

Compilation and Review of Evidence Leading to SANG and SAMM Provision

March 2024

Natural England Commissioned Report RP04518

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Report Details

Author(s)

Laura Beveridge, Samantha Cheater, Neil Davidson and Sweekruti Senapati.

Natural England Project Manager

Pippa Langford

Contractor

Lepus Consulting

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Foreword

Natural England's purpose is to ensure that the natural environment is conserved, enhanced and managed for the benefit of present and future generations, thereby contributing to sustainable development and it includes promoting nature conservation and protecting biodiversity, securing the provision and improvement of facilities for the enjoyment of the natural environment and promoting access to the countryside and open spaces and encouraging open-air recreation. Sustainable Development requires management of the impacts of growth and housing development on the natural environment as well as delivering green infrastructure for the benefit of people and the natural environment.

Currently one of the ways Natural England addresses potential impacts from recreation on protected sites for nature conservation is by requiring local authorities to meet their statutory obligations by use of Strategic Solutions. Each solution is bespoke but largely provide a mix of Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM). Natural England is seeking to improve our understanding of the evidence that local authorities have gathered and published about recreational impacts on protected sites; the methods used to estimate the requirement for SANG or SAMM; and the amount of SANG or SAMM that is within their local plans; so that this information is available to our local staff, local authorities and others to improve the evidence base within future plans.

This report is one in a series of three reports that were commissioned at similar times, these are:

- NEER026 Density and displacement of users of urban greenspaces and routes.
- NNER027 Provision and management of greenspaces and routes that generate additional use and enjoyment.
- RP04518 Compilation and review of evidence leading to SANG and SAMM provision.

Natural England commission a range of reports from external contractors to provide evidence and advice to assist us in delivering our duties. The views in this report are those of the authors and do not necessarily represent those of Natural England.

Executive Summary

Introduction

Development, and specifically housing growth, has the potential to increase public recreation and disturbance pressures at some of the most ecologically sensitive sites across the country. European and Ramsar sites are designated for a number of qualifying habitats and species of international importance. Increased recreational pressure has the potential to lead to a range of impacts upon these features, such as loss and damage to habitats and disturbance to species.

Currently, increased recreational pressures and impacts from housing growth is addressed at European designated sites through the adoption of mitigating actions that are referred to as strategic solutions. The aim of these solutions is to divert recreational pressure to an alternative location by providing Suitable Alternative Natural Greenspace (SANG) and/or to address recreational impacts on site through the adoption of Strategic Access Management and Monitoring (SAMM) measures. These measures often work in parallel with one another.

This study provides a review of methods and evidence published about recreational impacts on European protected sites and the solutions for their mitigation through a detailed review of 16 Local Planning Authority (LPA) case studies.

Scope of Research Project

This report has been undertaken through the following three stages:

- **Stage 1:** Data gathering; a desk-based review of LPA evidence regarding recreational impacts; identification of methods used to estimate requirements for SANG and SAMM; and the amount SANG or SAMM required to deliver relevant local plans.
- **Stage 2:** Compilation/summary of evidence leading to provision of SANG/SAMM.
- **Stage 3:** Review of the quality of evidence used and policy approaches.

Outputs

The case study review indicated that information gathered to inform mitigation solutions followed the following key stages:

1. **Triggers for mitigation:** The first stage in the process involves the identification of recreation impacts at each European site and the effect upon site features. For most case studies this stage was supported by a detailed evidence base including habitat and species surveys.
2. **Quantitative and qualitative evidence base:** The next stage in the process is the identification of information to help inform mitigation options. Again, for most case

studies evidence focusing on visitor surveys was collated to ensure a robust evidence base.

3. **Implemented solution:** A mixture of SANG and SAMM projects are most commonly used to address recreational impacts. However, the ways in which these solutions are designed and implemented vary across the case studies. Key differences include filtering for Zones of Influences (ZOI), tariffs applied, the types of development covered, and strategic approaches taken. In all case studies the mitigation solution includes SAMM projects. SANGs are applied for the majority of case studies, but not all. The most obvious difference noted across the case studies is the way in which SANGs are designed and implemented. These differences relate to the criteria and metrics applied, catchment areas and the use of non-traditional SANG approaches (often labelled as SAMM projects). These differences reflect the characteristics of each European site, types of user groups, and the nature of impacts. SAMM projects by contrast mostly comprised similar elements such as education and raising awareness, access management on site, promotion of SANG and monitoring. Mitigation options are always secured through local plan policy wording which is often accompanied by a Supplementary Planning Document (SPD) and/or mitigation strategy. The stage each LPA is at within their plan making process defines the policy information available.
4. **Communications:** Communication with both site users and developers is key to the successful implementation of mitigation solutions and the degree to which this is undertaken varies across case studies. There may also be opportunities to facilitate information exchange and sharing of findings between different mitigation strategies to develop more effective solutions.
5. **Review and monitoring:** Monitoring and reviewing the mitigation solution forms a key element of SAMM and SANG projects implemented across all case studies. It is an essential step in the feedback mechanism designed to respond to changes in housing growth and understand the effectiveness of mitigation solutions over time.

Conclusions

Based on the case study review the following conclusions have been drawn and recommendations have been made to ensure the process of identifying, designing and securing a mitigation solution follows best practice.

Triggers for mitigation

- A robust and periodically updated evidence base is required to identify and quantify recreational impacts.
- Recreational impact assessments should be commissioned to identify the nature and extent of visitor pressures and associated impacts on the ecological features of the specific European designation.
- Bespoke evidence should be gathered to ensure that the nuances of each designation and the different ecological/geographical factors and challenges faced are captured, to help inform the development and implementation of a mitigation strategy that is fit for purpose and 'ground-truthed'.

Quantitative and qualitative evidence base

- ZOI should be established to clearly communicate the geographic area over which the mitigation solution will apply.
- The 75% method is an appropriate starting point to define ZOI, but it is important to ensure that locally specific factors and up-to-date surveys are taken into account when considering incorporation of weighting for frequency/type of visitors.
- Appropriate, and bespoke, options for mitigation should be explored, in collaboration with landowners, site managers and other stakeholders to gather local knowledge and ensure they are fit for purpose for the specific site and visitor profile.

Implemented solutions

- A partnership approach helps to ensure in-combination effects are mitigated in line with the requirement of the Habitats Regulations and enables consistent and transparent advice regarding specific European sites.
- It is important to ensure that any guidelines for SANG or other recreational provisions are evidence based, in relation to the European sites in question, to ensure the greatest likelihood of effectiveness.
- Whilst guidelines are useful, it should also be noted that a degree of flexibility is likely to be beneficial in allowing a suite of different provisions to be created.
- The implemented solution should be clearly communicated to residents and developers within the LPA area, with policy wording in adopted local plans to secure this and ideally an SPD or other planning mechanism which provides further information to supplement that in the policy.

Communications

- Communication with site users is important to raise awareness of the importance of the designated sites, as well as to ensure that compliance with the strategy is maximised and expectations are clear.
- Information regarding the implemented mitigation strategy and expectations for developers are most easy to follow when presented in an SPD and on the LPA website, providing a clear set of guidance.
- Workshops or forums would be useful to share best practice between different mitigation solutions.

Monitoring and review

- A consistent and comprehensive monitoring strategy is essential to ensure that the mitigation strategy is effective, and to review the need for any changes required over time.

Wider benefits

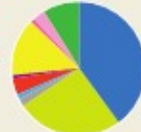
- Links between mitigation solutions and wider initiatives should be explored. This may include links between SANG and wider access management, consideration of impacts upon areas of Functionally Linked Land, Green Infrastructure (GI), Local Nature Recovery Networks (NRN) and Biodiversity Net Gain (BNG).
- Opportunities to link mitigation solutions to wider strategic access management and other initiatives such as GI provision, NRNs and BNG (among others) should be promoted and incorporated within current and future mitigation strategies. Innovative solutions could result in multifunctional benefits for ecosystem services, including but not limited to climate change mitigation and adaptation, active travel, health and wellbeing, and landscape character recording and evaluating these wider benefits would be helpful.

DORSET HEATHS ³



- 5 km
- SAMM: £2M (2020-2025)
- SAMM: 5,940 houses (2020/21 - 2024/25)
- 80 yrs
- Residential & Tourism
- 8ha - 16ha/1000 (Must satisfy guidelines and checklist)
- 2.3 - 2.5 km

NORFOLK ⁸



- Individual European site ZOIs
- SAMM: £7940,596.43 (until 2038)
- SAMM: 42,709 dwellings (2021)
- 125 yrs
- Residential & Tourism
- Enhanced GI requirements
- 2.7 km

LIVERPOOL CITY REGION ⁶



- Inner core zone: 5 km
- SAMM: £3,736,877 (2022 Wirral only)
- SAMM: 9,298 houses (Wirral only)
- 80 yrs
- Residential
- Locational criteria
- 3 km

THAMES BASIN HEATHS ¹⁴



- 5 km
- SAMM: £31.5M (approx. 2022)
- SAMM: 50,000 houses (approx. 2022)
- 125 yrs
- Residential
- 8ha - 16ha/1000 (Requirements for 'must have's', 'should have's' and 'desirable' features)
- 2.3 - 2.5 km

ASHDOWN FOREST ¹



- 7 km
- SAMM: £14,803,338 (Dec 2015)
- SAMM: 3,770 houses (Dec 2015)
- 100 yrs
- Residential & Tourism
- 8ha/1000 (Requirements for 'must have's', 'should have's' and 'desirable' features)
- 2.4 km

CANNOCK CHASE ²



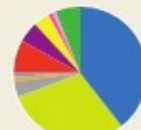
- 15 km
- SAMM: £6,297,104 (Apr 2022)
- SAMM: 21,671 houses (Apr 2022)
- 80 yrs
- Residential & Tourism
- n/a
- n/a

NEW FOREST ⁷



- 13.8 km
- SAMM: £892,500 (until 2036 NPA only)
- SAMM: 740 houses (NPA only)
- 100 yrs
- Residential & Tourism
- 8ha/1000 (Design criteria)
- 2.3 km

EPPING FOREST ⁴




- 6.2 km
- SAMM: £24,817,469.05 (2022)
- SAMM: 62,419 houses (local plan periods)
- 80 yrs
- Residential
- 8ha/1000 (Toolbox approach)
- Not specified

SOUTH PENNINE MOORS ¹⁵



- Visitor user data not available
- 7 km
- SAMM: £6,507,759.00
- SAMM: 17,326 houses
- 80 yrs
- Residential & Tourism
- Not provided
- Not provided

SHERWOOD FOREST ¹⁰



- Birklands & Bilhaugh SAC
- Clumber Park SSSI
- Not determined for ppSPA
- Determined on case-by-case basis
- Determined on case-by-case basis
- Not provided
- Determined on case-by-case basis
- Determined on case-by-case basis
- Not provided

SOUTH EAST DEVON ¹²




- Exc Estuary & Dawlish Warren
- Pebblebed Heaths
- 10 km
- SAMM: £23,553,767
- SAMM: 40,000 houses (local plan periods)
- 80 yrs
- Residential & Tourism
- 8ha/1000 Design criteria
- Not provided

SOLENT ¹¹



- 5.6 km
- SAMM: £1,996,000 (until 2034)
- SAMM: 63,684 houses (between 2016 - 2034)
- 80 yrs
- Residential & Tourism
- Mitigation strategy ('essential and desirable' location and design-based criteria)
- 5 km

NORTHUMBRIA / DURHAM COAST ⁹



- Visitor user data not available
- 6 km
- SAMM: £2,231,044 (North Tyneside, March 2017 - 2032)
- SAMM: 8,654 dwellings (until 2032, North Tyneside)
- Not provided
- Residential & Tourism
- n/a
- n/a

ESSEX ⁵



- Visitor user data not available
- Individual European ZOIs
- SAMM: £8,915,348 (until 2038)
- SAMM: 72,907 houses (up to 2038)
- 125 yrs
- Residential
- n/a
- n/a

TRENDS AND OBSERVATIONS

Identify impacts >	<ul style="list-style-type: none"> Triggers for mitigation Trend data
Assemble evidence >	<ul style="list-style-type: none"> Justify a ZOI Understand visitor profile
Mitigation solution >	<ul style="list-style-type: none"> Partnership approach Site specific solutions
Monitor >	<ul style="list-style-type: none"> Comprehensive monitoring strategy Tool for intervention
Communicate >	<ul style="list-style-type: none"> Formulate effective policy Share best practice
Think strategically >	<ul style="list-style-type: none"> Strategic access management & GI Sustainable development



KEY

	SANG	Activities
	SAMM	<ul style="list-style-type: none"> Dog walking Walking Family outing Meeting friends Horse riding Cycling Jogging Wildlife/birdwatching Photography Sport/informal games
	Zone of influence	
	Total cost	
	No. of houses	
	Timeline	
	Use	
	Sign off	
	SANG Circular walk	

Summary Infographic: Compilation and Review of Evidence Leading to SANG and SAMM Provision. March 2023. Credit: Lopus Consulting

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Introduction

Walking dog in the countryside. Credit: Istock images.



Introduction

Project Background

The natural environment is a key consideration for sustainable development. Achieving the right balance between housing and growth alongside protection of the natural environment provides opportunities to connect people to nature, improve health and wellbeing and protect and recover wildlife as set out in the 25 Year Environmental Plan (DEFRA, 2018) and updated in the Environmental Improvement Plan 2023.

Housing growth has the potential to increase recreational pressures at some the most ecologically sensitive sites across the UK. These pressures can cause the loss of, or damage to, the very features for which a site is designated. This can occur through activities such as erosion and compaction of habitats, disturbance of sensitive species (such as ground nesting birds), contamination from dog fouling, litter, tree climbing, removal of deadwood, and vandalism of trees (fires or graffiti) among other impacts.

Currently, increased recreational pressures and impacts from housing growth is addressed for European designated sites through the adoption of strategic mitigation solutions. The aim of these solutions is to divert recreational pressure to an alternative location by providing Suitable Alternative Natural Greenspace (SANG) and/or to address recreational impacts on site through the adoption of Strategic Access Management and Monitoring (SAMM) measures.

Purpose of Report

Natural England is seeking to improve its understanding of the evidence that Local Planning Authorities (LPAs) have gathered and published about recreational impacts on European protected sites, the methods used to estimate the requirement for SANG and/or SAMM, and the amount of SANG and/or SAMM that is required to support development set out in their local plans.

This report looks at these issues across 16 LPA case studies (as set out in **Table 1**) for a number of European sites. These case studies have informed an understanding of the approaches taken across England, identified best practice and shaped recommendations.

Table 1: LPA Case Studies

Strategic Solution	Local Planning Authority
Ashdown Forest	Mid Sussex
Ashdown Forest	Wealden
Norfolk	Breckland
Cannock Chase	Stafford
Dorset Heaths	Dorset
Epping Forest	Waltham Forest
Essex RAMs	Chelmsford
Liverpool City Region	Wirral
New Forest	New Forest National Park
Northumbria / Durham Coast	North Tyneside
Sherwood Forest	Newark and Sherwood
Solent	Portsmouth
South East Devon	Teignbridge
South Pennine Moors	Bradford
Thames Basin Heaths	Bracknell Forest
Thames Basin Heaths	Rushmoor

Scope of the Research Project

This report has been undertaken through the following three stages:

- **Stage 1:** Data gathering; A desk-based review of LPA evidence regarding recreational impacts; identification of methods used to estimate requirements for SANG and SAMM; and the amount SANG or SAMM within relevant local plans.
- **Stage 2:** Compilation/summary of evidence leading to provision of SANG/SAMM.
- **Stage 3:** Review of the quality of evidence used and policy approaches.

Stage 1: Data gathering

Data has been sourced primarily through a desk-based review of planning policy for each LPA and the evidence base collated to support this. The review focused specifically on the Habitats Regulations Assessment (HRA) evidence base and work which has been undertaken as part of the HRA process of the local plan, including recreation studies and visitor surveys.

Data gathered for each of the LPAs included the following:

- Evidence gathered and published about recreational impacts on protected sites;
- Methods used to estimate the requirement for SANG or SAMM; and
- Details of the implemented SANG or SAMM strategy for each LPA.

Where necessary, and where possible, contact has been made with individual LPA officers to ensure the most current evidence base was included in the review and to gain further insight into the implementation of each mitigation solution. The study has however been limited by LPA officer availability, and as such contact has not been possible with all LPAs.

Stage 2: Compilation/summary of evidence

Stage 2 comprised the compilation and summary of evidence leading to SANG/SAMM provision, documenting the criteria for selection of SANG/SAMM solutions as well as the actual details of the overall solution itself. This stage included extracting and recording details of the relevant local plan mitigation policy wording and supporting text, as well as other planning policy documents (such as Supplementary Planning Documents) and any other supporting information.

A series of 21 questions were agreed with Natural England and used as the basis for evidence gathering, to ensure consistency of data collection. For each LPA, a fully worded 'case study' based on these 21 questions was then prepared, alongside an overall summary drawing out key information regarding each approach to mitigation. These questions are set out in **Table 2**, **Table 3** and **Table 4**.

Table 2: SANG/ SAMM Baseline Review Criteria. Criteria 1: Triggers for Mitigation

Question Number	Questions for consideration
Q1	<p>Gather ‘Source – Pathway – Receptor’ evidence collected.</p> <p>To include details on (a) cause(s) of impact, (b) pathways of impact and (c) habitat types/species affected.</p> <p>Reference to be made to evidence which may have been gathered in support of identified impact pathways. Include information on data sources used to define impacts, such as Monitor of Engagement with the Natural Environment (MENE) or People and Nature Survey (PANS) data, visitor survey data, digital data etc.</p>

Table 3: SANG/ SAMM Baseline Review Criteria. Criteria 2: Mitigation Solution

Question Number	Questions for consideration
Q2	<p>What solutions have been considered? List the criteria for solution selection if available. Identify evidence, beyond visitor impact surveys, which has defined and informed mitigation solutions. Include information on the evidence behind the quantum of mitigation required e.g. standards such as 8ha/1,000 people.</p>
Q3	<p>Has a recreational ‘Zone of Influence’ been established? Where was this drawn from?</p>
Q4	<p>Is the solution strategic (i.e. cross LPA administrative boundary)? Or has the LPA put a solution in place independently?</p>
Q5	<p>How mitigation is secured e.g. policy wording, Supplementary Planning Document (SPD) etc?</p>
Q6	<p>How is the solution delivered e.g. by the LPA or an independent delivery body/partnership?</p>
Q7	<p>What types of development does the solution apply to?</p>

Question Number	Questions for consideration
Q8	What level of developer contribution is required? How is this collected e.g. via Section 106 or Community Infrastructure Levy (CIL)? Are details provided on costs/breakdown of costs etc?
Q9	Will the solution be delivered in perpetuity? If so, what timeframe is specified? Has a staged approach to the delivery of mitigation been identified to reflect the scale and timing of development coming forward over a plan period? Are details provided on length of leases, ownership, or how mitigation will be managed in the long term?
Q10	Have other initiatives been put in place to aid delivery of SANG/SAMM e.g. car parking strategy, presumption against development close to designation boundary etc?
Q11	Has monitoring been put in place? If so, provide a summary of monitoring methods and outputs. Provide an evaluation of the effectiveness of mitigation at achieving its stated aims to include a comparison of pre and post implementation where available, continuous datasets etc.
Q12	Has the solution been delivered via a communication strategy or plan? How has engagement with the public been undertaken, if at all? Does this communication strategy target a range of audiences e.g. developers, land owners, the public, contractors etc?
Q13	Identify the components that make up the SANG projects.
Q14	Has a green space standard or metric been used to define requirements for SANG? Provide details on the standard used.
Q15	Is reference made to Accessible Natural Green Space Standards (ANGSt)?
Q16	Is the quantity of SANG available to the public, published by the LPA?
Q17	Are details on visitor patronage, interpretation/education provision, walking routes provided etc available for each SANG?
Q18	What criteria have been used to define requirements for SAMM?

Question Number	Questions for consideration
Q19	Provide details on SAMM projects specified i.e. list all components which form the SAMM.

Table 4: SANG/ SAMM Baseline Review Criteria. Criteria 3: Wider Benefits

Question Number	Questions for consideration
Q20	Does the solution recognise links to multifunctional benefits e.g. a more active community, cleaner air or water, reducing urban heat island effects, biodiversity etc?
Q21	Does the solution make links to the Nature Recovery Network (and areas of Functionally Linked Land where relevant)?

Stage 3: Review of approaches

The appraisal stage evaluated the LPA approaches to SANG and SAMM in terms of successes, qualities, challenges and barriers of different schemes and explored the extent to which local plan policy translates into practice.

This stage also included consideration of wider multifunctional benefits which may have been considered by LPAs, such as active travel options, opportunities for health and wellbeing, adaptation to and mitigation of the impacts of climate change, improvements in water quality and flood storage, and links with the wider biodiversity network.

The Mitigation Study prepared by Hart, Rushmoor and Surrey Heath Councils to look at mitigation options for the Thames Basin Heath SPA Strategic Solution was revisited and discussed within this section.

The review concludes with a summary of best practice.

Compilation of evidence leading to SANG / SAMM Provision

Epping Forest. Credit: Istock images.



Compilation of Evidence Leading to SANG/SAMM Provision

The following sections of the report set out the results of the baseline data collation exercise for each LPA against the assessment criteria (**Tables 2, 3 and 4**).

Ashdown Forest

Ashdown Forest heather hillside. Credit: Istock images.



Ashdown Forest SAC and Ashdown Forest SPA – Mid Sussex District Council and Wealden District Council

Summary

Triggers for Mitigation

Ashdown Forest comprises a large contiguous area of open lowland heath and wooded habitat on the ridge of the High Weald Area of Outstanding Natural Beauty (AONB), located approximately 30 miles from London, within Sussex. It is designated as a SAC, for its heathland habitats and great crested newts, and SPA for a number of birds of European importance that these habitats support (nightjar and Dartford warbler).

Recreational Evidence Base

Studies analysing the impact of visitor patterns upon the distribution of nightjar and Dartford warbler populations at Ashdown Forest have been undertaken (Clarke and others, 2010). Whilst this study found no clear evidence that the current spatial distributions of nightjar and Dartford warbler are affected by visitor access patterns, this body of work has been linked to habitat distribution across the SPA, and other studies which provide strong evidence of the links between recreational impacts and bird distributions e.g., the body of work undertaken for the Thames Basin Heaths SPA. Key evidence base documents include:

- Ashdown Forest visitor survey data analysis (Clarke and others, 2010).
- Visitor Access Patterns on Ashdown Forest for Mid Sussex and Wealden District Councils (UE Associates, 2009).

Solutions for recreational impacts

Visitor surveys have been undertaken at Ashdown Forest over several years looking at visitor numbers and visitor profile. This data has been used to inform the mitigation solution, and includes:

- Visitor Access Patterns on Ashdown Forest for Mid Sussex and Wealden District Councils (UE Associates, 2009).
- Ashdown Forest Visitor Survey 2016 (Liley and others, 2016).
- Ashdown Forest Visitor Survey 2021 (Liley and Caals, 2022).

The 2021 visitor surveys split main user group activities as shown in **Figure 1**.

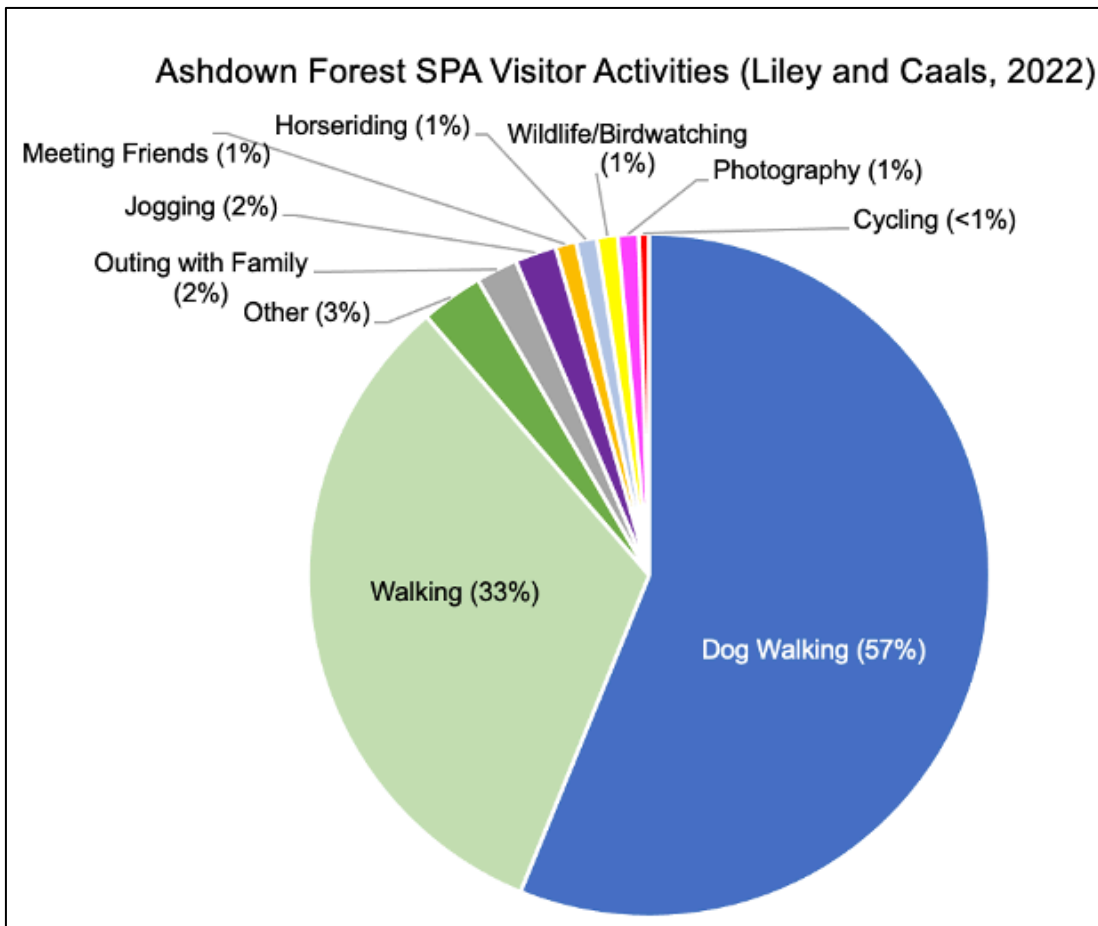


Figure 1: Visitor activities at Ashdown Forest SPA (adapted from Liley and Caals, 2022)

To calculate the SAMM tariff (set out in the Ashdown Forest SPA SAMM Strategy) each local authority provided their estimated housing projections in December 2015. A total of 3,770 houses were projected to be delivered as relevant to the SAMM Strategy over a 13-year period.

A ZOI of 7km was established based on the output of visitor surveys in both Wealden and Mid Sussex. This captured 100% of visitors surveyed in 2016 who visited either daily or most days. Strategically, 7km also captured 93.95% of visitors who visit 1-3 times per week, 91.05% of visitors who visit 2-3 times per month, 86.79% of visitors who visit once a month and 83.91% of visitors who visit less than once per month.

Mitigation Solution

The recreational mitigation solution at Ashdown Forest comprises a mixture of SAMM and SANG.

Wealden, Mid Sussex, Sevenoaks, Tandridge and Lewes District Councils and Tunbridge Wells Borough Council have worked in partnership with the Conservators of Ashdown Forest and Natural England to develop a Joint SAMM Strategy. SANGs are dealt with individually by each LPA.

SAMM Solutions

Development is not permitted within 400m of the SPA. Developer contributions are collected for new development between 400m to 7km of the SPA to fund SAMM projects. Contributions of £1,170 per dwelling are calculated on a per unit basis (not a bedroom basis except for houses of multiple occupation (HMOs), care homes and hotels/guest houses).

Tariffs apply to use class C3 (dwelling houses), C1 (hotels), C2 (residential units), C4 (HMO), Annexes, redevelopment sites, mobile/temporary dwellings, temporary and permanent Gypsy and Traveller pitches, camping/caravan sites, and on a case-by-case basis for replacement dwellings.

In perpetuity has been taken as 100 years for the purpose of calculating the SAMM tariff. The total cost of SAMM (December 2015) was £14,803,338.00. SAMM projects target the following types of interventions:

- Promoting education and awareness through codes of conduct, interpretation and information, wardens and officers;
- Access management within the site through signage and interpretation;
- Promotion of SANGs; and
- Monitoring of visitors and bird populations.

SANG Solutions

In Mid Sussex, East Court and Ashplats Wood SANG is at full capacity, whereas there is capacity at Hill Place Farm SANG. Contributions to this SANG are £5,253 per unit (includes SANG Management- £3,701; SANG Monitoring- £233; and Bluebell Railway Access Fee £1,319) (Mid Sussex District Council, 2022). SANG criteria are as follows:

- SANG must provide a circular walk of between 2.3-2.5km.
- SANG must be provided to a minimum standard of 8ha/1,000 people.
- SANG must satisfy a site quality checklist for SANG, listing a set of 'must haves', 'should haves' and 'desirable' requirements for SANG.
- Whilst not a requirement, all aspects of SANG provision have followed advice and agreement from Natural England.
- SANG mitigation must be provided in perpetuity which is defined as 125 years.

Prior to withdrawal of the Wealden Local Plan, SANG tariffs were set at £5,000 per dwelling to fund two strategic SANGs at Crowborough and Uckfield. SANG criteria are:

- SANG must provide a circular walk of 2.4km.
- SANG must be provided to a minimum standard of 8ha/1,000 people.
- SANG must satisfy a site quality checklist for SANG, listing a set of 'must haves', 'should haves' and 'desirable' requirements which reflect Natural England's Thames Basin Heaths SPA checklist.
- SANG mitigation must be provided in perpetuity which is defined as 100 years.

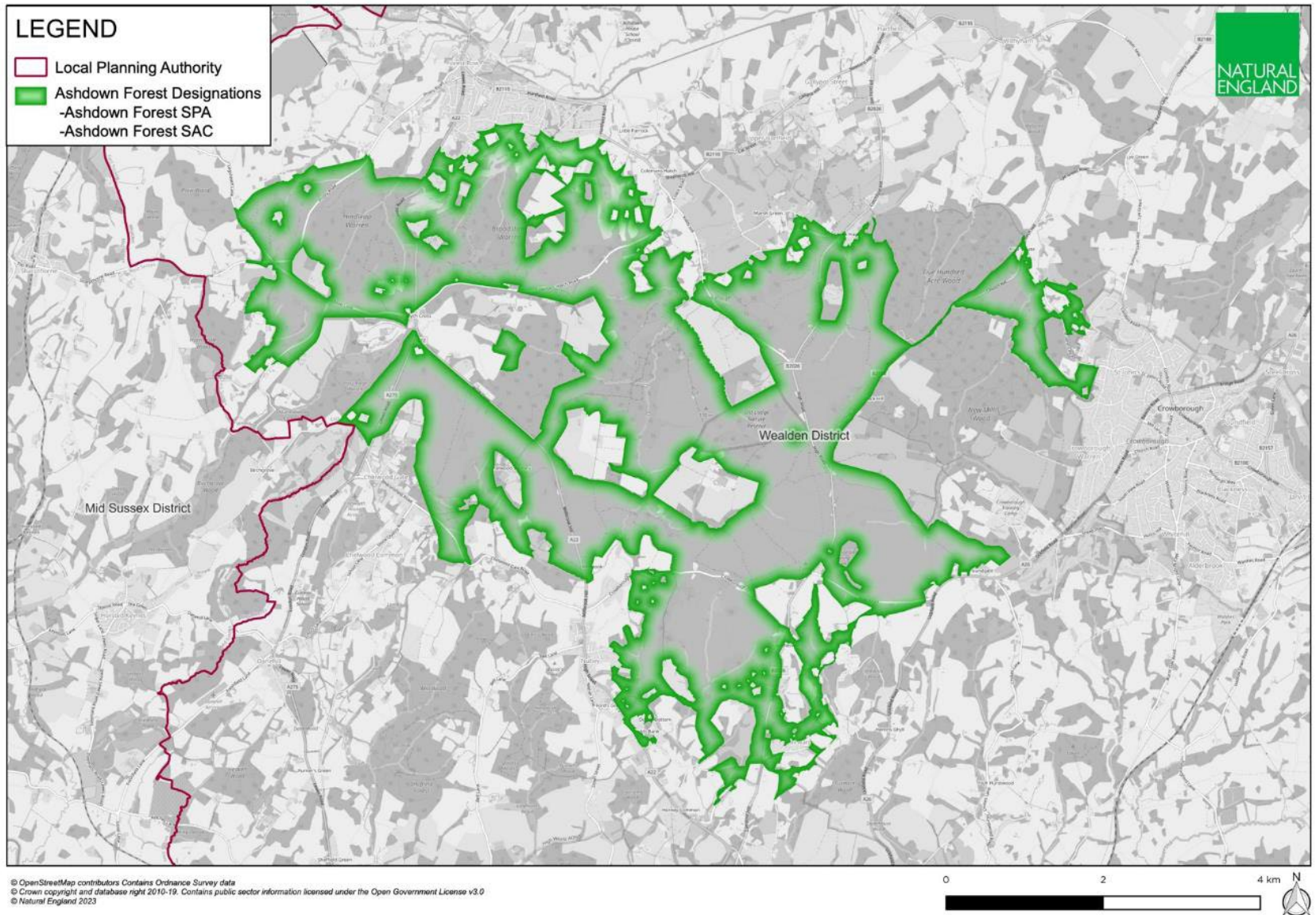


Figure 2: Location of Ashdown Forest Designations © Natural England 2024

Mid Sussex District Council

Criteria 1: Triggers for Mitigation

Ashdown Forest SAC

Ashdown Forest (**Figure 2**) comprises a large contiguous area of open lowland heath and wooded habitat on the ridge of the High Weald Area of Outstanding Natural Beauty (AONB), located approximately 30 miles from London, within Sussex. The underlying sandstone geology of the SAC and its exposed location have resulted in poor quality infertile soils which support both wet and dry heathland, valley mires and damp woodland. The qualifying features of the SAC are provided in Appendix A.

Ashdown Forest SPA

The heathland across Ashdown Forest and its management provides suitable habitat for a number of birds of European importance which are the qualifying features of the SPA as set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

In 2008 visitor surveys were undertaken to investigate visitor access patterns and points of visitor origin at Ashdown Forest SPA (UE Associates, 2009). Following this, further work was commissioned by Natural England in 2010 to determine the impact of visitors upon distributions of nightjar and Dartford warbler populations (Clarke and others, 2010). Whilst this study found no clear evidence that the current spatial distributions are affected by visitor access patterns, this body of work has been linked to habitat distribution across the SPA, and other studies which provide strong evidence of the links between recreational impacts and bird distributions e.g., work undertaken for the Thames Basin Heaths SPA.

Based on this survey work, the affected Local Planning Authorities (LPAs) (Wealden, Mid Sussex, Lewes, Tunbridge Wells, Tandridge and Sevenoaks, together known as the Strategic Access Management and Monitoring Scheme (SAMMS) Partnership) agreed to take a coordinated and consistent strategic approach to the collection of developer contributions required to fund mitigation in the form of SAMMS. This strategic approach was applied to a ZOI of 7km which was identified as the area within which recreational impacts were most likely to impact the qualifying features of the SPA.

In 2016, a further visitor survey was undertaken to ensure the strategic approach was based upon up-to-date data (Liley and others, 2016). This indicated that dog walking was the most common activity undertaken on site (69% of interviewees). Postcode data was collected as part of this survey which allowed home origin location to be mapped. This showed a wide scatter of visitors across Sussex from London to the south coast. The average straight-line distance between the home location and the survey point was 8,402m (median 4,870m). A quarter (25%) of interviewees lived within 1,459m of the survey point and three quarters (75%) lived within 9,643m. Analysis of the results

indicated that the majority of frequent visitors originated from closer locations to Ashdown Forest, with 72% originating from Wealden (and 12% from Mid Sussex and 5% from Tunbridge Wells). When filtering data for dog walkers only, it was found that 79% come from Wealden. The 2016 survey indicated the 7km ZOI still captured the majority of visitors and the majority of frequent visitors to the SPA and SAC (Liley and others, 2016).

Based on the visitor survey data, the SAMMS partnership signed up to a Statement of Common Ground in 2019 to which Natural England, as the Statutory Consultee, was party. This establishes a 7km ZOI within which developer contributions for new development are required to contribute to the implementation of SAMMS, and delivery of SANG where appropriate, to mitigate adverse impacts on the integrity of Ashdown Forest SPA due to increased visitor pressure.

In 2021 an updated visitor survey was undertaken to inform the evidence base for LPA local plans. This included visitor surveys, visitor counts and surveys at established SANGs to provide an overview of their effectiveness. The visitor survey results indicated that visitors are coming from a similar ZOI as identified in 2016 (Liley and Caals, 2022; Liley and Panter, 2022).

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

As noted in answer to Question 1, the mitigation solution considered for Ashdown Forest comprises a mix of SANG and SAMM and a presumption against development within 400m of the SPA boundary.

Q3: Zone of Influence

On the basis of the 2016 visitor surveys the affected LPAs considered four approaches to defining a zone for mitigation (Liley and others, 2016; Liley and Caals, 2022) (**Figure 3**):

- **Strategic approach:** Similar to the Thames Basin Heaths.
- **Bespoke approach:** Identify a bespoke approach for each LPA.
- **Combined approach:** Identify a strategic approach for an inner zone and apply a bespoke approach should an outer zone be found to be relevant for example.
- **Methodology approach:** Identify a methodology, which is agreed by all LPAs, e.g. this could encompass identifying a zone to include all frequent visitors.

The final chosen option was informed through a review of visitor survey data. A strategic mitigation zone of 7km was chosen as this captured 100% of those visitors surveyed in 2016 who visit either daily or most days. Strategically 7km also captured 93.95% of visitors who visit 1-3 times per week, 91.05% of visitors who visit 2-3 times per month, 86.79% of visitors who visit once a month and 83.91% of visitors who visit less than once per month. A 7km ZOI is therefore applied in Mid Sussex.

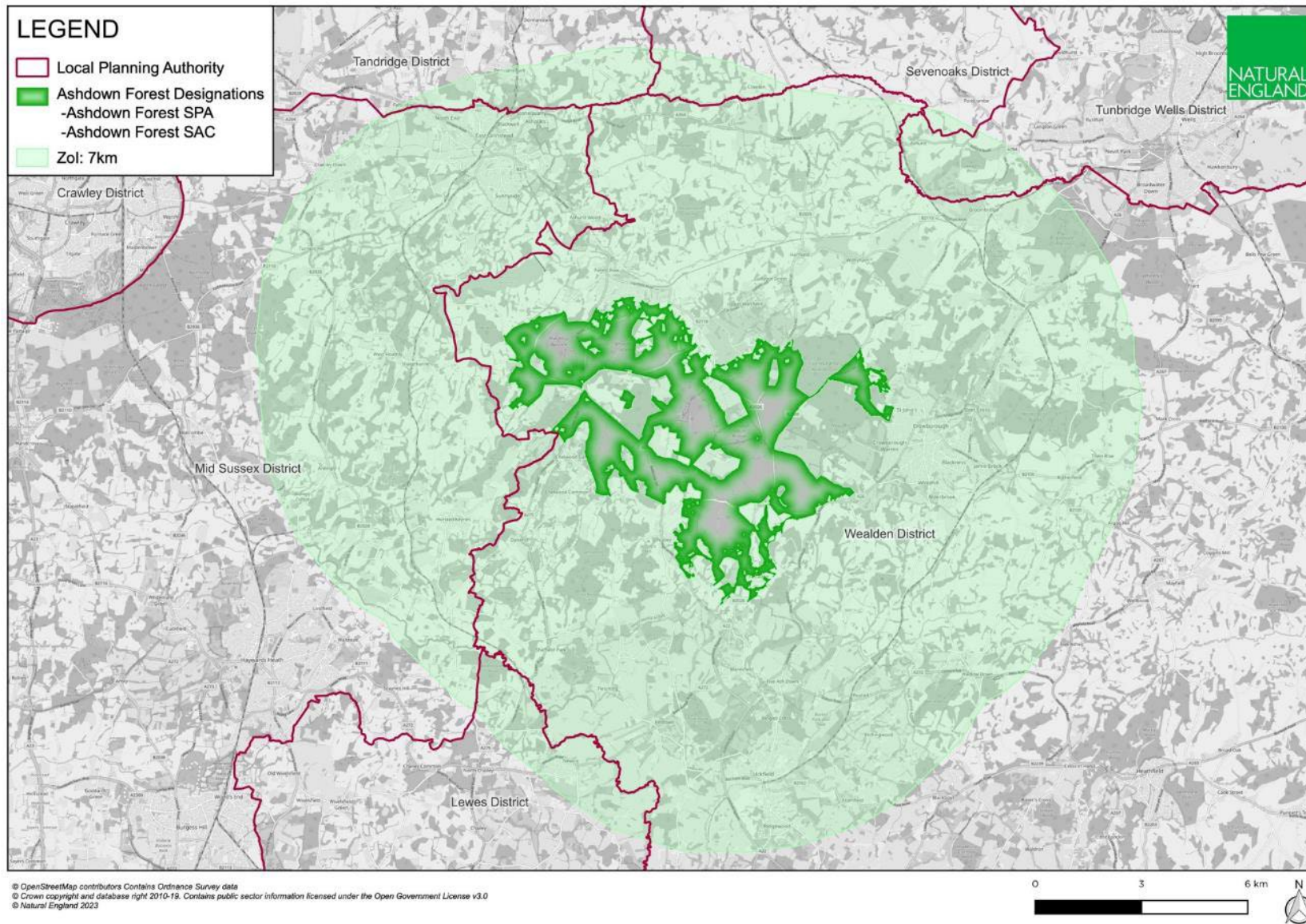


Figure 3: Ashdown Forest Zone of Influence © Natural England 2024

Q4: Strategic Approach

As noted in answer to Question 1, affected LPAs including Wealden, Mid Sussex, Lewes, Tunbridge Wells, Tandridge and Sevenoaks, have been working together on a strategic approach to the SAMM element of the recreational mitigation package; this is known as the SAMMS Partnership.

SANG is delivered by individual LPAs.

Q5: Policy

The Mid Sussex District Plan was adopted in March 2018 (Mid Sussex District Council, 2018). It sets out broad guidance on the distribution and quality of development in the form of strategic policies. This includes Policy DP17 which secures mitigation for Ashdown Forest, the relevant sections of which are copied in **Box 1**.

Box 1: Policy for Ashdown Forest SPA and SAC in the Mid Sussex District Plan (Mid Sussex District Council, 2018)

Policy DP17: Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC)

“ ...

In order to prevent adverse effects on the Ashdown Forest SPA and SAC, new development likely to have a significant effect, either alone or in combination with other development, will be required to demonstrate that adequate measures are put in place to avoid or mitigate any potential adverse effects.

Within a 400 metres buffer zone around Ashdown Forest, mitigation measures are unlikely to be capable of protecting the integrity of the SPA and, therefore, residential development will not be permitted.

Within a 7km zone of influence around the Ashdown Forest SPA, residential development leading to a net increase in dwellings will be required to contribute to mitigation through:

- 1) The provision of Suitable Alternative Natural Greenspace (SANG) to the minimum level of 8Ha per 1,000 net increase in population; or a financial contribution to SANGs elsewhere; or the provision of bespoke mitigation; and
- 2) A financial contribution to the Ashdown Forest Strategic Access Management and Monitoring (SAMM) Strategy.

Large schemes proposed adjacent or close to the boundary of the 7km zone of influence may require mitigation for the SPA. Such proposals for development will be dealt with on a case-by-case basis. Where bespoke mitigation is provided, these measures will need

Policy DP17: Ashdown Forest Special Protection Area (SPA) and Special Area of Conservation (SAC)

to be in place before occupation of development and must be managed and maintained in perpetuity. The effectiveness of such mitigation will need to be demonstrated prior to approval of the development. Bespoke mitigation will need to be discussed and agreed by the District Council as the competent authority following advice from Natural England.”

Q6: Delivery Body

The Board of Conservators of Ashdown Forest is responsible for managing the SPA. The Board was set up in 1885 and comprises sixteen members including representatives from all affected councils. The SAMMs component of the mitigation strategy is delivered by the Conservators of Ashdown Forest. All LPAs signed up to a SAMM tariff guidance document in 2019. The projects that form the mitigation measures are discussed and agreed in collaboration with the Conservators of Ashdown Forest, Natural England and all affected LPAs.

