

***Hart, Rushmoor and Surrey Heath
SPA Mitigation Project***

Project Report

January 2021



Contents

Executive Summary.....	vi
1. Introduction.....	11
2. The Project.....	14
3. Background Evidence and Research.....	42
4. The Identification of Mitigation Measures.....	61
5. Further Evidence and Research.....	63
6. Assessment of Potential Mitigation Measures.....	81
7. Assessment Summary and Conclusions.....	113
8. Implementation and Further Work.....	117
References.....	131
Appendix 1: Assessment Proforma Template.....	134
Appendix 2 – Other SPA Avoidance and Mitigation Examples.....	136
Appendix 3: The SANG Guidelines.....	162
Appendix 4: Evaluation of Potential SANG Sites.....	174

This report is supported by a collection of evidence/background studies which have been prepared alongside the main report on the HRSB SPA Project. The full set of published reports are set out below:

HRSB SPA Mitigation Project Report

SPA Visitor Distribution and Access Background Paper

Suitable Alternative Natural Greenspace (SANG) Background Paper

Strategic Access Management and Monitoring (SAMM) Background Paper

Suitable Alternative Natural Greenspace (SANG) Research Study

Habitat Restoration Feasibility Study

Access Restriction Research Study

Access Management Research Study

Car Parking Research Study

Dog Control Research Study

Mitigation Capacity Review & Supporting Advice

Acknowledgements

This report was written by the Project Managers in collaboration with Land Use Consultants (LUC) who particularly led on the assessment of potential mitigation measures. Thanks go to LUC for their ongoing support and input to the overall project, as well as their work on individual option research. Thanks also to Footprint Ecology, Ecological Planning and Research (EPR) and DTA Ecology whose research into mitigation options and capacity informed the project report. The research was also supported by data and information provided by 2Js Ecology and the Thames Basin Heaths SAMM team, for which we are grateful.

Executive Summary

Hart District Council, Rushmoor Borough Council and Surrey Heath Borough Council (HRSH) are part of a wider group of 11 local authorities affected by the Thames Basin Heaths Special Protection Area (TBH SPA). The TBH SPA comprises a network of heathland sites that provide habitat for the important ground-nesting bird species nightjar, Dartford warbler and woodlark. It was designated as SPA in March 2005 and is protected from adverse effects by the Conservation of Habitats and Species Regulations 2017 (as amended) (the ‘Habitats Regulations’).

It is well established that recreational disturbance can affect the SPA bird populations, particularly through impacts leading to reduction in breeding success through nest abandonment and increased predation of eggs or young. The majority of visitors who participate in recreation on the TBH SPA come from within 5km of the site, therefore development providing net increases in housing in this area could particularly lead to increased visitor pressure and disturbance. Within 400m of the SPA the impact of urban influences and recreational pressures from net new residential development is likely to be such that it is not possible to conclude no adverse effect on the SPA regardless of the mitigation provided. On this basis, there is a presumption against development within this zone.

The current approach to avoid and mitigate the impacts of new housing development within 400m-5km of the TBH SPA was originally set out within the South East Plan Policy NRM6 and further detailed in the TBH SPA Delivery Framework in 2009. The main measures required by developments include provision of Suitable Alternative Natural Greenspace (SANG) and contributions to access management, which is delivered through the Strategic Access Management and Monitoring (SAMM) project. Natural England created SANG guidelines which set out criteria which SANGs ‘must have’ as well as those which are desirable. The essential criteria include a minimum 2.3-2.5km circular walking route, as well as requirements relating to car parking provision, habitat variety and safe access for visitors and dogs.

The SANG and SAMM measures have been successfully delivered for housing developments across the TBH SPA area, ensuring that the requirements of the Habitats Regulations have been met with regard given to relevant case law and Natural England advice.

Hart, Rushmoor and Surrey Heath Councils form part of the HRSH Housing Market Area (HMA) with 86% of the HMA within the 5km zone (i.e. where SANG and SAMM is required). The Councils have worked collaboratively to deliver access to cross boundary SANG solutions. However, there are many constraints to delivering development and new SANGs in the HMA area. Opportunities for delivering

SANG are reducing and the Councils are concerned that that the current approach to avoidance and mitigation could result in significant difficulties in delivering net new residential development in parts of the HMA.

As a result, the three Councils were awarded funding by the Ministry of Housing, Communities and Local Government (MHCLG) under the Joint Working Planning Delivery Fund to undertake joint work to investigate alternative and complementary avoidance and mitigation measures, which could be delivered in order to mitigate net new residential development within the HRSH HMA.

An exploration of existing research, and mitigation approaches elsewhere informed the selection of options which were appropriate to be investigated further to identify whether they could provide an effective avoidance or mitigation measure (or measures) for the TBH SPA. The 11 options identified (in four groups) are set out below.

Group A – Alternative Sites/Green Infrastructure
Option 1 – SANG networks
Option 2 – Linear SANG
Option 3 - Enhancement or Creation of Recreational Routes
Option 4 – Smaller SANG/facilities with Smaller Catchments
Option 5 - Larger SANG with Larger Catchments
Group B – Habitat Management/Restoration
Option 6 – Habitat Management/Restoration
Group C – Access Management
Option 7 – Expansion of SAMM Project - Wardening service
Option 8 – Expansion of SAMM Project – Education and Communication service
Group D – Access Restriction/Control
Option 9 – Car Parking Availability/Access
Option 10 – Dog Control
Option 11 – Access Restriction

The options were then investigated further in associated research studies and assessed using proforma tables to identify which options could be appropriate to take forward and which may be unsuitable for further consideration at this time.

The SANG Research Study, informed by an online greenspace survey of residents within the HMA, showed that people visit a wide variety of sites. The features that people cited as important to them when choosing a greenspace to visit mainly aligned with the current SANG guideline ‘must have’

criteria. However, the popularity of sites which don't meet the criteria, e.g. linear routes, indicates that it may not be necessary for all sites to include all of the criteria to have an effective visitor draw. The Mitigation Capacity Review Study also found that 46% of the existing SANGs across TBH SPA do not include a minimum 2.3km circular walking route, indicating that SANGs can function effectively, appealing to the SPA user group despite not meeting all of the criteria. This is further supported by visitor surveys, for example there was a statistically significant drop in visitor numbers across the SPA between 2018 and 2005, despite a simultaneous 12.9% increase in housing, showing that existing SANGs are likely to be effective.

SANG networks could enable sites to be joined together so they perform as a connected network and can incorporate sites which may individually be considered unable to meet the usual criteria of a SANG. There is evidence that SANG networks already in place around the TBH SPA are effective; which was further supported by the Mitigation Capacity Review. The studies concluded that smaller SANGs particularly would work best as a linked cluster of sites. SANG networks would need to be carefully designed to avoid user conflict, particularly where existing sites and smaller linking routes are used. Cross boundary working may be useful to extend networks and share capacity across local authorities. It is recommended that SANG networks are taken forward as a suitable avoidance/mitigation option.

Linear SANG would include the creation or enhancement of sites which provided a linear route within them, rather than a circular walk. These could incorporate long-distance pathways and would preferably link to wider routes and/or SANG networks to provide opportunities for a variety of walks. Linear SANG would be wider and provide a more varied experience than a recreational route, for example a site with routes along a river with wider areas opening out next to it, creating an irregular shape and opportunities for dogs to exercise freely off-lead. The SANG Research Study found that linear sites were cited as very frequently visited, indicating that people would utilise linear routes where they could be provided or enhanced. Linear SANG would particularly need to be designed to avoid sites being viewed as 'too busy' and avoid user conflict. It is recommended that linear sites are taken forward within SANG networks, or independently where assessed as suitable in agreement with the competent authority and Natural England.

Recreational route creation or enhancement could enable features such as public rights of way to be used to provide walking opportunities away from the SPA. The greenspace survey found that although some existing recreational routes are used regularly, few people consider that 'clearly defined and waymarked walking trail(s)' are important features when considering which greenspace to visit. It may also be difficult to reduce user conflict and perceived site busyness if sites are narrow. This would also affect the capacity available for these sites. It is recommended that recreational routes are only

utilised as part of SANG networks to link other sites, as they are not considered able to work effectively alone.

Small SANGs have potential to principally provide sites close to homes for frequent local visits to meet some recreational demand without the provision of a minimum 2.3km circular walking route within the site, which often dictates the size of a SANG. Very small (<2ha) SANG are considered unlikely to be capable of delivering features required by the SPA user group and subsequently should not normally be considered unless being 'bolted on' to an existing SANG. Small SANG would therefore be defined as SANG 2ha or greater in size, without containing a 2.3km circular walking route. To provide mitigation for a significant number of dwellings there may need to be many small sites and existing use will need to be considered to establish remaining capacity. However, small sites could be linked together, contributing to SANG networks to provide a variety of walking routes, and circular walks where feasible. It is recommended that small SANG are utilised within SANG networks where possible and/or with links to connect a variety of routes both within and outside of the site. Where small SANGs are delivered independently their equivalent effectiveness would particularly need to be demonstrated and agreed with the competent authority and Natural England.

Larger SANG were investigated to identify whether they provide a wider draw which could be reflected in a larger catchment area. Data on the distance people travel to visit greenspaces indicated that people do travel further for specific activities e.g. horse riding and mountain biking but evidence for a 'formula' that would guarantee a catchment larger than 5km is limited. Although the provision of large SANG sites is beneficial as part of the suite of SANGs and could be linked to SANG networks, it is not generally recommended that larger SANG have larger catchments.

Legal advice suggested that habitat restoration could be utilised as an option to avoid impacts upon the integrity of the SPA overall, in line with regulation 63 of the Habitats Regulations, rather than automatically being considered as compensation (regulation 68). This is under the provision that any works would be additional to that which is already required to fulfil the UK's obligations to manage and conserve the SPA and that there is sufficient certainty of the benefits (i.e. they have already been provided and demonstrated to be performing in advance of any dwellings relying on this measure). The newly restored areas of heathland would also need to remain relatively undisturbed, to ensure no negative impacts upon the overall bird populations. There is currently no landowner agreement for the delivery of habitat restoration which would be essential in order to take this measure forward, therefore this option is not currently recommended.

The Access Management Study evidenced that there are opportunities to expand the SAMM wardening service to increase the interactions between wardens and SPA visitors, particularly with the less frequent SPA visitors. Further mitigation capacity could be provided for example by doubling the warden team, although it is important to recognise that this would still be likely to function most effectively as part of a mitigation package, including SANG. It is therefore not recommended that this option is taken forward at this time.

Some expansion of the education and communication aspects of the SAMM project is already planned so it is currently difficult to define measures which could be put in place to enable quantifiable additional benefits to be proven. In future extra staff resources could expand the reach of the education service as there are a large number of schools that could be engaged within 5km of the SPA (282 primary and 90 secondary schools). However, it is likely that the capacity provided by these measures would be relatively small. It is not recommended that this option is currently taken forward.

The Car Parking Research Study found that there are around 2,348 parking spaces over approximately 160 locations across the SPA. Surveys show the peak count of spaces being occupied at a maximum of 1,513 vehicles which is greatly below the overall number of spaces. This suggests there is a significant overprovision of parking at the SPA and means that any measures intended to reduce parking would need to be considerable to reduce choice to a level where distribution could be manipulated. If controls were implemented to alter visitor distribution, and this was found to be avoidance/mitigation under the Habitats Regulations, then it is still likely that the capacity would be minimal. There is currently no robust methodology to calculate this capacity. It is not currently recommended that this option is investigated further.

Dog controls were investigated in the Dog Control Research Study which suggested that theoretically preventing all dog walking on the SPA would be beneficial for the designated birds and could create mitigation for an equivalent of 16,191 dwellings. However, this would be unrealistic and undesirable, notwithstanding the fact that these dog walkers would require alternative spaces to recreate equal to an estimated 311ha of SANG. Measures which would be easier to implement include extending the period when dog walkers keep their dogs on the path (including February), requiring dogs to be on lead when asked, or creating zones where dogs could be excluded/required to be on lead during the bird breeding season. However, any mitigation benefit of these is likely to be relatively small and there is currently no way to quantify the additional mitigation capacity that could be created. Dog control measures are a beneficial component of the existing SAMM project work and have potential to be expanded however, it is not currently recommended that dog controls are utilised as an additional avoidance/mitigation option.

Access restrictions would also work best across the entirety of the SPA to avoid disturbance impacts on the SPA birds. However, this would be undesirable as the SPA is viewed as a valuable natural resource and would be difficult to achieve and enforce given the many different sites, landowners and kilometres of boundaries to be considered. Access restrictions may be effective as avoidance/mitigation if they could reduce instances of disturbance to the birds by visitors (e.g. by increasing the distance between visitors and birds) and therefore increasing the breeding success. However, they also need to be in areas where restrictions will be complied with and in locations that are ecologically suitable. Further information would be needed to calculate the capacity of access restriction measures as there is currently insufficient evidence on how restrictions that have been implemented previously have affected bird numbers and breeding success. It is not recommended that access restrictions are currently utilised as avoidance/mitigation alone although they could be investigated further to provide evidence on their effectiveness.

The measures which are recommended to be taken forward at this time are SANG networks, which may include linear and small SANG, with an option for linear and/or small SANG to perform alone where their equivalent effectiveness can be demonstrated. These options would still need to be supported by SAMM to ensure the avoidance and mitigation measures would be effective as an overall package.

As the only deviation from the existing SANG criteria would relate to the provision of the minimum 2.3-2.5km circular walk the existing SANG catchments would remain appropriate. Therefore, new SANGs would need to be provided within appropriate distances of future housing (2-12ha SANG: 2km catchment, 12-20ha SANG: 4km catchment, 20+ha SANG: 5km catchment, SANG without car parking: 400m catchment).

There should be a clear hierarchy of SANG provision, wherever possible SANG meeting all of the existing criteria should be delivered in the first instance. Only where this is not possible, for clearly established reasons, should the delivery of other options be considered. Sites which do not meet all of the current criteria should be agreed with the competent authority and Natural England.

Ensuring 'visible equivalence' in provision will be important for any SANG which does not meet all of the current SANG criteria, to ensure that the existing approach is not undermined. Any shortfall in the SANG criteria should be offset through other complementary means, for example an elevated provision rate (above the minimum 8ha/1,000 resident provision) and/or delivery of other high quality site features. This is likely to require case by case basis consideration, particularly as provision rates may also be affected by other factors such as existing visitor use, ecological sensitivities and

accessibility to the SPA. Demonstrating visible equivalence will be particularly important for any individual linear or small SANG sites.

The existing TBH SPA Delivery Framework already offers flexibility in the delivery of SANG which would enable networks, linear and small sites to be delivered in line with the broadly agreed approach. To improve clarity and consistency, it would be beneficial for these types of SANG to be formalised with modified SANG criteria to be provided by Natural England. The criteria could also set out the proposed hierarchy of provision, ensuring that the most desirable options are delivered in the first instance, with those not meeting all of the existing criteria requiring demonstration of visible equivalence. There are also opportunities for these approaches to be detailed within any updates of associated planning authority policies and guidance.

SANG sites could be identified in line with the existing approach, with sites being delivered and operational in advance of any associated dwellings being occupied with funding and management secured appropriately for in perpetuity (minimum 80 years). For strategic sites, which are particularly likely for SANG networks, local authorities, or others, may need to fund capital works with developer contributions recouping these and in-perpetuity management costs over time.

This project recommends the use of SANG networks, linear and small sites to provide mitigation for future development in areas where SANG land which meets the existing criteria may be unavailable. This approach could enable sites which have previously been discounted as SANG within the HMA to be delivered to provide mitigation for additional dwellings. It is acknowledged that the land available for greenspace delivery is finite and there will remain a point where alternative options may need to be reconsidered. This research could provide a basis for further investigation into possible measures, in advance of considering the provisions of regulation 64 of the Habitats Regulations.

1. Introduction

1.1 Hart District Council, Rushmoor Borough Council and Surrey Heath Borough Council (HRSH) are part of a wider group of 11 local authorities affected by the Thames Basin Heaths Special Protection Area (TBH SPA) (Map 1). The TBH SPA comprises a network of heathland sites that provides habitat for the important ground-nesting bird species nightjar, Dartford warbler and woodlark. It was designated as SPA in March 2005 and is protected from adverse effects by the Conservation of Habitats and Species Regulations.

1.2 Natural England has advised the affected local authorities that new housing within 5km of the SPA may result in harm to these bird species due to proposed housing throughout the SPA catchment causing increases in visitor pressure, which could result in birds being disturbed. Larger developments (more than 50 houses)¹ located between 5 and 7km of the SPA may also have an impact. As a result, the Thames Basin Heaths Special Protection Area Delivery Framework² was prepared by Natural England in consultation with the 11 affected Local Authorities. This was endorsed by the Thames Basin Heaths Joint Strategic Partnership Board (JSPB) in 2011 and is the recommended approach followed by the local authorities affected by the SPA.

1.3 Within 400m of the SPA the impact of net new residential development is likely to be such that it is not possible to conclude no adverse effect on the SPA regardless of the mitigation provided. On this basis, there is a presumption against development within this zone.

1.4 The Delivery Framework provides a recommended approach to the provision of measures between 400m and 5km to avoid an in-combination likely significant effect on the SPA and/or adverse effects on the integrity of the SPA (as interpreted in light of legal judgments such as Sweetman)³. The strategy advocates the provision of Suitable Alternative Natural Greenspace

¹ This reflects the approach proposed by the South East Plan Assessor, who recommended that between 5 and 7km from the edge of the SPA residential developments of over 50 houses should be assessed and may be required to provide appropriate mitigation. It is recommended that such cases be considered on a case by case basis.

² Thames Basin Heaths Joint Strategic Partnership Board (2009) *Thames Basin Heaths Special Protection Area Delivery Framework*

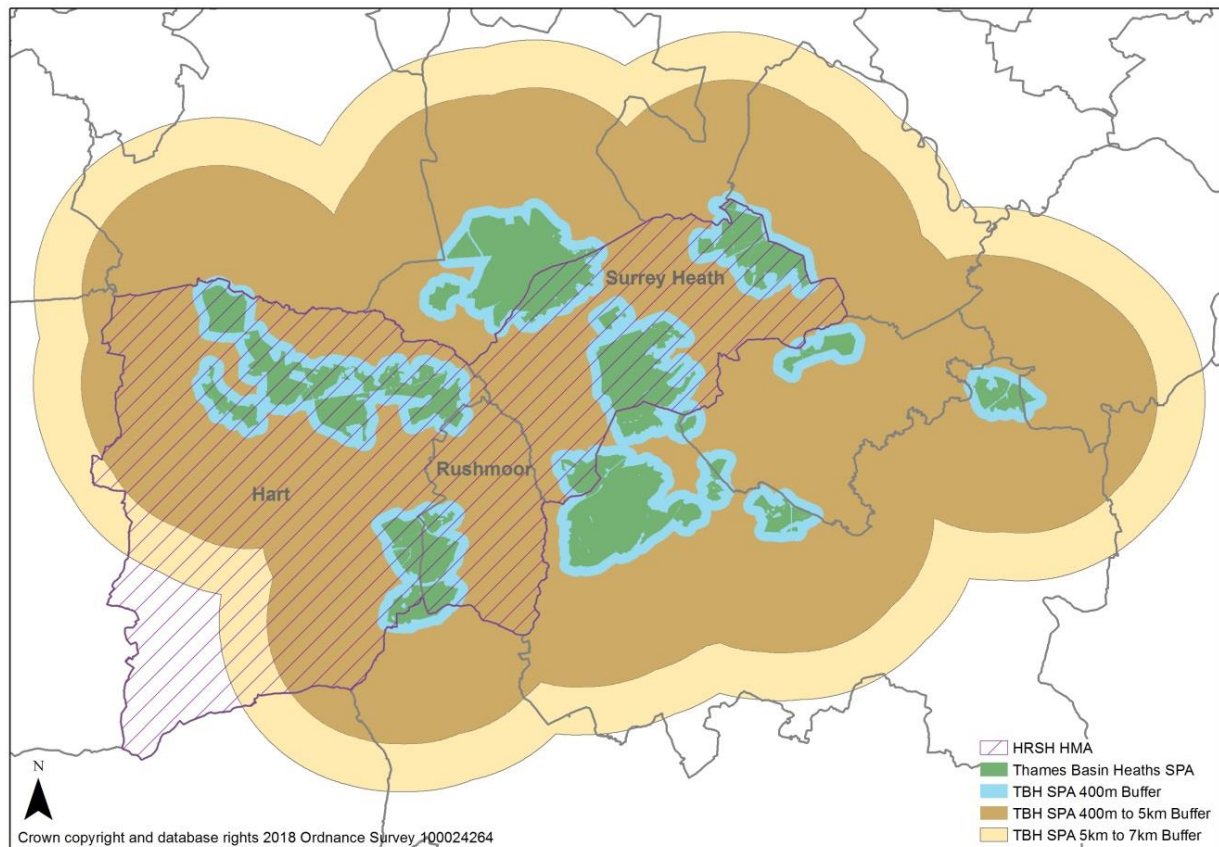
³ Court of Justice of the European Union Judgment (2018) *People Over Wind and Sweetman v. Coillte Teoranta C-323/17*

(SANG) to deflect visitors from the SPA onto less sensitive natural areas and Strategic Access Management and Monitoring (SAMM) measures, with a team of 11 rangers who educate the users of the SPA and the public in general regarding the need to keep dogs on paths and how to avoid disturbing the SPA birds. This strategy alongside ongoing habitat management of the SPA has been successful and the 2018 SPA Visitor Survey⁴ showed a statistically significant decrease in visits to the SPA since 2005 despite a 12.9% increase in housing numbers. The designated bird populations are generally stable or increasing in number although Dartford warbler numbers are variable as they are particularly affected by weather conditions.

1.5 Hart, Rushmoor and Surrey Heath Councils form part of the HRSH Housing Market Area (HMA) (Map 1). A significant proportion (92%) of the HMA is either designated as SPA or within the three buffer zones for the SPA (i.e. within 7km). 27% of the HMA is designated as SPA or within the 400m. 59% is between the 400m and 5km zone (i.e. where SANG is required). The Councils have worked collaboratively to deliver access to cross boundary SANG solutions. However, there are many constraints to delivering development and new SANGs in the HMA area. Opportunities for delivering SANG are reducing and the Councils are concerned that that the current approach to avoidance and mitigation could result in significant difficulties in delivering net new residential development in parts of the HMA.

⁴ EPR (2018) *Visitor Access Patterns on the Thames Basin Heaths SPA*

Map 1: Thames Basin Heaths Special Protection Area, buffer zones and the Hart, Rushmoor and Surrey Heath Housing Market Area (HMA).



1.6 As a result, the three Councils have been awarded funding by the Ministry of Housing, Communities and Local Government (MHCLG) under the Joint Working Planning Delivery Fund to undertake joint work to investigate and seek to implement alternative and complementary avoidance and mitigation measures, which can be delivered in order to mitigate net new residential development within the HRSH HMA.

2. The Project

Introduction

- 2.1. The overall aim of the two-year joint project is to identify a complementary alternative mitigation measure (or measures), which can be delivered in order to mitigate net new residential development within the HMA.
- 2.2. The three Councils are seeking to achieve three project outcomes:
 - 1) Identification and evaluation of potential alternative and complementary mitigation measures.
 - 2) Selection of a preferred/workable mitigation measure or measures, agreed in principle by Natural England and the three authorities.
 - 3) Creation of an implementation plan, agreed by Natural England and the three authorities.
- 2.3. A Project Board has been established. This includes officer representatives from Hart, Rushmoor and Surrey Heath Councils (the competent authorities) and a representative from Natural England (the statutory advisor). Terms of reference for the Project Board were agreed in March 2019 and staffing changes were reflected in an update in February 2020.
- 2.4. The SPA Mitigation Project Board oversee the project and support the preparation of technical reports. Technical reports have been prepared by the Project Manager with reporting and data provided by LUC, Footprint Ecology, EPR, and DTA Ecology. Additional data has been provided by Natural England and 2Js Ecology. Any decisions made as a result of the findings of this project based on these technical reports, which exercise the functions of a planning authority or competent authority (including setting formal planning policy or other planning decisions), will be a matter for each individual Council.
- 2.5. The focus of the project is to provide robust evidence to demonstrate whether an alternative mitigation strategy exists in a scenario where no further SANG can be identified to mitigate the impact of development in a particular local authority area. It is not an evaluation of the existing mitigation approach. In addition, whilst the aim of the project is to consider alternatives to the delivery of SANG, it is important to note that the evaluation of the alternatives will be assessed

in the context of the complementary nature of the existing three pronged approach: on-site access management, on-site habitat management and off-site greenspace provision.

Methodology for Evaluation

2.6. The competent authority has to be confident that any approach to avoidance or mitigation is legally robust. This needs to be based on evidence that the approach will be effective, reliable, timely and that there is sufficient certainty with regard to delivery. Any measures proposed must be sufficient, in place before any adverse effect would occur, and effective for as long as there is expected to be a risk.

2.7. In order to demonstrate this, it is necessary to:

- understand the measures proposed and how they will avoid or mitigate any adverse effect;
- provide evidence in relation to how they will be delivered, implemented and by whom;
- identify how and when they could be implemented; and
- identify how the measures will be secured, monitored and enforced.

2.8. The stages of the project are as follows:

Stage 1 - Scoping

2.9. The purpose of the scoping stage was to:

- Describe the approaches to SPA mitigation that have been explored to date, including mitigations measures that have been explored in the past and measures being implemented to mitigate impact on other SPAs;
- Identify other potential mitigation / avoidance options to be explored further during the project; and
- Develop assessment criteria against which each option could be evaluated.

2.10. The approach and options being considered were informed by stakeholder engagement where possible, and through review by the Project Board and others. This included a meeting with ecologists from the Local Authorities and ecological consultants, as well as the SAMM Project Manager and Natural England. A workshop was planned to enable further input from non-governmental organisations (e.g. RSPB and Wildlife Trusts) and major SPA landowners (e.g. Crown Estate and MoD) as well as housebuilder representatives, however this was cancelled due to lack of confirmed attendance.

- 2.11. The assessment criteria is set out in a proforma in Appendix 1; along with an explanation of how each criterion is assessed and scored. The criteria need to be applicable across a range of options types, enable the implications of each option to be presented clearly, and allow different types of option to be compared alongside each other. As the proforma collates a range of qualitative and quantitative criteria, a Red/Amber/Green (RAG) rating system was used, which enables the potential advantages and disadvantages of each option to be highlighted and compared.
- 2.12. Evidence referred to at the scoping stage, for example to describe approaches to SPA mitigation that have been explored to date, forms the basis of the more detailed evidence gathering and gap analysis undertaken at the next stage.

Stage 2 - Evidence Gathering and Gap Analysis

- 2.13. Following agreement of the methodology and avoidance & mitigation measures identified at the scoping stage, the project considered what is known about each option, collated the evidence base for each, and identified any gaps in evidence. Any studies necessary to enable a preferred option to be investigated were also identified; these studies were commissioned as part of this project. Evidence was gathered using a combination of desk-based research, GIS analysis, an online survey, and consultation with stakeholders, e.g. the SAMM team and landowners where appropriate. The national lockdowns and measures implemented due to Covid-19 impacted the ability for expanded stakeholder engagement. However, presentations were given to stakeholders to update them on the project progress, including at the Joint Strategic Partnership Board meetings and associated Officers Group. Offers of individual meetings were extended and these were held with interested parties e.g. Bracknell Forest Council.
- 2.14. The purpose of stage 2 was to:
- Characterise and describe each option being considered, for example: whether it would provide avoidance, mitigation or compensation; how it would need to be implemented and who would need to be involved.
 - Provide guidance on whether the options being considered would meet the requirements of the Habitats Regulations and, if not, what would be required to enable them to.
 - Appraise the evidence base for each option and identify any gaps.

- Identify evidence to be gathered to: address any gaps in information identified, determine whether the options are practicable, and to demonstrate that all alternatives have been fully explored. Additional studies undertaken as part of this project support the appraisal of options.

Stage 3 - Assessment and Identification of Preferred Option

- 2.15. As sufficient evidence was gathered to understand the implications of each avoidance / mitigation measure, they were assessed against the criteria described at the scoping stage (Appendix 1).
- 2.16. This report presents the analysis of all options, to fully describe the preferred options and reasons for selecting them and discounting other options. Justification for the preferred options is provided with reference to the evidence base, to demonstrate that all feasible alternatives have been explored.
- 2.17. Agreement on the principle of implementing the preferred options was sought from the three authorities and Natural England (collectively forming the HRSB SPA Project Board).

Stage 4 – Implementation and Further Work

- 2.18. The implementation and further work section in this report sets out how workable mitigation / avoidance measures would be taken forward by describing:
- How mitigation / avoidance measures could be taken forward;
 - Key stakeholders for the implementation of the option;
 - Likely cost estimates of the measure and potential sources of funding;
 - What amendments may be appropriate to includes measures within policies and/or guidance documents;
 - Measures required to meet the Habitats Regulations.

The Legal and Policy Context (relevant to the TBH SPA)

National Legislation

- 2.19. Special Protection Areas (SPAs) are strictly protected by the Habitats Regulations (The Conservation of Habitats and Species Regulations 2017 (SI 2017/1012), as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579)).

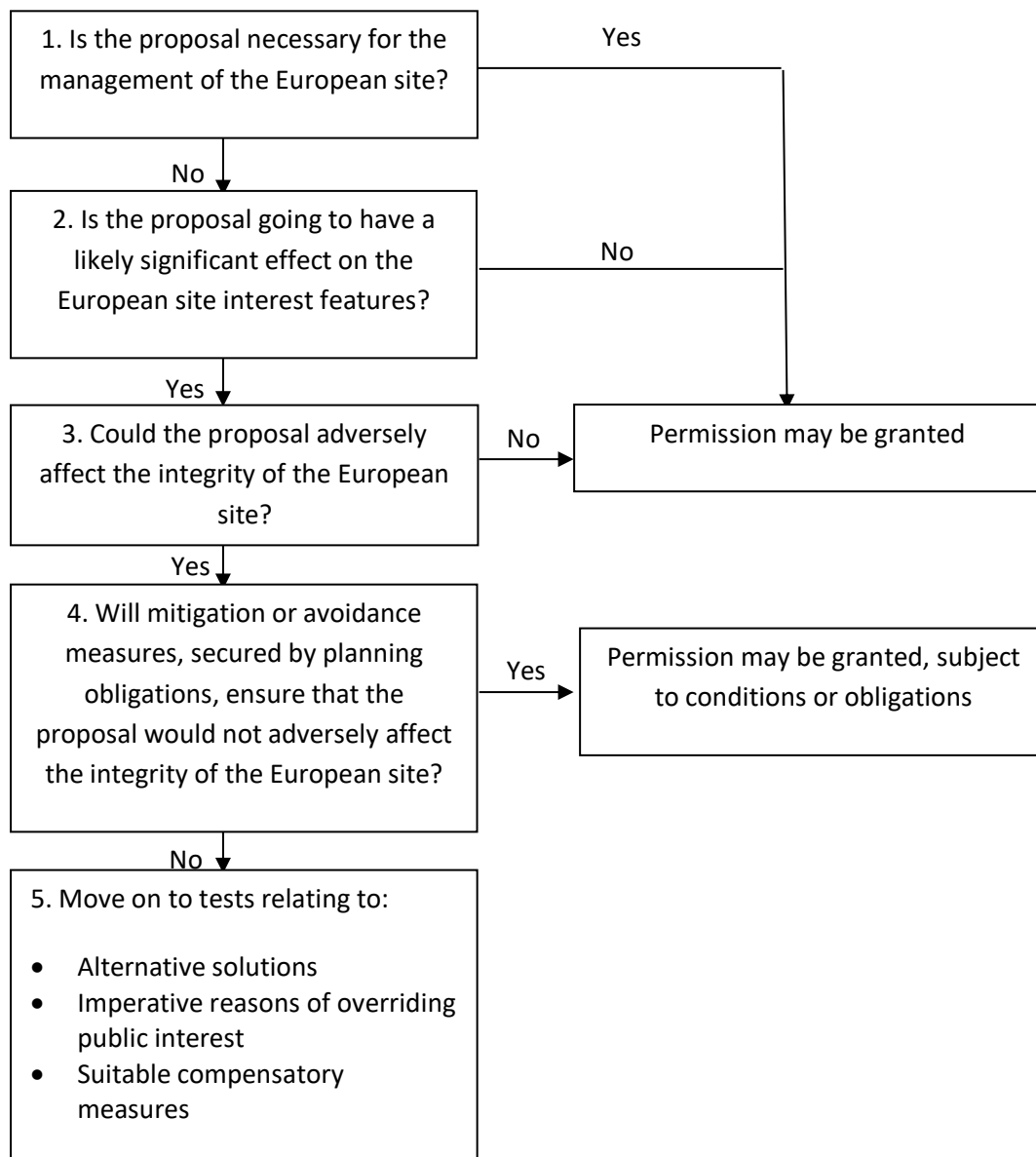
- 2.20. The Regulations aim to protect a network of SPAs, SACs and Ramsar sites that have rare or important habitats and species in order to safeguard biodiversity; SPAs are classified for rare and vulnerable birds, and for regularly occurring migratory species.
- 2.21. The Habitats Regulations require special measures to conserve the habitats of certain rare and migratory species of birds, and to classify the most suitable areas of such habitats as SPAs. These sites are designated to protect wild birds, and to provide sufficient diversity of habitats for all species so as to maintain populations at an ecologically sound level.
- 2.22. The Joint Nature Conservation Committee (JNCC), on behalf of the statutory country conservation agencies and government, published SPA Selection Guidelines⁵ for the UK. Each SPA has been established according to the principles laid out in the selection guidelines.
- 2.23. Both competent authorities and statutory advisors have a role to play in implementing the Habitats Regulations. The competent authority is principally the decision-making authority. The statutory adviser is the relevant nature conservation agency, whom the competent authority is required to consult before making a decision. For this project, the competent authorities are Hart District Council, Rushmoor Borough Council and Surrey Heath Borough Council. The statutory advisor is Natural England.
- 2.24. Competent authorities have a duty (under regulation 63(5)) to ensure that all the activities they regulate have no adverse effect on the integrity of any of the sites designated under the Habitats Regulations.
- 2.25. 63(5)“ *In the light of the conclusions of the assessment, and subject to regulation 64, the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).*”
- 2.26. Regulation 65(2) requires that the competent authority carry out an Appropriate Assessment of the implications of the project or plan for the site, in view of its conservation objectives. The

⁵ Joint Nature Conservation Committee (1999) *The Birds Directive Selection Guidelines for Special Protection Areas* [online]

same requirements apply to land use plans (for example Supplementary Planning Documents) in regulation 105.

- 2.27. The decision-maker must consider the likely and reasonably foreseeable effects in order to ascertain that the proposal will not have an adverse effect on the integrity of the SPA with certainty, using the precautionary principle before it may grant permission.
- 2.28. The Regulations provide an exemption, which would allow a plan or project to be approved in limited circumstances even though it would or may have an adverse effect on the integrity of a site: *64.—(1) If the competent authority is satisfied that, there being no alternative solutions, the plan or project must be carried out for imperative reasons of overriding public interest (which, subject to paragraph (2), may be of a social or economic nature), it may agree to the plan or project notwithstanding a negative assessment of the implications for the for the European site or the European offshore marine site (as the case may be).*
- 2.29. These tests must be interpreted strictly and can only be formally considered once an Appropriate Assessment has been undertaken (step 3 and 4 in figure 2).

Figure 2: Flow chart showing the Habitats Regulations Assessment process



Relevant Case Law

2.30. There are a number of judgments that have been handed down by the Court of Justice of the European Union (CJEU) relating to how the Habitats Directive⁶ has been interpreted. The

⁶ European Commission Council (1992) *Directive 92/43/EEC of 21 May 1992 on the Conservation of natural habitats and of wild fauna and flora*

Habitats Directive is EU legislation which no longer applies within the UK but associated caselaw may still be relevant to the Habitats Regulations (EU derived domestic legislation). The most recent and relevant cases are summarised in the following section.

2.31. In the *Waddenzee*⁷ case (C-127/02), the ECJ ruled that:

- An effect should be considered 'likely', "*if it cannot be excluded, on the basis of objective information, that it will have a significant effect on the site*" (para 44).
- An effect should be considered 'significant', "*if it undermines the conservation objectives*" (para 48).
- Where a plan or project has an effect on a site "*but is not likely to undermine its conservation objectives, it cannot be considered likely to have a significant effect on the site concerned*" (para 47).

2.32. The Advocate General's Opinion to CJEU in the case of *Sweetman and others v An Bord Pleanala* (C-258/11)⁸ commented that: "*The requirement that an effect in question be 'significant' exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on the site are thereby excluded. If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.*"

2.33. This opinion (the 'Sweetman' case⁹) therefore allows for the authorisation of plans and projects whose possible effects, alone or in combination, can be considered 'trivial' or de minimis; referring to such cases as those "*that have no appreciable effect on the site*". In practice such effects could be screened out as having no likely significant effect - they would be 'insignificant'.

2.34. In 2014, the European Court of Justice (ECJ) handed down a judgment in the case of *Briels v Minister van Infrastructuur en Milieu* (C-521/12)¹⁰. The case concerned the widening of a motorway in Holland, which an Appropriate Assessment concluded would affect an area of

⁷ Judgment of the Court (2004) *Waddenzee*, C-127/02, EU:C:2004:482.

⁸ Judgment of the Court (2013) *Sweetman and others v An Bord Pleanala*, C-258/11, EU:C:2013:220.

⁹ *Ibid*

¹⁰ Judgment of the Court (2014) *Briels v Minister van Infrastructuur en Milieu*, C-521/12, EU:C:2014:330.

damp meadows and fens designated as a Special Area of Conservation. In order to mitigate, it was proposed that the meadows be extended alongside other measures to manage the existing site. This was challenged on the grounds that this represented compensation rather than mitigation. As a result, the process set out in Article 6 was not followed correctly and they did not meet the requirements of Article 6(4). The judgment concluded that: “...*protective measures provided for in a project which are aimed at compensating for the negative effects of the project on a Natura 2000 site cannot be taken into account in the assessment of the implications of the project provided for in Article 6(3)*”.

2.35. As set out in figure 2 the process for assessing the potential effects on European protected sites includes a screening stage, to make an assessment of whether likely significant effects exist. Following that, if a likely significant effect is identified then an Appropriate Assessment is undertaken to establish whether adverse effects on the integrity of protected sites would occur. Appropriate Assessment is not a technical term; it simply means ‘an assessment that is appropriate’ for the plan or project in question. As such, the law purposely does not prescribe what it should consist of or how it should be presented; these are decisions to be made on a case by case basis by the competent authority.

