB.
- 6.2 The only component of the SAC that is located within 5 kilometres of the Surrey Hills AONB is not dissected by any 'A' class or 'B' class road links. The Upper Greensand Hangers: Wyck to Wheatley SSSI is dissected by a single section of a public footpath.

6.B Key Characteristics of the SAC

6.B.1 Reasons for Designation

6.3 The ecological interest of the SAC, and the particular habitats and species that are given as reasons for its designation, is described as follows in the published citation.

Site Description

This site supports beech *Fagus sylvatica* woodlands which are extremely rich in vascular plants, including white helleborine *Cephalanthera damasonium*, violet helleborine *Epipactis purpurata*, green-flowered helleborine *E. phyllanthes* & Italian lords-&-ladies *Arum italicum*.

The woods include areas with old pollards on former wood-pasture as well as high forest. There are transitions to mixed woodland including areas of small-leaved lime *Tilia cordata* on the steepest parts of the Upper Greensand scarp. The bryophyte flora is rich & includes several species that are rare in the lowlands. The Wealden Edge Hangers component of the site contains stands of yew *Taxus baccata* woodland.

Chalk grassland has developed in ancient quarries at Noar Hill & includes local species such as early gentian *Gentianella anglica* & an outstanding assemblage of orchids.

Qualifying Habitats

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Asperulo-Fagetum beech forests. (Beech forests on neutral to rich soils).
- Semi-natural dry grasslands & scrubland facies: on calcareous substrates (*Festuco-Brometalia*). (Dry grasslands & scrublands on chalk or limestone).
- Semi-natural dry grasslands & scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites). (Dry grasslands & scrublands on chalk or limestone, including important orchid sites)* (Annex I priority habitat).
- Taxus baccata woods of the British Isles. (Yew-dominated woodland)* (Annex I priority habitat).
- *Tilio-Acerion* forests of slopes, screes & ravines. (Mixed woodland on base-rich soils associated with rocky slopes)* (Annex I priority habitat).

Qualifying Species

• Early gentian Gentianella anglica.

6.B.2 Conservation Objectives

The published conservation objectives for the SAC are given below.

Conservation Objectives

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

- The extent & distribution of qualifying natural habitats & habitats of qualifying species
- The structure & function (including typical species) of qualifying natural habitats
- The structure & function of the habitats of qualifying species

- The supporting processes on which qualifying natural habitats & the habitats of qualifying species rely
- The populations of qualifying species, &,
- The distribution of qualifying species within the site.

Qualifying Features

- H6210. Semi-natural dry grasslands & scrubland facies: on calcareous substrates (Festuco-Brometalia) (important orchid sites); Dry grasslands & scrublands on chalk or limestone (important orchid sites)*
- H9130. Asperulo-Fagetum beech forests; Beech forests on neutral to rich soils
- H9180. *Tilio-Acerion* forests of slopes, screes and ravines; Mixed woodland on base-rich soils associated with rocky slopes*
- H91J0. Taxus baccata woods of the British Isles; Yew-dominated woodland*
- \$1654. Gentianella anglica; Early gentian

6.B.3 Condition

6.5 Based on the information published by Natural England in the most recent condition survey reports for the single SSSI within the SAC located within 5 kilometres of the Surrey Hills AONB boundary (see Table 6-A for a summary), 100% of that part of the SAC was in 'favourable' condition. That single SSSI is composed of 'broadleaved, mixed and yew woodland' (13.23 hectares).

Table 6-A: East Hampshire Hangers SAC components within 5 km of the Surrey Hills AONB—Condition Survey Findings

Main Habitat Type		Condition Classification	
імані парісас і уре	Favourable		
Broadleaved, Mixed & Yew Woodland – Lowland	<5 km from AONB	13.23 ha	
Totals		13.23 ha	

6.C Identification of Impact Pathways & Screening Evaluation

- 6.14 The published Site Improvement Plan (SIP) (12 December 2014) for the SAC identifies the following key pressures and threats to the site's ecological integrity.
 - Air pollution: impact of atmospheric nitrogen deposition (pressure) discussed further in section 6.C.1;
 - Invasive species (pressure) discussed further in section 6.C.2;
 - Forestry & woodland management (pressure) discussed further in section 6.C.3.

6.15 Those three pressures and threats define the main pathways by which adverse impacts could arise and compromise the ecological integrity of the SAC, and therefore form the basis of the screening stage of the HRA for the Surrey WLP in respect of the East Hampshire Hangers SAC.

6.C.1 Air pollution: impact of atmospheric nitrogen deposition

The features affected, directly or indirectly, by the deposition of atmospheric nitrogen on the SAC habitats are, the dry grassland and scrubland on chalk or limestone (important orchid sites) (H6210) habitats, the beech forest on neutral to rich soil (H9130) habitats, the mixed woodland on base-rich soil associated with rocky slopes (H9180) habitats, the yew-dominated woodland (H91J0) habitats, and the population of the early gentian (S1654). The SIP (p.3/9) offers the following explanation of the nature of the identified pressure:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection & hence there is a risk of harmful effects, but the sensitive features are currently generally considered to be in favourable condition on the site (those few that are unfavourable are unfavourable for specific reasons unrelated to nitrogen). This requires further investigation."

- 6.17 The actions identified as the principal means of addressing the pressure are concerned with controlling and reducing nitrogen emissions and deposition, and with ameliorating the impacts of that deposition.
- Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to nutrient nitrogen deposition within any part of the SAC would be as a consequence of vehicle movements associated with recreational visits to the SAC. The only policy set out in the AONB Management Plan that could contribute to additional recreational pressure outside the AONB would be policy CE3 (affordable housing provision). Only one unit (unit 4 Reynolds Hanger) within the Upper Greensand Hangers: Wyck to Wheatley SSSI, the only component of the SAC within 5 kilometres of the AONB, is dissected by a public right of way, and that unit is not situated close to any car parking facilities. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB. Implementation of the AONB Management Plan would therefore not be expected to contribute to emissions of nutrient nitrogen from vehicle movements within or adjoining the SAC.
- 6.19 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC as a consequence of the emission of nutrient nitrogen and its deposition on sensitive habitats. No further assessment is required in respect of the nutrient nitrogen impact pathway.

6.C.2 Invasive species

6.20 The feature affected by the invasion of the SAC by a non-native hybrid species of ivy is the mixed woodland on base-rich soils associated with rocky slopes (H9180) habitat. The SIP (p.3/9) offers the following explanation of the nature of the identified pressure:

"A non-native hybrid ivy is smothering out the ground flora and spreading in one of the hangers."

- 6.21 The actions identified as the principal means of addressing the pressure are concerned with removal of the non-native ivy, and improvement in the long-term management of the affected woodland.
- Screening Evaluation: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon invasive plant species management practices within the SAC. The closest component of the SAC (Upper Greensand Hangers: Wyck to Wheatley SSSI) is located some 4.1kilometres to the west of the closest boundary of the Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.
- 6.23 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on invasive plant species management practices within the SAC, and therefore would not affect hydrological conditions within the SAC. No further assessment is required in respect of the invasive plant species management impact pathway.

6.C.3 Forestry & woodland management

6.24 The feature affected by poor woodland management practice is the mixed woodland on base-rich soils associated with rocky slopes (H9180) habitat. The SIP (p.4/9) offers the following explanation of the nature of the identified pressure:

"A small portion of the SAC is in unfavourable condition due to lack of understorey. Attempts at providing regeneration have been poorly implemented and in addition parts of this area are thick with ruderal vegetation."

- 6.25 The actions identified as the principal means of addressing the pressure are concerned with further investigation of the causes of unfavourable condition, and with the development and implementation of a woodland management plan.
- 6.26 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon woodland management practices within the SAC. The closest component of the SAC is located some 4.1 kilometres to the

west of the closest boundary of the Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.

6.27 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on forestry or woodland management practices within the SAC, and therefore would not affect the condition of those habitats. No further assessment is required in respect of the changes in forestry and woodland management impact pathway.

6.D Conclusions

6.28 The assessment considered the three impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 6-B. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 6-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in air pollution (deposition of atmospheric nitrogen) – see section 6.C.1	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in forestry & woodland management – see section 6.C.2	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Introduction or spread of invasive species – see section 6.C.3	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

6.E References

- 6.29 The following sources of information have been referred to as part of the assessment process for the East Hampshire Hangers SAC.
 - 6.29.1 EC Directive 92/43 on the Conservation of Natural Habitats & of Wild Fauna and Flora: Citation for Special Area of Conservation (SAC) East Hampshire Hangers SAC (Natural England (English Nature), May 2005).

- 6.29.2 NATURA 2000 Standard Data Form: Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance & designated SACs) East Hampshire Hangers SAC (Joint Nature Conservation Committee (JNCC), 25 January 2016).
- 6.29.3 European Site Conservation Objectives for East Hampshire Hangers Special Area of Conservation (Site Code: UK0030080) (Natural England, 30 June 2014, v.2).
- 6.29.4 Site Improvement Plan: East Hampshire Hangers SAC (Natural England, 24 November 2014).
- 6.29.5 Upper Greensand Hangers: Wyck to Wheatley SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Chapter 7 Ebernoe Common SAC

7.A Geographic & Development Context

7.A.1 Location of the SAC

- 7.1 The Ebernoe Common SAC (see map) is located in West Sussex, and is composed of a single SSSI, the Ebernoe Common SSSI. The SAC covers an area of 234.05 hectares and was first designated on 1 April 2005, with extensions designated on 10 December 2009. The SAC also coincides with the Ebernoe Common National Nature Reserve (NNR) designation. The SAC is situated some 3.1 kilometres to the south of the Surrey/West Sussex county boundary, and some 4.0 kilometres to the south of the Surrey Hills AONB.
- 7.2 The SAC is dissected by a number of local road links, and part of the site is situated within 200 metres of the A283 (London Road) which forms the western boundary of the SSSI and SAC for some 1.1 kilometres. The SAC is dissected by nine sections of public footpath, which afford public access throughout the area covered by the designation.

7.B Key Characteristics of the SAC

7.B.1 Reasons for Designation

7.3 The ecological interest of the SAC, and the particular habitats and species that are given as reasons for its designation, is described as follows in the published citation.

Site Description

Ebernoe Common has an extensive block of beech *Fagus sylvatica* high forest & former wood-pasture over dense holly *Ilex aquifolium* with a very rich epiphytic lichen flora, including *Agonimia octospora* & *Catillaria atropurpurea*. The beech woodland is associated with other woodland types, open glades & pools, which contribute to a high overall diversity. A maternity colony of **Barbastelle bats** *Barbastella barbastellus* utilises a range of tree roosts in the site, usually in dead tree stumps, but the species appears to be present throughout the year, with individuals utilising a range of roost sites in tree holes & under bark. The site also holds a maternity colony of **Bechstein's bats** *Myotis bechsteinii*, mainly roosting in old woodpecker holes in the stems of live mature sessile oak *Quercus petraea* trees.