The SANG element of the mitigation strategy is delivered by individual LPAs.

Q7: Types of Development

SANG and SAMM requirements apply to residential development in Mid Sussex.

Appendix 1 of the [SAMM Tariff Guidance](#) provides details about types of development and contribution calculations. This includes:

- Use Class C1: Hotels and holiday accommodation.
- Use Class C2: Residential institutions.
- Use Class C3: Dwelling houses including retirement properties.
- Use Class C4: HMOs.
- Ancillary accommodation and annexes.
- Caravan sites.
- Gypsy and Traveller pitches.

The [SANG Contribution document](#) provides details about the types of development which require SANG and how this will be calculated. Certain residential use classes may not require SANG contributions in addition to SAMM, but are assessed on a case-by-case basis (e.g. Class C1).

Q8: Developer Contributions

The SAMM tariff guidance document sets out that each LPA will be responsible for collecting its contributions for the SAMM Strategy. It notes that the mechanism used to collect contributions is a matter for individual LPAs and will be determined on a case-by-case basis. A per-unit SAMM tariff is provided in the SAMM tariff guidance document.

This means that a set contribution will be required for each net unit whether a residential dwelling house or a flat, studio flat or other residential development use type. The tariff is based on the measures required to mitigate the impact of new development on the SPA.

From 1st September 2022, the SAMM tariff was set to £1,170 per unit within the 7km ZOI.

In Mid Sussex, East Court and Ashplats Wood SANG is at full capacity, however there is capacity at Hill Place Farm SANG. Contributions to this SANG are £5,253 per unit (includes SANG Management- £3,701; SANG Monitoring- £233; and Bluebell Railway Access Fee £1,319) (Mid Sussex District Council, 2022).

Breakdown of costs for SAMM

In consultation with Natural England and the Conservators of Ashdown Forest, SAMM strategy costs in perpetuity are provided in **Table 5**.

Table 5: SAMM Strategy Forecast Project costs in perpetuity (Mid Sussex District Council, 2019)

Project	Total cost in perpetuity
Project 1b - Code of Conduct review and reprint	£26,350
Project 2a (i) (ii) (iii) (iv) - Code of Conduct Promotion	£8,806
Project 2a / 2b (iv) - Code of Conduct promotion	£14,225
Project 2b (i) - Code of Conduct review and reprint	£15,130
Project 2b (ii) - Code of Conduct review and reprint	£2,550
Project 2b (iii) - Code of Conduct review and reprint	£3,532
Project 2b (iv) - Code of Conduct review and reprint	£128,180
Project 2b (v) - Code of Conduct review and reprint	£8,415
Project 2b (vi) - Code of Conduct review and reprint	£3,778,150
Project 3 - Lead Access Management Officer	£56,100
Project 3a - Volunteer Dog Rangers	£49,000

Project	Total cost in perpetuity
Project 3b - Community Events	£3,613,500
Project 4 - Assistant Access Management Officer	£3,613,500
Project 5 - Dog training programme	£49,500
Project M1 - Bird Monitoring	£792,000
Project M2 - Visitor Monitoring	£956,000
Contingency	£1,791,900
Management Fee	£2,970,000
Interest Rate Contingency	£540,000
TOTAL	£14,803,338

Q9: Timescales for Delivery

Mitigation is required for the lifetime of the development (in perpetuity). Within the SAMM Strategy, in perpetuity has been defined as 100 years (Mid Sussex District Council, 2019). Whereas for East Court and Ashplats Wood SANG, in perpetuity has been defined as 125 years (Mid Sussex District Council, 2014).

Q10: Other initiatives

Other initiatives include a presumption against development within 400m of the SPA boundary.

Q11: Monitoring

Both the SANG and SAMM strategies have a monitoring element which will provide the information necessary to update the strategies if required. The [Ashdown Forest SPA Monitoring Strategy](#) document lists a range of monitoring projects, both on- and off-site (Liley, 2018). The [East Court and Ashplats Wood SANG Strategy document](#) also sets out monitoring activities at this SANG (Mid Sussex District Council, 2014). Monitoring includes:

- **On-site:** Visitor surveying including face-to-face interviews, repeated every 5 years, and ongoing visitor counts using automated counters, car park counts and driving transects. Reviewing the effectiveness of mitigation including through dog rangers

carrying out vantage point watches. Bird monitoring (numbers and distribution) and monitoring the success of specific access management projects.

- **Off-site (SANGs):** Visitor surveys on SANGs to collect information about the visitor profiles, activities undertaken. Surveys to check effective working of SANG, to ensure there is sufficient capacity, and to monitor how provisions at SANGs affect visitor behaviour.

Q12: Communication Strategy

Several of the SAMM projects focus on raising awareness as to the sensitivities of the SPA and promoting a Code of Conduct for use (see answer to Question 19). Other projects include the installation of interpretation boards and contributing to the wider Ashdown Forest education and information programme.

Projects for communication have been developed and delivered by LPAs in partnership with the Conservators of Ashdown Forest (Mid Sussex District Council, 2019). This includes promotion of SANGs and the Code of Conduct for Dog Walkers on local authority websites and development, production and distribution of leaflets to new households regarding the Code of Conduct and SANGs.

The [Ashdown Forest website](#) carries a range of information relating to Ashdown Forest, including conservation issues, history, ongoing projects, education activities, and opportunities for volunteering.

SANG

Q13: Identify the components that make up the SANG projects

There is one existing SANG in Mid Sussex, known as East Court and Ashplats Wood SANG, which has reached full capacity. As there is no capacity for further development to be mitigated by this SANG, the Council is introducing a new strategic SANG at Hill Place Farm.

All SANGs must comply with the Natural England SANG Quality Guidance which is provided in Appendix C of [Ashdown Forest SPA and SAC document](#). This guidance includes a site quality checklist for SANG, listing a set of 'must have', 'should have' and 'desirable' requirements for SANG (Mid Sussex District Council, 2016).

Q14: Has a green space standard or metric been used?

The standard for the provision of SANG is set to the minimum level of 8ha per 1,000 net increase in population (Mid Sussex District Council, 2019). This requirement is reflected in planning policy - Policy DP17 (**Box 1**).

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt.

Q16: Is the quantity of SANG available to the LPA published?

Details of SANG capacity are provided on the [Council's website](#).

As answered in Question 13, the East Court and Ashplats Wood SANG has reached full capacity and as a result, the Council is introducing a new strategic SANG at Hill Place Farm. The available SANG capacity at Hill Place Farm SANG is set out in **Table 6**.

Table 6: Capacity at the Hill Place Farm SANG (Mid Sussex District Council, 2022)

Development at Hill Place Farm allocated SANG capacity	200 dwellings
Capacity for other development in the 7km ZOI	554 dwellings
Total capacity of the Hill Place Farm SANG	754 dwellings

Q17: Are details available for each SANG?

As answered for Question 16, information is provided on SANG capacity, but no other information is provided.

SAMM

Q18: SAMM Criteria

There are no specific criteria available to determine the requirements for SAMM. Projects identified are based on the evidence base and visitor survey data collected (see answer to Question 1). Details in the SAMM strategy drew on housing coming forward in the 7km ZOI over the plan periods for affected LPAs.

Q19: SAMM Projects

The aim of SAMM Strategy projects are as follows (Mid Sussex District Council, 2019):

- Raise awareness and build visitor understanding of the importance and sensitivity of ground nesting birds and their habitats within the Ashdown Forest SPA as part of the wider education and heathland management programme;
- Promote alternative recreational spaces (SANGs) for local people especially in the breeding bird season;
- Promote and enforce where necessary the Code of Conduct for dog walkers;
- Encourage responsible dog walking and behavioural change as set out in the Code of Conduct;
- Provide new and additional volunteering opportunities such as Volunteer Dog Rangers in the delivery of advice and on-site support to ensure and promote responsible behaviour and use of the Ashdown Forest SPA;

- Contribute to the existing Ashdown Forest education programme to deliver outcomes that relate to the required mitigation measures in relation to Ashdown Forest SPA;
- Help coordinate and support bird monitoring on the Ashdown Forest SPA and undertake visitor monitoring on the Ashdown Forest SPA and at SANG sites. This will be used to ensure that projects are effective; inform the direction of strategic access management; and measure the effectiveness of avoidance and mitigation measures.

Several projects have also been identified through consultation with the Conservators of Ashdown Forest and Natural England to deliver these objectives (Mid Sussex District Council, 2019):

- Development of a Code of Conduct, with input from affected LPAs to ensure that the Code meets the requirements of the Habitats Regulations;
- Promotion of Code of Conduct using a variety of media resources;
- Producing leaflets regarding the Code of Conduct and distribution of leaflets;
- Development and procurement of appropriate signage and interpretation boards;
- Organising responsible dog ownership training events and managing the delivery of the events;
- Recruiting and managing Volunteer Dog Rangers;
- Recruiting an Access Management Lead Officer;
- Recruiting an Assistant Access Management Officer;
- Organisation and delivery of on- and off-site education events (in relation to access management and monitoring at the Ashdown Forest SPA); and
- Contributing to the wider Ashdown Forest education, information and volunteer programme.

All details of the strategic avoidance measures and tariffs are presented in Ashdown Forest SPA SAMM Strategy Tariff Guidance.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

There are no multifunctional links set out specifically in the mitigation strategy.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network identified in the mitigation strategy.

Wealden District Council

Criteria 1: Triggers for Mitigation

Q1: Recreational Impacts Evidence and Background Information

Information on triggers for mitigation at Ashdown Forest SAC and SPA is set out in the **Mid Sussex** case study.

Additional visitor surveys were also undertaken on behalf of Wealden Council in 2021 to inform the development of their local plan.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

As noted in answer for the **Mid Sussex** case study, the mitigation solution considered for Ashdown Forest comprises a mix of SANG and SAMM and a presumption against development within 400m of the SPA boundary.

Q3: Zone of Influence

As set out for **Mid Sussex**, a 7km ZOI has been established in Wealden District. A ZOI of 7km captures 98.40% of all visitors surveyed, 100% of frequent visitors, 98.76% of visitors who visited 1-3 times a week and 97.92% of visitors who visited 2-3 times a week.

Q4: Strategic Approach

As noted in the **Mid Sussex** case study, a strategic approach has been taken for the SAMM element of the mitigation package, whereas SANG is delivered by individual LPAs.

Q5: Policy

Wealden Council is currently preparing a new local plan for the district. Once adopted this will replace the current plans:

- Wealden District Core Strategy Local Plan (Wealden District Council, 2013); and
- The 'saved' policies of the adopted Wealden Local Plan (Wealden District Council, 1998) and the Affordable Housing Delivery Local Plan (Wealden District Council, 2016).

A planning policy evidence base has been collated to support development of previous versions of the Wealden Local Plan. This evidence will support preparation of the new local plan and includes work undertaken in relation to recreational mitigation solutions at Ashdown Forest SPA.

Current policy which provides protection for Ashdown Forest SPA and secures recreational mitigation is set out in Policy WCS12 – Biodiversity of the adopted core strategy (Wealden District Council, 2013). Relevant sections of this policy wording are copied in **Box 2**.

Box 2: Wealden District Council Core Strategy Policy Wording (Wealden District Council, 2013)

Policy WCS12 Biodiversity

“...In order to avoid the adverse effect on the integrity of the Ashdown Forest Special Protection Area and Special Area of Conservation it is the Council's intention to reduce the recreational impact of visitors resulting from new housing development within 7 kilometres of Ashdown Forest by creating an exclusion zone of 400 metres for net increases in dwellings in the Delivery and Site Allocations Development Plan Document and requiring provision of Suitable Alternative Natural Green Space and contributions to on-site visitor management measures as part of policies required as a result of development at SD1, SD8, SD9 and SD10 in the Strategic Sites Development Plan Document. Mitigation measures within 7 kilometres of Ashdown Forest for windfall development, including provision of Suitable Alternative Natural Green Space and on-site visitor management measures will be contained within the Delivery and Sites Allocation Development Plan Document and will be associated with the implementation of the integrated green network strategy. In the meantime the Council will work with appropriate partners to identify Suitable Alternative Natural Green Space and on-site management measures at Ashdown Forest so that otherwise acceptable development is not prevented from coming forward by the absence of acceptable mitigation.

The Council will also undertake further investigation of the impacts of nitrogen deposition on the Ashdown Forest Special Area of Conservation so that its effects on development in the longer term can be more fully understood and mitigated if appropriate.”

It is noted that the Delivery and Site Allocations Development Plan Document was withdrawn on 27 May 2015.

Q6: Delivery Body

As noted for the **Mid Sussex** case study, the Board of Conservators of Ashdown Forest is responsible for managing the SPA and implementing the SAMM. The SANG element of the mitigation strategy is delivered by individual LPAs.

Q7: Types of Development Covered

No guidance is provided on the Wealden District Council planning website regarding the types of development for which mitigation and developer contributions apply for either SANG or SAMM.

As set out in answer to the **Mid Sussex** case study, the SAMM tariff guidance document, provides information on types of development covered.

Q8: Developer Contributions

As noted for the **Mid Sussex** case study, the SAMM tariff guidance document indicates that each LPA will be responsible for collecting its contributions for the SAMM Strategy along with details regarding per unit costs.

No information is provided on the Wealden District Council website regarding the level of developer contributions for SANG or SAMM.

Q9: Timescales for Delivery

For the purpose of the SAMM Strategy cash flow model, in-perpetuity has been taken to mean 100 years.

Q10: Other initiatives

Other initiatives include a presumption against development within 400m of the SPA boundary.

Q11: Monitoring

As noted for the **Mid Sussex** case study, the [Ashdown Forest SPA Monitoring Strategy](#) document lists a range of monitoring projects, both on- and off-site including bird and visitor surveys (Liley, 2018).

No information on SANG monitoring is available on the Wealden District Council website.

Q12: Communication Strategy

As noted in answer to the **Mid Sussex** case study, SAMM projects include raising awareness of the sensitives of the site and promoting a Code of Conduct for use. Other projects include the installation of interpretation boards and contributing to the wider Ashdown Forest education and information programme. The [Ashdown Forest website](#) also provides a range of information relating to Ashdown Forest.

No information on SANG communication is available on the Wealden District Council website.

SANG

Q13: Identify the components that make up the SANG projects.

Details on existing and proposed SANGs are not provided on the Wealden District Council website. There is no guidance provided on SANG requirements in terms of standards or catchments.

Consultation with the Council has indicated that there are two SANGs, Crowborough and Uckfield. SANG guidelines mirror those provided by Natural England for the Thames Basin Heaths SPA. A circular walk of 2.4km is required and a minimum standard of 8ha/1,000 population. SANG catchments are not applied.

At the time of the withdrawn Local Plan, a SANG tariff of £5,000 was proposed to be applied to each new net increase in residential dwelling within the 7km ZOI.

Q14: Has a green space standard or metric been used?

A minimum standard of 8ha/1,000 population is applied.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt.

Q16: Is the quantity of SANG available to the LPA published?

No information on quantity of available SANG is provided on the Wealden District Council website, however information is contained within the Council's [withdrawn Local Plan evidence base](#) (Wealden District Council, 2019). Both SANGs have the potential capacity to accommodate 3,018 dwellings.

Q17: Are details available for each SANG?

No information on quantity of available SANG is provided on the Wealden District Council website, however information is contained within the Council's withdrawn Local Plan evidence base.

SAMM

Q18: SAMM Criteria

There are no specific criteria established to determine the requirements for SAMM. Projects identified were based on the evidence base and visitor survey data collected (see **Mid Sussex** case study, Question 1). Details in the SAMM strategy drew on housing coming forward in the 7km ZOI over the plan periods for affected LPAs.

Q19: SAMM Projects

The aims of the SAMM Strategic projects have been established in the tariff guidance documents. A list of projects is set out in answer to Question 19 of the **Mid Sussex** case study.

A detailed breakdown of current projects is not publicly available on the Wealden Council Website.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

No reference to multifunctional linkages is provided in the current planning guidance.

Q21: Nature Recovery Network

No reference to the Nature Recovery Network is provided in the current planning guidance.

Cannock Chase

European dry heaths in Cannock Chase. Credit: Istock images.



Cannock Chase SAC – Stafford Borough Council

Summary

Triggers for Mitigation

Cannock Chase SAC is an area of lowland heathland which lies entirely within Cannock Chase AONB. The qualifying features of Cannock Chase SAC include wet and dry heaths.

A number of surveys have been undertaken to determine the links between recreational impacts upon features of the SAC, including:

- Evidence Base relating to Cannock Chase SAC and the Appropriate Assessment of Local Authority Core Strategies (Liley and others, 2009).
- Impacts of Recreation to Cannock Chase SAC (White and others, 2012).

Solutions for recreational impacts

Visitor surveys have been undertaken at Cannock Chase SAC over several years looking at visitor numbers, origins, activities and profile. These include the following and have informed mitigation solutions:

- Cannock Chase SAC Visitor survey report and map annex (Liley, 2012).
- Cannock Chase SAC observation study report (Liley and Lake, 2012).
- Cannock Chase SAC Visitor Impacts Mitigation Report (Underhill-Day and Liley, 2012).
- Cannock Chase Visitor Survey 2018 (Panter and Liley, 2019).

The 2018 visitor surveys split main user group activities as shown in **Figure 4**.

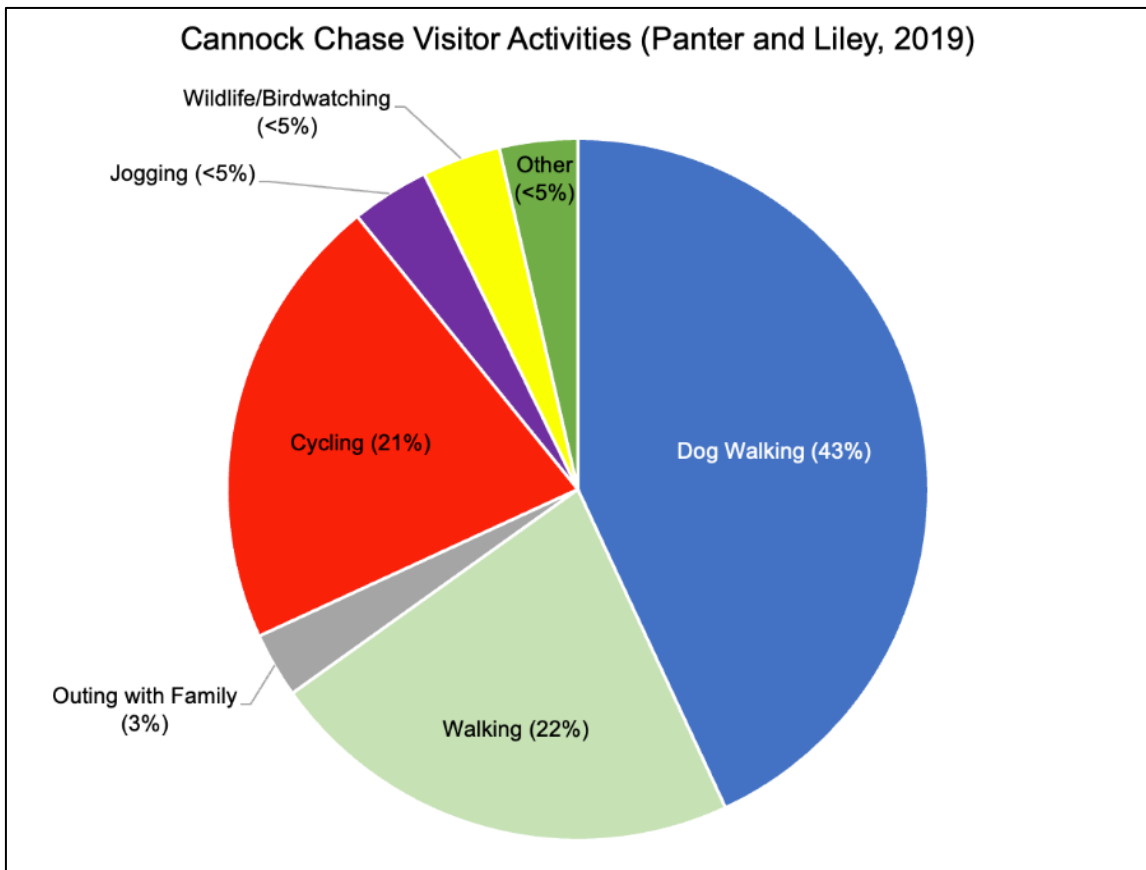


Figure 4: Visitor activities at Cannock Chase SAC (adapted from Panter and Liley, 2019)

For the purpose of calculating the mitigation tariffs, housing numbers coming forward within the 15km ZOI totalled 21,671 (from April 2022 to 2040) (Hoskin and Liley, 2017).

A ZOI of 15km was established based on the output of the visitor surveys and took into consideration 75% of all visitors to the SAC. The ZOI is drawn from the edge of the SAC.

Mitigation Solution

The mitigation strategy at Cannock Chase SAC focuses on access management and is known as Strategic Access Management and Monitoring Measures (SAMMM).

The Cannock Chase SAC Partnership provides a framework for coordination between statutory bodies having land use planning responsibilities in relation to Cannock Chase SAC. Partners and key facilitators include Cannock Chase District Council, East Staffordshire Borough Council, Lichfield District Council, South Staffordshire District Council, Stafford Borough Council, Walsall Borough Council, Wolverhampton City Council, Natural England, AONB Partnership, Staffordshire County Council, Forest England, National Trust and Staffordshire Wildlife Trust.

SAMMM Solutions

Any development which would produce a net increase in the number of homes within the 15km ZOI is required to make a financial contribution to strategic mitigation before development takes place.

Developer contributions have been calculated on the basis of housing growth within the 15km ZOI around Cannock Chase SAC. The level of contribution to the overall cost of the SAMMM varies between LPA depending on the scale of development proposed in the ZOI. Stafford Borough Council require a payment of £290.58 for each net new home, with the total cost of the solutions being £6,297,104.

The types of development from which developer contributions are required include new homes arising through the conversion of existing buildings, HMOs, sheltered accommodation and care homes (Use Class C3), and Gypsy and Traveller pitches. Hotels, holiday lets, and camping/caravan sites also need to provide financial contributions if they generate visitors to the SAC. Prior approval and permitted developments, such as conversion of offices into new homes, are also required to contribute.

In perpetuity has been taken as 80 years. SAMM projects have been costed on the basis of the Local Plan period to 2040. SAMMM projects sit within the following categories:

- Promoting education and awareness through a website, engagement events, face-to-face engagement codes of conduct, wardens and officers;
- Access management within the site through pathworks including circular walks and signage;
- Car park charging;
- Targeted projects such as a mountain bike centre; and
- Monitoring.

SANG Solutions

Whilst there are no formal requirements for SANG, a number of SAMMM projects comprise an element of SANG. For instance, the Marquis Drive Masterplan project aims to look at inclusion of land outside the SAC boundary to manage visitors at the Marquis Drive Visitor Centre. The Museum of Cannock Chase project would also aim to provide a southern gateway site into Cannock Chase which is also located outside the SAC boundary. This project seeks to specifically provide a family/community base with play area and dog park.

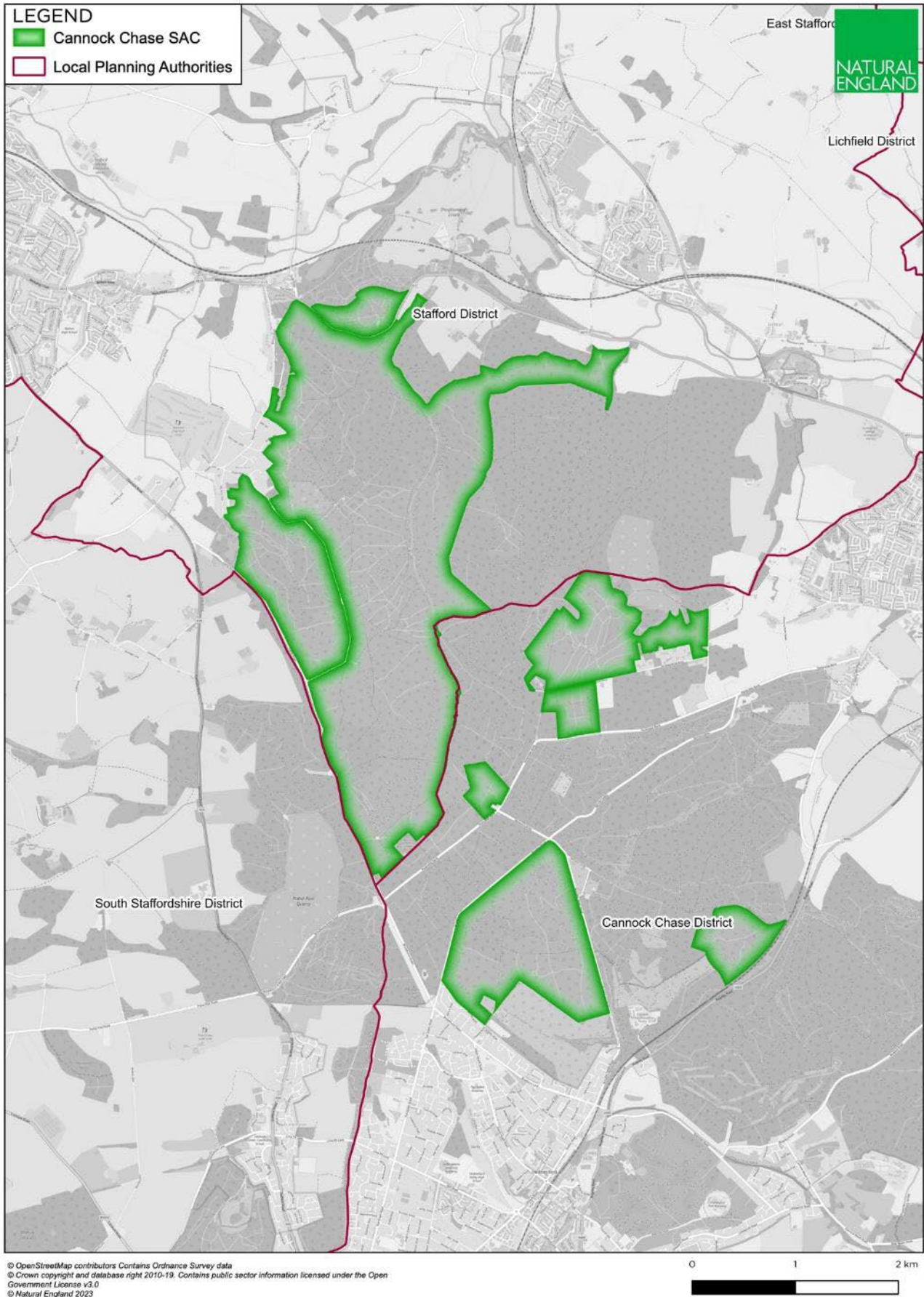


Figure 5: Location of Cannock Chase SAC © Natural England 2024

Criteria 1: Triggers for Mitigation

Cannock Chase SAC

Cannock Chase SAC is an area of lowland heathland (1,244.2ha) which lies entirely within Cannock Chase AONB (see **Figure 5**). The qualifying features of Cannock Chase SAC are set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

Recreational pressures on the features of the SAC have been summarised in a range of evidence documents. This evidence was collated through a review of increases in recreational use (Liley and others, 2009), on-site walkovers to determine condition of the site, a questionnaire for local experts, discussions with site managers, a literature review (White and others, 2012) and an observational study of recreational users (Liley and Lake 2012). Recreational impacts identified include the following (Underhill-Day and Liley, 2012):

- Disturbance to wildlife;
- Trampling, leading to path widening, vegetation wear, erosion and soil compaction;
- Trampling of invertebrate nest sites;
- Fragmentation of habitats from new desire lines and paths;
- Damage to tree roots where paths pass close to veteran trees;
- Increased risk of wildfire;
- Eutrophication (dog fouling);
- Spread of disease (*Phytophthora*);
- Contamination (e.g. dogs in water courses, litter);
- Vandalism;
- Challenges to achieving necessary management (e.g. grazing, spraying, scrub clearance); and
- Resources drawn away from conservation management to deal with recreation.

Following this identification of recreational impacts, a comprehensive range of studies were then commissioned to identify in more detail how visitors interact with the SAC, where they come from and how often they visit the SAC, among other things. This suite of work drew on a diverse range of survey types over various seasons and timescales, including visitor and parked car counts, a questionnaire delivered through face-to-face interviews and observational surveys (Liley, 2012; Liley and Lake, 2012). This body of work was then reviewed to determine the potential additional recreational impact from forecast growth upon the SAC and help inform mitigation options (Underhill-Day and Liley, 2012).

In 2017 the evidence base underpinning the mitigation solutions identified for Cannock Chase SAC was reviewed (Hoskin and Liley, 2017). The purpose of this was to better understand the current situation and ensure the mitigation options were still fit for purpose. Since the 2017 review, a further evidence base review has been undertaken, known as

the Planning Evidence Base Review (PEBR). The purpose of the PEBR was to monitor and guide the ongoing mitigation works and to ensure the evidence base remains robust (Panter and Liley, 2019; Liley and Panter, 2020a). This drew on updated visitor survey data and potential levels of growth within the area of impact.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

Mitigation options considered for Cannock Chase SAC focused on access management and monitoring at and around the SAC. These are known as Strategic Access Management and Monitoring Measures (SAMMM).

SANGs were suggested as a potential approach for mitigation for recreation impacts in the original Cannock Chase visitor impact mitigation strategy work (Underhill-Day and Liley, 2012). According to the 'Cannock Chase SAC – Planning Evidence Base Review' document (Hoskin and Liley, 2017), consideration of SANGs was not taken forward at that stage, due to concerns that Cannock Chase has a particular visitor draw, with a large-scale open landscape that is difficult to replicate, and because SANGs are often costly.

A type of SANG are however considered within the SAMMM projects (see answer to Question 19). These are aimed at enhancing facilities within the wider Cannock Chase AONB but outside the SAC designation.

Q3: Zone of Influence

The original visitor survey work (Liley, 2012; Liley and Lake, 2012) identified a 15km ZOI (see **Figure 6**), which was shown in the visitor data collected as part of the recent PEBR to be still appropriate (Panter and Liley, 2019; Liley and Panter, 2020a). This ZOI was determined by using the 75th percentile (i.e. the distance 75% of visitors originated from, measured as the straight-line distance between the interview location and home postcode) on the basis of 2018 visitor survey data. This ZOI was not filtered using frequency data.

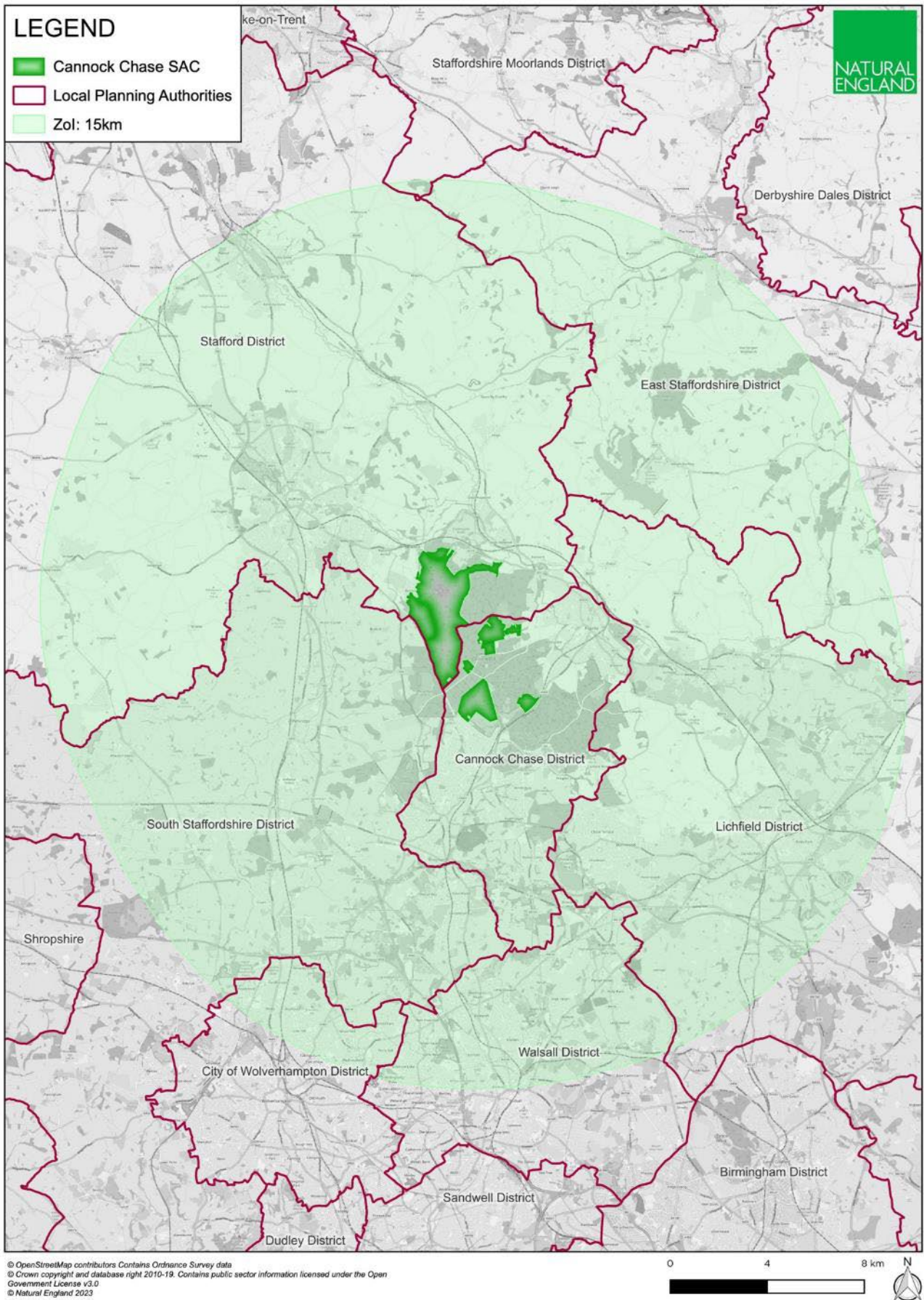


Figure 6: Cannock Chase SAC Zone of Influence © Natural England 2024

Q4: Strategic Approach

To manage identified recreational pressures, the Cannock Chase SAC Partnership was formalised under a Memorandum of Understanding (MOU) in 2016, reviewed in 2022. Partners and key facilitators include Cannock Chase District Council, East Staffordshire Borough Council, Lichfield District Council, South Staffordshire District Council, Stafford Borough Council, Walsall Borough Council, Wolverhampton City Council, Natural England, AONB Partnership, Staffordshire County Council, Forest England, National Trust and Staffordshire Wildlife Trust.

The Cannock Chase SAC Partnership allows a strategic approach to be taken towards management of recreational impacts and delivery of mitigation. It reflects LPAs within the ZOI.

Q5: Policy

In the case of Stafford Borough Council, mitigation at the SAC is secured through Policy N6 – Cannock Chase of The Plan for Stafford Borough (Stafford Borough Council, 2014) – see **Box 3**.

Box 3: Stafford Borough Council Policy (Stafford Borough Council, 2014)

Policy N6 – Cannock Chase Special Area of Conservation (SAC)

“Development will not be permitted where it would lead directly or indirectly to an adverse impact on the Cannock Chase SAC and the effects cannot be mitigated.

To ensure the Cannock Chase SAC is not harmed, all development that leads to a net increase in dwellings within 15km of the site, as shown on the Policies Map, must take all necessary steps to avoid or mitigate any adverse effects upon the SAC's integrity. This may include contributions to habitat management; access management and visitor infrastructure; publicity, education and awareness raising; provision of additional recreation space within development sites where they can be accommodated and, where they cannot, by contributions to off site alternative recreation space; and measures to encourage sustainable travel.

The effective avoidance and / or mitigation of any identified adverse effects must be demonstrated to the Council as the Competent Authority, and secured by means of a suitable mechanism (e.g. Legal agreement) prior to approval of the development.”

Q6: Delivery Body

The Cannock Chase SAC Partnership provides a framework for coordination between statutory bodies having land use planning responsibilities in the ZOI for Cannock Chase SAC.

The Joint Strategic Board (JSB) work together to coordinate the delivery of a programme of mitigation, prepare and implement common plans and policies to protect the SAC, promote its understanding and appreciation to help to deliver sustainable development.

The Cannock Chase SAC Partnership also provides a framework for coordination between statutory bodies having land use planning responsibilities within the ZOI. The Cannock Chase SAC Project Group work together to coordinate the delivery of a programme of mitigation, prepare and implement common plans and policies to protect the SAC, and promote its understanding and appreciation to help to deliver sustainable development.

SAMMM projects fund a project officer, face-to-face engagement officers, a delivery officer and administrator.

Q7: Types of Development Covered

Any development which would produce a net increase in the number of homes within the 15km ZOI will be required to undertake a Habitats Regulations Assessment (HRA) or make a financial contribution before development takes place.

The types of development from which developer contributions are required include new homes arising through the conversion of existing buildings, HMOs, sheltered accommodation and care homes falling within Use Class C3, and Gypsy and Traveller pitches. Hotels, holiday lets, and camping/caravan sites also need to undertake an HRA or provide a financial contribution if they generate visitors to Cannock Chase SAC.

Prior approval and permitted developments, such as conversion of offices into new homes, are also required to contribute.

Q8: Developer Contributions

Developer contributions have been calculated based on housing growth within the 15km ZOI around Cannock Chase SAC. The level of contribution to the overall cost of the SAMMM varies between LPA depending on the scale of development proposed in the ZOI.

Each individual LPA has determined how to implement the charging requirement. Stafford Borough Council require a payment of £290.58 for each net new home created through development within the 15km ZOI. This figure will be subject to an annual increase which will apply each 1st April from 2023 onwards, in line with the Office for National Statistics Retail Prices Index.

Stafford Borough Council require developers to enter into either a S106 agreement or a Unilateral Undertaking in order to secure the contribution.

In order to meet the requirements of the Habitats Regulations, any legal agreement must ensure that the financial contribution is paid before commencement of development.

Q9: Timescales for Delivery

Stafford Borough Council is currently in the process of reviewing their Local Plan, with consultation having taken place on the Preferred Options documentation and supporting evidence at the end of 2022. Mitigation has been secured to address growth in the number of dwellings over the next Local Plan period, 2020-2040.

A timescale for delivery for a minimum of 80 years has been given in the recent PEBR work and resources are secured accordingly. This allows mitigation to be delivered beyond the next Local Plan Period i.e. beyond the current plan period to 2040. The SAMMS strategy notes that monitoring can allow for the adjustment of measures in the future. The effectiveness of the DIPs mitigation proposals will be reviewed on a 5-year basis as part of the MOU review.

Q10: Other initiatives

No other initiatives are implemented alongside the SAMMM.

Q11: Monitoring

Monitoring is an important component of the SAMMM. It is required to ensure the package is successful and allow adjustments to be made to address emerging issues. SAMMM monitoring includes the following:

- Regular vehicle counts across the whole SAC and other parts of the AONB in line with current transects (no additional cost as part of duties of SAC partnership staff);
- Visitor survey repeated at 5-year intervals, involving interviews with visitors (£160,000 total cost for 4 repeats);
- Path condition monitoring and assessment (undertaken by SAC partnership staff);
- Automated counters to record footfall at selected key paths to give overall trend of use and changes over time (£6,000 per counter per 20 years, suggested at 15 locations, giving total cost of £90,000); and
- Incident recording (e.g. fires, off-road vehicles, dangerous parking, fly-tipping) in a standard way to allow them to be mapped and data compared between years, undertaken by partnership staff.

Q12: Communication Strategy

The SAC Partnership ran a consultation on two plans for SAMMM: one relating to the management of car-parking (since the majority of visitors arrive by car) and the other a site-user plan, addressing management of visitors once on the site. The two plans were subject to an online public consultation which ran from 21st October 2019 to 29th November 2019 (Liley and Caals, 2020).

The consultation looked at whether there were any additional measures or options that could be included and to gather views from members of the public and interested parties.

In addition, as set out in answer to Question 19, SAMMM projects include those to raise awareness and educate people on the sensitivities of the SAC both through on-site presence and online.

SANG

Q13-Q17

Whilst there are no formal requirements for SANG, a number of the SAMMM projects (listed in **Table 7**) comprise an element of SANG. For instance, the Marquis Drive Masterplan project aims to look at inclusion of land outside the SAC boundary to manage visitors at the Marquis Drive Visitor Centre. The Museum of Cannock Chase project would also aim to provide a southern gateway site into Cannock Chase which is also located outside the SAC boundary. This project seeks to specifically provide a family/community base with play area and dog park.

SAMM

Q18: SAMM Criteria

There were no criteria established to determine the requirements for SAMMM. Projects required were based on the extensive and comprehensive evidence base (see Question 1). Details of the mitigation strategy drew on housing coming forward in 15km ZOI over the plan periods for affected LPAs. The projects were designed in consultation with the SAC Partnership and consultants.

Q19: SAMM Projects

Detailed Implementation Plans (DIPs) which comprise the SAMMM, including costings for each DIP, are set out in the Council's planning guidance (Stafford Borough Council, 2022). These include those set out in **Table 7**.

Table 7: Calculation of developer contribution rates in the 15km ZOI (Stafford Borough Council, 2022)

Item of Works	Amount remaining to be funded
Resources / events for Engagement Key Stages 1-2 (2020 – 2040)	£99,195
Resources / events for Engagement Key Stages 3-4 (2020 – 2040)	£99,195
Resources / events for Engagement with key visitor groups (2020 – 2040)	£30,000

Item of Works	Amount remaining to be funded
Creation of Central Website and housing until 2040	£10,500
Special Project, Forestry England Visitor / mountain bike centre south of A460	£25,000
Special Project, Marquis Drive Masterplan	£25,000
Special Project, Museum of Cannock Chase, Community Hub	£25,000
Circular routes created at each main Car Park: pathworks	£90,000
Orientation panel in each main car park showing main promoted routes, replacement after 10 years	£15,800
Additional staffing to increase face-to-face engagement, (equivalent to 3 full time posts 2020 – 2040)	£2,364,000
Special Project, Chase Road	£25,000
Close Car Parks	£150,000
Material (temporary signs etc) to close damaging habitat fragmentation desire lines	£10,000
New road rights to replace existing ones	£75,000
Installation of Car Park Charging Machines	£70,000
Cost to maintain improved car parks 2020-2040	£704,900
Circular routes created at each main Car Park: way-markers, replacement after 10 years	£18,750
Circular routes created at each main Car Park: finger posts, replacement after 10 years	£30,300

Item of Works	Amount remaining to be funded
Orientation panel in each main car park showing main promoted routes, replacement after 10 years	£22,000
CC SAC Team Admin Assistant (part time, 2020-2040)	£420,000
CC SAC SAMMM Delivery Officer (2020-2030)	£400,000
Project manager / Project officer post	£765,000
Monitoring: visitor survey at 5 year intervals	£160,000
Monitoring: Automated counters (15 counters)	£90,000
Contingency (10%)	£572,464
Total	£6,294,104

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

There are no multifunctional links set out specifically in the SAMMM.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the SAMMM.

Dorset Heaths

Ame Heathland. Credit: Istock images



Dorset Heaths – Dorset Council

Summary

Triggers for Mitigation

The Dorset Heaths form an extensive, fragmented, complex of heaths in South East Dorset covering approximately 7,500ha, supporting a number of priority habitats and species including nationally scarce plants and assemblages of animal species.

The four European sites often collectively referred to as the Dorset Heaths include the following:

- Dorset Heaths SAC;
- Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC;
- Dorset Heathlands SPA; and
- Dorset Heathlands Ramsar.

Recreational Evidence Base

An extensive body of evidence has been collected over many years to establish the key issues for, and impacts on, heathland ecology at the Dorset Heaths associated with visitor pressure and housing growth. This list is too extensive to detail here in full, but includes studies into direct loss of habitat and fragmentation, urban effects and impacts on bird distribution and is available from the [Dorset Council website](#).

Solutions for recreational impacts

Visitor surveys have been undertaken over a number of years looking at visitor numbers and visitor profile. This data has been used to inform the mitigation solution, and includes:

- Visitor Access Patterns on the Dorset Heathlands 2005 (Clarke and others, 2005).
- Access Patterns in South-East Dorset. Dorset Household Survey: Consequences for Future Housing and Greenspace Provision (Clarke and others, 2008).
- Access Patterns in South-East Dorset. Dorset Household Survey and Predictions of Visitor Use of Potential Greenspace Sites (Liley and others, 2008).