2.36. In November 2018, the *Holohan v An Bord Pleanala* (C-461/17)¹¹ judgment concluded, amongst other things, that the Habitats Directive “...*must be interpreted as meaning that an ‘appropriate assessment must, on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site.*” The judgment clarifies the assessment of secondary effects and requires Appropriate Assessment to consider complex interactions and dependencies, for example impacts on habitats functionally linked to a SPA.

¹¹ Judgment of the Court (2018) *Holohan v An Bord Pleanala*, C-461/17, EU:C:2018:883

- 2.37. In April 2018, the ECJ issued a decision in the case of *People Over Wind, Peter Sweetman v Coillte Teoranta* (C-323/17)¹². The ruling stated that proposed mitigation measures cannot be taken into account for the purposes of screening under the UK Habitats Regulations but should be reserved for the Appropriate Assessment stage. This judgment particularly affected TBH SPA authorities who have since been required to complete Appropriate Assessments for all net new dwelling applications within 5km, even where appropriate mitigation is secured.
- 2.38. *Hilde Orleans & Others v Vlaams Gewest* (C-387/15 and C-388/15)¹³ related to a proposed development at the Port of Antwerp, for which there was a mandatory requirement for nature reserves to be created within an estuarine SAC. It was argued that these could be considered ‘conservation measures’ (i.e. preventative) as the new habitat would be fully developed before adverse effects on the SAC would occur; however, the judgment ruled that the measures were neither preventative nor mitigation but should be considered to be compensation.
- 2.39. A further ruling by the ECJ in July 2018 clarified the distinction between mitigation and compensation measures and when in the assessment process under the Habitats Directive each should be considered (*Grace v An Bord Pleanala* (C-164/17)¹⁴). The case involved the impact of a wind farm on hen harrier habitat at a European site. The ECJ found that measures to address the potential effects of the wind farm on the habitat were compensatory, not mitigation measures and should be examined at the IROPI stage in accordance with Article 6(4), to ensure that they provide the necessary protection for the overall coherence of the European site network.
- 2.40. The court said that:
- 2.41. “...there is a distinction to be drawn between protective measures forming part of a project and intended to avoid or reduce any direct adverse effects that may be caused by the project in order to ensure that the project does not adversely affect the integrity of the area, which are covered

¹² Judgment of the Court (2018) *People Over Wind, Peter Sweetman v Coillte Teoranta*, C-323/17, EU:C:2018:244

¹³ Judgment of the Court (2016) *Hilde Orleans & Others v Vlaams Gewest*, Joined cases C-387/15 and C-388/15, EU:C:2016:583

¹⁴ Judgment of the Court (2018) *Gewes Grace v An Bord Pleanala*, C-164/17, EU:C:2018:593

by Article 6(3), and measures which, in accordance with Article 6(4)¹⁵, are aimed at compensating for the negative effects of the project on a protected area and cannot be taken into account in the assessment of the implications of the project.”

National Planning Policy and Guidance

2.42. The National Planning Policy Framework (NPPF) 2019¹⁶ (paragraph 175 and 177) states:

2.43. *“When determining planning applications, local planning authorities should apply the following principles: a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;”*

2.44. *“The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.”* Planning Practice Guidance (PPG)¹⁷ provides more guidance on the application of the mitigation hierarchy and suggests the following questions are considered:

- Avoidance – can significant harm to wildlife species and habitats be avoided, for example through locating on an alternative site with less harmful impacts?
- Mitigation – where significant harm cannot be wholly or partially avoided, can it be minimised by design or by the use of effective mitigation measures that can be secured by, for example, conditions or planning obligations?
- Compensation – where, despite whatever mitigation would be effective, there would still be significant residual harm, as a last resort, can this be properly compensated for by measures to provide for an equivalent value of biodiversity?

¹⁵ of the EU Habitats Directive. In the UK the associated Habitats Regulations are Regulation 61 & 63 (Article 6(3)) and Regulation 64 & 68 (Article 6(4)).

¹⁶ MHCLG (2019) *National Planning Policy Framework*

¹⁷ MHCLG (2018) *Planning Practice Guidance* [online], Natural Environment, Paragraph: 018 Reference ID: 8-018-20140306

- 2.45. The definition of ‘habitats site’ in the NPPF is described as any site within the definition of regulation 8 of the Habitats Regulations, this includes designated and candidate protected sites.
- 2.46. The PPG¹⁸ refers to the special compensation considerations that apply in the case of sites protected by the Habitats Regulations. If harm to such sites is to be allowed (because there are no alternatives and ‘imperative reasons of overriding public interest’ can be shown) the Regulations require that all necessary compensatory measures are taken to ensure the overall coherence of the national site network (previously named Natura 2000) as a whole is protected.

Thames Basin Heaths Special Protection Area

- 2.47. The Thames Basin Heaths Special Protection Area was classified in March 2005¹⁹. It covers a total area of 8,274.72 hectares and consists of a number of separate sites located across the counties of Surrey, Hampshire and Berkshire in southern England. Together with the nearby Wealden Heaths SPA and Ashdown Forest SPA, the Thames Basin Heaths form part of a complex of heathlands in southern England that support important breeding bird populations.
- 2.48. The SPA consists of areas of agriculturally-unimproved heathland, scrub and woodland which were once almost continuous but are now fragmented by roads, urban development and farmland. The geology of the area consists of sand and gravel sediments which give rise to sandy or peaty acidic soils. These support dry heath vegetation in well-draining areas and wet heath vegetation in low-lying shallow slopes and bogs.

Qualifying Features

- 2.49. The site qualifies under regulation 15 of the Habitats Regulations. As detailed in the associated JNCC guidance for the selection of SPA sites²⁰ the Thames Basin Heaths regularly supports 1% or more of the Great Britain (GB) populations of the following species listed in Annex I of the Birds Directive²¹:

¹⁸ MHCLG (2018) *Planning Practice Guidance* [online], Natural Environment, Paragraph: 020 Reference ID: 8-020-20140306

¹⁹ English Nature (2005) *Thames Basin Heaths SPA Citation*

²⁰ Joint Nature Conservation Committee (1999) *The Birds Directive Selection Guidelines for Special Protection Areas*

²¹ European Commission Council (1979) *Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds*

- A302 Dartford Warbler (*Sylvia undata*) – 27.8% of the GB population
- A224 Nightjar (*Caprimulgus europaeus*) – 7.8% of the GB population
- A246 Woodlark (*Lullula arborea*) – 9.9% of the GB population

2.50. Within the SPA, the principal habitats supporting these qualifying species are lowland heathland and rotationally managed coniferous plantation woodland. Nightjar (*Caprimulgus europaeus*) and woodlark (*Lullula arborea*) both nest on the ground, often at the woodland/heathland edge, and Dartford warbler (*Sylvia undata*) often nests in gorse. Scattered trees and scrub are used for roosting.

2.51. The site also supports a number of other Annex I species, which occur in non-breeding numbers of less than European importance (less than 1% of the GB population), including:

- hen harrier (*Circus cyaneus*),
- merlin (*Falco columbarius*),
- short-eared owl (*Asio flammeus*), and
- kingfisher (*Alcedo atthis*).

Conservation Objectives

2.52. Natural England has identified the following Site Conservation Objectives²² for the SPA:

“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*

²² Natural England (2014) *European Site Conservation Objectives for Thames Basin Heaths Special Protection Area*

- *The population of each of the qualifying features, and,*
- *The distribution of the qualifying features within the site.”*

2.53. These Conservation Objectives are referred to in the Habitats Regulations²³ . They must be considered when a competent authority is required to make a Habitats Regulations Assessment, including an Appropriate Assessment, under the relevant parts of this legislation.

2.54. The Objectives and the accompanying Supplementary Advice (where available) also provide a framework to inform the management of European Sites, and the prevention of deterioration of habitats and significant disturbance of its qualifying features required under the Habitats Regulations.

2.55. These Conservation Objectives are set for each bird feature for a Special Protection Area (SPA). Where the objectives are met, the site will be considered to exhibit a high degree of integrity and to be contributing to achieving the aims of the Habitats Regulations.

Supplementary Advice on Conservation Objectives

2.56. In 2016, Natural England published supplementary advice²⁴ for the European Site Conservation Objectives relating to Thames Basin Heaths SPA. This includes targets relating to reducing the disturbance of the qualifying features. It also includes targets on the maintenance of supporting habitats and processes or features upon which the birds depend. This is important as management of additional areas can also increase the resilience of the SPA and annex 1 bird species, ensure that designated sites perform and positively contribute to the site objectives.

2.57. The supplementary advice should be used alongside the conservation objectives when assessing activities, plans or projects that could affect the SPA.

Seasonality of SPA Features

2.58. The table below highlights the months in which significant numbers of each mobile qualifying feature are most likely to be present at the SPA during a typical calendar year. This table is taken

²³ The Stationary Office (2017) *The Conservation of Habitats and Species Regulations 2017*

²⁴ Natural England (2016) *European Site Conservation Objectives: Supplementary Advice on Conserving and Restoring Site Features - Thames Basin Heaths Special Protection Area (SPA)*

from the supplementary advice²⁵ and is provided as a general guide only. The months which are *not* highlighted in grey are not ones in which the features are necessarily absent, rather that features may be present in less significant numbers in typical years. For example, in the Thames Basin Heaths SPA, woodlark and Dartford warbler are likely to be present in those months outside of their core breeding season. Furthermore, in any given year, features may occur in significant numbers in months in which typically they do not.

Table 1: Breeding Seasons for SPA Bird Species

Feature	Season	J	F	M	A	M	J	A	S	O	N	D
Dartford Warbler	Breeding											
Nightjar	Breeding											
Woodlark	Breeding											

Component Sites of Special Scientific Interest (SSSI)

2.59. The SPA is comprised of the following component SSSIs:

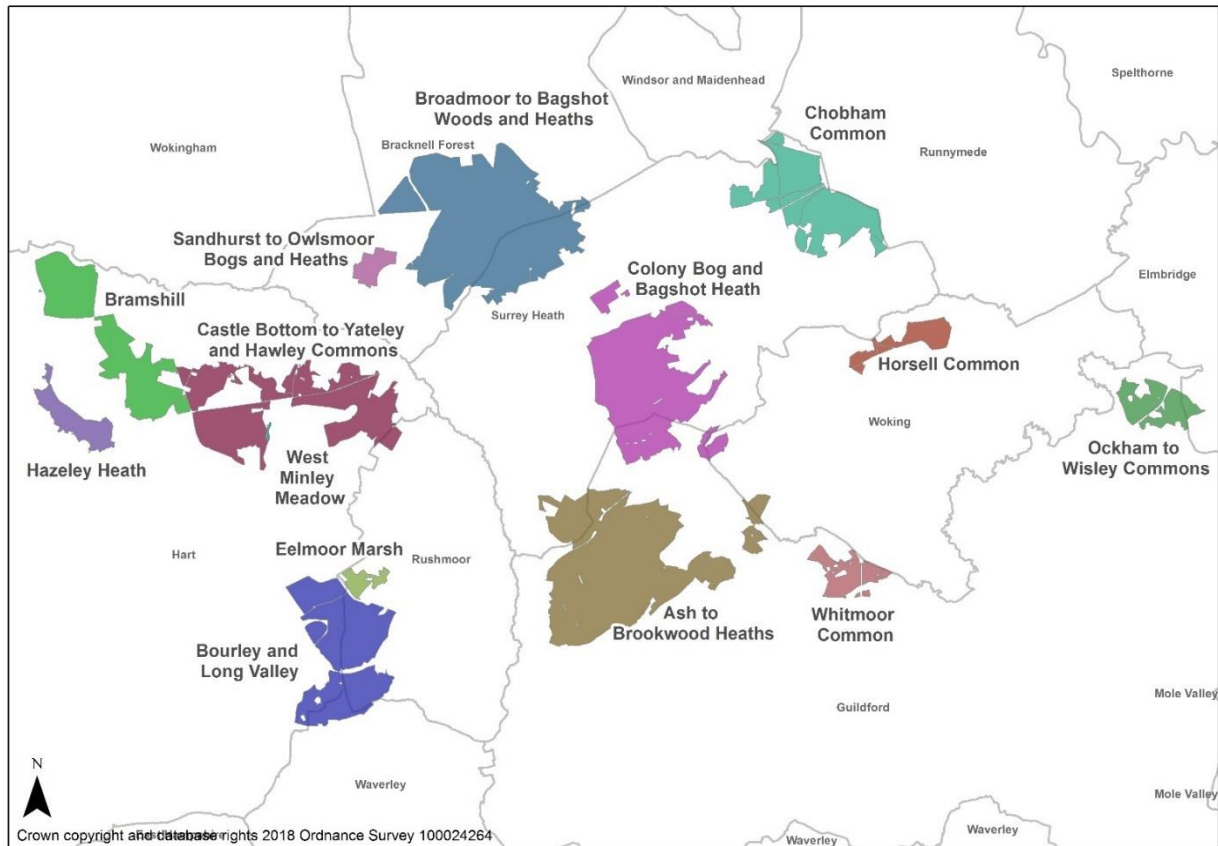
- Ash to Brookwood Heaths
- Bourley and Long Valley
- Bramshill
- Broadmoor to Bagshot Woods and Heaths
- Castle Bottom to Yateley and Hawley Commons
- Chobham Common
- Colony Bog and Bagshot Heaths
- Eelmoor Marsh
- Hazeley Heath
- Horsell Common
- Ockham and Wisley Commons
- Sandhurst to Owlsmoor Bogs and Heaths
- Whitmoor Common

2.60. These SSSIs are designated for a wide range of species and habitats, and whilst the reasons for designation typically include the presence of the SPA birds and supporting habitat, they may

²⁵ *Ibid*

also be designated for additional features which do not share clear inter-dependencies with the SPA qualifying features (e.g. the presence of reptiles, specific plants, or dragonflies and damselflies).

Map 2: Sites of Special Scientific Interest that make up the Thames Basin Heaths SPA



Habitats

2.61. The latest known habitat cover of the SPA is set out in the table below.

Table 2: Habitat Types within the Thames Basin Heaths SPA²⁶

Habitat Class Description	% Cover
Heath, scrub, maquis and garrigue, phygrana	44.0
Coniferous woodland	34.2

²⁶ Joint Nature Conservation Committee (2015) *Natura 2000 - Standard Data Form for Thames Basin Heaths Special Protection Area*

Broad-leaved deciduous woodland	7.0
Other land (including towns, villages, roads, waste sites, mines, industrial sites)	5.7
Bogs, marshes, water fringed vegetation, fens	4.9
Mixed woodland	3.6
Inland water bodies (standing water, running water)	0.6

Local Context

2.62. The SPA lies across the Counties of Hampshire, Surrey and Berkshire, mainly affecting 11 different Local Planning Authority areas. These are:

- Bracknell Forest Council
- Elmbridge Borough Council
- Guildford Borough Council
- Hart District Council
- Royal Borough of Windsor and Maidenhead
- Runnymede Borough Council
- Rushmoor Borough Council
- Surrey Heath Borough Council
- Waverley Borough Council
- Woking Borough Council
- Wokingham Borough Council

2.63. The SPA is also surrounded by urban areas with 2018 records showing approximately 325,174 residential properties within 5km. Population growth and net in-migration lead to the area surrounding the SPA being popular for development, with housing numbers particularly increasing over time. Housing growth within 5km of the SPA from 2005-2018 was 37,065 which gives an average of 2,851 dwellings per year.

Recreational Disturbance

2.64. There are a number of potential pathways of impact that could result in development having an impact on European sites. These include urbanisation, recreational pressure/disturbance, atmospheric pollution, water abstraction and water quality. However, the focus of this project is to consider alternative measures to avoid or mitigate recreational disturbance resulting from a net increase in residential dwellings on the TBH SPA, particularly within the 400m-5km buffer zone.

- 2.65. The effects of recreation on heathland sites have been described in a series of studies²⁷. The main reasons given for the reduction in breeding success in areas subject to recreational disturbance are nest abandonment and increased predation of eggs or young. Studies of other species have shown that birds nest at lower densities in disturbed areas, particularly when there is weekday as well as weekend pressure²⁸.
- 2.66. The nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level that may substantially affect their behaviour, and consequently affect the long-term viability of the population. Such disturbing effects can, for example, result in changes to feeding or roosting behaviour, increases in energy expenditure due to increased flight, abandonment of nest sites, increased predation of eggs and chicks and desertion of supporting habitat (both within or outside the designated site boundary).
- 2.67. This may undermine successful nesting, rearing, feeding and/or roosting, and/or may reduce the availability of suitable habitat as birds are displaced and their distribution contracts. Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling and presence of people, animals (including dogs) and presence of structures.
- 2.68. Nightjar, woodlark and Dartford warbler are known to be sensitive to disturbance. Disturbance caused by human activity is particularly significant in the TBH SPA because many parts are in close proximity to urban areas, meaning that visitor pressure is high.
- 2.69. As noted above, there are other potential pathways of impact, including urbanisation and associated urban edge effects. Urbanisation impacts result from an increase in population within close proximity to sensitive European sites e.g. within 400m. The detail of the impacts is distinct from the trampling, disturbance and dog-fouling that results specifically from

²⁷ For example, Land Use Consultants (2005) *Going, going, gone? The cumulative impact of land development on biodiversity in England*

²⁸ Van der Zande, A.N., J.C. Berkhuisen, H.C. van Letesteijn, W.J. ter Keurs and A.J. Poppelaars (1984) *Impact of outdoor recreation on the density of a number of breeding bird species in woods adjacent to urban residential areas*

recreational activity. The list of urbanisation impacts can be extensive, but core impacts include increased fly-tipping, cat predation and uncontrolled fires.

2.70. The Thames Basin Heaths Special Protection Area Delivery Framework²⁹ concluded that:

“Within 400m of the SPA (measured as the crow flies from the SPA perimeter to the point of access on the curtilage of the dwellings) the impact of net new residential development on the SPA is likely to be such that it is not possible to conclude no adverse effect on the SPA. There should therefore be a presumption against development within this zone – an Appropriate Assessment will be needed to demonstrate that any development will not have an adverse effect on the SPA and/or the acceptability of any avoidance measures provided. In exceptional circumstances the 400m distance may be modified by local authorities to take account of physical obstructions to cat movement and human access”³⁰.

2.71. It is important to reiterate that the focus of this project is to consider mitigation measures that would be required for development located beyond the 400m zone.

The Existing Approach to the Thames Basin Heaths Special Protection Area

2.72. In May 2006, English Nature (now Natural England) published a Draft Delivery Plan for the Thames Basin Heaths SPA, informed by relevant European Court judgments. This was then supported by Policy NRM6 in the South East Plan (2009)³¹. This policy sets out the overall approach to mitigation for the SPA which *“should comprise a combination of providing suitable areas for recreational use by residents to buffer the SPA and actions on the SPA to manage access and encourage use of alternative sites.”* The Plan was revoked in March 2013 with the exception of Policy NRM6 which remains in place.

2.73. In 2009, a Thames Basin Heaths Special Protection Area Delivery Framework was prepared as a non-statutory document within the context of the South East Plan. It was endorsed by the

²⁹ Thames Basin Heaths Joint Strategic Partnerships Board (2009) *Thames Basin Heaths Special Protection Area Delivery Framework*

³⁰ The Assessor recommended the retention of a 400m zone in which no development should be allowed unless it could be demonstrated that it would not lead to further recreational use of the SPA or have any other significant effect on its integrity

³¹ Government Office for the South East (GOSE) (2009) *The South East Plan: Regional Spatial Strategy*

Thames Basin Heaths Joint Strategic Partnership (JSP). The JSP was established by the Local Authorities that surround the SPA, along with the Regional Assembly (now disbanded) and other partners, to plan for the long-term protection of the SPA in a consistent and co-ordinated way. The JSP Board (JSPB) is advised by a number of bodies including Natural England.

2.74. The work of the JSP is based around the co-ordination of a three-pronged approach:

- 1) Suitable Alternative Natural Greenspace (SANG)
- 2) Access Management
- 3) On Site Management of the SPA

2.75. It is considered that there is a combined avoidance and mitigation effect of these measures, which ensure people are provided with alternative greenspaces to visit instead of the SPA, while also managing potential impacts on the SPA through on-site access and habitat management. The TBH SPA Delivery Framework (2009) focusses on the first two approaches.

2.76. As noted previously, the mitigation approach varies depending on the linear distance from the SPA. There are three main 'zones of influence' which are:

- Within 400m of the SPA the impact of net new residential development on the SPA is likely to be such that it is not possible to conclude no adverse effect on the SPA. There should therefore be a presumption against development within this zone.
- Between 400m and 5km, the avoidance measures recommended in the Delivery Framework should be applied.
- Applications for large-scale (in practice often interpreted as 50+ dwellings) development proposals 5km-7km away should be assessed on an individual basis. Where appropriate a full Appropriate Assessment may be required to ascertain whether the proposal could have an adverse effect on the SPA³².

³² The South East Plan Assessor, who recommended that between 5 and 7km from the edge of the SPA residential developments of over 50 houses should be assessed and may be required to provide appropriate mitigation. It is recommended that such cases be considered on a case by case basis.

2.77. The TBH SPA Delivery Framework (2009) sets out the JSPB's recommended approach to the provision of avoidance and mitigation measures. The JSPB has no formal control on the planning decisions made in respect of the Thames Basin nor does it set any formal planning policy. Therefore, each affected authority has included a strategic policy within adopted or emerging Local Plans. In addition, each local authority prepared an Avoidance and Mitigation Strategy to provide interim guidance and further detail on the approach. If complementary alternative mitigation measures are found to be deliverable then these policies and strategies may be updating accordingly. This would be a decision made by each individual authority.

Suitable Alternative Natural Greenspace (SANG)

2.78. The principle of SANG is based on the provision of alternative recreational land to attract new, and existing residents away from the SPA. SANG should be provided by Local Authorities funded by developer contributions, or provided by developers for individual developments.

2.79. The TBH SPA Delivery Framework (2009)³³ sets out when joint working between Local Authorities may be appropriate:

- i) the Local Authority alone is not able to provide sufficient SANG land to meet its local need,
- ii) the catchment of a SANG extends into a neighbouring authority,
- iii) there is the opportunity to add value and/or capacity to individual SANG by developing a network of SANGs across boundaries.

2.80. SANG should be provided on the basis of at least 8ha per 1,000 population. The average occupancy rate should be assumed to be 2.4 persons per dwelling unless robust local evidence demonstrates otherwise.

2.81. The catchment of a SANG depends on the individual site characteristics and location. As a guide the following catchments are often used:

³³ Thames Basin Heaths Joint Strategic Partnerships Board (2009) *Thames Basin Heaths Special Protection Area Delivery Framework*

Table 3: SANG Catchments

SANG Size	Catchment
2-12ha	2km
12-20ha	4km
20+ha	5km

- 2.82. Developments of less than 10 dwellings do not need to be within a specified catchment of the SANG they are allocated to, providing there is sufficient quantity and quality of SANG available to cater for the consequent increase in population within the local authority, or an adjoining local authority.
- 2.83. Natural England created SANG guidelines (appendix 3) which set out criteria which SANGs ‘must have’ as well as those which are desirable. The essential ‘must have’ criteria include a minimum 2.3-2.5km circular walking route, as well as requirements relating to car parking provision, habitat variety and safe access for visitors and dogs.
- 2.84. Further information on the existing approach to SANG can be found within the SANG Background Paper.

Access Management and Monitoring

- 2.85. In June 2009, the JSPB agreed an Outline Business Plan (updated in 2011), which identified the resources required to provide an effective Strategic Access Management and Monitoring (SAMM) project, together with the overall cost of providing strategic mitigation.
- 2.86. The overall objective of the SAMM project is to protect the SPA from recreational pressures arising from new housing development through education (both on and off site), guidance, promoting the use of SANG sites, and monitoring the effectiveness of the avoidance strategy. Funds from the SAMM project are used to:
- Promote SANGs as new recreational opportunities for local people and particularly encourage their use during the breeding bird season,
 - Provide an on-the-ground wardening service to supplement existing wardening efforts,
 - Provide an SPA-wide education programme,
 - Create new volunteering opportunities,
 - Demonstrate best practice for strategic access management of visitors and visitor infrastructure where the supply of greenspace is heavily dependent on protected areas,
 - Monitor visitor usage of SANGs and SPA, and

- Monitor Annex 1 birds on SPA sites.

2.87. Further information on SAMM is provided within the SAMM Background Paper.

2.88. Where contributions are collected through Local Planning Authorities to provide SANG and SAMM mitigation measures this is often through Section 106 agreements. Community Infrastructure Levy (CIL) has been used in some areas to collect suitable funding for SANG which can be deemed as infrastructure.

On-Site Management of the SPA

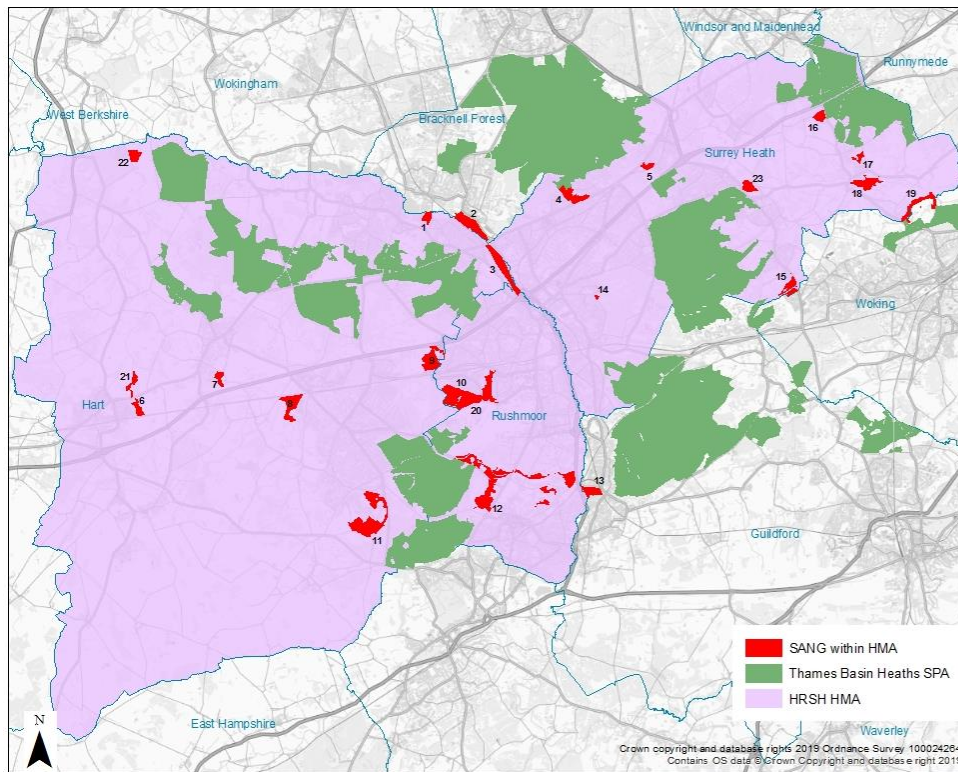
2.89. The current three-pronged approach to mitigation for the Thames Basin Heaths SPA includes the requirement for on-site management of the SPA. This work mainly utilises Countryside Stewardship grants to improve habitats across the SPA in agreements with landowners. These agreements incentivise positive land management of sites, providing financial grants which are received once improvements are in place.

2.90. Where Sites of Special Scientific Interest (SSSI) are not in favourable condition, these agreements must include management options aimed to improve the site condition. If SSSIs are already in favourable condition then the management should aim to maintain this. Works under Countryside Stewardship agreements are fully recorded and monitored over time to verify compliance and enable payments to be made.

SANG Approach and Capacity in the HMA

2.91. At July 2020, a total of 23 SANG had been recorded as delivered in the HMA. These sites could theoretically enable the development of 32,093 number of dwellings if based upon a 2.4 person per dwelling occupancy rate and 8ha per 1,000 resident provision. However, in practice many of these sites have less capacity due to discounts for elements such as existing visitor use and biodiversity sensitivities, and in some cases the use of a provision rate above the 8ha per 1,000 resident minimum. By January 2021 the total number of recorded SANGs in the HMA had increased to 25 with Hartland Country Park (Hart) and Frimley Fuel Allotments (Surrey Heath) being created and operational. A number of SANG also remain in the process of being implemented and it is likely that in some areas of the HMA, where suitable greenspace is available, SANG may continue to come forward. Further details on each existing, pipeline, and potential SANG can be found within the SANG Background Paper.

Map 3: Recorded SANG within the HMA (July 2020)



Ref	SANG Name
1	Swan Lake Park
2	Shepherd Meadows
3	Hawley Meadows and Blackwater Park
4	Diamond Ridge Woods
5	Earlswood Park
6	Bassetts Mead Country Park
7	Queen Elizabeth II Fields
8	Edenbrook Country Park
9	Bramshot Farm Country Park
10	Southwood Woodlands
11	Naishes Wood at Crookham Park
12	Wellesley Woodlands
13	Lakeside Nature Reserve
14	St. Catherine's Road
15	Bisley Common
16	Chobham Place Woods
17	Little Heath Meadow
18	Chobham Water Meadows
19	Heather Farm
20	Southwood Country Park
21	Whitewater Meadows
22	Wellesley Water Meadow
23	Windlemere

Rushmoor Borough

2.92. The Rushmoor Local Plan³⁴, adopted on 21st February 2019 anticipates the delivery of up to 8,900 net new homes in Rushmoor by 2032. The entire Borough is located within 5km of the Thames Basin Heaths Special Protection Area (SPA) and as a result there is a requirement to mitigate the potential recreational impact on the SPA of all net additional residential development.

2.93. A large proportion of the planned new homes already have planning permission and a SANG allocation. The Wellesley development is self-mitigating due to the on-site Wellesley Woodlands SANG, providing mitigation for 3,850 dwellings anticipated over the Plan period. An extension to this SANG has also recently been granted permission, giving some additional capacity. It is important to note that the SANG will remain in private ownership, any

³⁴ Rushmoor Borough Council (2019) *Rushmoor Local Plan*

arrangement in relation to allocation of surplus SANG capacity will require the agreement of the landowner and will not be fully within the control of the Council.

- 2.94. In November 2017, the Council signed a memorandum of agreement with Hart District Council to secure access to mitigation for 3,600 people (approximately 1,500 dwellings) from SANG sites in Hart, to mitigate the impact of development within Rushmoor, within a 5km catchment of the SANGs. The two sites that will be available to housing development in Rushmoor are Bramshot Farm and Hawley Park Farm. The 5km catchments for these SANGs do not cover the whole of Rushmoor but do include the Farnborough area.
- 2.95. It should be noted that the memorandum of agreement is not legally binding, and to this extent, the SANG provision remains beyond Rushmoor Council's direct control. It is not therefore guaranteed that Rushmoor developments will have access to the SANG availability in Hart District over the Plan period.
- 2.96. In December 2017, the Council made the decision to close Southwood Golf Course and convert this to create a 57 hectare SANG. It should be noted that this decision was taken as a "last resort" and that the Council had no other option but to consider the closure of its municipal Golf Course to enable provision of the required SANG for the Local Plan. Southwood Country Park SANG is now open and operational, with further site improvements planned in the next two years.
- 2.97. As part of the preparation of the Local Plan, and in order to carefully consider all possible alternative options to closure of the golf course, the Council explored all other potential SANG sites. The reasons for discounting these options are set out in more detail in the SANG Background Paper. Overall, these mainly relate to sites being unable to meet the existing SANG criteria, and landowner difficulties. The Council will continue to seek to identify any potential SANG opportunities within or adjacent to the Borough which can be delivered to mitigate development in the Borough. However, as a result of the work undertaken to date, Southwood Golf Course was considered to be the last remaining SANG opportunity in Rushmoor.

2.98. The 2019 NPPF³⁵ (paragraph 33) requires that policies in local plans should be reviewed at least once every five years to assess whether they need updating and should be updated as necessary. Therefore, in advance of the Rushmoor Local Plan reaching five years from its adoption, in 2023, the Council will need to consider whether to review it, or elements of it, in order to ensure that it remains up to date in the context of national planning policy. It is likely that the housing target will need to be extended to cover the period between 2032 and 2037. Housing targets are likely to vary but hypothetically, if the current Local Plan annual requirement were to be rolled forward, this would require mitigation for a further 2,180 dwellings to 2037.

Hart District

2.99. The Hart Local Plan³⁶ was adopted in April 2020. This Plan anticipates the delivery of at least 7,614 dwellings during the Plan period (2014-2032). During the Local Plan preparation SANG was identified which could adequately mitigate the planned housing numbers, some of which was to be bespoke SANG provided by developments.

2.100. The Council have noted in a recent (October 2020) Cabinet paper that whilst some additional SANG is expected to come forward in future, there is pressure on the current SANG capacity available which is at a relatively low level. The Council has a corporate policy for allocating Council-owned SANG to developments to ensure that capacity is prioritised for development that complies with the Local Plan, with a particular emphasis on supporting the delivery of affordable homes for rent.

2.101. Hart District Council will continue to monitor the SANG provision in the area and have stated a desire to work with Surrey Heath and Rushmoor going forward with a view to assisting those authorities wherever possible.

2.102. Whilst not part of the Local Plan, the Council has embarked on a Green Grid project which will increase the walking and cycling network and green infrastructure within Hart. This could have the potential to form part of an alternative SPA mitigation approach.

³⁵ MHCLG (2019) *National Planning Policy Framework*

³⁶ Hart District Council (2020) *The Hart Local Plan (Strategy and Sites) 2032*

Surrey Heath

- 2.103. The currently adopted Plan for Surrey Heath includes the Core Strategy and Development Management Policies Development Plan Document 2012 and the saved policies of the 2000 Local Plan. The Council will create a new Local Plan to guide development up to at least 2032 and are updating and reviewing the timetable for this work.
- 2.104. There are currently two strategic SANGs available to provide mitigation in Surrey Heath, namely Chobham Meadows and Windlemere. On the 7th August 2020 the remaining capacity of these sites was approximately 1,856 people, the equivalent of 773 dwellings at a standard 2.4 person occupancy. These sites are located to the east of the borough and the catchments do not extend to the settlements in the west of Surrey Heath.
- 2.105. Due to the limited capacity of SANG available in the west of the Borough, the Council has worked with neighbouring authorities to provide further mitigation opportunities for new development. This includes an apportionment of capacity from three SANGs located in the District of Hart and one in Bracknell Forest. The capacity remaining for Surrey Heath in these sites at 7th August 2020 was 607 people, or 253 dwellings. These sites have catchments which collectively cover the Western Urban Area which comprises settlement areas of Camberley, Frimley, Frimley Green and Mytchett.
- 2.106. Surrey Heath Council investigated the SANG capacity in the east and west of the borough separately to estimate when SANG would be likely to run out. A trajectory was based upon SANG capacity monitoring in late 2019 and indicative housing figures from the draft 2019 Strategic Land Availability Assessment. These estimates are likely to be best case scenarios as they do not include potential windfall developments. This work indicated that, without any additional SANG capacity or mitigation being found, capacity in the west of the borough is likely to run out in 2020/2021 and capacity in the east of the borough is likely to run out in 2033/34. The Council has been conserving SANG in the west where possible, for example through not allocating SANG to Prior Approvals, however capacity is still very limited and likely to run out in 2021. This will significantly impact the ability to deliver housing sites of over 10 units in the area unless a mitigation solution is found.
- 2.107. The east of the borough is relatively rural and therefore includes more opportunities for SANG to be delivered to meet future requirements. However, the west of the borough is urban in nature and has less land available for the provision of SANG. Land ownership and land values

also significantly influence the opportunities available, with only bespoke SANG tending to come forward alongside developments.

2.108. The Council has undertaken an assessment of all potential land for SANG in the west of the borough based on its potential to meet the SANG need over the upcoming plan period. Whilst some options have been identified, they are all in private ownership and unlikely to be deliverable in the short term.

3. Background Evidence and Research

Introduction

- 3.1. This section summarises the existing evidence and research available, which is considered relevant to the project. It is also important to refer to the background studies associated with this project which provide further information on specific topics. These are the SANG Background Paper, SAMM Background Paper and Visitor Distribution and Access Background Paper. The evaluation of this existing evidence informed the identification of potential alternative mitigation measures which are detailed in the following section. This section also informed the further research completed as part of this mitigation project.
- 3.2. Some of the evidence and research included in this chapter relates to areas outside the TBHSPA. It is useful to consider the relevance of findings of this research, whilst being cautious about drawing conclusions given the different contexts.

The Effect of Recreational Pressure on the SPA

- 3.3. The potential effects of recreation on heathland sites has been set out in a number of studies, which are summarised below. These studies have identified that disturbance can have an adverse effect in various ways, with increased nest predation by natural predators as a result of adult birds being flushed from the nest and deterred from returning to it by the presence of people and dogs likely to be a particular problem. A literature review on the effects of human disturbance on bird breeding found that 36 out of 40 studies reported reduced breeding success as a consequence of disturbance³⁷. A subsequent literature review of urban effects on lowland heaths and their wildlife summarised a range of likely effects identified in Dorset³⁸, including impacts on supporting habitats, disturbance and trampling.

³⁷ Hockin, D., M. Oundsted, M. Gorman, D. Hill, V. Keller and M.A. Barker (1992) *Examination of the effects of disturbance on birds with reference to its importance in ecological assessments*

³⁸ Underhill-Day, J.C. (2005) *A literature review of urban effects on lowland heaths and their wildlife*

- 3.4. A study published in 2006³⁹ explored the links between housing levels, recreational access and nightjar abundance and distribution across approximately 18,000ha of heathland and associated habitats in Dorset and the Thames Basin Heaths. This demonstrated negative correlation between the density of nightjars on a site and the amount of housing in the vicinity of the site in both SPA areas. These findings were supported by another study⁴⁰ showing that nightjars are particularly affected by pressure from housing as their numbers tend to be linked to the measure of urban development surrounding sites.
- 3.5. Two further studies considered the impact of human disturbance on nightjars on heathlands in Dorset (Murison, 2002⁴¹ and Liley and Clarke, 2003⁴²). In the former, the breeding success of nightjars was compared on several sites in Dorset with varying levels of public access. Sites with no public access showed significantly higher breeding success than sites with open access. On sites with public access, territory centres and nest sites occurred at a distance from urban development. In addition, nests that did succeed were located at a distance from paths. The probability of nest survival was 12%, with the key cause of nest loss being predation. The results from the latter study demonstrated that the number of nightjars present on a heathland patch was influenced by the surrounding land-use and that the effect of urban development is more than just habitat loss. It suggested that trends identified are at least partly due to human presence on the heathlands.
- 3.6. A number of studies have shown that birds are affected more by dogs and people with dogs than by people alone, with birds flushing more readily, more frequently, at greater distances and for longer⁴³.