Qualifying Habitats

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

• Atlantic acidophilous beech forests with *Ilex* & sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*). (Beech forests on acid soils) **Qualifying Species**

The site is designated under **article 4(4)** of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:

- Barbastelle bat Barbastella barbastellus
- Bechstein's bat Myotis bechsteinii

7.B.2 Conservation Objectives

7.4 The published conservation objectives for the SAC are given below.

Conservation Objectives

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

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

Qualifying Features

- H9120. Atlantic acidophilous beech forests with *Ilex* & sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae or Ilici-Fagenion*); Beech forests on acid soils
- S1308. Barbastella barbastellus; Barbastelle bat
- S1323. Myotis bechsteinii; Bechstein`s bat

7.B.3 Condition

7.5 Based on the information published by Natural England in the most recent condition survey report for the Ebernoe Common SSSI (see Table 7-A), the designated site extends to some 233.92 hectares, of which some 99.9% is in 'favourable' condition, and some 0.1% is in 'unfavourable – recovering' condition. The SSSI is composed of 'broadleaved, mixed & yew woodland – lowland' habitat (233.92 hectares), and hosts maternity colonies of the Barbastelle bat and the Bechsteins bat.

Table 7-A: Ebernoe Common SAC – Condition Survey Findings

Main Habitat Type		Condition Classification	
		Favourable	Unfavourable – Recovering
Broadleaved, Mixed & Yew Woodland	Within 5 km of the AONB	233.68 ha	0.25 ha
Totals	233.92 ha	233.68 ha	0.25 ha

7.C Identification of Impact Pathways & Screening Evaluation

- 7.6 The published Site Improvement Plan (SIP) for the SAC (6 March 2015) identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in forestry and woodland management practices discussed further in section
 7.C.1;
 - Changes in off-site habitat availability—discussed further in section 7.C.2;
 - Changes due to habitat fragmentation discussed further in section 7.C.3;
 - Changes in land management practices discussed further in section 7.C.4;
 - Changes in local hydrological conditions discussed further in section 7.C.5;
 - Changes arising from air pollution (atmospheric nitrogen deposition) discussed further in section 7.C.6;
 - Changes in the incidence of public access / disturbance discussed further in section 7.C.7.

7.C.1 Forestry & woodland management

7.7 The features affected by changes in forestry and woodland management practices within the SAC are the beech forest on acid soil (H9120) habitat, the population of Barbastelle bat (S1308), and the population of Bechsteins bat (S1323). The SIP (p.4/11) offers the following explanation of the nature of the identified pressure/threat:

"Woodland management for SSSI features (lichens, invertebrates) which require higher light levels may have a significant impact on the bat species. Additionally some management of the beech woodland is necessary in places. More information about potential impacts on bat species is required."

- 7.8 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with undertaking further investigation of the impacts of woodland management on other qualifying features, and with the development and implementation of a tailored habitat creation and restoration strategy.
- 7.9 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon woodland management practices within the SAC. The SAC is located some 4.0 kilometres to the south of the closest boundary of the Surrey Hills AONB and is situated in the county of West Sussex and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.

7.10 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on forestry or woodland management practices within the SAC, and therefore would not affect the condition of those habitats. No further assessment is required in respect of the changes in forestry and woodland management impact pathway.

7.C.2 Offsite habitat availability / management

7.11 The features affected by changes to offsite habitat availability and management are the population of Barbastelle bat (S1308), and the population of Bechsteins bat (S1323). The SIP (p.5/11) offers the following explanation of the nature of the identified pressure:

"The protected site is limited woodland core area where breeding colonies are known to exist. The bats, however, rely on commuting & foraging habitat outside of the site & this needs to be better understood, protected & appropriately managed. It would also be useful to understand how this site relates to other bat SACs in the southern part of the UK to ensure that they & the connecting habitats are managed appropriately to maintain favourable populations."

- 7.12 The actions that have been identified as the principal means of addressing the pressure are concerned with identifying further areas (outside the core area of woodland/wood pasture) with available, restored or created habitat that could suitably provide for foraging, for swarming activity, for commuting to hibernating sites, and for improving connectivity to related sites.
- 7.13 Screening Evaluation: There is potential for the implementation of the Surrey Hills AONB Management Plan to contribute to the provision or improved management of habitats suited to the two SAC bat species. Although the aims and policies of the AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, that area includes existing areas of forest that currently, or could, provide habitat suitable for Bechsteins bats and/or Barbastelle bats. The AONB encompasses the Mole Gap to Reigate Escarpment SAC, one of the qualifying features of which is a community of Bechsteins bats, and numerous other areas of woodland that may offer suitable habitat for Barbastelle bats or Bechsteins bats are situated across the AONB, including in relatively close proximity to the Ebernoe Common SAC.
- 7.14 Policies of the AONB Management Plan that would be supportive of the creation or maintenance of woodland habitat suited to the requirements of the Bechsteins bat or the Barbastelle bat include W5 (woodland extension or creation), B1 (protection of designated sites), and B3 (habitat restoration, extension or creation).
- 7.15 <u>Screening Conclusion</u>: The aims and intentions of the Management Plan, articulated across a range of policies, for the management of land, including woodland, would be expected to contribute to the appropriate management of existing and creation of new habitats suited to the requirements of the two bat species for which the Ebernoe Common SAC is designation.

7.C.3 Habitat fragmentation

7.16 The features affected by habitat fragmentation are the population of Barbastelle bat (S1308), and the population of Bechsteins bat (S1323). The SIP (p.5/11) offers the following explanation of the nature of the identified threat:

"Ebernoe Common & The Mens are similar SACs which lie within 5km of each other. It is likely that the bat populations of both sites are genetically linked. Barbastelle bats are known to commute more than 5km & there is continuous woodland cover between the sites to allow Bechstein's to travel. There is a case to investigate whether the two sites should be treated within one overarching Natura 2000 site. It would also be useful to understand (through genetic analysis) how this site relates to other bat SACs in the southern part of the UK to ensure that they and the connecting habitats are managed appropriately to maintain favourable populations."

- 7.17 The actions that have been identified as the principal means of addressing the threat are concerned with further investigation of the relationship of the SAC to other important bat sites in the south of the UK, and with the development and implementation of tailored habitat management programmes, particularly for areas outside the SAC, to support commuting and foraging use.
- 7.18 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to habitat fragmentation as a result of increased public access and associated disturbance within any part of the SAC would be as a consequence of recreational visits to the SAC. The only policy set out in the AONB Management Plan that could contribute to additional recreational pressure outside the AONB would be policy CE3 (affordable housing provision). The SAC is dissected by a number of public rights of way, but is served by a single car park located at Holy Trinity Church south of Streels Lane in Ebernoe, which offers a small number of parking spaces. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB. Implementation of the Management Plan would therefore not be expected to contribute to significant increases in the numbers of people making use of the SAC for recreational visits, and associated habitat fragmentation as a result of disturbance.
- 7.19 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the physical integrity of the SAC habitats as a consequence of additional recreational visits to the SAC. No further assessment is required in respect of the habitat fragmentation impact pathway.

7.C.4 Change in land management

7.20 The feature affected by changes in land management practice is the population of Barbastelle bat (S1308). The SIP (p.6/11) offers the following explanation of the nature of the identified pressure/threat:

"Land management in the surrounding countryside will have an impact on foraging areas for Barbastelle bats but at present the forage requirements (how much habitat & of what type) are poorly understood. Ultimately, inadequate foraging will impact on breeding success within the site. Further investigation of foraging & bat commuting route requirements of notified bat species is required, informing better management of mature hedgerows which need to be restored & maintained in the area around the site."

- 7.21 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with further investigation of the foraging and commuting route requirements of the notified bat species (within and outside the SAC), with the aim of informing improved management of foraging and commuting habitat in the surrounding landscape.
- 7.22 Screening Evaluation: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon land management practices within the SAC The SAC is located some 4.0 kilometres to the south of the closest boundary of the Surrey Hills AONB and is situated in the county of West Sussex and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.
- 7.23 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on land management practices within the SAC, and therefore would not affect the condition of the habitats within the SAC. No further assessment is required in respect of the land management impact pathway.

7.C.5 Hydrological changes

7.24 The feature affected by changes to the hydrology of the SAC is the population of Bechsteins bat (S1323). The SIP (p.6/11) offers the following explanation of the nature of the identified threat:

"Recent research has shown that water availability (ponds & streams) within Bechstein's breeding sites is likely to be important. Housing development around the site & hydrological changes in the local area could impact on the availability of these habitats."

- 7.25 The actions that have been identified as the principal means of addressing the threat are concerned with investigation of the hydrological setting of the SAC and the surrounding area, with making improvements to the overall hydrological management of the SAC and the surrounding area, and with the mitigation of the potential impacts of development.
- 7.26 Screening Evaluation: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon drainage management practices within the SAC or housing development in the area surrounding the SAC. The SAC is located some 4.0 kilometres to the south of the closest boundary of the Surrey Hills AONB and is situated in the county of West Sussex and within the boundaries of the South Downs

National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.

7.27 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on drainage management practices within the SAC, or result in additional housing development in the area surrounding the SAC, and therefore would not affect hydrological conditions within the SAC. No further assessment is required in respect of the drainage management impact pathway.

7.C.6 Air pollution: impact of atmospheric nitrogen deposition

7.28 The features affected by the deposition of nutrient nitrogen from the atmosphere are the beech forests on acid soils (H9120) habitat, the population of Barbastelle bat (S1308), and the population of Bechsteins bat (S1323). The SIP (p.7/11) offers the following explanation of the nature of the identified threat:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection & hence there is a risk of harmful effects, but the sensitive features are currently considered to be in favourable condition on the site. This requires further investigation."

- 7.29 The actions that have been identified as the principal means of addressing the threat are concerned with further investigation of the potential impacts of atmospheric nitrogen deposition on the site.
- 7.30 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to nutrient nitrogen deposition within any part of the SAC would be as a consequence of vehicle movements associated with recreational visits to the SAC. The only policy set out in the AONB Management Plan that could contribute to additional recreational pressure outside the AONB would be policy CE3 (affordable housing provision). The SAC is dissected by a number of public rights of way, but is served by a single car park located at Holy Trinity Church south of Streels Lane in Ebernoe, which offers a small number of parking spaces. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB. Implementation of the Management Plan would therefore not be expected to contribute to emissions of nutrient nitrogen from vehicle movements within or adjoining the SAC.
- 7.31 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC as a consequence of the emission of nutrient nitrogen and its deposition on sensitive habitats. No further assessment is required in respect of the nutrient nitrogen impact pathway.