The 2005 visitor surveys split main user group activities as shown in **Figure 7**.

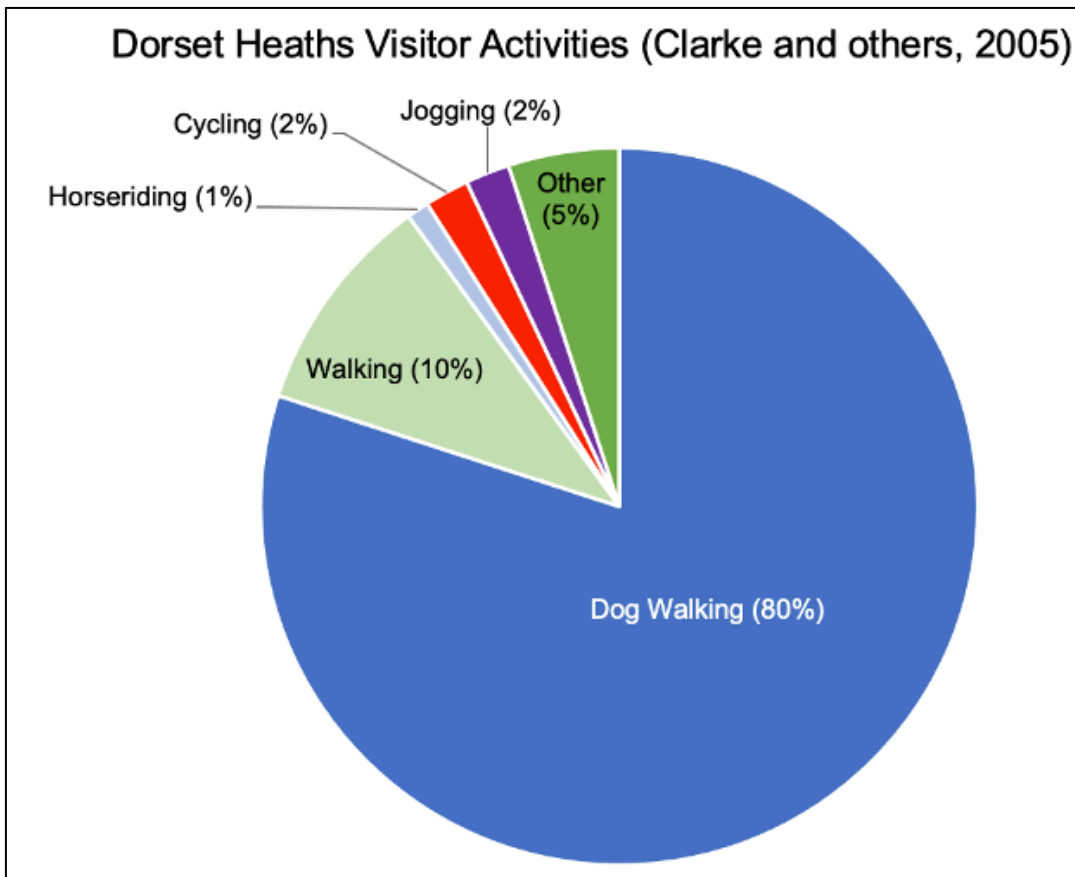


Figure 7: Visitor activities at the Dorset Heaths (adapted from Clarke and others, 2005)

The cost of the SAMM element of the mitigation strategy, as set out in The Dorset Heathlands Planning Framework 2020-2025, has taken into consideration housing trajectory published in each Council’s Strategic Housing Land Availability Assessments (SHLAA) which provides the planned number of homes expected to come forward over the period 2020/21-2024/25. This indicates a new supply of 4,440 homes in Bournemouth, Christchurch and Poole (BCP) Council area and 1,500 homes within Dorset Council area within 5km of designated heathland sites.

A ZOI of 5km was established based on the visitor data in addition to a presumption against development within 400m of the heathland, measured as a straight line from the boundary of a protected heath. The 5km ZOI captured 75% of visitors surveyed.

Mitigation Solution

The mitigation strategy sets out two approaches:

- **Part 1: Strategic Access Management and Monitoring (SAMM)** – including wardening, education and monitoring projects; and
- **Part 2: Heathland Infrastructure Projects (HIPs)** – including SANG and other bespoke greenspace/recreation projects.

Mitigation is overseen by the Urban Heaths Partnership (UHP), which is a collaboration of 10 organisations working together to protect and enhance the Dorset Heaths: BCP Council; Dorset Council; Dorset and Wiltshire Fire and Rescue Service; Dorset Police; Dorset Wildlife Trust; Amphibian and Reptile Conservation Trust (ARC); Natural England; National Trust; Forestry Commission; and Royal Society for the Protection of Birds (RSPB).

SAMM Solutions

Developer contributions are collected for new development between 400m to 5km from the heathland to fund SAMM projects. Contributions of £387 per home are calculated on a per unit basis (adjusted for average occupancy to £406 per house and £277 per flat). In BCP this contribution is £320 per home.

A general presumption against new residential and tourism development applies within 400m of the Dorset Heaths boundary, concerning Use Class C1, C2, C3 and C4 as well as accommodation for Gypsies and Travellers, university accommodation, tourist accommodation and HMOs. Certain circumstances may apply where residential uses are permitted; this includes development which would not lead to a net increase in dwellings (e.g. replacement dwellings) or where development would not lead to new residents accessing the heaths (e.g. Use Class C2 hospitals or nursing homes).

The mitigation measures set out through the SPD are required to be in place in perpetuity (defined as 80 years).

The cost of SAMMs over a 5-year period (2020-2025) is £2M; split £1.42M for BCP Council and £0.58M for Dorset Council. SAMM projects comprise strategic access and monitoring measures.

HIP Solutions

HIPs are physical infrastructure projects that provide facilities to attract people away from the protected heathland sites and include traditional SANG alongside other bespoke greenspace/recreation projects. These can include projects making links between SANGs and other non-designated sites, provision of facilities targeting specific user groups (e.g. BMX facilities), dog-friendly parks and more traditional strategic SANG. HIP contributions are determined by individual LPAs and are funded through collection of CIL payments or secured through Section 106 agreements.

A guideline threshold for the number of homes that trigger the requirement to provide a SANG is 50 homes. Strategic SANG must meet the following requirements:

- SANG must provide a circular walk of between 2.3-2.5km.
- SANG must be provided to a minimum standard of 8ha to 16ha/1,000 people.
- SANG must satisfy guidelines and a checklist provided in the SPD.
- The Councils recommend that organisations have an informal discussion with the appropriate Council and Natural England prior to submission of a proposal.

- SANG mitigation must be provided in perpetuity which is defined as 80 years.

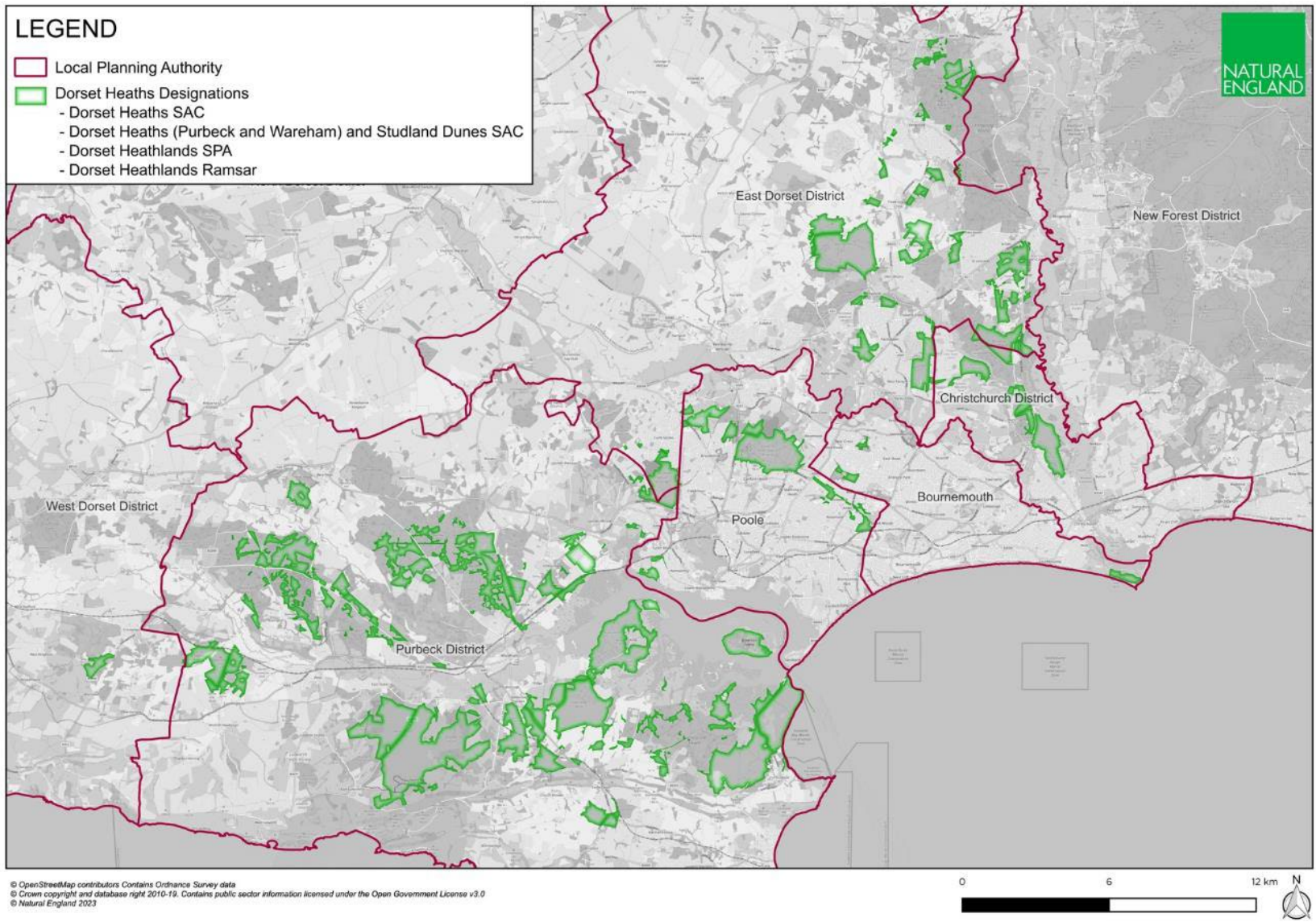


Figure 8: Location of Dorset Heaths Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

Dorset Heaths

The following four European sites are often collectively referred to as the Dorset Heaths (**Figure 8**). Their qualifying features are set out in Appendix A.

- Dorset Heaths SAC;
- Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC;
- Dorset Heathlands SPA; and
- Dorset Heathlands Ramsar.

Together the Dorset Heaths form an extensive, yet fragmented, complex of heaths in South East Dorset covering approximately 7,500ha, supporting a number of priority habitats and species including nationally scarce plants and assemblages of animal species. The heathlands support several dry and wet heath vegetation types and transitions, with diverse associated habitats such as acid grassland, sand dunes, acid oak woods, bog woodland, base-rich mires, fen-meadow and small water bodies.

The Dorset Heaths lie within the Unitary Authorities of Bournemouth, Christchurch and Pool (BCP) and Dorset.

Q1: Recreational Impacts Evidence and Background Information

Progressive loss of heathland has been a well-known issue at the Dorset Heaths since the late 18th Century, with heavy fragmentation of the heaths over time by urban development, forestry, agriculture and other land uses. The effects of urbanisation are understood to be a key issue and in particular the in-combination effects of small-scale urban developments and associated recreational disturbance to sensitive heathland species (e.g. Haskins, 2000; Liley and Clarke, 2002; Underhill-Day, 2005).

An extensive body of evidence has been collected over many years to establish the key issues for, and impacts on, heathland ecology at the Dorset Heaths associated with visitor access and housing growth; these are usefully summarised in the [Analysis and presentation of IPF monitoring and projects to inform the Heathland DPD](#) (Fearnley and Liley, 2011). This includes a range of research papers, fieldwork, studies, ecological surveys, visitor surveys and household surveys.

Key threats and pressures to the Dorset Heaths are summarised in **Table 8**.

Table 8: Summary of identified urban effects on the Dorset Heaths (Adapted from Dorset Council and BCP Council, 2020a)

Key issue	Summary of effects
Reduction in area	<ul style="list-style-type: none"> • Dorset Environmental Records Centre (DERC) report a reduction from c36,000ha in mid-18th Century to 6,199ha in 2019.
Fragmentation of heaths	<ul style="list-style-type: none"> • Fragmentation of heaths into 768 fragments by 1978, of which 88% were less than 10ha (Webb and Haskins 1980), with many ecological impacts associated with smaller heath areas.
Supporting habitats	<ul style="list-style-type: none"> • Less semi-natural habitat adjoining heaths which provide functional support.
Predation	<ul style="list-style-type: none"> • Fox, cat/rat predation on ground nesting birds and reptiles, direct predation and reduced recruitment.
Disruption to hydrology	<ul style="list-style-type: none"> • Diversion of pre-existing natural water sources away from heathland catchments. • Rapid run-off onto heaths from urban areas.
Pollution	<ul style="list-style-type: none"> • Changes in pH, nutrient status, turbidity of water supplies to heathland. • Enrichment and pollutants from urban run-off. • Pollutants from mis-connections storm overflows, spills and accidents.
Sand and gravel working with landfill after use	<ul style="list-style-type: none"> • Mineral working destroying habitat and disrupting hydrology. • Polluted water leakages from landfill.
Enrichment	<ul style="list-style-type: none"> • Dog excrement causing vegetation change along path edges. • Rubbish and garden waste dumping by roads and from gardens.
Roads	<ul style="list-style-type: none"> • Increased fire risk from car thrown cigarettes. • Pollution/enrichment causing vegetation change from vehicles in transport corridor.

Key issue	Summary of effects
	<ul style="list-style-type: none"> • Roads forming barriers to species mobility. • Road kills increasing mortality rates. • Noise and light pollution from traffic.
Service infrastructures both over and under heathland	<ul style="list-style-type: none"> • Disturbance during construction and maintenance. • Leakage from underground pipes and sewers. • Changes to heathland hydrology. • Poles providing bird predator look-out posts.
Disturbance	<ul style="list-style-type: none"> • Changes in breeding bird and animal distributions within and across sites. • Reduction in breeding success of birds/animals. • Delayed breeding in SPA birds.
Trampling	<ul style="list-style-type: none"> • Changes to vegetation. • Creation of bare areas and subsequent soil erosion. • Damage to bare ground reptile and invertebrate habitats and populations. • Increases in path and track networks. • Damage to archaeological features.
Fire	<ul style="list-style-type: none"> • Increased frequency of fires with majority in spring and summer. • Long term vegetation changes. • Increased mortality of heathland animals/birds. • Fragmentation/reduction of habitat on heaths. • Increased erosion into wetland habitats.
Vandalism	<ul style="list-style-type: none"> • Damage to signs and fences.
Public hostility to conservation management	<ul style="list-style-type: none"> • Opposition to management e.g. tree felling, fencing and grazing.
Management costs	<ul style="list-style-type: none"> • Greatly increased management costs on urban heaths.

The first holistic visitor survey across the Dorset Heaths was carried out in 2005 (Clarke and others, 2005), although several earlier surveys were undertaken which focused on distinct sections of the heaths. Household surveys were carried out in 2008 to provide an overview of access patterns (Liley and others, 2008; Clarke and others, 2008).

The visitor survey (Clarke and others, 2005) identified that 75% of interviewees who arrived at the Dorset Heaths by car had come from within 5.3km of the access point onto the heaths, and those who arrived by foot within 4.4km. The most common reason for visiting the heaths was found to be dog walking, with smaller proportions of people using the heaths for walking (without dogs), jogging, cycling and horse riding.

The household survey (Liley and others, 2008) determined that the proximity of households to the heath was a key factor in how often people visit, and that the extent of other types of greenspaces in proximity to households had no significant effect on the number of visits to the heaths.

Based on the evidence collected, Natural England advised that residential development within 5km of the Dorset Heaths would give rise to likely significant effects on the associated designations.

A mitigation strategy was therefore developed by the LPAs within 5km of the Dorset Heaths, in collaboration with Natural England, which has been operational since January 2007. The strategy sets out a range of measures to mitigate adverse effects on the heaths arising from new development in this area, enabling a consistent policy approach across the LPAs in South East Dorset.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

On the basis of the research undertaken and Natural England's advice, the avoidance and mitigation strategy comprises two key policy mechanisms, implemented through [The Dorset Heathlands Planning Framework 2020 – 2025 SPD](#) (Dorset Council and BCP Council, 2020a) and reflected in local plan policies:

- Restrictions on development within 400m of the heathland area; and
- Mitigation associated with some types of development between 400m and 5km from the heathland area.

The mitigation strategy sets out two approaches:

- **Part 1: Strategic Access Management and Monitoring (SAMM)** – including wardening, education and monitoring projects; and
- **Part 2: Heathland Infrastructure Projects (HIPs)** – including SANG and other bespoke greenspace/recreation projects.

Q3: Zone of Influence

Two key zones surrounding the Dorset Heaths designations have been established within which likely significant effects are anticipated: 400m and 5km. These zones are shown in **Figure 9**.

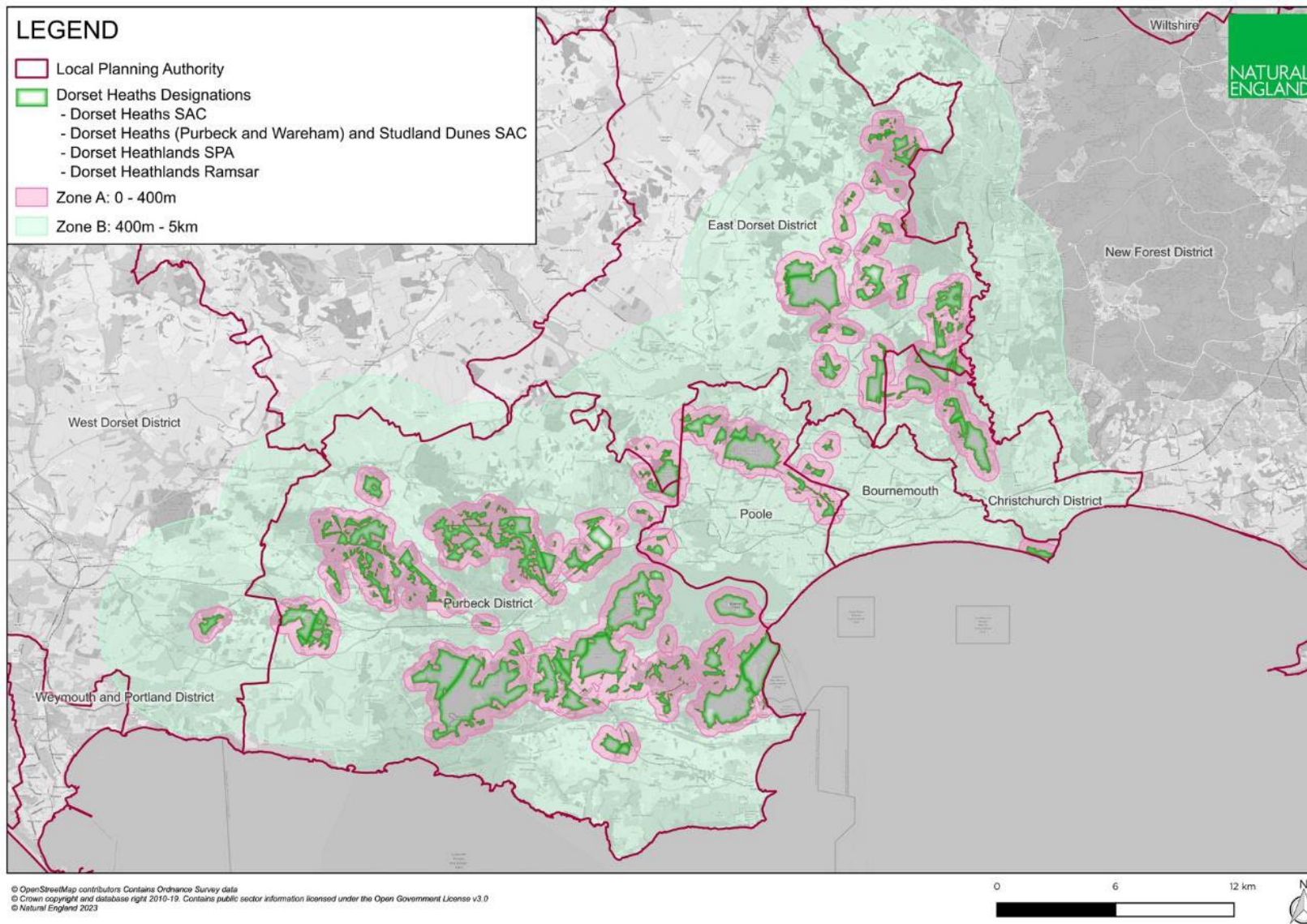


Figure 9: Dorset Heaths Zone of Influence © Natural England 2024

400m Consultation Area

Within the 400m area (straight line drawn around the edge of each protected heathland site) there should be no net increase in residential units (including curtilage). Specific types of development may be permitted, such as replacement dwellings and accommodation for people who are no longer active (i.e., those who are unlikely to access the heathland). Natural England should be consulted regarding proposed land uses, and each application will be determined on a case-by-case basis.

Between 400m and 5km

Within the 400m to 5km area (straight line drawn around the edge of each protected heathland site), development will only be permitted where it avoids significant effects upon the European sites. The required approach will depend on the type and scale of development, but includes financial contributions to HIPs and SAMM for smaller scale development, and potential bespoke SANG provision for larger scale development.

Q4: Strategic Approach

Mitigation is overseen by the Urban Heaths Partnership (UHP), which is a collaboration of 10 organisations working together to protect and enhance the Dorset Heaths:

- Bournemouth, Christchurch and Poole (BCP) Council
- Dorset Council
- Dorset and Wiltshire Fire and Rescue Service
- Dorset Police
- Dorset Wildlife Trust
- Amphibian and Reptile Conservation Trust (ARC)
- Natural England
- National Trust
- Forestry Commission
- Royal Society for the Protection of Birds (RSPB)

Q5: Policy

A joint planning framework prepared by BCP Council and Dorset Council for mitigation at the Dorset Heaths has been in place since 2007, setting out a five-year rolling programme. The latest iteration of the Supplementary Planning Document (SPD) was adopted in March 2020: [The Dorset Heathlands Planning Framework 2020 – 2025 SPD](#).

At the time of writing, the following adopted local plans of the former LPAs within the Dorset Council area set out planning policies to secure mitigation to address adverse effects on the Dorset Heaths, in accordance with the SPD:

- **Christchurch and East Dorset Local Plan Part 1** – Policy ME2 Protection of the Dorset Heathlands (Christchurch Borough Council and East Dorset District

Council, 2014) (note – Christchurch now forms part of BCP Council, rather than Dorset Council)

- **North Dorset Local Plan Part 1** – Policy 4 Natural Environment (North Dorset District Council, 2016)
- **Purbeck Local Plan Part 1** – Policy DH Dorset Heaths International Designations (Purbeck District Council, 2012) (to be replaced by Policy E8 of the emerging Purbeck Local Plan update which at the time of writing is undergoing ‘Further Proposed Main Modifications’ consultation following Examination).
- **West Dorset, Weymouth and Portland Local Plan** – Policy ENV2 Wildlife and Habitats (West Dorset District Council and Weymouth and Portland District Council, 2015)

The relevant policy wording is presented in **Boxes 4** to **7**.

Box 4: Christchurch and East Dorset Local Plan Part 1 – Policy ME2 (Christchurch Borough Council and East Dorset District Council, 2014)

Policy ME2 Protection of the Dorset Heathlands

“In accordance with the advice from Natural England, the evidence available to the authorities and Core Strategy Habitats Regulations Assessment (HRA), no residential development will be permitted within 400m of protected European and internationally protected heathlands.

Any residential development between 400m and 5km of these areas will provide mitigation through a range of measures as set out in the Core Strategy, Site Specific Allocations Development Plan Document and the Dorset Heathlands Planning Framework Supplementary Planning Document including:

- Provision of on-site and off-site suitable alternative natural greenspace (provided in accordance with guidelines set out Appendix 5).
- Provision of other appropriate avoidance/mitigation measures.

The avoidance or mitigation measures are to be delivered in advance of the developments being occupied and must provide for mitigation in perpetuity. Suitable Alternative Natural Greenspaces (SANGs) will be secured by way of a legal agreement between the developer and the relevant council. The delivery of Heathland mitigation measures will be secured as set out in the Councils' Regulation 123 list. The authority will ensure that mitigation measures to avoid harm are given priority as required by this policy.

The Dorset Heathlands Planning Framework Supplementary Planning Document will set out the type of development circumstances where mitigation is required, and a list of mitigation projects. The Councils' Core Strategy and Site Specific Allocations Development Plan Document sit alongside the Supplementary Planning Document in identifying SANGs provision. This will ensure that suitable measures are in place by the

Policy ME2 Protection of the Dorset Heathlands

time development is occupied. The combination of the 400m exclusion zone with the heathland mitigation measures set out above are designed to function together as an effective package avoiding the harmful effects of additional residential development on the European and internationally designated heathlands.”

Box 5: North Dorset Local Plan Part 1 – Policy 4 (North Dorset District Council, 2016)

Policy 4 Natural Environment

“Internationally Important Wildlife Sites

Developers should demonstrate that their proposals will not have significant adverse effects, including cumulative effects, on internationally important wildlife sites. Where this cannot be demonstrated, appropriate mitigation measures will be required otherwise permission will be refused. Mitigation measures for specific sites will include:

...

c) in relation to the Dorset Heaths SAC, Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC, Dorset Heathlands SPA, and Dorset Heathlands Ramsar site, contributions from developments within 5km of the heathland designations towards the sustainable management of the heathland sites or contributions towards the provision of alternative accessible recreation space to reduce recreational pressure on the Dorset heathlands;

...”

Box 6: Purbeck Local Plan Part 1 – Policy DH (Purbeck District Council, 2012)

Policy DH Dorset Heaths International Designations

“Development will not be permitted unless it can be ascertained that it will not lead to an adverse effect upon the integrity, of the Dorset Heaths’ International designations.

The Council is jointly preparing a Heathlands DPD with affected neighbouring authorities to set out a long-term mitigation strategy to ensure that the growth planned for South East Dorset can be accommodated without having an adverse effect upon the integrity of the Dorset Heaths.

This policy will apply until the Heathlands DPD supersedes it:

Policy DH Dorset Heaths International Designations

The following forms of development (including changes of use) will not be permitted within a 400m buffer around protected heathland:

- Residential (C3) development that would involve a net increase in dwellings;
- Tourist accommodation including hotels, guest houses, boarding houses, bed and breakfast accommodation, tented camping and caravans which require planning permission (C1 uses) and self-catering tourist accommodation; and
- Equestrian-related development that may directly or indirectly result in an increased adverse impact on the heathland.

Between 400 metres and 5km of a heathland, new residential development and tourist accommodation will be required to take all necessary steps on site to avoid or mitigate any adverse effects upon the internationally designated site's integrity or, where this cannot be achieved within the residential development, to make a contribution towards mitigation measures designed to avoid such adverse effects taking place. Measures will include:

- Provision of open space and appropriate facilities to meet recreation needs and deflect pressure from heathland habitats;
- Heathland support areas;
- Warden services and other heathland/harbour management;
- Access and parking management measures; and
- Green infrastructure.”

Box 7: West Dorset, Weymouth and Portland Local Plan – Policy ENV2 (West Dorset District Council and Weymouth and Portland District Council, 2015)

Policy ENV2 Wildlife and Habitats

“i) Internationally designated wildlife sites (including proposed sites and sites acquired for compensatory measures), will be safeguarded from development that could adversely affect them, unless there are reasons of overriding public interest why the development should proceed and there is no alternative acceptable solution.

ii) Development that is likely to have an adverse effect upon the integrity of the Poole Harbour and Dorset Heaths International designations will only be permitted where there is provision to avoid, or secure effective mitigation of, the potential adverse effects in accordance with the strategy in Table 2.2.

...”

The emerging Dorset Council Local Plan (latest consultation was 'Options' (Dorset Council, 2021)) will review and update policy wording to secure the heathland mitigation strategy, alongside BCP Council. This will replace the currently adopted plans for the former borough/district council areas which now make up the two Unitary Authorities.

Q6: Delivery Body

Mitigation is delivered by the UHP on behalf of the 10 partner organisations (see answer to Question 4). BCP Council and Dorset Council, the two LPAs within the UHP, have jointly prepared the planning framework (SPD) to set out a strategy for the avoidance and mitigation of impacts of new residential and tourism development in their authority areas upon the Dorset Heaths.

SAMM contributions are collected by each LPA to secure funding for the management and monitoring of the heathlands. This includes costs for a core team of wardens within the UHP, educational programmes in local schools, and ongoing monitoring work.

The LPAs coordinate the delivery of bespoke SANG for major developments, and HIPs (including SANG) that smaller developments contribute towards financially via S106 agreements or CIL.

Q7: Types of Development Covered

The mitigation strategy applies to residential and tourism development within the relevant ZOI (see Question 3).

A general presumption against new residential and tourism development applies within 400m of the Dorset Heaths boundary, concerning Use Class C1, C2, C3 and C4 as well as accommodation for Gypsies and Travellers, university accommodation, tourist accommodation and HMOs. Certain circumstances may apply where residential uses are permitted; this includes development which would not lead to a net increase in dwellings (e.g. replacement dwellings) or where development would not lead to new residents accessing the heaths (e.g. Use Class C2 hospitals or nursing homes).

For new residential or tourism development situated between 400m and 5km of the Dorset Heaths, the required mitigation approach will depend upon the type and scale of development proposed.

Q8: Developer Contributions

In accordance with the SPD, Dorset Council collect developer contributions from developments within 5km of the designated heathland sites.

Developer contributions have been calculated based on planned housing growth within the 5km area around the Dorset Heaths within the five-year period covered by the current SPD (2020 – 2025). The current total SAMM cost set out in the SPD is £2M. The level of contribution to the overall cost of the SAMM varies between the LPAs, with £1.42M required for BCP Council and £0.58M for Dorset Council.

Within the Dorset Council area, the majority of SAMM contributions are collected through CIL. The exception to this is the North Dorset Local Plan area where there is no CIL charging schedule in place and so in this area SAMM contributions are instead collected through planning obligations. The required contribution per home is £387 (adjusted for average occupancy to £406 per house and £277 per flat).

Depending upon the local circumstances, HIPs are funded through CIL payments or S106 agreements. In general, bespoke HIP provision is required alongside larger scale development; however, in some circumstances, it is more appropriate for larger scale developments to contribute financially towards a specific strategic HIP/SANG.

The current adopted SPD does not provide a breakdown of costs which make up the total of £2M for SAMM for the five-year period 2020 to 2025.

The [UHP Heathland Mitigation Delivery Report 2021-22](#) (UHP, 2022) sets out the budget for the Core UHP Team agreed for the 2021-2022 financial year of £291,660.43 including monitoring costs listed in **Table 9**. This budget is split between the two Unitary Authorities from developer contributions collected from development within the 5km of any heathland site. Detailed breakdown of costs relating to other aspects of the mitigation strategy, such as wardening and monitoring equipment, are not provided.

Table 9: Monitoring Delivery Costs at the Dorset Heaths for 2021/2022 (UHP, 2022)

Monitoring Expenditure	Amount
Footprint Ecology	£5,200
Dorset Environmental Records Centre	£3,500
Dorset Explorer GIS maintenance	£2,000
Bird Surveys	£11,000
Total	£21,700

As outlined in answer to Question 5, the emerging BCP Local Plan and Dorset Council Local Plan will provide an opportunity to review the mitigation strategy including the funding mechanisms, which will help to provide a consistent approach across the area in future iterations of the SPD.

Q9: Timescales for Delivery

The mitigation measures set out through the SPD are required to be in place in perpetuity (defined as 80 years). This includes the SANG maintenance and function. The SPD

notes however that “the element of monitoring established allows for the adjustment of measures in the future based upon the evidence gathered”.

Q10: Other initiatives

The SPD sets out a range of suggested mitigation projects including SANG and HIPs (see Question 13) but welcomes local organisations to submit possible projects for consideration which may be specific to particular schemes.

Q11: Monitoring

An ongoing monitoring programme has been in place for the Dorset Heaths since the inception of an Interim Planning Framework (IPF) monitoring strategy in 2007. Monitoring forms a key element of the SAMM scheme, and is carried out to identify areas of the heaths at risk from urban pressure, target mitigation work, establish baseline data for visitor use and gauge opinions on the heathlands as well as provide information to allow continuous assessment of the UHP project.

The [Analysis and presentation of IPF monitoring](#) report (Fearnley and Liley, 2011) reviewed the effectiveness of projects and monitoring carried out during the IPF, to inform the new SPD. The report recommended continued baseline data collection and standardised monitoring regimes to investigate visitor patterns in the longer term at both the heathland sites and SANG/HIP sites to allow for more effective analysis.

Monitoring methods at the Dorset Heaths include:

- **Incident recording** – the UHP incident database records events that caused damage to the heaths such as fires and trespassing vehicles, in collaboration with Dorset Environmental Records Centre and the Dorset and Wiltshire Fire and Rescue Service.
- **Automated visitor counters** – remote sensor data (gathered using tools such as pressure pads, infra-red beams and inductive loop sensors) is used to record numbers of visitors, identify trends of visitor behaviour and site usage. This strategy is used both at the Dorset Heaths and at SANG/HIP sites.
- **Car park counts** – 14 ‘snap-shot’ counts are organised annually to gather information on the number of cars at all heathland car parks, with random counts also carried out regularly by UHP wardens.
- **Site user surveys** – visitor surveys help to identify who is accessing the heaths, for what purpose, and where they go.
- **Wildlife and habitat recording** – e.g. Amphibian and Reptile Conservation Trust provide training for UHP wardens, and the RSPB carry out bird distribution and breeding surveys.

Monitoring Reports are prepared annually by Footprint Ecology to summarise the data collected by the UHP, with the latest published iteration being for the 2019-2020 financial year (Panter and Caals, 2021). The Monitoring Report notes that detailed analysis of the

collated data is being progressed, to help identify changes over time and recommendations going forward.

The SPD sets out the requirement for a SANG monitoring strategy to be prepared for each SANG. Monitoring at SANG sites is carried out by UHP staff alongside landowners and developers. Methods used include visitor questionnaires, remote sensors and observational studies. All SANG monitoring raw data must be made readily available to the authority as part of the wider Heathland Monitoring Strategy.

Q12: Communication Strategy

There is no apparent specific communication strategy; however, communication forms a key part of the heathland mitigation.

Heathland Mitigation Delivery Reports are prepared annually by UHP, which set out the range of delivery techniques used to allow for communication with partner organisations, developers and the public. The latest iteration is the [UHP Heathland Mitigation Delivery Report 2021-22](#) (UHP, 2022). The Mitigation Delivery Report notes a range of tools used for engagement with different audiences, including:

- **BBQ Campaign** – working alongside Litter Free Dorset to raise awareness of wildfire risk, through social media, posters, leaflets and signage.
- **# Operation Heathland Campaign** – social media campaign to raise awareness and profile of the value and importance of heathland ecology.
- **Heath Week** – events and activities to promote key messages in conservation and management of the heaths.
- **Heathland Life newsletter** – issued to partners and councillors to provide information on upcoming events, activities and projects.
- **Online engagement** – social media and website use to promote Dorset Heaths messages, including articles and information.
- **Education programme** – a range of educational activities including heath walks, fieldwork and online lessons delivered by the Education Coordinator and Education Assistant for local schools.
- **Dorset Dogs** – promotes responsible dog ownership and positive management for dog owners through targeted events, signage, leaflets and online information, providing advice on best practice for access management, helping to minimise wildlife disturbance, prevent dog fouling, and encourage dog walkers to get involved with incident reporting and management/monitoring work on the heaths.
- **Firewise** – aiming to reduce the risk of damage to homes from wildfire through knowledge and practical improvements to reduce hazards and make communities more resilient.

Dorset Council website includes a range of information relating to the Dorset Heaths, including conservation issues, history, ongoing projects, education activities, and opportunities for volunteering.

The SANG Site Quality Checklist (see Question 14) includes a requirement for clear sign posting and advertising for SANG sites, including for new homeowners, to maximise awareness and use of the SANG.

SANG

Q13: Identify the components that make up the SANG projects

As outlined in answer to Question 2, Part 2 of the mitigation strategy as set out in the SPD focuses on Heathland Infrastructure Projects (HIPs). HIPs are defined as “physical infrastructure projects that provide facilities to attract people away from the protected heathland sites” and can be delivered and managed by both the public and private sector.

SANGs form a major component of the HIPs. Provisions include strategic SANGs set out through local plans intended to draw visitors from a wider area, and non-strategic SANGs which are delivered alongside housing developments. Other possible HIPs are focused on provision of specific recreational facilities or links between SANGs rather than necessarily greenspaces, which are designed to target a particular pressure on the heaths.

The SPD sets out a range of possible types of HIPs that would be appropriate to address different impacts. This includes, but is not limited to:

- Provision of strategic SANGs, e.g. country parks.
- Provision of developer-led SANGs alongside new development.
- Improvements to accessible routes, provision of seating and viewpoints.
- Improvements to links between SANGs or other green infrastructure.
- Improvements to non-designated sites.
- Provision of BMX facilities.
- Provision of new dog-friendly areas/parks.
- On-site projects including improved signage, managing inappropriate car parking and use of BBQs.

Q14: Has a green space standard or metric been used?

SANG must be provided to a minimum standard of 8ha/1,000 people, however, taking into consideration the rural nature of the Dorset countryside a metric up to 16ha/1,000 is often applied. In the SPD Consultation Report (Dorset Council and BCP Council, 2020b), the officer response to queries relating to standardised SANG thresholds indicates that “The 8/16ha standards are a guide but it is attractiveness of the SANG that is more important”.

The SPD does however refer to a general threshold of 50 homes to trigger the requirement to provide a SANG, and states that SANG should be provided within walking distance of a new development, although this varies depending on location.

The SPD sets out guidelines for the quality of SANG provision in the form of a Site Quality Checklist. The Checklist (see **Figure 10**) includes key points for consideration in identifying and developing SANGs to ensure they can effectively mitigate the specific

threat/pressure at the Dorset Heaths that is being addressed, based on the evidence studies regarding the features of the heaths that make them desirable to visitors.

Matters relating to the capacity, catchment and management of SANGs are to be agreed with Natural England and the Council, on a case-by-case basis.

Features		Current	Future
Access			
1	Sites must have adequate parking for visitors, unless the site is intended for local pedestrian use only, i.e. within easy walking distance (400m as a straight line) of the developments linked to it.		
2	Car parks must be easily and safely accessible by car, be of an open nature and be clearly sign posted.		
3	There should be easy access between the car park or housing and the SANG with the facility to take dogs safely from the car park to the SANG off the lead.		
4	Access points should have signage showing the SANGs layout and the routes available.		
Paths, Tracks and Infrastructure			
5	Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming too urban in feel.		
6	Most paths should be suitable for use in all weathers and all year around. Boardwalks may be required in wet sections.		
7	SANGs with car parks must have a circular walk which starts and finishes at the car park.		
8	A circular walk of 2.3-2.5km around the SANGs is available - for larger SANGs a variety of circular walks created		
9	It must be designed so that visitors are not deterred by safety concerns		
10	Good green infrastructure links with nearby development to encourage use of SANG		
Advertising and marketing of the SANG			
11	It should be clearly sign-posted and advertised		
12	Leaflets and/or websites advertising their location to potential visitors should be produced and provided at the sales office of the new development and to the new homeowners		
Landscape and vegetation			
13	They must be perceived as natural spaces without intrusive artificial structures, except in the immediate vicinity of car parks. Visually-sensitive way-markers and some benches are acceptable		
14	They must aim to provide a variety of habitats for visitors to experience (e.g. some of: woodland, scrub, grassland, heathland, wetland, open water)		
15	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 but under control so as not to deter others.		
16	They must avoid where possible unpleasant visual and auditory intrusions (e.g. derelict buildings, intrusive adjoining buildings, dumped materials, loud intermittent or continuous noise from traffic, industry, sewage treatment works, waste disposal facilities).		

Figure 10: Site Quality Checklist for SANG at Dorset Heaths (Dorset Council and BCP Council, 2020a)

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the SPD.

Q16: Is the quantity of SANG available to the LPA published?

There is no apparent centrally publicised inventory of SANGs/HIPs in the BCP or Dorset Council areas. The previous iteration of the SPD (Dorset Local Authorities, 2016) sets out a list of mitigation projects in Appendix A including SANG with details on the area of new access created although there are no details provided relating to capacity at each SANG. There is no equivalent update to this within the currently adopted SPD.

Various evidence base documents, including the latest UHP Monitoring Report (Panter and Caals, 2021), refer to a suite of existing and emerging SANGs and HIPs that have been established within South East Dorset and are the subject of ongoing monitoring and management.

The UHP Long Term Analysis and Evidence Base Review (Panter and others, 2022) refers to a total area of approximately 279ha of current SANG across 18 sites (within BCP and Dorset Council areas), with approximately 115ha of further committed SANG to be delivered. In addition, the report identifies a total of 39 existing HIPs. The 18 existing SANG sites are as follows:

- Bog Lane
- Burnbake
- BytheWay
- Canford Park
- Cuthbury Allotments
- Frenches Farm
- Holmwood House
- South East and North East Wimbourne
- South of Leigh Road (east)
- South of Leigh Road (west)
- St Leonards Hospital
- Stanpit Riversmeet
- Stapehill Abbey
- Swanage Northbrook
- Upton Country Park Phase 1
- Upton Country Park Phase 2
- Verwood, Ringwood Road
- Woolslope

Q17: Are details available for each SANG?

As discussed in answer to Question 16, there is no apparent centrally publicised inventory of SANGs/HIPs. SANG requirements are determined by the relevant LPAs (Dorset Council or BCP Council) and Natural England on a case-by-case basis.

The UHP publish annual monitoring reports and summaries of data collected (e.g. Panter and Caals, 2021), which includes monitoring and surveys conducted at different SANG and HIP sites.

The level of information available relating to each project varies. Information is available online for some SANG sites, for example the emerging [Throop Nature Park](#) which will provide 30ha with circular walks, [Canford Park](#) providing approximately 47ha of green space, and the strategic SANG at [Upton Country Park](#) with phased delivery of approximately 30ha of areas for recreation and dog walking. No details are provided regarding SANG capacity; however, the recent analysis report (Panter and others, 2022) used vehicle count and visitor data to estimate the visitor rate at SANG sites to derive indications of their capacity. The analysis identified some SANG sites as potentially having further capacity (e.g. Bog Lane, South of Leigh Road (east), Canford Park and Woolslope) although more detailed surveys are recommended in the report to confirm this.

SAMM

Q18: SAMM Criteria

No specific criteria are set out to determine the requirements for SAMM. SAMMs contributions are required for all residential and tourism development within the 400m to 5km heathland area as set out in the SPD (see Question 8).

Guidance relating to the forms of development which may cause additional harm to the Dorset Heaths and required mitigation measures and SAMM contributions within both the 400m and 5km areas are set out in Appendix B of the Dorset Heathlands Planning Framework SPD.

Q19: SAMM Projects

The two key elements of SAMM projects are (1) Strategic Access Management; and (2) Monitoring.

Strategic Access Management measures include:

- Employing wardens/rangers to manage visitor pressures on the heathland generated from development.
- Employing education officers to raise awareness in schools and local communities regarding damaging recreational pressures and fires.
- Reviewing fire access across the heathlands and supporting measures for the fire service, including provision of firefighting equipment and launch of Firewise UK online platform raising awareness of heath fires.
- Development of SANGs/creating or improving other recreational sites to draw visitors away from the heaths.

Monitoring measures include:

- Undertaking surveys to detect any change in the numbers and behaviour of heathland users to provide information on which activities and locations may need better management. This includes use and maintenance of monitoring equipment (see Question 11).
- Monitoring of protected birds and species.
- Surveys and monitoring (of site users, wildlife and habitats – see answer to Question 11) to ensure the mitigation measures are working.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The SPD recognises the opportunities that mitigation projects such as SANGs provide in regard to delivering multifunctional benefits. The SPD encourages embedding projects which would help to achieve the Councils' targets for carbon neutrality, where these do not compromise the functionality of the mitigation for the heathland itself.