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

⁴⁰ Liley, D. and R.T. Clarke (2002) *Urban development adjacent to heathland sites in Dorset: the effect on the density and settlement patterns of Annex 1 bird species*

⁴¹ Murison, G. (2002) *The impact of human disturbance on the breeding success of nightjar *Caprimulgus europaeus* on heathlands in south Dorset, England*

⁴² Liley, D. & Clarke, R. T. (2003). *The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England*

⁴³ Underhill-Day, J.C. (2005) *A literature review of urban effects on lowland heaths and their wildlife*

3.7. In addition, dogs, rather than people, tend to be the cause of many management difficulties, notably by worrying grazing animals, and causing excessive nutrient enrichment (eutrophication) near paths. Nutrient-poor habitats such as heathland are particularly sensitive to the fertilising effect of inputs of phosphates, nitrogen and potassium from dog faeces⁴⁴.

3.8. A study⁴⁵ of managed land in Nottinghamshire, comparing a heavily disturbed section and a less disturbed section of equal habitat availability, found that overall nightjar density was significantly lower and there were significantly fewer breeding pairs in the heavily disturbed habitat compared with the less disturbed habitat. However, it found that average breeding success per pair was not significantly different between the two areas. The findings suggested that recreational disturbance may drastically alter settlement patterns and nest site selection and may reduce the utility of apparently suitable patches of remnant and created habitat.

3.9. The study modelled the spatial distribution of visitors, which predicted visitor numbers for individual access points. This demonstrated that:

- the number of people arriving at a given access point is dependent on the amount of housing surrounding the access point and the amount of parking available.
- people arriving on foot can be predicted from the amount of housing in the surrounding area.
- parking capacity was the best single predictor of visitor numbers arriving by car.
- It appeared that parking capacity was not limiting visitor numbers, but the distribution of current parking reflects patterns of access and the locations that people prefer to visit.
- sites surrounded by high densities of housing do not necessarily also have the most parking, and therefore high visitor pressure is sometimes not associated with housing.

⁴⁴ Shaw, P.J.A., K. Lankey and S.A. Hollingham (1995) *Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath*

⁴⁵ Lowe, A., A. C. Rogers, and K. L. Durrant. 2014. *Effect of human disturbance on long-term habitat use and breeding success of the European Nightjar, *Caprimulgus europaeus**

3.10. Research published in 2007⁴⁶ explored how the impacts of human disturbance of Dartford warbler varied among different habitats, namely heather-dominated territories, heather territories with significant areas of European gorse and heather territories with significant areas of Western gorse. This found that the productivity was significantly affected by the timing of breeding in all three habitats, but that disturbance only appeared to have a significant impact on the productivity of birds in heather territories. It noted that, dogs were recorded as moving as far as 45m into heather but were not seen to move off the path where vegetation was dominated by Western gorse, which is harder to penetrate. Disturbance events were found to delay breeding pairs for up to 6 weeks, which significantly decreased the number of successful broods and the number of chicks fledged per pair.

Understanding Recreational Use of the SPA

3.11. In 2005, a study of Visitor Access Patterns on the Thames Basin Heaths SPA was undertaken⁴⁷. This study follows methods similar to those used by a previous study undertaken on the Dorset Heathlands⁴⁸ to examine access patterns across the Thames Basin Heaths SPA. This study was commissioned by English Nature (now Natural England) to provide the baseline understanding in order to underpin a strategic approach to access management across the SPA. It identified a number of visitor patterns that are of relevance to the mitigation approach taken, including:

- The majority of visitors arrived by car (83%).
- The median distance travelled to access points was 3.1km.
- 70% of those arriving by car came from within a radius of 5km from the access point.
- 90% of those arriving on foot came from within a radius of 1.5km from the access point.

⁴⁶ Murison, G., Bullock, J.M., Underhill-Day, J., Langston, R., Brown, A.F., Sutherland, W.J. (2007) *Habitat type determines the effects of disturbance on the breeding productivity of the Dartford Warbler *Sylvia undata**

⁴⁷ Liley, D, Jackson, D. & Underhill-Day, J. (2005). *Visitor Access Patterns on the Thames Basin Heaths*

⁴⁸ Clarke, R.T., Liley, D., Underhill-Day, J.C., & Rose, R.J. (2005). *Visitor access patterns on the Dorset Heaths*

- There are a variety of reasons for visiting the heathland, but dog walking was the most common reason (59% of groups interviewed). 72% of groups were accompanied by a dog.
- A significantly higher proportion of those who visited the heaths daily were dog walkers, compared to less frequent visitors.
- Three-quarters of all heathland visitors said they visited alternative sites.
- People that travelled to sites by car were more likely (than those that walked to sites) to visit alternative locations.
- Dog walkers tended to travel shorter distances to reach alternative sites than other users.
- A variety of different variables were explored as potential predictors of total visitor numbers. Of these, the number of houses/residents around the access point was significant and it is suggested as the most reliable method to model visitor levels.
- An estimate of over 5 million visits per annum was shown across the whole SPA.
- Circular routes were commonly cited as followed.

3.12. In 2007, Liley & Underhill-Day (2007)⁴⁹ undertook a review of visitor access patterns on southern heathlands, including the Thames Basin Heaths. The study makes an observation regarding the extent that dog walkers appear more willing to let dogs off the lead on heathland, compared to other habitats such as farmland and forestry land. This also identified some common findings across the studies, including:

- The majority of visitors visit regularly and live nearby (within 5km).
- Across a larger sample of urban and rural heaths 59% of visitors were found to drive to sites (although it was noted that this has been found to be much higher in the Thames Basin Heaths).

⁴⁹ Liley, D. & Underhill-Day, J (2007) *Visitor patterns on southern heaths: a review of visitor access patterns to heathlands in the UK and the relevance to Annex I bird species*

- Dog walking is usually the purpose of the visit.
- Visits are typically short, with an average distance travelled in Dorset Heaths of 2.2km and in the Thames Basin Heaths of 2.5km. In Dorset, walks were typically circular.
- Dog walkers typically stay on the path, but most let their dogs off the lead (and consider it important to do so). Around half of dogs went off the path and this was found to be higher where there were two dogs together.

3.13. In 2012, Natural England commissioned a second visitor survey of TBHSPA⁵⁰ on behalf of the JSPB. This aimed as far as possible to replicate the methodology of the 2005 survey but was also extended across a greater part of the nesting season, included an increased number of visitor survey points and a more detailed questionnaire.

- The majority of visitors arrived by car (75%).
- There are a variety of reasons for visiting the heathland, but dog walking was the most common reason (65% of groups interviewed).
- The majority (80%) of all interviewed groups were accompanied by a dog.
- More than three quarters (83%) of all visitors made their visit at least once a week, and 38% visited daily.
- The median straight-line distance from the home postcode of the interviewee to the access point where interviewed was 2.65km (for those travelling by car) and 0.52km (for those walking from home).
- The majority (94%) of local visitor postcodes (visitors who were on holiday or visiting friends were excluded) fell within a 5km radius of the SPA boundary.
- 83% of visitors lived within 5km of the access point at which they were interviewed (straight line distance between a visitor postcode and the access point).

⁵⁰ Fearnley, H. & Liley, D. (2013) *Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA)*

3.14. A visitor survey of the SPA also took place during the summer of 2018 and the associated report found a statistically significant drop in visitor numbers, despite the recorded 12.9% increase in housing numbers over the period 2005-2018. This survey also maintained that most local visitors (91.8%) came from within 5km of the SPA boundary with typical users being local dog walkers.

Suitable Alternative Natural Greenspace

3.15. Detailed information on existing Suitable Alternative Natural Greenspace (SANG) can be found in the SANG Background Paper for this project. There are currently (January 2021) 25 SANGs recorded as operational within the HMA, which appear to be providing effective mitigation for the SPA based on SANG and SPA visitor surveys as well as SPA bird monitoring. The SANG Background Paper also summarises the evidence available to support the existing SANG criteria and highlights some areas where variations may be possible.

Access Management

3.16. Access and visitor distribution can influence visitors' effects on breeding birds, for example a study of the impact of disturbance on a woodlark *Lullula arborea* population on 16 heathland sites in southern England was published in 2007⁵¹. This identified a significant negative correlation between disturbance and woodlark density, but it notes that this was not a simple linear relationship. There was evidence of an initial decline in density as disturbance increased, but it suggests that further increases would have little effect. It also found that nest survival was not affected by disturbance but suggested that this may be a result of avoiding the areas with the highest levels of disturbance. It went on to consider the population scale consequences of different access alternatives and found the impact depended on the number of people and their spatial distribution. The study indicated that if an increase in visitor numbers was widely distributed (i.e. as opposed to focussed in areas currently accessible) it would lead to a major negative effect on the population.

⁵¹ Mallord, J. W., Dolman, P. M., Brown, A. F., & Sutherland, W. J. (2007). *Linking recreational disturbance to population size in a ground-nesting passerine*

3.17. Management measures therefore have potential to reduce negative disturbance effects from visitors, through measures such as:

- Enforcement of dogs on leads during the breeding season,
- Provision for off the lead dog exercising areas in non-sensitive area,
- Reducing the penetrability of path-side habitats as a management tool to influence access patterns (including the planting of vegetation such as gorse where ecologically appropriate),
- Consider access restriction where concentrations of breeding birds coincide with high visitor levels,
- Changing the attractiveness of particular heathland routes to different user groups (e.g. dog-walkers),
- Positioning car parks, access points and footpaths away from areas used by breeding birds,
- Temporary path closures and diversion of paths away from sensitive areas (e.g. those with high densities of avian interest features)⁵².

3.18. Jenkinson states in a study⁵³ that:

“...to ensure the best chance of success in any management initiative, avoid adverse publicity/political pressure, and prevent problems simply being moved to other sites (which may currently be more sensitive and less disturbed), it is essential that management initiatives:

- *Accept and work with the recreational aspirations of dog owners, irrespective of how inappropriate or challenging they may seem to others;*
- *Take a holistic view of the external influences and impacts in the area, rather than adopt a narrow, solely site-based approach;*
- *Seek to accommodate dog owners’ needs, either on-site or by planned displacement to accessible, attractive and relevant alternative sites.*

It is also important to note that while “education of dog owners” about wildlife is often cited as a way to reduce disturbance, the reality is that education/interpretation can help justify the need for, and compliance with, restrictions, but:

⁵² Natural England (2009) *Access and Nature Conservation Reconciliation: Supplementary Guidance for England (NECR013)* (Footprint Ecology).

⁵³ *Ibid*

- *it is highly unlikely to educate dog owners out of wanting off-lead access, close to home, and away from traffic, as those are their highest priorities;*
- *it will only have a very limited effect if not integrated into a wider access management plan that accommodates dog owners' needs somewhere.”*

3.19. There is a risk that access management measures could lead to displacement. A study of dog walkers around Winchester (Jenkinson and McCloy, 2008⁵⁴) found that there were four possible responses to restrictions:

- 1) *Accommodation:* Keep visiting the site if their needs are still met with the restriction in place, e.g. through zonation by space or time;
- 2) *Displacement:* Go somewhere else that seems to better accommodate their needs;
- 3) *Challenge:* Practically and/or politically challenge the restriction;
- 4) *Non-compliance:* Ignore the restriction given a low likelihood of being caught/fined, or willingness to pay the fine.

3.20. A report⁵⁵ commissioned by English Nature (now Natural England) in 2005 concluded that dog management policies vary in effectiveness but wardening, steering and regulations appear to work best, whilst leaflets and signage are less effective, except as part of a comprehensive strategy, and that a multi-faceted policy is likely to be more effective than one or no policy. It also provided the following recommendations for site managers:

- develop integrated strategies for dog management and control, including control of potential predators that benefit from the presence of dogs (such as corvids and gulls);
- consider zoning their sites to differentiate between areas where dogs are allowed/not allowed and where they can be on/off-lead at times throughout the year;

⁵⁴ Jenkinson, S. and McCloy, A. (2008) *Final report: Walkers with dogs around Winchester. Access and Countryside Management, Hope Valley*

⁵⁵ Taylor, K., Anderson, P., Taylor, R., Longden, K. and Fisher, P. (2005) *Dogs, access and nature conservation*

- plan strategically how the pattern of people’s behaviour can be influenced (without breaching their rights), such as through steering, use of signs etc., to direct people towards areas where impacts of dogs (and humans) will be less significant on the not unreasonable assumption that they will take their dogs along the same route;
- exploit the tendency for dogs to urinate and defecate soon after their arrival at a site by creating ‘sacrifice areas’ between car parks and site entry points where feasible (although it should be noted that ‘sacrifice areas’ are unlikely to be appropriate within an SPA);
- implement campaigns to promote responsible behaviour amongst dog owners and where they can find dog-friendly sites;
- co-ordinate dog management with other aspects of site management (e.g. predator control, livestock management).

3.21. In 2012, Bracknell Forest Council introduced car parking charges at The Look Out Discovery Centre in Bracknell which is adjacent to the Thames Basin Heaths SPA⁵⁶. A Habitat Regulations Assessment (HRA) was undertaken which considered the likely effects of the proposed charges and found the following positive effects:

- 65% of non-SPA users and 44% of existing SPA users reported that they would not change their behaviour,
- An expected reduction in total annual visits to the SPA of 24.5%,
- An increase in travel by walking or cycling to the site,
- Visitor displacement to SANGS or other parks.

3.22. Negative effects were also identified including potential for visitor displacement to other SPA access points. These effects were based on opinions of those surveyed before the changes were implemented. A number of mitigation measures were proposed in order to ensure that



⁵⁶ Bracknell Forest Council (2011) *Site Allocations DPD (SADPD) Habitats Regulations Assessment (HRA) Draft Submission*

the introduction car parking charges were compliant with the Habitat Regulations. These included:

- Interpretation and information including the erection of signage highlighting the sensitive nature of the site at various access points to the wider SPA;
- Parking restrictions and enforcement;
- Warden patrols to monitor use and encourage responsible behaviour;
- Access management measures;
- Promotion of alternative open spaces which offer facilities such as toilets, play areas, a café etc.;
- Reduction in the Council's strategic SANGs capacity – in order to ensure that the capacity of the SANGs to mitigate for residential development will not be compromised.

3.23. Surveys conducted following the introduction of the car parking charges found that the number of visitors using the Look Out car park did not reduce as significantly as expected. Monitoring of other car parks indicated that there was no significant visitor displacement as a result of the charges.

3.24. In 2018, Surrey County Council commissioned a Habitat Regulations Assessment⁵⁷ of a project to introduce car parking charges to a selection of car parks at countryside sites in Surrey. The car parks provide access to a range of European sites, including the Thames Basin Heaths SPA. The HRA assessed the potential impacts on European Sites, including the potential for displacement. The assessment concluded that the introduction of charges would lead to a net decrease in recreation use of the relevant European sites, but that there were slight risks of these changes resulting in additional recreational pressure at other locations. The HRA determined that a number of mitigation measures were required in order to ensure no adverse effect on integrity, including measures to limit roadside parking and additional wardening.

⁵⁷ Liley, D., Weitowitz, D., Panter, C., & Hoskin, R (2018) *Habitat Regulations Assessment for proposed charges at selected car parks in Surrey*

3.25. In order to assess potential displacement, the HRA assessment included a visitor survey. 96% of those interviewed arrived at the site by car and 71% of those interviewed stated that they would not have parked where they did if charges applied. Of these, 55% said they would have gone to a different site. This did vary by site, with a greater proportion at Rodborough Common saying that they would have still visited the site but parked elsewhere. A 12 month review was completed and the expected income levels from the charges were not achieved. There was also significant public opposition to the charges. The Council decided that all charges would be removed in April 2020 with an aim to introduce a voluntary payment scheme in future.

3.26. A number of research reports and guidance notes have been prepared which consider how to balance the need to conserve and enhance habitats, whilst enabling the public to explore and enjoy the countryside. Some of the key points raised by this research and guidance relating to dog walkers are set out below.

3.27. A guidance note⁵⁸ published by Hampshire Country Council highlights some of the behaviours and motivations of dog walkers, including:

- The main influence for dog walkers is opportunities to let their dog off the lead in safe traffic free areas.
- There is a sense of community amongst dog owners, but it's important to understand that dog walkers come from a range of backgrounds and the only aspect that all dog walkers have in common is owning a dog.
- Evidence of conflict between dog walkers and other users which may be strengthened by a sense of fraternity and a feeling of being less welcome than other users – importance of reducing potential for confrontation. For example, clearly defined areas where dogs are allowed off lead which can be avoided by others.

3.28. The guidance goes on to discuss the considerations for land managers, including emphasising:

- The importance of clear signage/guidance/communication on what is expected from dog owners. For example, instructions such as 'keep dogs under close control' can often be open

⁵⁸ Hale, J (2008) *Taking the lead: managing walkers with dogs on your site*

to interpretation. Signs indicating livestock presence being left up after livestock are moved may result in dog owners ignoring signs regularly.

- Communication should describe the behaviour that is required and explain the reason why (notes that this can be more effective if it references a potential effect on the health and wellbeing of the dog).
- The value of providing specific areas for walkers with dogs or asking them to use particular paths, whilst ensuring that these areas are safe and attractive, not seen as a neglected space or a 'dog walking ghetto'.
- Avoiding a blanket/overly restrictive approach which is likely to lead to non-compliance. Successful changes are more likely if there is clarity about desired behaviours and reasons behind them and the desired behaviours are realistic and easy to comply with. Suggested use of zoning or traffic light system.

3.29. A guidance document was prepared in 2013 by Stephen Jenkinson⁵⁹ on planning for dog ownership in new developments. The guidance refers to the strong emotional bond that people have with dogs and, as result, the priority people give to their dog's safety and enjoyment. It notes that studies all over the UK repeatedly show that the three most important amenities for dog owners are off-lead access, being close to home and away from traffic. Therefore, if greenspace which meets these requirements is not provided near new housing development, or within walking distance, dog walkers will travel by car to access it. This can result in displacing off-lead exercise to more sensitive areas. The guidance identifies some important features of good greenspace design⁶⁰, which can positively accommodate off-lead access and reduce conflict between different types of users, including a choice of open and enclosed landscapes, free draining and naturalistic path surfaces, car parking if the greenspace is not within walking distance, clear information about off-lead access and desired behaviours, separation from roads and other dangers and seating. It also identifies a number of desirable features including appropriately lit routes for use during winter, a variety in grass

⁵⁹ Jenkinson, S. (2013) *Planning for dog ownership in new developments*

⁶⁰ This guidance is designed to complement Natural England's SANG guidance

length, access to clean water for swimming and drinking, dog wash, activity trails and fenced-in training areas. It is noted that there are few facilities available for dog owners to have safe, confined outdoor areas away from home where young dogs can be trained to have good off-lead recall and it is suggested that an area of 0.5 hectares is sufficient⁶¹. The report also provides guidance on ongoing management and expresses caution on the need to ensure that any other uses or changes to management (e.g. conservation grazing) of greenspaces designed to provide off-lead dog walking are compatible with this primary purpose.

Habitat Restoration

3.30. In 2014, Natural England explored the potential for alternative approaches to mitigation for the TBH SPA and at the time identified heathland restoration from conifer plantations within the SPA as having good potential. As a result, Natural England and Forest Enterprise undertook a feasibility assessment⁶². It tested a sample of 1,000 homes in Surrey Heath Borough Council. At the time, Forest Enterprise had indicated in principle that they would be prepared to enter into an arrangement to create 60ha of heathland. In ecological terms, the assessment concluded that heathland restoration is likely to: be effective in addressing the impacts of housing on the SPA bird species; provide enhancement for the other heathland features of the Sites of Special Scientific Interest in the SPA; and avoid negative impacts on other important features of the natural environment.

3.31. However, the study identified the need for Habitats Regulations Assessment (HRA) and Environmental Impact Assessment if it was to be considered further. The former would need to take into account the judgment in the *Briels* case⁶³, which was handed down by the European Court of Justice whilst this initial feasibility assessment was being undertaken. The implication of this judgment was interpreted that heathland restoration may be considered as a compensatory measure in line with regulations 64 and 68 of the Habitats Regulations. If this measure was deemed compensation this would mean that any Plan or Project relying on habitat restoration would need to meet the strict tests under regulation 64 of the Habitats

⁶¹ Jenkinson, S. (2013) *Planning for dog ownership in new developments*

⁶² Forestry Enterprise & Natural England (2014) *Joint feasibility assessment: Heathland restoration from conifer plantation as mitigation of the likely impacts of housing development*

⁶³ Judgment of the Court (2014) *Briels v Minister van Infrastructuur en Milieu*, C-521/12, EU:C:2014:330

Regulations, including having Imperative Reasons of Overriding Public Interest (IROPI) for the proposal to be permitted. Conversely, if this was viewed as an effective avoidance or mitigation measure then it could be assessed earlier in the HRA Appropriate Assessment sequential process without the requirement to meet the additional tests (see figure 2). The costs of habitat restoration were also found to be similar to alternative measures. Given the constraints this option was not taken forward further and the approach of SANG and SAMM was deemed the best mitigation option to utilise at that time.

Site Ownership, Access and Current Management

3.32. Detailed information on access and visitor distribution for the SPA can be found in the associated report for the background study SPA Visitor Distribution and Access⁶⁴. This report shows the characteristics of each SPA parcel, including the main habitats, parking locations and areas where access is currently restricted or classified as open access. SPA visitor surveys are drawn upon to indicate visitor distribution and hotspots. The Countryside and Rights of Way Act 2000 (CROW Act)⁶⁵ normally gives a public right of access to land mapped as open country (mountain, moor, heath and down) or registered common land. These areas are known as 'open access land'.

3.33. Visitors using their open access rights must keep their dogs on a short lead of no more than 2 metres between 1 March and 31 July each year and at all times near livestock. The CROW Act excludes the right of access to land known as 'excepted land' even if it appears as open access land on maps. This includes land under Ministry of Defence byelaws, such as most military training areas.

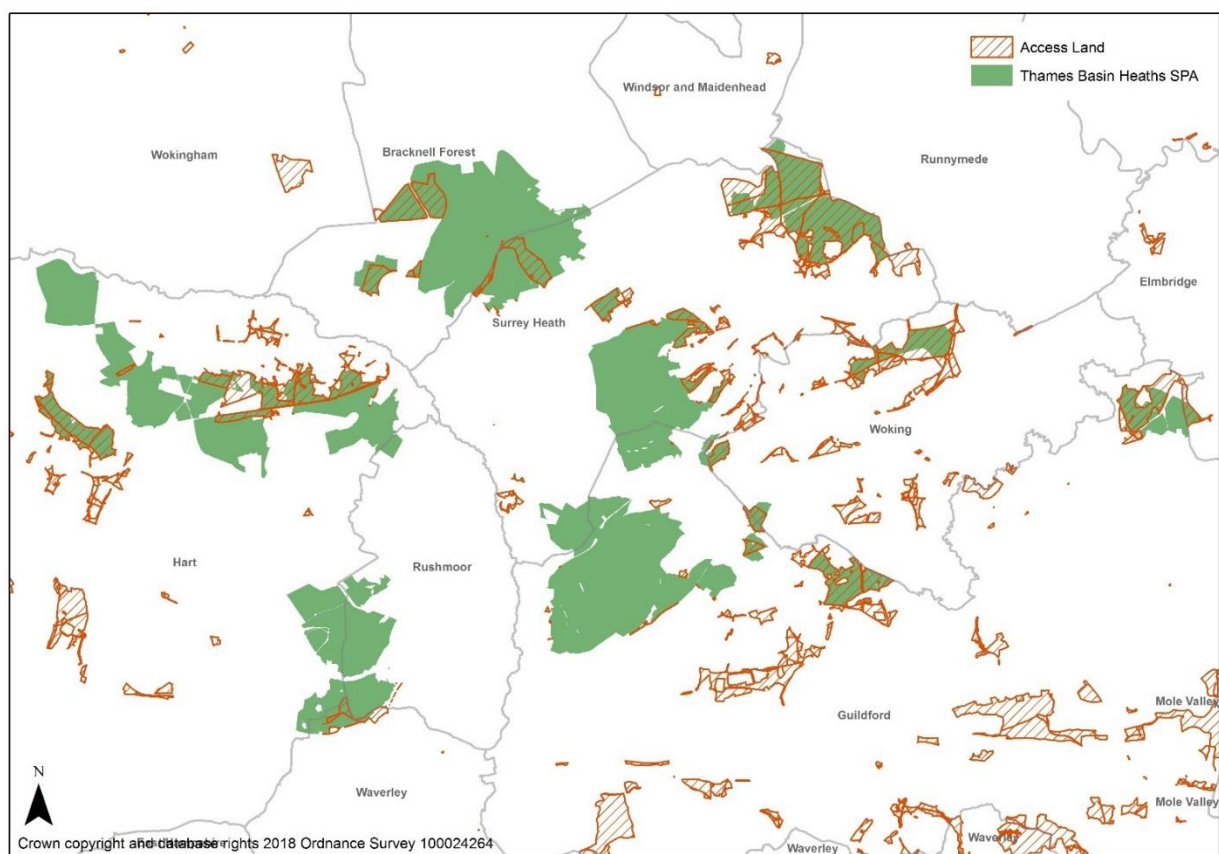
3.34. The following map show the proportion of land within the SPA which has open public access. This includes the Combined Open Country, Registered Common Land and Section 16 Dedicated Land⁶⁶.

⁶⁴ Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SPA Visitor Distribution and Access*

⁶⁵ The Stationary Office (2000) *Countryside and Rights of Way Act*

⁶⁶ Land owners, or those with a lease which has more than 90 years left to run, can voluntarily create public access rights by dedicating the land under section 16 of the CROW Act.

Map 4: Open Access Land around the Thames Basin Heaths SPA



Condition of the TBH SPA

3.35. Monitoring and reporting on the condition of these sites is a vital part of Natural England’s statutory responsibility to conserve and protect them. Natural England assesses the condition of SSSIs using Common Standards Monitoring (CSM), developed by the Joint Nature Conservation Committee (JNCC) for the whole of the UK. For the purpose of monitoring all SSSIs are divided in to one or more monitoring ‘units’ and condition is recorded at this unit level for all features. Units tend to separate different areas of habitat and/or land ownership.

Whilst condition is recorded at the unit level, some features, for example bird populations or woodland, may initially be assessed across a whole site and then considered in the context of factors influencing individual units⁶⁷.

3.36. There are fourteen component SSSIs in the TBHSPA. These are split into a total of 127 units.

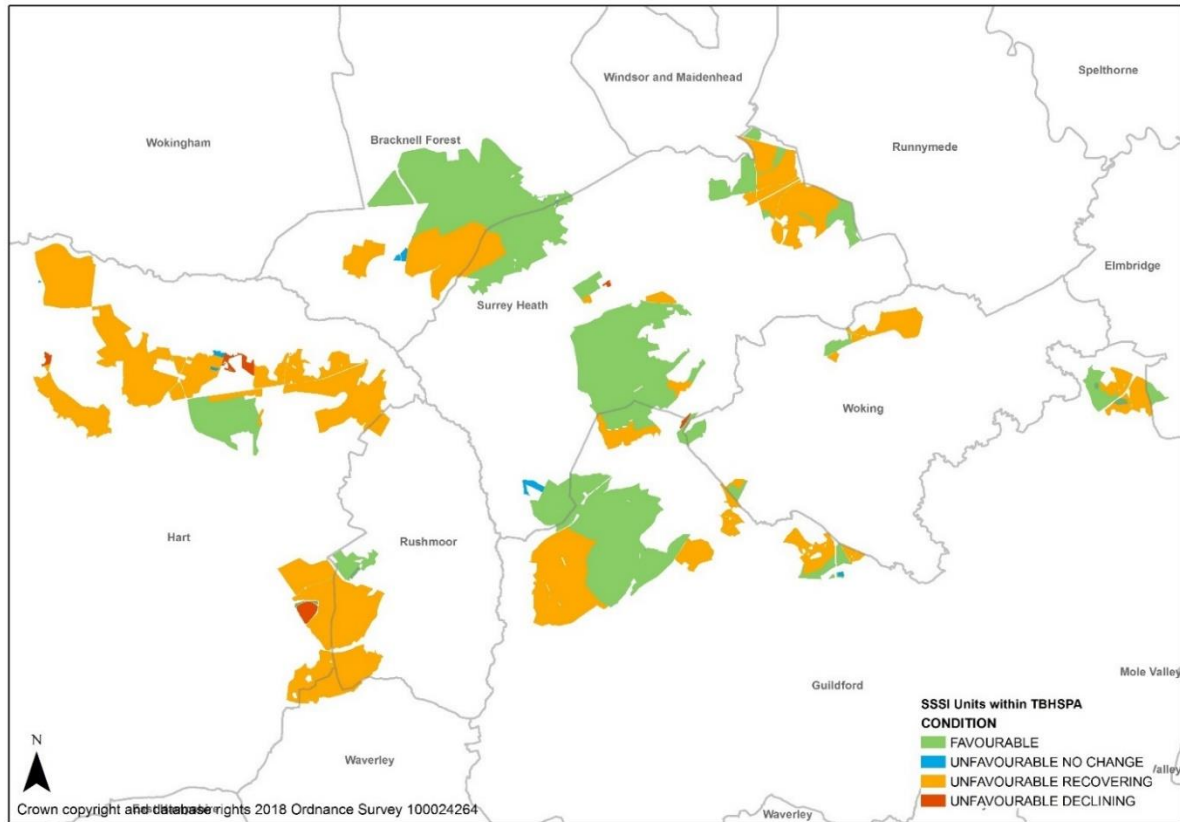
A summary of the latest assessments across the TBHSPA are set out in the table below:

Table 4: Latest Recorded Condition of SSSI Units in the Thames Basin Heaths SPA

Condition Assessment	Units	%
Favourable	54	42.5%
Unfavourable – Declining	5	3.9%
Unfavourable - No change	7	5.5%
Unfavourable – Recovering	61	48.0%
Total	127	100.0%

Map 5: Condition of SSSI Units within the Thames Basin Heaths SPA

⁶⁷ Natural England (2020) *Natural England Standard: SSSI Monitoring, Assessment and Reporting*



Case Studies

3.37. As part of the process of scoping potential alternative options, it is useful to review examples of approaches taken to mitigation on other Special Protection Areas (SPA), particularly where they have the same or similar qualifying features and/or conservation objectives. Specific case studies may be relevant to potential measures.

3.38. However, there needs to be some caution in considering the suitability of measures and approaches taken elsewhere. The current TBH approach is designed to meet the needs of this specific SPA. The SPA has particularly vulnerable features and is a highly fragmented site spread across many local planning authorities, in a highly urbanised area. It is subject to a high level of visitor pressure, and with the level of housing proposed across the area, this is expected to increase. In fact, it is relevant to note that many of the other approaches that have been developed over recent years cite the Thames Basin Heaths SPA approach as a good practice example to follow. The current approach taken in the Thames Basin Heaths SPA has been designed based on research and evidence based on visitor patterns and the context within which the strategy must operate.

3.39. Details of the other SPA approaches explored can be found within Appendix 2. This sets out information on each approach which could be useful for identifying and investigating alternative approaches for the Thames Basin Heaths. It is clear that there are similarities between many of the existing and emerging approaches to avoidance and mitigation across the Country. However, this review of other approaches has identified some examples of variations. These can be explored as potential options and further analysis undertaken to evaluate if this could be applied in the TBH SPA context. In summary, these include:

- Alternative greenspace enhancement or provision which is not traditional SANG e.g. Heathland Infrastructure Projects (HIPs).
- Enhancement or creation of recreational routes.
- On site mitigation.
- Closure of access points, screening, fencing (access restrictions).
- Rationalisation of path networks.
- Changes to car parking.
- Bird refuge projects.

4. The Identification of Mitigation Measures

- 4.1. The previous existing research assisted in the initial selection of mitigation measures by the Project Manager and LUC to take forward as options for consideration. The proposed options were then shared with the Project Board, Natural England representatives, and Environmental Advice Group for their comments and suggestions which informed the final list of options to be explored. The options were presented to the JSPB and associated Officers Group (which includes non-governmental organisations (NGOs) and planning authority representatives) whose comments were also taken into consideration in taking options forward.
- 4.2. Since the designation of the Special Protection Area in 2005, there have been several potential alternative mitigation approaches identified and considered. In many cases, there are justified reasons why these alternatives have not been considered workable and/or have not been pursued further. However, it is considered important to evaluate all potential options considered to date, alongside any new options identified.
- 4.3. The implementation of one measure may not provide adequate mitigation. However, measures could be considered as part of a package of measures delivered alongside the existing three-pronged approach of SANG, access management and on-site management of the SPA. The 11 options identified are set out in the table below. They have been divided into four groups.

Table 5: Avoidance/Mitigation Measure Options

Group A – Alternative Sites/Green Infrastructure
Option 1 – SANG networks
Option 2 – Linear SANG
Option 3 - Enhancement or Creation of Recreational Routes
Option 4 – Smaller SANG/facilities with Smaller Catchments
Option 5 - Larger SANG with Larger Catchments
Group B – Habitat Management/Restoration
Option 6 – Habitat Management/Restoration
Group C – Access Management
Option 7 – Expansion of SAMM Project - Wardening service
Option 8 – Expansion of SAMM Project – Education and Communication service
Group D – Access Restriction/Control
Option 9 – Car Parking Availability/Access

Option 10 – Dog Control/Wardening

Option 11 – Access Restriction

5. Further Evidence and Research

Introduction

5.1. Research was undertaken to investigate options further during this project. Each of the 11 potential options, or group of options, was investigated within an associated report which should be read alongside this report for further details. These studies aimed to address the gaps in the initial evidence, to provide information that would enable identification and selection of potential workable measures and/or exclusion of those which are unsuitable for further consideration. Summaries of the findings are provided below.

Group A: Alternative Sites/Green Infrastructure

- 5.2. The greenspace options were investigated further by LUC within the SANG Research Study⁶⁸ with the use of an online greenspace survey. Overall this found that people visit a wide variety of sites, often including footpaths, bridleways and linear sites. Many of the features people cited as most important to them related to those within the current 'must have' SANG criteria. However, the popularity of sites which don't meet the criteria, e.g. linear routes, indicates that it may not be necessary for all sites to include all of the criteria to have an effective visitor draw. People may also choose sites to visit based on local convenience more than other desirable features.
- 5.3. Further information from the study is provided below under each separate greenspace option.

Option 1. SANG Networks

5.4. This option relates to the potential for enhancing the existing SANG network and/or delivering SANG as part of a network, for example by recognising the value of a connected network of sites and taking into account the 'offer' and role of each site. This could enable sites to be enhanced (for example by improving access or facilities) and to provide mitigation, as part of the suite of SANG, which would not be considered to meet the requirements if assessed individually. SANG

⁶⁸ Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SANG Research Study*

networks could include a range of sites such as linear SANGs and/or smaller SANGs; therefore there is potential overlap with the other options in Group A.

- 5.5. The existing SANG guidelines already make provision for suites of SANGs, and have slightly different criteria for suites than individual sites (Appendix 3), and state that:
- 5.6. *“Where long routes cannot be accommodated within individual SANG it may be possible to provide them through a network of sites. However, networks are inherently likely to be less attractive to users of the type that visit the SPA, and the more fragmented they are, the less attractive they will be, though this is dependent on the land use which separates each component. For example, visitors are likely to be less put off by green areas between SANG than by urban areas, even if they restrict access to rights of way and require dogs to be kept on leads. Though networks of SANG may accommodate long visitor routes and this is desirable, they should not be solely relied upon to provide long routes.”*
- 5.7. SANG networks were therefore considered to include sites linked by routes, as well as groups of sites that provide SANG features across a wider area. The opportunity to add value and/or capacity to individual SANG by developing a network of SANGs across local authority boundaries is also already referred to in the TBH SPA Delivery Framework (2009).
- 5.8. SANG networks could provide opportunities for the creation of circular walks and inclusion of SANG criteria features across a range of sites and may provide the advantage of bringing routes close to people’s homes. However, networks which included narrow pathways or small sites could create conflict between users and create a sense of busyness which would be undesirable for the target visitors, particularly dog walkers. 86% of dog walkers reported that a site being ‘too busy’ would put them off visiting a greenspace. 57% of dog walkers would also be discouraged by user conflict. If SANG networks were to be utilised then the convenience and appeal of links and connections to greenspaces would be important. Existing visitor use would also require consideration.
- 5.9. Creating SANG networks such that a group of sites functions as a whole may make sites more appealing by providing more variety, which was indicated as very important when selecting which greenspace to visit by those surveyed; both in relation to providing a variety of landscape features (45% of respondents) and variety of routes (43% of respondents). While the survey data provided evidence that people do use different sites at different times and for different purposes, and therefore that SANG networks could be effective in principle, it was not possible to identify a set of specific criteria by which potential groups of sites could be assessed.

5.10. The Mitigation Capacity Review study showed that SANG networks could be effective particularly through linking small sites together, and/or extending links to larger SANGs and the wider greenspace network. Sites should aim to incorporate as many features from the SANG criteria as possible, with a >2.3km circular route being provided across different sites where feasible. Any departure from the existing criteria should be offset by an increased provision rate (above the minimum 8ha/1,000 residents) or other 'mitigating' factors such as connectivity to other greenspaces.

Option 2. Linear SANG

5.11. This option explores the ability to deliver SANG on linear sites that lack the space for the traditional circular walk provided in current SANGs, but which might provide a circular walk by utilising off-site routes; it is expected that they might commonly be found alongside linear features such as railway lines, canals or rivers, with some wider areas opening out from the linear feature.

5.12. The existing guidelines for SANG include a requirement that it is possible to complete a circular walk of 2.3-2.5km around the SANG but linear SANG would comprise of sites that themselves do not provide a circular walk, but otherwise meet existing SANG criteria and still provide a quality experience and meet a recreational demand that would provide the required mitigation. It is possible that linear SANG could incorporate a long-distance pathway (recreational routes – Option 3), provide a 'there and back again' walk e.g. including a narrow strip of land (<100m which is often accepted as the distance Natural England request between paths in an open area of traditional SANG, although this is dependent upon site habitat and topography etc.), or link into the wider rights of way network to provide other route options e.g. circular walk opportunities.