7.C.7 Public access / disturbance

7.32 The feature affected by disturbance arising from human activity and development (specifically light pollution) is the Bechsteins bat (S1323) population. The SIP (p.7/11) offers the following explanation of the nature of the identified pressure/threat:

"It is known that light pollution has an impact on both myotis species, i.e. Bechstein's and Horseshoe bats. The investigation would seek to identify what light levels are presently and deduce whether they are having an impact on bat movements/roosting availability in and around the SAC areas."

- 7.33 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with further investigation of the impact of light pollution on the resident populations of bat species.
- 7.34 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased public access and associated disturbance within any part of the SAC would be as a consequence of recreational visits to the SAC. Any development brought forward under the AONB Management Plan would be too distance from the SAC to contribute to light pollution within the designated site. The only policy set out in the AONB Management Plan that could contribute to additional recreational pressure outside the AONB would be policy CE3 (affordable housing provision). The SAC is dissected by a number of public rights of way, but is served by a single car park located at Holy Trinity Church south of Streels Lane in Ebernoe, which offers a small number of parking spaces. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB. Implementation of the Management Plan would therefore not be expected to contribute to significant increases in the numbers of people making use of the SAC for recreational visits.
- 7.35 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC as a consequence of additional recreational visits to the SAC. No further assessment is required in respect of the public access and disturbance impact pathway.

7.D Conclusions

7.36 The assessment considered the seven impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 7-B. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 7-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in forestry and woodland management practices – see section 7.C.1	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in off-site habitat availability—see section 7.C.2	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes due to habitat fragmentation – see section 7.C.3	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in land management practices – see section 7.C.4	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in local hydrological conditions – see section 7.C.5	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in air pollution (deposition of atmospheric nitrogen) – see section 7.C.6	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the incidence of public access / disturbance – see section 7.C.7	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

7.E References

- 7.37 The following sources of information have been referred to as part of the assessment process for the Ebernoe Common SAC.
 - 7.37.1 EC Directive 92/43 on the Conservation of Natural Habitats & of Wild Fauna and Flora: Citation for Special Area of Conservation (SAC) Ebernoe Common SAC (Natural England (English Nature), May 2005).
 - 7.37.2 NATURA 2000 Standard Data Form: Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance & designated SACs) Ebernoe Common SAC (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 7.37.3 European Site Conservation Objectives for Ebernoe Common Special Area of Conservation (Site Code: UK0012715) (Natural England, 30 June 2014, v.2).
 - 7.37.4 Site Improvement Plan: Ebernoe Common SAC (Natural England, 6 March 2015).
 - 7.37.5 Ebernoe Common SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Chapter 8 Thames Basin Heaths SPA

8.A Geographic & Development Context

8.A.1 Location of the SPA

- 8.1 The Thames Basin Heaths SPA (see map) is distributed across western Surrey, north east Hampshire and the south east of the former county of Berkshire, and is composed of a complex of thirteen SSSIs. The SPA covers an area of 8,274.72 hectares, as stated on the SPA citation, and was designated on 9 March 2005. The SPA is composed of the following thirteen SSSIs, of which the three highlighted in **bold text** is situated within 5 kilometres of the closest boundary of the Surrey Hills AONB.
 - Ash to Brookwood Heaths SSSI, located in Surrey and covering some 1,576.35 hectares. The SSSI is some 2.8 kilometres to the north of the Surrey Hills AONB.
 - **Bourley & Long Valley SSSI**, located partially in Surrey with the majority of the SSSI in Hampshire, and covering some 823.48 hectares. The SSSI is some 3.3 kilometres to the north west of the Surrey Hills AONB.
 - Bramshill SSSI, located in Hampshire and covering some 673.27 hectares, situated some 6.79 kilometres to the west of the Surrey/Hampshire boundary. The SSSI is some 17.6 kilometres to the north west of the Surrey Hills AONB.
 - Broadmoor to Bagshot Woods & Heaths SSSI, located in Surrey and Berkshire, and covering some 1,696.33 hectares. The SSSI is some 136.2 kilometres to the north of the Surrey Hills AONB.
 - Castle Bottom to Yateley & Hawley Commons SSSI, located in Hampshire and covering some 922.74 hectares, situated some 0.6 kilometres to the west of the Surrey/ Hampshire boundary. The SSSI is some 9.8 kilometres to the north west of the Surrey Hills AONB.
 - Chobham Common SSSI, located in Surrey and covering some 655.73 hectares. The SSSI is some 13.4 kilometres to the north of the Surrey Hills AONB.
 - Colony Bog & Bagshot Heath SSSI, located in Surrey and covering some 1,130.51 hectares. The SSSI is some 8.2 kilometres to the north of the Surrey Hills AONB.
 - Eelmoor Marsh SSSI, located in Hampshire and covering some 66.34 hectares, and situated some 3.66 kilometres to the west of the Surrey/Hampshire border. The SSSI is some 6.7 kilometres to the north west of the Surrey Hills AONB.
 - Hazeley Heath SSSI, located in Hampshire and covering some 180.79 hectares, situated some 9.15 kilometres to the west of the Surrey/Hampshire boundary. The SSSI is some 14.3 kilometres to the north west of the Surrey Hills AONB.
 - Horsell Common SSSI, located in Surrey and covering some 151.99 hectares. The SSSI is some 10.1 kilometres to the north of the Surrey Hills AONB.

- Ockham & Wisley Commons SSSI, located in Surrey and covering some 265.96 hectares. The SSSI is some 5.6 kilometres to the north of the Surrey Hills AONB.
- Sandhurst to Owlsmoor Bogs & Heaths SSSI, located in Berkshire and covering some 85.81 hectares, situated some 2.36 kilometre to the north west of the Surrey/Bracknell Forest boundary. The SSSI is some 14.5kilometres to the north west of the Surrey Hills AONB.
- Whitmoor Common SSSI, located in Surrey and covering some 166.03 hectares. The SSSI is some 3.9 kilometres to the north of the Surrey Hills AONB.
- The following motorways and 'A' class roads pass through or within 200 metres of the component SSSIs of the SPA that are located within 5 kilometres of the Surrey Hills AONB: The A322 (Bagshot Road) passes within 200 metres of the Whitmoor Common SSSI and the Ash to Brookwood Heaths SSSI; the A320 (Guildford Road) passes through the Whitmoor Common SSSI; the A324 (Pirbright Road) passes through and within 200 metres of the Ash to Brookwood Heaths SSSI; the A287 (Odiham Road), the A325 (Farnborough Road) and the A323 (Fleet Road) pass through or within 200 metres of the Bourley & Long Valley SSSI.
- 8.3 The majority of the area covered by the Ash to Brookwood Heaths SSSI is owned by the Ministry of Defence and is not accessible to the public, although the eastern part of the SSSI is less constrained and is dissected by ten sections of public footpath, four sections of public bridleway and two sections of byways open to all traffic. The area covered by the Bourley & Long Valley SSSI is owned by the Ministry of Defence and is not accessible to the public. The Whitmoor Common SSSI is dissected by a network of public rights of way, including ten sections of public footpath and four sections of public bridleway affording access across the majority of the area covered by the designation.

8.B Key Characteristics of the SPA

8.B.1 Reasons for Designation

8.4 The ecological interest of the SPA, and the particular species that are given as reasons for its designation, is described as follows in the published citation.

Site Description

The Thames Basin Heaths SPA is a composite site that is located across the counties of Surrey, Hampshire & Berkshire in southern England. It encompasses all or parts of Ash to Brookwood Heaths Site of Special Scientific Interest (SSSI), Bourley & Long Valley SSSI, Bramshill SSSI, Broadmoor to Bagshot Woods & Heaths SSSI, Castle Bottom to Yateley & Hawley Commons SSSI, Chobham Common SSSI, Colony Bog & Bagshot Heaths SSSI, Eelmoor Marsh SSSI, Hazeley Heath SSSI, Horsell Common SSSI, Ockham & Wisley Commons SSSI, Sandhurst to Owlsmoor Bogs & Heaths SSSI & Whitmoor Common SSSI.

The open heathland habitats overlie sand & gravel sediments which give rise to sandy or peaty acidic soils, supporting dry heathy vegetation on well-drained slopes, wet heath on low-lying shallow slopes & bogs in valleys.

The site consists of tracts of heathland, scrub & woodland, once almost continuous, but now fragmented into separate blocks by roads, urban development & farmland. Less open habitats of scrub, acidic woodland & conifer plantations dominate, within which are scattered areas of open heath & mire. The site supports important breeding populations of a number of birds of lowland heathland, especially nightjar *Caprimulgus europaeus* & woodlark *Lullula arborea*, both of which nest on the ground, often at the woodland/heathland edge, & Dartford warbler *Sylvia undata*, which often nests in gorse *Ulex* sp.

Scattered trees & scrub are used for roosting. Together with the nearby Ashdown Forest & Wealden Heaths SPAs, the Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations.

Qualifying Species

The site qualifies under **article 4.1** of the Directive (79/409/EEC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:

- Nightjar *Caprimulgus europaeus -* 264 churring males breeding (1998/99) 7.8% of GB population
- Woodlark Lullula arborea 149 pairs breeding (1997) 9.9% of GB population
- Dartford warbler Sylvia undata 445 pairs breeding (1999) 27.8% of GB population

Non-qualifying species of interest

Hen harrier *Circus cyaneus*, merlin *Falco columbarius*, short-eared owl *Asio flammeus* & kingfisher *Alcedo atthis* (all Annex I species) occur in non-breeding numbers of less than European importance (less than 1% of the GB population).

8.B.2 Conservation Objectives

8.5 The published conservation objectives for the SPA are given below.

Conservation Objectives

"With regard to the individual species &/or assemblage of species for which the site has been classified ("the Qualifying Features" listed below): Avoid the deterioration of the habitats of the qualifying features, & the significant disturbance of the qualifying features, ensuring the integrity of the site is maintained & the site makes a full contribution to achieving the aims of the Birds Directive. Subject to natural change, to maintain or restore:

- The extent & distribution of the habitats of the qualifying features;
- The structure & function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The populations of the qualifying features;
- The distribution of the qualifying features within the site.

Qualifying Features

- A224 Caprimulgus europaeus; European nightjar (Breeding)
- A246 Lullula arborea; Woodlark (Breeding)
- A302 Sylvia undata; Dartford warbler (Breeding)

8.B.3 Condition

8.6 Based on the information published by Natural England in the most recent condition survey reports for the three SSSIs within the Thames Basin Heaths SPA that are located within 5 kilometres of the Surrey Hills AONB (see Table 8-A for a summary), the designated sites extend to some 8,395.17 hectares, of which some 43.8% is in 'favourable' condition, some 54.2% is in 'unfavourable – recovering' condition, some 0.7% is in 'unfavourable – no change' condition, and some 1.3% is in 'unfavourable – declining' condition. The three SSSIs are primarily composed of lowland dwarf shrub heath habitat (2,502.36 hectares) with the balance made up of acid grassland habitat (7.05 hectares), and standing open water and canals habitat (2.45 hectares).