SANGs form a component of the South East Dorset Green Infrastructure Strategy (Dorset Council, 2011).

Furthermore, in partnership with the Dorset Integrated Care System the SPD welcomes projects which help to promote better access to and enjoyment of open spaces, with benefits to human health and wellbeing.

Q21: Nature Recovery Network

The SPD states that all mitigation projects will need to be prepared in alignment with the objectives of the Councils and partner organisations, including “as part of the Dorset Local Nature Partnership to enhance ecological networks / Nature Recovery Networks”.

Epping Forest

Cross-leaved heath (*Erica tetralix*) Credit: Flickr.



Epping Forest – Waltham Forest London Borough Council

Summary

Triggers for Mitigation

Epping Forest is one of London's largest open spaces and is managed by the City of London (CoL) as the conservators of Epping Forest. Epping Forest SAC lies within Epping Forest and supports sensitive woodland and heathland habitat, which provides habitat for the stag beetle.

Recreational Evidence Base

No recreational impact surveys are publicly available to identify the nature and extent of recreational pressures or the impact they are having on the ecological features of the SAC itself.

Solutions for recreational impacts

Visitor surveys (including interview and counts) were undertaken in 2017, and updated in 2019, to better understand the way in which visitors use Epping Forest:

- Epping Forest Visitor Survey, 2017 (Liley and others, 2018).
- Epping Forest Visitor Survey in 2019 (Liley, 2019).

The 2020 visitor surveys split main user group activities as shown in **Figure 11**.

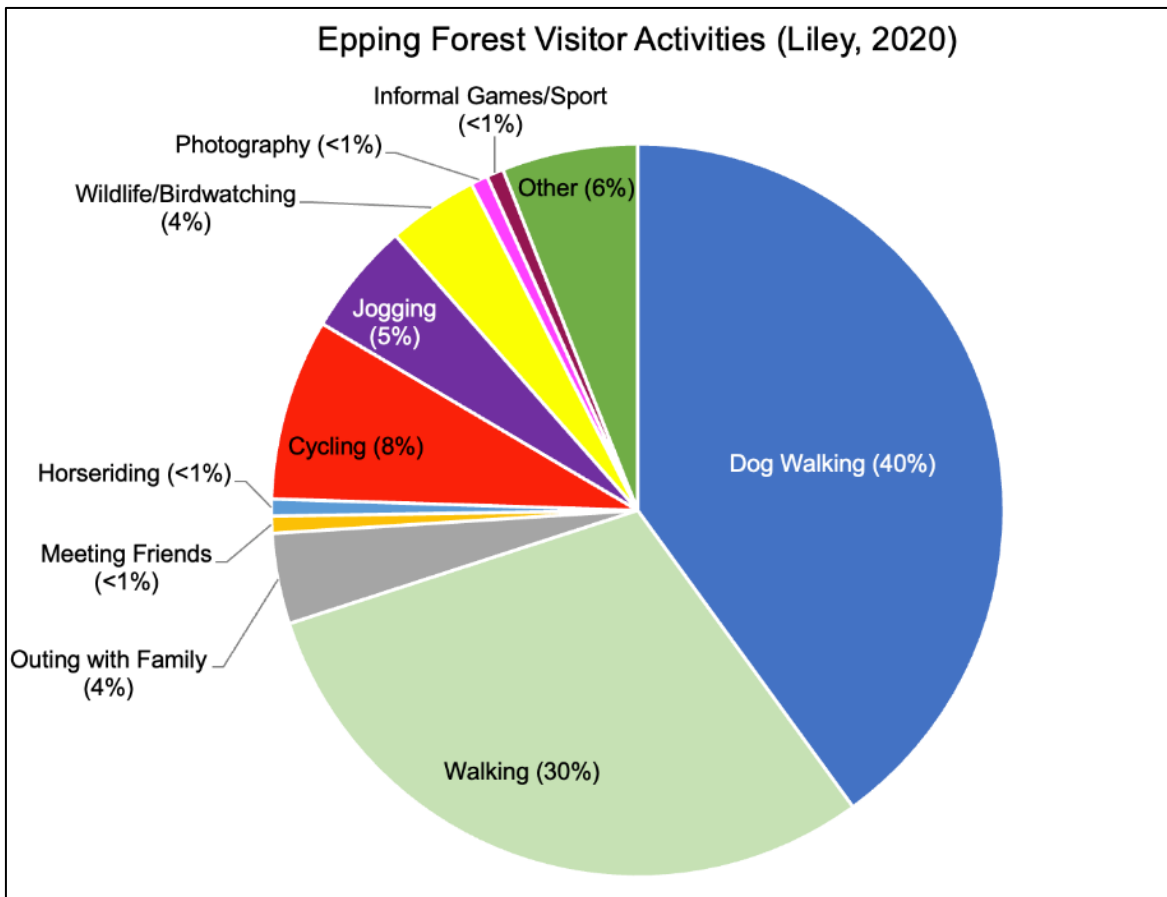


Figure 11: Visitor activities at Epping Forest (adapted from Liley, 2020)

For the purpose of calculating the SAMM tariff each local authority provided their predicated housing figures within 6.2km of the SAC. A total of 62,419 homes were projected to be delivered as relevant to the SAMM Strategy.

A 6.2km ZOI, drawn from the SAC boundary, was determined based on the visitor surveys carried out in 2017 and 2019. The ZOI was calculated based on the 75th percentile method, which calculates the distance from which 75% of visits originate and is a recognised method for strategic solutions nationwide.

Mitigation Solution

On the basis of the research undertaken and Natural England’s advice, the mitigation solution for Waltham Forest comprises three elements:

- A SAMM Strategy for all development within a 6.2km ZOI;
- Provision of SANG to reflect the urban nature of Waltham for all development within a 6.2km ZOI (including measures taken from the toolbox as outlined by Natural England in their 2021 advice); and
- Bespoke measures to address urban impacts for development which is located within 400m of the SAC.

The LPA partners include Epping Forest District Council, London Borough of Enfield, London Borough of Hackney, London Borough of Newham, London Borough of Redbridge and London Borough of Waltham Forest. This represents a strategic approach to mitigating recreational impacts at the SAC itself from all development within the ZOI.

SAMM Solutions

All new homes built in the ZOI are required to make a financial contribution to the delivery of SAMM. In Waltham Forest this equates to £627 for every new home built.

All development resulting in a net increase of residential units within 6.2km of the SAC is expected to make a financial contribution towards SAMM and SANG.

In perpetuity has been taken as 80 years for the purpose of calculating the SAMM tariff. The total cost of SAMM over 80 years was set at £24,817,469.05.

SAMM projects cover three strands:

- A site wide approach to managing impacts.
- Managing of increased use of three 'visitor hubs'.
- Raising awareness and educating users.

SANG Solutions

The SANG Strategy for Waltham Forest forms part of its wider Green Spaces and Places SPD and comprises 39 proposed SANG schemes (London Borough of Waltham Forest, 2022). The aim of the Green Network Strategy (part of the Green Spaces and Places SPD) is to provide and connect GI which can be reached within 15 minutes by sustainable modes of transport. The guidance recognises that the use of an 8ha/1,000 population traditional SANG metric may not be possible within the urban setting of Waltham Forest and suggests a toolbox type approach be taken where this cannot be provided.

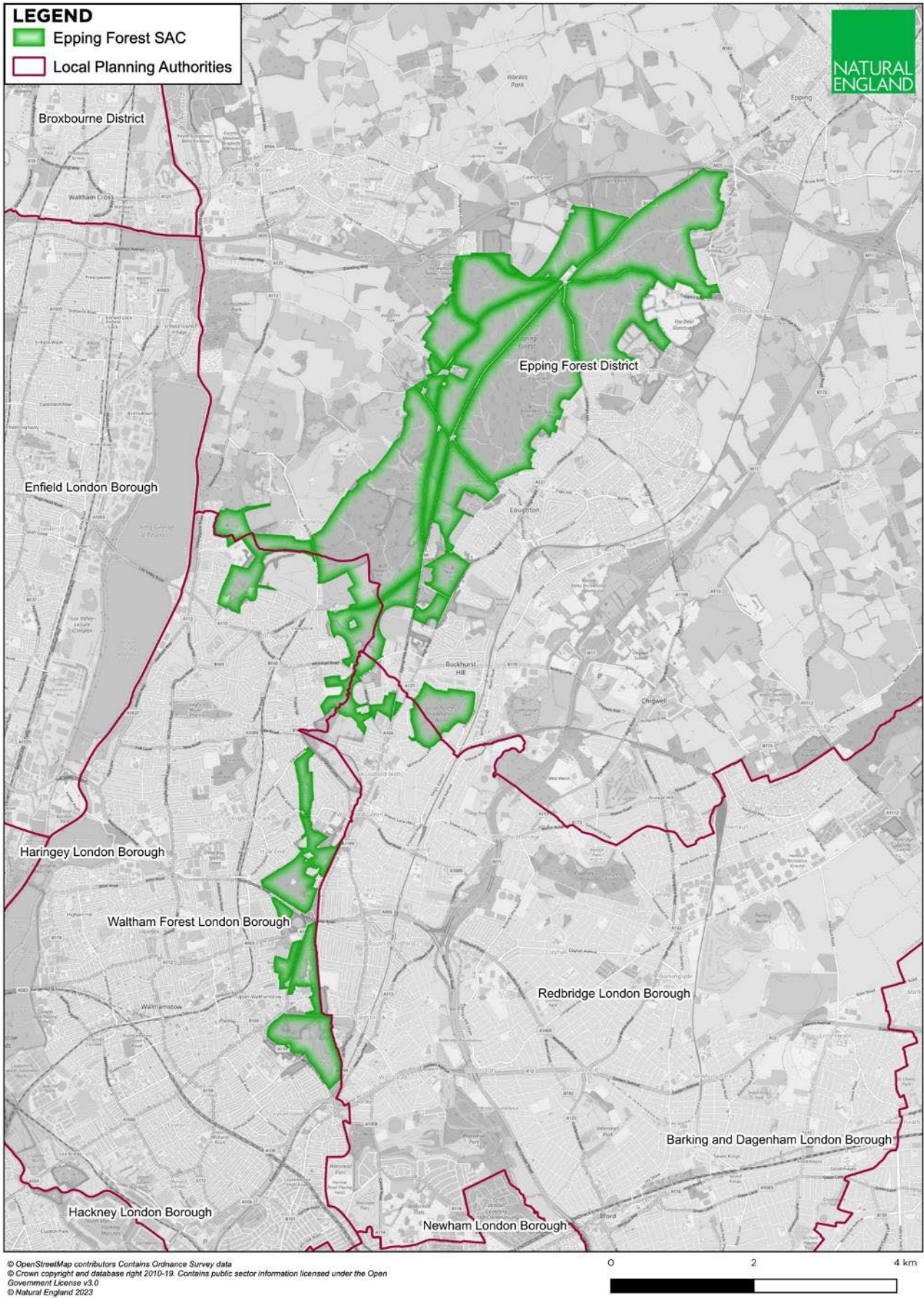


Figure 12: Location of Epping Forest SAC © Natural England 2024

Criteria 1: Triggers for Mitigation

Epping Forest SAC

Epping Forest is one of London's largest open spaces and is managed by the City of London (CoL) as the conservators of Epping Forest (**Figure 12**). Epping Forest SAC lies within Epping Forest and its qualifying features are set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

Epping Forest receives approximately 4.2 million visits annually, is served by 52 car parks, four visitor centres and provides a key walking and mountain biking destination (City of London, 2021).

Visitor surveys (including interview and counts) were undertaken in 2017, and updated in 2019, to better understand the way in which visitors use Epping Forest (Liley and others, 2018; Liley, 2019). Surveys included visitor interviews, visitor counts and a sample of people. The surveys collected data on visitor origin, visitor profile and factors that influence visitor behaviours. The information was gathered to help inform and shape mitigation options.

CoL undertakes ongoing assessments to determine whether particular areas of the site can cope with current access levels (Liley and others, 2018; Liley, 2019). The outputs of these CoL surveys are however not publicly available. The Epping Forest Management Plan includes a strategic priority to increase the Forest's resilience to recreational pressures and to minimise urbanisation impacts whilst encouraging visitor access (City of London, 2021).

No recreational impact surveys are publicly available to identify the nature and extent of these pressures or the impact they are having on the ecological features of the SAC.

Natural England produced an interim advice note on the Emerging Strategic Mitigation Strategy for the Epping Forest SAC (Natural England, 2019a). This advice related to residential planning applications with the potential to impact on Epping Forest SAC to ensure compliance with the Habitats Regulations. The CoL, as Conservators of Epping Forest, commissioned a report in 2020 to undertake a detailed assessment of the SAC (Land Use Consultants, 2020). The purpose of this report was to better understand the effects of recreational pressure on Epping Forest SAC and the measures needed to avoid harm arising from current and predicted future growth in visitors. The report provided an in-depth assessment and identified a range of costed measures, with guidance not only to the Conservators in terms of their responsibilities as the custodians of the Forest on behalf of the landowner, but also to inform the development of a SAMM Strategy.

Natural England updated their advice in relation to the SAC in a letter dated 5 March 2021 (Natural England, 2021a). The 2021 advice highlights the benefits of a strategic solution towards addressing recreational impacts at the SAC. It outlines options for mitigation which incorporates the principles of both SANG and SAMM, but also discusses a toolbox

approach where delivery of traditional SANG at the 8ha/1,000 population standard is not possible. Natural England indicate that the following items may be included in a toolbox approach:

- Traditional SANG, meeting the 8ha minimum standard and guidelines.
- SANG networks, either not meeting the standard, or all of the traditional guidelines, but providing a semi-natural experience of a size greater than 2ha.
- Strategic SANG provided by a third party, with options to look at areas such as Olympic Park or Hackney Marshes.
- SAMM+ Contribution, directly funding a significant project from the CoL's proposed complete solution. Reducing the overall requirement strategically, but dealing with a likely acute development issue due to size of development/proximity to the SAC.
- Offsite Public Rights of Way improvements away from the SAC, providing an opportunity to improve accessibility to current green spaces in the London Boroughs from the new developments and beyond.
- Bespoke wardens provided to manage visitor engagement on SANGs other green spaces in the boroughs.
- A new education centre/facility focused on managing behaviours at the SAC.
- Dog training areas on the site within small, fenced areas where people could train their dogs, recall etc, without being on the SAC.
- Contributions to other GI in the vicinity (improvements to accessibility or biodiversity on them). Suggestions include opening up areas of green space, removing culverts on river sections, extra habitat planting or riverside walks.
- Contribution to CoL for something else outside of the SAMM project requirements.
- Pet covenants on the development to ban keeping of dogs.
- Reduce access to the SAC from any particular development with physical barriers.
- Secure measures to provide garden waste provision on site, to prevent garden refuse or fly-tipping on the SAC, where gardens are part of the application.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

On the basis of the research undertaken and Natural England's advice, the mitigation solution for Waltham Forest comprise three elements:

- A SAMM Strategy for all development within a 6.2km ZOI.
- Provision of SANG to reflect the urban nature of Waltham for all development within a 6.2km ZOI (including measures taken from the toolbox as outlined by Natural England in their 2021 advice).
- Bespoke measures to address urban impacts for development which is located within 400m of the SAC.

The SAMM Strategy is delivered through the Epping Forest SAC SAMM Strategy (unpublished draft, 2022 – it should be noted that the document has not been agreed by all parties at the time of writing). This has been prepared by partners including LPAs within the ZOI (as partner to the agreement) and CoL (as delivery body). The LPA partners include Epping Forest District Council, London Borough of Enfield, London Borough of Hackney, London Borough of Newham, London Borough of Redbridge and London Borough of Waltham Forest. This represents a strategic approach to mitigating recreational impacts at the SAC itself from all development within the ZOI.

SANG is delivered through Waltham Forest's Green Spaces and Places Supplementary Planning Document (SPD) (Part 1: Suitable Alternative Green Space (SANG)) (London Borough of Waltham Forest, 2022). The approach towards SANG includes elements taken from Natural England's suggested toolbox which reflects the urban nature of the London Borough of Waltham Forest.

In addition, where a planning application is made for one or more new home(s) within 400m of the Epping Forest SAC boundary, there is a requirement to provide further mitigation measures to avoid urban effects. These are agreed with Natural England and the Conservators of Epping Forest and negotiated through the planning process.

Q3: Zone of Influence

A 6.2km ZOI, drawn from the SAC boundary, has been determined based on the visitor surveys carried out in 2017 and 2019 (**Figure 13**). The ZOI was calculated based on the 75th percentile method, which calculates the distance from which 75% of visits originate and is a recognised method for strategic solutions nationwide (Liley and others, 2018; Liley, 2019).

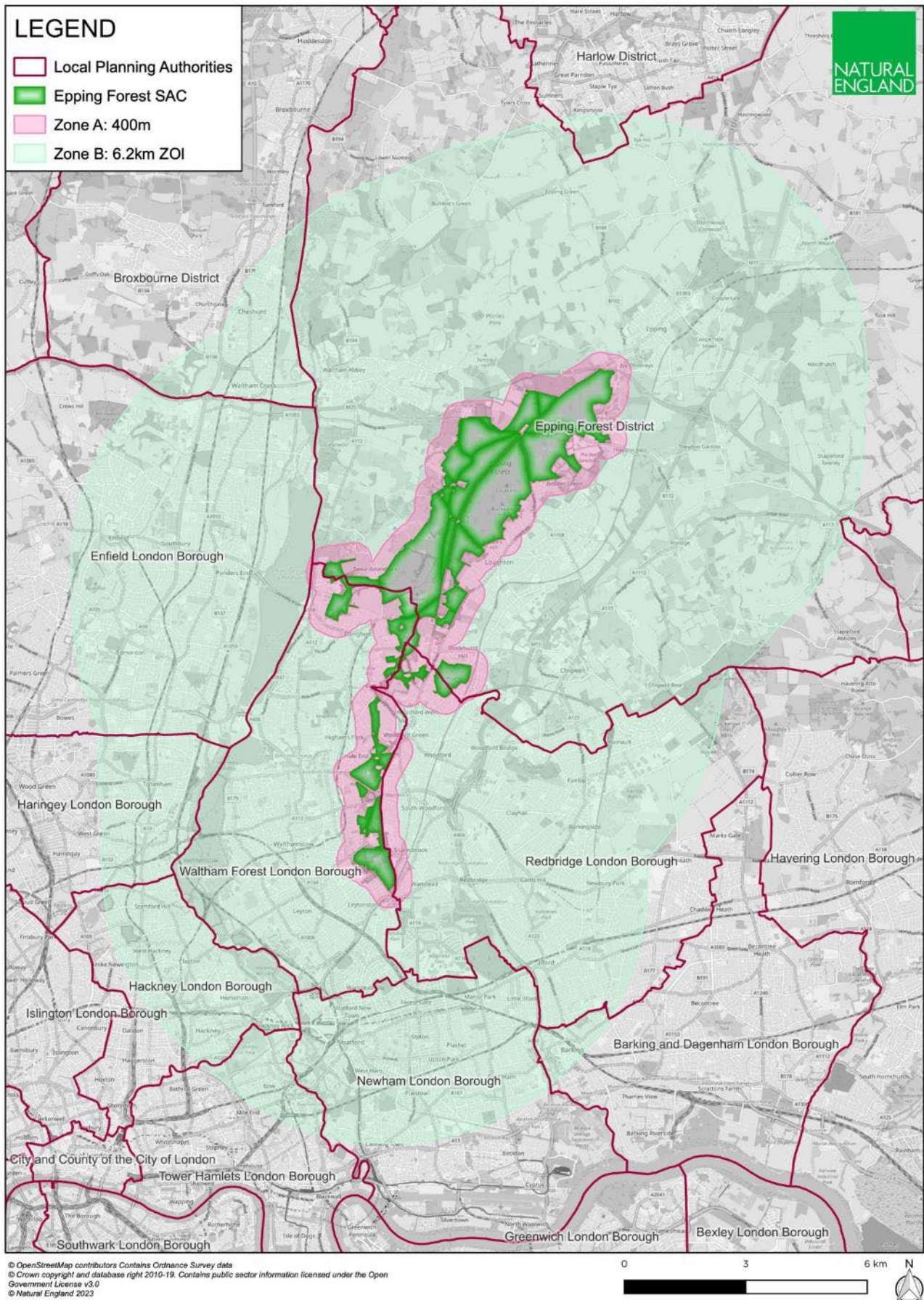


Figure 13: Epping Forest SAC Zone of Influence © Natural England 2024

Q4: Strategic Approach

All LPAs within the 6.2km ZOI have formed a partnership to evidence and deliver the SAMM element of the mitigation solution (see answer to Question 2). The Delivery Body for the SAMM is CoL, which reports to a Technical Oversight Group, formed of partners (i.e. the affected LPAs), technical experts representing partners and Natural England. All partners and the CoL are in the process of reviewing and signing up to the Epping Forest SAC SAMM Strategy (unpublished draft, 2022).

The SANG element and bespoke urban mitigation for developments within 400m of the SAC are implemented by the Council independently through their SPD (London Borough of Waltham, 2022) and individual planning permissions.

Q5: Policy

Current development plan documents for the London Borough of Waltham Forest comprise:

- Core Strategy - adopted in 2012 (London Borough of Waltham Forest, 2012).
- Development Management Policies Document - adopted in 2013 (London Borough of Waltham Forest, 2013).
- Area Action Plan for Walthamstow Town Centre - adopted 2014 (London Borough of Waltham Forest, 2014).
- Area Action Plan for Blackhorse Lane in 2014 - adopted 2015 (London Borough of Waltham Forest, 2015).

The Council is currently preparing a new Local Plan which will replace these development plan documents once adopted. The emerging new Local Plan will comprise two parts:

- Waltham Forest Local Plan Part 1 (Strategic Policies) – LP1.
- Waltham Forest Local Plan Part 2 (Site Allocations) – LP2.

LP1 is currently at the Examination Stage, and LP2 is currently at the statutory consultation stage, with a proposed submission document having been published towards the end of 2022.

Given their dates of adoption, the Core Strategy and Development Management Policies Document do not include wording to secure recreational mitigation solutions. Policy DM25 of the Development Management Policies Document notes that “Development proposals will not normally be granted planning permission where they pose adverse direct or indirect effects on any land or area within the ... Special Areas of Conservation (SAC), ... However, in an exceptional situation where such proposals are permitted, any damaging impacts should be prevented by appropriate mitigation measures or use of conditions” (London Borough of Waltham Forest, 2013).

Recreational mitigation solutions will need to be secured through policy wording in the emerging LP1 and LP2. Prior to adoption of LP1 and LP2, the SANG element of the

recreation mitigation solution is currently secured through the Green Spaces and Places SPD Part 1 (London Borough of Waltham Forest, 2022).

Guidance on Waltham Forest's planning website requires all planning applications that would create one or more new home(s) to include a project level HRA Screening and Appropriate Assessment. The Council provides an HRA template for development located within 400m from the Epping Forest SAC boundary and a template for development located over 400m from the SAC boundary. These templates set out recreational mitigation that can be applied to project level HRA to mitigate alone and in-combination recreational impacts at Epping Forest SAC and ensure no adverse impacts on site integrity. These measures include the SAMM Strategy, SANG measures (set out in the SPD) and bespoke requirements for development within 400m of the SAC boundary.

Q6: Delivery Body

As noted in answer to Question 2, CoL is the delivery body for the SAMM element of the mitigation solution.

SANG contributions are distributed by the Developer Contributions Board led by senior Council Officers, and the Cabinet. All projects requiring CIL funding are reviewed by the Board prior to monies being allocated and later monitored via the Infrastructure Funding Statement. This governance process applies to all CIL funding for SANGs projects. Fully costed, detailed designs are reviewed by the Board and funding is allocated accordingly. This process will ensure sufficient SANGs are provided in advance of occupancy of residential developments.

Bespoke mitigation for development within 400m of the SAC boundary is secured through planning conditions and delivered on a case-by-case basis.

Q7: Types of Development Covered

All development resulting in a net increase of residential units within 6.2km of the SAC is expected to make a financial contribution towards SAMM and SANG.

All development resulting in a net increase of residential units within 400m of the SAC is expected to make provide bespoke mitigation measures to address urban effects.

Q8: Developer Contributions

All new homes built in the ZOI are required to make a financial contribution to the delivery of SAMM (as set out in the Partnership Agreement – unpublished draft, 2022). In Waltham Forest this equates to £627 for every new home built. This will be secured through Section 106 Legal Agreements associated with every planning consent granted for one or more new homes and passed directly to the Conservators of Epping Forest. As noted under Question 4, Waltham Forest Council is a member of the Technical Oversight Group of partner LPAs who will oversee the investment in the forest and ensure these financial contributions are spent as agreed.

As with the SAMM Strategy, every new home that is delivered in the borough is expected to contribute to SANG investment. In most cases, this investment will be made through CIL. This is a charge levied on new development in the borough to help deliver the infrastructure required. It applies to most new buildings and the amount charged is based on the size and type of new floorspace. The level of contribution required also takes into consideration the potential visitor uplift of daily visits and SANG catchments.

Certain types of development can apply for CIL relief, which means they do not have to pay the charge. This includes dwelling conversions and developments for charitable, educational or healthcare uses, as set out on the [CIL exemptions page](#) of the Council website. In these cases, a bespoke investment package will be negotiated and secured through a Section 106 agreement to ensure that all new homes delivered in the borough are making a fair and proportionate contribution to the delivery of SANG.

The delivery of bespoke mitigation to address urban effects of development within 400m of the SAC will be agreed with Natural England and the Conservators of Epping Forest and negotiated through the planning process.

Q9: Timescales for Delivery

The costs calculated for delivery and maintenance of SANG are made in perpetuity (defined as 80 years).

The financial contributions being secured to deliver the SAMM Strategy include an 'in-perpetuity' factor to ensure that the ongoing management and maintenance of the measures is taken into account and is also based on an 80-year period.

Q10: Other initiatives

Other initiatives include bespoke requirements for mitigation of urban effects for development within 400m of the SAC boundary (to be agreed with Natural England and the Council).

Q11: Monitoring

The Epping Forest SAC SAMM Strategy Technical Oversight Group have responsibility to monitor and recommend updates to ensure its effectiveness. Monitoring forms a costed element of the Strategy and includes monitoring of ecological conditions (in terms of visitor impacts upon soils and ecology every 2/4 years depending on survey type) and visitor usage (every 5 years).

SANG monitoring will form part of the LP1 monitoring process once adopted. Monitoring indicators are set out in the SPD for incorporation into the overall LP1 monitoring and reporting process (London Borough of Waltham Forest, 2022). Monitoring indicators include SANG capacity surveys, visitor surveys at SANG, ecological surveys at SANG (to "ensure the appropriate management of ecological improvements" where SANG sites have nature conservation value), and ecological health of the SAC.

As set out in the SPD, monitoring will be undertaken at individual SANGs including a baseline survey, a survey 3 months following completion of SANG, and post-implementation. This will include visitor counts at access points and visitor interviews.

Q12: Communication Strategy

Projects set out in the SAMM Strategy include upgrades to mapping and interpretation boards at the SAC alongside visitor campaigns and the appointment of forest-wide ambassadors to raise public and local community awareness.

As set out in the SPD, the Council's website will provide a web page which will act as a hub for all outputs relating to Epping Forest SAC. It will outline the pressures that the SAC is facing and explain the need to protect it for future generations. It will provide details on SANG locations and the activities available in each. In conjunction with the launch of a web page, a full-page article will feature in Waltham Forest News, a quarterly newspaper produced by the London Borough of Waltham Forest that is distributed to every resident in the borough.

Further promotion will take place through the 15-minute neighbourhood consultation process, notifying residents of SANGs and inviting them to help shape proposals for them.

The SPD sets out the Council's aspirations to develop an app that can be accessed through residents' phones and provide detail on geocaching and QR code orienteering. QR codes will also provide targeted, up-to-date information for visitors as they move between and within SANGs.

The SPD also outlines details of an active education programme in partnership with the Suntrap Forest Education Centre. This is likely to include workshops and attendance at community events across the Waltham Forest, providing information and leaflets, and indoor class sessions for school-aged children.

Finally, as set out in the SPD, there will be a programme of training for maintenance and ground keeping teams.

SANG

Q13: Identify the components that make up the SANG projects.

The SANG Strategy for Waltham Forest is part of its wider Green Spaces and Places SPD (London Borough of Waltham Forest, 2022). The aim of the Green Network Strategy (part of the Green Spaces and Places SPD) is to provide and connect green infrastructure (GI) which can be reached within 15 minutes by sustainable modes of transport. The SPD sets out details on how this will be achieved through enhancement of existing spaces and bringing forward new spaces and green links. The SPD identifies committed SANG and 39 proposed areas for new SANG (London Borough of Waltham Forest, 2022).

Committed SANG are mapped and development where SANG contributions have been successfully negotiated are listed in the SPD, including the number of homes.

Information is provided in the SPD on the 39 proposed SANG schemes, including location map, suitable recreation activities, land ownership, uplift capacity, strategic growth locations within a 15-minute walking radius and enhancements required to make them suitable for SANG.

As Waltham Forest is aiming to achieve 15-minute neighbourhoods, catchments for the potential SANGs have been determined based on a 15-minute walking distance catchment, which equates to 1.2km. This applies to all SANGs except for Banbury Reservoir, because it has a different character to the other SANGs and is directly comparable to the Walthamstow Wetlands. A wider catchment of 3.2km has therefore been applied based on visitor survey data collated for Walthamstow Wetlands in 2022. Where SANG catchments cover more than one strategic development location, the anticipated uplift in visitor numbers has been shared. The SPD provides information on daily visitor uplift both required and achieved by proposed SANG for all strategic development locations. It also includes mapping to illustrate the coverage of SANG catchments across all areas of the borough.

Q14: Has a green space standard or metric been used?

No green space standard or metric is included in the SPD. However, Natural England note in their advice (Natural England, 2021a) that traditional SANG should be delivered at a minimum standard of 8ha/1,000 population. This advice also recognises that this standard may not be possible in urban areas, and notes that SANG networks should, as a minimum, provide a semi-natural experience of a size greater than 2ha for the local populous.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the SPD.

Q16: Is the quantity of SANG available to the LPA published?

Additional (or uplift) visitor capacity which could be achieved at proposed SANG, through enhancements to make them more attractive greenspaces, is calculated in the SPD. This 'uplift' figure is based on an assessment of the proposed enhancements and the expected additional number of visitors that will be attracted to each site following these enhancements. This was based on a review of visitor survey data obtained for Walthamstow Wetlands in 2022 and input from London Borough of Waltham Forest Officers, supported by Natural England.

The SPD sets out the visitor 'uplift' capacity which could be achieved at each proposed SANG following implementation of enhancements.

Q17: Are details available for each SANG?

Details are provided as follows for each proposed SANG in the SPD:

- Location map.

- Land ownership.
- Uplift category, range and single person equivalent.
- Strategic development locations within a 15-minute walk of the SANG.
- Enhancement proposals required to make the site into a SANG.

SAMM

Q18: SAMM Criteria

There were no specific criteria established to determine the requirements for SAMM. Projects required were based on the evidence base and visitor survey data collected, specifically the 2020 CoL report which examined the three busiest areas of the SAC, looking at the impacts caused by visitors to inform proposals for mitigation (Land Use Consultants, 2020).

Details in the SAMM strategy drew on housing coming forward in the 6.2km ZOI over the plan periods for affected LPAs. The projects were designed by the affected LPAs, CoL and Natural England.

Q19: SAMM Projects

The SAMM Strategy comprises three key strands as follows:

- A site-wide approach to physically manage additional ‘wear and tear’ on surfaced and unsurfaced tracks and paths, provision of enhancements to wayfinding and interpretation, and ongoing monitoring of ecological conditions and visitor usage;
- Managing increased use of the three ‘visitor hubs’ which act as ‘attractors’ and, as has been evidenced by the Visitor Surveys (2017 and 2019), are used on a regular basis by residents. This places focused pressure on these parts of the Forest; and
- Ongoing visitor engagement activities to help raise awareness of the issues facing the Forest, to encourage ‘Forest-friendly’ behaviours (through on-site engagement with visitors and local resident user groups) and to manage the use of ‘access pressure points’ by encouraging people to use different routes at times when some routes may temporarily be more vulnerable to over-use (Epping Forest SAC SAMM Strategy, 2022 – unpublished draft).

Proposed site measures and costings are set out in **Table 10**.

Table 10: SAMM Strategy measures and costs (Epping Forest SAC SAMM Strategy, 2022 – unpublished draft)

Proposal	Cost (80 years)
Physical management of surfaced paths and tracks across other (non-hub) SAC areas	£2,310,000.00

Proposal	Cost (80 years)
Physical management of unsurfaced paths and tracks across other (non-hub) SAC areas.	£480,000.00
Signage at transport nodes – Map and interpretation including installation	£70,000.00
Interpretation roll-out – forest wide	£246,400.00
Visitor engagement campaigns	£70,000.00
Cycle Map	£16,000.00
Mitigation Strategy Delivery Officer (Project Management and field monitoring experience)	£4,503,000
Visitor surveys (including for SAC, relevant SANGs and buffer lands) every 5 years	£400,000.00
Forest Wide Ambassadors	£3,515,500
Forest Wide Ambassadors	£3,426,500
Forest Wide Ambassadors	£3,337,500
Monitoring visitor impacts on soils and ecology of SAC	£397,000.00
High Beach Hub Costings	£998,386.50
Chingford Hub Costings	£2,567,974.05
Leyton Flats Costings	£2,479,208.50

The total cost of the proposed SAMM programme is £24,817,468. This sum is to be met through SAMM contributions from the five LPAs within 6.2km of the SAC who each contribute more than 2% of visitor numbers to the Forest. Costs are apportioned as set out in **Table 11**.

Table 11: Epping Forest SAC – SAMM Contributions by LPA (Epping Forest SAC SAMM Strategy, 2022 – unpublished draft)

Authority	% of pressure caused by new development	Apportionment (80 yr.)
Epping Forest District Council	15.66%	£3,886,415.65
Waltham Forest	68.13%	£16,908,141.66
Redbridge	12.51%	£3,104,665.38
Newham	1.18%	£292,846.13
Enfield	2.52%	£625,400.22

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The SANG SPD forms part of the wider Waltham Forest Green Spaces and Places SPD (London Borough of Waltham Forest, 2022). The aim of the Green Network Strategy is to identify steps to achieve a safe, connected, biodiverse, ecologically resilient network of quality spaces and GI that can be reached in 15 minutes by sustainable transport and help bring health and wellbeing benefits to residents. This will be achieved through a combination of enhancement and conservation of existing spaces and where possible bringing forward new spaces and green links. The contribution of SANG to this overall Green Network Strategy recognises the multifunctional benefits achieved through GI. The contribution of GI to addressing the climate emergency in terms of improving air quality and managing flood risks, and its contribution towards enhancing and protecting biodiversity resources is specifically referenced in the SPD.

Q21: Nature Recovery Network

There are no specific links identified between SANG and the Nature Recovery Network.

Essex

Scarce Emerald Damselfly(*Lestes dryas*) Credit: Istock images.



Essex Coast RAMS – Chelmsford City Council

Summary

Triggers for Mitigation

A large proportion of the Essex coastline is designated as a SPA, SAC or Ramsar site due to the presence of both breeding and non-breeding birds as well as coastal ecosystems. The European sites to which the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy (RAMS) solution applies are as follows (Chelmsford City Council, 2020a):

- Essex Estuaries SAC;
- Stour and Orwell Estuaries SPA and Ramsar;
- Hamford Water SPA and Ramsar;
- Colne Estuary SPA and Ramsar;
- Blackwater Estuary SPA and Ramsar;
- Dengie SPA and Ramsar;
- Crouch and Roach Estuaries SPA and Ramsar;
- Foulness Estuary SPA and Ramsar;
- Benfleet and Southend Marshes SPA and Ramsar; and
- Outer Thames Estuary and Marshes SPA and Ramsar.

Recreational Evidence Base

Key evidence which shows the link between population increase, recreational pressure, and adverse effects on the SPA birds includes a study by Panter and Liley (2016). In addition, key stakeholder workshops were undertaken to gather localised information such as locations of visitors at the coast and their recreational activity.

Solutions for recreational impacts

Visitor survey evidence was used to inform the RAMS. Where gaps were identified these were filled through two rounds of surveys in winter 2017/18 and spring 2018.

For the purpose of calculating the RAMS tariff as set out in the Strategy, housing up to 2038 (which reflects the longest local plan period for a partner LPA) was calculated to be 72,907 across all LPAs within the ZOI.

A separate ZOI was calculated for each designated site relevant to the strategy on the basis of visitor survey data based on the 75th percentile of postcode data (i.e. the distance where the closest 75% of visitors come from) taken from the winter.

Mitigation Solution

The recreational mitigation solution for the Essex coastal designations is the Recreational disturbance Avoidance and Mitigation Strategy, also known as the 'Strategy' or the 'Essex

Coast RAMS'. The strategy does not require creation of SANG due to the unique nature of the coast which cannot be replicated.

Twelve of the 14 Essex LPAs lie either wholly or partially within the ZOI for the Essex coastal European sites and are therefore partners to the strategy. The 14 LPAs are:

- Basildon Borough Council
- Braintree District Council
- Brentwood Borough Council
- Castle Point Borough Council
- Chelmsford City Council
- Colchester Borough Council
- Maldon District Council
- Rochford District Council
- Southend-on-Sea Borough Council
- Tendring District Council
- Thurrock Council
- Uttlesford District Council

SAMM Solutions

Developer contributions are collected for new development within the relevant ZOIs towards delivery of RAMS.

As of 2022/2023, the per-dwelling tariff for developments in Chelmsford is £137.71. The RAMS applies to residential development which results in a net gain in units including C2, C2A, C3 (a-c), C4, and on a case-by-case basis residential caravan sites (excludes holiday caravans and campsites) and Gypsy, Travellers and Travelling Showpeople plots.

RAMS projects are costed over the duration of the Local Plan 2018–2038, in perpetuity, defined as 125 years. The total cost of RAMS is £8,915,348. SAMM projects target the following types of interventions:

- Promoting education and awareness through rangers, codes of conduct and interpretation;
- Access management through signage, fencing, diversions, water sports zones, car park rationalisation and interpretation; and
- Monitoring of visitors, vegetation and bird populations.

SANG Solutions

There are no SANG elements in the Essex RAMS, however, the SPD notes that recommendations in project-level HRAs carried out alongside residential developments within the ZOI “may include measures to mitigate effects ‘on-site’ such as through open space provision or accessible alternative natural recreational green spaces which are relevant to individual developments only”.

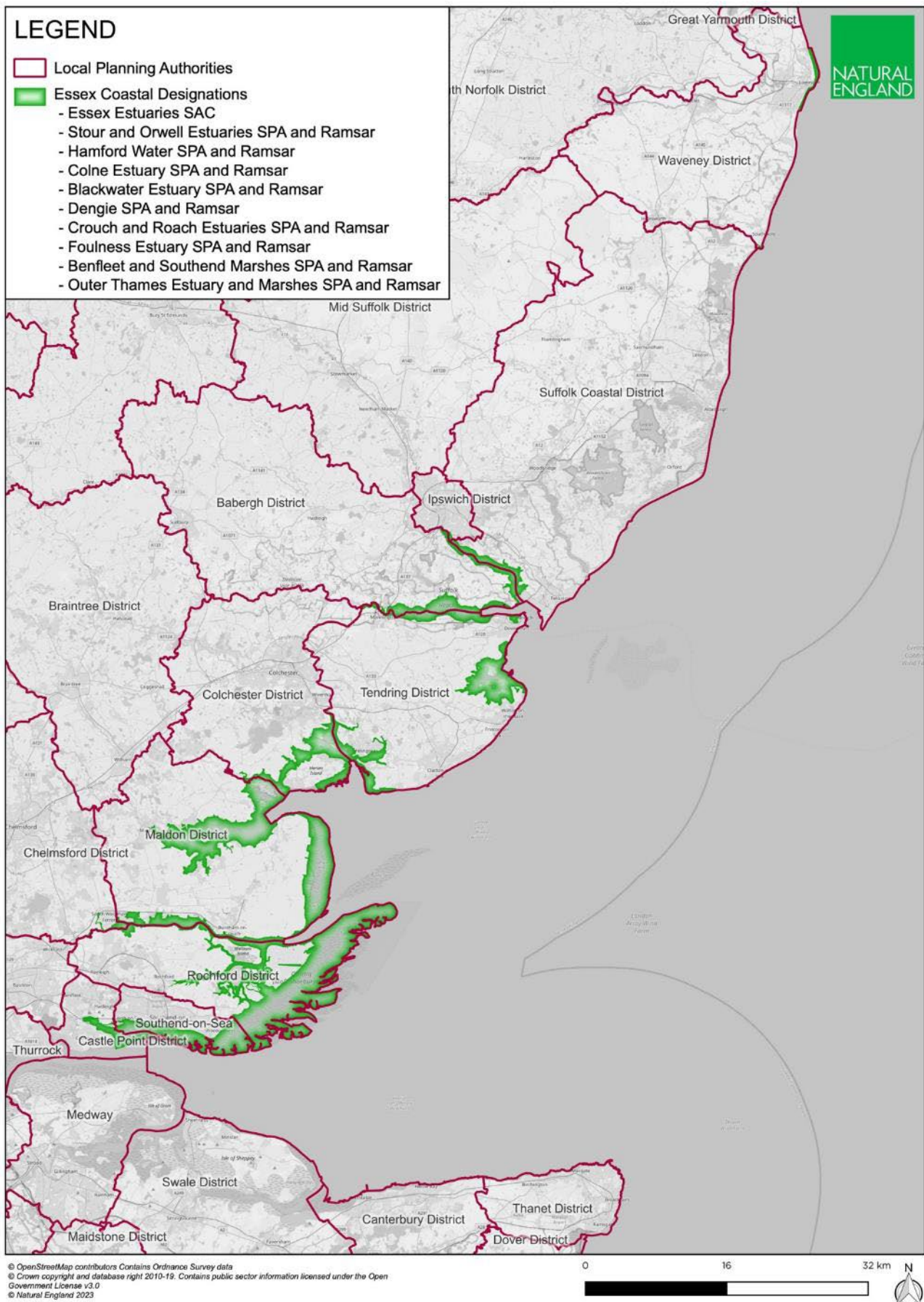


Figure 14: Location of Essex Coastal Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

International, European, and national wildlife designations span a sizable stretch of the Essex coastline. The preservation of both breeding and non-breeding birds as well as coastal ecosystems is a major objective of these designations. Most of the Essex coast is designated as a SPA, SAC, or Ramsar for qualifying coastal habitat types and species which these habitats support (**Figure 14**). The European sites to which the Essex Coast RAMS solution applies are as follows (Chelmsford City Council, 2020a):

- Essex Estuaries SAC;
- Stour and Orwell Estuaries SPA and Ramsar;
- Hamford Water SPA and Ramsar;
- Colne Estuary SPA and Ramsar;
- Blackwater Estuary SPA and Ramsar;
- Dengie SPA and Ramsar;
- Crouch and Roach Estuaries SPA and Ramsar;
- Foulness Estuary SPA and Ramsar;
- Benfleet and Southend Marshes SPA and Ramsar; and
- Outer Thames Estuary and Marshes SPA and Ramsar.

The qualifying features of these designations are set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

The Essex coastline is home to significant populations of breeding and non-breeding birds as well as the coastal habitats that support them. For recreational activities like walking, sailing, birdwatching, jet skiing, dog walking, and fishing (including bait-digging), the coast is a popular destination. Evidence, which is extensively discussed in the RAMS (including visitor surveys undertaken at various SSSI component sites between 2010 and 2013), reveals that most of these activities are carried out by residents of Essex (Chelmsford City Council, 2020a).

To determine the RAMS and the ZOI, the following methodology was followed in the review process to determine patterns of visitor use of designated sites:

- Desk studies to determine evidence of existing information and an identification of gaps (including review of Wetland Bird Survey (WeBS) data);
- Visitor surveys to supplement the desk studies and gain an understanding of the origins of visitors to the European sites and thereby determine the ZOIs;
- Continual engagement with Natural England to discuss and agree the methodology, location and results of the studies to provide robust evidence on which to develop the Strategy; and
- Stakeholder meetings with those parties with a responsibility for or an interest in the European sites to gain a better understanding of the sites, the recreational pressures they are under presently, those that would arise with an increase in

population, and an understanding of what mitigation has been undertaken to date and how effective this is.