5.13. The SANG Research Study found that linear sites were some of the most frequently visited, with the Basingstoke Canal SSSI cited most often of all the green space responses. Other public surveys in the HMA also indicated that residents use route networks and would like to see more 'green corridors'. Sites with circular walks may therefore tend to be more desirable for some visitors but high quality sites with linear routes will also be well used.

5.14. With the existing evidence it is difficult to determine whether people are visiting these sites as part of a wider circular walking route, or as a destination in themselves. If true 'there and back again' walks were to be relied upon further investigation would be useful to fully establish how these sites are used and assist in enabling appropriate mitigation capacity to be calculated. This

may be appropriate on a case by case basis and could be incorporated within visitor surveys exploring existing visitor use which would be likely to be required for any publicly accessible spaces being considered for SANG.

- 5.15. There is a risk that the creation of linear SANG could make existing sites too busy or increase conflict between user groups which would be undesirable. Sites would need to be irregular in shape to provide suitable wider areas where dogs could easily exercise off lead while avoiding conflicts.

Option 3. Enhancement/Creation of Recreational Routes

- 5.16. Option 3 includes the potential for mitigation from the enhancement or creation of recreational routes (e.g. Public Rights of Way (PROW)), outside of the SPA and existing SANGs. This may involve projects that enhance existing routes, create new routes and/or provide connections between SANG. Recreational routes could be implemented in conjunction with SANG networks (Option 1) and/or linear SANG (Option 2).

- 5.17. Enhancement could include improving the condition and signage of routes, improving infrastructure (e.g. providing information/interpretation boards, benches, dog bins and dog exercise areas), replacing stiles with gates and improving connections between parts of the footpath (PROW) network, as well as widening routes to minimise user conflict. A similar approach has been taken at the New Forest SPA (see Appendix 2), where the mitigation strategy includes enhancement to recreational routes.

- 5.18. The online greenspace survey found that although some existing recreational routes are used regularly, few people consider 'clearly defined and waymarked walking trail(s)' as one of the most important features when considering which greenspace to visit. There are also particular issues with recreational routes being viewed as too busy and leading to user conflict, which are undesirable as referred to under option 1 and 2. Where sites already exhibit high levels of use this may also lead to low levels of additional capacity being available. Recreational routes may also have a limited draw for some visitors if a circular walk cannot be provided although this could be possible with appropriate links.

Option 4. Smaller SANG/Facilities with Smaller Catchments

- 5.19. Smaller SANG would provide opportunities to deliver smaller sites or facilities which would not meet the current SANG guidelines due to characteristics such as size, or the lack of certain

features, but could still meet a recreational demand which could provide the necessary mitigation.

- 5.20. According to the Natural England guidelines SANG 'must have' a minimum 2.3 - 2.5km circular walk so although SANG can in theory be 2ha in size, in practice an area much larger than this is needed to fit a circular walk of this length without being overly convoluted and unattractive. SANG of greater than 2ha that may be unable to incorporate a 2.3km circular walk would therefore be considered 'smaller SANG / sites with smaller catchment' (which therefore has overlap with linear SANG; Option 2).
- 5.21. The SANG Research Study findings align with previous SANG and SPA visitor surveys which found that one of the main criteria by which people choose a green space to visit is that it is close to home. One third of respondents also said that sites close to home were more important during the pandemic than usual. 49% of respondents said they have visited 'smaller grassed areas for recreation' in the last year, however, of the 'most visited' sites named by survey respondents, only a small proportion (2%) were at very small sites <2ha, both for dog walkers and others. Smaller sites may have been among the sites that it was not possible to match to the survey data.
- 5.22. Consideration of smaller catchments may be most important for 'intercepting' dog walkers that may otherwise visit the SPA when compared to other user groups. The average distances travelled for dog walking is relatively short compared to other activities, and similar for all types of sites.
- 5.23. Smaller SANG sites might therefore provide for convenient frequent visits, particularly for dog walkers, although other visitors (such as horse riders) may not be catered for. 'Very important' features that were more important to dog walkers than other visitors were 'space for dog off lead' and 'facilities for dogs'. Dog walkers are also more likely to be put off by characteristics that affect dogs and dog walkers, such as the presence of grazing animals, a lack of space to take dogs off leads and a lack of water points.
- 5.24. Smaller SANGs have the advantage that smaller sites may be easier to find in urban areas (close to where people live) than other types of SANG, although to provide mitigation for a significant number of homes, there will need to be a lot of them, and existing use will be an important consideration.
- 5.25. Small sites were also considered within the Mitigation Capacity Review study which concluded that given the motivations of dog walkers and following review of the collective evidence base,

small sites of less than 2ha are unlikely to be capable of delivering the features which appeal to the SPA user group, reinforcing the minimum SANG size of 2ha outlined in the Delivery Framework. Therefore, very small (<2ha) sites should not normally be considered unless being 'bolted on', i.e. directly attached, to an existing SANG. The existing catchments for small SANGs would therefore remain appropriate (2-12ha = 2km catchment, 400m catchment where no parking is provided).

- 5.26. Although smaller sites may be constrained in the type of experience they are able to offer, there may also be potential for the visitor experience to be extended over a number of other sites through strengthening connections with other smaller green spaces, to a larger site, linear feature, or by providing a range of experiences across a group of nearby but separate small sites. This could form a SANG network approach as described in option 1.

Option 5. Larger SANG with Larger Catchments

- 5.27. This option could enable the potential for mitigation to be provided by larger sites with increased catchments. Current SANG guidance suggests that SANG larger than 20ha would usually have a catchment of 5km; therefore this option would allow for sites greater than 20ha to have catchments of greater than 5km in some circumstances, for example where they provide a greater range of features and/or unique facilities and attractions. The current Delivery Framework gives opportunity for some variation: *"The catchment of SANG will depend on the individual site characteristics and location, and their location within a wider green infrastructure network."*
- 5.28. The SANG Research Study survey found that, based on the data on travel distance to existing sites, people are willing to travel further to a site with provision for horse riding, mountain biking, picnicking and facilities for children and teenagers, than other types of site. Some of these activities were found to be more likely within the SPA specifically than at other types of large site. Horse riding and mountain biking takes place where there are facilities such as trails, within the SPA. A large SANG could therefore incorporate features for these specific users. The proportion of visitors this could divert from the SPA is relatively low, but could potentially be used in conjunction with other features, to create a catchment greater than 5km.
- 5.29. A larger percentage of dog walkers (50%) are only willing to walk up to 15 minutes (c. 1.2km) when compared to cyclists and walkers (40% and 41% respectively) to reach a new green space containing their five most important features. This indicates that dog walkers may be less willing to travel to reach sites if a larger catchment was being relied upon to 'intercept' visits to the

SPA. Larger catchments may therefore only be reliable for certain user groups who are willing to travel further.

5.30. The average travel distances recorded in the 2020 greenspace survey were less than 5km with average travel distances to the SPA being highest at 3.5km. Data on travel distance indicates that people will travel further to use facilities for specific activities such as horse riding and mountain biking. SANG providing these facilities (which could be larger sites, but not necessarily) could be further from people's homes, for example in the more rural areas of Hart. However, sites which could support a catchment >5km are likely to arise infrequently (if at all) and robust site-specific evidence would be required to fully justify any catchment deviations which should be agreed with Natural England.

Group B: Habitat Management/Restoration

Option 6. Habitat Restoration

5.31. A feasibility study⁶⁹ was undertaken by the Project Manager which investigated whether habitat restoration could be used as an avoidance or mitigation measure for dwellings. Existing evidence, new information in the form of current legal advice and input from Natural England, as well as SPA landowners was drawn upon to inform this study.

5.32. The conclusions of this study indicate that habitat restoration, i.e. the clearance of forested areas to re/create and manage additional open habitat that is suitable for breeding SPA birds, could be viewed as a measure which would enable housing development to avoid impacts upon the SPA. Legal advice confirmed that this option could avoid the impacts on the integrity of the SPA in line with regulation 63 of the Habitats Regulations, rather than being considered compensation.

5.33. The clearance of forested areas to create or recreate suitable habitat for the SPA birds would mean that although numbers of new visitors to the SPA would not be reduced, the impact on the SPA overall would not be so great. The newly restored heathland areas would need to be unlikely to become disturbed by recreation even with new development, as this approach

⁶⁹ Hart, Rushmoor & Surrey Heath Council's (2020) Hart Rushmoor and Surrey Heath SPA Mitigation Project: *Habitat Restoration Feasibility Report*

would rely on the areas of undisturbed new habitat being able to sustain an equal or greater population of birds than those who may be affected by potential disturbance in other areas. The Queen’s Counsel (QC) advice⁷⁰ states that this can enable a conclusion to be reached on an Appropriate Assessment that development would not have an adverse effect on the integrity of the SPA, provided it is additional to that which would be required to fulfil the UK’s obligations to maintain and preserve the SPA under regulation 10 of the Habitats Regulations and the benefits are sufficiently certain. This means that the habitat would need to be in place with benefits proven in advance of any applications relying on it.

5.34. It currently remains uncertain whether there is suitable land available for the implementation of this option, based on landowner discussions. Although there are areas of land within the SPA which appear appropriate for habitat restoration, landowner agreement is essential in order to take this option forward.

5.35. If this option was to be taken forward in future with landowner agreement, then further work would be required to calculate the associated mitigation capacity and secure the appropriate ongoing management and monitoring of the habitat.

Group C: Access Management

Option 7. Access Management – Expansion of Wardening

5.36. This mitigation option was explored by Footprint Ecology in the Access Management Study Report⁷¹. This report explored the potential for expanding the SAMM offer through increased wardening, as well as education and communication (under option 8 below). Statistical analysis was undertaken to establish the current level of wardening and identify any gaps or opportunities for expansion in order to further the public engagement and increase the mitigation offer for new dwellings.

⁷⁰ Tromans, S. Queen’s Counsel (2020) *Advice in the matter of Hart, Rushmoor and Surrey Heath SPA Mitigation Project*

⁷¹ Liley, D. & Panter, C. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Management Research Study*

5.37. The Thames Basin Heaths Partnership SAMM team currently deploys over 9 full-time equivalent staff undertaking ranger duties. It is estimated that around 5,000 hours warden time over a year (the approximate current level) could result (if deployment were perfectly matched to visitor numbers and distribution) in around 28.4% of visitor groups coming into contact with a warden once and 19.8% if two encounters were the target. Current levels of wardening are such that a high proportion of very regular visitors are likely to be encountered over the year, but less frequent visitors (e.g. those visiting weekly or less) are likely to be missed. Modelling warden deployment based on current estimates of visitor numbers at different access points (and assuming wardens were deployed at or close to access points) suggests that focussing warden effort at busy access points is likely to result in the greatest number of visitor-warden encounters.

5.38. Expansion of the SAMM offer could also include:

- More warden focus towards afternoons;
- Extending the bird breeding season focus to include February (woodlark settling period);
- Greater focus on wildfires;
- Potential for wardens to have powers to enforce (e.g. dogs on leads relating to the dog control mitigation option) if necessary.

5.39. The report shows that there could be scope to increase the warden team by up to twice its current size and this could provide additional mitigation. The current provision is a single warden for 374 new houses per year and the additional benefits of further wardening coverage will be ever decreasing, as such Footprint suggest that an additional 9 wardens could precautionarily be sufficient to provide SAMM-type mitigation for 2,700 houses. The calculations indicate that the extended SAMM wardening could potentially support an additional 300 dwellings per year. It is important to recognise that this is estimated simply based on extending the current SAMM – which functions as part of a package of mitigation alongside SANGs. The additional mitigation is estimated in this context and is not a final total of what mitigation could be achieved.

5.40. There is no clear way to estimate additional capacity (using a formulaic approach) from greater focus on wildfires or other areas of expansion that are discussed. There is currently no method for calculating capacity for these individual measures, particularly as they would function as relatively small elements of a much wider mitigation package. It is likely that the capacity

provided would be very small and therefore further investigation into these elements is not recommended for this project.

- 5.41. The current SAMM Project Manager would welcome additional wardens but there would need to be some further considerations for any implementation and associated costs. For example, doubling the warden team may require an additional Team Leader to manage the staff, additional vehicles, office space, uniforms etc. all of which would incur costs above that of just the wardens themselves. These costs would need to be considered in relation to the housing that was to rely on them and an approach agreed with Hampshire County Council (the holders of funds) and the JSPB.
- 5.42. To date SAMM has been provided as an SPA-wide strategic approach. If this was to continue with an extended wardening service then the capacity of additional mitigation may be spread very widely across all developments within 5km of the SPA, giving each dwelling a very small amount of capacity which would need to be supported by SANG, and agreed to by all 11 Local Authorities. Footprint Ecology suggest that elevated SAMM payments could be made in lieu of SANG in very specific circumstances where SANG options are impossible and there are clear opportunities to enhance SAMM. This could enable interested authorities to implement this approach and safeguard the capacity only for developments which met certain criteria. The deployment of site-specific wardens could enable an increased warden presence in areas which are likely to be visited by people from those developments (which would need to be supported by ongoing monitoring).
- 5.43. It should be noted that the SAMM team have recently appointed a data officer who is analysing data to further evidence the current SAMM project effectiveness. This work may provide further evidence to inform future opportunities to expand the SAMM offer which could be explored.

Option 8. Access Management – Expansion of Education & Communication

- 5.44. This mitigation option was explored by Footprint Ecology in the Access Management Study Report⁷². There is also detailed information on the current education and communication work

⁷² Liley, D. & Panter, C. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Management Research Study*

delivered by SAMM within the associated SAMM Background Paper⁷³. These reports indicate that the current provision has been increasing over time and is planned to further expand in future. It would therefore be difficult to enable additional work to be identified and suitably separated from the current offer in order to consider it able to provide additional mitigation.

- 5.45. Use of social media indicates steady increase over time. The current maximum reach of social media is over 30,000 people, which is broadly equivalent to the number of individual groups that visit the SPA over a year. Social media clearly has an important role in extending the reach of the wardening team and some avenues have only just been opened. However, there is perhaps limited scope to further expand given the current level and rising trajectory.
- 5.46. Education work is primarily through a dedicated education officer whose role includes work directly with schools (visits to schools and to heaths), wildfire session in schools, promotion of alternative greenspace and engagement with community groups. There are at least 282 primary schools and 90 secondary schools within 5km of the Thames Basin Heaths SPA. Postcode from 2020 data indicates there are also around 333,000 residential properties (potentially with 800,000 residents) living within 5km of the SPA. These figures would suggest there is clearly a large audience for such work and the current plans are to increase engagement through further education. In future it could be possible to explore the potential for extra staff resources to expand the reach. At the current time activities are planned to expand within the budget and staffing available from the existing mitigation package.
- 5.47. There is no known way to estimate additional capacity (using a formulaic approach) from increased education work. It is not currently possible to calculate the additional mitigation that might be achieved if greater weight were placed on education and/or communication, particularly as these elements are already being expanded under the existing SAMM arrangements. It is likely that the capacity provided by these measures would be relatively small and therefore further investigation into these elements is not recommended for this project.

⁷³ Hart, Rushmoor & Surrey Heath Councils (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SAMM Background Paper*

Group D: Access Restriction and Control

Option 9. Car Parking Controls

- 5.48. Car parking controls were explored as a mitigation option by Footprint Ecology in the Car Parking Research Study Report⁷⁴. This study explores the potential for implementing changes to limit or restrict the parking provision for the SPA as avoidance/mitigation for new housing growth. The work considers how effective the changes in parking provision might be, the scope to implement them, the capacity (i.e. mitigation) they might achieve and how they might be actioned.
- 5.49. Currently there are approximately 160 parking locations with around 2,348 spaces that provide access to the SPA. Most parking locations are small with few spaces. Formal car parks account for 27.5% of the locations and provide around 67% of the total spaces.
- 5.50. Counts conducted by the Thames Basin Heaths Partnership have recorded an average of 515.6 vehicles parked on or around the SPA at any one time. Taking the peak count at each parking location and summing these gives a maximum of 1,513 vehicles, still well below the overall number of spaces. This would suggest that there is considerable over provision of parking currently, such that there are many more spaces than visitors. This would mean that visitors have a wide choice of where to park and that measures to reduce parking might need to be considerable to reduce the choice to a level where distribution can be manipulated.
- 5.51. A model was used to test different scenarios of parking control. The model assumed that if a parking location was full or unavailable cars shift to the next nearest location. Testing different hypothetical scenarios indicated that closing parking locations could result in marked redistributions of visitors arriving by car. The model suggests around a third (32%) of all access to the SPA is currently on foot, therefore parking controls will not affect these visitors in any way. It is also important to consider any potential displacement to other sites which may occur if parking controls were implemented. For example, any deflection to SANGs could reduce the mitigation capacity available at these sites which would be undesirable.

⁷⁴ Panter, C. & Liley, D. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Car Parking Research Study*

- 5.52. Rural sites where there is little foot access will show the most marked effects of parking control. The scenario testing shows that, even with marked parking controls, there is still sufficient parking resource on the SPA for visitors to simply change location to another SPA parking location. It would seem that unless major controls were implemented, there is potential for continued use of the SPA by the same number of visitors, with the potential for some (relatively minor) changes in the spatial distribution of footfall. As such, the mitigation potential for parking changes is viewed as minimal.
- 5.53. It is complex to equate a parking approach to a level of avoidance/mitigation for housing. The relative change in visitor numbers through areas of the SPA with higher bird densities was calculated, as a means of exploring the implications of controls in more detail. As an example, if all informal parking were closed and only formal car parks remained, it is estimated that 1,765 fewer people per day would pass through areas that have supported higher bird densities (>4 territories 2015-2019). While such a redistribution could be beneficial to the SPA bird interest, ultimately it may mean, for example, that some areas of the site are being further damaged making restoration harder. Legal advice could be useful to explore this point if this option was to be taken forward further. Furthermore, changes in parking that are permanent will result in long term shifts in access whereas the bird distributions may shift over time as habitats change. Panter & Liley (2020)⁷⁵ caveat that they present the figures simply for information and to prompt discussion. Attributing a level of mitigation to a redistribution in access is considered very difficult and there currently remains no methodology for this.

Option 10. Dog Controls

- 5.54. The use of dog controls as a mitigation measure was investigated by Footprint Ecology in the Dog Control Research Study Report⁷⁶. This report explores the potential for implementing dog control measures as mitigation for new housing growth. The work considers how effective dog

⁷⁵ Panter, C. & Liley, D. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Car Parking Research Study*

⁷⁶ Liley, D., Panter, C. & Powner, S. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Dog Control Research Study*

restrictions might be, the scope to implement them, the capacity (i.e. mitigation) they might achieve and how they might be enforced.

5.55. The majority of visitors to the SPA are dog walkers. Current dog controls on the SPA predominantly relate to requesting dogs to be kept to main paths over the period March 1st – 15th September. This is promoted through signage and the requests by the Thames Basin Heaths Partnership wardens. There is however no means to enforce this across the SPA.

5.56. The current approach by the Thames Basin Heaths Partnership is positive and influences behaviour through positive messaging, engagement and awareness raising. There is a risk of marked public opposition to any proposals that are not fair, proportionate and clearly justified. Ultimately, there is a risk that the implementation of further controls could be open to challenge, incur considerable opposition and undermine the engagement with visitors and positive relationships established to date.

5.57. There are three options whereby dog controls could have some (perhaps limited) mitigation benefit and be workable. They are:

1) Extend the period at which current controls kick in, shifting the current period 1st March-mid September. to 1st February-mid September. This would ensure the period when woodlarks are settling on territory was included.

2) Dogs on lead when asked, providing the means to enforce (if necessary) the current approach of dogs on paths (i.e. a means to target those few individuals who currently do not comply);

3) Potential for limited areas (e.g. heathland areas with high bird densities) where dogs are excluded or required to be on lead during the breeding season.

5.58. Models were produced to show the current distribution of access across the SPA and the numbers of dog walkers on different parts of the SPA. The modelling demonstrates that there are marked areas with higher densities of Annex I birds and that these can be relatively small in area. This highlights that it could be possible to create zones within sites that were relatively small yet provided protection for a relatively high proportion of the birds present. These could become 'low disturbance' zones where access levels were low, yet given their relatively small size on otherwise big sites, there would still be space for dog walkers. Such zones would mean that use is concentrated in other parts of the SPA.

- 5.59. It is complex to equate a particular dog control approach to a level of avoidance/mitigation. It is suggested that mitigation that resulted in a reduction of 0.23 person visits per day to the SPA would be equivalent to the SANG requirement for a single dwelling. Were measures to result in no dog walking at all on the SPA, this could create avoidance/mitigation for around 16,191 dwellings or equivalent to 311ha of SANG. However, this is clearly hypothetical as this would be impossible to achieve and could displace over 2 million dog walks per annum elsewhere, potentially requiring increased SANG provision.
- 5.60. Predicting the mitigation benefit of more likely and relevant approaches, such as extending the period when dog walkers keep their dogs on the path (including February), requiring dogs to be on lead when asked or creating zones within sites where dogs are excluded/required to be on leads during the breeding season is much harder. Any mitigation benefit is likely to be relatively small given that there is already strong messaging to keep dogs to paths and the Thames Basin Heaths Partnership staff already patrol and approach dog walkers whose pets are off the path.

Option 11. Access Restriction

- 5.61. This mitigation option was further explored by LUC through the Access Restriction report⁷⁷, supported by information within the associated LUC Visitor and Access Background Paper⁷⁸. This study considers the potential for access restriction (physical measures within the SPA itself, such as fencing; habitat management to create barriers; improvements to paths or facilities to encourage people to use certain areas rather than others; and/or signage) to avoid or mitigate the effects of recreation pressure on the SPA.
- 5.62. There are a number of existing access restrictions in place across the SPA, including areas in private ownership with no public access, MOD danger areas with no or restricted access, and areas of forestry that are subject to temporary fencing to allow clear-cut woodland to regenerate. Although an annual survey of SPA birds is carried out, there has been no specific analysis of the effects of existing access restriction measures on the number of bird territories

⁷⁷ Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Restriction Research Study*

⁷⁸ Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SPA Visitor Distribution and Access*

or breeding success and overall there is currently insufficient information to determine the effects of existing access restrictions at the SPA.

- 5.63. Access can be restricted through a number of physical measures that either prevent people from accessing certain areas or steer them away by encouraging them into other areas. A combination of these measures are likely to be required to enable effective access restriction.
- 5.64. For the SPA's qualifying bird species, the most effective way of avoiding visitor pressure through access restriction would be to restrict access to the whole SPA. However, this would be difficult to achieve and enforce, and would be undesirable. The 'most effective' mitigation is therefore something that is workable, as well as something that reduces overall disturbance to birds. The three main approaches considered were focussed on: areas currently under the most visitor pressure; large open areas of heathland crossed by desire lines, where visitors could be steered around heathland instead; and where fencing rotationally-managed forestry could be extended.
- 5.65. Access restriction measures would be effective as avoidance/mitigation if they could reduce instances of disturbance of birds by visitors (e.g. by increasing the distance between visitors and birds) and therefore increasing the breeding success of the SPA's qualifying bird species. However, they also need to be areas where the restrictions will be complied with, that are ecologically suitable for the proposed measures, and where restrictions will not result in displacement of visitors to other sensitive areas.
- 5.66. Quantifying the effectiveness of access restriction measures applied at the SPA, and therefore the number of homes that could be mitigated, requires a robust understanding of current condition of habitats, data on the presence of breeding bird populations (particularly within restricted access areas), and information on recreational pressure, as well as an understanding of how visitor behaviour could change and where people would displace to. Existing baseline data may help with this calculation but there are gaps in the existing evidence (how effective previous access restriction measures have been in reducing recreation pressure) which currently limits the ability to accurately quantify the number of homes that could be delivered through a specific access restriction measure. This could be explored further by specifically monitoring the effects of existing access restrictions, or through a targeted trial. Further modelling and potentially legal advice would also be beneficial to understand the likely extent and effects of displacement of recreational pressure prior to implementation of an access restriction measure.

Capacity Review

- 5.67. A Mitigation Capacity Review⁷⁹ study was completed by EPR, supported by DTA, as part of the project research to evaluate the approaches to capacity explored within the mitigation option reports. Those options where capacity was not calculated, and/or viewed to be minimal, were not included within this study.
- 5.68. The main focus of this study relates to the greenspace options (group A) which are referred to as 'SANG Alternatives' in the LUC SANG Research Study⁸⁰. The capacity review report suggests that circular walking routes would not necessarily have to be accommodated within every individual SANG site for that site to appeal to the SPA user group, if other qualities can be provided, for example opportunities to complete longer walks within a wider connected SANG network.
- 5.69. Many SANG sites (46%) have been delivered to date with a shorter than 2.3 km walk, without apparent consequences for the overall success of the Delivery Framework approach. This is indicated by the latest SPA visitor survey results that have reported a statistically significant drop in visitor numbers across the SPA since 2005, despite a concurrent increase in housing numbers across the same period. The potential acceptability of SANG networks is also already acknowledged within the SANG guidelines and TBH Delivery Framework. Therefore if specific and carefully considered deviations from the SANG guidelines are required in order to ensure enough supply to achieve future housing delivery within the HMA, then this review indicates that delivery of smaller SANGs that cannot independently achieve a 2.3-2.5km circular walk but which can function as a part of a wider SANG and greenspace network would be the measure most supported by current evidence.
- 5.70. It should also be noted that many of the existing SANGs which do not contain a 2.3km circular walk are not located in close proximity to other SANG sites, therefore it is unlikely that they are currently part of a SANG network approach. The research shows that 20 sites do not have another SANG within 400m, and 11 of these are not located within 1km of another SANG. This

⁷⁹ Ecological Planning and Research (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Mitigation Capacity Review*

⁸⁰ Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SANG Research Study*

indicates that there may be opportunities for further sites to function effectively, even where they are too small to contain a 2.3km circular route and are not connected to a SANG network, although any individual proposals would need to fully demonstrate their effectiveness and be agreed with the competent authority and Natural England.

- 5.71. Ensuring visible equivalence in provision will be important for any SANG which does not meet the current SANG criteria to ensure that the regional approach to SPA mitigation is not undermined. Any shortfall in SANG quality criteria envisaged, such as the length of circular walk, should therefore be offset by other complementary means, such as an elevated provision rate (i.e. above the minimum 8ha/1,000 residents), and/or the delivery of other high quality site features or even other projects to support greenspace access in the locality.
- 5.72. Some examples of areas where these greenspaces could be provided, and their associated capacities are reproduced in appendix 4 of this report. This shows that there are opportunities for the delivery of additional SANG sites within the HMA which could assist in mitigating future housing. The report indicates that, based on the 2018 Strategic Housing Market Assessment (SHMA), housing need could be met for approximately 7 years through relying on 50% of the total sites investigated within the capacity report being delivered. It is also noted that there are many other sites identified within the SANG Background Paper which could be considered further by the authorities.
- 5.73. The Mitigation Capacity Review, and associated Supporting Advice from DTA Ecology, advise that the term 'SANG alternative' may suggest more of a material deviation from the current SANG provision than is envisaged. Although the mitigation options considered by this project could include significant deviations from the current SANG guidelines, the options have been refined as the project has progressed. It is now clear that those options considered workable are already acknowledged as part of the current SANG provision. Discussions with Natural England confirmed that it would be acceptable to name sites such as SANG networks 'SANGs' without deviating from the existing Delivery Framework approach. In this main report the SANG will be referred to by their option name to provide clarity on the type of SANG being discussed where necessary but it is acknowledged that these sites would be viewed as SANG along with the existing suite of sites which have been delivered to date.

6. Assessment of Potential Mitigation Measures

Introduction

- 6.1. This section of the report considers each of the mitigation measures identified in Chapter 4, and characterises and appraises their potential effectiveness and deliverability. Each of the mitigation options has been appraised using a proforma (Appendix 1) created at the start of the project, which has been updated as the project has progressed and used as a tool to identify and fill any gaps in evidence. The main gaps identified have now been filled with the research studies (Chapter 5) and this section draws together the findings and conclusions reached through that work. Chapter 8 provides information on any further work that may be necessary in order to implement the preferred options.
- 6.2. The proformas use a red/amber/green (RAG) scoring system to rate aspects of the mitigation options, where red indicates that problems are likely, amber (orange) indicates some uncertainty, and green is positive. An explanation is provided for each score. Within the overall RAG scores, those that are green are recommended to be taken forward as potential mitigation, amber have potential but it is not recommended that they are pursued at this time, and red are not currently considered to have potential as mitigation. Chapter 7 presents the overall conclusions of the assessment and the recommended approach to mitigation.

Group A – Alternative Sites/Green Infrastructure

Option 1 – SANG Networks

- 6.3. Overall, SANG networks have been given the rating 'green' and are recommended to be taken forward as potential mitigation. The SANG Research Study found that, although data from the online survey alone did not provide robust evidence that SANG networks would work, there is evidence that SANG networks already in place around the TBH SPA are effective; this was further supported by the Mitigation Capacity Review. The studies concluded that it would be beneficial for smaller SANGs in particular to be linked as a cluster of sites; linear SANG and recreational routes (assessed separately) could also be enhanced by considering their connectivity beyond the site.
- 6.4. It is recommended that sites within a SANG network meets the current SANG criteria where possible, with the exception of the circular walk requirement, which could be met by utilising routes between sites as well as those within them. Since the only deviation from the SANG guidelines would relate to the circular walk, the existing SANG catchments set out within the Delivery Framework would remain appropriate (2-12 ha SANG: 2 km catchment; 12-20 ha SANG: 4 km catchment; 20+ ha SANG: 5 km catchment; SANGs with no parking: 400 m). Sites would therefore have to come forward within appropriate distances of potential future housing locations.
- 6.5. SANG networks would also need to be carefully designed to avoid user conflict, particularly where existing sites and smaller linking routes are used.

Option 1	SANG Networks
<p>Description summary Delivering SANG as part of a network, which may include enhancing or linking existing suites of SANG or enhancing individual SANGs so that as a network they draw more people away from the SPA.</p>	
<p>Characteristics</p>	
<p>Type of intervention Strategic approach to provision of 'SANG' function, e.g. that:</p> <ul style="list-style-type: none"> • Could take a network approach to provision of SANG function. • Could allow new sites that currently would not meet SANG criteria to contribute to mitigation (considered individually in relation to small/large/linear SANG). • Could allow existing SANG sites to be considered as a network (e.g. in terms of their capacity and/or catchment), which could include making use of rights of way to link them. • Could use a mix of existing and new SANG sites. 	
<p>Scale of intervention</p> <ul style="list-style-type: none"> • At TBHSPA level (subject to agreement), e.g. to vary or add to SANG criteria. • At borough/HMA level, e.g. to identify contribution of SANG to potential/existing network and/or consider as part of a green infrastructure strategy. May require cooperation across boroughs. • At site level, to enhance existing or deliver new sites. 	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • SANG Research Study (2020) by LUC, which included an online survey of local greenspace users. • SANG Background Paper (2020) by Rushmoor Borough Council. • Mitigation Capacity Review (2020) by EPR. <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • Visitor surveys, SANG surveys and research on visitor access patterns: provides data on the reasons that people use the SPA and where they travel from. • Green infrastructure (GI) strategies: provide information on existing and potential linkages between green spaces within each borough. • Census data: provides data on the density and household size of settlements near to the SPA. • Review of potential SANG sites previously considered in the HMA: provides data on other sites that are available, reasons why they were discounted, and the features that they could contribute to a SANG network. 	
<p>Gaps in evidence base Most gaps identified have been filled by studies commissioned as part of this project (see above). It would be beneficial to further explore the capacity of site links.</p>	
<p>Effectiveness</p>	
	<p>HRA implications The Mitigation Capacity Review concluded that SANG networks could be effective as mitigation on the same basis as the existing strategy, and in line with the Delivery Framework. Amendments to the SANG Guidelines would be beneficial to formalise the approach.</p>
	<p>Likely outcomes of implementing option Capacity may differ depending on the offer, e.g. reduced capacity available if a minimum 2.3km circular walk cannot be provided within any of the sites that</p>

	<p>form the network. The existing SANG catchments set out within the Delivery Framework would remain appropriate (2-12 ha SANG: 2 km catchment; 12-20 ha SANG: 4 km catchment; 20+ ha SANG: 5 km catchment; SANGs with no parking: 400 m). The site size used to calculate catchments may be based on the joint network where effective links are demonstrated. Sites would therefore have to come forward within appropriate distances (based on catchments) of potential future housing locations. The number of homes that SANG networks could enable depends on the availability and location of suitable sites. A comprehensive review of all potential sites was beyond the scope of this study; however, the Mitigation Capacity Review suggested that if 50% of the sites explored in the study (a variety of SANG types) could be delivered in appropriate locations and timescales relative to proposed housing, objectively assessed housing need could be supported for circa 7 years.</p>
<p>Relationship to other options being considered Not dependent on other options but could incorporate other options within the SANG network, particularly smaller SANGs, which would be most effective in clusters. Linear SANGs and recreational routes could also be enhanced with connectivity to the wider area.</p>	
<p>Monitoring effectiveness The effectiveness of this option could be monitored in a similar way to the existing SANG approach with:</p> <ul style="list-style-type: none"> • SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species. • SPA visitor surveys: to monitor changes in how people are using the site and where they travel from. • SANG network surveys: to monitor how people are using the SANG networks and where they travel from. 	
<p>Deliverability</p>	
	<p>Implementation method May require cross-boundary working to be most effective, but the majority of the work could be carried out by the local planning authorities. Implementation would require:</p> <ul style="list-style-type: none"> • Consideration of ideal location and features for network, as part of a local authority GI Strategy and/or Local Plan work: e.g. based on location of existing settlements and planned development locations in proximity to SPA. • Identification of potential SANG sites that are available: e.g. as previously identified through a call for sites. • Identification of additional sites that might require negotiation with landowners to use within a SANG network. • Cooperation with neighbouring authorities where network(s) could be cross-boundary. • Understanding and appropriately securing how features of the network as a whole and at individual sites would be maintained, by who and how funded.
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Local authorities within the TBH SPA area / HMA, depending on the scale of the intervention • Natural England • Multiple site land owners and managers

	<ul style="list-style-type: none"> • Housing developers
	<p>Potential sources of funding</p> <p>Developer contributions to fund improvements within the networks – continuation of current approach for collecting contributions.</p> <p>Mitigation would need to be linked to specific development with sites provided within the distances defined by the Delivery Framework catchments.</p>
	<p>Potential costs</p> <p>Costs would be very site/intervention-specific. However, an estimate based on making improvements to a single site with 2ha of greenspace including 500m new cycling/walking route is c.£500,000 (£4,000,000 in perpetuity). SANG networks could require multiple sites and therefore costs could be much higher, although this could be staged as developer contributions are collected. Costs to developers (per dwelling) may be similar to existing SANG, depending on provision rate.</p>
<p>Overall assessment</p>	
<p>Explanation for overall assessment</p> <p>Overall, SANG networks have been given the rating 'green' and are recommended to be taken forward as potential mitigation. The SANG study found that, although data from the online survey alone did not provide robust evidence that SANG networks would work, there is evidence that SANG networks already in place around the TBH SPA are effective; this was further supported by the mitigation capacity review.</p> <p>SANG networks would require more 'design' input than individual sites as the way that multiple sites could function together is complex; proposals would need to be reviewed on a case by case basis to take into account existing use etc.</p>	

Option 2 - Linear SANG

6.6. High quality attractive linear SANGs (which could incorporate parts of recreational routes) could have value as mitigation and it is recommended that sites which incorporate linear instead of circular walks are considered as potential SANG sites. Where circular walks could be provided this would be beneficial, but lack of circular walk may not necessarily put off visitors to the site, particularly as linear sites are currently very well used. There may also be opportunities to link with other greenspaces to provide circular routes, which could be part of a SANG network. The Mitigation Capacity Review makes the point that narrow sites (narrow linear SANGs or recreational routes) might have difficulty providing sufficient space to allow dogs off leads, but that these might still have a role to play as part of a SANG network or broader mitigation package. Some linear SANGs, however, could provide a more varied experience with wider areas being provided along the route to create an irregular-shaped site, enabling opportunities for dogs to exercise freely off-lead while avoiding conflict with other users. It is considered that these could be effective alone, although it would be beneficial if they linked into rights of way, recreational routes, or a SANG network that could allow a circular walk to be created. Where linear sites are provided independently it will be particularly important to demonstrate visible equivalence of the avoidance/mitigation being provided e.g. through increased provision rate (above the 8ha/1,000 resident standard). Sites must also be agreed with the competent authority and Natural England.

Option 2	Linear SANG
<p>Description SANG sites that provide a linear route (for example incorporating a long-distance footpath) rather than a circular walk.</p>	
<p>Characteristics</p>	
<p>Type of intervention SANG that allows new linear sites that currently would not meet SANG criteria to be used.</p>	
<p>Scale of intervention</p> <ul style="list-style-type: none"> • At TBHSPA level (subject to agreement), e.g. to vary or add to SANG criteria. • At borough/HMA level to identify sites. • At site level, to enhance or deliver sites. 	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • SANG Research Study (2020) by LUC, which included an online survey of local greenspace users. • SANG Background Paper (2020) by Rushmoor Borough Council. • Mitigation Capacity Review (2020) by EPR. <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • Visitor surveys, SANG surveys and research on visitor access patterns: provides data on the reasons that people use the SPA, what they are looking for in terms of type of experience (circular walks, openness etc.) and where they travel from. 	