Table 8-A: Thames Basin Heaths SPA component SSSIs located within 5 km of the Surrey Hills AONB – Condition Survey Findings

Main Habitat Type		Condition Classification			
		Favourable	Unfavourable - Recovering	Unfavourable – No Change	Unfavourable – Declining
Dwarf shrub heath – lowland	<5km from AONB	1,094.37 ha	1,360.59 ha	15.31 ha	32.09 ha
Acid grassland - lowland	<5km from AONB	7.05 ha	-	-	-
Standing open water & canals	<5km from AONB	-	0.25 ha	2.20 ha	-
Totals	2,511.86 ha	1,101.42 ha	1,360.84 ha	17.51 ha	32.09 ha

8.7 The 32.09 hectares of **lowland dwarf shrub heath** habitat exhibiting 'unfavourable – declining' condition is situated within the Bourley & Long Valley SSSI (Unit 4). That unit is located some 6 kilometres from the Surrey Hills AONB boundary, although the Bourley & Long Valley SSSI commences within 5 kilometres of the AONB. The condition survey report for Unit 4 of the Bourley &Long Valley SSSI provides the following explanation of the reasons for the poor condition.

Bourley & Long Valley SSSI (Hampshire / Surrey), Unit 4, 32.09 ha, Last surveyed 26/06/13

<u>Comments</u>: There are large areas of the site where vegetation has been lost leaving bare, soft sand, not suitable for invertebrates due to disturbance. These areas appear to be expanding. Much of the grassland & heather has been mown very short, this may lead to loss of more vegetation. In particular, the heather which is not part of the few remaining large blocks, is tending to thin. Areas suitable for woodlark & nightjar have declined in recent years although a few birds do still succeed in fledging young. An area to the east of the site which was cleared of all heather & gorse in 2012 is showing scant signs of heather regeneration. The sections which were not scraped too deeply have some pioneer *Calluna* but most of the area is either bare or becoming dominated by weedy species & European gorse.

<u>Reasons for adverse condition</u>: Agriculture - inappropriate cutting/mowing; Lack of corrective works - inappropriate scrub control

8.8 The 15.31 hectares of **lowland dwarf shrub heath** habitat exhibiting 'unfavourable – no change' condition is situated within the Ash to Brookwood Heaths SSSI (Unit 12). That unit is located some 7 kilometres from the Surrey Hills AONB boundary, although the Ash to Brookwood Heaths SSSI commences within 5 kilometres of the AONB. The condition survey report for Unit 12 of the Ash to Brookwood Heaths SSSI provides the following explanation of the reasons for the poor condition.

Ash to Brookwood Heaths SSSI (Surrey), Unit 12, 15.31 ha, Last surveyed 15/05/17

Comments: The unit is considered to be in unfavourable condition, as it provides a very limited area of rather poor quality 'open' habitat for heath land flora & fauna. The unit has the potential to be enhanced for heathland species, including the bird assemblage. At present there is no suitable nesting habitat for specialist heathland birds. Most of the unit has stands of closed canopy Scot's pine plantation as the dominant vegetation: much of this is fairly mature, but there is an area with younger thicket stage pine saplings (3-4m), which have grown up on the site of a former clearing (from aerial photos). There are occasional broad-leaved trees, mainly English oak, silver birch & rowan, with some holly. Parts of the woodland floor are bare/ covered with pine litter, but there are frequent patches of bilberry (some quite large), & bracken is also widespread.

A stand of ling is present at the location of the pine saplings, but is now being shaded out. A wayleave passes along one of the unit boundaries, & forms an open corridor linking to adjacent parts of the SSSI/SPA where there are larger clearings of value to nesting heathland birds. The wayleave has a bare sandy track, with heathland vegetation along the verges including ling & cross-leaved heath, bilberry, purple moor-grass, gorse, & occasional fine grasses including bristle bent. The unit provides a little supporting habitat for SPA birds, with some of the woodland edge habitats suitable for foraging by nightjar. There is significant amount of recreational visitor pressure, mainly dog walkers along the wayleave.

Reasons for adverse condition: Lack of corrective works - inappropriate scrub control & inappropriate weed control

8.9 For the 2.20 hectares of **standing open water and canals** habitat (Whitmoor Common SSSI unit number 11, last surveyed on 16/08/06) exhibiting 'unfavourable – no change' condition, the condition survey report provides the following explanation and analysis.

<u>Comments</u>: All the aquatic plants which are the interest features of this site are no longer found here. The pond requires a full scale lake restoration to restore habitats for these features.

Reasons for adverse condition: Freshwater - siltation

8.C Identification of Impact Pathways & Screening Evaluation

- 8.10 The published Site Improvement Plan (SIP) for the SPA (03 November 2014) identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in the incidence of public access / disturbance discussed further in section 8.C.1;
 - Changes in grazing practices discussed further in section 8.C.2;
 - Changes in forestry and woodland management practices discussed further in section 8.C.3

- Changes in scrub control practices—discussed further in section 8.C.4;
- Changes in the incidence of wildfire / arson discussed further in section 8.C.5;
- Changes arising from air pollution (atmospheric nitrogen deposition) discussed further in section 8.C.6;
- Changes in the condition, location and extent of the features of qualifying interest discussed further in section 8.C.7;
- Changes in the use of the land for military activities discussed further in section 8.C.8;
- Changes due to habitat fragmentation discussed further in section 8.C.9.

8.C.1 Public Access / Disturbance

8.11 The features affected by changes in public access and disturbance are the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (pp.5/20 and 6/20) offers the following explanation of the nature of the identified pressure/threat:

"Parts of Thames Basin Heaths (& Thursley, Hankley & Frensham Commons SPA) are subject to high levels of recreational use & dog walkers make up a large proportion of visitors. This is likely to be affecting the distribution & overall numbers of ground-nesting Annex 1 birds (& breeding success). An 'avoidance strategy' is in place to help manage this pressure, including the provision of Suitable Accessible Natural Green Space (SANGS). However, recreational pressure may be hampering the potential for the sites to achieve their full contribution to sustainable national populations. Further work is desirable to determine the scale of impact from recreational disturbance. There is also concern at the growing use of parts of the complex by commercial dog walkers & desire to control this. Improved habitat management to increase suitability for Annex 1 birds & better coordination of habitat provision across the complex is also needed to better offset the effects of disturbance."

- 8.12 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with producing an over-arching habitat management strategy to help offset/ decrease the effects of recreational disturbance on Annex 1 birds, with producing coherent and consistent access management strategies for all sites, and with implementing a wardening strategy to reduce impacts of recreational disturbance on Annex 1 birds.
- 8.13 <u>Screening Evaluation</u>: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased public access and associated disturbance within any part of the SPA would be as a consequence of recreational visits to the SPA. The only policy set out in the AONB Management Plan that could contribute to additional recreational pressure outside the AONB would be policy CE3 (affordable housing provision). Of the three components of the SPA located within 5 kilometres of the AONB only the Whitmoor Common SSSI is openly accessible to the general public, with the majority of both Ash to Brookwood Heaths SSSI and the Bourley & Long Valley SSSI owned

by the MoD and subject to active military training use with associated restrictions on public access.

8.14 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased public access and associated disturbance. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

8.C.2 Undergrazing

8.15 The features affected by under-grazing are the habitats of the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (pp.6/20 to 8/20) offers the following explanation of the nature of the identified pressure:

"Parts of the complex are undermanaged. Limitations are such that traditional stock cannot be used (because they are live firing ranges), or resistance to the fencing of common land. The excessive cost of disposal of arisings from cutting management is a significant factor making it impractical for large scale use. Controlled burning is not considered a practical alternative in this complex. Lack of grazing over a long period has resulted in poor habitat quality & restoration will take a long time. Grazing may actually be having negative impacts in some cases & improved management is required in these instances. There is scope to improve efficiency in use of resources through improved coordination, sharing of equipment & improved partnership working."

- 8.16 The actions that have been identified as the principal means of addressing the pressure are concerned with:
 - Implementing appropriate alternative management where grazing is not practical;
 - Investigating possible economic uses of material arising from habitat management, such as biomass to bioenergy;
 - Developing a heathland management partnership which seeks to share resources, expertise and equipment in order to increase efficiencies in management delivery;
 - Producing agreed management plans for key sites which identify priority actions to improve condition of Natura 2000 features;
 - Improving long-term management of power line wayleaves with power suppliers to avoid damaging impacts and improve habitat condition and connectivity.
- 8.17 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon land management practices within the SPA. The closest component of the SPA (Ash to Brookwood Heaths SSSI) is located some 2.8 kilometres to the north of the closest boundary of the Surrey Hills AONB in the borough of Guildford. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB.

8.18 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on land management practices within the SPA, including the use of grazing, and therefore would not affect the condition of the heathland habitats favoured by the SPA bird species. No further assessment is required in respect of the changes in land management (under-grazing) impact pathway.

8.C.3 Forestry & Woodland Management

8.19 The features affected by changes in forestry and woodland management are the habitats of the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (p.8/20) offers the following explanation of the nature of the identified pressure:

"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. However, there is no coordination or overall management plan & felling is dependent upon market forces. Climate change is also causing change in thinking amongst managers with introduction of broadleaves being considered & change from rotational to continuous cover management."

- 8.20 The actions that have been identified as the principal means of addressing the pressure are concerned with undertaking a review of long-term forestry management policy in the complex to ensure suitable habitat conditions for Annex 1 birds are consistently maintained.
- 8.21 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon forestry and woodland management practices within the SPA. The closest component of the SPA (Ash to Brookwood Heaths SSSI) is located some 2.8 kilometres to the north of the closest boundary of the Surrey Hills AONB in the borough of Guildford. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB.
- 8.22 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on forestry and woodland management practices within the SPA, and therefore would not affect the condition of the heathland habitats favoured by the SPA bird species. No further assessment is required in respect of the changes in forestry and woodland management impact pathway.

8.C.4 Inappropriate Scrub Control

8.23 The features affected by inappropriate scrub control practices are the habitats of the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (p.10/20) offers the following explanation of the nature of the identified pressure:

"Ineffective or lack of scrub control affects some areas of dry & wet heath, especially at Colony Bog, & at Bourley & Long Valley. The absence of scrub management plans at most sites is of concern as it is often viewed as a negative aspect with little consideration given for its value to Annex 1 birds. There is also concern that scrub management is a constant, significant drain on resources – there is a need for investigation of options which give an economic return on scrub management."

- 8.24 The actions that have been identified as the principal means of addressing the pressure are concerned with implementing a programme of scrub clearance to reverse effects of encroachment of heathland to follow on from investigation of the potential for sustainable use of the waste arising.
- 8.25 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon scrub management practices within the SPA. The closest component of the SPA (Ash to Brookwood Heaths SSSI) is located some 2.8 kilometres to the north of the closest boundary of the Surrey Hills AONB in the borough of Guildford. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB.
- 8.26 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on scrub management practices within the SPA, and therefore would not affect the condition of the heathland habitats favoured by the SPA bird species. No further assessment is required in respect of the changes in scrub management impact pathway.