The research indicated that residents from Basildon Borough, Brentwood Borough, Uttlesford District, and Braintree District are also likely to travel to the coast for recreational purposes, even though only Tendring District, Colchester Borough, Chelmsford City, Maldon District, Rochford District, Southend-on-Sea Borough, Castle Point Borough, and Thurrock Councils are located on the coast (Chelmsford City Council, 2020a).

Housing and consequent population growth in Essex is likely to increase the number of visitors to these sensitive coastal areas, creating the potential for impacts from increased recreational disturbance of the birds and their habitats, unless adequately managed (Chelmsford City Council, 2020a).

Key evidence which shows the link between population increase, recreational pressure, and adverse effects on the SPA birds includes a study by Panter and Liley (2016).

Tables 6.1 to 6.9 of Chapter 6 of [Essex Coast Recreational disturbance Avoidance and Mitigation Strategy \(RAMS\) Habitats Regulations Assessment Strategy document 2018-2038](#) provide details of potential for disturbance to birds at the European sites (listed under Criteria 1: Triggers for Mitigation) and mitigation options.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

Workshops were held for the key stakeholders to gather localised information such as locations of visitors at the coast and their recreational activity, recreational disturbances, and current mitigation measures in place. This helped to gain insight into recreational pressures at the European sites and to prioritise the most effective mitigation measures (Chelmsford City Council, 2020a). Options for mitigation discussed in the workshops by the Steering Group are presented in Chapter 6 of the RAMS document (Essex County Council, 2018).

The goal of the Essex Coast Recreational disturbance Avoidance and Mitigation Strategy, also known as the 'Strategy' or the 'Essex Coast RAMS', is to provide the mitigation required to avoid significant adverse in-combination effects of residential development that are anticipated throughout Essex, on the integrity of the European sites on the Essex coast. The Essex Coast RAMS applies to all new residential construction projects where there is a net increase in dwellings within the ZOI as indicated (see Question 3).

The creation of SANGs is not covered by the Essex Coast RAMS due to the unique nature of the coast which cannot be replicated. However, the strategy recognises that LPAs could decide to identify SANGs through separate funding streams (CIL) or enhancements

such as the Local Growth Fund and Local Enterprise Partnership, where appropriate, for example:

- expand Belhus and/or Hadleigh Castle Country Parks;
- upgrade other open space areas near the coast to attract visitors away from the beach areas; and
- provide a new Country Park/open space facility to the northeast of Southend as identified in the adopted Southend-on-Sea Core Strategy.

Q3: Zone of Influence

In order to determine the ZOI for each European site, as well as to compile data on present recreational activities at European sites and forecast anticipated effects from greater use by more inhabitants, data from both the winter and summer visitor surveys discussed in answer to Question 1 were used (see **Figure 15**).

Based on the home postcode information that visitors provided, each ZOI was determined by ranking the travel distances made by visitors to the shore. Each ZOI was based on the 75th percentile of postcode data from the winter or summer surveys depending on which was larger. The data used to calculate the ZOIs defined in **Table 12** has been refined to eliminate surveys where people were unlikely to cause disturbance to the coast.

Table 12: ZOI (in km) for Essex Coast European sites (adapted from Essex County Council, 2018)

European Site	Original ZOI from NE's interim advice letter (Nov 2017)	Updated ZOI based on winter visitor surveys (refined data)	Updated ZOI based on summer visitor surveys (refined data)	Final ZOI
Essex Estuaries SAC	24	-	-	- <i>(overlaps with the Blackwater Estuary, Colne Estuary, Crouch and Roach Estuaries, Dengie, Foulness and Outer Thames Estuary SPA and Ramsar sites)</i>

European Site	Original ZOI from NE's interim advice letter (Nov 2017)	Updated ZOI based on winter visitor surveys (refined data)	Updated ZOI based on summer visitor surveys (refined data)	Final ZOI
Hamford Water SAC, SPA and Ramsar	8	-	-	8
Stour and Orwell Estuaries SPA and Ramsar	13	-	-	13
Colne Estuary SPA and Ramsar	24	9.7	-	9.7
Blackwater Estuary SPA and Ramsar	8	14.2	22	22
Dengie SPA and Ramsar	13	20.8	-	20.8
Crouch and Roach Estuaries SPA and Ramsar	10	4.5	-	4.5
Foulness Estuary SPA and Ramsar	13	-	-	13
Benfleet and Southend Marshes SPA and Ramsar	10	4.1	4.3	4.3
Thames Estuary and Marshes	10	8.1	-	8.1

European Site	Original ZOI from NE's interim advice letter (Nov 2017)	Updated ZOI based on winter visitor surveys (refined data)	Updated ZOI based on summer visitor surveys (refined data)	Final ZOI
SPA and Ramsar				

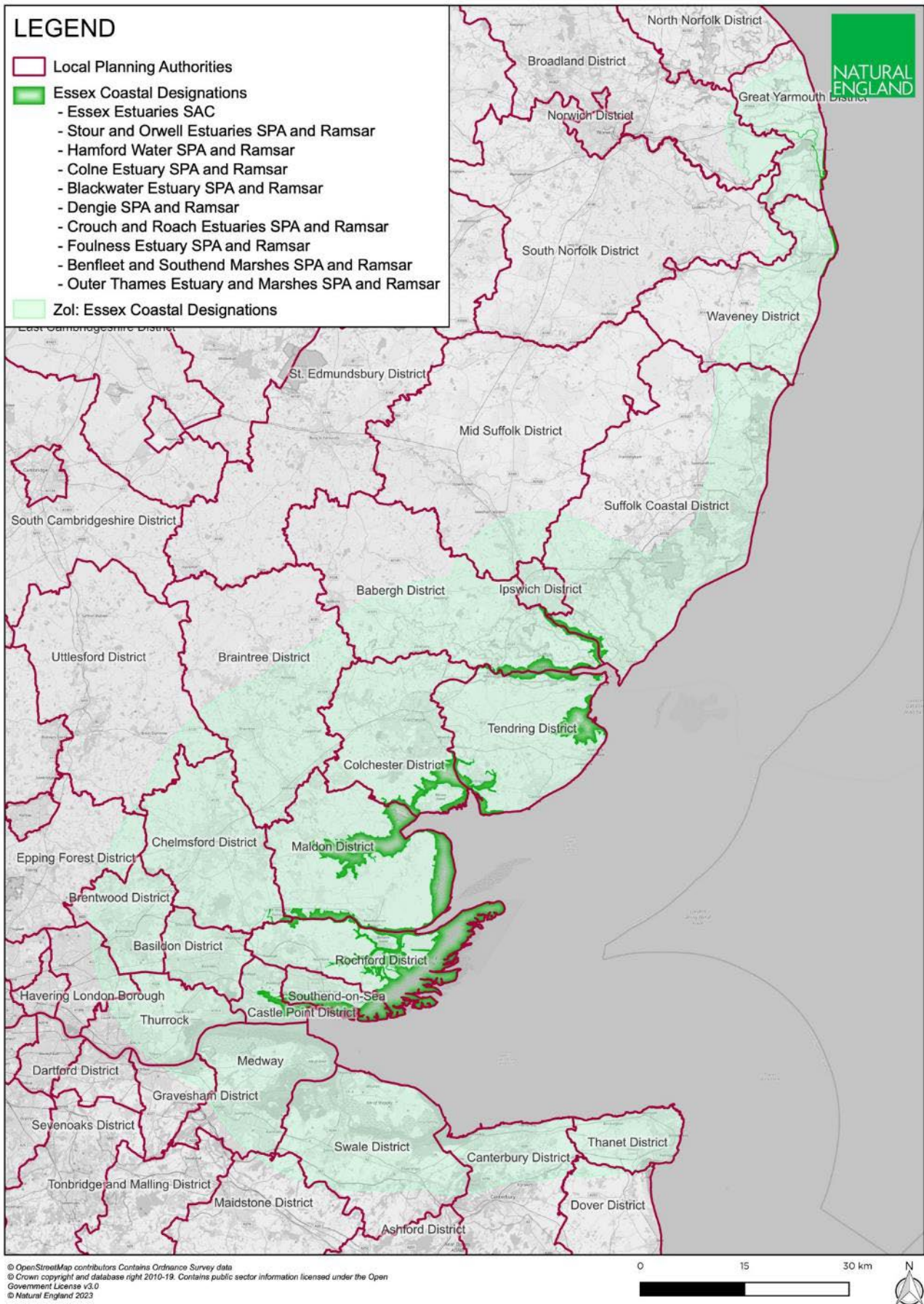


Figure 15: Essex Coastal designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

Twelve of the 14 Essex LPAs lie either wholly or partially within the ZOI for the Essex coastal European sites and are therefore partners to the strategy (Essex County Council, 2018). The 14 LPAs are:

- Basildon Borough Council
- Braintree District Council
- Brentwood Borough Council
- Castle Point Borough Council
- Chelmsford City Council
- Colchester Borough Council
- Maldon District Council
- Rochford District Council
- Southend-on-Sea Borough Council
- Tendring District Council
- Thurrock Council
- Uttlesford District Council

Q5: Policy

The Essex Coast RAMS is set out in the HRA Strategy Document (2018-2038) (Essex County Council, 2018) and supported by an SPD, adopted in May 2020 (Chelmsford City Council, 2020a). Both are available on the Chelmsford City Council [website planning pages](#).

Also adopted in May 2020, the Chelmsford Local Plan 2013-2036 sets out several planning policies which secure the RAMS (Chelmsford City Council, 2020b). Key elements of this policy wording are copied in **Table 13**.

Table 13: Policy securing mitigation (Chelmsford City Council, 2020b)

Policy Name	Policy Wording
Strategic Policy S4- Conserving and Enhancing the Natural Environment	“... Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to

Policy Name	Policy Wording
	<p>mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.</p> <p>Where appropriate, contributions from proposed residential developments will be secured towards recreational mitigation measures at Hatfield Forest Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR).”</p>
<p>Policy DM16- Ecology and Biodiversity</p>	<p>“Internationally Designated Sites- Developments that are likely to have an adverse impact (either individually or in combination with other developments) on European Designated Sites must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating against impacts where identified.</p> <p>Where appropriate, contributions from developments will be secured towards mitigation measures identified in the Essex Recreational disturbance Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS completion, the authority will seek contributions, where appropriate, from proposed residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.</p> <p>...”</p>

Q6: Delivery Body

Delivery of the RAMS is the responsibility of each of the partner LPAs (see answer to Question 4). The RAMS Steering Group, made up of representatives from each LPA, work alongside the RAMS Delivery Officer to implement and review the scheme.

Q7: Types of Development

The RAMS affects residential development which results in a net gain in units. Natural England’s revised interim advice to the Essex LPAs (Natural England, 2018a) sets out the specific development types to which the RAMS should apply. These uses are reflected in the adopted SPD, as set out in **Table 14**.

Table 14: Planning Use Classes covered by the Essex Coast RAMS (Chelmsford City Council, 2020a)

Planning Use Class	Class Description
C2 Residential institutions	Residential care homes, boarding schools, residential colleges and training centres. Care homes will be considered on a case-by-case basis according to the type of residential care envisaged.
C2A Secure Residential Institution	Military barracks Consideration as to whether such developments qualify for the full extent of tariff payments should be done on a case-by-case basis.
C3 Dwelling houses (a)	Covers use by a single person or a family (a couple whether married or not, a person related to one another with members of the family of one of the couple to be treated as members of the family of the other), an employer and certain domestic employees (such as an au pair, nanny, nurse, governess, servant, chauffeur, gardener, secretary and personal assistant), a carer and the person receiving the care and a foster parent and foster child.
C3 Dwelling houses (b)	Up to six people living together as a single household and receiving care e.g. supported housing schemes such as those for people with learning disabilities or mental health problems.
C3 Dwelling houses (c)	Allows for groups of people (up to six) living together as a single household. This allows for those groupings that do not fall within the C4 HMO definition, but which fell within the previous C3 use class, to be provided for i.e., a small religious community may fall into this section as could a homeowner who is living with a lodger.
C4 Houses in multiple occupation	Small, shared houses occupied by between three and six unrelated individuals, as their only or main residence, who share basic amenities such as a kitchen or bathroom
Sui Generis	<ul style="list-style-type: none"> Residential caravan sites (excludes holiday caravans and campsites) Gypsies, travellers and travelling show people plots

Planning Use Class	Class Description
	Developments will be considered on a case-by-case basis according to the type of development proposed

The SPD notes that “Other types of development, for instance tourist accommodation, may be likely to have significant effects on protected habitat sites related to recreational pressure and will in such cases need to be subject of an Appropriate Assessment as part of the Habitats Regulations. As part of this assessment any mitigation proposals (including those which address any recreational pressure) will need to be considered separately from this strategy and considered by the appropriate authorities” (Chelmsford City Council, 2020a).

Q8: Developer Contributions

The total cost of RAMS is £8,916,448.00 for the period of March 2019 to 2038. Chelmsford City developer contributions total £1,072,684.00 (see **Table 15**). Appendix 1 of [Essex Coast RAMS SPD](#) lists the details of the mitigation package.

Table 15: Cost for Developer Tariff Calculations (mitigation Package for 2018-2038) (adapted from Chelmsford City Council, 2020a)

Measure	One off/ Annual Cost	No. of Years	TOTAL
Delivery Officer	£45,000	19	£1,027,825
Equipment and uniform	(small ongoing cost)	N/A	£5,000
Rangers (2)	£36,000	18	£1,541,686
Staff Training	£2,000	19	£38,000
Audit of Signage including interpretation	£1,000 (one off)	N/A	£1,000
New interpretation Boards	£48,600 (one off)	N/A	£48,600
Monitoring: Recording implementation of mitigation and track locations and costs	£10,000 (one off)	N/A	£10,000

Measure	One off/ Annual Cost	No. of Years	TOTAL
Monitoring: Collation and mapping of key roosts and feeding areas outside the SPA	£15,000 (one off)	N/A	£15,000
Monitoring: Visitor surveys at selected locations in summer (with questionnaires)	N/A	N/A	£15,000
Monitoring: Visitor numbers and recreational activities	£5,000 (£500 / European site / year) (one off)	N/A	£5,000
Communication: Website set up, Walks and talks, and promotional materials	N/A	N/A	£5,000
Dog related- Set up/expand Dog project in line with Suffolk Coast and Heaths AONB "I'm a good dog" and Southend Responsible Dog Owner Campaign	£15,000 (one off)	N/A	£15,000
Water sports zonation	£10,000 (one off)	N/A	£10,000
Staff resources: Additional ranger	£36,000	13	£456,567
Staff resources: Websites, promotions and social media	£1,000	19	£19,000
Monitoring: Update visitor surveys at selected locations in summer (with questionnaires)	£45,000 (one off)	N/A	£45,000
Monitoring: Signage and interpretation	£13,500 (one off)	N/A	£13,500
Water based bailiffs to enforce byelaws (Set up water Ranger +	£50,000 (one off) £120,000 (x2)	15	£2,029,342

Measure	One off/ Annual Cost	No. of Years	TOTAL
Additional ranger wherever needed)			
Codes of conduct- For water sports, bait digging, para motors/power hang gliders and kayakers	£5,000 (one off)	N/A	£5,000
Habitat creation - Alternatives for birds project – and long term management	£500,000 (one off)	N/A	£500,000
Ground nesting SPA bird project – fencing and surveillance costs - specifically for breeding Little Terns and Ringed Plovers	£15,000 (one off)	N/A	£15,000
Car park rationalisation	£50,000 (one off)	N/A	£50,000
Monitoring: Birds monitoring for key roosts and breeding areas within and outside SPAs	£5,000	10	£50,000
Monitoring: Vegetation monitoring	£5,000	4	£20,000
Monitoring: Update visitor surveys at selected locations in summer (with questionnaires)	£45,000 (one off)	N/A	£135,000
Route diversions- Work with PRow on projects	£15,000 (one off)	N/A	£15,000
Total Package Cost + 10% contingency	N/A	N/A	£8,915,348

As of 2022–2023, the per-dwelling tariff for developments in Chelmsford is £137.71 (Chelmsford City Council, 2023). The strategic mitigation package cost (which includes an additional 10% for contingency purposes) (as set out in **Table 15**) was divided by the total number of dwellings (72,907) that are currently identified to be built in the ZOI over Local

Plan periods until 2038 in order to arrive at a per-dwelling contribution figure, excluding dwellings that have previously been consented. The figures will be subject to review when the Local Plan is updated.

The tariff is expected to be paid through Section 106 agreements. Details for tariffs are set out in Chapter 4 of the [Essex Coast RAMS SPD](#) (Chelmsford City Council, 2020a).

Q9: Timescales for Delivery

Although the costs (as set out in answer to Question 8) are limited to the duration of the Local Plan 2018–2038, the package of mitigation set out in the RAMS will need to be implemented in perpetuity, which is defined as 125 years in the HRA Strategy Document (Essex County Council, 2018).

Q10: Other initiatives

The SPD sets out that alternative approaches to the RAMS may be permitted but would be subject to a project-level HRA.

Q11: Monitoring

As set out in the SPD (Chelmsford City Council, 2020a), a strategic monitoring approach has been put in place to track the success of the RAMS. This is overseen by a dedicated RAMS delivery officer alongside the monitoring officers of each LPA.

A range of monitoring activities are set out in the RAMM which includes monitoring of:

- Visitor numbers and recreational activities;
- Visitor surveys and questionnaires;
- Bird numbers and roost/feeding locations;
- Vegetation monitoring;
- Effectiveness of mitigation monitoring; and
- Delivery of mitigation measures.

No monitoring outputs have been published on the LPA website since the adoption of the strategy in 2020.

Q12: Communication Strategy

As answered in Question 8, several RAMS components include communication projects to raising awareness and education as to the sensitivities of the European sites.

One communication initiative includes the ‘Bird Aware Essex Coast’ project, which seeks to raise awareness of the birds found along the Essex Coast and how to engage in recreation without causing disturbance. The [Bird Aware Essex Coast website](#) presents a range of information including details on the European sites and variety of species, conservation issues, ongoing projects, education activities, and opportunities for volunteering.

SANG

Q13-17

There are no SANG elements set out in the Essex RAMS, owing to the difficulty in replicating coastal sites elsewhere.

However, the SPD notes that recommendations in project-level HRAs carried out alongside residential developments within the ZOI “may include measures to mitigate effects ‘on-site’ such as through open space provision or accessible alternative natural recreational green spaces which are relevant to individual developments only”.

SAMM

Q18: SAMM Criteria

Projects set out in the RAMS are targeted specifically to those European sites affected and the types and scale of impacts identified through the evidence base (discussed in answer to Question 1).

Q19: SAMM Projects

The RAMS identifies a detailed programme of strategic mitigation measures which would be funded by contributions from residential development schemes (Chelmsford City Council, 2020a). The projects which make up the RAMS are set out in **Table 15** (see answer to Question 8) and can be summarised as follows:

1. Education and communication-

- Provision of information on sensitive birds and their habitats, a coastal code for visitors, maps with circular routes away from the coast on alternative footpaths, and information on alternative sites for recreation.
- Direct engagement led by rangers/volunteers, interpretation and signage, using websites, social media, leaflets and traditional media to raise awareness of conservation and explain the Essex Coast RAMS project; and direct engagement with clubs e.g. sailing clubs, ramblers’ clubs, dog clubs and local businesses.

2. Habitat based measures-

- **Fencing/waymarking/screening-** To direct visitors away from sensitive areas and/or provide a screen such that their impact is minimised.
- **Pedestrian (and dog) access-** Zoning; prohibited areas; and restrictions of times for access e.g. to avoid bird breeding season.
- **Cycle access-** Promote appropriate routes for cyclists to avoid disturbance at key locations.
- **Vehicular access and car parking-** Audit of car parks and capacity to identify hotspots and opportunities for ‘spreading the load’.

- **Enforcement-** Establish how the crew operating the river ranger patrol boat could be most effective, including to explain reasons for restricted zones to visitors.
- **Habitat creation-** Saltmarsh recharge, regulated tidal exchange and artificial islands may fit with Environment Agency Shoreline Management Plans.
- **Partnership working-** Natural England, Environment Agency, RSPB, Essex Wildlife Trust, National Trust, landowners, local clubs and societies.
- **Monitoring and continual improvement-** Birds and visitor surveys, including a review of the effectiveness of mitigation measures. Outputs of the review may include the introduction of new ways to keep visitors engaged.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

There are no multifunctional links set out specifically in the RAMS.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the RAMS.

Liverpool

Common tern (*Sterna hirundo*) Credit: Istock Images.



Liverpool City Region – Wirral Metropolitan Borough Council

Summary

Triggers for Mitigation

Most of the Wirral coastline, and wider coastline of Merseyside and Lancashire, has been designated as SAC, SPA and/or Ramsar owing primarily to its role in supporting wintering bird species and coastal habitat types. The following European sites fall within the Wirral mitigation interim approach:

- Mersey Estuary SPA and Ramsar;
- Mersey Narrows and North Wirral Foreshore SPA;
- Dee Estuary SAC, SPA and Ramsar; and
- Liverpool Bay SPA.

Recreational Evidence Base

Studies have been undertaken to analyse recreational activities that take place within the coastal sites in the LCR, including:

- Mersey Narrows and North Wirral Foreshore SSSI - Investigation into the Impacts of Recreational Disturbance on Bird Declines (Watola and Heard, 2015).
- Towards a Liverpool City Region European Sites Recreation Mitigation and Avoidance Strategy – Evidence Report (Version 24) (Merseyside Environmental Advisory Service, 2021).

Solutions for recreational impacts

Visitor surveys have been undertaken across the LCR coastline, and the collected data has been used to inform the mitigation solution. This includes:

- STEAM data, which are available for Sefton for the period 2009-2016 (Global Tourism Solutions (UK) Ltd. 2017).
- Recreational Activity and Interactions with Birds within the SSSIs on the North-West Coast of England (Liley and others, 2017).
- Wirral visitor and stakeholder research study in 2016 used to inform the Wirral Visitor Economy Strategy (2017-2020).
- Mersey Narrows and North Wirral Foreshore Sites of Special Scientific Interest - Investigation into the Impacts of Recreational Disturbance on Bird Declines (Watola and Heard, 2015.)
- Sefton's Natural Coast surveys (England's Northwest Research Service 2005; 2006; 2009; 2011).
- Merseyside Coast visitor surveys in 2000 as part of the Quality of Coastal Towns Interreg IIc Project.

- Sefton Coast Tourism Surveys 2018 (North West Research, 2019 unpublished).

The 2015 visitor surveys split main user group activities as shown in **Figure 16**.

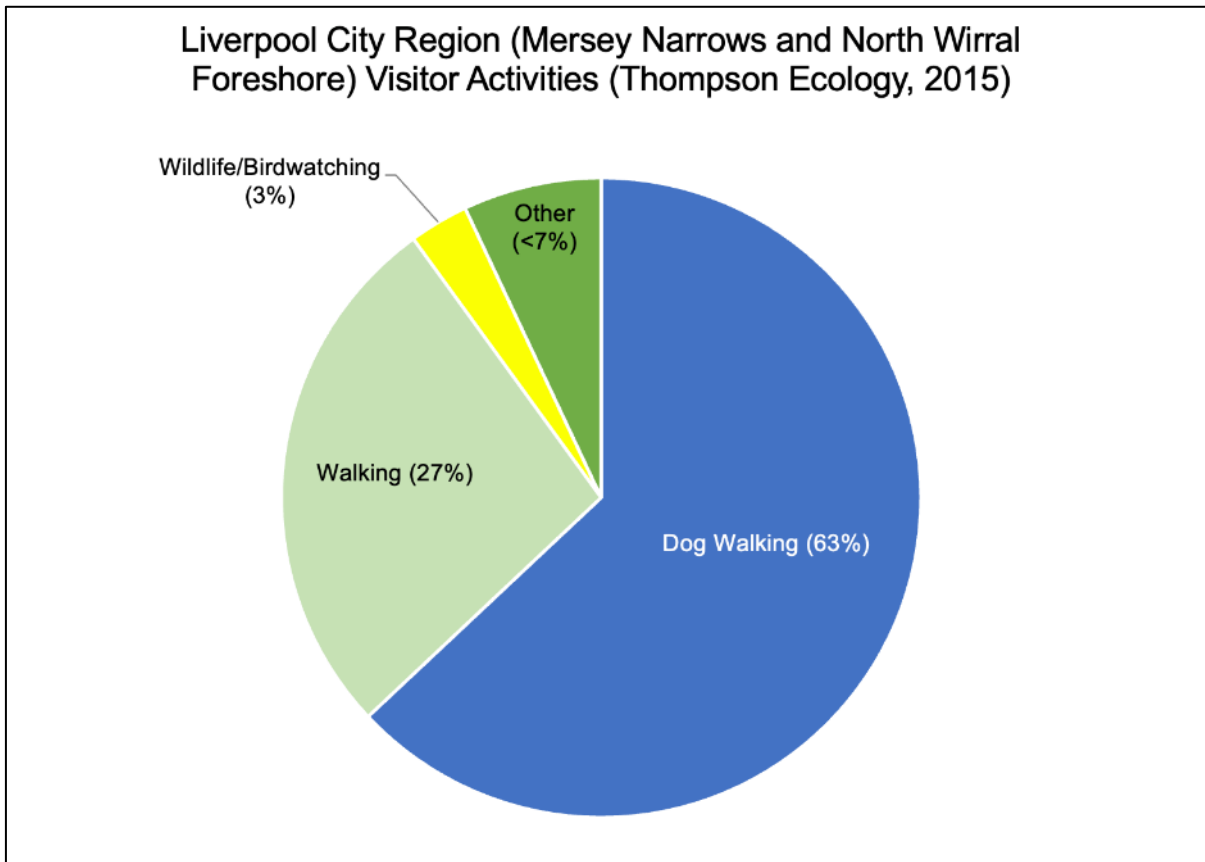


Figure 16: Visitor activities at the Mersey Narrows and North Wirral Foreshore designations (adapted from Thompson Ecology, 2015)

For the purpose of calculating the SAMM tariff (set out in the [Interim Approach to Avoid and Mitigate Recreation Pressure in Wirral](#)) each LPA provided their estimated housing projections in December 2015. A total of 9,298 qualifying houses were projected to be delivered over the period of Wirral’s Local Plan period (2021 – 2037) in the Interim Approach (IA). Details on other housing numbers within the affected areas are not provided in this IA.

Based on evidence of frequency of coastal visits in the LCR, two zones have been identified for the emerging RMS (Wirral Metropolitan Borough Council, 2022):

- **Inner Core Zone** (up to 5km to the European site boundaries): Analysis of the evidence of frequency of coastal visits in the LCR region indicates that 75% of the LCR coastal visitors originate from this zone.
- **Outer Zone** (over 5km from the European site boundaries): Number of visitors originating from this zone equates to 25% of the total coastal visitors.

Mitigation Solution

The IA for Wirral has considered two broad elements to provide mitigation which are based on well-established practices across the UK and the emerging LCR RMS. These key components include (Wirral Metropolitan Borough Council, 2022):

- **Suitable Alternative Natural Greenspace (SANGs)** – SANGs must be appropriately located, of sufficient scale and accessible to residents of existing and new development for them to be effective alternatives to visiting the coast.
- On-European **Site Access Management and Monitoring Measures (SAMMs)**. SAMM measures which are appropriate for Wirral and which can be targeted locally.

The Liverpool Combined Authority brings together the six local authorities of Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral within the LCR, along with West Lancashire Council. Together these LPAs have collectively developed the emerging Recreation Mitigation Strategy (RMS).

SAMM Solutions

Developer contributions are collected for new development within the 5km ZOI for LCR-Wide Mitigation Package RMS, with a contribution of £280.26 per unit within the core zone and £68.63 within the outer zone. The total cost of the mitigation scheme is £3,736,877.

Wirral's IA notes that the mitigation tariff applies to development sites with 10 or more units, for all residences (houses, flats, HMOs, and supported living facilities) that are submitted for planning approval, regardless of their floor space, occupancy, number of bedrooms or tenure. The Wirral IA does not apply to residential care facilities or nursing homes since it is believed that residents' access to the European sites would be limited and unlikely to cause recreational disturbance.

The mitigation measures set out in the IA are required to be in place in perpetuity (defined as 80 years).

SAMM projects target the following types of interventions:

- Communications, marketing and education initiatives;
- Installation of signage to SANGs;
- Provision of householder information packs for new housing developments;
- Site-specific visitor management and bird refuge projects; and
- Monitoring data on recreation use and effectiveness of interventions.

SANG Solutions

New/enhanced strategic SANG have been identified at a number of locations. Appendix 4 of the IA document lists the locational criteria for each of these including provision of a

circular walk of 3km. No details are provided on a metric or catchments for SANG however they must be delivered in perpetuity (80 years).

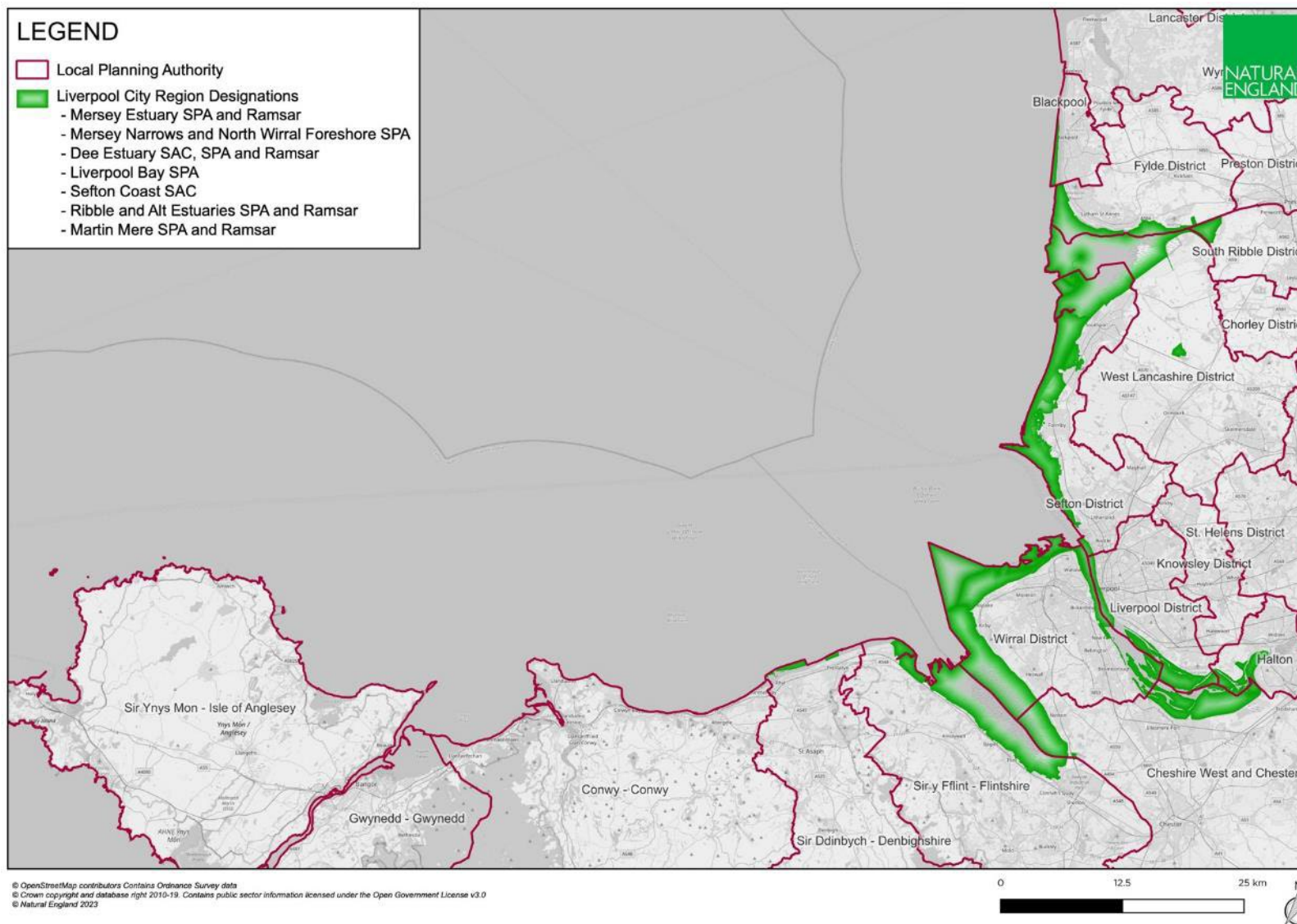


Figure 17: Location of Liverpool City Region Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

Most of the Wirral coastline, and wider coastline of Merseyside and Lancashire, has been designated as SAC, SPA and/or Ramsar owing primarily to its role in supporting wintering bird species (see **Figure 17**). The following European sites fall within the Wirral administrative boundary:

- Mersey Estuary SPA and Ramsar;
- Mersey Narrows and North Wirral Foreshore SPA;
- Dee Estuary SAC, SPA and Ramsar; and
- Liverpool Bay SPA.

The following European sites also fall within the wider Liverpool City Region (LCR):

- Sefton Coast SAC;
- Ribble and Alt Estuaries SPA and Ramsar; and
- Martin Mere SPA and Ramsar.

These sites are designated for their coastal habitat types and species which rely on these habitats, as set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

A variety of recreational activities undertaken within the coastal sites in the LCR have led to increasing pressure and disturbance to the protected bird species and habitats which support them. Investigations into recreational disturbance identified the need for monitoring of visitor pressure and bird disturbance and implementation of coordinated mitigation approach to address bird declines (Watola and Heard, 2015). This work recommended a zonal approach should be taken towards mitigation to discourage visitor access to certain intertidal areas through signage and education, and exploring options for introducing dog control orders and buffer zones.

An [evidence based study](#) (referred to as the Evidence Report) was commissioned by the LCR LPAs, in liaison with National Trust and Natural England. This seeks to bring together collected evidence and assist in preparing a strategic response to protect the coast in compliance with the Habitats Regulations (Merseyside Environmental Advisory Service (MEAS), 2021). It draws on available visitor and tourist data collected across various sites within the wider LCR coastal region over several years, including visitor interviews (Liley and others, 2017). The Evidence Report identifies that the coastal and estuarine sites are popular with dog walkers particularly in the winter, whereas in summer months there is a much larger visitor draw for water-based activities. Despite the popularity of the area with tourists, the research showed that local residents account for the majority of the visitor base.

The Liverpool Combined Authority brings together the six local authorities of Halton, Knowsley, Liverpool, Sefton, St Helens and Wirral within the LCR, along with West

Lancashire Council. Together these LPAs have collectively developed a Recreation Mitigation Strategy (RMS). The LCR RMS governs how the affected LPAs plan to reduce damage from recreation pressure and take a more comprehensive strategic approach to managing visitor pressure in the LCR (Wirral Metropolitan Borough Council, 2022).

One aim of the Evidence Report (MEAS, 2021) was to support the preparation of interim strategies for the LPAs within the LCR, prior to the RMS being implemented. Its implementation is expected to take place in June 2023.

As such, the [Interim Approach to Avoid and Mitigate Recreation Pressure in Wirral](#) (IA) outlines Wirral Council's strategy for mitigating the potential harm that recreational disturbance linked with the housing growth anticipated in the Wirral Local Plan 2021–2037 may cause to European sites (Wirral Metropolitan Borough Council, 2022).

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

The Evidence Report (MEAS, 2021) sets out an overview of avoidance and mitigation options to address recreational pressures. The report recommends the RMS should adopt a suite of measures to act in combination to provide efficient and effective mitigation; suggested measures include:

- Habitat creation;
- On-site visitor management and infrastructure improvements;
- Exclusion zones/fenced areas;
- Closing/re-locating car parks;
- Codes of conduct and communication; and
- Off-site informal provision and promoting watersport zones.

The IA for Wirral has considered two broad elements to provide mitigation which are based on well-established practices across the UK and the emerging LCR RMS. These key components include (Wirral Metropolitan Borough Council, 2022):

- **Suitable Alternative Natural Greenspace** (SANGs) – SANGs must be appropriately located, of sufficient scale and accessible to residents of existing and new development for them to be effective alternatives to visiting the coast.
- On-European **Site Access Management and Monitoring Measures** (SAMMs). SAMM measures which are appropriate for Wirral and which can be targeted locally.

The IA notes that it is not plausible that significantly more new greenspaces (e.g. parks, greenspaces or other open spaces) can be delivered as SANG measures across the LCR, or in Wirral, in the short- to medium-term (about 5 years) due to lack of space and funds. As a result, the Council will make advantage of the potential of its current GI, particularly

its most notable parks, to provide more recreational opportunities (Wirral Metropolitan Borough Council, 2022). As such the SANG mitigation set out in the IA focusses on the following three aspects:

- “Increasing the capacity and functionality of Wirral’s existing green and open spaces for the purpose of delivering additional recreational capacity;
- Creating an integrated network of SANGs through better linkage of smaller green and open spaces; and
- Enhanced accessibility, awareness and promotion of SANG provision with residents as alternatives to recreation visits to European sites”.

The SAMMs element of the strategy focuses on the following aspects (Wirral Metropolitan Borough Council, 2022):

- “Raising awareness and encouraging behavioural change of visitors to the coast;
- Implementing projects to better manage visitors and provide secure habitats for the birds; and
- Providing and promoting new/ enhanced greenspaces in less sensitive areas as an alternative to visiting the coast” (i.e. promoting the SANG element of the strategy).

Q3: Zone of Influence

Based on evidence regarding the frequency of coastal visits in the LCR, two zones have been identified for the emerging RMS (Wirral Metropolitan Borough Council, 2022) (see **Figure 18**):

- **Inner Core Zone** (up to 5km to the European site boundaries): Analysis of the evidence of frequency of coastal visits in the LCR region indicates that 75% of the LCR coastal visitors originate from this zone.
- **Outer Zone** (over 5km from the European site boundaries): Number of visitors originating from this zone equates to 25% of the total coastal visitors.

For the purposes of the IA, the entire administrative area of Wirral is considered to be within the Inner Core Zone as only a small parcel of land in the middle of Wirral is more than 5km from the coast and there are no proposed allocations within this area in the emerging Wirral Local Plan 2021–2037 (Wirral Metropolitan Borough Council, 2022).

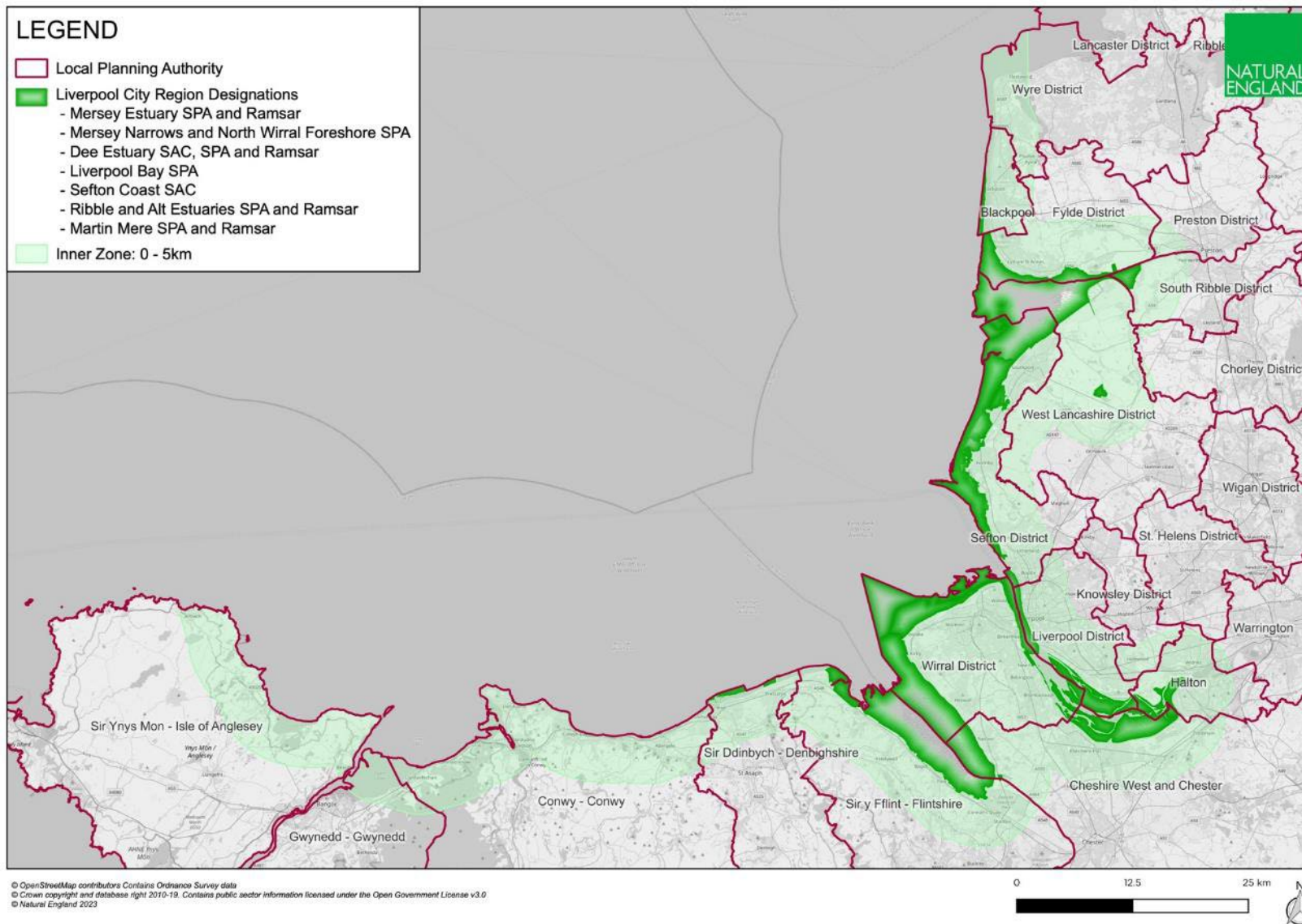


Figure 18: Liverpool City Region designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

The RMS is a collaboration led by affected LPAs, Mayoral Combined Authority, National Trust, Natural England and Sefton Coast Landscape Partnership.

Q5: Policy

The current adopted plan for Wirral is the Unitary Development Plan (Wirral Metropolitan Borough Council, 2000) which predates the preparation of the emerging RMS or IA. The Wirral Local Plan 2021-2037 is being prepared and as of 26th October 2022, the draft has been submitted for independent Examination. Policy WS5.5 in the emerging local plan provides the basis to protect the coastal European sites from the impact of housing development over the plan period (Wirral Metropolitan Borough Council, 2022). Relevant sections of this policy wording are copied in **Box 8**.

Box 8: Policy for recreational mitigation in the emerging Wirral Local Plan (Wirral Metropolitan Borough Council, 2022)

Strategic Policy WS5.5: Mitigating Recreational Disturbance on International Sites for Nature Conservation

“N. Following screening, developments that are deemed likely to have a significant adverse effect (either individually or in combination with other developments) on European Designated Sites for Nature Conservation must satisfy the requirements of the Habitats Regulations, determining site specific impacts and avoiding or mitigating significant adverse impacts where identified. A precautionary approach to each stage of the Habitats Regulations Assessment process must be taken.

O. Where appropriate, contributions from developments will be secured towards mitigation measures identified in the LCR Recreational Disturbance Avoidance and Mitigation Strategy (RMS) which will be completed during the early part of the plan period. It is intended that the RMS will be implemented via a Supplementary Planning Document in cooperation with all LCR authorities and Natural England and it will be 5 funded by developer contributions in respect of residential and tourism accommodation developments.

P. Prior to the completion of the RMS, the Council will seek contributions as set out in the Wirral Recreational Management Interim Approach document, where appropriate, from residential proposals of 10 or more dwellings to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational disturbance impacts in compliance with the Habitats Regulations and Habitats Directive.”

Q6: Delivery Body

As set out in answer to Questions 1 and 4, the LPAs are expected to be responsible for delivery of the RMS in collaboration with Natural England and other partners.

Q7: Types of Development

According to the Evidence Report, the emerging RMS will focus on residential development only and will not address tourism development (MEAS, 2021).

Wirral's IA notes that the mitigation tariff applies to development sites with 10 or more units, for all residences (houses, flats, HMOs, and supported living facilities) that are submitted for planning approval, regardless of their floor space, occupancy, number of bedrooms or tenure (Wirral Metropolitan Borough Council, 2022).