<ul style="list-style-type: none"> Review of Potential SANG sites previously considered in the HMA by Rushmoor, Hart and Surrey Heath. 	
<p>Gaps in evidence base</p> <p>Gaps identified have been filled by studies commissioned as part of this project (see above). Further work may be required to establish a set criteria for linear SANG although, as with other SANG sites, some site specific assessment will be necessary.</p>	
<p>Effectiveness</p>	
	<p>HRA implications</p> <p>The Mitigation Capacity Review Study highlights that it may be more challenging to achieve ‘space to walk dogs off lead away from potential conflicts’ within linear sites but this will be dependent on site size and characteristics and should be assessed on an individual basis. Sites would need to have sufficient space for dog exercise and ideally link to other routes which could provide circular walk opportunities. This option may be unable to deliver significant quantum of mitigation but could contribute to the SANG offer where suitable sites are identified. Linear SANG could also have a role as part of a broader mitigation package, for example as part of a SANG network.</p>
	<p>Likely outcomes of implementing option</p> <p>The number of homes that linear SANG could enable depends on the availability and location of suitable sites. It is likely that linear SANG will have a reduced capacity if sites cannot meet all of the SANG criteria. A comprehensive review of all potential sites was beyond the scope of this study; however, the Mitigation Capacity Review suggested that if 50% of the sites explored in the study (a variety of SANG types) could be delivered in appropriate locations and timescales relative to proposed housing, objectively assessed housing need could be supported for circa 7 years.</p>
<p>Relationship to other options being considered</p> <p>Because sites unable to provide circular walks tend to be those which have narrow areas (e.g. width <100m) with linear paths through them, there are similarities with 'recreational routes' (Option 3), although linear SANGs focus more on the individual site whereas recreational routes consider wider network connections. Linear SANG could be used in conjunction with SANG networks (Option 1).</p>	
<p>Monitoring effectiveness</p> <p>The effectiveness of this option could be monitored in a similar way to the existing SANG approach with:</p> <ul style="list-style-type: none"> SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species. SPA visitor surveys: to monitor changes in how people are using the site and where they travel from. Linear SANG surveys: to monitor how people are using the linear walks and where they travel from. 	
<p>Deliverability</p>	
	<p>Implementation method</p> <p>If suitable and available sites are identified, this option could be relatively straightforward to implement. Implementation would require:</p> <ul style="list-style-type: none"> Identification of potential linear SANG sites that are available: e.g. as previously identified through a call for sites. Identification of sites that might require negotiation with landowners in order to become available.

	<ul style="list-style-type: none"> • The means of managing and maintaining the sites in perpetuity.
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Local authorities within the HMA/TBHSPA area, depending on the scale of intervention • Natural England • Individual site owners and managers • Housing developers
	<p>Potential sources of funding</p> <p>Developer contributions – continuation of current approach</p>
	<p>Potential costs</p> <p>Costs would be very site/intervention-specific. However, an estimate based on a linear SANG incorporating a 1km new cycling/walking route is c.£750,000 capital costs, c.£6,000,000 in perpetuity. Costs may be particularly variable depending on the amount of land surrounding the linear route.</p>
Overall assessment	
<p>Explanation for overall assessment</p> <p>Linear sites were frequently identified as 'most visited' sites in the 2020 greenspace survey. High quality attractive linear SANGs (which could incorporate recreational routes) may therefore have value as mitigation, providing that conflict with other users is minimised.</p>	

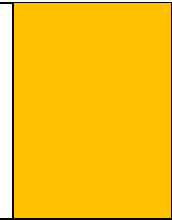
Option 3 - Enhancement or Creation of Recreational Routes

Many recreational routes are well used, so existing routes are likely to be viewed as busy and have limited additional capacity. It may be difficult to enhance or create a recreational route that minimises user conflict as most are relatively narrow and there may not be opportunities to provide wider areas for recreation away from the main route. Given that recreational routes would appear to be more likely to be successful as part of a linear SANG or SANG network, recreational routes alone would not provide sufficient certainty of mitigation. It is therefore not recommended that recreational routes are taken forward as mitigation unless part of a network/linear SANG.

Option 3	Enhancement or creation of recreational routes
<p>Description The provision of new or improved green recreational routes that function as SANG by providing users with a semi-natural experience and therefore drawing people away from the SPA. Recreational routes could form part of a linear SANG (Option 2) or SANG network (Option 1), or function on their own.</p>	
<p>Characteristics</p>	
<p>Type of intervention</p> <ul style="list-style-type: none"> • New type of site that could complement SANGs. • Could make use of existing or new recreational routes/rights of way. 	
<p>Scale of intervention</p> <ul style="list-style-type: none"> • At TBHSPA/borough level (subject to agreement), depending on the scale of the intervention e.g. update mitigation strategy and plan suitable routes. May require cooperation across boroughs. • At site level, to enhance existing or deliver new recreational routes. 	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • SANG Research Study (2020) by LUC, which included an online survey of local greenspace users. • SANG Background Paper (2020) by Rushmoor Borough Council. • Mitigation Capacity Review (2020) by EPR. <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • Visitor surveys, SANG surveys and research on visitor access patterns: provides data on the reasons that people use the SPA, where they travel from and features that attract them to particular sites/routes. • Green infrastructure strategies (Hart, others are emerging) and OS mapping: provide information on existing recreational routes and potential linkages between green spaces within each borough. • Census data: provides data on the density and household size of settlements near to the SPA. 	
<p>Gaps in evidence base Gaps identified have been filled by studies commissioned as part of this project (see above).</p>	
<p>Effectiveness</p>	
	<p>HRA implications Neither the SANG study or mitigation capacity review consider that recreational routes could be effective mitigation alone (and therefore</p>

	avoid adverse effects on integrity); they should only be considered as part of a SANG network or linear SANG.
	<p>Likely outcomes of implementing option</p> <p>Given that recreational routes are not considered likely to be effective on their own, an estimate of the number of homes they could provide for has not been provided (except as part of a network/linear SANG, as above).</p>
<p>Relationship to other options being considered</p> <p>Not dependent on other options but could be incorporated into a SANG network or linear SANG.</p>	
<p>Monitoring effectiveness</p> <p>The effectiveness of this option could be monitored in a similar way to the existing SANG with:</p> <ul style="list-style-type: none"> • SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species. • SPA visitor surveys: to monitor changes in how people are using the site and where they travel from. • Recreational route surveys: to monitor how people are using new/enhanced routes and where they travel from. 	
<p>Deliverability</p>	
	<p>Implementation method</p> <p>If suitable routes are identified, this option could be relatively straightforward to implement as it could make use of existing rights of way (subject to existing usage). However, identifying suitable locations for new/enhanced recreational routes would be best achieved by taking a strategic GI approach, and considering SANGs and recreational routes as a network.</p> <p>Implementation would require:</p> <ul style="list-style-type: none"> • Consideration of ideal location for new/enhanced routes, as part of GI strategy, e.g. location of existing or potential SANG sites and linkages between them. • Identification of existing rights of way and those that need enhancements. • Identification of potential new routes that might require negotiation with landowners in order to become available. • Assessment of existing use (if enhancing an existing site) and estimation of potential capacity. • The means of managing and maintaining routes in perpetuity.
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Local authorities within the TBH SPA area / HMA, depending on the scale of intervention • Natural England • Individual land owners and managers • Housing developers
	<p>Potential sources of funding</p> <p>Developer contributions – continuation of current approach.</p>
	<p>Potential costs</p> <p>Costs would be very site/intervention-specific. However an estimate (as for linear SANG) for a green route incorporating a 1km new cycling/walking route is c.£750,000 capital costs, c.£6,000,000 in perpetuity.</p>
<p>Overall assessment</p>	
<p>Explanation for overall assessment</p> <p>It is likely that existing usage of recreational routes, potential conflict between users, a lack of space to walk dogs off lead and limited capacity would make recreational</p>	

routes unlikely to have significant mitigation benefit on their own. Sites that could be significantly enhanced and provide wide routes to minimise conflict could be considered where identified but these are unlikely to provide substantial levels of capacity. These issues could be overcome if the recreational route was part of a linear SANG or SANG network, which are considered separately in Option 1 and Option 2.



Option 4 – Smaller SANG/Facilities with Smaller Catchments

- 6.7. Smaller SANGs might lack the space within the site to provide a circular walk that meets the ‘must have’ SANG criteria. It has been established that although a 2.3km circular walk is desirable, and should be provided where possible, it is not necessary for every SANG site. As with linear SANG, a circular walk could be provided by linking a smaller SANG into existing rights of way, recreational routes or SANG networks. Independent small sites may occasionally come forward which can be demonstrated as effective. In this case it will be particularly important to demonstrate visible equivalence of the avoidance/mitigation being provided e.g. through increased provision rate (above the 8ha/1,000 resident standard) and high-quality facilities. The provision must also be agreed with the competent authority and Natural England.
- 6.8. Smaller SANGs have the advantage that smaller sites may be easier to find land for in urban areas (close to where people live) than other types of SANG, although to provide mitigation for a significant number of homes, there will need to be a lot of them, and existing use may already be high. The Mitigation Capacity Review concludes that smaller sites would need to be at least 2ha in size to be effective.
- 6.9. Overall, it is considered that smaller SANG could provide effective avoidance/mitigation for the TBH SPA. It would be desirable for these sites to be linked or close to other sites, to provide a SANG network or variety of walking routes, preferably including a circular walk..

Option 4	Smaller SANGs / Facilities with Smaller Catchments
Description Sites that, either due to their smaller size or features, may not meet all of the SANG criteria, or could have a smaller catchment than the existing SANG site catchments.	
Characteristics	
Type of intervention SANG that allows new sites that may not fully meet current ‘must have’ SANG criteria (particularly the minimum 2.3km circular walk) to be used to provide for a particular recreational need.	
Scale of intervention <ul style="list-style-type: none"> • At TBHSPA level (subject to agreement). • At HMA / borough level to identify sites. • At site level, to enhance or deliver sites. 	
Existing evidence base Studies commissioned as part of this project: <ul style="list-style-type: none"> • SANG Research Study (2020) by LUC, which included an online survey of local greenspace users. • SANG Background Paper (2020) by Rushmoor Borough Council. • Mitigation Capacity Review (2020) by EPR. These draw on previous work including:	

<ul style="list-style-type: none"> • SPA / SANG visitor surveys: provides data on the reasons that people use the SPA and/or alternative sites and where they travel from. • Review of potential SANG sites previously considered in the HMA: provides data on sites that may have been rejected due to their size or lack of features. 	
Gaps in evidence base Gaps identified have been filled by studies commissioned as part of this project (see above).	
Effectiveness	
	HRA implications Small SANG could contribute to mitigation and would be particularly effective as part of a cluster / SANG network. The studies conclude that small SANGs functioning within a SANG network would not all need to independently meet all the 'must have' SANG criteria (e.g. 2.3km circular walk) in order to provide mitigation. This type of SANG provision could take the form of several smaller interconnected SANGs, providing a variety of routes and potentially a circular walk, within a connected greenspace network. Small SANG alone may perform effectively but would require robust evidence to show equivalent avoidance/mitigation would be provided.
	Likely outcomes of implementing option The capacity review stated that to provide effective mitigation small SANGs should remain ≥ 2 ha in size, therefore the existing SANG catchments set out within the Delivery Framework would remain appropriate (2-12 ha SANG: 2 km catchment; SANGs with no parking: 400 m). The number of homes that SANG networks could enable depends on the availability and location of suitable sites. A comprehensive review of all potential sites was beyond the scope of this study; however, the Mitigation Capacity Review suggested that if 50% of the sites explored in the study (a variety of SANG types) could be delivered in appropriate locations and timescales relative to proposed housing, objectively assessed housing need could be supported for circa 7 years.
Relationship to other options being considered Most desirable as part of a SANG network; could therefore link to other types of SANG e.g. linear SANG or recreational routes.	
Monitoring effectiveness The effectiveness of this option could be monitored in line with the existing SANG approach with: <ul style="list-style-type: none"> • SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species. • SPA visitor surveys: to monitor changes in how people are using the site and where they travel from. • SANG surveys: to monitor how people are using the smaller sites and where they travel from. 	
Deliverability	
	Implementation method If suitable sites are identified, individual sites could be relatively straightforward to implement, in line with the existing SANG provision. As part of a SANG network, the same approach would be required as for Option 1. Implementation of smaller SANGS within a network would require: <ul style="list-style-type: none"> • Consideration of ideal location and features for network, which could be further investigated as independent SANG work or as part of a local authority GI Strategy and/or Local Plan: e.g. based on

	<p>location of existing settlements and planned development locations in proximity to SPA.</p> <ul style="list-style-type: none"> • Identification of potential SANG sites that are available: e.g. as previously identified through a call for sites. • Identification of additional sites that might require negotiation with landowners to use within a SANG network. • Cooperation with neighbouring authorities where network(s) could be cross-boundary. • Understanding and securing how features of the network as a whole and at individual sites would be maintained, by who and how funded.
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Local authorities within the TBH SPA area / HMA, depending on the scale of intervention • Natural England • Site land owners/managers • Housing developers
	<p>Potential sources of funding Developer contributions – continuation of current approach.</p>
	<p>Potential costs Costs would be very site/intervention-specific. However an estimate based on a 2ha small SANG with an 800m circular walk is c.£500,000 (per site) capital cost, c.£4,000,000 in perpetuity; although as part of a network, costs could be significantly higher. Costs to developers (per dwelling) may be similar to existing SANG, depending on provision rate.</p>
Overall assessment	
	<p>Explanation for overall assessment There is evidence that people, especially dog walkers, use small sites close to home. The Mitigation Capacity Review concludes that smaller sites would need to be at least 2ha in size to be effective. Overall, it is considered that small SANG could provide effective avoidance/mitigation. It would be desirable for these sites to be linked or close to other sites, to provide a SANG network and/or variety of walking routes, preferably including a circular walk.</p>

Option 5 – Larger SANG with Larger Catchments

6.10. The potential effectiveness of large SANG with an increased catchment as mitigation is currently uncertain, due to the lack of clear evidence that people would travel further than 5km to a large SANG. The potential effectiveness of this option is very dependent on the availability of suitable sites: a high quality attractive site with provision for horse riding, cycling and other activities could potentially have a catchment larger than 5km but evidence for a 'formula' that would guarantee a catchment larger than 5km is limited, therefore larger catchments are not recommended as an alternative mitigation approach.

Option 5	Larger SANG with larger catchments
Description	
SANG sites greater than 20ha with a catchment larger than 5km. These may be significantly larger than 20ha and/or have a greater range of features than current SANGs.	
Characteristics	
Type of intervention	
<ul style="list-style-type: none"> • SANG variation that allows new large sites to be turned into SANGs; and • Allows existing large sites to be enhanced or expanded so that they meet certain criteria and/or their catchment can be increased. 	
Scale of intervention	
<ul style="list-style-type: none"> • At TBHSPA level (subject to agreement), e.g. to vary or add to SANG criteria/options. • At HMA/borough level, e.g. to identify large sites with cross-border catchments. • At site level, to enhance existing or deliver new sites. 	
Existing evidence base	
<p>Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • SANG Research Study (2020) by LUC, which included an online survey of local greenspace users. • SANG Background Paper (2020) by Rushmoor Borough Council. • Mitigation Capacity Review (2020) by EPR. <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • SPA / SANG visitor surveys: provides data on the reasons that people use the SPA and/or alternative sites, and where they travel from. • Census data: provides data on the density and household size of settlements near to the SPA. • GI strategies (Hart) and OS mapping: may help to identify suitable sites for example large sites such as country parks that are not currently SANGs. 	
Gaps in evidence base	
Gaps identified have been filled by studies commissioned as part of this project (see above).	
Effectiveness	
	<p>HRA implications</p> <p>Neither the SANG study or mitigation capacity review consider that large SANGs with larger catchments could provide certainty of mitigation.</p>
	<p>Likely outcomes of implementing option</p> <p>As large SANGs with larger catchments are not considered likely to be effective on their own, an estimate of the number of homes they could provide for has not been provided (except as part of a network/linear SANG, as above).</p>

Relationship to other options being considered

Not dependent on other options but large SANGs could be combined with others e.g. smaller SANGs to form part of a SANG network.

Monitoring effectiveness

The effectiveness of this option could be monitored in a similar way to the existing SANG approach with:

- SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species.
- SPA visitor surveys: to monitor changes in how people are using the site and where they travel from.
- Large SANG surveys: to monitor how people are using the larger SANGs, where they travel from and how often.

Deliverability

	<p>Implementation method</p> <p>Implementing this option would require cross-boundary working to enable the SANG capacity of a larger site to be shared across the HMA or wider, but selecting a site (or ruling out the possibility) may be easier as fewer large sites are available.</p> <p>Implementation would require:</p> <ul style="list-style-type: none"> • Consideration of ideal location and features for a large site, as part of a local authority GI Strategy or Local Plan: e.g. based on location of existing settlements and new development locations in proximity to SPA. Potentially rural areas of Hart. • Identification of large sites that are available: e.g. country parks or potential SANGs previously identified through a call for sites, and the features those sites have and/or would need as SANGs. • Identification of additional large sites that might require negotiation with landowners to use as a SANG. • Cooperation with neighbouring authorities. • The means of managing and maintaining the site in perpetuity.
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Local authorities within the TBH SPA area / HMA (cross-boundary working) • Natural England • Large site landowners / managers
	<p>Potential sources of funding</p> <p>Developer contributions – continuation of current approach</p>
	<p>Potential costs</p> <p>Costs would be very site/intervention-specific. However an estimate based on a 75ha SANG with a 2.5km circular route for pedestrians/cyclists and a 1km horse riding route is c.£900,000 capital cost, c.£9,000,000. Costs to developers (per dwelling) may be similar to existing SANG, depending on provision rate.</p>

Overall assessment**Explanation for overall assessment**

The potential effectiveness of this option is very dependent on the availability of suitable sites: a high quality attractive site with provision for horse riding, cycling and other activities could potentially have a catchment larger than 5km but evidence for 'formula' that would guarantee a catchment larger than 5km is limited and it is not recommended that large SANG with larger catchments are pursued as a mitigation approach.



Group B – Habitat Management/Restoration

Option 6 – Habitat Management/Restoration

Option 6	Habitat Management/Restoration
<p>Description Clearance of forested areas within the SPA to re/create and manage open habitat that is suitable for breeding SPA birds e.g. heathland.</p>	
<p>Characteristics</p>	
<p>Type of intervention Physical intervention within the TBHSPA.</p>	
<p>Scale of intervention Within areas of coniferous forestry within the SPA, e.g. Bramshill.</p>	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • Habitat Restoration Feasibility Study (2020) by Rushmoor Borough Council. • These draw on previous work including: Natural England and Forestry Enterprise’s Joint Feasibility Study (2014) which considers potential effectiveness of heathland restoration from commercial forestry, as TBH SPA mitigation. • SPA Forest Plans: set out intended management of forestry areas for SPA qualifying features. 	
<p>Gaps in evidence base Most gaps identified have been filled by studies commissioned as part of this project (see above) on the principle of this measure, although it currently remains uncertain whether there is suitable land available for the implementation of this option, based on landowner discussions. If this option were taken forward, additional work to update the capacity calculations would also be required.</p>	
<p>Effectiveness</p>	
	<p>HRA implications Current legal advice indicates that habitat restoration could be considered to avoid effects on the integrity of the SPA in line with regulation 63 of the Habitats Regulations, without this being considered compensation. The newly restored heathland areas would need to be unlikely to become disturbed by recreation, be additional to the current landowner obligations, and be fully functioning (supported by monitoring) in advance of any dwellings relying on them at HRA Appropriate Assessment stage.</p>
	<p>Likely outcomes of implementing option The 2014 feasibility study estimated that 9.05ha of habitat restoration could provide mitigation for 1,000 residents. Further capacity calculations were not undertaken as part of this study as there is currently no certainty of the approach being taken forward imminently by landowners. If this option is to be delivered in future then recent data should be utilised to create updated reliable capacity calculations. It was suggested in recent legal advice that one way to approach this could be to consider what levels of development will come forward under Local Plans and how much disturbance this might be expected to create. It would then be necessary to establish what level of additional habitat would make it possible to be confident that there would not be an adverse impact on the SPA integrity. This view supports the 2014 feasibility study approach by Footprint Ecology. It was also emphasised that ecological advice would be integral to the calculations.</p>

Dependence on other options being considered

Extending the area of fencing around clear-cut areas of forestry, considered in relation to access restriction (Option 11) could be carried out to enable support of habitat restoration as an effective measure. Creating areas of open undisturbed habitat, also considered in relation to access restriction, also has an element of habitat restoration but the focus of that is heathland with scrub encroachment, therefore would not be considered 'additional' in terms of impact avoidance.

Monitoring

The effectiveness of this option could be monitored with:

- Monitoring of habitat and annex 1 bird numbers.

Deliverability

	<p>Implementation method</p> <p>Habitat restoration would involve clear felling an area of forestry to remove the trees and then managing the land to provide suitable open habitat for the SPA birds in perpetuity, rather than allowing, or encouraging, conifer woodland to re-establish. This would enable the provision of open habitat above that already planned to be qualified as additional and able to contribute to the avoidance of impacts from development.</p>
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Natural England • SPA land owners and managers • Local authorities (although could be managed at a higher level e.g. HMA group or TBH JSPB)
	<p>Potential sources of funding</p> <p>As the habitat restoration works would be required to be completed in advance of any associated applications it is likely that up-front costs would need to be provided with future contributions being collected to recoup these costs through a pooled developer fund which could be collected under Section 106 obligations.</p>
	<p>Potential costs</p> <p>Costs will need to be agreed with landowners and may vary depending upon the management approach. The 2014 study estimated management and income foregone costs of c.£23,200 per hectare. However, Forestry England also requested costs to cover the loss of public benefit and maintenance of woodland cover and sought a commercial market rate for releasing the land. The market rate would be set by the costs of alternative mitigation options (i.e. SANG), therefore costs could be set to directly reflect the current SANG costs.</p>

Overall assessment**Explanation for overall assessment**

Legal advice is that habitat restoration could be considered a measure to avoid overall impacts on the SPA and it would be possible to calculate a capacity that could be linked to new homes. However, currently discussions with major landowners has not identified suitable land and unless this situation changes the option cannot proceed. If a landowner proposed suitable land further investigation would be required.

Group C – Access Management

Option 7 – Expansion of SAMM project: wardening

6.11. Overall, an expansion of SAMM wardening is considered to have value as part of a package of mitigation measures that include SANG; it is not considered that expanding wardening alone would be effective as mitigation and therefore is not recommended as part of this project.

6.12. Footprint Ecology consider that the wardening programme could be expand by up to twice the number of wardens, alongside other mitigation measures.

Option 7	Expansion of SAMM project: wardening
Description Expanding the existing programme of wardening by the SAMM team.	
Characteristics	
Type of intervention Expansion of existing SAMM programme.	
Scale of intervention <ul style="list-style-type: none"> • Local authorities within the TBH SPA area (jointly, as it would be difficult for individual authorities to implement alone). • Largely within the SPA itself although wardens have some outreach activities (see also Option 8). 	
Existing evidence base Studies commissioned as part of this project: <ul style="list-style-type: none"> • Access Management Research Study (2020) by Footprint Ecology. • SAMM Background Paper. • Mitigation Capacity Review (2020) by EPR. 	
Gaps in evidence base Gaps identified have been filled by studies commissioned as part of this project (see above).	
Effectiveness	
	HRA implications Evidence demonstrates that SAMM wardening is effective as a mitigation measure, as part of a package of mitigation. Footprint suggest that there could be scope to increase the warden team by up to twice its current size (an additional nine FTE wardens), to provide additional mitigation benefit.
	Likely outcomes of implementing option Footprint estimate that the current wardening effort (c.5,000 hours) is sufficient to reach most regular visitors and that more wardening time could reach less frequent visitors or encounter more frequent visitors more often. The additional mitigation achieved by doubling the number of wardens would be equivalent to current SAMM for a further 2,700 houses (note that this does not include any benefit from e.g. expanding the focus on wildfires as this is difficult to quantify). However, this assumes that the SAMM provision is supported by SANG in line with the current approach, therefore this may not currently offer an alternative solution to developments which cannot provide SANG.
Relationship to other options being considered This option is similar to Option 8 (expansion of the education and communication aspect of SAMM). Option 10 (dog control) and Option 11 (access restriction) would benefit from an	

expanded warden programme, to ensure that measures are known to the public, and potentially to enforce them.

Monitoring effectiveness

The effectiveness of this option could be monitored with:

- SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species, as wardening is expanded.
- SPA visitor surveys: to monitor changes in how people are using the site and how they respond to wardening.
- Wardening data: Footprint suggest that there is scope for more detailed spatial analysis and modelling to derive the optimal spatial and temporal coverage for the wardening.

Deliverability

	<p>Implementation method</p> <p>The structure for collecting SAMM monies and establishing wardening is already in place which is beneficial. Expansion of the wardening programme is likely to be easier to implement across the SPA as a whole, however this would require JSPB approval. Alternative methods of implementation may require further work, for example site-specific access assessments could be used in some circumstances to identify projects and measures, subject to site ownership and existing management plans. If certain developments required the capacity then it could be possible to deliver focussed wardening on particular sites.</p> <p>There is scope for more detailed spatial analysis and modelling to derive the optimal spatial and temporal coverage for the wardening.</p>
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Natural England (Delivery Body for the SAMM project) • Local planning authorities in the HMA/JSPB, including Hampshire County Council as the Administrative Body for SAMM collection and distribution • SPA land owners, managers and wardens
	<p>Potential sources of funding</p> <p>Developer contributions collected through existing SAMM system. Would require JSPB/HCC agreement. Consideration would need to be given to which developments can contribute to an increase in SAMM provision.</p>
	<p>Potential costs</p> <p>Wardening costs £50,000 per year (per warden, FTE), including support costs.</p> <p>An access management assessment may cost in the region of £6,000, depending on the area.</p>

Overall assessment

	<p>Explanation for overall assessment</p> <p>This option would be relatively straightforward to implement as the structure for collecting SAMM monies and establishing wardening is already in place, and there is a quantifiable benefit that could be linked to new homes. SAMM wardening is intended to be part of a mitigation 'package' and would be best provided alongside other measures (e.g. dog control and/or SANG) to ensure greater certainty of mitigation and avoid undermining the existing approach.</p>	
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Option 8 – Expansion of SAMM Project – Education and Communication

6.13. The assessment concludes that, while SAMM education and communication is clearly very important and has a key role to play in the existing mitigation strategy, there would seem little scope to expand those elements in isolation. The research study concluded that it is not currently possible to associate a mitigation capacity with an expanded education and communication programme; this option is therefore not recommended as a mitigation approach.

Option 8	Expansion of SAMM project: education and communication
Description Increasing the programme of education and communication funded through SAMM.	
Characteristics	
Type of intervention Expansion of existing SAMM programme.	
Scale of intervention Schools and residents within 5km of the TBH.	
Existing evidence base Studies commissioned as part of this project: <ul style="list-style-type: none"> • Access Management Research Study (2020) by Footprint Ecology. • SAMM Background Paper. • Mitigation Capacity Review (2020) by EPR. 	
Gaps in evidence base Gaps identified have been filled by studies commissioned as part of this project (see above), although it has not been possible to quantify a contribution to mitigation that would be provided by expanding SAMM education and communication.	
Effectiveness	
	HRA implications Evidence demonstrates that SAMM wardening is effective as a mitigation measure, as part of a package of mitigation. However, it is not possible to quantify a contribution to mitigation that would be provided by expanding SAMM education and communication beyond the existing provision, or therefore linking it to housing development.
	Likely outcomes of implementing option It is not possible to determine the contribution that expanding the education component of SAMM would have to mitigating recreation pressure; therefore it is not possible to calculate a number of homes that could be mitigated.
Relationship to other options being considered This option is similar to Option 7 (expansion of wardening aspect of SAMM) as the SAMM team undertake a variety of related tasks within the SPA and surrounding area.	
Monitoring effectiveness The effectiveness of this option could be monitored with: <ul style="list-style-type: none"> • A count of the schools / individuals that the education and communication programme has reached • Assessment of changes in visitor behaviour etc within the SPA 	
Deliverability	

	<p>Implementation method</p> <p>This option would be relatively straightforward to implement as the structure for collecting SAMM monies and the education and communication officers are already in place.</p>
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Natural England (Delivery Body for the SAMM project) • JSPB • Local schools and local authorities
	<p>Potential sources of funding</p> <p>Developer contributions collected through existing SAMM system. Consideration would need to be given to which developments can contribute to an increase in SAMM provision.</p>
	<p>Potential costs</p> <p>Not provided within research report but would be likely to require additional education officer resources (salary = £26,675).</p>
Overall assessment	
<p>Explanation for overall assessment</p> <p>It is not possible to determine the contribution that expanding the education component of SAMM would have to mitigating recreation pressure; therefore it would not provide the certainty required by the Habitats Regulations.</p>	

Group D – Access Restriction/Control

Option 9 – Car Parking Availability/Access

6.14. It is not recommended that car parking controls are taken forward as mitigation, due to likely displacement and difficulties with enforcement, as well as the scale of change that would be required to impact visitor behaviour. Parking controls would therefore not currently provide certainty that recreation pressure from new homes could be mitigated.

Option 9	Car parking availability / access
<p>Description A reduction or restriction of car parking at the SPA, which could include permanent/seasonal closure.</p>	
<p>Characteristics</p>	
<p>Type of intervention Physical intervention at the TBHSPA itself (e.g. closure or creation of parking spaces) along with some input from the SAMM team (e.g. to educate about changes).</p>	
<p>Scale of intervention Dependent on the scenario implemented: some scenarios are targeted at specific areas, while others apply more generally across the SPA.</p>	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • Car Parking Research Study (2020) by Footprint Ecology • Visitor Distribution and Access Background Paper (2020) by LUC • Mitigation Capacity Review (2020) by EPR <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • Visitor surveys, SANG surveys and research on visitor access patterns: provides data on the proportion of visitors who drive to the SPA, where they drive from, the importance of parking in selecting the sites they go to, and their penetration into the SPA. 	
<p>Gaps in evidence base Most gaps identified have been filled by studies commissioned as part of this project (see above). The Footprint report ruled out the potential for using parking charges to reduce visitor numbers at the SPA but did not explore whether charges could provide any income to offset costs; this could be explored further if parking controls were taken forward. There remains no method for calculating the capacity of these measures.</p>	
<p>Effectiveness</p>	
	<p>HRA implications The car parking study found that parking controls would be difficult to enforce and could result in displacement; therefore certainty of mitigation would not be provided. In addition, parking controls effectively redistribute access at the SPA. Footprint state that any redistribution in access could mean that some areas of the site are being further damaged making restoration harder.</p>
	<p>Likely outcomes of implementing option Counts conducted by the Thames Basin Heaths Partnership suggest that there is considerable over provision of parking currently, such that there are many more spaces than visitors. This would mean that visitors have a wide choice and that measures to reduce parking might need to be</p>

	considerable to reduce the choice to a level where distribution can be manipulated. There have been limited occasions where parking controls have been implemented around the SPA and these have been contentious and not necessarily delivered the intended outcomes. Overall, the mitigation potential for parking changes is minimal and there is not currently a robust method for calculating exact capacities.
Relationship with other options being considered	
This option is not dependent on other options but might be more effective in conjunction with enhancements to education/communication (Option 9), wardening (Option 8) and could affect SANGs, due to displacement from the SPA.	
Monitoring effectiveness	
The effectiveness of this option could be monitored with:	
<ul style="list-style-type: none"> • Car park surveys: monitoring of parking will be necessary prior to the implementation of any control and regularly after, with the monitoring used to identify displacement effects and target measures to address them. • SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species, where parking controls have been implemented. Bird distributions may shift over time, for example in relation to forestry management, habitat change etc. It may be possible to overcome this concern by having a system whereby parking locations could be opened or closed over time depending on the quality of the habitat nearby. • SPA visitor surveys: to monitor changes in the distribution of visitors and dogs across the site, how they have travelled and where they have parked if arriving by car. 	
Deliverability	
	<p>Implementation method</p> <p>Some of the parking control scenarios considered involve the creation of additional parking, but all involve some closure of parking spaces. At formal parking sites, this might involve earth banks for permanent closure or gates for temporary closure, but may be more difficult at laybys, where closure could affect highway safety or passing places. Some car parks also provide access to businesses (e.g. pubs) or facilities (e.g. toilets within the SPA), or have been recently opened/improved, where closure would be more difficult.</p> <p>Parking controls would also require public engagement, consultation, communication and monitoring to ensure that the controls would be effective.</p>
	<p>Stakeholders</p> <ul style="list-style-type: none"> • The public • Natural England • SPA land owners, managers and wardens • Business owners • Highways authorities • Enforcement officers/wardens
	<p>Potential sources of funding</p> <p>Funding sources (e.g. developer contributions or parking charges) were not explored by Footprint, but as they concluded that the mitigation potential for parking controls is minimal and that it would be complex to quantify any mitigation, it is assumed that it would be difficult to assign developer contributions linked to new homes.</p>
	Potential costs

	<p>Overall, scenarios which simply close parking locations are relatively low cost, under £250,000, ranging to those which require reductions and increases at every location e.g. scenario D in the associated report where the costs are in the region of £1.5 million.</p> <p>The cost estimates are capital costs for physical measures only and do not include additional costs e.g. consultation, monitoring or in perpetuity management / maintenance.</p>
<p>Overall assessment</p>	
<p>Explanation for overall assessment</p> <p>Footprint's study suggests that the mitigation potential for parking changes is minimal and that it would be difficult to quantify mitigation and predict displacement effects. Parking controls would therefore not provide certainty that recreation pressure from new homes could be mitigated, and it is not proposed that parking controls are taken forward as an avoidance/mitigation approach at this time.</p>	

Option 10 – Dog control

6.15. It is not proposed that dog controls are taken forward as an alternative or complementary mitigation approach at this time. The dog control study concluded that any additional mitigation benefit that could be gained from dog controls would be minimal and difficult to link to new developments.

Option 10	Dog control
<p>Description Dog control measures applied on a seasonal or permanent basis on parts of the SPA or the whole SPA.</p>	
<p>Characteristics</p>	
<p>Type of intervention Physical intervention within the TBHSPA itself (e.g. signs) along with intervention from the SAMM team (e.g. to educate about changes) and/or enforcement officers.</p>	
<p>Scale of intervention Could apply to whole SPA (e.g. where extending existing controls) or be applied to areas with high concentrations of breeding birds.</p>	
<p>Existing evidence base Studies commissioned as part of this project:</p> <ul style="list-style-type: none"> • Dog Control Research Study (2020) by Footprint Ecology. • Visitor Distribution and Access Background Paper (2020) by LUC. • Mitigation Capacity Review (2020) by EPR. <p>These draw on previous work including:</p> <ul style="list-style-type: none"> • Studies into disturbance of SPA qualifying features: the effect of visitors with dogs compared to that of visitors without, variation in effects related to visitor/dog distribution (e.g. distance from paths, and ability of dogs to penetrate some habitat types). • Visitor surveys, SANG surveys and research on visitor access patterns: the proportion of visitors who have dogs with them, the distance they tend to walk and their penetration into the SPA, and features that deter/encourage dog walkers from letting dogs off the lead. 	
<p>Gaps in evidence base Many gaps identified have been filled by studies commissioned as part of this project (see above). It has been difficult to estimate the mitigation potential of dog controls (see below). If this was to be explored further, Footprint have said that an approach would be to identify potential areas and collect new data on the level of compliance currently with keeping dogs to paths. The scale of any mitigation could then be perhaps estimated based on expert opinion, involving for example Natural England and others with specialist expertise, such as ornithologists and dog behavioural specialists. The expert opinion could then be based on a specific scenario, where details of communication, warden coverage, enforcement etc were provided alongside the information on current compliance.</p>	
<p>Effectiveness</p>	
	<p>HRA implications As it is difficult to quantify the effect of dog controls, it would be difficult to link mitigation to new homes and therefore provide the certainty required by the Habitats Regulations.</p>
	<p>Likely outcomes of implementing option It is difficult to equate dog control to a level of avoidance/mitigation for housing development. If all dogs were excluded from the SPA the birds</p>

	would benefit but the provision of alternative greenspace would need to increase significantly to accommodate displaced dog walkers. Smaller scale measures, such as extending the period when dogs should be kept on the paths, or creating dog exclusion zones, are challenging to equate to a quantifiable mitigation capacity and likely to provide relatively small mitigation benefits.
Relationship to other options being considered	
Any of the dog control options discussed would not work in isolation and other measures would be necessary in tandem. Footprint highlight the importance of the Strategic Access Management and Monitoring (SAMM), with the on-site presence of wardens, signage and other communication in particular; dog control could therefore potentially be delivered alongside an increase in wardening (Option 7) and may be more effective longer term in conjunction with enhancements to education/communication (Option 8). Alternative green space is also important, particularly if there were to be any deflection away from the SPA.	
Monitoring Effectiveness	
The effectiveness of this option could be monitored with:	
<ul style="list-style-type: none"> • SPA bird surveys: to monitor changes in breeding success / number of territories for qualifying bird species, where dog controls have been implemented. • SPA visitor surveys: to monitor changes in the distribution of visitors with dogs and compliance with controls. • SANG/greenspace surveys to monitor any displacement effects. • Consultation with dog groups and use of social media to monitor awareness. 	
Deliverability	
	Implementation method
	Any dog control measures would require communication and engagement with dog walkers. Extending existing controls would also require updates to printed materials etc to explain changes. 'Dogs on leads when asked during breeding season' would additionally require a means of enforcement. This could be through a Public Space Protection Order (PSPO), which would require consultation and suitable staffing to implement any enforcement. Creating limited areas where dogs would be excluded or lead-only would require signs, maps, and additional wardening. On the heaths, fencing can be impractical but key areas could be clearly identifiable onsite including both an overall zonation map and roundels, flags or similar to delineate the zones clearly, implemented seasonally and preferably removed when not applicable if dates aren't given on the markers. It could be possible to provide smartphone apps that inform visitors when they are entering areas where dogs are expected to be on lead (and potentially provide other information about the site).
	Stakeholders
	<ul style="list-style-type: none"> • Dog owners and groups, for example the Heathland Hounds • Natural England • SPA land owners and managers • SAMM funded wardens and/or new enforcement officers
	Potential sources of funding
	It would be difficult to assign development contributions to the measure.
	Potential costs
	Funds would be required for increased warden time, education/interpretation materials and signs, and consultation on a PSPO.

	Estimated costs are £33,750-£38,750 plus enforcement, depending on the approach adopted, location chosen, and extent of PSPO consultation.
Overall assessment	
<p>Explanation for overall assessment</p> <p>Some dog controls would be relatively easy to implement; however, the effectiveness of dog controls would be limited and is currently difficult to quantify. Because it is difficult to quantify the effects of specific measures, it would be difficult to link mitigation from dog controls to new homes, and provide certainty of mitigation. It is therefore not proposed that dog controls are taken forward as an avoidance/mitigation approach at this time.</p>	

Option 11 – Access Restriction

6.16. Given the need for further study and also the uncertainties around displacement, access restriction would not currently be considered an effective mitigation measure in its own right. However; access restriction measures can be implemented relatively quickly, compared to new SANGs for example, therefore a trial of measures could be undertaken in the short term to gather data. This could also enable some potential avoidance/mitigation to be in place while longer term measures are being established. If data provides evidence that access restriction is effective, then it could continue to be used as a faster-response avoidance/mitigation method alongside other measures.