8.C.5 Wildfire / Arson

8.27 The features affected by changes in the risk or incidence of wildfire or arson are the populations of European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)) and the habitats on which they depend. The SIP (p.11/20 and 12/20) offers the following explanation of the nature of the identified pressure:

"Uncontrolled fires are very damaging as they can have profound impacts on reptile populations, invertebrates & plant diversity & can result in significant habitat loss for Annex 1 birds. They can affect forestry areas as well as open heath. Damaging impacts can last for many years for example by the wholesale removal of all gorse from a site. Strategies are in place in parts of the complex to reduce risk but more attention is needed to properly address this issue. Increasing threat of extensive fires is of great concern to the fire services & there is a desire for greater link up between efforts to protect property & roads from fire, & habitat management."

8.28 The actions that have been identified as the principal means of addressing the pressure are concerned with completing and implementing fire strategies and risk management plans for all sites, with undertaking a public fire awareness campaign, and with embedding wildfire mitigation and adaptation into local authority Local Development Plan policies.

- 8.29 <u>Screening Evaluation</u>: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased risks of arson or accidental fire within any part of the SPA would be as a consequence of recreational visits to the SPA. The only policy set out in the AONB Management Plan that could contribute to additional recreational visits outside the AONB would be policy CE3 (affordable housing provision). Of the three components of the SPA located within 5 kilometres of the AONB only the Whitmoor Common SSSI is openly accessible to the general public, with the majority of both Ash to Brookwood Heaths SSSI and the Bourley & Long Valley SSSI owned by the MoD and subject to active military training use with associated restrictions on public access.
- 8.30 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of increased risks of arson or accidental fire associated with greater public access to land within or adjoining the SPA. Further assessment is therefore required in respect of the arson / wildfire impact pathway.

8.C.6 Air pollution: impact of atmospheric nitrogen deposition

8.31 The features affected by changes in nutrient nitrogen deposition from the atmosphere are habitats of the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (p.12/20) offers the following explanation of the nature of the identified pressure/threat:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards Molinia & sedge dominated systems rather than Sphagnum dominated; spread of Molinia into wet & dry heath also appears to be promoted by high nitrate levels. This is most likely to be a current issue at Chobham Common but may represent a chronic adverse impact over the complex as a whole."

- 8.32 The actions that have been identified as the principal means of addressing the pressure/threat are concerned with controlling and reducing nitrogen emissions and deposition, and with ameliorating the impacts of that deposition.
- 8.33 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased nutrient nitrogen deposition within any part of the SPA would be as a consequence of recreational visits to the SPA and associated vehicle movements. The only policy set out in the AONB Management Plan that could contribute to additional recreational visits outside the AONB would be policy CE3 (affordable housing provision). Of the three components of the SPA located within 5 kilometres of the AONB only the Whitmoor Common SSSI is openly accessible to the general public, with the majority of both Ash to Brookwood Heaths SSSI and the Bourley & Long Valley SSSI owned by the MoD and subject to active military training use with associated restrictions on public access.

8.34 <u>Screening Conclusion</u>: In the absence of mitigation measures (which cannot be relied upon at the screening stage) it is possible that activities brought forward or promoted under the auspices of the Surrey Hills AONB Management Plan could contribute to likely significant adverse impacts on the SPA as a consequence of the deposit of nutrient nitrogen arising from a variety of sources on the sensitive heathland habitats of the SPA bird species. Further assessment is therefore required in respect of the public access and disturbance impact pathway.

8.C.7 Monitoring of Feature Condition, Location & Extent

8.35 The features affected are the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (p.13/20) offers the following explanation of the nature of the identified threat:

"There are significant gaps in the knowledge of key aspects such as where woodlarks are overwintering & whether these sites are in need of protection, & coverage of the complex in terms of monitoring of Annex 1 birds is not comprehensive so recorded bird numbers are not representative of total numbers. Also, current monitoring does not provide information on breeding success, only territory numbers."

- 8.36 The actions that have been identified as the principal means of addressing the threat are concerned with establishing a sustainable long-term bird monitoring strategy which provides adequate coverage of all parts of the SPA, and with commissioning research to determine the critical factors in the breeding success of woodlark in this complex, particularly focusing on possible effects of climate change and changing weather patterns.
- 8.37 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could contribute to the development and maintenance of a more comprehensive evidence base in respect of the features of qualifying interest of the SAC. The closest component of the SPA (Ash to Brookwood Heaths SSSI) is located some 2.8 kilometres to the north of the closest boundary of the Surrey Hills AONB in the borough of Guildford. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB. Any opportunities for evidence collection or collation that might arise from schemes and initiatives promoted under the AONB Management Plan would be focused on the area of land covered by the AONB designation, which does not encompass any part of the SPA.
- 8.38 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to any opportunities for evidence collection or collation in respect of the area of land covered by the SPA. No further assessment is required in respect of the features of qualifying interest impact pathway.

8.C.8 Military Uses

8.39 The features affected by changes in military use of the designated land are the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler

(A302(B)). The SIP (p.13/20) offers the following explanation of the nature of the identified threat:

"None of the military training areas in the complex currently have integrated management plans which seek to integrate management of the estate for military training with nature conservation management. There is a need for improved communication between partners over common objectives."

- 8.40 The actions that have been identified as the principal means of addressing the threat are concerned with completing integrated management plans for all military training sites in the complex.
- 8.41 <u>Screening Evaluation</u>: There is no mechanism by which the Surrey Hills AONB Management Plan would impact, either negatively or positively, on the ways in which the Ministry of Defence (MoD) manages those areas of land that it owns within the SPA designation. The Surrey Hills AONB Management Plan is concerned with the provision of guidance in respect of the management of land within the AONB boundary over the 5 year plan period, to protect the natural beauty of the AONB, and has no locus to influence the land use management practices employed by the military on MoD land outside the AONB.
- 8.42 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SPA with reference to the use of land within the SPA designation for military purposes. No further assessment is required in respect of the military uses impact pathway.

8.C.9 Habitat Fragmentation

8.43 The features affected by further fragmentation of the supporting habitats are the populations of the European nightjar (A224(B)), the Woodlark (A246(B)), and the Dartford Warbler (A302(B)). The SIP (p.14/20) offers the following explanation of the nature of the identified pressure:

"Fragmentation of the complex means that recovery after devastating impacts such as fires & severe winters is restricted or prevented altogether. This has implications for the ability of species such as Dartford warbler, smooth snake, marsh clubmoss, specialist invertebrates to recolonise parts of the complex. There is currently high risk of local extinctions in parts of the complex because of this."

- 8.44 The actions that have been identified as the principal means of addressing the pressure are concerned with commissioning a study to identify priorities for habitat management that is able to ameliorate the effects of habitat fragmentation.
- 8.45 <u>Screening Evaluation</u>: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased risks of habitat fragmentation within any part of the SPA would be as a consequence of recreational visits to the SPA and associated disturbance. The only policy set out in the AONB Management Plan that could

contribute to additional recreational visits outside the AONB would be policy CE3 (affordable housing provision). Of the three components of the SPA located within 5 kilometres of the AONB only the Whitmoor Common SSSI is openly accessible to the general public, with the majority of both Ash to Brookwood Heaths SSSI and the Bourley & Long Valley SSSI owned by the MoD and subject to active military training use with associated restrictions on public access. Whilst the possibility of some individuals choosing to visit the SPA cannot be ruled out, it is unlikely that the SPA would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB, and would therefore not be placed at significant risk of habitat fragmentation as a consequence of those visits. Implementation of the Management Plan would therefore not be expected to contribute to significant increases in the numbers of people making use of the SPA for recreational visits and associated risks of habitat fragmentation.

8.46 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SPA as a consequence of additional recreational visits to the SPA and associated risks of habitat fragmentation. No further assessment is required in respect of the habitat fragmentation impact pathway.

8.D Assessment of significant effects

8.47 The screening assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan for the period 2020-2025 has the potential to give rise to likely significant effects on the Thames Basin Heaths SPA with reference to the public access and disturbance impact pathway, the wildfire/arson impact pathway, and the nutrient nitrogen deposition impact pathway. The purpose of the following section of this report is to consider the extent to which the identified risks of likely significant effects could be appropriately and successfully addressed through mitigation measures.

8.D.1 Public access / disturbance

- 8.48 The screening assessment concluded that changes in public access arrangements and associated disturbance could give rise to likely significant impacts on the features of interest of the SPA in the absence of mitigation measures. Of particular concern where activities supported under policy CE3 (provision of affordable housing) of the revised AONB Management Plan.
- In terms of mitigation of the potential impacts of the AONB Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of disturbance associated with the implementation of policy CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise

promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.

8.50 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thames Basin Heaths SPA those are policy NE3 (Thames Basin Heaths Special Protection Area) of the Waverley Local Plan Part 1 (2018), policy P5 (Thames Basin Heaths Special Protection Area) of the Guildford Local Plan, policy CS15 (Biodiversity & Geological Conservation) of the Mole Valley Local Plan, policy CON1 (European Sites) of the Hart Local Plan, and policy NE1 (Thames Basin Heaths Special Protection Area) of the Rushmoor Local Plan. All applications for planning permission submitted to the relevant borough or district council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the impacts of public access and disturbance.

8.D.2 Wildfire / Arson

- 8.51 The screening assessment concluded that increased public access to the SPA could give rise to likely significant impacts on the features of interest in the absence of mitigation measures as a consequence of an increased risk of arson / accidental fire. Of particular concern where activities supported under policy CE3 (provision of affordable housing) of the revised AONB Management Plan.
- 8.52 In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing any risks of arson / accidental fire associated with the implementation of policy CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 8.53 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thames Basin Heaths SPA those are policy NE3 (Thames Basin Heaths Special Protection Area) of the Waverley Local Plan Part 1 (2018), policy P5 (Thames Basin Heaths Special Protection Area) of the

Guildford Local Plan, policy CS15 (Biodiveraity & Geological Conservation) of the Mole Valley Local Plan, policy CON1 (European Sites) of the Hart Local Plan, and policy NE1 (Thames Basin Heaths Special Protection Area) of the Rushmoor Local Plan. All applications for planning permission submitted to the relevant borough or district council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the risks of arson / accidental fire.