The Wirral IA does not apply to residential care facilities or nursing homes since it is believed that residents' access to the European sites would be limited and unlikely to cause recreational disturbance.

Q8: Developer Contributions

The mitigation charging schedule for each zone in the emerging LCR RMS is set out in **Table 16** (Wirral Metropolitan Borough Council, 2022).

Table 16: LCR-Wide Mitigation Package RMS – 01/04/19 baseline (Wirral Metropolitan Borough Council, 2022)

Category	2019 base	Mitigation (£s)/ Units
SANG	£1,823,596	-
SAMM	£1,913,281	-
Mitigation Total	£3,736,877	-
Qualifying units (Core zone)	10,346	£280.26
Qualifying units (Outer zone)	12,200	£68.63
Qualifying units (Total)	22,445	-

The [IA document's](#) Appendices 4 and 5 provide a schedule for the proposed SAMM interventions and SANG.

Q9: Timescales for Delivery

The mitigation measures set out in the IA are required to be in place in perpetuity (defined as 80 years). This includes SANG initial establishment costs, annual maintenance costs and cyclical replacement costs, along with staff costs (Wirral Metropolitan Borough Council, 2022).

Q10: Other initiatives

The Wirral IA notes that if developers choose not to participate in the IA, they will still be expected to employ a strategy that adheres to the same guidelines as those outlined in the upcoming LCR RMS (Wirral Metropolitan Borough Council, 2022).

Q11: Monitoring

The implementation of mitigation measures will be monitored using the Wirral IA Monitoring Framework shown in **Table 17**. The framework will keep track of the mitigation actions taken, how they relate to development pressure, and their success rate (Wirral Metropolitan Borough Council, 2022).

Table 17: Wirral IA Monitoring Framework (Wirral Metropolitan Borough Council, 2022)

Indicator	Target	Reporting Period for Local Plan Annual Monitoring Report
Amount of qualifying new residential development (number of dwellings permitted and number of dwellings completed, by site/ location)	Amount of qualifying new residential development matches that expected in the planned annual housing delivery/ Local Plan housing trajectory	Annual
Amount of developer contributions sought for Recreational Management mitigation from qualifying developments (amount per development/ site)	Amount of contributions secured and received matches the amount required in accordance with the Charging Schedule	Annual
Changes in numbers of birds for different sections of the internationally designated sites	No change in area of the internationally designated sites	Every two years

Indicator	Target	Reporting Period for Local Plan Annual Monitoring Report
Increased visitor numbers at each of the Strategic Alternative Natural Greenspace sites	Annual increase	Annual
Changes in visitor behaviour and awareness of recreational impacts	Visitor understanding and actions align with the objectives of the mitigation measures	Annual

Q12: Communication Strategy

Mitigation measures set out in the emerging LCR RMS include communications, marketing and education initiatives such as (Wirral Metropolitan Borough Council, 2022):

- Targeted awareness raising at specific activities or user groups, e.g. dog walkers and drone pilots.
- Increased Wirral Council Ranger staffing hours targeted on raising awareness through engaging with coastal visitors, explaining the vulnerability of the birds and advising how to avoid damage/disturbance. Responsible Coastal User signage will be installed at main access gateways where they do not currently exist, including:
 - Parts of North Wirral Coastal Park - Leasowe Lighthouse and Bay;
 - Rock Ferry shoreline;
 - New Brighton Mersey shoreline;
 - Derby Pool;
 - Hoylake to Red Rocks;
 - Red Rocks to West Kirby Marine Lake; and
 - Thurstaston shore.
- Installation of signage to SANGs including on highways and targeted waymarking from new housing developments, where appropriate, to the nearest SANGs with an emphasis on dog walking routes and new/enhanced cycling and walking links.
- Provision of householder information packs for new housing developments, informing residents of the presence and importance of European sites and explaining how residents can avoid damage and disturbance to those sites, including the Responsible Coast User Code.

SANG

Q13: Identify the components that make up the SANG projects.

The following new/enhanced SANGs have been identified (Wirral Metropolitan Borough Council, 2022):

- Arrowe Country Park (focus of enhancements in the short to medium term).
- Potential for enhancements at the following locations - Ashton Park; Birkenhead Park; Central Park; Mayer Park; Royden Country Park; Torr Park; Vale Park, Wallasey; and Wirral Way targeted at coastal access locations.

Appendix 4 of the IA document lists the locational criteria for each proposed SANG and these include (Wirral Metropolitan Borough Council, 2022):

- “A wholly new site or an enhancement of existing public open space if the site is currently underused and has substantial capacity to accommodate recreational activity or could be expanded, taking into account the availability of land and its potential for improvement;
- Be in a location where it will divert visitors especially dog walkers away from sections of SPA which are sensitive to additional human disturbance and where a significant increase in visitors due to the increase in potential housing development is anticipated;
- Be located where it will attract visitors who would otherwise have gone to those sections of the Estuary;
- Be large enough to include a variety of paths which enable at least one circular walk of at least 3 km (approx. a 60 min walk);
- Be in a location where a SANG would be acceptable in terms of planning policy and traffic generation, and would not have an unacceptable impact on biodiversity e.g. a nature conservation site protected under a national designation;
- Has views of the Estuary which are not too distant or include a sizeable water feature;
- Has a varied topography with some gentle slopes, a mix of open and wooded areas, and a focal point such as a viewpoint, monument, etc;
- Designed so that the SANG is perceived by uses as a cohesive semi-natural space which is safe and easily navigable;
- Paths must be clearly discernible, well signposted/ waymarked and have firm, level, well drained surfaces (albeit unsealed to avoid any ‘urban feel’) in order to be useable throughout the winter;
- Dogs are welcome and the majority of the sites are suitable for safe off-lead dog exercise.
- Dog waste bins are planned/provided.”

Q14: Has a green space standard or metric been used?

No green space standard and/or metric is included in the emerging LCR RMS or Wirral IA.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the emerging LCR RMS or Wirral IA.

Q16: Is the quantity of SANG available to the LPA published?

As mentioned in answer to Question 2, the LCR RMS and the Wirral IA set out to enhance the existing recreational provisions to provide SANG. At present the only identified SANG in Wirral is Arrowe Country Park, details of which are provided in the IA.

Q17: Are details available for each SANG?

Appendix 4 of the IA document provides 'SANG Site Mitigation Proformas' including details such as map, location, size and details of each mitigation measure for Arrowe Country Park SANG.

SAMM

Q18: SAMMs Criteria

There are no specific criteria established to determine the requirements for SAMM. Projects set out in the emerging LCR RMS are based on the evidence base which indicates the potential impact of the development proposed in the Wirral Local Plan over the plan period and measures to avoid/mitigate these effects.

Q19: SAMMs Projects

As set out in answer to Question 2, the SAMMs element of the IA focuses on communication, monitoring, encouraging behavioural change and protecting important bird habitats.

Site-specific visitor management and bird refuge projects include the following (Wirral Metropolitan Borough Council, 2022):

- Signage and interpretation that promotes general good behaviour and increases knowledge of coastal European sites and issues associated with recreation;
- Travel-related measures including managing capacity issues at key destinations such as car park capacity and promotion of less sensitive locations at the SANGs, which will be communicated on the Council website and through social media;
- Footfall counters to record visitor numbers at key sensitive coastal locations;
- Infrastructure deployment and maintenance on or near to the key coastal locations, e.g. path management and fencing to disperse visitor pressure and/or manage access desire routes;
- Provision of bird refuge stations in partnership with appropriate voluntary organisations;
- Creation of dog walking locations and routes; and
- Creation of circular trails within and between existing parks.

Details on the communications element of the SAMMs are set out in answer to Question 12.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The IA notes that the RMS would benefit from the strategic improvement of “management and quality of green, blue and open spaces through integration with other Local Authority plans and strategies such as Green and Blue Infrastructure plans (e.g. emerging Wirral Green and Blue Infrastructure evidence base), Access Plans and Coastal Plans including implementation arrangements (e.g. Sefton Coast Plan)” (Wirral Metropolitan Borough Council, 2022).

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the emerging LCR RMS or Wirral IA.

New Forest

New Forest. Credit: Istock images.



New Forest – New Forest National Park Authority

Summary

Triggers for Mitigation

The New Forest comprises a mosaic of habitats including lowland heath, valleys and fens, ancient pasture woodland, riparian and bog woodland and a range of acid to neutral grasslands. It supports three European site designations: The New Forest SAC, SPA and Ramsar. These designations fall within the wider New Forest National Park.

Recreational Evidence Base

Work undertaken to identify recreational pressure from new development on the New Forest highlighted a number of issues, including disturbance to birds, nutrient enrichment, trampling, compaction and erosion (Lake and others, 2020).

Solutions for recreational impacts

Visitor surveys have been undertaken since 2004 to understand how many people are visiting the New Forest, visitor profiles and their purpose for visiting. This data has been used to inform the mitigation solution and includes:

- A survey of recreational visits to the New Forest National Park (Tourism South East Research Services and Geoff Broom Associates, 2005).
- New Forest National Park Recreation and Leisure Visits (RJS, 2018).
- Recreation use of the New Forest SAC/SPA/Ramsar: Impacts of recreation and potential mitigation approaches (Lake and others, 2020).
- Recreation use of the New Forest SAC/SPA/Ramsar: Overview of visitor results and implications of housing change on visitor numbers (Liley and others, 2019a).
- Recreation use of the New Forest SAC/SPA/Ramsar: New Forest visitor survey 2018/19 (Liley and others, 2019b).
- Recreation use of the New Forest SPA/SAC/Ramsar: Results of a telephone survey with people living within 25km (Liley and Panter, 2020b).

The 2019 visitor surveys split main user group activities as shown in **Figure 19**.

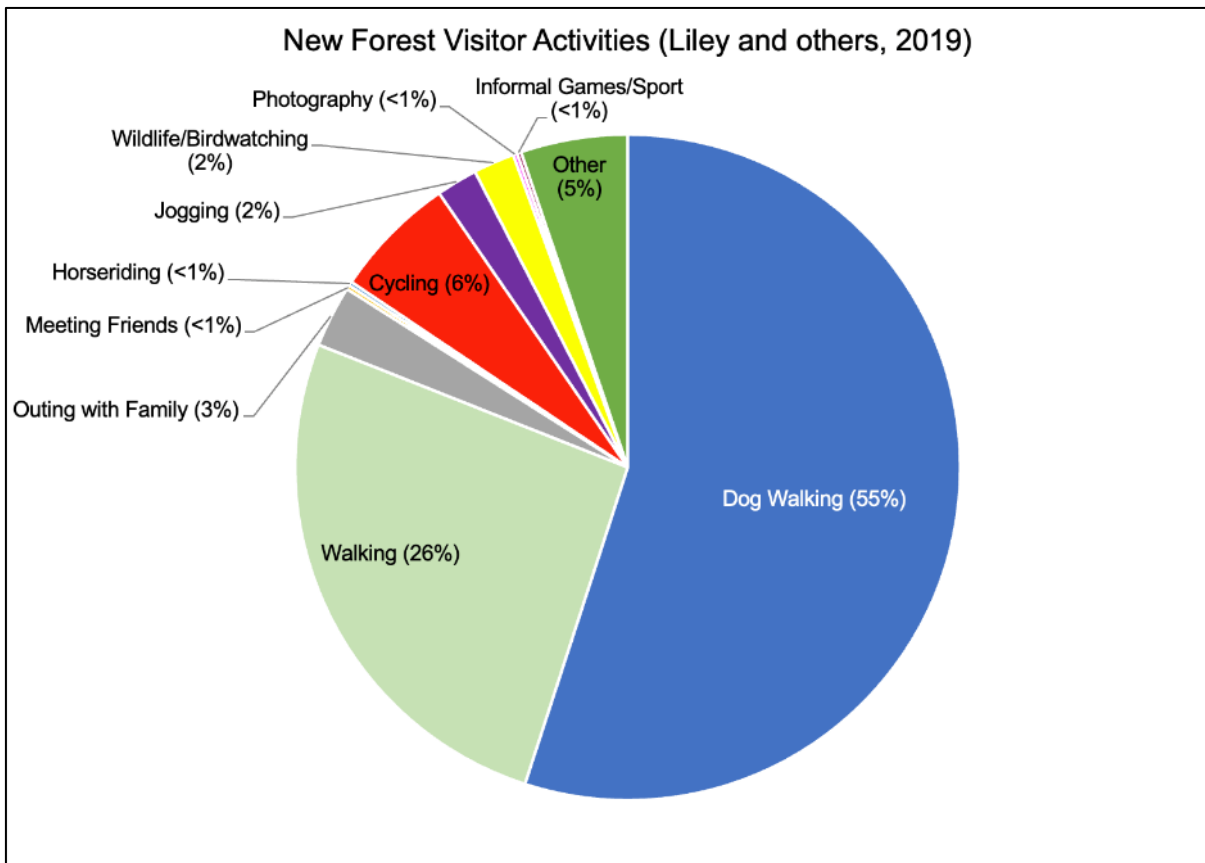


Figure 19: Visitor activities at the New Forest designations (adapted from Liley and others, 2019)

For the purpose of calculating developer contributions towards the Revised Mitigation Scheme, additional housing (dwellings and visitor accommodation bedspaces) was calculated for the National Park Authority plan period (until 2036) and totalled 740 new dwellings.

A ZOI of 13.8km was established based on the output of visitor surveys. This used the 75% percentile method applied to people on a short visit or day trip, applied as a straight line from the designation boundaries. This ZOI took into consideration the presence of the River Test/The Solent as a barrier to movement.

Mitigation Solution

The New Forest National Park Recreation Management Strategy comprises a mixture of recreational avoidance and mitigation (RAM) projects.

There is an identified need for collaborative working to address the cumulative effects of residential development arising in areas surrounding the New Forest National Park. The coordinated strategic approach is expected to also apply to other LPAs within the 13.8km ZOI including Dorset Council, Fareham Borough Council and Bournemouth, Christchurch and Poole (BCP) Council.

SAMM Solutions

Developer contributions are collected for new development within the 13.8km ZOI to fund the RAM projects.

Contributions of £3,512.00 per residential dwelling are required, with new serviced visitor accommodation (e.g. hotels) contributing £2,739.00 per additional bedroom. The funding requirement for other types of accommodation is determined on a case-by-case basis.

In perpetuity has been taken as 100 years for the purposes of funding, with mitigation costs over the New Forest NPA Plan period totalling £892,500.00 and costs beyond 2026 to cover in perpetuity requirements totalling £21,035.00 per year until 2136. Mitigation projects target the following types of interventions:

- Access management;
- Raising education and awareness; and
- Monitoring and research.

SANG Solutions

Given the small scale of development anticipated with the NPA boundary (averaging less than 40 dwellings per annum across the National Park), no SANG is provided within its administrative area. Elements of green space provision however forms part of the mitigation strategy taken by other LPAs within the ZOI.

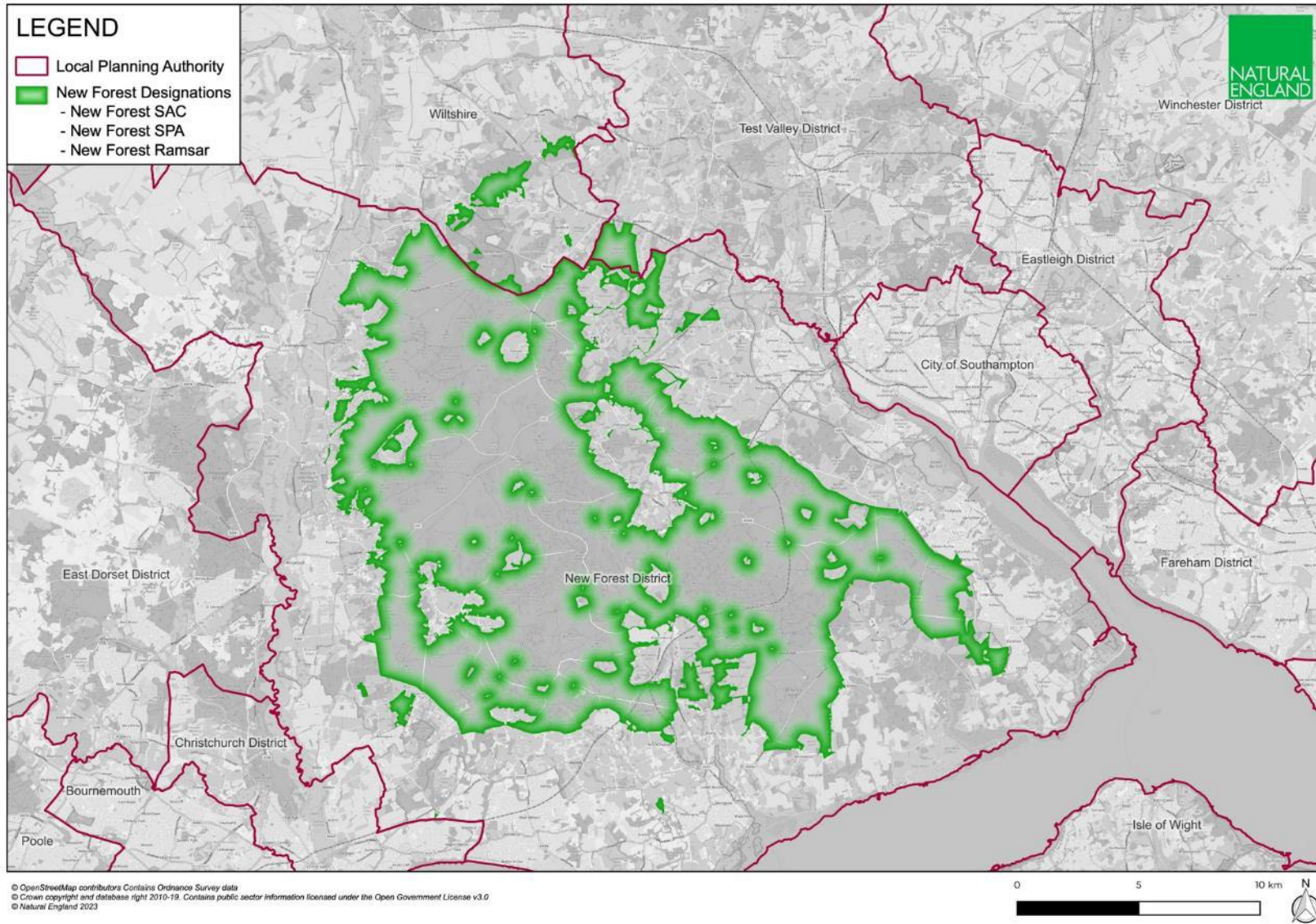


Figure 20: Location of New Forest Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

The New Forest National Park supports three European site designations: The New Forest SAC, New Forest SPA and New Forest Ramsar (see **Figure 20**). The SPA and Ramsar designations cover the same area of c.28,000ha, whereas the SAC designation extends slightly further covering c.29,000ha. The wider National Park designation comprises c.56,600ha, the majority of which lies within the New Forest District, with smaller proportions falling within Wiltshire Unitary Authority and Test Valley District.

The New Forest comprises a mosaic of habitats including lowland heath, valleys and fens, ancient pasture woodland, riparian and bog woodland and a range of acid to neutral grasslands (Natural England, 2019b). These habitats support a range of species and in particular a rich bird assemblage (see qualifying features in Appendix A). The New Forest is a popular destination for tourism, leisure and recreation, receiving approximately 13.5 million day visits per year (RJS Associates, 2018).

Q1: Recreational Impacts Evidence and Background Information

The Site Improvement Plan for the New Forest (Natural England, 2014a) indicates a range of pressures and threats to the condition of the qualifying features of both the SAC and SPA designations, relating to land management practices as well as from recreation including “disturbance to qualifying Natura 2000 species and compaction, abrasion and other modifications to vegetation, soils and watercourses”.

As a National Park, under the Environment Act (1995) the New Forest has a statutory purpose to (1) Conserve and enhance the natural beauty, wildlife and cultural heritage; and (2) Promote opportunities for the understanding and enjoyment of the special qualities by the public. As such, planning policies and decision-making regarding the New Forest area needs to carefully consider the levels of public recreation and enjoyment that are appropriate without compromising the conservation interest of the site including the underlying SAC/SPA/Ramsar designations.

Research undertaken by Tourism South East (TSE) in 2004 and 2005 (TSE Research Services and Geoff Broom Associates, 2005) sought to understand how many people were visiting the New Forest, their characteristics, and their purpose for visiting (i.e. the type of recreational activity). This study found a total of 13.5 visitor days to the New Forest National Park area in 2004 for recreation and leisure, with dog walking or going for a short walk being the most common reason for visiting.

A subsequent study in 2017 (RJS, 2018) was carried out to determine how these visits have changed over time, to help inform the mitigation strategy. This study found an overall increase in unique visitors, trips and visitor days since 2004. According to the study, most visitor days were from a small number of local walkers who visit the forest regularly. Local walkers were defined as “Visitors resident in the NFNP and adjacent area (i.e. day visitor zones 1 and 2) and going for a short walk or walking the dog” (RJS, 2018).

More recently, a series of research projects have been carried out to further investigate recreational use and visitor profiles of the New Forest. This included a series of surveys via telephone, face-to-face interviews, and vehicle counts (Lake and others, 2020; Liley and others, 2019a; 2019b; Liley and Panter, 2020b). The research focused on interviewees living within a 25km radius of the New Forest SAC/SPA/Ramsar, because this was the distance used for previous survey work (i.e. the study by TSE Research Services and Geoff Broom Associates, 2005) and ensured that *“data were collected from a wide geographic area, including those living some distance away from the New Forest, while also ensuring that the survey was relevant to the New Forest area and included residents who might visit the New Forest”* (Liley and Panter, 2020b). A potential 16.4% increase in housing within 25km was calculated over the period 2018-2036. The reports noted a range of potential impacts from this projected increase in visitors to the New Forest arising from the planned new development. This includes:

- **Disturbance to birds** – including avoidance of breeding habitat and reduced breeding success as well as physiological impacts.
- **Disturbance to grazing animals** – worrying of livestock by dogs, gates left open, road traffic accidents.
- **Wildfire** – leading to habitat loss, altering vegetation structure, and direct mortality.
- **Cats and other urban predators** – causing direct mortality of rare bird species.
- **Contamination and nutrient enrichment** – associated with littering, dog fouling, greywater from camping sites and air pollution from traffic.
- **Spread of alien species and pathogens** – leading to adverse effects on important habitats and populations of rare species that are vulnerable to invasion.
- **Trampling, compaction and erosion** – leading to habitat loss, churning of sediment in waterbodies.
- **Management problems** – conflicts with public perceptions of management and visitor expectations.
- **Habitat fragmentation** – e.g. by roads.
- **Harvesting** – such as collection of wood and fungi.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

For the New Forest National Park Authority (NPA) area, a Habitat Mitigation Scheme was first established in 2012 (New Forest NPA, 2012) to support the previous Core Strategy, which was superseded by the [Revised Mitigation Scheme](#) SPD in 2020 (New Forest NPA, 2020a). The Mitigation Scheme requires all new residential development and visitor accommodation throughout the National Park to provide mitigation for their recreational impacts on the New Forest’s protected sites, for the full lifetime of the development.

The key elements of the Mitigation Scheme (New Forest NPA, 2020a) are:

- **Access management within the designated sites:** Facilities and physical changes ‘on the ground’ designed to reduce impacts, including changes to visitor focal points, signage and route waymarkers.
- **Alternative recreational greenspace sites and routes outside the designated sites:** New and improved sites, routes and facilities chosen and designed to accommodate recreation, including close to where people live.
- **Education, awareness and promotion:** Initiatives that enhance people’s understanding of protected species and vulnerable habitats and encourage responsible recreation, e.g. through ranger activities, education programmes, events, exhibitions, publications, films, web-based information, and social media campaigns.
- **Monitoring and research:** Collating data and evidence to assess the implementation and effectiveness of the mitigation measures and providing information to inform revisions to the Scheme where necessary.
- **In perpetuity funding:** To ensure mitigation will last as long as the effects of new development, because people will continue to enjoy recreation on the designated sites for the lifetime of a new dwelling, and not just until the end of the plan period.

The research reports regarding recreational use of the New Forest’s protected habitats (see answer to Question 1) recommended that a strategic, proportionate and coordinated approach is developed by relevant LPAs and stakeholders to help deliver a consistent approach to mitigation based on the evidence collected.

In 2019, New Forest organisations agreed a suite of [22 strategic actions](#) (New Forest NPA, 2019a) to manage recreation across the National Park, one of which is to “Develop a coordinated approach among planning authorities in and around the New Forest to mitigate the impacts of new housing on protected areas – and use developer contributions to support work that protects the Forest”.

A number of potential approaches, which could together form a strategic package of avoidance and mitigation measures to address recreational effects, are set out in the study by Lake and others (2020) including:

- Providing alternative recreational green spaces/routes outside the designations;
- Improving access management within the designations;
- Communication and educational activities, both within and outside the New Forest designations;
- Siting of new development to avoid/reduce impacts; and
- Monitoring.

Suggested approaches within the report include either contributions to the mitigation scheme to address likely types of access, or measures linked to new developments such as SANG (Lake and others, 2020).

According to the Annual Report on Scheme Implementation (New Forest NPA, 2021), and building on the findings of the various research reports, ongoing work is being carried out

to develop a longer-term strategic approach to prevent adverse effects on the New Forest designations from residential development planned in areas outside of the National Park boundary, supported by Natural England. At present, this responsibility lies with each of the neighbouring LPAs.

The [New Forest National Park Recreation Management Strategy 2010-2030 \(RMS\)](#) (New Forest NPA, 2010) sets out the strategic direction for the management of outdoor recreation in the New Forest from 2010 to 2030, seeking to guide recreation and spatial planning across the National Park and adjoining areas. The RMS sets out the intention to establish a New Forest Recreation Management Steering Group to oversee this.

Q3: Zone of Influence

At present, there is no formally adopted ZOI within which strategic mitigation measures apply.

The New Forest Zone of Influence Report (Liley and Caals, 2021) recommends the use of the 75th percentile method for defining the ZOI, applied as a straight-line distance to the boundary of the SAC/SPA/Ramsar designations.

Visitor survey data indicated that 75% of people on a short visit/day trip from at the New Forest live within 13.8km of the New Forest (Liley and others, 2019b). Whilst the New Forest is also a popular destination for tourists, research has shown that although tourists do visit from a wide geographic area, they make up a minority of total visits when compared to local people who visit frequently (Liley and Caals, 2021).

Owing to the barrier to movement presented by the River Test/The Solent it was recommended to exclude the following LPAs which lie partially within the 13.8km ZOI: Gosport, Fareham, Winchester, and the Isle of Wight (Liley and Caals, 2021); although, subsequent advice from Natural England suggested development in Fareham is likely to contribute to cumulative effects and should therefore be included in the ZOI (Fareham Borough Council, 2021). It was further recommended by Liley and Caals (2021) that a wider 15km zone is established within which larger-scale developments would be subject to HRA to determine bespoke mitigation requirements.

Following the recommendations of the ZOI report (Liley and Caals, 2021) and advice from Natural England, it is anticipated that whilst the coordinated strategy is being established, LPAs within the 13.8km ZOI will develop an interim approach, or continue to use their own existing approach, for mitigation of recreational impacts of new development at the New Forest.

The 13.8km ZOI and affected LPAs are shown in **Figure 21**.

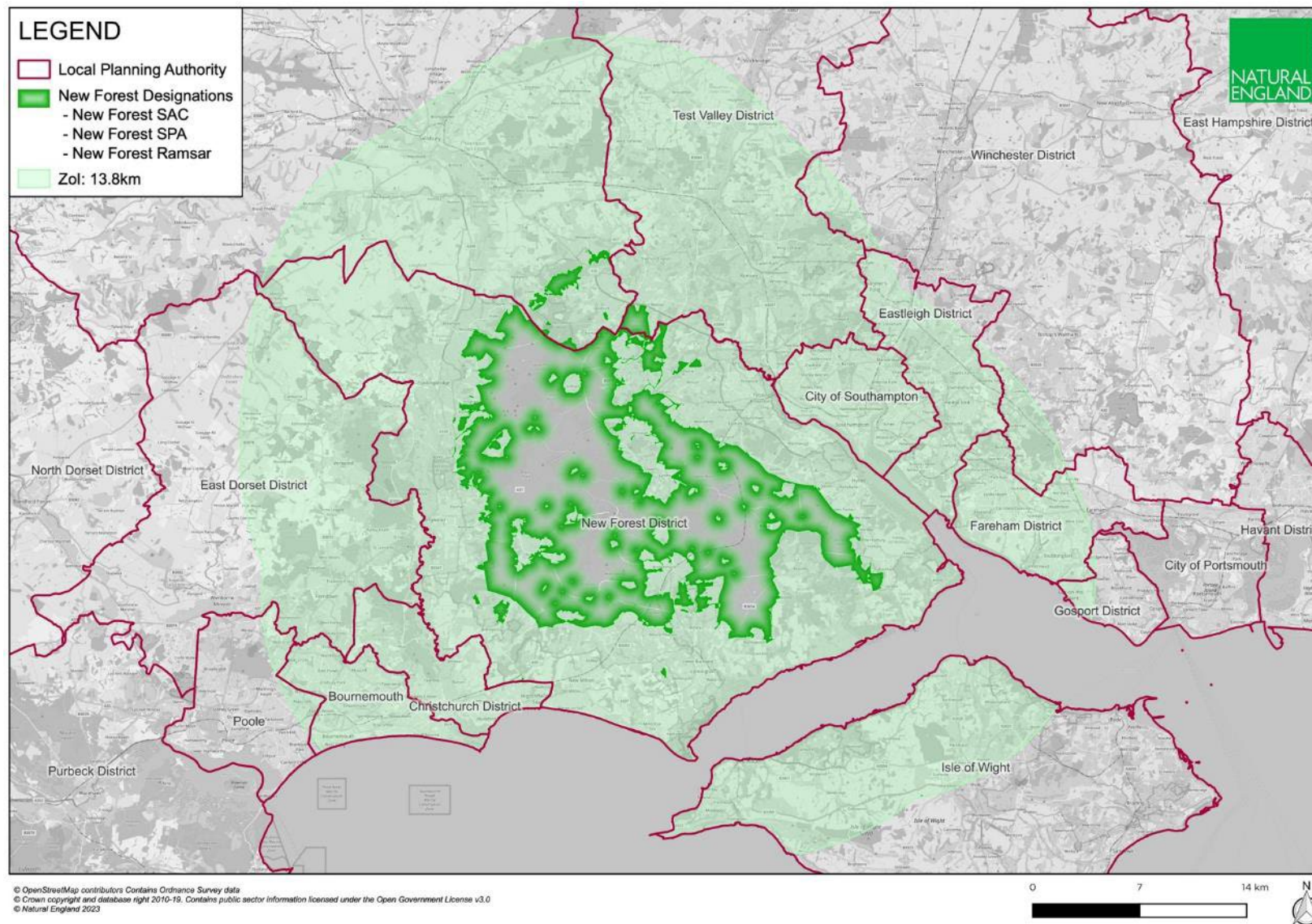


Figure 21: New Forest Designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

As discussed in answer to Question 2, there is an identified need for collaborative working to address the cumulative effects of residential development arising in areas surrounding the New Forest National Park.

Research has been undertaken (e.g. Lake and others, 2020; Liley and others, 2019a; 2019b; Liley and Panter, 2020b) on behalf of the following six LPAs, alongside Natural England and Forestry England, who currently have their own mitigation approaches:

- Test Valley Borough Council – [Draft New Forest Recreational Mitigation SPD](#) (Test Valley Borough Council, 2021);
- Eastleigh Borough Council – [Interim New Forest Recreation Mitigation](#) (Eastleigh Borough Council, 2019);
- New Forest District Council (outside the National Park) – [Mitigation for Recreational Impacts on the New Forest European Sites SPD](#) (New Forest District Council, 2021);
- New Forest NPA – [Habitat Mitigation Scheme SPD](#) (New Forest NPA, 2020a);
- Southampton City Council (no apparent strategy in place); and
- Wiltshire Council – [Interim Recreation Mitigation Strategy for the New Forest](#) (Wiltshire Council, 2022).

The coordinated strategic approach is expected to also apply to Dorset Council, Fareham Borough Council and Bournemouth, Christchurch and Poole (BCP) Council (within the 13.8km ZOI – see Question 3).

Q5: Policy

The New Forest National Park Local Plan (New Forest NPA, 2019b) sets out a planning policy (see **Box 9**) which requires contributions to European site mitigation schemes.

Box 9: The New Forest National Park Local Plan – Policy SP5 (New Forest NPA, 2019b)

Policy SP5: Nature conservation sites of international importance

“All development must comply with the Conservation of Habitats and Species Regulations 2017 (as amended). Development which may affect the integrity of an internationally important site for nature conservation will not be permitted unless there are imperative reasons of overriding public interest for the development, and there are no alternatives. If this is the case, the Authority will require compensatory measures to ensure the overall coherence of the designated site.

Development may satisfy the Conservation of Habitats and Species Regulations if sufficient and effective measures are put in place to avoid or fully mitigate any likely significant adverse effects of the proposal (either individually or in combination with other

Policy SP5: Nature conservation sites of international importance

plans and projects) through its lifetime on the designated sites. A contribution to the Authority's Habitat Mitigation Scheme and/or the Solent Recreation Mitigation Partnership's Scheme will enable developers to ensure that mitigation measures are secured for the recreational impacts of their development. The type of development and situations where recreational impacts can be mitigated are described in the Authority's Habitat Mitigation Scheme and the Solent Recreation Mitigation Strategy Explanatory Note.

Avoidance or mitigation may not be possible in some cases due to the impacts, scale, type, or proximity of the proposed development in relation to the designated site, and so the Authority will assess each case on its merits."

Policy SP5 as set out in **Box 9** is supported by the Revised Habitat Mitigation Scheme SPD (New Forest NPA, 2020a). The SPD sets out further guidance to that provided in the policy, regarding the types of development which could lead to recreational impacts on the New Forest SAC/SPA/Ramsar, as well as the required mitigation measures and associated costs.

Q6: Delivery Body

Within the New Forest National Park, the NPA are responsible for delivery of appropriate mitigation measures as part of the Habitat Mitigation Scheme Steering Group. The Steering Group comprises representatives from the RSPB, Hampshire Wildlife Trust, Natural England and New Forest District Council in addition to the NPA (New Forest NPA, 2021).

As outlined in answer to Question 2, the RMS (New Forest NPA, 2020a) proposes to establish a new Steering Group to oversee the implementation of the emerging strategic mitigation approach.

Many different organisations, authorities and businesses are directly involved in managing recreational activity in the New Forest. The New Forest NPA is the LPA for the area but does not directly own or manage any property/facilities within the National Park.

Q7: Types of Development Covered

The current approach to mitigation within the NPA area requires financial contributions from all net new residential development and visitor accommodation. The Habitat Mitigation Scheme SPD (New Forest NPA, 2020a) sets out guidance based on the approach taken in the Dorset Heaths Planning Framework (Dorset Council and BCP Council, 2020a) whereby the requirements apply to residential and tourist development in general, but some uses, such as Use Class C2 (e.g. residential care homes and hospitals) will be considered on a case-by-case basis as recreational mitigation measures may not be required if the residents are not active.

Q8: Developer Contributions

The Habitat Mitigation Scheme SPD (New Forest NPA, 2020a) sets out requirements for developer contributions from development within the National Park towards mitigation measures within the Local Plan period, and longer-term measures beyond the Plan period.

The contribution required to enable a developer to ensure that appropriate mitigation is secured through the SPD for each net new dwelling is £3,512. This has been calculated based on the total cost of the measures set out in the SPD:

- Until 2036 (£892,500), divided by the number of dwellings planned for in the Local Plan; and
- Beyond 2036 (£21,035 per year), to provide sufficient financial reserve to account for the in-perpetuity requirements until 2136.

For new serviced visitor accommodation (e.g. hotels), the contribution level is determined at £2,739 per new additional bedroom. The funding required from other visitor accommodation types will be determined on a case-by-case basis.

Contributions will be secured through either CIL or S106 agreements depending on circumstances.

Q9: Timescales for Delivery

The Mitigation Scheme set out in the Revised Habitat Mitigation Scheme SPD (New Forest NPA, 2020a) requires in-perpetuity mitigation and funding, which is defined as 100 years.

Q10: Other initiatives

The Habitat Mitigation Scheme SPD (New Forest NPA, 2020a) supports applicants proposing their own appropriate mitigation measures to address potential adverse impacts of their development, which will be considered by the NPA on a case-by-case basis.

Q11: Monitoring

Monitoring and research form a key aspect of the strategy as set out in the SPD (New Forest NPA, 2020a). The following monitoring projects are proposed:

- The Steering Group will review the implementation and effectiveness of the mitigation measures, to determine future recommendations. New measures and innovative approaches will be considered in the future if they present a good opportunity to provide effective mitigation.
- Small-scale visitor surveys will be commissioned to gain insights into recreational demand and behaviour at different sites, both within and outside the designations. These will include face-to-face interviews by rangers, observation and automated people counters.
- Surveys of key bird species, especially where these studies also assess recreational impacts.

- Collation or purchase and analysis of data to inform access management.

The NPA will report on the implementation of the mitigation measures through the Annual Monitoring Report and the annual Infrastructure Planning Statement.

The latest NPA Monitoring Report (New Forest NPA, 2020b) indicates the amount of developer contributions received the NPA in 2019/2020 (£46,637) and states that “Contributions to the Scheme were spent on a number of mitigation measures including communications and media development, as well as employing seasonal rangers who actively engaged with visitors to the protected nature conservation sites, providing advice and guidance about the ground nesting birds and the rare habitats and ways that visitors can avoid disturbing the rare birds and affecting the habitats”.

The Annual Report on Implementation (New Forest NPA, 2021) states that people counters have been installed along the Hale – Woodgreen walking route to gather baseline data, and a walking app has been launched which allows monitoring of the number of users and routes taken within the New Forest.

Q12: Communication Strategy

A significant element of the Mitigation Scheme is the delivery of consistent messages regarding the importance of protected habitats and species and how recreation can avoid impacting these features (New Forest NPA, 2021). This includes use of the NPA website, leaflets, newsletters and social media, as well as a free walking app which promotes defined routes and offers information about the National Park for users as they walk.

Go New Forest (GNF) is the official tourism body for the New Forest area, who have a number of campaigns and strategies which seek to promote ‘Forest First’ tourism – developing and promoting the New Forest as a visitor destination, whilst protecting and enhancing its special qualities.

An action plan developed by Forestry England, the New Forest NPA, New Forest District Council, and GNF with support from The Verderers, Hampshire Fire and Rescue Service, and Hampshire Constabulary seeks to manage increasing visitor numbers. Details are provided on the [New Forest NPA website](#). A key aspect of this work is visitor communication.

The New Forest Code was launched in 2020 (following the Covid-19 lockdown and increasing recreational use) to set out guidance and actions for visitors to take to ensure they are avoiding harm to the Forest (see **Figure 22**). Social media posts, promotional videos and web pages, as well as signage within the National Park, have been used to distribute the key messages to visitors.



Figure 22: The New Forest Code (New Forest NPA, 2023)

SANG

Q13: Identify the components that make up the SANG projects

Given the small scale of development anticipated with the NPA boundary (averaging less than 40 dwellings per annum across the National Park), no SANG is provided within its administrative area. Elements of green space provision however forms part of the mitigation strategy taken by other LPAs within the ZOI.

The Revised Habitat Mitigation Scheme SPD for the NPA area recognises alternative recreational greenspace and routes outside the designated sites, such as Country Parks or smaller sites for local community use, as an important consideration.

Neighbouring LPA mitigation strategies (see answer to Question 4) already provide alternative greenspaces, for example New Forest District Council sets out the requirement for developments over 50 homes to provide on-site alternative natural recreational greenspace (ANRG) in the Mitigation for Recreational Impacts SPD (New Forest District Council, 2021).

Q14: Has a green space standard or metric been used?

As outlined in answer to Question 13, SANGs have been established in surrounding LPAs to the National Park and will likely form a key element of the strategic mitigation approach going forward and may apply standards.

For example, in the New Forest District (outside of the National Park boundary) the Mitigation for Recreational Impacts SPD (New Forest District Council, 2021) requires provision of at least 8ha of ANRG per 1,000 population.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the SPD or associated documents.

Q16: Is the quantity of SANG available to the LPA published?

The New Forest NPA does not provide SANG within its administrative area.

Q17: Are details available for each SANG?

The New Forest NPA does not provide SANG within its administrative area. There is no apparent centrally publicised inventory of SANG (or ANRG) for the surrounding LPAs within the identified 13.8km ZOI for the New Forest, although this may form part of the emerging collaborative strategy.

SAMM

Q18: SAMM Criteria

No specific criteria are set out. The current funding mechanism implemented by the NPA applies to residential and tourist development within the National Park, although the NPA supports applicants proposing their own alternative mitigation measures which will be considered on a case-by-case basis.

Q19: SAMM Projects

Whilst not named as SAMM, the SPD sets out access mitigation measures which developer contributions will fund, including:

- Access management within the designated sites
- Education, awareness and promotion
- Monitoring and research

There is an emerging package in development which will potentially be used by all LPAs within the 13.8km ZOI to mitigate recreational impacts on the New Forest designations.

The current strategy adopted by the NPA does not directly refer to 'SAMM' however developer contributions are used fund a range of mitigation projects, including employing rangers, dog-specific mitigation measures, communications and projects to encourage

behavioural change. The annual budget and associated mitigation measures as set out in the Mitigation Scheme SPD are presented in **Table 18**.

Table 18: Annual budget for mitigation measures at the New Forest set out in the SPD (New Forest NPA, 2020a)

Mitigation Measure	Associated Tasks	Annual Budget
Access management within the designated sites	Facilities and physical changes ‘on the ground’ designed to reduce impacts, including visitor focal points, signage and route waymarkers.	£2,900
Alternative recreational greenspace sites and routes outside the designated sites	New and improved sites, routes and facilities chosen and designed to accommodate recreation, including close to where people live.	£9,600
Education, awareness and promotion	Initiatives that enhance people’s understanding of protected species and vulnerable habitats and encourage responsible recreation, e.g. through ranger activities, education programmes, events, exhibitions, publications, films, web-based information and social media campaigns).	£31,800
Monitoring and research	Collating data and evidence to assess the implementation and effectiveness of the mitigation measures and providing information to inform revisions to the Scheme where necessary.	£6,300
Implementation	Staff and other costs associated with oversight, coordination and monitoring of agreed mitigation measures.	£1,900
Total Annual Budget		£52,500

The NPA publishes annual reports on the Habitat Scheme Implementation on their [website](#), with the latest being 2020/2021 (New Forest NPA, 2021). The latest implemented measures were:

- Provision of rangers.
- Delivering messaging across a range of communications channels.
- Planning for improvements and installing monitoring for alternative recreational routes outside the designated sites.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The Mitigation Scheme SPD itself does not refer to multifunctional benefits.

Various documents and strategies set out on the NPA website recognise the health and wellbeing benefits of recreation and leisure within the National Park, although with emphasis that these activities must not be at the expense of designated habitats. These principles are reflected in the 22 strategic actions set out in the RMS (New Forest NPA, 2010) and presented on the [NPA website](#).

The RMS (New Forest NPA, 2010) is part of a suite of 'daughter' documents to the National Park Management Plan alongside a Landscape Action Plan and Biodiversity Action Plan.

Q21: Nature Recovery Network

The Mitigation Scheme SPD itself does not refer to the Nature Recovery Network, although the NPA website sets out Nature Recovery as Objective 5 of its [Partnership Plan](#), which cross-references to recreational mitigation.

Norfolk

Otter (*Lutra lutra*) Credit: Istock images.



Norfolk – Breckland Council

Summary

Triggers for Mitigation

Norfolk contains a number of sites designated as SPA, SAC and/or Ramsar due to the diverse coastal and inland habitats and species associated with the Brecks, Broads, Fens and Norfolk coastal locations.

Recreational Evidence Base

Whilst a recreational impact assessment has not been undertaken across all the Norfolk designations, the visitor survey reports commissioned on behalf of the Norfolk LPAs and Norfolk County Council highlighted a range of potential recreational impacts from increased development. These effects included disturbance to breeding birds, wintering/passage birds and non-avian effects such as trampling and erosion of habitats, increased fire risk, eutrophication (from dog fouling) and contamination.

Key evidence includes:

- Visitor surveys at European protected sites across Norfolk during 2015 and 2016 (Panter and others, 2016).