Option 11	Access restriction
Description	
Restriction of access from parts of the SPA, permanently or temporarily / seasonally.	
Characteristics	
Type of intervention	
Physical intervention within the TBHSPA itself.	
Scale of intervention	
Restricting access to the whole SPA would be difficult (and unpopular), therefore it has been assumed that access would be restricted to areas that still allow visitor access to other areas within the same SSSI component of the SPA.	
Existing evidence base	
Studies commissioned as part of this project: <ul style="list-style-type: none"> • Access Restriction Study (2020) by LUC. • Visitor Distribution and Access Background Paper (2020) by LUC. • Mitigation Capacity Review (2020) by EPR. These draw on previous work including: <ul style="list-style-type: none"> • Studies into disturbance of SPA qualifying features: the effect of visitors on disturbance, variation in effects related to visitor distribution (e.g. distance from paths). • Visitor surveys, SANG surveys and research on visitor access patterns: the reasons that people use the SPA, the distance they tend to walk and their penetration into the SPA. • SSSI condition status (for extent and distribution of supporting habitat), population abundance and distribution. 	
Gaps in evidence base	
Most of the gaps identified have been filled by studies commissioned as part of this project (see above), although it has not been possible to quantify the mitigation that access restriction could provide because there is no data on the effectiveness of access restrictions previously implemented at the SPA.	
Effectiveness	
	HRA implications
	There is currently insufficient data on the potential effectiveness of access restrictions (and associated displacement effects) for there to be certainty of mitigation, although the Mitigation Capacity Review considers that the approach could have mitigation potential as part of a package of measures.
	Likely outcomes of implementing option

	<p>Quantifying the effectiveness of access restriction measures applied at the SPA, and therefore the number of homes that could be mitigated, requires a robust understanding of the current condition of habitats, data on the presence of breeding bird populations, and information on recreational pressure, as well as an understanding of how visitor behaviour could change and where people would displace to. There is some baseline data for this calculation but there are gaps in the existing evidence (how effective previous access restriction measures have been in reducing recreation pressure) which limits the ability to accurately quantify the number of homes that could be delivered through a specific access restriction measure.</p>
<p>Relationship to other options being considered</p> <p>It may be appropriate to use access restriction as a means of supporting other mitigation approaches (e.g. supporting habitat restoration or managing visitors close to areas where parking controls have been implemented), while using monitoring and data analysis to appraise the effectiveness of those access restrictions.</p> <p>Access restrictions are likely to be more complied with by the public if combined with an increase in SAMM wardening / education.</p>	
<p>Monitoring Effectiveness</p> <p>An access restriction trial could be undertaken in part of the SPA (a single SSSI unit or smaller), where a management plan can be drawn up for the whole area and monitoring could be undertaken by the SAMM team. Bird survey data also needs to be analysed to see whether it shows the effects of implemented changes in access restriction.</p>	
<p>Deliverability</p>	
	<p>Implementation method</p> <p>It may be possible to demonstrate a measurable effect from access restriction in its own right with further data, which could either be analysed for measures that have been / are being implemented anyway or as a focussed trial.</p> <p>Access restriction measures can be implemented relatively quickly, compared to new SANGs for example, therefore a trial of measures could be undertaken in the short term to gather data. If data indicates that access restriction is effective, then it could continue to be used as a faster-response mitigation method alongside other measures.</p> <p>Physical access restriction measures would include a combination of 'carrots' (measures that encourage behaviour change by providing positive alternatives) e.g. new or improved footpaths; and 'sticks' (measures that encourage behaviour change by making the original behaviour less appealing or impossible) e.g. blocking desire lines.</p>
	<p>Stakeholders</p> <ul style="list-style-type: none"> • Natural England / SAMM • SPA land owners, managers and wardens (potentially complex depending on location chosen) • JSPB • SPA visitors
	<p>Potential sources of funding</p> <p>Developer contributions collected through existing SAMM system, although consideration would need to be given as to how access restrictions are linked to specific developments.</p>
	<p>Potential costs</p> <p>Capital costs are estimated to be:</p> <ul style="list-style-type: none"> • Steering people away from hotspots c.£20,000/year (10 years).

	<ul style="list-style-type: none"> • Increase area of open undisturbed habitat c.£37,000 in year 1 then c.£4,500/year (10 years). <p>Extend area of temporary fencing around clear-cut forestry c.£26,500 in years 1 then c.£3,500 year 2-3 and £6,000 year 4. Preparation of a management plan including consultation, monitoring, review, evaluation and wardening is estimated to costs c.£30,000 in year 1 then c.£20,000/year (10 years)</p>
Overall assessment	
<p>Explanation for overall assessment</p> <p>Given the need for further study and therefore the uncertainties around displacement, access restriction would not currently be considered an effective mitigation measure in its own right and it is not currently possible to independently link mitigation from it to new homes, although this may be possible with more data. It is not currently possible to quantify the potential for mitigation from access restriction. If further data indicates that access restriction is effective, then it could continue to be used as a faster-response mitigation method alongside other measures, and as part of an overall package of mitigation.</p>	

7. Assessment Summary and Conclusions

Summary of Overall Conclusions

7.1. The table below summarises the red/amber/green (RAG) scores from the assessment proformas in Chapter 6. In general, 'green' indicates that an option scores positively in terms of effectiveness or deliverability, 'amber' indicates some uncertainty, and 'red' indicates that an option is currently likely to be less effective or deliverable. Further explanation is provided in the proforma template (Appendix 1).

7.2. The overall RAG rating indicates whether or not the option is recommended as avoidance/mitigation or not at the current time. Options that score green are recommended to be taken forward as potential mitigation, amber have potential but it is not recommended that they are pursued at this time, and red are not currently considered to have potential as mitigation.

Table 6: Overall RAG Ratings

Option	Effectiveness		Deliverability				Overall
	HRA implications	Likely outcomes	Implement'n method	Stake-holders	Funding sources	Costs	
1 SANG networks	Green	Amber	Amber	Amber	Green	Amber	Green
2 Linear SANG	Amber	Amber	Green	Green	Green	Amber	Green
3 Recreational routes	Red	Red	Amber	Green	Green	Amber	Amber
4 Smaller SANG	Green	Amber	Amber	Amber	Green	Amber	Green
5 Larger SANG catchments	Red	Red	Amber	Amber	Green	Amber	Red
6 Habitat restoration	Amber	Amber	Amber	Amber	Amber	Amber	Amber
7 SAMM wardening	Green	Amber	Amber	Amber	Amber	Amber	Amber
8 SAMM education	Red	Red	Green	Green	Amber	Green	Red
9 Parking control	Red	Red	Amber	Amber	Red	Amber	Red
10 Dog control	Red	Red	Green	Amber	Red	Green	Red
11 Access restriction	Amber	Amber	Amber	Amber	Amber	Amber	Amber

Recommended Approach

7.3. The following options are recommended as avoidance/mitigation:

- SANG Networks which could incorporate:
 - Linear SANG (which could incorporate recreational routes).
 - Smaller SANG..
- Linear SANG.
- Small SANG.

7.4. None of the options were identified as being completely effective alone, therefore SANG measures would still need to be supported by SAMM in line with the existing Delivery Framework.

7.5. The recommended approach is a variation of the existing mitigation approach, which would formalise the acceptability of SANGs which do not meet all Natural England's "must have" criteria such as a circular walk within the site of 2.3-2.5km.

7.6. It is recommended that the following mitigation options are not considered further in this study as the existing evidence base does not currently show that they would provide effective and/or quantifiable mitigation:

- Larger SANG with increased catchments (while it is possible that a SANG with catchment of greater than 5km could be created, it is very uncertain);
- Enhancement or creation of recreational routes (although these could be incorporated into linear SANG or SANG networks);
- Expansion of SAMM project: education and communication;
- Car parking availability / access; and
- Dog control.

7.7. Some of the other options may have potential as mitigation but are not recommended at this stage as their effectiveness, or mitigation capacity has not yet been proven. It is recommended that these are considered as having potential as future avoidance or mitigation measures, if

needed. The following options may have value but are not recommended to be taken forward at this stage:

- Habitat restoration / management: unclear whether there are willing landowners with suitable land but recommended that this is explored further if an appropriate location becomes available.
- Access restriction: recommended that where access restrictions are applied as part of site management, data is collected and analysed on the effects on bird breeding success. Alternatively, a focussed trial could be carried out.
- Expansion of SAMM project: wardening: there appear to be opportunities to effectively engage with additional visitors through increased wardening, however relating this to specific developments and seeking JSPB approval would require further work. Further site-specific evidence may also be required for any deviation to the existing balance of SANG/SAMM.

Trialling Measures

- 7.8. Given the need for further study and therefore the uncertainties around displacement of visitors, access restriction is not currently recommended as a mitigation approach. However; access restriction measures can be implemented relatively quickly, compared to new SANGs for example, therefore a trial of measures could be undertaken in the short term to gather data. This could also enable some potential 'mitigation' to be in place while longer term measures are being established. If data indicates that access restriction is effective, then it could continue to be used as a faster-response mitigation method alongside other measures.
- 7.9. Data could be gathered where access restrictions are being carried out anyway as part of the SPA's management (e.g. to restrict access to clear-felled areas) or as a focussed trial. An access restriction trial could be undertaken in part of the SPA (a single SSSI unit or smaller), where a management plan can be drawn up for the whole area and monitoring can be undertaken, for example by the SAMM team. Bird survey data also needs to be analysed to see whether it shows the effects of recent changes in access restriction. It may then be possible to demonstrate a measurable effect from access restriction in its own right.
- 7.10. If data indicates that access restriction is effective, then it could continue to be used as a faster-response mitigation method alongside other measures. In some cases, data may already exist but not have been analysed; the SAMM team data officer would therefore need to be involved

in setting up a trial, to provide background details and recommendations on any data gathering and analysis that would be required.

- 7.11. Habitat restoration could also be explored via a trial, subject to suitable land being identified and landowner agreement. Initial work, which could be delivered at a relatively low cost, could comprise monitoring bird numbers and territories found on areas of conifer plantation before and after it has been felled in a normal rotational cycle. This could be used to enhance capacity calculations and provide further certainty of the effectiveness of the approach in advance of full implementation which would require investment.

8. Implementation and Further Work

8.1. This chapter sets out the principles for implementing the recommended mitigation options in terms of:

- Amending the current approach;
- Key stakeholders for the implementation of the option;
- Amendments to planning policy and related SPDs;
- Measures required to meet the Habitats Regulations;
- Identifying sites; and
- Linking mitigation to development and apportioning funds.

Amending the Current Approach

8.2. As noted in the EPR Mitigation Capacity Review, the concept that modest deviations from the listed SANG quality criteria of ‘must have’ and ‘desirable’ features could be acceptable in mitigation terms is not new. The TBH SPA Delivery Framework (2009) and SANG guidelines allow for bespoke provision to be made in consultation with Natural England, with SANG networks already being described in the guidelines. However, the EPR Mitigation Capacity Review also notes that it is imperative to ensure that, where the delivery of SANGs that deviate from the listed quality criteria are envisaged, there is a ‘visible equivalence’ in provision. This means that where particular SANG quality criteria are not fully met, this should be offset through the provision of alternative qualities/features, such as a higher provision rate, or through achieving the criteria across a network of connected sites.

8.3. The list of features provided in the EPR Mitigation Capacity Review are reproduced in Table 7 below, which based on evidence collated, are considered to be essential within any SANG provision, will therefore help to define the pipeline of SANGs potentially explored further by the three councils.

Table 7: Key Site Selection Criteria

Site Selection Factor	Site Features
Accessibility	<ul style="list-style-type: none"> ✓ Close to home ✓ Parking ✓ Safe offsite connections
Enjoyment of dog	<ul style="list-style-type: none"> ✓ Safe off lead access ✓ Space to run about ✓ Variety of ground-level interest features, such as a variety of natural habitats, in particular access to water ✓ Ability to avoid other people/dogs
Enjoyment of owner	<ul style="list-style-type: none"> ✓ Overall countryside experience (not formal site in urban setting) ✓ Quiet/not too many people ✓ Visual interest, such as a variety of natural habitats, in particular water ✓ Ability to achieve required length of visit in safe setting ✓ Variety of route options, including ideally opportunity for circular walk
Other desirable practicalities	<ul style="list-style-type: none"> ✓ Facilities for dogs e.g. bins, water points, exercise areas ✓ Facilities, such as café, toilets, naturalised play

- 8.4. Surveys have consistently shown that people use a variety of sites to meet their recreational needs, often including large sites for longer visits and small sites for regular local recreation. It is therefore beneficial to provide a variety of sites and recreational opportunities for visitors across the SANG suite, ensuring that there are offers of longer walks alongside smaller local sites which should be linked where possible.
- 8.5. As also highlighted by the Mitigation Capacity Review, in order to meet the requirements of the Habitats Regulations and the ‘mitigation hierarchy’ approach, i.e. with impacts most effectively addressed via avoidance measures, then mitigation measures that reduce impacts, and finally to compensate for unavoidable impacts that cannot be controlled; a clear hierarchy needs to be set for SANG provision.
- 8.6. SANGs meeting all of the existing quality criteria should therefore be delivered in the first instance, and only where that is not possible, for clearly established reasons, should delivery of other options be pursued, demonstrating visible equivalence in provision, and as agreed with the competent authority and Natural England. It would be beneficial for this approach to be formalised alongside the formalisation of any other modified SANG delivery criterion.
- 8.7. This approach would be straightforward for individual sites such as linear or small SANG, where the site is large/wide enough to accommodate provision for dog walkers and only deviates from

current SANG criteria by providing a linear/shorter walk within the site boundaries rather than a circular 2.3km route.

8.8. SANG networks and linear SANG incorporating recreational routes would require a similar approach, but with the function of the group of sites taken into consideration instead of an individual site. SANG networks could constitute several smaller interconnected SANGs, or small SANGs which link to larger SANGs. Where possible it would be beneficial to provide opportunities for (≥ 2.3 km) circular walks, this may be through the use of larger sites or routes around the connected network as a whole. Links should also be made to the wider greenspace network to provide opportunities for a variety of walks.

8.9. The Mitigation Capacity Review states that:

“Since the only deviation from the SANG guidelines envisaged for this type of modified SANG provision would relate to the circular walk, the existing SANG catchments set out within the Delivery Framework would remain appropriate (2-12 ha SANG: 2 km catchment; 12-20 ha SANG: 4 km catchment; 20+ ha SANG: 5 km catchment; SANGs with no parking: 400 m). Sites would therefore have to come forward within appropriate distances of potential future housing locations” [as allocated in Local Plans or coming forward through planning applications].

8.10. As with the current approach, SANG would continue to be supported by the SAMM project, as part of an overall package of mitigation measures. It will also remain important for SANG to be delivered and operational in advance of any occupation of the dwellings which are allocated to the site. SANG sites could be identified in line with the existing approach, with funding and management to be secured appropriately for in perpetuity (minimum 80 years).

8.11. The Mitigation Capacity Review suggests that elements of SANG networks or linear SANG that cannot be defined as 'SANG' but which provide a useful supporting function could also be formalised (e.g. through an SPD and/or revised SANG guidelines), in a similar approach to the 'Heathland Infrastructure Projects' (HIPs) used for the Dorset Heaths SPA. 'Greenspace Support Projects', which could include narrow connecting links, dog training areas or targeted access restrictions, could be designed, in consultation with relevant key stakeholders, to support location- and quantum-specific housing delivery, with an agreed list of proposals set out within revised TBH SPA Impact Avoidance Strategies, to be costed up alongside SANG and SAMM delivery with a single per dwelling tariff. It is likely that capacity of these measures would be calculated on a case-by-case basis in consultation with Natural England. This could include

elements such as connections to the wider area, or other green infrastructure improvements. The study suggests that access restriction projects could also be incorporated into the mitigation strategy in this way (if effectiveness is proven). These elements aren't currently integral to the delivery of the recommended avoidance/mitigation options and would require additional work to fully define before implementation but could be investigated further in future.

Key Stakeholders for Implementing the Recommended Mitigation Options

8.12. As the proposed approach is not a radical departure from the current strategy, the stakeholders that would be involved in implementing SANG networks, small or linear SANG are similar to those involved now, for example local authorities, landowners, developers and Natural England. There are some potential differences, for example approaching SANG with more of a focus on links to other sites may require more cross-boundary working. The approach is flexible such that individual authorities could take a different approach to SANGs than their neighbour; however, the benefits of neighbouring authorities adopting the same approach are that capacity can be shared between authorities.

8.13. The TBH SPA Delivery Framework states that:

“Joint working between authorities to provide SANG may be appropriate when:

– A LPA alone is not able to provide sufficient SANG land to meet its local need

– The catchment of a SANG extends into a neighbouring authority

– There is the opportunity to add value and/or capacity to individual SANG by developing a network of SANGs across boundaries.

Local authorities should explore opportunities for cross boundary working.”

8.14. How the capacity of SANGs is shared in practice varies and is largely agreed between authorities as required; although, where a SANG is privately owned, the owner decides how the capacity will be apportioned (e.g. for a specific development). The capacity of SANG networks, small or linear SANG could be shared in the same way.

8.15. Formalising clusters of smaller SANG as part of a SANG network is likely to require more planning, design and assessment than an individual site, as the function of groups of sites is more complex than an individual site. The number of stakeholders may be higher for groups of sites (e.g. due to different landowners/site managers), and consideration of groups/networks will require closer consultation with Natural England, to ensure that the provision is acceptable

in terms of mitigation. Increased use of small urban sites may also cause impacts upon other greenspace provision (e.g. loss of formal park). Ecological effects must also be considered as with any SANG provision, especially for associated impacts on sites that may have their own local, or national designation. Relevant stakeholders should be consulted to inform the selection of appropriate sites.

- 8.16. It is recommended that the stakeholders are consulted and involved in preparing a detailed implementation plan, once each authority has agreed on the approach that they want to take forward.

Amendments to Planning Policy and Supplementary Planning Documents

- 8.17. The current policy approach to mitigating the effects of recreation pressure on the Thames Basin Heaths SPA is summarised in Chapter 2. The overarching strategic approach to avoidance and mitigation was included in Policy NRM6 of the South East Plan (which was revoked in 2013, leaving Policy NRM6 in place).

- 8.18. In order to take forward Policy NRM6, the TBH SPA Delivery Framework which was endorsed by the TBH Joint Strategic Partnership Board (JSPB) in 2009 and sets out the JSPB's (i.e. the TBH SPA affected local authorities and Natural England's) recommended approach to the provision of avoidance and mitigation measures. The Delivery Framework was a non-statutory document and the JSPB itself does not set any formal planning policy. Therefore, to date each TBH SPA affected authority has included a strategic policy within adopted or emerging Local Plans referring to the Delivery Framework, and in some cases, individual Avoidance and Mitigation Strategy Supplementary Planning Documents (SPDs) to provide interim guidance and further detail on the approach.

- 8.19. In terms of SANG provision, the Delivery Framework already offers some flexibility in terms of size of SANG and connectivity, stating at paragraph 5.10: *"The size of site suitable for use as SANG will depend on the individual site characteristics and location, including its relationship within a wider accessible open space or network of green infrastructure. The preference should be for SANG to be of at least 2ha in size, and located within a wider open space or network of spaces although smaller spaces may form part of a wider SANG network. Across the affected area, a range of types and sizes of SANG should be provided, offering a range of experiences, including large SANG which have the benefit of being able to act as attractor sites."*

- 8.20. SANG networks, small and linear SANG (which could link to recreational routes) therefore fall within the broader requirements of the Delivery Framework. The Natural England SANG

Guidelines (Appendix 3) currently state that SANG 'must have' a minimum 2.3-2.5km circular walking route. While developers and local authorities should 'have regard' to these guidelines it appears, from the existing SANG suite, that this criterion is not always interpreted as strictly essential. DTA note that although they are helpful the guidelines are not prescriptive in a strict or legal sense. It is recommended that the relationship between the relevant SPDs delivering the framework and the NE guidelines should be subject to review.

- 8.21. It is recommended that an updated SANG guideline document, or addendum, is created which could formalise the acceptability of SANG networks, small and linear SANG, creating similar criteria which should be given due regard. This document could also set out a 'SANG hierarchy', emphasising that wherever possible SANG should still meet the previous criteria. Once each local authority has agreed its preferred approach, their policies and guidance will also need to be reviewed to confirm the extent to which the existing guidance supports the proposed approach and to identify any amendments required. The status of Hart, Rushmoor and Surrey Heath's extant Local Plans, including the relevant policy relating to the TBH SPA and SPDs is set out in the table below. Although all three authorities make provision for bespoke SANGs or for SANGs to be considered on a case by case basis, their policies and guidance would need to be updated to formalise and provide principles for any revised approach (as above).
- 8.22. The timing of any updates to policies and guidance will need to fit into each authority's Local Plan timetable. However, sites could come forward and be implemented in advance of these changes which would mainly be formalising an accepted approach to the delivery of SANG, rather than directly deviating from the policies and Delivery Framework themselves.

Table 7: Status of Hart, Rushmoor and Surrey Heaths Local Plans, policies and SPDs relating to the TBH SPA

Local Planning Authority	Status of extant Local Plan	Relevant TBH SPA Policy within Plan	Any additional guidance/SPD apart from TBH SPA Delivery Framework
Hart	<p>Hart Local Plan (Strategy and Sites) 2032, Adopted April 2020.</p> <p>https://www.hart.gov.uk/plans-and-policies</p>	<p>Policy NBE3 TBH SPA states:</p> <p>The provision of SANG will meet the following standards and arrangements:</p> <p>i) a minimum of 8 hectares of SANG land (after discounting to account for current access and capacity) should be provided in perpetuity per 1,000 new occupants;</p> <p>ii) developments must fall within the catchment of the SANG that provides mitigation, except developments of fewer than 10 net new residential units.</p> <p>Where further evidence demonstrates that the integrity of the TBHSPA can be protected using different linear thresholds or with alternative mitigation measures these must be agreed with the Council and Natural England.</p> <p>The supporting text also states:</p> <p>Applicants may propose bespoke SANGs that provide mitigation for their own developments, either within the development site or off-site in an appropriate location. The requirements of the SANG guidelines often mean that SANGs cannot be delivered on smaller sites. Where we have capacity we may make Council administered SANG available to developers of smaller sites subject to the payment of a tariff.</p> <p>[In reference to the 5-7km zone of influence] Large developments may be required to provide bespoke SANGs based on factors including their scale and potential impact on the TBHSPA, and the availability of strategic SANG. This will be judged on a case-by-case basis.</p> <p>In addition to providing an attractive alternative to the SPA, bespoke SANGs may be required to include a combination of benefits, including biodiversity enhancement, green infrastructure and, potentially, new recreational facilities in line with the Council’s adopted green infrastructure policies.</p>	<p>SANG catchments and TBH zone maps and tariffs are provided.</p> <p>An updated SPA Avoidance and Mitigation Strategy is currently in preparation.</p> <p>https://www.hart.gov.uk/planning-policy-guidance</p>

		<p>SANGs as a publicly accessible open space must also conform to all the usual criteria and standards associated with a high quality open space provision (see the Hart Open Space Study, 2016). This will mean that the site must have regard to the suitability for a diverse range of user groups, with a variety of social and physical needs and abilities.</p>	
Rushmoor	<p>Rushmoor Local Plan 2014-2032 (Adopted February 2019)</p> <p>https://www.rushmoor.gov.uk/rushmoorlocalplan</p>	<p>Policy NE1 - Thames Basin Heaths Special Protection Area states: New development which is likely to have a significant effect on the ecological integrity of the Thames Basin Heaths Special Protection Area (SPA), including all net new dwellings, will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects.</p> <p>In all instances where mitigation measures are applicable, as set out in the Delivery Framework, the following standards will apply, unless an evidence-based alternative strategy has been agreed with Natural England:</p> <p>a. A minimum of 8 ha of SANG land (after discounting to account for current access and capacity) should be provided in perpetuity per 1,000 new occupants, either through contributions towards the provision of SANG identified by the Borough Council, or through on-site SANG, agreed with Natural England; and</p> <p>b. Contributions towards Strategic Access Management and Monitoring measures.</p> <p>The supporting text states that:</p> <p>The Council has access to three areas of SANG: Hawley Meadows, Rowhill Nature Reserve and Southwood Woodlands. It continues to explore options to deliver additional SANG to support the delivery of new homes, and to investigate alternative methods of mitigation. It is expected that large residential developments will provide bespoke mitigation that</p>	<p>Rushmoor Borough Council has prepared the Thames Basin Heaths Special Protection Area Avoidance and Mitigation Strategy 2020 (https://www.rushmoor.gov.uk/CHttpHandler.ashx?id=20913&p=0)</p> <p>It sets out the approach that the Council will follow to seek to avoid harm arising from additional residential development.</p> <p>Repeating the requirements of Local Plan policy NE1, it states that:</p> <p>It is expected that large residential developments will provide bespoke mitigations that provides a combination of benefits including SANG, biodiversity enhancement and green infrastructure. Where developers propose a bespoke solution, this will be accessed on its own merits under the Habitats Regulations and will be agreed by the Council in consultation with Natural England.</p> <p>Two Local Plan allocations are identified as providing, or as having the opportunity to provide, bespoke mitigation:</p>

		<p>provides a combination of benefits, including SANG, biodiversity enhancement and green infrastructure improvements. Where developers propose a bespoke solution, this will be assessed on its own merits under the Habitats Regulations and will be agreed with the Council in consultation with Natural England. Where further evidence demonstrates that the integrity of the SPA can be protected using alternative mitigation measures, these must be agreed with Natural England.</p>	<ul style="list-style-type: none"> - Blandford House and Malta Barracks - Wellesley
Surrey Heath	<p>Surrey Heath Core Strategy and Development Management Policies 2011-2028 (Adopted February 2012)</p> <p>https://www.surreyheath.gov.uk/residents/planning/planning-policy/surrey-heath-current-local-plan</p>	<p>Policy CP14B European Sites states:</p> <p>Only new development that complies with the following requirements will be permitted.</p> <p>(i) No (net) new residential development will be permitted within 400m of the SPA.</p> <p>(ii) Non-residential development within 400m of the SPA will be required to demonstrate that it is not likely to have a significant effect either alone or in combination with other plans or projects.</p> <p>Proposals for residential development elsewhere in the Borough will be required to provide appropriate measures to avoid adverse effects upon the Thames Basin Heath Special Protection Area in accordance with the Borough Councils adopted Avoidance Strategy (or as subsequently amended) Such measures shall include:</p> <p>(iii) All net new residential development shall provide or contribute toward the provision of Suitable Alternative Natural Greenspaces (SANGs)</p> <p>(iv) SANGS will be provided at a standard of at least 8ha per 1,000 new occupants.</p> <p>(v) Developments of 10 or more net new dwellings will only be permitted within the identified catchment areas of SANGs</p> <p>(vi) All net new residential development shall contribute toward strategic access management and monitoring (SAMM) measures</p> <p>The effective avoidance of any identified adverse effects must be demonstrated and secured prior to approval of the development.</p>	<p>Surrey Heath Borough Council has prepared the Thames Basin Heath Special Protection Area Avoidance Strategy SPD (2019)</p> <p>https://www.surreyheath.gov.uk/residents/planning/planning-policy/supplementary-planning-documents/thames-basin-heaths-special</p> <p>It states that:</p> <p>Bespoke SANGs provide avoidance measures for a specific development. New developments of more than 136 units will generally be expected to provide a bespoke SANG rather than relying on capacity at Surrey Heath’s available strategic SANGs. Proposals for any bespoke SANG will be considered on a case-by-case basis, in consultation with Natural England.</p>

		<p>In relation to the Deepcut allocation (policy CP4) the Plan states:</p> <p>The Council is working to produce a bespoke solution for open space on this site. This reflects the need to incorporate both Suitable Alternative Natural Green Space and Accessible Natural Green Space provision as part of the development as well as provision for sports pitches with changing rooms and facilities, other formal open space, informal open space, allotments and amenity space.</p>	
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Measures Required to Meet the Habitats Regulations

- 8.23. The requirements of the Habitats Regulations in relation to protection of the Thames Basin Heaths SPA are described in Chapter 2 of this report, and involve a sequential approach to the assessment of potential impacts on the SPA (identifying if a plan or project is likely to have a significant effect, either alone or in combination with other plans or projects, and if so undertaking an appropriate assessment of the implications of the plan or project for that site in view of that site's conservation objectives).
- 8.24. The Mitigation Capacity Review notes that there are two assessment frameworks that can helpfully be used to inform an approach to HRA involving reliance on the use of mitigation measures: the 'source-pathway-receptor' concept and 'the mitigation hierarchy'.
- 8.25. The first framework requires potential impact pathways to be considered, with control measures most effectively applied at source. The second framework establishes a hierarchy for control measures, with impacts most effectively addressed via avoidance measures, then mitigation measures that reduce impacts, and finally to compensate for unavoidable impacts that cannot be controlled.
- 8.26. Given the increasingly stringent tests applied at the progressive HRA stages (in particular through application of relevant case law), achieving impact avoidance at the potential impact source provides the greatest confidence that the requirements of the Habitats Regulations can be met. This has therefore influenced the approach to avoiding and mitigating the effects of increased recreational pressure on the TBH SPA to date, which required an overall approach comprising a combination of providing suitable areas for recreational use by residents to buffer the SPA, managing access on the SPA and encouraging use of alternative sites. As SANGs attract potential SPA users away from the designated site they should strictly be considered measures which *avoid* impacts on the SPA although are commonly referred to as 'mitigation' in practice.
- 8.27. The delivery of SANGs within Hart, Rushmoor and Surrey Heaths is closely monitored and the available SANG capacity (i.e. number of new dwellings that could still be mitigated by a SANG if delivered within the catchment of that SANG) is kept up to date by the Local Planning Authorities (LPAs). The current SANG capacity remaining in each authority is summarised in Chapter 2. This same approach to setting out the catchment and capacity used or available for each SANG should continue to be undertaken regularly by each LPA in relation to any SANG networks, small or linear SANG identified (once the capacity of each SANG has been calculated). The capacity information will then be able to be used by the LPAs to help inform the HRA requirements for future updates to each authority's Local Plan, and also by prospective housing developers to assist understanding of where bespoke SANG are to be provided.
- 8.28. The Mitigation Capacity Review concluded that the overall capacity of such a package of measures to mitigate the effects of a defined quantum of housing would be influenced by the relative balance of SANGs meeting all

of the quality criteria, those that don't and other measures, and would need to be informed by consultation with the competent authority and Natural England.

8.29. This study has therefore established the principle that SANG networks, small and linear SANG would provide avoidance/mitigation, although further HRA work would be required for each authority's Local Plan to assess any changes to policy or guidance, and to assess new housing provision proposed in the Local Plans in light of the amended mitigation approach. Project level HRA will still be required where SANG sites are brought forward through the development planning system.

Identifying and Delivering Sites

8.30. SANGs are currently identified and delivered in three ways:

- Strategic SANG: Open spaces allocated as SANG, in agreement with Natural England, which are owned/managed by the local authority. Developers pay financial contributions towards enhancement to SANG status and long-term management.
- Bespoke SANG: New open spaces provided mostly by large development and allocated as SANG, in agreement with Natural England. In most cases, the SANG land is transferred to local authority ownership with maintenance sums to fund long term management.
- Third Party SANG: Open spaces privately provided and owned. They have been approved through planning permission and developers can purchase SANG capacity directly from the owners by private contract in agreement with the local authority. Long term management is sometimes provided by the owner or the land is transferred to local authority ownership, or other bodies, with maintenance sums to fund its long-term management.

8.31. This means that SANGs are created through a mixture of enhancing currently accessible sites, bringing new sites into public access, or alongside new developments that have the space and appropriate characteristics for SANG. SANG networks, small or linear SANG would be identified in much the same way.

8.32. Sites for SANGs could be identified individually, for example sites that have been identified through other studies as being available for development. Some sites were explored as part of this study, in order to understand the range of site types across the HMA, but some of these might be ruled out or further opportunities may present themselves if more detailed study were undertaken (e.g. through sites visits or by taking into account site quality, surveys of existing use, constraints analysis, or further work on green infrastructure strategies). Some of the sites explored in the Mitigation Capacity Review report are detailed within Appendix 4 and may include appropriate sites to investigate further. A comprehensive review of available sites in relation to the recommended SANG networks, small and linear SANG is recommended.

- 8.33. One potential approach would be to look strategically at identifying areas of need (i.e. SANG deficiency), although this would still be dependent upon SANG sites being available. This could be a development of the existing local authority Local Plan, or green infrastructure work and would seek to identify and build on the mapping of the network of existing SANGs, open spaces and linkages within the three authorities, as well as the areas of deficiency identified from the open space and green and blue infrastructure strategies and this study. This would also need to take into account potential new strategic housing allocations coming forward through Local Plans, as new areas of need may appear.
- 8.34. The design and delivery of the new SANG should then be a collaborative process between local authorities, developers, community groups and other key stakeholders, including consultation with Natural England. The process could also seek to explore opportunities to support existing partnerships or establish new ones. It would be beneficial for bespoke and third party SANG developers to engage with the relevant local planning authority and Natural England for advice at an early stage in site selection to seek views on SANG suitability.
- 8.35. Suitable management organisations would then need to be appointed for new sites, and SANG Management Plans created. The management and funding, including capital works and in-perpetuity maintenance, should preferably be secured through the planning process with SANG Management Plans agreed in consultation with Natural England through associated planning permissions.

Linking Mitigation to Development and Apportioning Funds

- 8.36. SANG networks, small and linear SANG would be funded, as with the current approach, through developer contributions, so that the mitigation can be linked to new development. However, as with 'strategic SANG' (see above), delivery may be required in advance of all the necessary contributions, therefore local authorities may be required to seek funding and then recoup the costs through developers. As these sites are very similar to the existing SANG provision it is likely that the cost to developers (per dwelling) will also be similar. Where the provision rate is increased above the minimum 8ha/1,000 residents costs may be slightly higher. This would need to be considered when evaluating potential SANG sites to ensure costs would not affect viability.
- 8.37. For SANG networks, small and linear SANG that have 'visible equivalence' in provision to existing SANG, the current SANG catchments would apply (2-12 ha SANG: 2 km catchment; 12-20 ha SANG: 4 km catchment; 20+ ha SANG: 5 km catchment; SANGs with no parking: 400 m). Sites would therefore have to come forward within appropriate distances of potential future housing locations, in order for the mitigation capacity to be associated with them.

Future Approaches

- 8.38. This project has recommended approaches to avoidance/mitigation which could enable new SANG networks, small and/or linear SANG to be brought forward and enable housing to be delivered without having adverse

effects on the integrity of the Thames Basin Heaths SPA. As with any alternative greenspace delivery the amount of space available for these sites is finite and although this approach may enable additional dwellings to be delivered for upcoming Local Plans there will remain a point at which sites are difficult to identify and deliver. It may therefore be beneficial to investigate the viability of some of the 'amber' options which are highlighted in this report to have potential and could be explored further, for example through the trials detailed in section 7.

- 8.39. The avoidance and mitigation approach should align with the mitigation hierarchy and be evidenced by the best scientific knowledge available. It would be beneficial for future development to firstly aim to provide SANG in line with the existing SANG guidelines and SAMM. If this cannot be achieved then SANG could be provided in line with the proposed amended SANG guidelines to demonstrate equivalent provision, alongside SAMM. If these options cannot be utilised, then it is recommended that the options rated as amber within this study are reviewed to investigate whether they could be quantified and formalised as effective avoidance/mitigation measures. As a last resort, competent authorities may then have to consider the derogation provisions under regulation 64 of the Habitats Regulations.
- 8.40. Application of regulation 64 would involve evidencing that there were no alternative solutions, and that the plan or project under consideration must be carried out for imperative reasons of overriding public interest (IROPI), which may be social or economic in nature. To date we are not aware of any housing schemes which have been able to successfully demonstrate the regulation 64 requirements, however DTA Ecology advise that this should not preclude the possibility that they could in future. Alternative solutions must be considered in light of government policies and objectives, including housing targets. The HMA may be viewed as unique in terms of the area influenced by the SPA designation (92% within 7km) and may therefore require approaches that would not be acceptable elsewhere. If the tests under regulation 64 could be met then it would also be important to consider the implications of regulation 68 and what compensatory measures should be provided to ensure that the overall coherence of the national sites network is protected.