8.D.3 Nutrient nitrogen deposition

- 8.54 The screening assessment concluded that changes in nutrient nitrogen deposition rates arising from changes in land use or increased vehicle movements within the AONB could give rise to likely significant impacts on the habitats of the SPA bird species in the absence of mitigation measures. Of particular concern were activities supported under policy CE3 (provision of affordable housing) of the revised AONB Management Plan.
- 8.55 In terms of mitigation of the potential impacts of the Management Plan on the SPA, policy B1 is concerned with the management of existing designated sites, including SPAs, so that they achieve and/or maintain 'favourable' condition. The application of policy B1 could provide a means of addressing the impacts of nutrient nitrogen deposition associated with the implementation of policy CE3 (provision of affordable housing). However, policy B1 appears to be primarily focused on the direct management of designated SSSIs, SACs and SPAs within the AONB, rather than the management of impacts arising from schemes and initiatives brought forward under the AONB Management Plan. It is recommended that additional wording be added to policy B1 to ensure that all schemes and initiatives brought forward or otherwise promoted under the AONB Management Plan contribute to the positive management of designated sites within or adjoining the AONB.
- 8.56 Where planning permission would be required for a development that would contribute to the aims of the AONB Management Plan, for example the construction of affordable housing in a settlement within the AONB, policies for the protection of designated sites in the relevant Local Plan would also come into play. In the case of the Thames Basin Heaths SPA those are policy NE3 (Thames Basin Heaths Special Protection Area) of the Waverley Local Plan Part 1 (2018), policy P5 (Thames Basin Heaths Special Protection Area) of the Guildford Local Plan, policy CS15 (Biodiveraity & Geological Conservation) of the Mole Valley Local Plan, policy CON1 (European Sites) of the Hart Local Plan, and policy NE1 (Thames Basin Heaths Special Protection Area) of the Rushmoor Local Plan. All applications for planning permission submitted to the relevant borough or district council would have to demonstrate conformity with the requirements of those policies in respect of the protection of the SPA, and would be subject to assessment under the provisions of Regulation 63 of the Conservation of Habitats & Species Regulations 2017 (as amended) prior to any grant of permission which could include consideration of the likely impact of the scheme of nutrient nitrogen deposition.

8.E Conclusions

- 8.57 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thames Basin Heaths SPA has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, wildfire and arson, and nutrient nitrogen deposition could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SPA from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.
- 8.58 The assessment considered the nine impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SPA via each pathway are summarised in Table 8-B.

Table 8-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA.	
Changes in the incidence of public access / disturbance – see sections 8.C.1 & 8.D.1	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	
Changes in grazing practices – see section 8C.2	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in forestry and woodland management practices – see section 8.C.3	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in scrub control practices— see section 8.C.4	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA.	
Changes in the incidence of wildfire / arson – see section 8.C.5 & 8.D.2	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	

Impact Pathway	Conclusion	
Changes arising from air	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SPA from a range of sources (recreational / residential / agricultural / transport).	
Changes arising from air pollution (atmospheric nitrogen deposition) – see section 8.C.6 & 8.D.3	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	
Changes in the condition, location and extent of the features of qualifying interest – see section 8.C.7	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the use of the land for military activities – see section 8.C.8	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes due to habitat fragmentation – see section 8.C.9	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

8.F References

- 8.59 The following sources of information have been referred to as part of the assessment process for the Thames Basin Heaths SPA.
 - 8.59.1 EC Directive 79/409 on the Conservation of Wild Birds: Citation for Special Protection Area (SPA) Thames Basin Heaths SPA (Natural England (English Nature), February 2005).
 - 8.59.2 NATURA 2000 Standard Data Form: Special Protection Areas under the EC Wild Birds Directive Thames Basin Heaths SPA (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 8.59.3 European Site Conservation Objectives for Thames Basin Heaths Special Protection Area (Site Code: UK9012141) (Natural England, 30 June 2014, v.2).
 - 8.59.4 Site Improvement Plan: Thames Basin (covering the Thames Basin Heaths SPA, the Thursley, Ash, Pirbright & Chobham SAC, & the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA) (Natural England, 3 November 2014).
 - 8.59.5 Ash to Brookwood Heaths SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

- 8.59.6 Bourley & Long Valley SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).
- 8.59.7 Whitmoor Common SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Chapter 9 Woolmer Forest SAC

9.A Geographic & Development Context

9.A.1 Location of the SAC

- 9.1 The Woolmer Forest SAC (see map) is located in Hampshire, and is composed of part of the Woolmer Forest SSSI (1,298.52 hectares). The SAC covers an area of 666.68 hectares, and was designated on 1 April 2005. The SAC commences some 4.36 kilometres to the south west of the Surrey/Hampshire county boundary and is some 4.7 kilometres to the west of the Surrey Hills AONB.
- 9.2 The SAC is bounded by a number of road links, including the A3 (Portsmouth Road / London Road) which passes through the SSSI and adjoins the SAC designation, and the A325 (Petersfield Road / Farnham Road) which passes through the SSSI and adjoins the SAC designation.

9.B Key Characteristics of the SAC

9.B.1 Reasons for Designation

9.3 The ecological interest of the SAC, and the particular habitats and species that are given as reasons for its designation, is described as follows in the published citation.

Site Description

Woolmer Forest is located at the western end of the Weald. The majority lies on the coarse sands of the Folkestone beds. The drainage ditches & streams crossing the site have cut broad valleys into the sandy soils, interspersed with rounded hills & ridges.

Extensive areas of dry heathland vegetation occur on the tops of the hills & ridges. These areas are dominated by heather *Calluna vulgaris* & bell heather *Erica cinerea*, commonly with dwarf gorse *Ulex minor*, grasses such as wavy hair-grass *Deschampsia flexuosa* & sheep's-fescue *Festuca ovina*, & a rich diversity of lichens. Humid heath occurs on less free-draining soils. It is dominated by heather & characterised by the presence of cross-leaved heath *Erica tetralix* & purple moor-grass *Molinia caerulea*.

Humid heath grades into areas of wet heath along the valley bottoms where both cross-leaved heath & purple moor-grass are abundant. These wet heath areas are also characterised by the presence of bog-mosses such as *Sphagnum compactum*, carnivorous plants such as round-leaved *Drosera rotundifolia* & oblong-leaved sundews *D. intermedia*, & common *Eriophorum angustifolium* & hare's-tail cottongrasses *E. vaginatum*. A number of nationally scarce & uncommon plant species occur in patches of bare wet peat within the wet heath, often along tracks & pathways. These include the club-moss *Lycopodiella inundata*, white beak-sedge *Rhynchospora alba* & allseed *Radiola linoides*.

Within Woolmer Forest, Cranmer Pond is an example of an acid peat-stained pond. This 8 ha pond is thought to originate from peat-cutting, & has an average depth of 1m. The aquatic flora is comprised of bulbous rush *Juncus bulbosus* var. *fluitans*, which grows submerged & forms dense mats at the margins, & bog-mosses which grow in shallower areas. To the north & south of Cranmer Pond are areas of transition mires & quaking bogs.

Seepage mires & other waterlogged areas are minor features amongst predominantly wet heath habitat. Seepages are fed from a mix of acidic & calcareous sources, & give rise to a series of pool & hummock structures within the mire. White beak-sedge occurs along with a range of bog-mosses, common & hare's-tail cottongrasses, bog asphodel *Narthecium ossifragum*, cranberry *Vaccinium oxycoccos* & the rare marsh clubmoss *Lycopodiella inundata*.

Qualifying Habitats

The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:

- Depressions on peat substrates of the Rhynchosporion
- European dry heaths
- Natural dystrophic lakes & ponds. (Acid peat-stained lakes & ponds)
- Northern Atlantic wet heaths with Erica tetralix. (Wet heathland with cross-leaved heath)
- Transition mires & quaking bogs. (Very wet mires often identified by an unstable 'quaking' surface)

9.B.2 Conservation Objectives

9.4 The published conservation objectives for the SAC are given below.

Conservation Objectives

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

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

Qualifying Features

- H3160. Natural dystrophic lakes & ponds; Acid peat-stained lakes & ponds
- H4010. Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath
- H4030. European dry heaths
- H7140. Transition mires & quaking bogs; Very wet mires often identified by an unstable `quaking` surface
- H7150. Depressions on peat substrates of the Rhynchosporion

9.B.3 Condition

- 9.5 Based on the information published by Natural England in the most recent condition survey report for the Woolmer Forest SSSI (see Table 3-A), that designated site extends to some 1,298.52 hectares, of which some 670.21 hectares is covered by the SAC designation. Those SSSI units that are covered by the SAC designation are listed below.
 - Unit 17 (112.88 ha) Lowland dwarf shrub heath 'Favourable' condition
 - Unit 18 (1.14 ha) Standing open water & canals 'Favourable' condition
 - Unit 19 (1.66 ha) Standing open water & canals 'Favourable' condition
 - Unit 20 (82.61 ha) Lowland dwarf shrub heath 'Favourable' condition
 - Unit 27 (62.84 ha) Lowland dwarf shrub heath 'Favourable' condition
 - Unit 29 (109.08 ha) Coniferous woodland 'Favourable' condition
 - Unit 30 (35.25 ha) Coniferous woodland 'Favourable' condition
 - Unit 21 (26.28 ha) Lowland broadleaved, mixed & yew woodland Unfavourable recovering' condition
 - Unit 22 (26.83 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
 - Unit 23 (53.04 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
 - Unit 24 (22.55 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
 - Unit 25 (42.35 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
 - Unit 26 (54.79 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
 - Unit 28 (38.91 ha) Lowland dwarf shrub heath Unfavourable recovering' condition
- 9.6 The most recent condition survey results for those units of the SSSI (see Table 9-A for a summary) covered by the SAC designation indicates that 64.4% of the SAC is in 'favourable' condition, 35.6% is in 'unfavourable recovering' condition, and 35.6% is in 'unfavourable no change' condition. The SAC is composed of four main habitat types, 'lowland dwarf shrub heath' (496.80 hectares), 'coniferous woodland' (144.33 hectares), 'broadleaved, mixed & yew woodland' (26.28 hectares), and 'standing open water & canals' (2.80 hectares).

Table 9-A: Woolmer Forest SAC – Condition Survey Findings

Main Habitat Type		Condition Classification		
		Favourable	Unfavourable – Recovering	
Dwarf shrub heath – lowland	496.80 ha	258.33 ha	238.47 ha	
Coniferous woodland	144.33 ha	144.33 ha	0.0 ha	
Broadleaved, mixed & yew woodland – lowland	26.28 ha	26.28 ha	0.0 ha	
Standing open water & canals	2.80 ha	2.80 ha	0.0 ha	
Totals	670.21 ha	431.74 ha	238.47 ha	

9.C Identification of Impact Pathways & Screening Evaluation

- 9.7 The published Site Improvement Plan (SIP) for the SAC (23 October 2014) for identifies the following key pressures and threats to the site's ecological integrity.
 - Changes in land management practices discussed in section 3.C.1;
 - Introduction or spread of invasive species discussed in section 3.C.2;
 - Changes in local hydrology discussed in section 3.C.3;
 - Changes in the location, extent and condition of the features for which the SAC is designated discussed in section 3.C.4;
 - Changes in military use of the land discussed in section 3.C.5;
 - Changes in air pollution (deposition of atmospheric nitrogen) discussed in section 3.C.6;
 - Changes in the risks of wildfire / arson discussed in section 3.C.7;

9.C.1 Change in land management

9.8 The features affected by changes in land management practices are the wet heathland with cross-leaved heath (H4010), European dry heaths (H4030), very wet mires often identified by an unstable `quaking` surface (H7140), and depressions on peat substrates (H7150). The SIP (pp.4/15 to 5/15) offers the following explanation of the nature of the identified threat:

"Parts of the complex have suffered from management neglect in the past & there are ongoing management issues. Common issues are lack of structural diversity, bracken encroachment & scrub development. Grazing is not practical in parts of the complex but viable alternative means of management to meet objectives are not yet in place. Grazing may also be constrained in parts because of resistance to fencing of common land."