Solutions for recreational impacts

Visitor surveys were undertaken across the Norfolk designated sites in 2015 and 2016 to inform the mitigation solution (Panter and others, 2016).

These visitor surveys split main user group activities as shown in **Figure 23**.

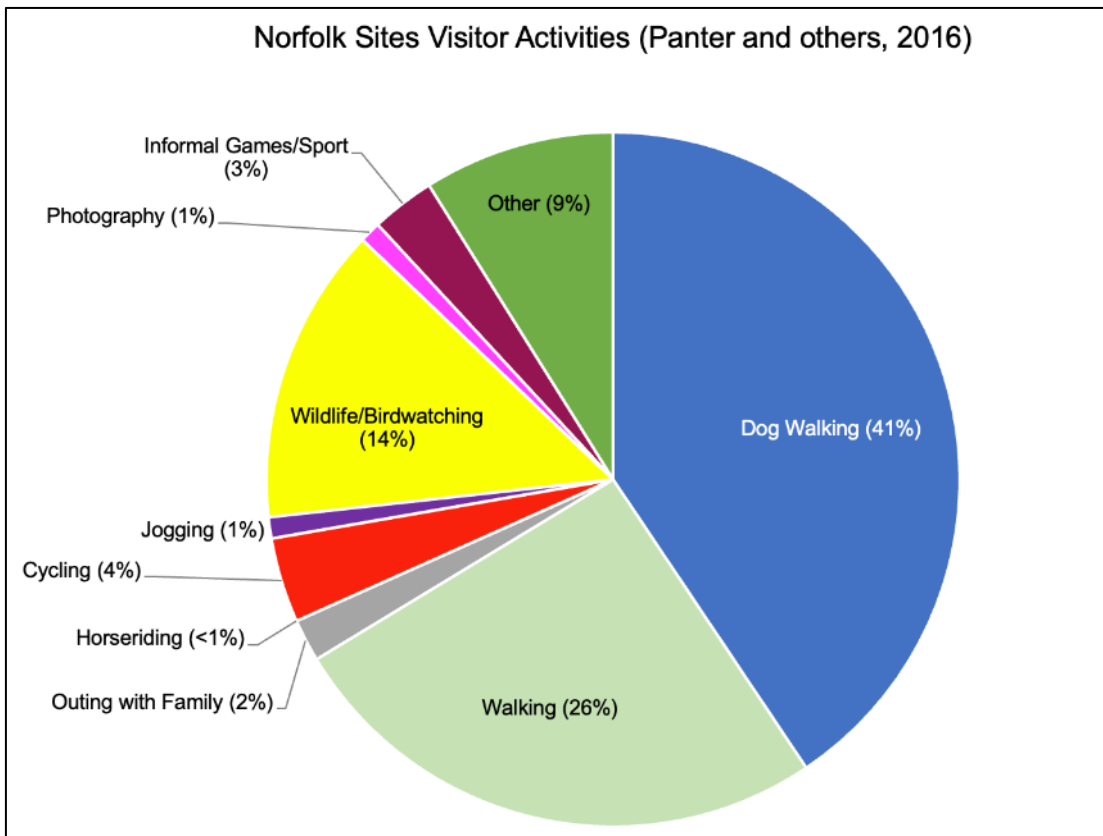


Figure 23: Visitor activities at the Norfolk designations (adapted from Panter and others, 2016)

LPA Local Plan growth was identified (in January 2021) within the evidenced ZOI for the purpose of calculating the RAMS tariff, identifying a total of 42,709 dwellings coming forward over all Local Plan periods.

A separate ZOI was calculated for each European site for both residential development and tourism development using the 75th percentile distance travelled.

Mitigation Solution

The recreational mitigation solution across Norfolk is set out in the GIRAMS and comprises an element of Enhanced GI (to be implemented by individual LPAs) and recreational access management solutions (RAMS, to be implemented strategically across Norfolk). The exact details and nature of GIRAMS is currently under development. In the interim period, and in line with Natural England’s interim advice, all affected LPAs are using a standard template (or similar) to secure sufficient GI on site or nearby, and collect developer contributions for the delivery of mitigation at the European sites as necessary.

The LPAs of Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King’s Lynn and West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council and the Broads Authority are working together to address cross-boundary issues and offer a strategic solution through a Norfolk Strategic Planning Framework (NSPF).

It is also noted that an established approach to mitigate impacts upon stone curlew, nightjar and woodlark associated with the Breckland SPA applies to development in Breckland Council. This applies a buffer zone approach, where development will not normally be permitted within a 1500m zone from the SPA and requirements for project level HRA apply within a secondary buffer zone. In addition, development will not normally be supported within 400m of the SPA to protect nightjar and woodlark populations.

SAMM Solutions

Developer contributions are collected for new development with the ZOI of each European site to fund RAMS projects.

Contributions of £185.93 per dwelling/unit are required towards RAMS. This tariff applies to all net new residential developments. This includes, for example, the conversion of one dwelling to multiple dwellings or flats, or the change of use of other buildings to dwellings. It also includes new tourist accommodation. It excludes replacement dwellings and extensions to existing dwellings (where there is no net gain in dwelling numbers).

In perpetuity is taken as 125 years in the GIRAMS, which notes that “The package of mitigation measures, some coast-wide and others specific to an individual Habitats Site will need to be implemented ‘in perpetuity’ although the costs are currently calculated for the lifetime of the Local Plans as advised by Natural England”. The total cost of RAMS is calculated at £7,940,596.43.00 (until 2038).

SAMM projects target the following types of interventions: Promoting education and awareness; access management, zonation; and monitoring of visitors, areas of functionally linked land and bird populations.

SANG Solutions

Enhanced GI (EGI) will be provided as part of the mitigation solution, delivered by individual LPAs. In their interim advice, Natural England recommend that a threshold of 50 dwellings is used to trigger the requirement for EGI. Formal requirements for EGI are yet to be agreed by individual LPAs; GIRAMS however provides some informal EGI criteria which includes the following requirements:

- Car parking;
- Provision over a network of sites;
- A choice of routes of around 2.7km in length with both shorter and longer routes of at least 5km as part of the choice, where space permits;
- Information on path surfacing;
- Signage and benches etc;
- Requirements in terms of landscaping; and
- Areas for dogs to run freely.

Whilst GIRAMS does not provide a metric for minimum EGI, it notes that GI should equate to a minimum of 2ha/1,000 population and should reflect Natural England's Accessible Natural Greenspace Standard.

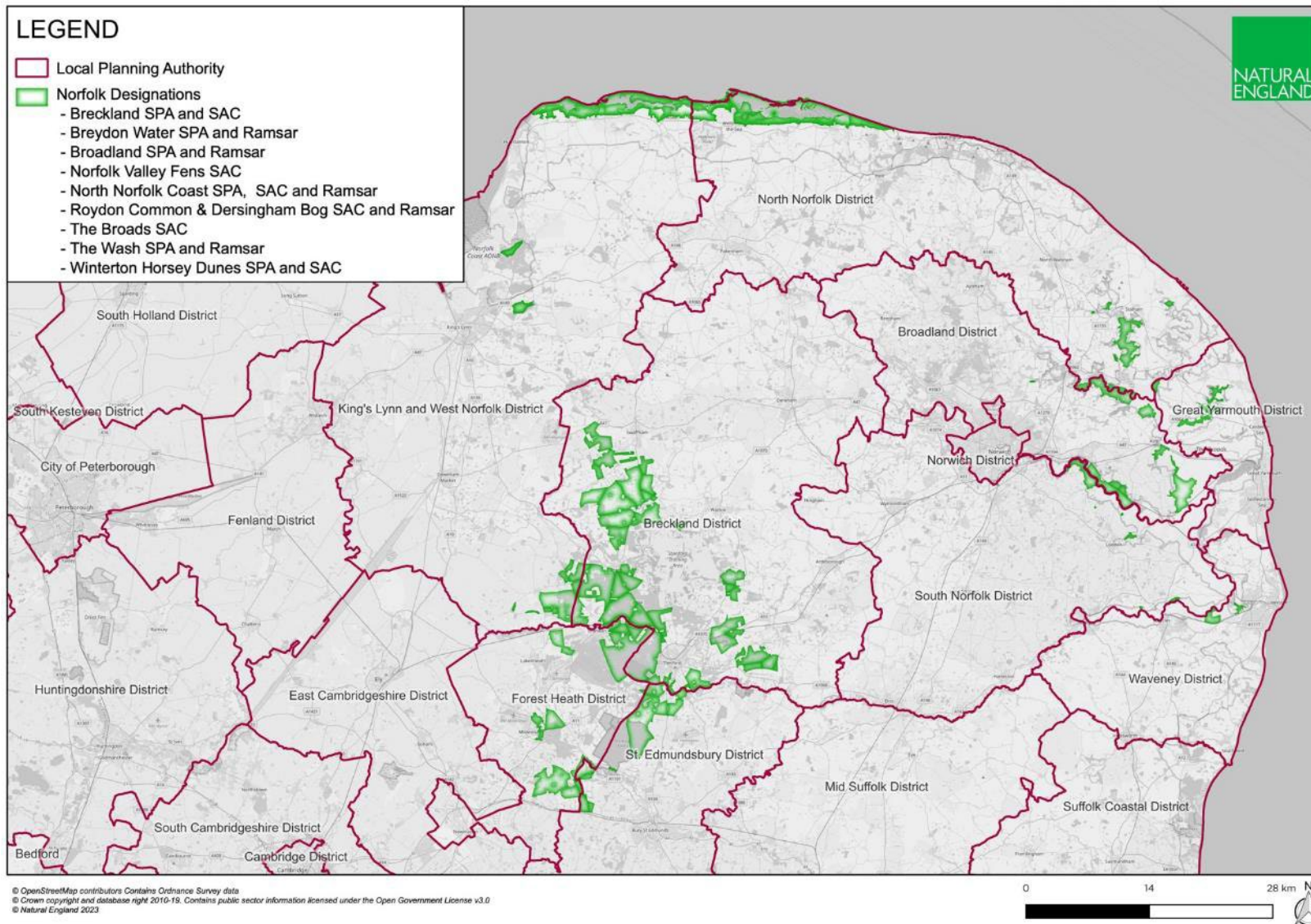


Figure 24: Location of Norfolk Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

Norfolk European sites

The Norfolk mitigation strategy covers several European sites across the county as shown in **Figure 24**:

- Breydon Water Ramsar;
- Breydon Water SPA;
- Breckland SAC;
- Breckland SPA;
- Broadland SPA;
- Broadland Ramsar;
- Norfolk Valley Fens SAC;
- North Norfolk Coast SAC;
- North Norfolk Coast SPA;
- North Norfolk Coast Ramsar;
- Roydon Common and Dersingham Bog SAC;
- Roydon Common and Dersingham Bog Ramsar;
- The Broads SAC;
- The Wash SPA;
- The Wash Ramsar;
- Winterton Horsey Dunes/Great Yarmouth North Denes SAC; and
- Winterton Horsey Dunes/Great Yarmouth North Denes SPA.

These comprise several coastal and inland sites designated for a range of qualifying features associated with the Brecks, Broads, Fens and Norfolk coastal locations (see Appendix A for qualifying features).

Q1: Recreational Impacts Evidence and Background Information

In 2015 and 2016, visitor surveys were commissioned by Norfolk County Council and the Norfolk Biodiversity Partnership (NBP) on behalf of all LPAs to determine current and projected visitor patterns at European sites within Norfolk (Panter and others, 2016). The European sites which formed the focus of this commission are listed under Criteria 1: Triggers for Mitigation.

The survey work highlighted potential effects from increased recreational pressure (predominantly from residential development) to the qualifying features of these European sites. Effects included disturbance to breeding birds, wintering/passage birds and non-avian interest, trampling and erosion of habitats, increased fire risk, eutrophication (from dog fouling) and contamination. Recreational impact assessments (to identify the exact location and nature of recreational impact) were not undertaken at individual sites as part of this commission.

Natural England provided interim advice to the Norfolk LPAs in relation to recreational disturbance (Natural England, 2019c), encouraging LPAs to work in partnership on a county-wide Recreational Avoidance and Mitigation (RAMS) and Green Infrastructure (GI) Strategy, the approach for which is set out in GIRAMS. The advice noted that prior to adoption of the RAMS all residential schemes should be considered through project level HRA. It provided clarity on the types of development which would be subject to RAMS. Natural England also provided advice in respect of GI which should be provided for larger development (50 or more houses), including minimum GI requirements and standards.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

The research undertaken on behalf of Norfolk County Council/NBP identified several strategic mitigation options on a site-by-site basis, such as access management, wardening, raising public awareness, site management and delivery of high-quality green space (Panter and others, 2016). It also indicated where people travel from and provided an assessment of the links between the cumulative impact of new housing development across all LPAs in Norfolk and increased recreation use at European sites. The report noted that increased recreational pressure has the potential to impact the qualifying features of European sites, for instance through disturbance to Annex I birds. The results showed a range of different uses and recreational draws for the different European sites, and as such the mitigation solutions were tailored to suit each site individually (Panter and others, 2016).

Drawing on the visitor survey data (Panter and others, 2016), the LPAs of Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King's Lynn and West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council and the Broads Authority (working together to address cross-boundary issues and offer a strategic solution through a Norfolk Strategic Planning Framework (NSPF)), prepared the Norfolk Green Infrastructure (GI) and Recreational Impact Avoidance and Mitigation Strategy (RAMS) (Place Services, 2021). This strategy (GIRAMS) forms part of the evidence base for each LPA's Local Plan and provides the basis for future agreements through the NSPF. The mechanisms through which GIRAMS will be implemented for each individual LPA is currently being developed. GIRAMS however sets out the key principles for the mitigation solution.

GIRAMS provides two overarching recommendations in relation to GI and RAMS to mitigate adverse impacts that might arise from visitor pressure related to new housing development. Firstly, GI seeks to avoid impacts through the provision of sufficient and suitable informal recreational greenspace elsewhere. The aim of this is to reduce the number of visits to the protected sites. Secondly, a financial contribution from each new home is to be made towards direct mitigation measures on the protected sites (RAMS) (Place Services, 2021).

Q3: Zone of Influence

The Norfolk GIRAMS identifies ZOIs which represent the extent of land around European sites (measured from the designation boundary) within which residents travel to the relevant site for recreational activities, as evidenced by extensive survey work. This area is calculated based on the 75th percentile distance travelled for each survey location and then the average ZOI calculated for each European site (**Table 19**). These ZOIs cover the administrative area of Breckland Council and contain the following designated European sites (**Figure 25**). A separate ZOI is calculated for each European site for both residential and tourism development which reflects the distance travelled by both tourists and residents in Norfolk.

Table 19: Zones of Influence for European sites covered by GIRAMS (Place Services, 2021)

European site	Residential ZOI (km)	Tourism ZOI (km)
Norfolk Brecks: Breckland SPA and Breckland SAC	26km	163km
Broads: Broadland SPA, Broadland Ramsar, Breydon Water SPA and The Broads SAC	25km	248km
East Coast: Winterton – Horsey Dunes SAC and Great Yarmouth North Denes SPA	30km	202km
Norfolk Coast: North Norfolk Coast SAC, North Norfolk Coast SPA and North Norfolk Coast Ramsar	42km	198km
Roydon and Dersingham SAC and Ramsar	12km	182km
Norfolk Valley Fens: Norfolk Valley Fens SAC	15km	156km
The Wash: The Wash SPA, The Wash and North Norfolk Coast SAC and The Wash Ramsar	61km	162km

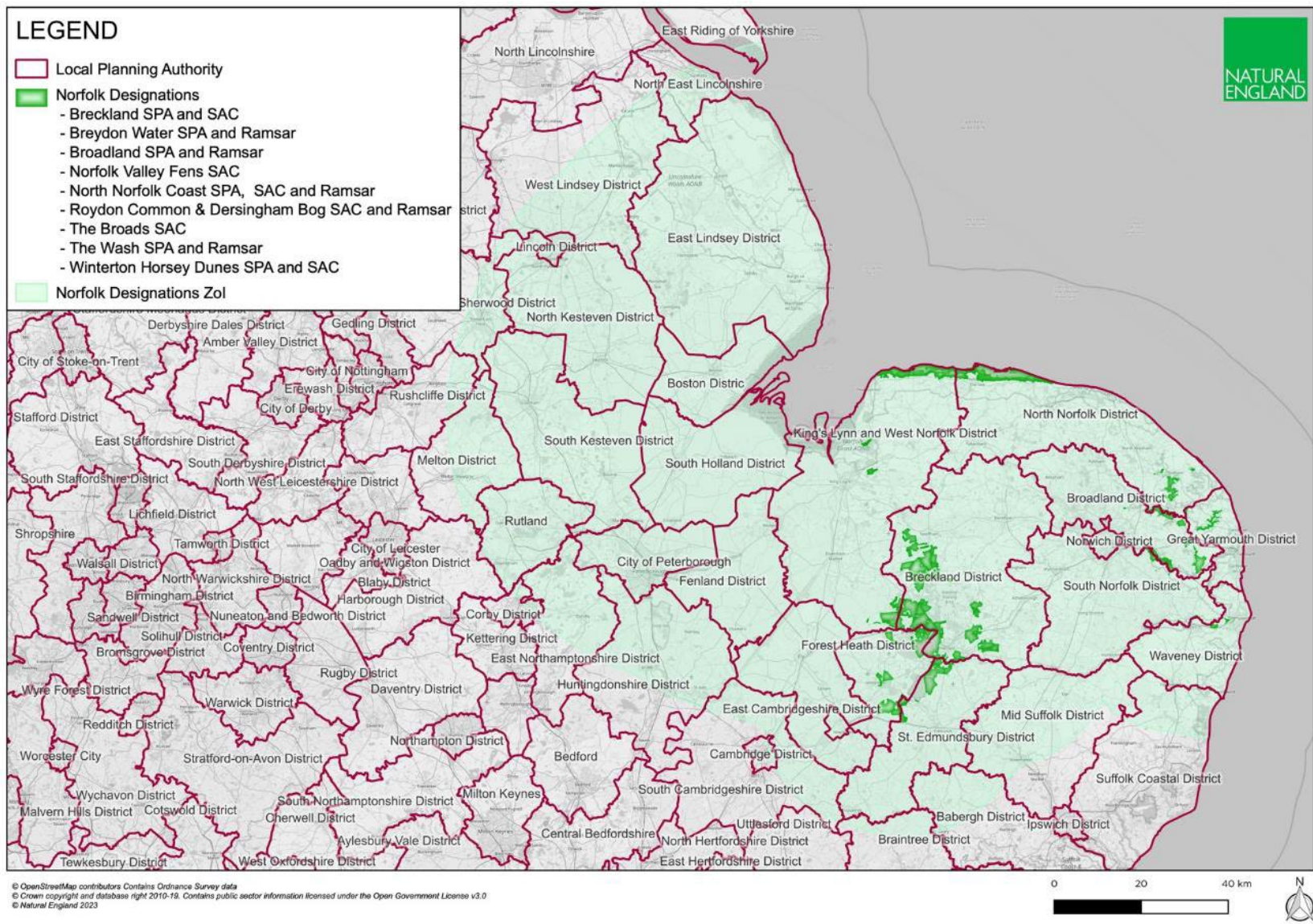


Figure 25: Norfolk Designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

As noted in answer to Question 2, the Councils of Broadland District Council, Breckland District Council, Great Yarmouth Borough Council, The Borough Council of King's Lynn and West Norfolk, North Norfolk District Council, Norwich City Council, South Norfolk Council and the Broads Authority are working together to address cross-boundary issues and offer a strategic solution to recreational mitigation through a NSPF and implementation of the principles set out in GIRAMS.

Details around governance and implementation of GIRAMS are currently in development. The GIRAMS document however sets out how this mitigation scheme will function in practice. In this interim period, and in line with Natural England's interim advice (Natural England, 2019c), all LPAs are asked to prepare HRA records using a template provided by Natural England, or similar, secure sufficient GI on site or provision nearby, and collect developer contributions for the delivery of mitigation at European sites as necessary. This is to avoid any adverse impact on the integrity of any European site (alone or in-combination) from residential and tourism development.

It is likely that the RAMS element of the strategy will be implemented strategically across LPAs, with the GI element implemented by LPAs individually.

Q5: Policy

Breckland Council's [planning pages](#) note that from 1 April 2022 development was required to make contributions towards the delivery of GIRAMS.

The adopted Breckland Council Local Plan does not include wording to secure either GI or RAMS to mitigate recreational impacts from development (Breckland Council, 2019). The Council is currently in the process of undertaking a full update of its Local Plan which will cover the period to 2046. This will include wording to secure GI and RAMS within planning policy. GIRAMS provides suggested policy wording for incorporation into future planning documents as set out in **Box 10** (Place Services, 2021).

Box 10: GIRAMS Suggested Local Plan Policy Wording (Place Services, 2021)

GIRAMS - Suggested Local Plan Policy wording to secure GIRAMS

"The potential impacts on European sites from recreational pressure from residential development will be addressed through:

(i) the provision of local level GI / open space and (ii) mitigation of residual effects through a developer contributions.

(ii) Contributions from residential developments will be secured towards mitigation measures identified in the Norfolk Recreational impact Avoidance and Mitigation Strategy (RAMS) which will be completed by the time the Local Plan is adopted. Prior to RAMS adoption, the authority will seek contributions, where appropriate, from proposed

GIRAMS - Suggested Local Plan Policy wording to secure GIRAMS

residential development to deliver all measures identified (including strategic measures) through project level HRAs, or otherwise, to mitigate any recreational impacts in compliance with the Habitats Regulations and Habitats Directive."

Suggested Supporting Text / Reasoned Justification

Residential developments proposed within the Local Plan have the potential to result in a significant increase in recreational disturbance at the Norfolk Habitats Sites (list the relevant SPA, SAC and Ramsar sites). Measures required to mitigate the impacts of recreational disturbance on Habitats Sites will be delivered as detailed in the Norfolk GI and Recreational impact Avoidance and Mitigation Strategy (RAMS). Any residential development that is likely to affect the integrity of Habitats Sites, will be required to either contribute towards mitigation measures identified in the RAMS (or any subsequent Supplementary Planning Document) or, in exceptional circumstances, identify and implement bespoke mitigation measures in perpetuity to ensure compliance with the Habitats Regulations.

Following consultation with Natural England, a Norfolk-wide GI and Recreational impact Avoidance and Mitigation Strategy (RAMS) is being prepared to include all Habitats Sites. The strategy will identify where recreational disturbance is happening and the main recreational uses causing the disturbance. New residential development that is likely to affect the integrity of the European Sites will be required to contribute towards the implementation of the mitigation. It is considered that this development allocation will be required to pay for the implementation of mitigation measures to protect the (list sites). The appropriate mechanisms will be identified in the adopted GI and RAMS document."

GIRAMS also provides suggested policy wording to secure Enhanced Green Infrastructure (EGI) as set out in **Box 11** (Place Services, 2021).

Box 11: Enhanced Green Infrastructure Suggested Policy Wording (Place Services, 2021)

GIRAMS - Enhanced Green Infrastructure suggested policy wording

"If EGI is to be incorporated into planning policy, in particular existing GI policies, we would recommend the following:

- The GI network should be referred to as "A strategic multifunctional network of enhanced green infrastructure"

GIRAMS - Enhanced Green Infrastructure suggested policy wording

- The aim is for it to “provide areas attractive enough for local recreational use on or near where new homes are built that can deflect people away from Habitats Sites for recreation.”
- Development should “seek to maximise opportunities for the restoration, enhancement and connection of the District’s green infrastructure network throughout the lifetime of the development, both on-site and for the wider community.”
- Reference could be made to this document, and objectives that: “seek to meet local standards and identified opportunities within the Norfolk Green Infrastructure and Recreational impact Avoidance and Mitigation Strategy and any future strategies adopted by the Council.”
- We encourage local authorities to promote and work towards 40% GI within large-scale developments.
- Access to local GI should be enhanced. Opportunities to connect to existing Rights of Way networks and infrastructure must be utilised where possible to provide year-round use.
- Policy should lead to the delivery and implementation of SANG. This should be a unified approach across all LPAs.”

Q6: Delivery Body

The delivery body for GIRAMS will be a Steering Group comprising LPA partners; this may be the NSPF. Details around administrative arrangements are still being worked up by the LPAs who comprise the NSPF. A Partnership Delivery Agreement will be drafted to cover ongoing governance, coordination and delivery of GIRAMS.

Q7: Types of Development Covered

As set out in Natural England’s advice, GIRAMS will apply to the following types of development (Natural England, 2019c):

- New dwellings of one or more units included in current site allocations and windfall (excludes replacement dwellings and extensions);
- Houses in Multiple Occupancy (HMOs);
- Student accommodation;
- Residential care homes and residential institutions (excludes nursing homes);
- Residential caravan sites (excludes holiday caravans and campsites); and
- Gypsies, Travellers and Travelling Showpeople plots.

Considering the large tourism ZOI that have been identified (see answer to Question 3), the GIRAMS report recommends “the application of a RAMS tariff on tourist accommodation based on a per bed space ratio with the same ZOI as other residential growth” (Place Services, 2021). In addition to the Natural England Advice, GIRAMS recommends also including:

- Residential moorings, holiday caravans, touring pitches and campsites.

GIRAMS also notes that “It will be up to the NSPF steering group to allocate spend for delivery of measures as they see fit” regarding non-tourist development, acknowledging that the tourism ZOIs are county-wide for all European sites (Place Services, 2021). The report recommends that tariffs for tourist development are not applied to the specific European sites to which each residential ZOI relates, and instead are proposed to be spread across all European sites.

Q8: Developer Contributions

Breckland Council note that from 01 April 2022, for any development permitted where additional recreational impact is likely to be generated, applicants will be required to pay a one-off tariff of £185.93 per dwelling/unit towards RAMS. A breakdown of costs is provided in answer to Question 19. This will pay for recreational mitigation measures at European sites within Norfolk as described in the GIRAMS. The Council has produced a standard Unilateral Undertaking which will apply (usually for minor and other applications and not major planning applications – 10 dwellings or more – which are likely to be dealt with by a Section 106 Agreement).

Q9: Timescales for Delivery

GIRAMS has yet to be implemented by individual LPAs. The GIRAMS document recognises that “in perpetuity” has a legal definition of 125 years. However, the RAMS package has been costed to 2038 to reflect local plan timescales (see Question 19).

Q10: Other initiatives

In addition to GIRAMS, there are other initiatives implemented by Breckland Council which aim to ensure no adverse impacts on features for which the Breckland SPA is designated, including stone curlew, nightjar and woodlark. These measures are separate to GIRAMS and include a series of buffer distances, measured from Breckland SPA, which are applied to development (Liley and Hoskin, 2019).

Stone Curlew

The output of the work undertaken to support the adopted Breckland Local Plan identified two buffers required for the protection of stone curlew from the impacts of new development. These include a ‘primary buffer’ area covering 1500m from the SPA boundary for areas that support, or are capable of supporting, stone curlew. This area excludes the entirety of Cranberry Rough, Hockham SSSI and the Rex Graham Reserve SSSI which do not provide habitat suitable for stone curlews.

A 'secondary buffer' zone comprises areas that have a functional linkage to the SPA and are within 1500m of the SPA boundary, because they support stone curlew outside, but in close proximity to, the SPA.

This work also identified grid squares where RSPB data was not available and/or limited for a particular grid cell. For these areas, a project level HRA is required under the Habitats Regulations, which may include additional survey work.

These buffers are illustrated in the [Breckland Local Plan](#) (Breckland Council, 2019).

Nightjar and woodlark

In addition, work undertaken and reviewed to support the adopted Breckland Local Plan identified a correlation between human disturbance from new development and woodlark and nightjar nesting densities (Liley and Hoskin, 2019). This work showed that a higher density of housing correlated with fewer birds. As a result, the Council has included a 400m buffer around the SPA within which development would not normally be permitted.

Mitigation solutions (in terms of buffer distances) for stone curlew, woodlark and nightjar are secured through Policy ENV 03 of the adopted Breckland Local Plan (Breckland Council, 2019) (**Box 12**).

Box 12: Breckland Local Plan – Policy ENV 03 (Breckland Council, 2019)

Policy ENV 03 The Brecks Protected Habitats and Species

“The Council requires that a Habitats Regulations Assessment is undertaken on all proposals for development that are likely to have a significant effect on The Breckland Special Protection Area (SPA) which is classified for its populations of Stone Curlew, woodlark and nightjar, and/or Breckland Special Area of Conservation (SAC), which is designated for its heathland habitats. Development will only be permitted where it can be demonstrated that the proposal will not adversely affect the integrity of the SPA or the SAC.

Stone Curlew

Plan level Habitats Regulations Assessment has been undertaken to identify where built development is likely to significantly affect the Breckland SPA. Map 5.1 identifies a 1,500m buffer zone from the edge of those parts of the SPA that support, or are capable of supporting, Stone Curlew, where new built development would be likely to significantly affect the SPA population. The plan level Habitats Regulations Assessment also identifies areas that have a functional link to the SPA, because they support Stone Curlew outside, but in close proximity to the SPA boundary. These areas also have a 1500m buffer zone, within which new built development would be likely to significantly affect the SPA population.

Policy ENV 03 The Brecks Protected Habitats and Species

A conclusion of no likely significant effect can be met where the proposed building is located further than 1500m away from the SPA boundary (red primary buffer) or the identified (blue secondary buffer) or possible (orange square cells) areas that have a functional link (see Map 5.1).

Development within the SPA boundary, or located less than 1500m away from the SPA boundary or identified areas that have a functional link (see Map 5.1) will not normally be permitted.

Where a proposed building is outside the SPA but within 1500m of the SPA boundary or identified or possible areas that have a functional link (see Map 5.1), there may be circumstances where a project level Habitats Regulations Assessment is able to demonstrate that the proposal will not adversely affect the integrity of the SPA. For agricultural buildings, applicants must provide evidence to show how their proposal meets the criteria listed in Natural England's "Agricultural Buildings and the Breckland SPA Stone Curlew constraint zone" advice note, or successor document. Circumstances where the proposal is able to conclusively demonstrate that it will not result in an adverse effect on Breckland SPA may include where the proposal is:

- **More than 1500m away from potential stone curlew inside the SPA;**
- **A new building that will be completely masked from the SPA by existing built development;**
- **A proposed re-development of an existing building that would not alter its footprint or increase its potential impact;**
- **A new agricultural building of less than 120 sqm;**
- **An extension to existing agricultural buildings of less than 120 sqm or 100% of the original, whichever is less.**

Large developments adjacent to, or just outside the primary or secondary buffer, particularly where occurring in an isolated area with few other buildings, are likely to also require project level assessment.

Woodlark and nightjar

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.

Recreation pressure and urban effects

Plan level Habitats Regulations Assessment has identified the potential for increased disturbance to nightjar, woodlark and Stone Curlew as a result of recreation, and the

Policy ENV 03 The Brecks Protected Habitats and Species

potential for other urban effects such as increased fire, litter and eutrophication to significantly affect Breckland SPA and SAC.

Monitoring and Mitigation Framework

The Council commits to a framework of measures that will enable it to co-ordinate the necessary monitoring and mitigation measures required to demonstrate that the increases in visitor pressure arising from new development in the District 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:

- **Creation of an advisory group;**
- **Production of a monitoring programme;**
- **Identification of mitigation measures; and**
- **Defining funding to support the above measures.**

The Council will work with partners to develop a framework for managing and monitoring urban effects. Proposals for development where urban heaths at Thetford (Barnham Cross Common, Thetford Heath, Thetford Golf Club and Marsh), East Wretham or Brettenham are likely to be used as local greenspace will need to demonstrate the inclusion of mitigation measures that contribute to the framework to address the potential impact urban effects on Breckland SPA/SAC.”

Q11: Monitoring

The RAMS (equivalent to the term SAMM used elsewhere in this report) include monitoring projects, the details of which are yet to be worked up, including:

- Monitoring of functionally linked land for SPA birds;
- Monitoring of visitors; and
- European site monitoring (including birds).

It is noted in GIRAMS that regular reviews for assessing progress of the measures delivered under implementation of the RAMS mitigation package should be incorporated to provide a comprehensive mitigation package (Place Services, 2021).

Q12: Communication Strategy

A communication strategy to roll out the mitigation solution has yet to be designed.

SANG

Q13: Identify the components that make up the SANG projects.

Natural England recommend in their interim advice letter (Natural England, 2019c) that “large developments (50+ houses) include green space that is proportionate to its scale to

minimise any predicted increase in recreational pressure to designated sites, by containing the majority of recreation within and around the developed site”. In the GIRAMS, this is defined as Enhanced Green Infrastructure (EGI). The need for county-wide SANG is discounted in the GIRAMS work, but it recommended a review of existing or proposed localised GI Strategies and/or policies to include enhancements proposed through EGI (Place Services, 2021).

Components making up EGI (similar in concept to SANG) are yet to be prepared; however, the GIRAMS makes recommendations in terms of GI enhancements which could be made across Norfolk as follows (Place Services, 2021). It is likely that GI will be delivered by LPAs individually.

- “The integration of ‘Enhanced Green Infrastructure (EGI)’ criteria within GI Policy in emerging Local Plans, to ensure that developers are aware of their responsibilities regarding the quality of GI provision.
- LPAs to undertake an EGI Audit, exploring whether GI provision could be improved moving forward to offer an additional recreational offer close to where people live. This audit would use a set of EGI Quality Criteria to ensure social, economic and environmental benefits.
- Exploring the potential for Plan-level GI provision within the ‘Opportunity Areas’ identified in this Strategy, in order to rectify deficiencies and future-proof growth in future Local Plan periods whilst offering additional recreational benefits”.

Q14: Has a green space standard or metric been used?

Whilst no formal guidance has been produced to determine criteria to provide suitable SANG or EGI to divert recreational pressure from the European sites, GIRAMS provides a set of EGI criteria. These have been adapted from standard Natural England SANGs Guidance to meet the Norfolk need and are set out in **Table 20**.

Table 20: GIRAMS EGI Criteria (Place Services, 2021)

Theme	Criteria
Accessibility	<p>The amount and nature of parking provision should reflect the anticipated use of the site by visitors. It should provide an attractive alternative to parking by the part of the Habitats site for which it is mitigation.</p> <p>Car parks should be clearly signposted and easily accessed.</p> <p>New parking provision should be advertised as necessary to ensure that it is known by potential visitors.</p>

Theme	Criteria
Networks of sites	<p>Because a large proportion of visitors to the Habitats sites have long walks or run or bicycle rides the provision of longer routes is important.</p> <p>The design of routes within sites smaller than about 40ha will be critical to providing routes of sufficient length and attractiveness for mitigation purposes.</p>
Paths, Roads and Tracks	<p>Findings suggest that you should aim to supply a choice of routes of around 2.7km in length with both shorter and longer routes of at least 5km as part of the choice, where space permits.</p> <p>Paths do not have to be of any particular width, and both vehicular-sized tracks and narrow PRow type paths are acceptable to visitors.</p> <p>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.</p> <p>Paths should be surfaced but not necessarily tarmac paths, particularly where these blend in well with the landscape.</p>
Artificial Infrastructure	<p>Generally, an urban influence is not what people are looking for when they visit the Habitats sites, and some people undoubtedly visit the Habitats sites because they have a naturalness about it that would be marred by such features.</p> <p>It would be expected that sites have adequate carparking with good information about the site and the routes available. Some subtle way-marking would also be expected for those visitors not acquainted with the layout of the site.</p> <p>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.</p>
Landscape and Vegetation	<p>A semi-natural looking landscape with plenty of variation was regarded as most desirable by visitors. Landscape features within the landscape</p>

Theme	Criteria
	<p>will vary depending on the Habitats site you are trying to deflect visitors from.</p> <p>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.</p>
Restrictions on Usage	<p>The bulk of visitors to the Habitats sites come to exercise their dogs and so it is imperative that sites allow for pet owners to let dogs run freely over a significant part of the walk.</p> <p>Public access 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.</p>

GIRAMS notes that the adequate provision of GI should equate to a minimum of 2ha per 1,000 population and should reflect Natural England's Accessible Natural Greenspace Standard. This reflects Natural England's advice (Natural England, 2019c) in which they also set out provisions which could be included:

- High-quality, informal semi-natural areas.
- Circular dog walking routes of 2.7km within the site and/or with links to the surrounding public rights of way (PRoW).
- Dedicated 'dogs-off-lead' areas.
- Signage/information leaflets to householders to promote these areas for recreation.
- Dog waste bins.
- Long term maintenance and management for these provisions.

Q15: Is reference made to Accessible Natural Green Space Standards?

Yes – see answer to Question 14.

Q16: Is the quantity of SANG available to the LPA published?

The quantity of SANGs is not yet provided on individual LPA websites.

Q17: Are details available for each SANG?

Details on SANGs are not yet provided on individual LPA websites.

SAMM

Q18: SAMM Criteria

There were no specific criteria established to determine the requirements for the RAMS element of the recreation solution. RAMS requirements drew on the evidence base collected and focused on individual European site requirements (Panter and others, 2016).

Q19: SAMM Projects

The GIRAMS provides a costed package of RAMS measures. This package will provide a toolbox for the Delivery Body to consider once in post in liaison with Natural England.

Table 21 provides an overview of these measures.

Table 21: RAMS measures and costs costed to 2038 (Place Services, 2021)

Proposal	Cost
Set up a partnership	N/A
Staff resource including delivery coordinator and training	£918,193.19
Ranger contracts	£3,311,130.84
Access	£195,400
Monitoring of residential development and RAMS contributions	N/A
Monitoring of Functionally Linked Land for SPA birds	£95,000
Monitoring of visitors	£15,000
Communication	£50,000
Dog related project	£75,000
Water sports zonation for Norfolk Coast	£10,000
Website	£204,000
Visitor monitoring	£225,000
Signage at Habitats Sites	£290,000

Proposal	Cost
Codes of conduct	£25,000
Local mitigation projects	£1,000,000
Ground nesting SPA bird project – fencing, specifically for breeding Little Terns and Ringed Plovers and surveillance costs for Stone Curlew	£240,000
Car park rationalisation	£50,000
Habitats site monitoring (birds)	£200,000
Vegetation monitoring	£300,000
Route diversions	£15,000

The total cost of the proposed RAMS programme is £7,940,596.43 (plus 10% contingency). This sum is to be met through RAMS contributions from all LPAs within the relevant ZOIs (see answer to Question 8).

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

GIRAMS recognises the multifunctional benefits associated with EGI. However, this is not a specific requirement as set out in **Box 11**. Natural England notes in their advice to LPAs that GI provision should provide multifunctional benefits (Natural England, 2019c).

Q21: Nature Recovery Network

There are no specific links identified between GI and the Nature Recovery Network.

However, the RAMS includes costs for monitoring of Functionally Linked Land (see **Table 21**).

Northumbria/ Durham Coast

Little tern (*Sterna Albifrons*) Credit: Istock Images.



Northumbria / Durham Coast – North Tyneside Council

Summary

Triggers for Mitigation

The Northumberland Coast is of national significance for its coastal habitats and its role in supporting migratory species of wading birds and wildfowl. This area of coast includes the Durham Coast SAC and Northumbria Coast SPA and Ramsar site.

Recreational Evidence Base

The Appropriate Assessment undertaken in support of the North Tyneside Local Plan (2017-2032) (Capita, 2017) pointed to a range of evidence used by neighbouring authorities (e.g. Durham and Sunderland) to identify adverse recreational impacts upon the Northumbria Coast SPA/Ramsar and Durham Coast SAC. Developer Guidance prepared for County Durham (Durham County Council, 2017) refers to a range of visitor survey data collected between 2013 and 2016. This evidence base is not publicly available.

Solutions for recreational impacts

North Tyneside Local Plan Appropriate Assessment notes that visitor surveys have been undertaken to collect postcode data to determine visitor origin and distance travelled (Capita, 2017). This evidence base is not publicly available, and as such no information is available on the split of user groups.

The North Tyneside Coastal Mitigation SPD calculates a tariff based on the number of houses coming forward within the North Tyneside Local Plan period (8,654 potential additional dwellings up to 2032). There are no forecasts of future development of tourist accommodation.

Whilst a ZOI of 6km is established in the SPD on the basis of visitor survey data, the SPD notes that journey times from all parts of North Tyneside to the coast are under 20 minutes by car, therefore development in all parts of the district will be expected to make a contribution towards the mitigation solution. However, a greater contribution is to be obtained from development within the 6km ZOI.

Mitigation Solution

The mitigation strategy set out in the North Tyneside Coastal Mitigation SPD includes a “coastal wardening service as part of a wider Coastal Mitigation Service that will implement a range of targeted and coordinated physical projects to mitigate the impacts at the coast”.

The neighbouring authority of South Tyneside Council has developed a mitigation approach to address recreational impacts upon the Northumberland Coast SPA/Ramsar and Durham Coast SAC. The neighbouring authority of Northumberland County Council

has developed its own established approach to mitigate impacts upon the Northumberland Coast SPA and Ramsar (not Durham Coast SAC).

SAMM Solutions

In North Tyneside, developer contributions are collected for new development within the 6km ZOI (£337 per net dwelling unit) with a smaller contribution required for development outside this 6km ZOI (£151 per net dwelling unit). Tourist accommodation within the 6km ZOI contributes £153, with tourist development outside the 6km ZOI contributing £69 for each net additional unit of accommodation.

The total cost of the mitigation package is £2,231,044 for the period of March 2017 to 2032 (North Tyneside Council, 2019). No reference is made in the SPD to in-perpetuity mitigation requirements.

Mitigation will focus on a coastal wardening service, with the SPD noting that further mitigation projects to direct visitors away from the coast will be identified as the scheme develops.

SANG Solutions

Whilst SANG does not currently comprise part of the mitigation approach, Policy DM5.6 of the Local Plan indicates that SANG could provide a mitigation option. The HRA sets out a series of criteria for SANG if applied (Capita, 2017):

- “Sites should be natural / semi-natural in appearance in order to replicate the same sense of space as visiting the coast;
- Sites should be within 300m and at least 2ha in size; or within 2km and 20ha in size;
- Sites should aim to allow for a return or circular route journey of 2.7km;
- Sites should include sufficiently large and open areas to allow dogs to walk off their leads;
- Where existing spaces are to be used, they should be assessed to ensure there are no conflicting interests with existing uses e.g. children’s play areas; and
- Each site should be assessed to measure the carrying capacity”.

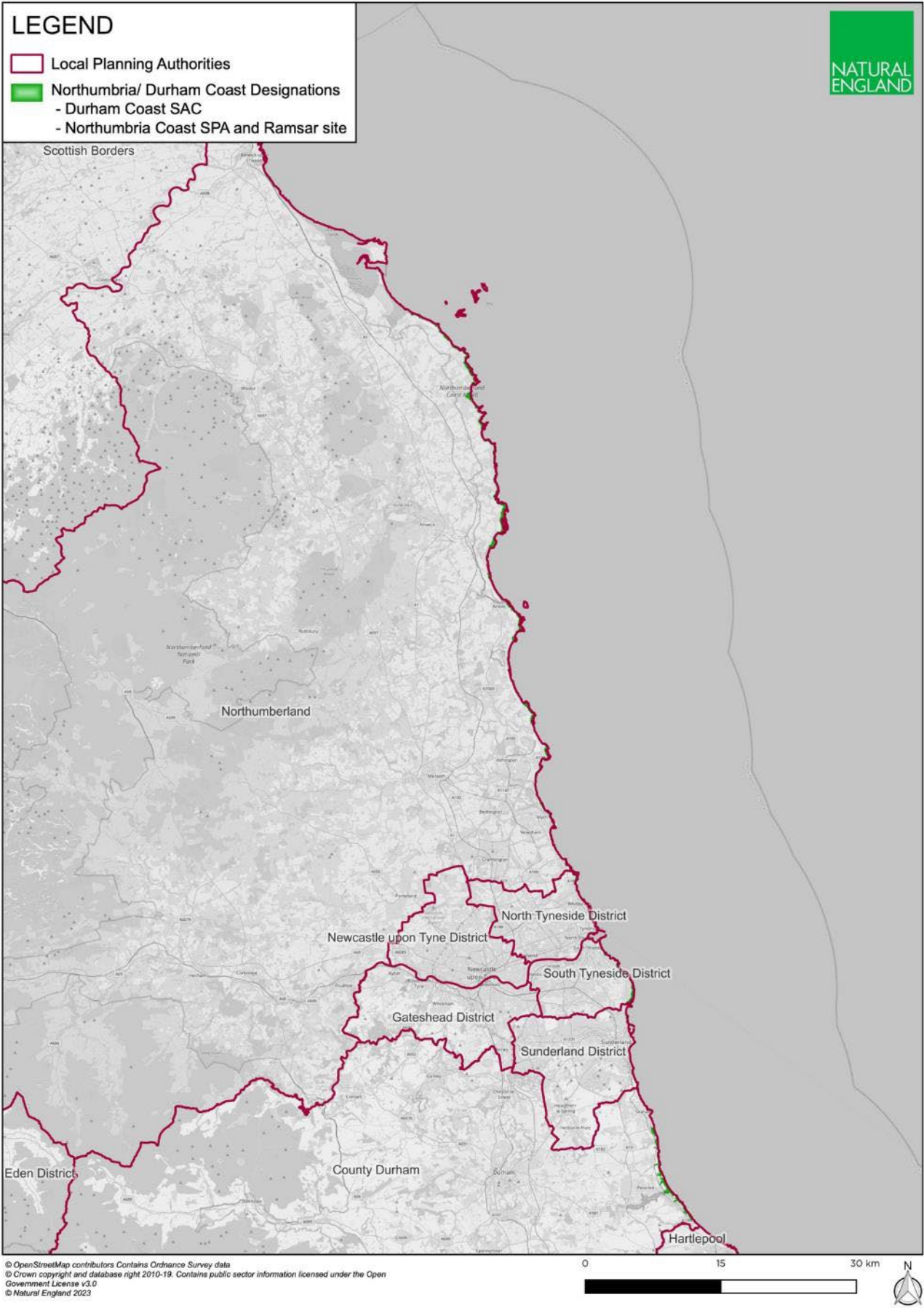


Figure 26: Location of Northumbria / Durham Coast Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

The Northumberland Coast is of national significance for its coastal habitats and its role in supporting migratory species of wading birds and wildfowl. Three internationally designated sites are likely to be affected by recreational impacts of new development within North Tyneside as they extend along the coast to both the north and south of North Tyneside (North Tyneside Council, 2019) (see **Figure 26**):

- Durham Coast SAC;
- Northumbria Coast SPA; and
- Northumbria Coast Ramsar.