References

- Bracknell Forest Council (2011) *Site Allocations DPD (SADPD) Habitats Regulations Assessment (HRA) Draft Submission*. Updated Version 04 December 2012
- Clarke, R.T., Liley, D., Underhill-Day, J.C., & Rose, R.J. (2005) *Visitor access patterns on the Dorset Heaths*. English Nature Research Report
- Court of Justice of the European Union Judgment (2018) *People Over Wind and Sweetman v. Coillte Teoranta C-323/17*
- Ecological Planning and Research (2018) *Visitor Access Patterns on the Thames Basin Heaths SPA*
- Ecological Planning and Research (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Mitigation Capacity Review*
- English Nature (2005) *Thames Basin Heaths SPA Citation*
- European Commission Council (1979) *Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds*
- European Commission Council (1992) *Directive 92/43/EEC of 21 May 1992 on the Conservation of natural habitats and of wild fauna and flora*
- Fearnley, H. & Liley, D (2013) *Results of the 2012/13 visitor survey on the Thames Basin Heaths Special Protection Area (SPA)*. Natural England Commissioned Reports, Number 136
- Forestry Enterprise & Natural England (2014) *Joint feasibility assessment: Heathland restoration from conifer plantation as mitigation of the likely impacts of housing development*
- Government Office for the South East (GOSE) (2009) *The South East Plan: Regional Spatial Strategy*
- Hale, J (2008) *Taking the lead: managing walkers with dogs on your site*. Hampshire County Council. Available at www.hants.gov.uk/dogs
- Hart District Council (2020) *The Hart Local Plan (Strategy and Sites) 2032*
- Hart, Rushmoor & Surrey Heath Council's (2020) *Hart Rushmoor and Surrey Heath SPA Mitigation Project: Habitat Restoration Feasibility Report*
- Hart, Rushmoor & Surrey Heath Councils (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SAMM Background Paper*
- Hockin, D., M. Oundsted, M. Gorman, D. Hill, V. Keller and M.A. Barker (1992) *Examination of the effects of disturbance on birds with reference to its importance in ecological assessments*. Journal of Environmental Management, 36, 253-286
- Jenkinson, S. (2013) *Planning for dog ownership in new developments*. Hampshire County Council / East Hampshire District Council / Whitehill Bordon Eco-town / Kennel Club. www.hants.gov.uk/dogs
- Jenkinson, S. and McCloy, A. (2008) *Final report: Walkers with dogs around Winchester. Access and Countryside Management, Hope Valley*
- Joint Nature Conservation Committee (2015) *Natura 2000 - Standard Data Form for Thames Basin Heaths Special Protection Area*
- Joint Nature Conservation Committee (1999) *The Birds Directive Selection Guidelines for Special Protection Areas* Joint Nature Conservation Committee [Viewed 20 February 2019]. Available from: <http://jncc.defra.gov.uk/page-2643>
- Judgment of the Court (2014) *Briels v Minister van Infrastructuur en Milieu*, C-521/12, EU:C:2014:330
- Judgment of the Court (2018) *Grace v An Bord Pleanala*, C-164/17, EU:C:2018:593
- Judgment of the Court (2016) *Hilde Orleans & Others v Vlaams Gewest*, Joined cases C-387/15 and C-388/15, EU:C:2016:583
- Judgment of the Court (2018) *Holohan v An Bord Pleanala*, C-461/17, EU:C:2018:883
- Judgment of the Court (2018) *People Over Wind, Peter Sweetman v Coillte Teoranta*, C-323/17, EU:C:2018:244
- Judgment of the Court (2013) *Sweetman and others v An Bord Pleanala*, C-258/11, EU:C:2013:220

- Judgment of the Court (2004) *Waddenzee*, C-127/02, EU:C:2004:482
- Land Use Consultants (2005) *Going, going, gone? The cumulative impact of land development on biodiversity in England*. English Nature Research Reports. No. 626
- Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Restriction Research Study*
- Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SANG Research Study*
- Land Use Consultants (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: SPA Visitor Distribution and Access*
- Liley, D, Jackson, D. & Underhill-Day, J. (2005) *Visitor Access Patterns on the Thames Basin Heaths*. English Nature Research Report 682. English Nature, Peterborough
- Liley, D. & Clarke, R. T. (2003) *The impact of urban development and human disturbance on the numbers of nightjar *Caprimulgus europaeus* on heathlands in Dorset, England*. Biological Conservation, 114, 219-230
- Liley, D. & Panter, C. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Management Research Study*
- Liley, D. & Underhill-Day, J (2007) *Visitor patterns on southern heaths: a review of visitor access patterns to heathlands in the UK and the relevance to Annex I bird species*. Ibis, 149, s1
- Liley, D. and R.T. Clarke (2002) *Urban development adjacent to heathland sites in Dorset: the effect on the density and settlement patterns of Annex 1 bird species*. English Nature Research Reports, No. 463.
- Liley, D., Clarke, R. T., Mallord, J. & Bullock, J. M. (2006) *The effect of urban development and human disturbance on the distribution and abundance of nightjars on the Thames Basin and Dorset Heaths*. Natural England/Footprint Ecology
- Liley, D., Panter, C. & Powner, S. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Dog Control Research Study*
- Liley, D., Panter, C. & Powner, S. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Dog Control Research Study*
- Liley, D., Weitowitz, D., Panter, C., & Hoskin, R (2018) *Habitat Regulations Assessment for proposed charges at selected car parks in Surrey*
- Lowe, A., A. C. Rogers, and K. L. Durrant. 2014. *Effect of human disturbance on long-term habitat use and breeding success of the European Nightjar, *Caprimulgus europaeus**. Avian Conservation and Ecology 9(2): 6.
- Mallord, J. W., Dolman, P. M., Brown, A. F., & Sutherland, W. J. (2007). *Linking recreational disturbance to population size in a ground-nesting passerine*. Journal of Applied Ecology, 44, 185–195.
- MHCLG (2018) *Planning Practice Guidance* [online]
- MHCLG (2019) *National Planning Policy Framework*
- Murison, G. (2002) *The impact of human disturbance on the breeding success of nightjar *Caprimulgus europaeus* on heathlands in south Dorset, England*. English Nature Research Reports, No. 483.
- Murison, G., Bullock, J.M., Underhill-Day, J., Langston, R., Brown, A.F., Sutherland, W.J. (2007) *Habitat type determines the effects of disturbance on the breeding productivity of the Dartford Warbler *Sylvia undata**
- Natural England (2009) *Access and Nature Conservation Reconciliation: Supplementary Guidance for England (NECR013)* (Footprint Ecology)
- Natural England (2014) *European Site Conservation Objectives for Thames Basin Heaths Special Protection Area*
- Natural England (2016) *European Site Conservation Objectives: Supplementary Advice on Conserving and Restoring Site Features - Thames Basin Heaths Special Protection Area (SPA)*
- Natural England (2020) *Natural England Standard: SSSI Monitoring, Assessment and Reporting*
- Panter, C. & Liley, D. (2020) *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Car Parking Research Study*
- Rushmoor Borough Council (2019) *Rushmoor Local Plan*

- Shaw, P.J.A., K. Lankey and S.A. Hollingham (1995) *Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath*. The London Naturalist, 74, 77-82.
- Taylor, K., Anderson, P., Taylor, R., Longden, K. and Fisher, P. (2005) *Dogs, access and nature conservation*. English Nature Research Report 649, Peterborough
- Thames Basin Heaths Joint Strategic Partnership Board (2009) *Thames Basin Heaths Special Protection Area Delivery Framework*
- The Stationary Office (2000) *Countryside and Rights of Way Act*
- The Stationary Office (2017) *The Conservation of Habitats and Species Regulations 2017*
- Tromans, S. Queen's Counsel (2020) *Advice in the matter of Hart, Rushmoor and Surrey Heath SPA Mitigation Project*
- Underhill-Day, J.C. (2005) *A literature review of urban effects on lowland heaths and their wildlife*. English Nature Research Reports, No. 623.
- Van der Zande, A.N., J.C. Berkhuisen, H.C. van Letesteyn, W.J. ter Keurs and A.J. Poppelaars (1984) *Impact of outdoor recreation on the density of a number of breeding bird species in woods adjacent to urban residential areas*

Appendix 1: Assessment Proforma Template

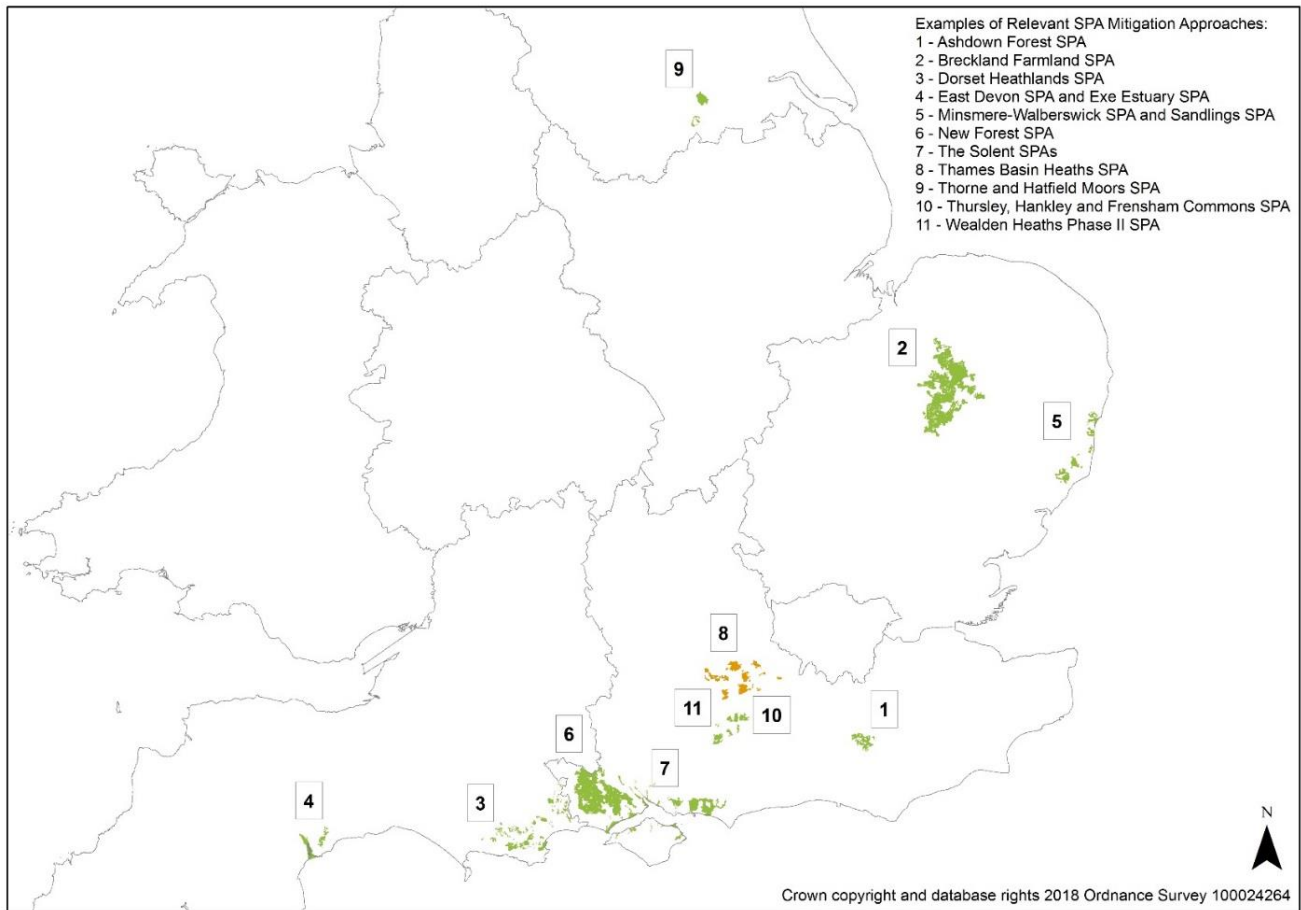
Ref: X	Option: [Title summarising mitigation or avoidance measure]
Description [of avoidance or mitigation measure]	
Characteristics	
Type of intervention [e.g. physical intervention]	
Scale of intervention [explanation, e.g. single district / whole SPA]	
Existing evidence base [summary of information available]	
Gaps in evidence base [summary of information required]	
Effectiveness	
[RAG rating]	HRA implications [Explanation; can option be considered ‘avoidance’ or ‘mitigation’ (may be difficult to determine without legal advice); has this been tested through HRA previously; what would need to be demonstrated to conclude no adverse effect on integrity (AEOI)? <i>Rating based on a scale with Green being more likely to avoid AEOI and Red less likely.</i>
[RAG rating]	Likely outcomes of implementing option [e.g. scale of potential effectiveness; what would be needed to understand likely outcome; potential number of homes that could be accommodated if avoidance/mitigation measure is associated with development. <i>Rating based on a high (Green), medium (Amber), low (Red) range in terms of potential scale of contribution to each district’s housing requirement]</i>
Relationship to other options being considered [i.e. would it only be effective in conjunction with another of the options (in addition to the existing measures); does this preclude another?]	
Monitoring effectiveness [how can effectiveness of this option be monitored / measured?]	
Deliverability	
[RAG rating]	Implementation method [description of steps required to implement. <i>Rating based on range from simple (Green) to complex (Red)</i>]
[RAG rating]	Stakeholders [identify stakeholders. <i>Rating based on extent of cooperation required e.g. Green: factors easily controlled by the three Councils; Red: large number of stakeholders / cross boundary working]</i>
[RAG rating]	Potential sources of funding [and likelihood of securing it. <i>Rating based on low (Red), medium (Amber) and high (Green) likelihood of securing it]</i>
[RAG rating]	Potential costs [estimated capital / in perpetuity costs. <i>Rating based on a low (Green), medium (Amber) and high (Red) range of costs comparative to the existing avoidance/mitigation costs]</i>
Overall assessment	

<p>Explanation for overall assessment [e.g. overall conclusions at the current time; discussion around relative weight of RAG scores. Green are recommended to be taken forward as potential mitigation, amber have potential but it is not recommended that they are pursued at this time, and red are not currently considered to have potential as mitigation]</p>	<p>[RAG Rating]</p>
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CONFIDENTIAL DRAFT

Appendix 2 – Other SPA Avoidance and Mitigation Examples

Locations of Special Protection Areas with relevant mitigation strategies



CONFIDENTIAL

SPA Name	Ashdown Forest		
Date Classified	25/08/1998	Site Area (Ha)	3,207.08
SPA Description			
Contains one of the largest single continuous blocks of lowland heath in south-east England, with both dry heaths and, in a larger proportion, wet heath.			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i>, • Nightjar <i>Caprimulgus europaeus</i> 			
Avoidance and Mitigation Strategy			
<p>Two measures have been identified by the affected authorities to mitigate the impact of development on the Ashdown Forest Special Protection Area (SPA), including:</p> <ul style="list-style-type: none"> • provision of SANGs; and • the implementation of a Strategic Access Management and Monitoring Strategy. <p>SANGs are currently being delivered on a per local authority basis of which Wealden District Council is currently in the process of implementing two SANGs, Mid Sussex has one SANG, as does Lewes District Council. Surrounding authorities have been working together to identify and implement a joint SAMM strategy.</p>			
Further Information			
<p>Wealden Local Plan Ashdown Forest SPA Mitigation Zone Background Paper 2019</p> <p>Draft Interim Mitigation Strategy Tariff Guidance for residential dwellings - September 2018</p> <p>Wealden Local Plan - Submission January 2019</p> <p>SAMM Tariff - April 2018</p> <p>Visitor Access Patterns on Ashdown Forest for Mid Sussex and Wealden District Councils (UE Associates and University of Brighton, 2009)</p>			
Comment			
This is a very similar approach to existing approach to avoidance and mitigation in the TBHSPA area.			

SPA Name	Breckland Farmland		
Date Classified	21/09/2006	Site Area (Ha)	39,433.66
SPA Description			
<p>The area consists of a gently undulating plateau underlain by a bedrock of Cretaceous chalk, which is covered largely by thin deposits of sand and flint of glacial origin. The semi-continental climate, with low rainfall and free-draining soils, has led to the development of dry heath and grassland communities. The complex of soils has led to the creation of intimate mosaics of heather dominated heathland with acid and calcareous grassland rarely found elsewhere.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Nightjar <i>Caprimulgus europaeus</i> • Stone curlew <i>Burhinus oedicnemus</i> • Woodlark <i>Lullula arborea</i> 			
Avoidance and Mitigation Strategy			
<p>Local Plan level Habitats Regulations Assessments have identified the potential for increased disturbance to nightjar, woodlark and stone curlew as a result of recreation, and the potential for other urban effects such as increased fire, litter and eutrophication to significantly affect Breckland SPA and SAC.</p> <p>Local Plans in the affected authorities (Breckland, Forest Heath, St. Edmunds Bury and King's Lynn and West Norfolk) include the following measures:</p> <ul style="list-style-type: none"> • Development within the SPA boundary, or located less than 1,500m away from the SPA boundary or identified areas that have a functional link will not normally be permitted. Development is restricted to the re-use of existing buildings or where existing development completely masks the new proposal from the Breckland SPA. • Development within 400m of the SPA that support, or are capable of supporting woodlark and/or nightjar will not normally be permitted. The Council will consider the need for a Habitats Regulations Assessment to determine the implications of development on nightjar and woodlark on a case by case basis, depending on the location and nature of the proposal. <p>The Breckland Local Plan includes a commitment to a framework of measures necessary for monitoring and mitigation measures required to demonstrate that the increases in visitor pressure arising from new development will be addressed before adverse effects on European sites occurs. These will include as a minimum the following measures to be implemented following adoption of the Plan:</p> <ul style="list-style-type: none"> • Creation of an advisory group; • Production of a monitoring programme; • Identification of mitigation measures; and • Defined funding to support the above measures. 			
Further Information			

<https://www.breckland.gov.uk/adopted-local-plan>

Clarke, R., & Liley, D. (2013). Further assessments of the relationship between buildings and stone curlew distribution. Unpublished report by Footprint Ecology for Breckland Council.

<http://www.norfolkbiobiodiversity.org/assets/Uploads/Visitor-surveys-at-European-protected-sites-across-Norfolk-during-2015-and-2016.pdf>

Comment

There needs to be caution in making a direct comparison with the approach taken for this SPA given the different context and designated species. In addition, the development of a framework appears to be at a relatively early stage. However, it may be helpful to explore the proposed mitigation measures in more detail if the information becomes available.

CONFIDENTIAL DRAFT

SPA Name	Chichester and Langstone Harbours		
Date Classified	28 October 1987	Site Area (Ha)	5,810.03
SPA Description			
<p>Large, sheltered estuarine basins comprising extensive sand- and mud-flats exposed at low tide. The two harbours are joined by a stretch of water that separates Hayling Island from the mainland. Tidal channels drain the basin and penetrate far inland. The mud-flats are rich in invertebrates and also support extensive beds of algae, especially <i>Enteromorpha</i> species, and eelgrasses <i>Zostera</i> spp. The basin contains a wide range of coastal habitats supporting important plant and animal communities. The site is of particular significance for waterbirds, especially in migration periods and in winter. It also supports important colonies of breeding terns.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season;</p> <ul style="list-style-type: none"> • Little tern <i>Sterna albifrons</i> • Sandwich tern <i>Sterna sandvicensis</i> <p>On passage:</p> <ul style="list-style-type: none"> • Little egret <i>Egretta garzetta</i> <p>Over winter:</p> <ul style="list-style-type: none"> • Bar-tailed godwit <i>Limosa lapponica</i> • Little egret <i>Egretta garzetta</i> <p>This site also qualifies by supporting populations of importance of the following migratory species:</p> <p>On passage:</p> <ul style="list-style-type: none"> • Ringed plover <i>Charadrius hiaticula</i> <p>Over winter:</p> <ul style="list-style-type: none"> • Black-tailed godwit <i>Limosa islandica</i> • Dark-bellied brent goose <i>Branta bernicla</i> • Dunlin <i>Calidris alpina</i> • Grey plover <i>Pluvialis squatarola</i> • Redshank <i>Tringa totanus</i> • Ringed plover <i>Charadrius hiaticula</i> <p>Assemblage qualification: A wetland of international importance.</p> <p>The area also qualifies by regularly supporting at least 20,000 waterfowl.</p>			
Avoidance and Mitigation Strategy			
Chichester and Langstone Harbour SPA is one of three sites collectively referred to as the Solent SPAs.			

Over 60,000 new homes are planned around the Solent up to 2034. Research undertaken as part of the Solent Disturbance Mitigation Project, has shown that this will result in more people visiting the Solent SPAs for recreation, potentially causing additional disturbance to birds as a result.

The research highlighted that dogs off lead were a cause of all 'major flights' (i.e. birds flying more than 50m to escape disturbance). Therefore, working with and understanding the needs of dog walkers is a priority for the Partnership. The research also found that the level of disturbance is determined more by people's behaviour than purely by number of visitors. Therefore, the strategy is based on an approach to better managing visitors at the coast, rather than attempting to restrict access.

The Solent Recreation Mitigation Partnership established a strategic approach to the provision of mitigation for recreational disturbance.

The strategy includes:

- A team of coastal rangers.
- Communications, marketing and education initiatives (and an officer to implement).
- Initiatives to facilitate and encourage responsible dog ownership (and an officer to implement).
- Codes of conduct for variety of coastal activities.
- Site-specific visitor management and bird refuge projects.
- Providing new/enhanced greenspaces.
- A partnership manager.
- Monitoring.

There is caution regarding use of SANG as a mitigation measure. The survey results identify that many visit the coast for sea views or due to proximity to the coast. Therefore, SANGs may have a role in providing mitigation if they are closely linked to management at the coast, targeted in the right locations and accompanied by active promotion of their existence.

The implementation of measures is funded by 'developer contributions' equivalent to average of £564 per dwelling (increased annually to take into account inflation). Collected for all new homes built within 5.6km of the Solent SPAs.

The site-specific visitor management and bird refuge projects are implemented through a five-year rolling programme with a budget of £400,000 per year (an additional 5% is available for ongoing maintenance). Projects are assessed in relation to the mitigation objectives of the strategy and the evidence base that supports their ability to alleviate pressure on sensitive parts of the coast. Projects are assessed by a team that includes representatives from NE, RSPB, Hampshire and Isle of Wight Wildlife Trust, New Forest National Park Authority and the Partnership Manager. Assessment considers project scale, deliverability, effectiveness, monitoring and cost. Projects are then scored and where possible funding will be recommended to those with highest scores in the annual budget report to Partnership for Urban South Hampshire (PUSH).

There is a commitment to undertake a detailed assessment of each section of the coast in the form of an Access Management Assessment. This will seek to review the activities of all coastal users and make recommendations about how their needs can be accommodated without causing recreational pressures and disturbance.

Further Information

<http://jncc.defra.gov.uk/default.aspx?page=2034>

www.birdaware.org

Bird Aware Solent (December 2017) Solent Recreation Mitigation Strategy.

Liley D, Stillman R & Fearnley H (2011) Solent Disturbance & Mitigation Project Phase II Results of bird disturbance fieldwork 2009/10.

Walk Unlimited (2016) Dog Walking Market Research Report.

Jenkinson S (2016) Mitigation options for influencing the behaviour of walkers with dog in the Solent area

Comment

There needs to be caution in making a direct comparison with the approach taken for this SPA given the different coastal context. However, the approach taken to site specific visitor management and bird refuge projects could be explored further.

CONFIDENTIAL DRAFT

SPA Name	Dorset Heathlands		
Date Classified	01 October 1998	Site Area (Ha)	8,168.79
SPA Description			
Suite of heathland sites at the western edge of the Hampshire Basin. Fragmented remains of once extensive tracts of dry heath, wet heath and valley mire.			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i> <p>Over winter:</p> <ul style="list-style-type: none"> • Hen harrier <i>Circus cyaneus</i> • Merlin falco <i>columbarius</i> 			
Avoidance and Mitigation Strategy			
<p>Local authorities in South East Dorset whose administrative area is within 5 kilometres of the protected heathland and which have responsibility for the determination of residential planning applications, have been operating a strategy for the protection of heathland since 2007. The strategy consists of:</p> <ul style="list-style-type: none"> • Heathland Infrastructure Projects (HIPs); and • Strategic Access Management and Monitoring (SAMM). <p>HIPs are projects that provide facilities to attract people away from protected heathland sites. Projects are tailored to the specific needs that have been identified through the HRAs of the local authority's local plans as being requirements for the avoidance or mitigation of adverse effects from development. Of these projects SANGs (Suitable Alternative Natural Greenspaces) are the most significant element of provision, having a key role in attracting residents away from the Dorset Heaths. Other projects are likely to be more bespoke to local areas and for example may consist of creating linkages between open green spaces, recreational facilities such as BMX tracks or fire access measures.</p> <p>HIPs are delivered by either the local authorities from contributions collected through Community Infrastructure Levy payments and/or directly by developers through on-site provision. Third parties may bring forward proposals through the planning system for consideration by the local authorities and Natural England.</p> <p>It is also possible for authorities to agree to fund HIPs outside their area if they consider this, in agreement with Natural England, to be the best way to provide mitigation.</p> <p>Other examples of HIPs include improving access to existing sites and/or linear trails and dog activity areas.</p>			
Further Information			
<p>Dorset Heathlands Planning Framework Supplementary Planning Document 2020 to 2025;</p> <p>https://www.dorsetforyou.gov.uk/planning-buildings-land/planning-policy/joint-planning-policy-</p>			

[work/pdfs/heathlands/appendix.pdf;](#)

<https://www.dorsetforyou.gov.uk/planning-buildings-land/planning-policy/joint-planning-policy-work/heathlands/evidence-to-support-the-dorset-heathland-planning-framework.aspx>

Comment

This is similar to existing approach to avoidance and mitigation in the TBHSPA area, which developed at a similar time to the TBH SPAs. Given the similarities between these sites and the approaches, it would be useful to better understand any differences. Whilst many of the Heathland Infrastructure Projects (HIPs) constitute SANG, it would be helpful to explore the implementation of other projects and whether they could be translated into the TBH SPA context.

CONFIDENTIAL DRAFT

SPA Name	East Devon Heaths		
Date Classified	29 June 1998	Site Area (Ha)	1,119.94
SPA Description			
<p>The SPA forms part of the Devon Redlands National Character Area (NCA) characterised by its new red sandstone and Triassic Budleigh Salterton Pebble Beds which has contributed to the formation of the heathland.</p> <p>The area is predominantly lowland heath but is interspersed with areas of coniferous woodland. It is a locally important area for recreational activities such as dog walking and cycling and is extensively used by the Royal Marines at Lymington for training purposes.</p> <p>The heaths are registered as common land. There are rights of public access on foot over all the common land (most of the Pebblebed Heaths). The site is also rich in archaeological features and is exemplified by the well-known Woodbury Fort.</p> <p>Further information on the Exe Estuary component sites can be found on subsequent pages.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i> • Nightjar <i>Caprimulgus europaeus</i> 			
Avoidance and Mitigation Strategy			
<p>Research has determined a likely significant effect from housing and tourism development on the Exe Estuary SPA, Dawlish Warren SAC and East Devon Pebble Bed Heaths SPA through impacts from recreational use. These are referred to collectively as South East Devon European Sites.</p> <p>As a result, the affected authorities collect financial contributions which are dependent on which European sites the development will impact:</p> <ul style="list-style-type: none"> • Developments within 10km of the Exe Estuary SPA pay a contribution of £859.00 per residential unit • Developments within 10km of the Exe Estuary SPA and within 10km of the East Devon Pebbled Heaths SAC and SPA will pay a fee of £1,130.00 per residential unit. <p>Alternatively, a developer may choose to provide their own mitigation measures rather than pay the contribution.</p> <p>The contribution has been calculated from the total costs of the projects in the South East Devon European Site Mitigation Strategy (SEDESMS), which are divided by the number of houses to be built in the areas impacting upon the protected habitats. The three local planning authorities work in partnership to use these financial contributions to deliver the required mitigation measures.</p> <p>The package of mitigation measures proposed in the SEDESMS includes:</p> <ul style="list-style-type: none"> • SANGs. • Other cross-site mitigation measures. • Exe Estuary SPA on site mitigation. • Pebblebed Heaths SPA/SAC on site mitigation. • Dawlish Warren SAC on site-mitigation. 			

- Monitoring.

The table of measures in the SEDESMS includes cross site measures (applying to the three designated sites) and site-specific measures. Cross site measures include a Delivery Officer, wardens, delivery of a Dog Walking Project and SANGs.

Teignbridge, East Devon District Council and Exeter City Council have joined together to form the South East Devon Habitat Regulations Executive Committee. This new Committee is working with partners including Natural England, Clinton Devon Estates, National Trust, RSPB, Exe Estuary Management Partnership and Devon Wildlife Trust.

Further Information

Liley, D., Hoskin, R., Lake, S., Underhill-Day, J. & Cruickshanks, K. (2013). South-east Devon European Site Mitigation Strategy. Footprint Ecology. Unpublished report for East Devon District Council, Exeter City Council and Teignbridge District Council.

<https://exeter.gov.uk/planning-services/payments-from-developers/habitats-mitigation/why-is-mitigation-needed-within-exeter/>

Comment

This is a similar approach to existing approach to avoidance and mitigation in the TBHSPA area.

Given the similarities between these sites and the approaches, it would be useful to better understand any differences. For example, it will be helpful to explore the implementation of non- SANG projects identified in the SEDSEMS and on sites measures and explore whether they could be translated into the TBH SPA context.

CONFIDENTIAL

SPA Name	Exe Estuary		
Date Classified	11 March 1992	Site Area (Ha)	2,345.71
SPA Description			
<p>The Exe Estuary is located in Devon on the English south coast. The site extends 10 km south from Exeter to the open sea at Dawlish Warren. It comprises the waters, foreshore, low-lying land, three saltmarshes and an unusual double spit across the mouth of the estuary, and the sand dunes of Dawlish Warren. The mud- and sand-flats support eelgrass <i>Zostera</i> spp. and <i>Enteromorpha</i> beds, and contain an abundance of invertebrates including extensive mussel <i>Mytilus edulis</i> beds, which together provide rich feeding habitats for wintering waders and wildfowl. This complex of coastal habitats supports internationally important numbers of wintering and passage waterbirds.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • Avocet <i>Recurvirostra avosetta</i> • Slavonian grebe <i>Podiceps auritus</i> <p>Assemblage qualification: A wetland of international importance.</p> <ul style="list-style-type: none"> • The area also qualifies by regularly supporting at least 20,000 waterfowl. 			
Avoidance and Mitigation Strategy			
See East Devon Heaths SPA			
Further Information			
See East Devon Heaths SPA			
Comment			
See East Devon Heaths SPA			

SPA Name	Minsmere-Walberswick		
Date Classified	19 May 1992	Site Area (Ha)	2,018.92
SPA Description			
<p>Located on the Suffolk coast south of Southwold in eastern England. The SPA comprises two large marshes, the tidal Blyth estuary and associated habitats. This composite coastal site contains a complex mosaic of habitats, notably areas of marsh with dykes, extensive reedbeds, mud-flats, lagoons, shingle, woodland and areas of lowland heath.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Avocet <i>Recurvirostra avosetta</i> • Bittern <i>Botaurus stellaris</i> • Little tern <i>Sterna albifrons</i> • Marsh harrier <i>Circus aeruginosus</i> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i>, <p>Over winter:</p> <ul style="list-style-type: none"> • Avocet <i>Recurvirostra avosetta</i> • Bittern <i>Botaurus stellaris</i> • Hen harrier <i>Circus cyaneus</i> 			
Avoidance and Mitigation Strategy			
<p>The Suffolk Coast Recreation Disturbance Avoidance and Mitigation Strategy is a means by which sustainable housing growth can be delivered in the Ipswich Borough and its neighbouring local planning authority areas of East Suffolk Council, Babergh District and Mid Suffolk District, whilst adequately protecting Suffolk's coastal, estuarine and heathland European wildlife sites. It is being developed as a strategy that provides a solution to the additional recreation pressure risks highlighted by each of the local plan HRAs for the authorities.</p> <p>This has led to the collaborative working between the local planning authorities that lie within 13km of the coastal and heathland European sites.</p> <p>The evidence supporting the RAMS indicates that developer contributions would be required for all additional housing development within 13km of the European sites. It focuses on avoiding and mitigating for recreation pressure on the following sites:</p> <ul style="list-style-type: none"> • Alde-Ore Estuary SPA/Ramsar site with Orfordness-Shingle Street SAC. • Deben Estuary SPA/Ramsar site. • Stour and Orwell Estuaries SPA/Ramsar site. • Sandlings SPA. • Minsmere-Walberswick SPA/SAC/Ramsar site. 			

The strategy identified a zone of influence of 13km for sites such as Minsmere /Walberswick for recreation impacts and sets out a mitigation approach involving developer contributions to fund targeted mitigation measures.

Mitigation measures include:

- Provision of a new Country Park.
- Provision of green spaces as part of new development.
- Visitor management measures.
- Monitoring the impact of recreational pressure on birds in protected sites.

Further Information

<https://www.eastsuffolk.gov.uk/planning/s106/habitat-mitigation/>

Comment

This is similar to existing approach to avoidance and mitigation in the TBHSPA area.

Given the similarities between these sites and the approaches, it would be useful to better understand any differences. It may be particularly useful to identify any differences in the greenspace criteria to the TBH SANGs.

CONFIDENTIAL

SPA Name	New Forest		
Date Classified	22 September 1993	Site Area (Ha)	28,002.81
SPA Description			
<p>Comprises a complex mosaic of habitats overlying mainly nutrient-poor soils over plateau gravels. The major components are the extensive wet and dry heaths with their rich valley mires and associated wet and dry grasslands, the ancient pasture woodlands and enclosure woodlands, the network of clean rivers and streams, and frequent permanent and temporary ponds.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i> • Honey buzzard <i>Pernis apivorus</i> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i> <p>Over winter:</p> <ul style="list-style-type: none"> • Hen harrier <i>Circus cyaneus</i> 			
Avoidance and Mitigation Strategy			
<p>New Forest District Council (NFDC) have adopted a Supplementary Planning Document on the Mitigation Strategy for European Sites (Recreational Pressure from Residential Development).</p> <p>The SPD sets out in some detail the measures and projects which will be implemented to mitigate recreational impacts of new residential development. It includes proposals for new areas of natural green space, improvements to recreational walking routes, and management of visitors to sensitive sites. It includes three elements of mitigation:</p> <ul style="list-style-type: none"> • Contributions towards mitigation projects from the Mitigation Strategy SPD (the provision or improvement of natural green spaces and recreational routes). • Access and visitor management measures funded by a contribution which will be secured through the completion of a Section 106 agreement (developments of over 50 dwellings which provide Suitable Alternative Natural Green Space (SANGS) on-site are currently exempted from this contribution). • Monitoring funded by a contribution which will be secured through the completion of a Section 106 agreement. <p>Any CIL paid is normally sufficient to cover the cost of the first element of mitigation (provision of new green spaces) and NFDC has committed to using CIL funding in this way.</p> <p>The mitigation strategy includes enhancement to recreational routes. It identified that a number of these rights of way suffer from a lack of signage and thus public awareness of the network. It identified that usage of routes could be enhanced by improving the condition and signage of these routes, enhancing the network by improving infrastructure (e.g. providing information/interpretation boards, benches, dog bins and dog exercise areas), replacing stiles with gates and improving connections between parts of the footpath (PROW) network. The idea is to make these routes more attractive and encourage more frequent use by new (and existing) residents, as an alternative to visiting a European site for a walk. The proposed enhancements in the strategy were selected because they are</p>			

particularly accessible from the areas where residential development is planned, or take advantage of a particular local recreation opportunity.

These improvements involve a number of different agencies and are collectively referred to as 'Green Way' projects. The projects have the same logo displayed so that users can recognise them and know that walking route and spaces are suitable for all users and dogs.

The New Forest National Park Authority have devised a similar scheme to mitigate recreational impacts on the New Forest SPA. The New Forest National Park Draft Revised Habitat Mitigation Scheme 2018 includes a number of measures:

- Access management within the designated sites (including a number of small schemes and expected to be informed by a Recreation Management Strategy in the future).
- Alternative recreation sites and routes outside the designated sites.
- Education, awareness and promotion.
- Monitoring and research.

Test Valley Borough Council adopted the New Forest SPA Mitigation – Interim Framework in 2014. This offers the following four options where a net increase in dwellings is proposed within a 13.6km point buffer zone of the SPA:

- a. Put forward evidence to justify that the proposal would not lead to a likely significant effect when considered alone or in combination.
- b. Develop a bespoke mitigation package for the proposal, which would need to be subject to a site-specific Habitat Regulations Assessment.
- c. Provide alternative natural green space for recreational use to a standard of 8ha per 1,000 population, to be designed to divert visitors from the New Forest SPA.
- d. Provide a contribution of £1,300 per dwelling towards off-site mitigation measures.

In 2020 Footprint Ecology were commissioned to explore the strategic impacts on housing on the New Forest on behalf of 6 local/unitary authorities. They recommended a mitigation package approach which should be strategic, proportionate and coordinated with partners, including:

- Alternative greenspace for recreation.
- Access management.
- Education and communications within and outside the SPA.
- Monitoring.
- Other – including the appropriate siting of development.

Further Information

<http://www.newforest.gov.uk/article/17526/Frequently-Asked-Questions>

<http://www.newforest.gov.uk/article/15454/Mitigation-Strategy-for-European-Sites>

<https://www.testvalley.gov.uk/planning-and-building/guidance/solent-southampton-water-special-protection-area>

The New Forest National Park Draft Revised Habitat Mitigation Scheme 2018

Test Valley Borough Council New Forest SPA Mitigation Interim Framework (1st October 2014)

Comment

This is similar to the existing approach to avoidance and mitigation in the TBHSPA area.

Given the similarities between these sites and the approaches, it would be useful to better understand any differences. For example, it will be helpful to explore the collection of contributions towards recreational routes/ 'Greenway projects'.

CONFIDENTIAL DRAFT

SPA Name	Portsmouth Harbour		
Date Classified	28 February 1995	Site Area (Ha)	1,248.77
SPA Description			
<p>A large industrialised estuary and includes one of the four largest expanses of mud-flats and tidal creeks on the south coast of Britain. The mud-flats support large beds of narrow-leaved eelgrass <i>Zostera angustifolia</i> and dwarf eelgrass <i>Z. noltii</i>, extensive green algae beds, mainly <i>Enteromorpha</i> species, and sea lettuce <i>Ulva lactuca</i>. Portsmouth Harbour has only a narrow connection to the sea via the Solent, and receives comparatively little fresh water, thus giving it an unusual hydrology. The site supports important numbers of wintering dark-bellied brent goose <i>Branta b. bernicla</i>, which also feed in surrounding agricultural areas away from the SPA.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following migratory species:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • Dark-bellied brent goose <i>Branta bernicla</i> 			
Avoidance and Mitigation Strategy			
<p>One of three SPAs collectively referred to as the Solent SPAs. The Solent Recreation Mitigation Partnership have established a strategic approach to the provision of mitigation for recreational disturbance on the Solent SPAs. See Chichester and Langstone Harbours SPA above for further information.</p>			
Further Information			
<p>See Chichester and Langstone Harbours SPA above for further information.</p>			
Comments			
<p>There needs to be caution in comparing approaches given the different context. However, the approach taken to site specific visitor management and bird refuge projects is of interest.</p>			

SPA Name	Sandlings		
Date Classified	10 August 1995	Site Area (Ha)	3,391.80
SPA Description			
<p>The Sandlings SPA lies near the Suffolk Coast between the Deben Estuary and Leiston. In the 19th century, the area was dominated by heathland developed on glacial sandy soils. During the 20th century, large areas of heath were planted with blocks of commercial conifer forest and others were converted to arable agriculture. Lack of traditional management has resulted in the remnant areas of heath being subject to successional changes, with the consequent spread of bracken, shrubs and trees, although recent conservation management work is resulting in their restoration. The heaths support both acid grassland and heather-dominated plant communities, with dependant invertebrate and bird communities of conservation value.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i> 			
Avoidance and Mitigation Strategy			
See information on the Suffolk Coast HRA RAMS under Minsmere-Walberswick SPA.)			
Further Information			
See information on the Suffolk Coast HRA RAMS under Minsmere-Walberswick SPA.			
Comment			
<p>This is a similar approach to existing approach to avoidance and mitigation in the TBHSPA area.</p> <p>Given the similarities between these sites and the approaches, it would be useful to better understand any differences.</p>			

SPA Name	Solent and Southampton Water SPA		
Date Classified	1st October 1998	Site Area (Ha)	5,505.86
SPA Description			
<p>The site comprises a series of estuaries and harbours with extensive mud-flats and saltmarshes together with adjacent coastal habitats including saline lagoons, shingle beaches, reedbeds, damp woodland and grazing marsh. The mud-flats support beds of <i>Enteromorpha</i> species and <i>Zostera</i> species and have a rich invertebrate fauna that forms the food resource for the estuarine birds. In summer, the site is of importance for breeding seabirds, including gulls and four species of terns. In winter, the SPA holds a large and diverse assemblage of waterbirds, including geese, ducks and waders. Dark-bellied brent goose <i>Branta b. bernicla</i> also feed in surrounding areas of agricultural land outside the SPA.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Common tern <i>Sterna hirundo</i> • Little tern <i>Sterna albifrons</i> • Mediterranean gull <i>Larus melanocephalus</i> • Roseate tern <i>Sterna dougallii</i> • Sandwich tern <i>Sterna sandvicensis</i> <p>This site also qualifies by supporting populations of European importance of the following migratory species:</p> <p>Over winter:</p> <ul style="list-style-type: none"> • Black-tailed godwit <i>Limosa islandica</i> • Dark-bellied brent goose <i>Branta bernicla</i> • Ringed plover <i>Charadrius hiaticula</i> • Teal <i>Anas crecca</i> <p>Assemblage qualification: A wetland of international importance.</p> <ul style="list-style-type: none"> • The area qualifies by regularly supporting at least 20,000 waterfowl. 			
Avoidance and Mitigation Strategy			
<p>One of three SPAs collectively referred to as the Solent SPAs. The Solent Recreation Mitigation Partnership have established a strategic approach to the provision of mitigation for recreational disturbance on the Solent SPAs. See Chichester and Langstone Harbours SPA for further information.</p>			
Further Information			
<p>See Chichester and Langstone Harbours SPA for further information.</p>			
Comment			
<p>There needs to be caution in making a direct comparison with the approach taken for this SPA given the different</p>			

context. However, the approach taken to site specific visitor management and bird refuge projects is of interest.