- 9.9 The actions that have been identified as the principal means of addressing the threat are concerned with:
 - Improving habitat management to deliver effective heather management, scrub control and bracken control.
 - Establishing site-based partnerships to improve communication over management priorities and to advise and agree on annual work programmes.
 - Making changes to existing Higher Level Stewardship agreements in order to fit with impending changes in use of military training areas.
 - Investigating possible biomass to bioenergy use of material produced as a result of annual cutting of vegetation.
- 9.10 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon land management practices within the SAC. The SAC is located some 4.7 kilometres to the west of the closest boundary of the

Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.

9.11 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on land management practices within the SAC, and therefore would not affect the condition of the SAC habitats. No further assessment is required in respect of the changes in land management impact pathway.

9.C.2 Invasive Species

9.12 The features affected by the incursion of invasive plant species (*Crassula helmsii*) are the acid peat-stained lakes and ponds (H3160). The SIP (p.5/15) offers the following explanation of the nature of the identified pressure:

"Ponds & wetlands at Woolmer Forest are dominated by Crassula helmsii, adversely affecting habitat quality. Control is particularly difficult because of presence of rare amphibians. It is currently unclear to what extent the presence of Crassula is adversely affecting the dystrophic lake interest feature & indeed whether effective control is feasible."

- 9.13 The actions that have been identified as the principal means of addressing the pressure are concerned with investigating the ecological impacts of *Crassula helmsii* on the dystrophic pond and wet heath features and evaluating options for control, implementing control measures to reduce the dominance of the invasive species, dependent on the outcome of investigations and taking account of the need to protect natterjack toad and invertebrate populations.
- 9.14 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon wetland management practices, and in particular the control of invasive aquatic plant species, within the SAC. The SAC is located some 4.7 kilometres to the west of the closest boundary of the Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.
- 9.15 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the management of invasive aquatic plant species within the SAC, and therefore would not affect the condition of the SAC's wetland habitats. No further assessment is required in respect of the management of invasive species impact pathway.

9.C.3 Hydrological changes

9.16 The feature affected by changes in hydrology is the wet heathland with cross-leaved heath (H4010). The SIP (p.6/15) offers the following explanation of the nature of the identified pressure:

"Parts of the wet heath & mire areas at Woolmer Forest are affected by the presence of drainage ditches. The full impact of these has not yet been assessed but it is likely that they are having adverse impacts."

- 9.17 The actions that have been identified as the principal means of addressing the pressure are concerned with investigating and characterising the hydrological regime of the mires and the potential implications of reversing the effects of drainage, preparing habitat restoration plans for those mires affected by drainage, and implementing the mire restoration plans.
- 9.18 <u>Screening Evaluation</u>: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could impact upon drainage management practices within the SAC. The SAC is located some 4.7 kilometres to the west of the closest boundary of the Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park.
- 9.19 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on drainage management practices within the SAC, and therefore would not affect the condition of the SAC's heathland habitats. No further assessment is required in respect of the drainage management impact pathway.

9.C.4 Monitoring of Feature Location, Extent & Condition

9.20 The features affected are the acid peat-stained lakes and ponds (H3160), the wet heathland with cross-leaved heath (H4010), the European dry heaths (H4030), and the very wet mires often identified by an unstable 'quaking' surface (H7140). The SIP (p.7/15) offers the following explanation of the nature of the identified pressure:

"Work is needed by Natural England to clarify the conservation objectives for designated features at Woolmer Forest, to improve the evidence base on the interest features, to identify where these occur, & to provide greater linkage between objectives & military training use."

9.21 The actions that have been identified as the principal means of addressing the pressure are concerned with commissioning a study to identify the core areas utilised by Annex 1 birds for breeding and feeding, and to identify priorities for habitat enhancement, and providing clear advice on nature conservation objectives and habitat management priorities.

- 9.22 Screening Evaluation: There is no mechanism by which the aims and policies set out for the Surrey Hills AONB Management Plan could contribute to the development and maintenance of a more comprehensive evidence base in respect of the features of qualifying interest of the SAC. The SAC is located some 4.7 kilometres to the west of the closest boundary of the Surrey Hills AONB and is situated in the county of Hampshire and within the boundaries of the South Downs National Park. The aims and policies of the Surrey Hills AONB Management Plan only apply within the geographical area defined by the boundaries of the AONB, and do not extend into the neighbouring county or the South Downs National Park. Any opportunities for evidence collection or collation that might arise from schemes and initiatives promoted under the AONB Management Plan would be focused on the area of land covered by the AONB designation, which does not encompass the SAC.
- 9.23 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to any opportunities for evidence collection or collation in respect of the area of land covered by the SAC. No further assessment is required in respect of the features of qualifying interest impact pathway.

9.C.5 Military Activities / Uses

9.24 The features affected by changes in military activities and uses are the acid peat-stained lakes and ponds (H3160), the wet heathland with cross-leaved heath (H4010), European dry heaths (H4030), and the very wet mires often identified by an unstable `quaking` surface (H7140). The SIP (p.8/15) offers the following explanation of the nature of the identified pressure:

"There is currently poor coordination between management for military training purposes & nature conservation management at Woolmer Forest & scope for significant gains with closer working between partners. The production of an integrated management plan is needed."

- 9.25 The actions that have been identified as the principal means of addressing the pressure are concerned with preparing and implementing integrated management plans for military training areas.
- 9.26 Screening Evaluation: There is no mechanism by which the Surrey Hills AONB Management Plan would impact, either negatively or positively, on the ways in which the Ministry of Defence (MoD) manages those areas of land that it owns within the SAC designation. The Surrey Hills AONB Management Plan is concerned with the provision of guidance in respect of the management of land within the AONB boundary over the 5 year plan period, to protect the natural beauty of the AONB, and has no locus to influence the land use management practices employed by the military on MoD land outside the AONB.
- 9.27 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC with reference to the use of land within the SAC designation for military purposes. No further assessment is required in respect of the military uses impact pathway.

9.C.6 Air pollution: impact of atmospheric nitrogen deposition

9.28 The features affected by changes in nutrient nitrogen deposition from the atmosphere are the wet heathland with cross-leaved heath (H4010), the European dry heaths (H4030), the very wet mires often identified by an unstable 'quaking' surface (H7140), and the depressions on peat substrates (H7150). The SIP (p.8/15) offers the following explanation of the nature of the identified pressure:

"Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards Molinia & sedge dominated systems rather than Sphagnum dominated; ponds may be losing characteristic aquatic plant assemblage partly because of increasing nutrient status. This most likely to be an issue at Woolmer Forest but could be a chronic problem at all sites in the complex."

- 9.29 The actions that have been identified as the principal means of addressing the pressure are concerned with controlling and reducing nitrogen emissions and deposition, and with ameliorating the impacts of that deposition.
- 9.30 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased nutrient nitrogen deposition within the SAC would be as a consequence of recreational visits to the SAC and associated vehicle movements. The only policy set out in the AONB Management Plan that could contribute to additional recreational visits outside the AONB would be policy CE3 (affordable housing provision). The majority of the SAC is owned by the MoD and subject to active military training use with associated restrictions on public access. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB, and would therefore not be placed at significant risk of nutrient nitrogen deposition from vehicle movements associated with those visits. Implementation of the Management Plan would therefore not be expected to contribute to significant increases in the numbers of people making use of the SAC for recreational visits and associated nutrient nitrogen deposition.
- 9.31 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC as a consequence of additional recreational visits to the SAC and associated nutrient nitrogen deposition. No further assessment is required in respect of the nutrient nitrogen deposition impact pathway.

9.C.7 Wildfire / Arson

9.32 The features affected by the incidence of wildfire or arson are the wet heathland with cross-leaved heath (H4010), the European dry heaths (H4030), and the very wet mires often identified by an unstable 'quaking' surface (H7140). The SIP (p.8/15) offers the following explanation of the nature of the identified threat:

"Wildfire is a natural hazard identified in the National Risk Assessment / Register & Community Risk Registers. Wildfires in the south of England are likely to increase as identified in the Climate Change Risk Assessment (CCRA). Wildfires can be a serious risk to human life, residential & commercial property & critical national infrastructures, as well as being a high risk threat to reptile populations, inverts & plant diversity resulting in significant habitat loss for Annex 1 birds. Open heath is the predominant risk (dry & wet heath, peat habitats) as well as young coniferous woodland. Impacts can last for many years for example by the wholesale removal of all gorse & heather seedbank."

- 9.33 The actions that have been identified as the principal means of addressing the threat are concerned with completing wildfire risk assessments for all sites and preparing and implementing wildfire management plans, and with embedding wildfire mitigation and adaptation into local authority Local Development Plan policies and community risk registers.
- 9.34 Screening Evaluation: The only mechanism by which the implementation of the Surrey Hills AONB Management Plan could contribute to increased risks of arson or accidental fire within the SAC would be as a consequence of recreational visits to the SAC. The only policy set out in the AONB Management Plan that could contribute to additional recreational visits outside the AONB would be policy CE3 (affordable housing provision). The majority of the SAC is owned by the MoD and subject to active military training use with associated restrictions on public access. Whilst the possibility of some individuals choosing to visit the SAC cannot be ruled out, it is unlikely that the SAC would be a major destination for recreational visits arising from additional affordable housing provision within the Surrey Hills AONB, and would therefore not be placed at significant risk of arson or accidental fire as a consequence of those visits. Implementation of the Management Plan would therefore not be expected to contribute to significant increases in the numbers of people making use of the SAC for recreational visits and associated fire risks.
- 9.35 <u>Screening Conclusion</u>: The implementation of the Surrey Hills AONB Management Plan would not give rise to direct or indirect significant impacts on the SAC as a consequence of additional recreational visits to the SAC and associated risks of arson or accidental fire. No further assessment is required in respect of the arson and wildfire impact pathway.

9.D Conclusions

9.36 The assessment considered the seven impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 9-B. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 9-B: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in land management practices – see 9.C.1	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Introduction or spread of invasive species – see section 9.C.2	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in local hydrology – see section 9.C.3	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the location, extent and condition of the features for which the SAC is designated — see section 9.C.4	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in military use of the land – see section 9.C.5	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in air pollution (deposition of atmospheric nitrogen) – see section 9.C.6	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the risks of wildfire / arson – see section 9.C.7	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

9.F References

- 9.37 The following sources of information have been referred to as part of the assessment process for the Woolmer Forest SAC.
 - 9.37.1 EC Directive 92/43 on the Conservation of Natural Habitats & of Wild Fauna and Flora: Citation for Special Area of Conservation (SAC) Woolmer Forest SAC (Natural England (English Nature), May 2005).
 - 9.37.2 NATURA 2000 Standard Data Form: Special Areas of Conservation under the EC Habitats Directive (includes candidate SACs, Sites of Community Importance & designated SACs) Woolmer Forest SAC (Joint Nature Conservation Committee (JNCC), 25 January 2016).
 - 9.37.3 European Site Conservation Objectives for Ashdown Forest Special Area of Conservation (Site Code: UK0030304) (Natural England, 30 June 2014, v.2).
 - 9.37.4 Site Improvement Plan: Woolmer Forest SAC & Wealden Heaths Phase 2 SPA (Natural England, 23 October 2014).
 - 9.37.5 Woolmer Forest SSSI Condition Survey Report (Natural England, Designated Sites website, accessed 30 May 2018).

Chapter 10 Summary of HRA Conclusions

10.A Introduction & Overview of conclusions

- The assessment has considered the potential for the implementation of the revised Surrey Hills AONB Management Plan to give rise to likely significant effects on the SPAs and SACs that are situated within the AONB, or within 5 kilometres of the boundaries of the AONB. The assessment has considered the aims and policies set out in the revised AONB Management Plan against the impact pathways identified in the published SIPs for each SPA and SAC. Detailed assessment was carried out in respect of all four of the European sites covered in Part A of this report and in respect of one of the European sites covered in Part B of this report.
- 10.2 The assessment has concluded that implementation of the revised Surrey Hills AONB Management Plan is not likely, alone or in combination with other plans or development, to give rise to significant adverse impacts on the integrity of any of the SPAs or SACs covered by the assessment, subject to some minor changes to the wording of Policy B1 of the Management Plan.

10.B Mole Gap to Reigate Escarpment SAC

- The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Mole Gap to Reigate Escarpment SAC has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance and nutrient nitrogen deposition could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SAC from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.
- The assessment considered the five impact pathways identified by Natural England in the SIP for the SAC as key threats and pressures with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the revised Surrey AONB Management Plan (2020-2025) on the SAC via each pathway are summarised in Table 10-A.

Table 10-A: Summary of assessment conclusions for the Mole Gap to Reigate Escarpment SAC

Impact Pathway	Conclusion	
Changes arising from the incidence of plant disease (box blight) – see section 2.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices—see section 2.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in land management practices – see section 2.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the incidence of public access / disturbance – see section 2.C.4 and section 2.D.1	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SAC. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	Adverse – not significant with mitigation

10.C Thursley, Ash, Pirbright & Chobham SAC

- The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thursley, Ash, Pirbright & Chobham SAC has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, nutrient nitrogen deposition and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SAC from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.
- 10.6 The assessment considered the nine impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey AONB Management Plan on the SAC via each pathway are summarised in Table 10-B.

Table 10-B: Summary of assessment conclusions for the Thursley, Ash, Pirbright & Chobham SAC

Impact Pathway	Conclusion	
Changes in grazing practices – see section 3.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in forestry and woodland management practices – see section 3.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in local hydrological conditions – see section 3.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices – see section 3.C.4	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes due to the introduction of invasive species – see section 3.C.5	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SAC.	
Changes in the incidence of wildfire / arson – see section 3.C.6 and 3.D.1	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SAC.	

10.D Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA & the Thursley & Ockley Bogs Ramsar Site

10.7 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA and the Thursley & Ockley Bogs Ramsar Site has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, wildfire and arson, nutrient nitrogen deposition, and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the

SPA and the Ramsar Site from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.

10.8 The assessment considered the eight impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA and the features of interest of the Ramsar Site. The conclusions reached in respect of the likely impacts of the Surrey AONB Management Plan on the SPA and Ramsar Site via each pathway are summarised in Table 10-C.

Table 10-C: Summary of assessment conclusions for the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA & the Thursley & Ockley Bogs Ramsar Site

Impact Pathway	Conclusion	
	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA and/or Ramsar Site.	
Changes in the incidence of public access / disturbance- see section	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with
4.C.1 & section 4.D.1	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	mitigation
Changes in grazing practices – see section 4.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in scrub control practices— see section 4.C.3	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA and/or Ramsar Site.	
Changes in the incidence of wildfire / arson – see section 4.C.4 & section	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
4.D.2	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	

Impact Pathway	Conclusion	
Changes arising from air pollution (atmospheric nitrogen deposition) – see section 4.C.5 & section 4.D.3	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SPA and/or Ramsar Site from a range of sources (recreational / residential / agricultural / transport). Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	Adverse – not significant with mitigation
Changes in the condition, location & extent of the features of qualifying interest –see section 4.C.6	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the use of the land for military activities – see section 4.C.7	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes due to habitat fragmentation – see section 4.C.8 & section 4.D.4	Potential for likely significant adverse impacts as a consequence of increased recreational use of land within the SPA and/or Ramsar Site. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA and/or Ramsar Site.	Adverse – not significant with mitigation

10.E Wealden Heaths Phase 2 SPA

The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Wealden Heaths Phase 2 SPA has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, wildfire and arson, nutrient nitrogen deposition, and habitat fragmentation could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the

SPA from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.

10.10 The assessment considered the five impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA. The conclusions reached in respect of the likely impacts of the Surrey AONB Management Plan on the SPA via each pathway are summarised in Table 10-D.

Table 10-D: Summary of assessment conclusions for the Wealden Heaths Phase 2 SPA

Impact Pathway	Conclusion	
Changes in land management – see section 5.C.1	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
Changes in the condition, location or extent of the qualifying features – see section 5.C.2	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA.	
Changes in the incidence of public access / disturbance – see section 5.C.3 & section 5.D.1	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	
Changes in the use of the land for military activities – see section 5.C.4	No likely significant adverse impact. The Management Plan includes a number of policies that present opportunities for a positive contribution to the management of the threat/pressure.	Beneficial
	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA	
Changes in the incidence of wildfire / arson – see section 5.C.5 & section 5.D.2	Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission.	Adverse – not significant with mitigation
	For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	

10.F East Hampshire Hangers SAC

10.11 The assessment considered the three impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 10-E. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 10-E: Summary of assessment conclusions for the East Hampshire Hangers SAC

Impact Pathway	Conclusion	
Changes in air pollution (deposition of atmospheric nitrogen) – see section 6.C.1	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in forestry & woodland management – see section 6.C.2	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Introduction or spread of invasive species – see section 6.C.3	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

10.G Ebernoe Common SAC

10.12 The assessment considered the seven impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 10-F. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 10-F: Summary of assessment conclusions for the Ebernoe Common SAC

Impact Pathway	Conclusion	
Changes in forestry and woodland management practices – see section 7.C.1	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in off-site habitat availability—see section 7.C.2	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

Impact Pathway	Conclusion	
Changes due to habitat fragmentation – see section 7.C.3	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in land management practices – see section 7.C.4	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in local hydrological conditions – see section 7.C.5	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in air pollution (deposition of atmospheric nitrogen) – see section 7.C.6	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the incidence of public access / disturbance – see section 7.C.7	No direct or indirect significant impacts on the SAC likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

10.H Thames Basin Heaths SPA

- 10.13 The assessment of the implications of the implementation of the revised Surrey AONB Management Plan (2020-2025) for the ecological integrity of the Thames Basin Heaths SPA has concluded that overall the potential for 'likely significant effects' in respect of access and disturbance, wildfire and arson, and nutrient nitrogen deposition could be managed through established mitigation mechanisms, including relevant policies in adopted Local Plans. It is recommended that the wording in policy B1 of the Management Plan be strengthened and broadened to provide for the protection of the SPA from the adverse impacts that could arise from schemes or initiatives brought forward or otherwise promoted under the Management Plan.
- 10.14 The assessment considered the nine impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SPA. The conclusions reached in respect of the likely impacts of the Surrey AONB Management Plan on the SPA via each pathway are summarised in Table 10-G.

Table 10-G: Summary of assessment conclusions for the Thames Basin Heaths SPA

Impact Pathway	Conclusion	
Changes in the incidence of public access / disturbance – see sections 8.C.1 & 8.D.1	Potential for likely significant adverse impacts as a consequence of increased recreational pressure on the SPA. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	Adverse – not significant with mitigation
Changes in grazing practices – see section 8C.2	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in forestry and woodland management practices – see section 8.C.3	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in scrub control practices—see section 8.C.4	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the incidence of wildfire / arson – see sections 8.C.5 & 8.D.2	Potential for likely significant adverse impacts as a consequence of increased presence of people on land within the SPA. Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA.	Adverse – not significant with mitigation
Changes arising from air pollution (atmospheric nitrogen deposition) – see sections 8.C.6 & 8.D.3	Potential for likely significant adverse impacts as a consequence of increased emissions / deposition of nutrient nitrogen within the SPA from a range of sources (recreational / residential / agricultural / transport). Mitigation to be achieved through existing planning policies (Local Plans) and legal obligations (Conservation of Habitats & Species Regulations 2017) for development requiring planning permission. For other schemes / initiatives recommended that wording of Policy B1 of the AONB Management Plan be enhanced to provide for the protection of the SPA	Adverse – not significant with mitigation

Impact Pathway	Conclusion		
Changes in the condition, location and extent of the features of qualifying interest – see section 8.C.7	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects	
Changes in the use of the land for military activities – see section 8.C.8	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects	
Changes due to habitat fragmentation – see section 8.C.9	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects	

10.I Woolmer Forest

10.15 The assessment considered the seven impact pathways identified as key threats and pressures of concern with reference to the conservation objectives for the SAC. The conclusions reached in respect of the likely impact of the Surrey Hills AONB Management Plan on the SAC via each pathway are summarised in Table 10-H. Overall the assessment concluded that implementation of the AONB Management Plan would not give rise to likely significant effects against any of the identified impact pathways.

Table 10-H: Summary of assessment conclusions

Impact Pathway	Conclusion	
Changes in land management practices – see 9.C.1	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Introduction or spread of invasive species – see section 9.C.2	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in local hydrology – see section 9.C.3	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the location, extent and condition of the features for which the SAC is designated — see section 9.C.4	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in military use of the land – see section 9.C.5	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

Impact Pathway	Conclusion	
Changes in air pollution (deposition of atmospheric nitrogen) – see section 9.C.6	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects
Changes in the risks of wildfire / arson – see section 9.C.7	No direct or indirect significant impacts on the SPA likely to arise from implementation of the Surrey Hills AONB Management Plan	No significant effects