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SPA Name	Thorne & Hatfield Moors		
Date Classified	16 August 2000	Site Area (Ha)	2449.2
SPA Description			
<p>Thorne and Hatfield Moors SPA is an extensive lowland raised mire system adjacent to the Humber estuary on the north-east coast of England and is the largest remaining lowland peatland in England. Despite a long history of extensive peat extraction since the late nineteenth century, the site retains substantial areas of Sphagnum bog, which has been changed by succession to wet scrub woodland dominated by birch <i>Betula sp.</i>, <i>sallows</i> and alder <i>Alnus glutinosa</i>. Where the peat surface has been removed, subsequent restoration of active bog has depended upon shallow flooding to allow sphagnum and other bog plants to re-colonise. The mire communities are dominated by hare's-tail <i>Eriophorum vaginatum</i> and common cottongrass <i>E. angustifolium</i>, cross-leaved heath <i>Erica tetralix</i>, soft-rush <i>Juncus effusus</i> and sphagnum mosses, and include a variety of scarcer bog plants such as bog-rosemary <i>Andromeda polifolia</i> and cranberry <i>Vaccinium oxycoccos</i>. Drier heath is dominated by heather <i>Calluna vulgaris</i>, bracken <i>Pteridium aquilinum</i> and purple moor-grass <i>Molinia caerulea</i>. Birch <i>Betula sp.</i> scrub, some of it dense, occurs throughout both moors. The diverse mosaic of habitats contributes greatly to the ornithological interest, which comprises breeding species, notably nightjar <i>Caprimulgus europaeus</i>.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of European importance of the following species listed on Annex I of the Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> Nightjar <i>Caprimulgus europaeus</i> 			
Avoidance and Mitigation Strategy			
<p>There is no existing strategic avoidance and mitigation strategy for recreational disturbance on the SPA. Existing and emerging Local Plans prepared by the affected authorities have included criteria relating to impact on the SPA.</p> <p>For example, the Doncaster Draft Local Plan includes the following policy criterion:</p> <p><i>"In order to ensure development does not negatively impact on nightjar populations, proposals located within 3km of Thorne and Hatfield Moors Special Protection Area, that impact habitats that nightjars may use for feeding on, will only be supported where they deliver a net gain in nightjar foraging habitat."</i></p>			
Further Information			
<p>Thorne and Hatfield Moors Conservation Forum (https://thmcf.org/)</p> <p>Doncaster Local Plan Informal Consultation: Draft Policies & Proposed Sites Draft Policies September 2018</p>			
Comment			
No strategy or relevant mitigation measures.			

SPA Name	Thursley, Hankley & Frensham Commons (Wealden Heaths Phase I)		
Date Classified	February 1994	Site Area (Ha)	3,923.8
SPA Description			
<p>The Thursley, Hankley and Frensham Commons SPA forms a large complex of lowland heaths situated in Surrey close to the Hampshire border. The surrounding landscape includes oak woodlands, conifer woods and small pastures intersected by narrow, sunken lanes.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i> 			
Avoidance and Mitigation Strategy			
<p>Previous analysis for the East Hampshire and South Downs National Park Joint Core Strategy, the withdrawn Waverley Core Strategy and the recent Waverley Local Plan Part 1 Habitat Regulations Assessment has demonstrated no evidence of a significant existing disturbance problem on this SPA which is comparable to the Thames Basin Heaths SPA.</p> <p>The Waverley Local Plan Part 1 HRA (2016) notes that the scale of existing residential Development within 5km of the TBHSPA and Dorset Heaths SPA is already high and there have been long-standing concerns about the impact of new residential development on the SPA. However, the same pattern of historic development intensity does not apply to The Wealden Heaths Phase I (Thursley, Hankley and Frensham Commons) SPA. It also demonstrates that core catchment of residents who are likely to regularly visit the SPA are all Waverley Borough Council residents.</p> <p>On this basis Natural England has previously agreed that it is not necessary to automatically transfer the Thames Basin Heaths/ Dorset Heathlands mitigation approach to The Wealden Heaths Phase I (Thursley, Hankley and Frensham Commons) SPA. Instead they have recommended the Council undertake HRA on all major developments located within 5km of The Wealden Heaths Phase I (Thursley, Hankley and Frensham Commons) SPA.</p> <p>However, the latest East Hampshire Draft Local Plan 2017-2036 was consulted on in October 2019 with an Interim HRA which concluded that additional housing numbers could now have potential to cause adverse impacts upon the site's integrity through increased recreational pressure. The document proposes that for larger (more than 10 dwellings) site allocations within 5km of Thursley, Hankley and Frensham Commons SPA, SANG mitigation may be required to avoid these adverse effects.</p>			
Further Information			
<p>Local Plan Part 1: Strategic Policies and Sites. Pre-Submission Draft (July 2016) Habitats Regulations Assessment https://www.easthants.gov.uk/draft-local-plan</p>			
Comment			

No current strategy or relevant mitigation measures.

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SPA Name	Wealden Heaths Phase II		
Date Classified	16 March 1998	Site Area (Ha)	3,923.8
SPA Description			
<p>The underlying geology is composed of Cretaceous sandstones and ironstone, which give rise to predominantly acid soils. These are often sandy and free-draining but clay and silt layers produce poorly drained areas where streams and wetland habitats can be found. The landscape is largely rural and is characterised by a prominent escarpment with broad, steep-sided valleys and low, rounded hills with a mixture of heaths, oak and birch woodland, mature conifer woodlands, pastures and wetlands.</p> <p>The component parts of the SPA have extensive areas of lowland heath which is similar in character to the nearby heathland complexes at Thursley, Hankley and Frensham Commons SPA (Wealden Heaths Phase I) and the Thames Basin Heaths SPA.</p>			
Qualifying Species			
<p>This site qualifies by supporting populations of importance of the following species listed on Annex I of the Habitats Directive:</p> <p>During the breeding season:</p> <ul style="list-style-type: none"> • Dartford warbler <i>Sylvia undata</i> • Nightjar <i>Caprimulgus europaeus</i> • Woodlark <i>Lullula arborea</i> 			
Avoidance and Mitigation Strategy			
<p>The adverse effects of recreational pressure on the Wealden Heaths Phase II SPA were investigated and discussed in detail at the time the East Hampshire Joint Core Strategy (JCS) was prepared. The JCS includes a policy which sets a requirement to undertake a project-specific Habitats Regulations Assessment (HRA) where any new housing that is proposed within 400 metres of the Wealden Heaths Phase II SPA.</p> <p>The HRA for the JCS concluded that, based on the levels of development expected within 5km of the SPA over the strategy period, no strategic mitigation solution was required on the basis that the regeneration of Whitehill-Bordon mitigated its own impacts at project-level.</p> <p>The HRA for the Waverley Local Plan Part 1 was submitted to the Planning Inspectorate in 2016. The conclusions were that the small increase in housing stock of less than 5% (and visitor pressure expected to be significantly less than 5%) and the low pressure to which the SPA is currently subject to, means that a strategic mitigation strategy is not required.</p> <p>The South Downs Local Plan was submitted in April 2018. The proposed number of new homes in the South Downs Local Plan is slightly more than accounted for in the JCS and the Waverley Local Plan HRA (an increase of 49 dwellings). However, the National Park has concluded that this does not materially change the conclusions as the increase in housing stock remains below 5%. Other development proposals within 5km will be considered on a case by case basis in determining whether mitigation is required with a project-level HRA required as necessary.</p> <p>The Joint Core Strategy HRA included an analysis of the number of dwellings that were likely to be delivered in East Hampshire (including the part covering the South Downs National Park) over the plan period until 2028. This was based on a statistical analysis and considered that approximately 33 windfall dwellings (cumulatively and on schemes of 5 or less dwellings) could be expected to come forward during the plan period and would be unlikely to have an impact on the SPA.</p> <p>However, monitoring of the early years of the plan period has demonstrated that a significant number of windfall schemes for dwellings have been granted planning permission within the 400-metre buffer zone. Therefore, in 2015</p>			

with the support from Natural England, East Hampshire District Council commissioned work to reassess the windfall allowance within 400 metres of the Wealden Heaths Phase II SPA using an updated methodology. The results of this work demonstrated that the windfall allowance could be increased to 43 dwellings.

To support the preparation of a new Local Plan, EHDC have commissioned consultants to assess land parcels that are potentially suitable to provide Suitable Alternative Natural Greenspace (SANG) that could be used as part of the avoidance and mitigation strategy. No formal guidance has been produced to determine what criteria may be required to provide suitable SANG to functionally divert recreational pressure from the Wealden Heaths sites, therefore the assessment has been based on criteria agreed by Natural England to provide SANG for the Thames Basin Heaths SPA.

In addition, a visitor survey has also been conducted on two Special Area of Conservation (SAC) sites, Woolmer Forest and Shortheath Common, and on part of the Wealden Heaths Phase II Special Protection Area (SPA). These visitor surveys were commissioned to allow an examination of the visitor patterns and understand levels of use on these sites.

The Interim East Hants Local Plan HRA (December 2018) was updated in 2019 and shows that increased recreational pressure could have potential to adversely affect the SPA features.

The draft policy (S20) states that: *“Development within the 400m to 5 km core catchment boundary around the Wealden Heaths Phase II SPA boundary must be supported by a Habitats Regulations Assessment setting out details of any potential impacts from the development on the interest features of the SPA and avoidance and/or mitigation measures proposed”*.

The supporting text explains that to ensure new homes will not lead to pressure on the SPA, new development will be expected to provide, secure and/or contribute to an amount of SANG and/or contribute towards Strategic Access Management and Monitoring (SAMM) and/or Heathland Infrastructure Projects (HIPs).

A detailed mitigation strategy for the SPA for all net new housing is being finalised in consultation with Natural England. The Council state that this will be specified in the Regulation 19 Local Plan.

Further Information

[Joint Wealden Heaths Phase II Special Protection Area - Supplementary Planning Document \(SPD\)](#)

South Downs National Park Authority Local Plan 2014-2033 (April 2018) Habitats Regulations Assessment

South Downs National Park Authority (April 2018) Biodiversity Background Paper South Downs Local Plan

East Hampshire District Council Draft Local Plan 2017-2036 (Regulation 18)

Habitats Regulations Assessment of East Hampshire's Regulation 18 Local Plan (December 2018)

<https://www.easthants.gov.uk/draft-local-plan>

Comment

There needs to be caution in making a direct comparison with the approach taken for this SPA given the different context. The development of a framework appears to be at a relatively early stage so it is difficult to draw full comparisons.

Appendix 3: The SANG Guidelines

Introduction

'Suitable Accessible Natural Green space' (SANG) is the name given to green space that is of a quality and type suitable to be used as mitigation within the Thames Basin Heaths Planning Zone.

Its role is to provide alternative green space to divert visitors from visiting the Thames Basin Heaths Special Protection Area (SPA). SANGs are intended to provide mitigation for the potential impact of residential development on the SPA by preventing an increase in visitor pressure on the SPA. The effectiveness of SANG as mitigation will depend upon the location and design. These must be such that the SANG is more attractive than the SPA to users of the kind that currently visit the SPA.

This document describes the features which have been found to draw visitors to the SPA, which should be replicated in SANG. It provides guidelines on

- the type of site which should be identified as SANG
- measures which can be taken to enhance sites so that they may be used as SANG

These guidelines relate specifically to the means to provide mitigation for housing within the Thames Basin Heaths Planning Zone. They do not address nor preclude the other functions of green space (e.g. provision of disabled access). Other functions may be provided within SANG, as long as this does not conflict with the specific function of mitigating visitor impacts on the SPA.

SANG may be created from:

- existing open space of SANG quality with no existing public access or limited public access, which for the purposes of mitigation could be made fully accessible to the public
- existing open space which is already accessible but which could be changed in character so that it is more attractive to the specific group of visitors who might otherwise visit the SPA
- land in other uses which could be converted into SANG

The identification of SANG should seek to avoid sites of high nature conservation value which are likely to be damaged by increased visitor numbers. Such damage may arise, for example, from increased disturbance, erosion, input of nutrients from dog faeces, and increased incidence of fires. Where sites of high nature conservation value are considered as SANG, the impact on their nature conservation value should be assessed and considered alongside relevant policy in the development plan.

The Character of the SPA and its Visitors

The Thames Basin Heaths SPA is made up of 13 Sites of Special Scientific Interest, and consists of a mixture of heathland, mire, and woodland habitats. They are essentially "heathy" in character. The topography is varied and

most sites have a large component of trees and some contain streams, ponds and small lakes. Some are freely accessible to the public and most have a degree of public access, though in some areas this is restricted by army, forestry or other operations.

A recent survey showed that more than 83% of visitors to the SPA arrive by car, though access points adjacent to housing estates showed a greater proportion arriving on foot (up to 100% in one case). 70% of those who visited by car had come from within 5km of the access point onto the SPA. A very large proportion of the SPA visitors are dog walkers, many of whom visit the particular site on a regular (more or less daily) basis and spend less than an hour there, walking on average about 2.5km. Almost 50% are retired or part-time workers and the majority are women. Further detailed information on visitors can be found in the reports referenced at the end of this document.

Guidelines for the Quality of SANG

The quality guidelines have been sub-divided into different aspects of site fabric and structure. They have been compiled from a variety of sources but principally from visitor surveys carried out at heathland sites within the Thames Basin Heaths area or within the Dorset heathlands. These are listed as references at the end of this document. The principle criteria contained in the Guidelines have also been put into a checklist format which is contained in Annexe 1.

- Accessibility

Most visitors come by car and want the site to be fairly close to home. Unless SANGs are provided for the sole use of a local population living within a 400 metre catchment around the site, then the availability of adequate car parking at sites larger than 10 ha is essential. The amount and nature of parking provision should reflect the anticipated use of the site by visitors and the catchment size of the SANG. It should provide an attractive alternative to parking by the part of SPA for which it is mitigation. Car parks should be clearly signposted and easily accessed. New parking provision for SANG should be advertised as necessary to ensure that it is known of by potential visitors.

- Target groups of Visitors

This should be viewed from two perspectives, the local use of a site where it is accessed on foot from the visitor's place of residence, and a wider catchment use where it is accessed by car. Most of the visitors to the SPA come by car and therefore should be considered as a pool of users from beyond the immediate vicinity of the site. All but the smallest SANG should therefore target this type of visitor. It is apparent from access surveys that a significant proportion of those people who visit the sites on foot, also visit alternative sites on foot and so this smaller but significant group look for local sites. Where large populations are close to the SPA, the provision of SANG should be attractive to visitors on foot.

- Networks of sites

The provision of longer routes within larger SANG is important in determining the effectiveness of the authorities' network of SANG as mitigation, because a large proportion of visitors to the SPA have long walks or run or bicycle rides. The design of routes within sites at the smaller than about 40 ha will be critical to providing routes of sufficient length and attractiveness for mitigation purposes.

Where long routes cannot be accommodated within individual SANG it may be possible to provide them through a network of sites. However, networks are inherently likely to be less attractive to users of the type that visit the SPA, and the more fragmented they are, the less attractive they will be, though this is dependent on the land use which

separates each component. For example, visitors are likely to be less put off by green areas between SANG than by urban areas, even if they restrict access to rights of way and require dogs to be kept on leads.

Though networks of SANG may accommodate long visitor routes and this is desirable, they should not be solely relied upon to provide long routes.

Specific guidance on individual SANG is summarised in Annexe 2. An information sheet for individual SANG can also be found in Annexe 4.

- Paths, Roads and Tracks

The findings suggest that SANG should aim to supply a choice of routes of around 2.5km in length with both shorter and longer routes of at least 5km as part of the choice, where space permits. The fact that a considerable proportion of visitors were walking up to 5km and beyond suggests the provision of longer routes should be regarded as a standard, either on-site or through the connection of sites along green corridors.

Paths do not have to be of any particular width, and both vehicular-sized tracks and narrow PRow type paths are acceptable to visitors.

The majority of visitors are female and safety is one of the primary concerns of site visitors. Paths should be routed so that they are perceived as safe by the users, with some routes being through relatively open (visible) terrain (with no trees or scrub, or well spaced mature trees, or wide rides with vegetation back from the path), especially those routes which are 1-3 km long.

The routing of tracks along hill tops and ridges where there are views is valued by the majority of visitors. A substantial number of visitors like to have surfaced but not tarmac paths, particularly where these blend in well with the landscape. This is not necessary for all paths but there should be some more visitor-friendly routes built into the structure of a SANG, particularly those routes which are 1-3 km long.

- Artificial Infrastructure

Little or no artificial infrastructure is found within the SPA at present apart from the provision of some surfaced tracks and car parks. Generally an urban influence is not what people are looking for when they visit the SPA and some people undoubtedly visit the SPA because it has a naturalness about it that would be marred by such features.

However, SANG would be expected to have adequate car parking with good information about the site and the routes available. Some subtle waymarking would also be expected for those visitors not acquainted with the layout of the site.

Other infrastructure would not be expected and should generally be restricted to the vicinity of car parking areas where good information and signs of welcome should be the norm, though discretely placed benches or information boards along some routes would be acceptable.

- Landscape and Vegetation

SANGs do not have to contain heathland or heathy vegetation to provide an effective alternative to the SPA.

Surveys clearly show that woodland or a semi-wooded landscape is a key feature that people appreciate in the sites they visit, particularly those who use the SPA. This is considered to be more attractive than open landscapes or parkland with scattered trees.

A semi-natural looking landscape with plenty of variation was regarded as most desirable by visitors and some paths through quite enclosed woodland scored highly. There is clearly a balance to be struck between what is regarded as an exciting landscape and a safe one and so some element of choice between the two would be highly desirable. The semi-wooded and undulating nature of most of the SPA sites gives them an air of relative wildness, even when there are significant numbers of visitors on site. SANG should aim to reproduce this quality.

Hills do not put people off visiting a site, particularly where these are associated with good views, but steep hills are not appreciated. An undulating landscape is preferred to a flat one. Water features, particularly ponds and lakes, act as a focus for visitors for their visit, but are not essential.

- Restrictions on usage

The majority of the people using most of the SPA sites come to walk, with or without dogs. At two or three sites there were also a significant number of cyclists and joggers. A small amount of horse riding also occurs at some sites.

The bulk of visitors to the SPA came to exercise their dogs and so it is imperative that SANG allow for pet owners to let dogs run freely over a significant part of the walk. Access on SANG should be largely unrestricted, with both people and their pets being able to freely roam along the majority of routes. This means that sites where freely roaming dogs will cause a nuisance or where they might be in danger (from traffic or such like) should not be considered for SANG.

It may be that in some areas where dog ownership is low or where the cultural mix includes significant numbers of people sensitive to pets, then the provision of areas where dogs are unrestricted can be reduced. It should also be possible to vary restriction over time according to the specific needs of a community, providing effective mitigation is maintained. SANG proposals which incorporate restrictions on dogs should be in the minority of SANG and would need to be considered on a case by case basis in relation to the need for restrictions.

- Assessment of site enhancement as mitigation

SANG may be provided by the enhancement of existing sites, including those already accessible to the public that have a low level of use and could be enhanced to attract more visitors. The extent of enhancement and the number of extra visitors to be attracted would vary from site to site. Those sites which are enhanced only slightly would be expected to provide less of a mitigation effect than those enhanced greatly, in terms of the number of people they would divert away from the SPA. In order to assess the contribution of enhancement sites in relation to the hectare standards of the Delivery Plan, it is necessary to distinguish between slight and great enhancement.

Methods of enhancement for the purposes of this guidance could include enhanced access through guaranteed long-term availability of the land, creation of a car park or a network of paths.

SANGs which have not previously been open to the public count in full to the standard of providing 8ha of SANG per 1000 people in new development in zone B. SANGs which have an appreciable but clearly low level of public use and can be substantially enhanced to greatly increase the number of visitors also count in full. The identification of these sites should arise from evidence of low current use. This could be in a variety of forms, for example:

- Experience of managing the site, which gives a clear qualitative picture that few visitors are present
- Quantitative surveys of visitor numbers
- Identified constraints on access, such as lack of gateways at convenient points and lack of parking
- Lack of easily usable routes through the site

- Evidence that the available routes through the site are little used (paths may show little wear, be narrow and encroached on by vegetation)

SANGs with no evidence of a low level of use should not count in full towards the Delivery Plan standards.

Information should be collected by the local planning authority to enable assessment of the level of increased use which can be made of the SANG. The area of the site which is counted towards the Delivery Plan standards should be proportional to the increase in use of the site. For example, a site already used to half of its expected capacity should count as half of its area towards the standards.

- Staging of enhancement works

Where it is proposed to separate the enhancement works on a site into separate stages, to deliver incremental increases in visitor use, the proportion of the increase in visitor use arising from each stage should be estimated. This would enable the granting of planning permission for residential development to be staged in parallel to ensure that the amount of housing permitted does not exceed the capacity of SANG to mitigate its effects on the SPA.

- Practicality of enhancement works

The selection of sites for enhancement to be SANG should take into account the variety of stakeholder interests in each site. Consideration should be given to whether any existing use of the site which may continue is compatible with the function of SANG in attracting recreational use that would otherwise take place on the SPA. The enhancement should not result in moving current users off the SANG and onto the SPA. The specific enhancement works proposed should also be considered in relation not only to their effects on the SANG mitigation function but also in relation to their effects on other user groups.

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SANG Guidelines Annexe 1 Site Quality Checklist – for a suite of SANGS

This guidance is designed as an Appendix to the full guidance on Suitable Accessible Natural Greenspaces (SANGS) to be used as mitigation (or avoidance) land to reduce recreational use of the Thames Basin Heaths SPA.

The wording in the list below is precise and has the following meaning:

- Requirements referred to as “must” are essential in all SANGS
- Those requirements referred to as “should have” should all be represented within the suite of SANGS, but do not all have to be represented in every site.
- All SANGS should have at least one of the “desirable” features.

Must have

- For all sites larger than 4ha there must be adequate parking for visitors, unless the site is intended for local use, i.e. within easy walking distance (400m) of the developments linked to it. The amount of car parking space should be determined by the anticipated use of the site and reflect the visitor catchment of both the SANGS and the SPA.
- It should be possible to complete a circular walk of 2.3-2.5km around the SANGS.
- Car parks must be easily and safely accessible by car and should be clearly sign posted.
- The accessibility of the site must include access points appropriate for the particular visitor use the SANGS is intended to cater for.
- The SANGS must have a safe route of access on foot from the nearest car park and/or footpath/s
- All SANGS with car parks must have a circular walk which starts and finishes at the car park.
- SANGS must be designed so that they are perceived to be safe by users; they must not have tree and scrub cover along parts of the walking routes
- Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming too urban in feel.
- SANGS must be perceived as semi-natural spaces with little intrusion of artificial structures, except in the immediate vicinity of car parks. Visually-sensitive way-markers and some benches are acceptable.
- All SANGS larger than 12 ha must aim to provide a variety of habitats for users to experience.
- Access within the SANGS must be largely unrestricted with plenty of space provided where it is possible for dogs to exercise freely and safely off lead.
- SANGS must be free from unpleasant intrusions (e.g. sewage treatment works smells etc.).

Should have

- SANGS should be clearly sign-posted or advertised in some way.

- SANGS should have leaflets and/or websites advertising their location to potential users. It would be desirable for leaflets to be distributed to new homes in the area and be made available at entrance points and car parks.

Desirable

- It would be desirable for an owner to be able to take dogs from the car park to the SANGS safely off the lead.
- Where possible it is desirable to choose sites with a gently undulating topography for SANGS
- It is desirable for access points to have signage outlining the layout of the SANGS and the routes available to visitors.
- It is desirable that SANGS provide a naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. The provision of open water on part, but not the majority of sites is desirable.
- Where possible it is desirable to have a focal point such as a view point, monument etc. within the SANGS.

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SANG Guidelines Annexe 2 Site Quality Checklist – for an individual SANGS

The wording in the list below is precise and has the following meaning:

- Requirements referred to as “must” or “should have” are essential
- The SANGS should have at least one of the “desirable” features.

Must/ Should have

- For all sites larger than 4ha there must be adequate parking for visitors, unless the site is intended for local use, i.e. within easy walking distance (400m) of the developments linked to it. The amount of car parking space should be determined by the anticipated use of the site and reflect the visitor catchment of both the SANGS and the SPA.
- It should be possible to complete a circular walk of 2.3-2.5km around the SANGS.
- Car parks must be easily and safely accessible by car and should be clearly sign posted.
- The accessibility of the site must include access points appropriate for the particular visitor use the SANGS is intended to cater for.
- The SANGS must have a safe route of access on foot from the nearest car park and/or footpath/s.
- All SANGS with car parks must have a circular walk which starts and finishes at the car park.
- SANGS must be designed so that they are perceived to be safe by users; they must not have tree and scrub covering parts of the walking routes.
- Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming too urban in feel.
- SANGS must be perceived as semi-natural spaces with little intrusion of artificial structures, except in the immediate vicinity of car parks. Visually-sensitive way-markers and some benches are acceptable.
- All SANGS larger than 12 ha must aim to provide a variety of habitats for users to experience.
- Access within the SANGS must be largely unrestricted with plenty of space provided where it is possible for dogs to exercise freely and safely off lead.
- SANGS must be free from unpleasant intrusions (e.g. sewage treatment works smells etc.).
- SANGS should be clearly sign-posted or advertised in some way.
- SANGS should have leaflets and/or websites advertising their location to potential users. It would be desirable for leaflets to be distributed to new homes in the area and be made available at entrance points and car parks.

Desirable

- It would be desirable for an owner to be able to take dogs from the car park to the SANGS safely off the lead.

- Where possible it is desirable to choose sites with a gently undulating topography for SANGS
- It is desirable for access points to have signage outlining the layout of the SANGS and the routes available to visitors.
- It is desirable that SANGS provide a naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. The provision of open water on part, but not the majority of sites is desirable.
- Where possible it is desirable to have a focal point such as a view point, monument etc. within the SANGS.

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SANG Guidelines Annexe 3: Background

The Thames Basin Heaths SPA was designated in 2005 under the Habitats Regulations 1994 to protect the populations of three internationally-threatened bird species that use the heathlands: woodlark, nightjar and Dartford warbler. One of the principle threats to these species is disturbance during their breeding period which collectively extends from February to August. Freely roaming dogs hugely exacerbate the disturbance caused by people visiting the sites.

The Thames Basin Heaths area is much urbanised with little green space available to people apart from the designated areas of heathland. The whole area is also under pressure for more housing.

The Habitats Regulations require an 'appropriate assessment' to be carried out for any plan or project (including housing developments) which may affect the designated interest, either alone or in combination with other plans or projects. The result is that each new planning application within the Thames Basin Heaths Planning Zone would have to be assessed in combination with all the other extant applications. A solution to this situation (which would cause a log jam in the planning system) is the Thames Basin Heaths Delivery Plan.

The Thames Basin Heaths Delivery Framework, which is monitored by the TBH Joint Strategic Partnership Board, provides the framework for addressing new residential development in the Thames Basin Heaths Planning Zone.

The need to provide green space for the community was incorporated into planning policy through PPG 17, originally published in 1991 and revised in 2003. It requires local authorities to set green space standards locally but that these should include aspects of quantity, quality and accessibility. PPG17 illustrates the breadth of type and use of public open spaces that are encompassed by the guidelines. SANGS fit into a small proportion of these. Local authorities may look at provision of SANGS in relation to other public open space provision within their area and identify potential SANGS as part of their audit of green space.

SANG Guidelines Annexe 4: SANGS Information Form

This form is designed to help you gather information about any potential SANGS. For more guidance on the creation of SANGS, please also refer to the relevant Borough Council's Thames Basin Heaths SPA Interim Avoidance Plan.

Natural England, Local Planning Authorities, and other organisations will then be able to consider the potential suitability of the proposed SANGS based on this initial information.

Background information

Name and location of proposed SANGS	Name: Address: Grid reference: (Please attach a map of the site with the boundaries clearly marked)
Size of the proposed SANGS (hectares), excluding water features	
Any current designations on land - e.g. LNR / SNCI	
Current owners name and address. (If there is more than one owner then please attach a map)	
Who manages the land?	
Legal arrangements for the land – e.g. how long is the lease?	
Is there a management plan for the site? (if so, please attach)	
Is the site currently accessible to the public?	
Does the site have open access?	
Has there been a visitor survey of the site? (If so, please attach)	
If there has been no visitor survey, please give an indication of the current visitor levels on site	High / Medium / Low
Does the site have existing car parking?	Yes / No How many car parks? How many car parking spaces? (Please mark car parks and numbers of car parking spaces on the site map)
Are there any existing routes or paths on the site?	Yes / No (Please mark these on the map)
Are there signs to direct people to the site? (Please indicate where and what type of sign)	

Site quality checklist

This checklist is intended to help identify what is already present on the site and what needs to be developed for the SANGS to be suitable. This information is taken from Annexe 2 – please refer to Annexe 2 for more details.

Must/should have – these criteria are essential for all SANGS			
	Criteria	Current	Future
1	Parking on all sites larger than 4ha (unless the site is intended for use within 400m only)		
2	Circular walk of 2.3-2.5km		
3	Car parks easily and safely accessible by car and clearly sign posted		
4	Access points appropriate for particular visitor use the SANGS is intended to cater for		
5	Safe access route on foot from nearest car park and/or footpath		
6	Circular walk which starts and finishes at the car park		
7	Perceived as safe – no tree and scrub cover along part of walking routes		
8	Paths easily used and well maintained but mostly unsurfaced		
9	Perceived as semi-natural with little intrusion of artificial structures		
10	If larger than 12 ha then a range of habitats should be present		
11	Access unrestricted – plenty of space for dogs to exercise freely and safely off the lead		
12	No unpleasant intrusions (e.g. sewage treatment smells etc.)		
13	Clearly sign posted or advertised in some way		
14	Leaflets or website advertising their location to potential users (distributed to homes and made available at entrance points and car parks)		
Desirable features			
15	Can dog owners take dogs from the car park to the SANGS safely off the lead		
16	Gently undulating topography		
17	Access points with signage outlining the layout of the SANGS and routes available to visitors		
18	Naturalistic space with areas of open (nonwooded) countryside and areas of dense and scattered trees and shrubs. Provision of open water is desirable		
19	Focal point such as a view point or monument within the SANGS		

Appendix 4: Evaluation of Potential SANG Sites

The table below includes information reproduced from the EPR Mitigation Capacity Review report, showing how greenspace sites within the HMA could be considered as potential new SANG. The table includes potential provision rates (allowing for estimated offsetting and discounting) and a rough estimate of the housing quantum that could be served by the site if it was to come forward as SANG. This table is provided as an indication of the types of sites that may be considered and gives a basis for further work, it does not indicate that these sites would definitely be found suitable or unsuitable as SANG in future.

LPA	Site name	Size (ha)	SANG type	LUC Analysis	EPR Evaluation	SANG Catchment	Potential Provision Rate	Potential housing quantum that could be served
Hart	Yateley Green	23.2	SANG networks	A range of habitats (grassland / woodland) with potential to enhance for a range of users. Easy access from surrounding residential areas. Relatively low respondent count for size of site. Further work would need to be undertaken to understand impact of use for large events on capacity. Potential to improve connectivity to surrounding sites (Castor Court Woods, Moulsham Green, Horseshoe Lake SANG, Trilakes Country Park)	Likely to be difficult to reconcile existing formal uses with natural countryside qualities required of SANG.	N/A	N/A	N/A
Hart	Elvetham Heath	20.7	SANG networks	Local Nature Reserve. Relatively low respondent count for size of site with potential capacity for additional visits. A range of habitats with potential to enhance to cater for a range of users. Potential to improve connectivity to surrounding sites (woodland walk, Twyford Close Open Space, Broomhurst Wood)	Woodland/heathland LNR. Could come forward as standard SANG with 5km catchment.	5km	12ha/1,000	720
Hart	Zebon Copse	12.4	SANG networks	Varied site with formal and informal provision. Good existing connectivity to Basingstoke Canal.	Woodland LNR that could provide walk of up to 2km if connected to woodland on opposite side of Basingstoke Canal (Zephon Common/Peatmoor Copse).	4km	14ha/1,000	370
Hart	Basingbourne Park	8.8	SANG networks	Varied site (formal / informal provision) with	Woodland site that could provide shorter walk, but	2km	14ha/1,000	260

LPA	Site name	Size (ha)	SANG type	LUC Analysis	EPR Evaluation	SANG Catchment	Potential Provision Rate	Potential housing quantum that could be served
				potential to enhance and cater for a range of users. Relatively low respondents count suggesting there is capacity for additional visits. Potential to enhance connectivity to Basingstoke Canal.	also potentially link up with Zebon Copse and Basingstoke Canal as part of a small local network.			
Hart	Castor Court Woods	1.9	SANG networks Linear SANG Smaller SANG	Small site in close proximity to residential areas. Potential to improve connectivity to larger surrounding sites.	Too small and linear.	N/A	N/A	N/A
Hart	Odiham Recreation Ground	1.2	Smaller SANG	Small site in close proximity to residential areas. Potential to enhance the 'offer' and cater for a wider range of users.	Too small.	N/A	N/A	N/A
Surrey Heath	Blackwater river valley walk	46.2	SANG networks Larger SANG with larger catchment	Large site with few environmental constraints / designations. Existing connectivity to surrounding open spaces (e.g. Coleford Bridge Road Lake) via Blackwater River Path.	Could come forward as standard SANG with 5km catchment, notwithstanding deliverability issues identified in SANG Background Paper Appendix 6.	5km	12ha/1,000	1,500
Surrey Heath	Frimley Fuel Allotments	26.5	SANG networks	Wide range of existing users. Near several other sites with potential to manage in a coordinated way and maximise the 'offer'. Potential to increase capacity of existing nearby SANGS (Ridgewood SANG, St Catherine's Road).	OS mapping shows small existing 'Frimley Fuel Allotments SANG', but potential to expand as standard SANG and connect with St Catherine's Road SANG.	5km	10ha/1,000	1,100
Surrey Heath	Watchetts Park and Lakes	12	SANG networks	Wide range of existing users. Near several other sites with potential to manage in a coordinated way and maximise the 'offer'.	Formal park would need significant habitat creation to provide a semi-natural offering, which may not be reconciled with formal use requirements. Connection to Watchetts Lake would increase offering if suitable link could be secured, to provide a SANG network.	4km	12ha/1,000	400
Surrey Heath	Watchmoor Reserve	1.7	Smaller SANG	A notable number of respondents listed this small site. A range of activities are undertaken. A valuable example of the	Too small.	N/A	N/A	N/A

LPA	Site name	Size (ha)	SANG type	LUC Analysis	EPR Evaluation	SANG Catchment	Potential Provision Rate	Potential housing quantum that could be served
				features and facilities that may be provided at a smaller SANG site.				
Rushmoor	Manor Park	11.5	SANG networks	A range of feature and facilities provided. In close proximity to several other open spaces offering a range of different landscapes (Brickfields Country Park, Redan Gardens)	Could function as SANG network with Brickfields Park.	2km	14ha/1,000	340
Rushmoor	Queen Elizabeth Park	9.3	SANG networks	A range of features and facilities provided. The site is near residential areas and surrounding open spaces. Nearby green spaces include Cove Brook & Blunden Road.	Wooded site that could provide shorter circular walk with wider network with adjacent Southwood Country Park SANG and Blackwater river valley walk.	2km	14ha/1,000	275
Rushmoor	King George V Playing Fields	8.4	SANG networks	Potential to enhance site for a wider range of uses. Near several other sites with potential to manage in a coordinated way and maximise the 'offer'. Nearby sites include Queens Road Recreation Ground, Salesian View Playing Field & Ramillies Park.	Formal park would need significant habitat creation to provide a semi-natural offering, which may not be reconciled with formal use requirements. Poor connections to other SANGs or semi-natural sites. Unlikely to be suitable.	N/A	N/A	N/A
Rushmoor	Brickfields Country Park	3.1	SANG networks	In close proximity to several other green spaces offering a range of different landscapes. There is potential to manage sites in a coordinated way and maximise the 'offer'. Nearby green spaces include Blackwater Walk & Tice's Meadow Nature Reserve (outside of the borough).	Could function as a SANG network with Manor Park.	2km	14ha/1,000	100
Rushmoor	Blackwater Walk	1.3	SANG networks Linear SANG Smaller SANG	Small site linking several nearby green spaces including Aldershot Park and Tice's Meadow Nature Reserve (outside of the borough).	Too small.	N/A	N/A	N/A

LPA	Site name	Size (ha)	SANG type	LUC Analysis	EPR Evaluation	SANG Catchment	Potential Provision Rate	Potential housing quantum that could be served
Rushmoor	Prince Charles Recreation Ground	0.7	Smaller SANG	Small site with potential to enhance and improve the offer for local users. Nearby residential areas.	Too small.	N/A	N/A	N/A

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Hart, Rushmoor and Surrey Heath
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Project Report