The qualifying features of the Durham Coast SAC and Northumbria Coast SPA and Ramsar criteria are set out in Appendix A.

Q1: Recreational Impacts Evidence and Background Information

The Appropriate Assessment carried out for the North Tyneside Local Plan (2017-2032) (Capita, 2017) identified likely significant effects on Northumbria Coast SPA/Ramsar and Durham Coast SAC as a result of increased recreational disturbance. The HRA identified that “residential pressure within a local catchment and visitor pressure from a wider catchment” in North Tyneside is likely to increase the number of visitors to the sensitive coastal areas, creating the potential for impacts from increased recreational disturbance in the European sites, unless adequately managed (North Tyneside Council, 2019).

The HRA (Capita, 2017) refers to a range of evidence used by neighbouring authorities (e.g. Durham and Sunderland) including research studies which have investigated the impacts of disturbance on wintering and passage wildfowl in other coastal areas, Wetland Bird Surveys (WeBS) which have been carried out over several years along the coastline, and visitor surveys which have collected postcode data to determine visitor origin and distance travelled. These pieces of evidence are not published on North Tyneside Council website.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

The HRA for the North Tyneside Local Plan set out two key elements that would be required to manage visitor pressure on these coastal European sites (Capita, 2017):

1. “Managing the predicted increase in recreational pressure linked to new housing developments supported through Local Plan policies”; and

2. "Raising awareness and managing access to reduce impacts by occasional visitors which are expected to increase as visitor attractions and tourist facilities along the coast improve".

Suggested measures set out in the HRA to mitigate and monitor adverse effects include:

- SANGS;
- Coastal Wardens;
- Codes of conduct;
- Education;
- Dog free zones;
- Signposted routes; and
- Ongoing research including bird surveys and visitor surveys.

The [North Tyneside Coastal Mitigation SPD](#) (North Tyneside Council, 2019) proposed to introduce a "coastal wardening service as part of a wider Coastal Mitigation Service that will implement a range of targeted and coordinated physical projects to mitigate the impacts at the coast". This includes tasks associated with the suggested mitigation measures outlined in Local Plan Policy DM5.6 'Management of International Sites'. These actions will also be evaluated in light of the goals of the Northumberland Coastal SPA Site Improvement Plan, such as (North Tyneside Council, 2019):

- awareness-raising and education, focussing on high-risk activities such as off-lead dog walking;
- guided walks;
- identification and monitoring of locations of particular sensitivity to birds such as high tide roosts;
- identification of locations where management activities such as temporary fenced enclosures at sites being prospected by pre-breeding terns might be required;
- identification of areas of functional land such as important roosts or feeding areas on farmland, to influence the design of agri-environment schemes;
- identification of locations that are particular disturbance hotspots and therefore require particular interventions;
- interpretation strategy and events strategy to expand knowledge and understanding of the value of the designated coastline and appropriate behaviours;
- ensure enforcement of existing Public Space Protection Orders (PSPOs) and consideration of PSPOs requiring owners to put their dogs on lead when directed to do so; and
- identification of potential projects to assist in reducing recreational impacts including identification of alternative locations that could support protection of protected sites.

The neighbouring authority of South Tyneside Council have adopted an [Interim SPD](#) (Hoskin and others, 2018) which also outlines measures to mitigate the impacts of in-combination development upon the Northumberland Coast SPA/Ramsar and the Durham Coast SAC.

Cross-boundary effects with development in Northumberland County relate solely to the Northumberland Coast SPA and Ramsar (and not the Durham Coast SAC).

Northumberland County Council have their own established [Coastal Mitigation Service Strategy](#) (Northumberland County Council, 2018) and '[Space for Shorebirds](#)' project which seeks to reduce the impact of recreation upon the coastal and dune habitats and the birds they support.

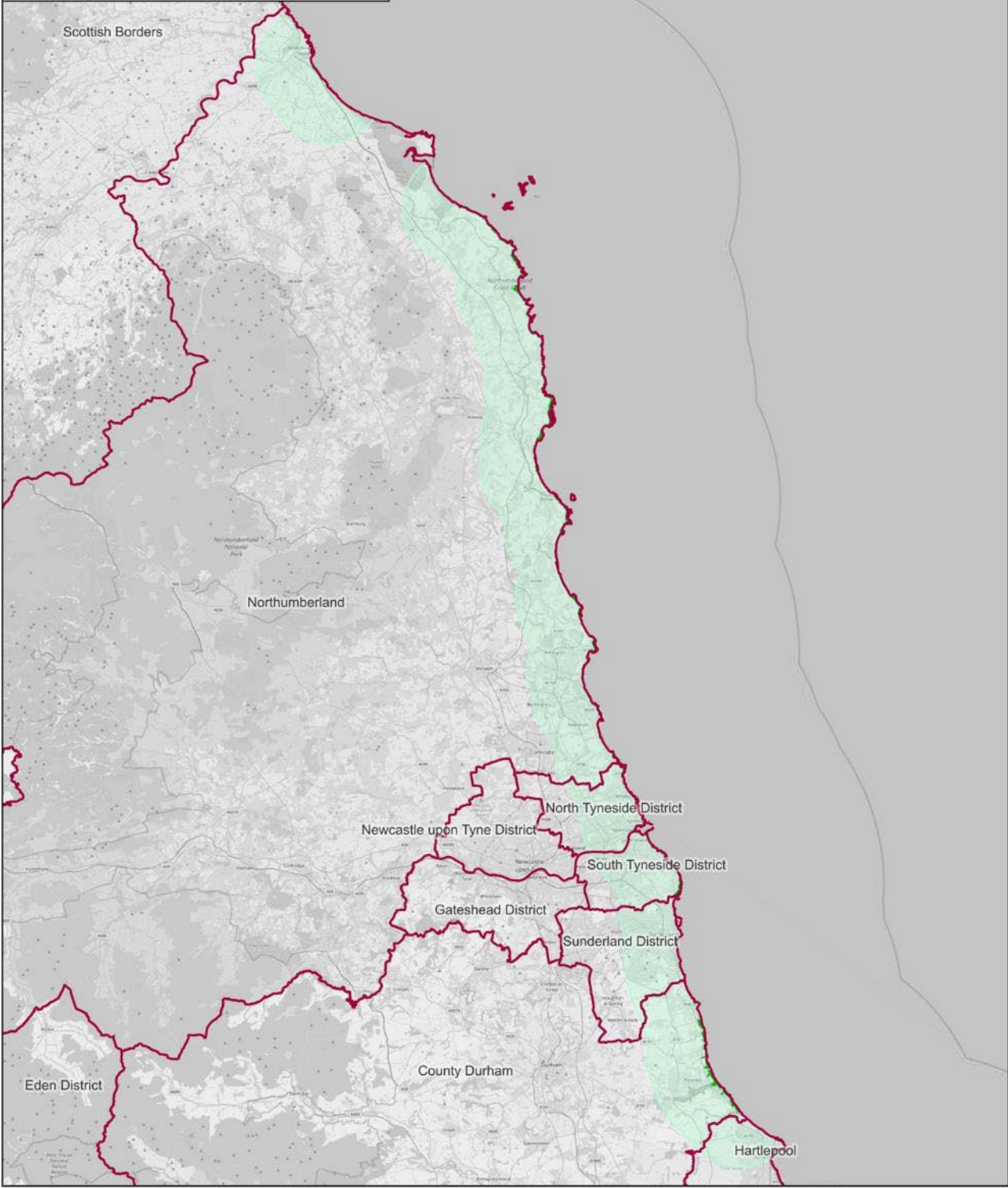
Q3: Zone of Influence

A 6km buffer zone (ZOI) has been identified within the SPD within which new development is likely to have the greatest impact upon the designations (North Tyneside Council, 2019) (see **Figure 27**). Developer Guidance prepared for County Durham (Durham County Council, 2017) refers to a range of visitor survey data collected between 2013 and 2016 that has been analysed to identify the 6km zone, based on the distance within which 75% of coastal visitors have originated from, however these are not publicly available.

The North Tyneside SPD also recognises that because overall journey times from all parts of North Tyneside to the coast are under 20 minutes by car, residents are likely to view the coast as an attractive location to visit. Development in all parts of the district will therefore be expected to make a proportionate contribution to mitigation set out in the SPD.

LEGEND

-  Local Planning Authorities
-  Northumbria/ Durham Coast Designations
 - Durham Coast SAC
 - Northumbria Coast SPA and Ramsar site
-  Zol: 6km



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Figure 27: Northumbria / Durham Coast Designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

As answered in Question 1, North Tyneside Council along with the neighbouring authorities of South Tyneside Council and Northumberland County Council address cross-boundary effects of development on their respective European sites.

The SPD states that, to address cross-boundary effects with Northumberland County Council in particular, “Any strategy to introduce mitigation of these impacts and the operation of the Coastal Mitigation Service will require close and ongoing co-operation”.

Q5: Policy

The North Tyneside Local Plan 2017-2032 adopted in July 2017 (North Tyneside Council, 2017) sets out the Council's policies and proposals to guide planning decisions and establishes the framework for the sustainable growth and development of North Tyneside up to 2032.

The [SPD](#) supplements the local plan’s objective to “protect and enhance the natural environment” and provides further guidance on the implementation of Local Plan Policy DM5.6 (see **Box 13**).

Box 13: Policy for the Natural Environment (North Tyneside Council, 2017)

DM5.6 Management of International Sites

“In accordance with European Legislation, proposals that are likely to have significant effects on features of internationally designated sites, either alone or in-combination with other plans or projects, will require an appropriate assessment. Proposals that adversely affect a site’s integrity can only proceed where there are no alternatives, imperative reasons of overriding interest are proven and the effects are compensated.

Expert advice will be sought on such proposals and, if necessary, developer contributions or conditions secured to implement measures to ensure avoidance or mitigation of, or compensation for, adverse effects. Such measures would involve working in partnership with the Council (and potentially other bodies) and could include a combination of two or more of the following mitigation measures:

- a. Appropriate signage to encourage responsible behaviour;
- b. Distribution of information to raise public awareness;
- c. Working with local schools, forums and groups to increase public understanding and ownership;
- d. Use of on-site wardens to inform the public of site sensitivities;
- e. Adoption of a code-of conduct;

DM5.6 Management of International Sites

- f. Zoning and/or seasonal restrictions to minimise disturbance in particular sensitive areas at particularly sensitive times;
- g. Specially considered design and use of access points and routes;
- h. Undertaking monitoring of the site's condition and species count;
- i. Provision of a Suitable Accessible Natural Green Space (SANGS)."

Q6: Delivery Body

As mentioned in Question 1 and Policy DM5.6 (Management of International Sites), mitigation measures would be delivered by North Tyneside Council, in partnership with the neighbouring authority of Northumberland County. Although not in collaboration, South Tyneside Council has adopted an [interim SPD](#) that outlines measures to mitigate the impacts of development upon coastal designations.

The [SPD](#) for North Tyneside seeks to establish a Coastal Mitigation Steering Group "Comprised of senior wardens, and officer representation from North Tyneside and Northumberland".

Q7: Types of Development

The mitigation strategy in the SPD applies to the types of residential and tourist development set out in **Table 22**.

Table 22: Types of development (North Tyneside Council, 2019)

Planning Use Class	Class Description
C1 Hotels	The coastal mitigation contribution will apply to purpose built hotels, staff accommodation, boarding and guest houses and the change of use to such where levels of guest accommodation are considered by the Council to increase upon any previous levels of accommodation provided. The coastal mitigation contribution will also apply to extensions to existing C1 uses that would increase levels of accommodation. The contribution for new tourist accommodation is based upon the calculated contributions for new residential units, adjusted for the difference in number of guests compared to average household size, and for accommodation occupancy rate.
C2 Residential institutions	The coastal mitigation contribution will be applied to developments within the C2 use class (i.e. residential care homes, hospitals, nursing homes, boarding schools, residential colleges and training centres) on a case by case basis. In

Planning Use Class	Class Description
	<p>general, developments such as hospitals and residential care/nursing homes will not be considered to have a likely significant effect with regard to recreational impacts but will be considered on a case by case basis taking into account potential “in combination” effects and any associated net change in residential occupancy for carers residing on the site.</p> <p>Certain types of C2 residential accommodation may also be considered to have little to no recreational impacts, including:</p> <ul style="list-style-type: none"> • Purpose built schemes for the frail elderly where there is an element of close care provided on site 24 hours a day. This level of care is above that of provision of an on-site warden service provided for sheltered accommodation. It would be expected that there would normally be an age restriction of 60+ years for the occupants of the units and that the planning permission would be conditioned in such a way that the units could not become open market housing. • Purpose built schemes for the accommodation of disabled people, where by the nature of the residents’ disabilities, they are unlikely to have any impact on the coastal protected sites. <p>Relevant conditions may need to be attached to any planning permission to ensure that no significant effects can arise for the lifetime of the development including for example, preventing further changes of use within the C2 use class and ensuring that units will not become open market housing</p>
C3 Dwelling houses	The coastal mitigation contribution will apply to dwelling housings, including affordable houses, flats, annexes, retirement and age restricted properties and the change of use to such.
C4 Houses in multiple occupation (HMO)	The coastal mitigation contribution will apply to purpose built HMOs, including proposals for large HMOs (i.e. 6 or more people sharing) that are unclassified by the Use Classes Order and are 'sui generis'. The coastal mitigation contribution will also apply to the extension of existing HMOs where they are considered by the Council to provide additional levels of occupancy. The coastal mitigation contribution will apply to the

Planning Use Class	Class Description
	change of use from C3 to C4 where levels of occupancy increase.
Sui Generis	<p>Camp and caravan sites -The coastal mitigation contribution will apply to proposals for temporary, seasonal and permanent camp and caravan sites and extensions to such where the number of pitches or guest accommodation increases. This includes applications to extend temporary planning consent. If subsequently made permanent, no additional contribution will be sought. The contribution for new tourist accommodation is based upon the calculated contributions for new residential units, adjusted for the difference in number of guests compared to average household size, and for accommodation occupancy rate.</p> <p>Mobile and temporary dwellings - The coastal mitigation contribution will apply to proposals for mobile or temporary dwellings. If subsequently made permanent no additional contribution will be sought.</p> <p>Temporary and permanent gypsy and traveller pitches - The coastal mitigation contribution will apply to proposals for temporary and permanent gypsy and traveller pitches and the extension of sites for such. If subsequently made permanent no additional contribution will be sought.</p> <p>The coastal mitigation contribution will apply to proposals that are considered likely to increase the visitor draw and appeal of the coast.</p>

The SPD also notes that developments such as “leisure facilities and food and drink outlets, that when developed on or close to the coast, may play a role in attracting visitors and thus contribute to recreational disturbance” and may also be required to contribute towards mitigation. In such cases, the required contribution would be determined on a case-by-case approach in discussion between the applicant and the Council, and the amount of contribution will depend on the nature and size of the development and degree of negative impact (North Tyneside Council, 2019).

Q8: Developer Contributions

For developer contributions in North Tyneside, the total cost of the mitigation package is £2,231,044 for the period of March 2017 to 2032 (North Tyneside Council, 2019). Contributions will be secured through Section 106 agreements or a Unilateral Undertaking.

Appendix C, D and E of the [SPD document](#) set out the details of the mitigation package. The annual cost (£159,360) of coastal mitigation includes:

- Full time senior warden;
- Full time assistant warden;
- Van and fuel;
- Equipment;
- Training;
- Project budget; and
- Contingency for periods of low housing delivery.

New residential units within 6km of the coast contribute 75% of total cost of coastal mitigation (£337 per net dwelling unit), whereas new residential units beyond 6km of the coast contribute 25% of total cost of coastal mitigation (£151 per net dwelling unit) (North Tyneside Council, 2019).

Tourist accommodation such as caravan parks and hotels within the 6km buffer zone would contribute £153 whereas beyond the 6km zone such developments would contribute £69 for each net additional accommodation unit (North Tyneside Council, 2019).

Where proposed development sites cross the 6km buffer zone, the Council will provide guidance on the appropriate contribution to be paid considering the site's characteristics.

The calculations are based on the estimated delivery of housing during the Local Plan period as well as the existing costs of providing the identified coastal mitigation. The Council will monitor and revise the level of contributions annually to incorporate inflation and to ensure that they remain appropriate to the scale of the developments, and are effective in terms of the delivery of the coastal mitigation (North Tyneside Council, 2019).

Q9: Timescales for Delivery

No reference is made in the SPD to in-perpetuity mitigation requirements. The Coastal Mitigation Service is expected to address the impacts of development over the Local Plan period to 2032 (North Tyneside Council, 2019).

Q10: Other initiatives

As answered in Question 2, the SPD indicates that the potential mitigation projects identified by the Coastal Warden Service could also include “physical projects to steer visitors away from the most sensitive locations and any other initiatives that could assist in protecting the coast’s most sensitive locations from the cumulative impacts of development” (North Tyneside Council, 2019).

Q11: Monitoring

Monitoring is a key element of the proposed strategy. Provisions set out in the SPD (North Tyneside Council, 2019) include:

- **Authority Monitoring Report:** “The monitoring of bird populations and visitor surveys undertaken by the Coastal Mitigation Service will be reported regularly to the Steering Group and will be published on an annual basis within the Authority Monitoring Report (AMR). The AMR will also publish information on the developer contributions collected and spent in the previous year alongside its reporting of all section 106 and Community Infrastructure Levy information”.
- **Annual Action Plan:** “Informed by the findings of the most up to date monitoring information an Annual Action Plan will be prepared by the Coastal Mitigation Service. The Action Plan will be submitted to the Steering Group for approval and agreed with the Council, and adjacent Council’s in Northumberland and South Tyneside if any cross-boundary activities are considered necessary. The Annual Action Plan will identify immediate costed actions for the next 12 months and any longer-term objectives or trends that may require action in future years. The action plan will be published online and reported within the AMR”.

Q12: Communication Strategy

Components of mitigation strategy that include communication (raising awareness and education) are answered in Question 2.

SANG

Q13-17

There is no defined requirement for SANG in North Tyneside, although the SPD refers to the “identification of potential projects to assist in reducing recreational impacts including identification of alternative locations that could support protection of protected sites”. In addition, Policy DM5.6 ‘Management of International Sites’ lists SANG as an option for mitigation. If a conclusive recommendation from the Space for Shorebirds project is that a SANG is required, this recommendation would be reviewed by the relevant steering group and LPA ahead of implementation. Presently, SANG is considered as one of a range of potential measures to mitigate recreational impacts.

The HRA for the North Tyneside Local Plan (Capita, 2017) sets out recommendations for SANG provision if required:

- “Sites should be natural / semi-natural in appearance in order to replicate the same sense of space as visiting the coast;
- Sites should be within 300m and at least 2ha in size; or within 2km and 20ha in size;
- Sites should aim to allow for a return or circular route journey of 2.7km;
- Sites should include sufficiently large and open areas to allow dogs to walk off their leads;
- Where existing spaces are to be used, they should be assessed to ensure there are no conflicting interests with existing uses e.g. children’s play areas;
- Each site should be assessed to measure the carrying capacity”.

SAMM

Q18: SAMM Criteria

No specific criteria are set out to determine the requirements for SAMM. SAMMs contributions are required for all development within North Tyneside, with a greater contribution for development within the 6km ZOI as set out in the SPD (see answer to Question 7 and 8).

Q19: SAMM Projects

The SPD proposes to introduce SAMM projects in accordance with Policy DM.5 of the Local Plan (see **Box 13**). The SPD proposes that a coastal wardening service will be introduced as part of a wider Coastal Mitigation Service that will implement a range of targeted and coordinated physical projects to mitigate the impacts at the coast. The projects are listed in answer to Question 2.

As set out in answer to Question 10, the SPD also notes that the Coastal Warden Service will identify further mitigation projects to direct visitors away from the coast.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

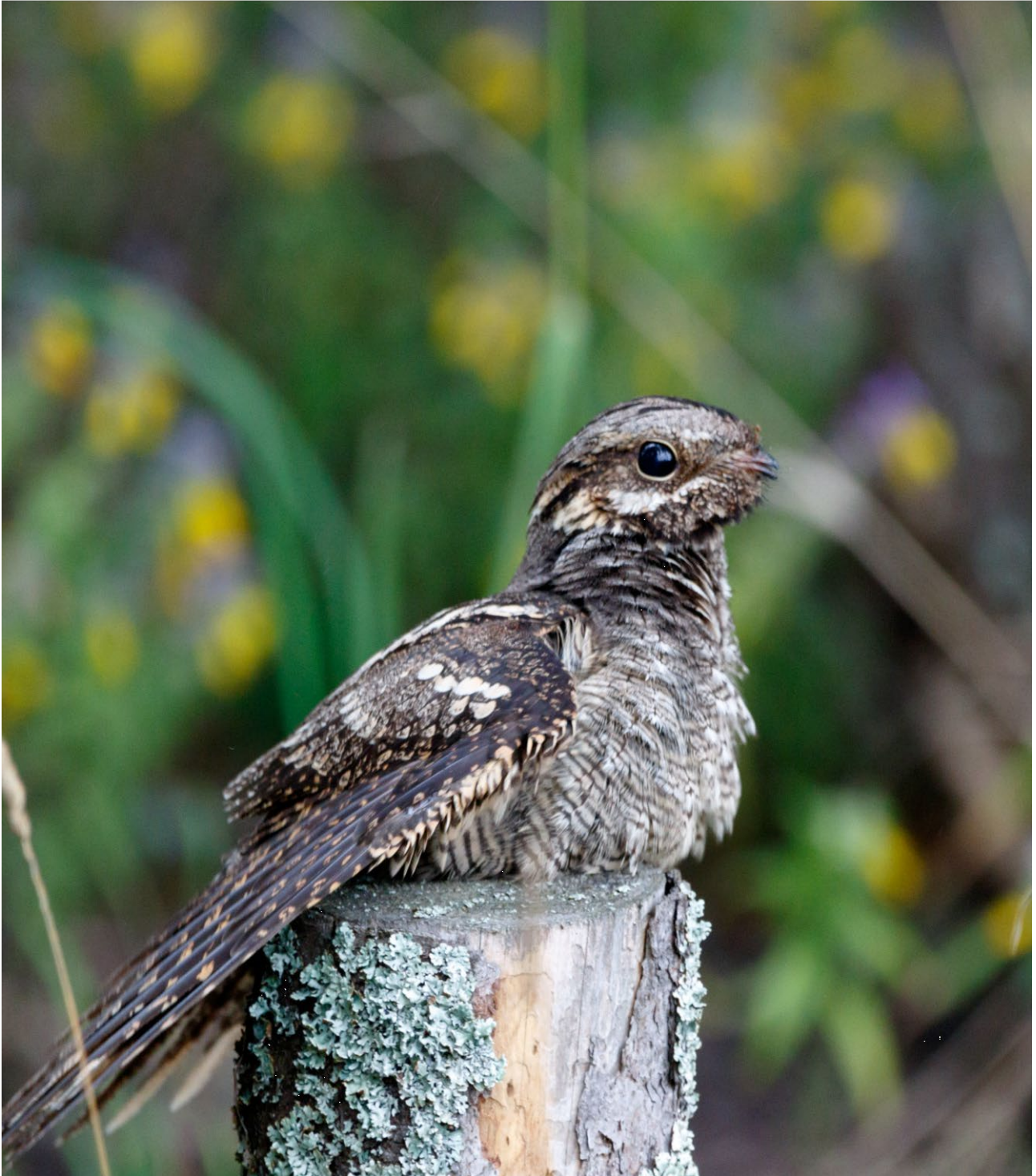
There are no multifunctional links set out specifically in the SPD, although the HRA for the North Tyneside Local Plan (Capita, 2017) identifies potential links with the existing North Tyneside Green Space Strategy, in terms of SANG provision.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the SPD.

Sherwood Forest

European nightjar (*Caprimulgus europaeus*) Credit: Istock images.



Sherwood Forest ppSPA – Newark and Sherwood District Council

Summary

Triggers for Mitigation

Sherwood Forest possible potential SPA (ppSPA) has been notified as an Important Bird Area (IBA) and identified as an indicative core area by Natural England due to breeding populations of nightjar and woodlark within Sherwood Forest. The Birklands and Bilhaugh SAC is located within the ppSPA alongside a number of SSSI designations.

Recreational Evidence Base

There has been no recreational impact or visitor survey data obtained for the ppSPA as a whole to identify and characterise recreational impacts. Recreational impact assessments have however been undertaken for components of the ppSPA: Birklands and Bilhaugh SAC and Clumber Park SSSI (Saunders and others, 2021a; Sanders and others, 2021b).

Solutions for recreational impacts

As with recreational impact assessments, bespoke recreational visitor survey data has not been collected for the ppSPA as a whole. However, visitor survey data has been collected for the Birklands and Bilhaugh SAC and Clumber Park SSSI components of the ppSPA (Saunders and others, 2021a; Sanders and others, 2021b).

The 2021 visitor surveys split main user group activities as shown in **Figures 28** and **29**.

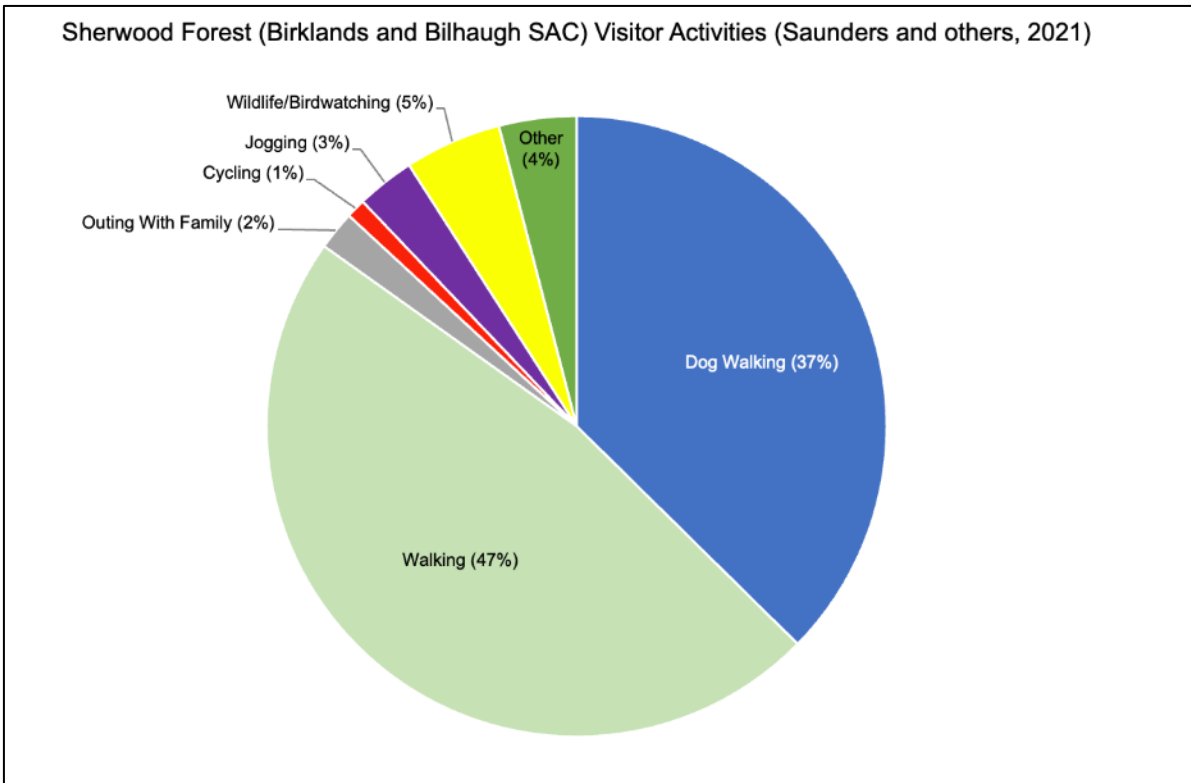


Figure 28: Visitor activities at Birklands and Bilhaugh SAC (adapted from Saunders and others, 2021a)

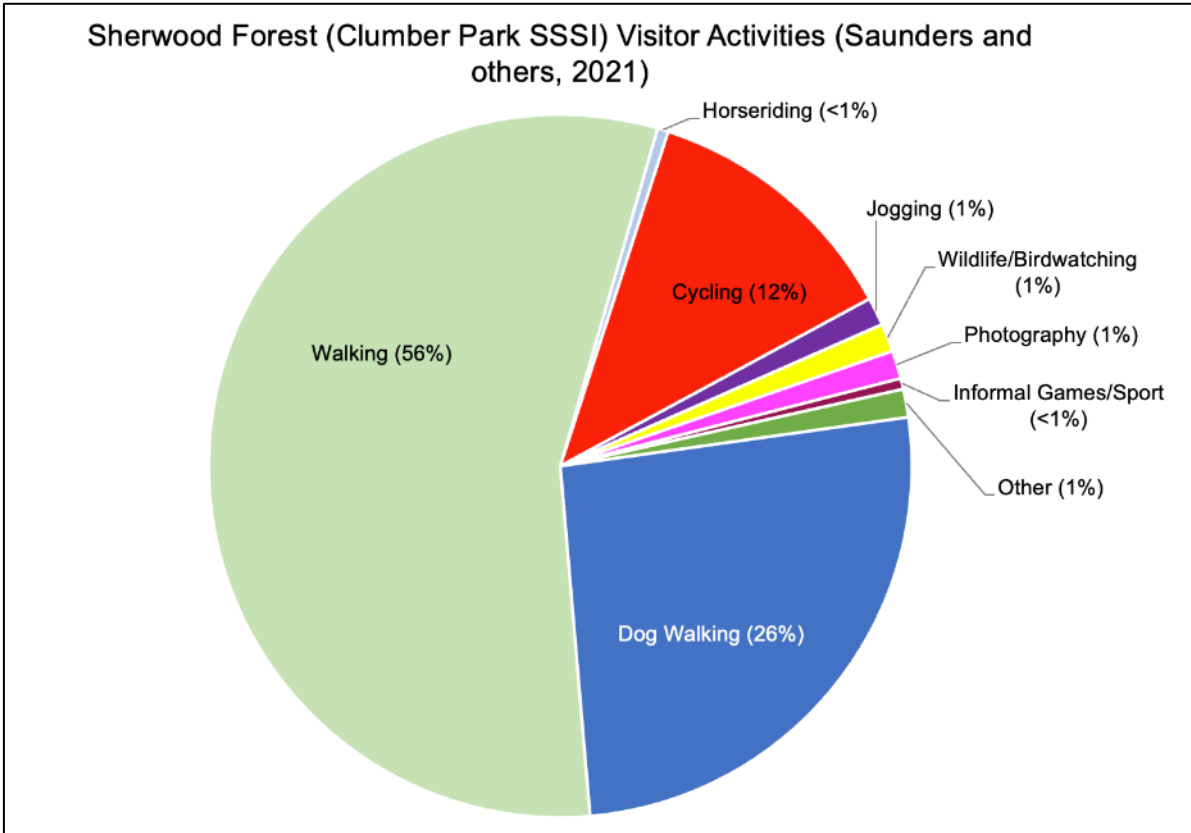


Figure 29: Visitor activities at Clumber Park SSSI (adapted from Saunders and others, 2021b)

No strategic or LPA-led recreational mitigation solution has been defined for the Sherwood Forest ppSPA as a whole or any components of this designated area individually to date.

In support of the Bassetlaw Local Plan, and based on the output of Recreational Impact Assessments and visitor surveys, a ZOI was calculated for the Birklands and Bilhaugh SAC and Clumber Park SSSI components of the ppSPA, of 8.9km and 24.7km respectively.

The Newark and Sherwood current Core Strategy and Allocations and Development Management DPD notes that SANG will be provided for any development within 5km of the SAC. It is proposed that this ZOI will be updated to reflect the 2021 visitor surveys and extended to 8.9km as part of the revised Allocations and Development Management DPD.

Criteria for each SANG is determined on a case-by-case basis in consultation with Natural England.

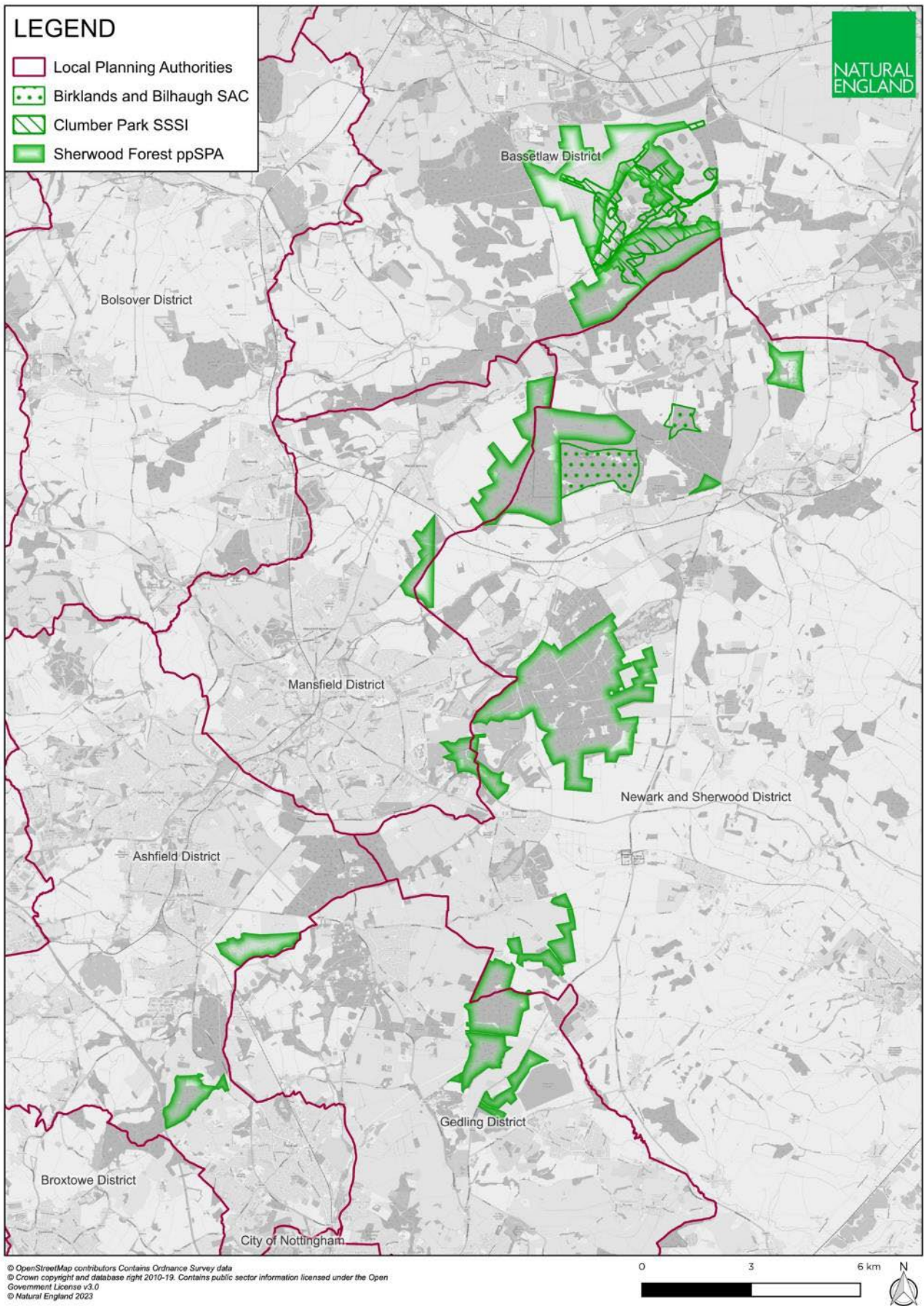


Figure 30: Location of Sherwood Forest ppSPA © Natural England 2024

Criteria 1: Triggers for Mitigation

Sherwood Forest ppSPA

At a Public Inquiry in 2011, the Secretary of State refused planning permission for an Energy Recovery Facility (ERF) on land at the former Rufford Colliery site at Rainworth. This was due to likely effects of development on breeding populations of nightjar and woodlark within Sherwood Forest (Communities and Local Government, 2011). This area has been notified as an Important Bird Area (IBA) and identified as an indicative core area by Natural England. These areas of land are informally known as the Sherwood Forest possible potential Special Protection Area (ppSPA) (see **Figure 30**).

Background Information

Following the Rufford Colliery Public Inquiry, Natural England provided advice to all affected LPAs in 2014 in relation to the Sherwood Forest ppSPA (Natural England, 2014b). This advice recommends a precautionary approach to be adopted which ensures reasonable and proportionate steps are taken to avoid or minimise, as far as possible, any potential adverse effects from development on the breeding populations of nightjar and woodlark in the Sherwood Forest area. Natural England recommend plans and proposals are accompanied by an additional and robust assessment of the likely impacts arising from the proposals on breeding nightjar and woodlark in the Sherwood Forest area. This should ideally cover the potential direct, indirect and cumulative impacts which may include, but may not be limited to, the following;

- Disturbance to breeding birds from people, their pets and traffic;
- Loss, fragmentation and/or damage to breeding and/or feeding habitat;
- Bird mortality arising from domestic pets and/or predatory mammals and birds;
- Bird mortality arising from road traffic and/or wind turbines; and
- Pollution and/or nutrient enrichment of breeding habitats.

The Sherwood Forest ppSPA area includes all/part of the following designations:

- Birklands and Bilhaugh SAC;
- Clumber Park Site of Special Scientific Interest (SSSI);
- Welbeck Lake SSSI;
- Thoresby Lake SSSI;
- Birklands and Bilhaugh SSSI;
- Birklands West and Ollerton Corner SSSI;
- Sherwood Forest Golf Course SSSI;
- Strawberry Hill Heaths SSSI;
- Rainworth Heath SSSI;
- The Greenwood (Community Forest);
- Sherwood Heath Local Nature Reserve (LNR);
- Sherwood Forest National Nature Reserve (NNR);
- Rainworth Water LNR;

- Oak Tree Heath LNR;
- Cockglode and Rotary Wood LNR; and
- Clumber Park Nature Reserve.

Q1: Recreational Impacts Evidence and Background Information

There has been no recreational impact or visitor survey data obtained for the ppSPA as a whole to identify and characterise recreational impacts. Given the size, extent and distribution of the ppSPA, recreational access varies across the site considerably. Studies have however been undertaken for a number of designations within the ppSPA boundary. These include one for the Birklands and Bilhaugh SAC and Sherwood Forest National Nature Reserve (NNR) and another for Clumber Park SSSI. These sites are designated for the following features:

- **Birklands and Bilhaugh SAC** – designated for old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland; and
- **Clumber Park SSSI** – notified for areas of mixed habitat including lowland acid grassland, heath and mature deciduous woodland which are characteristic of the English North Midlands. It supports a rich beetle fauna is associated with mature timber and dead wood habitats and the park is notable for its breeding bird communities which include woodlark and nightjar amongst other species.

As can be seen in **Figure 30**, these designations are small areas within the overall ppSPA boundary.

The studies at Birklands and Bilhaugh SAC and Clumber Park SSSI are known as Recreational Impact Assessments (RIA) and were commissioned as part of the Bassetlaw Local Plan review (Saunders and others, 2021a; Sanders and others, 2021b). The aim of these RIAs was to identify potential recreational mitigation required to ensure no adverse impacts from the Bassetlaw Local Plan, either alone or in-combination with other plans and projects (including NSDC's Local Development Framework (LDF))¹. Since preparation of these RIAs, two landowners unexpectedly withdrew their site from the proposed Garden Village development element of the Bassetlaw Local Plan shortly before submission. As such, Bassetlaw are considering alternatives to address consequential changes in response to updated evidence.

These RIAs were commissioned and published by Bassetlaw District Council. Whilst affected LPAs, including Newark and Sherwood District Council (NSDC), were involved in

¹ The assessments included consideration of a Garden Village which was a key component of the Bassetlaw Local Plan. However, since preparation of these RIAs, two landowners unexpectedly withdraw their site from the proposed Garden Village development shortly before submission of the Bassetlaw Local Plan.

the commission as part of a Project Group², the findings have not been agreed or formally approved for publishing by all LPAs. There has been no commitment to a strategic approach to any mitigation specially for the Sherwood Forest ppSPA. It is noted that mitigation set out in the RIAs will need to be revisited in light of the removal of the Garden Village from Bassetlaw's Local Plan.

The RIAs comprised the following elements:

- Targeted bird surveys for nightjar and woodlark to determine distribution within each designation.
- Habitat mapping using UK Habitat Classification (UKHab) methods.
- A recreation impact assessment walkover – to provide evidence of recreational impacts upon habitats. Recreational pressure was mapped and recorded, and the severity of the impact noted.
- Two tranches of visitor interview surveys – visitor surveys and tally counts were undertaken at two locations once in spring and once in summer to determine activities undertaken on site, reasons for site choice, and routes taken on site.

The outputs of these RIAs identified recreational impacts on habitats which are important to woodlark and nightjar including trampling, dens, desire lines, direct damage to veteran trees, eutrophication and car parking. The visitor survey data also allowed a recreational ZOI to be drawn for each site to reflect the distance over which visitors travel to these parts of the ppSPA.

No other bespoke recreational evidence has been provided to quantify recreational impacts and visitor pressures across the rest of the Sherwood Forest ppSPA.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

No Sherwood Forest ppSPA-wide mitigation solution for recreational impacts has been considered.

The RIAs discussed for Birklands and Bilhaugh SAC/Sherwood Forest NNR and Clumber Park SSSI, suggest a combination of SANG/SAMM mitigation be adopted to address

² The Project Group included Bassetlaw District Council, Newark and Sherwood District Council, Nottinghamshire County Council, Rotherham Metropolitan Borough Council, Bolsover District Council, Gedling Borough Council, Ashfield District Council and Mansfield District Council as well as Natural England, National Trust, and the RSPB.

recreational pressures from new development at the SAC, NNR and SSSI. This package of mitigation has not been taken forward, either strategically or by NSDC alone at the SAC or NNR. However, Natural England has recently (2023) issued advice recommending that a strategic approach to recreational mitigation be adopted for Clumber Park SSSI in line with the recommendations set out in the relevant RIA.

SAMM mitigation recommendations were made in the RIAs, although the RIA do not contain criteria for solution selection and no standards have been applied. This reflects the early stage of the RIAs.

At Birklands and Bilhaugh SAC/Sherwood Forest NNR the following SAMM recommendations were made:

- Surfacing of heavily used paths at bottleneck localities, alongside additional fencing to prevent spill-over;
- Increased staff presence and wardening resource;
- Additional resources for signage and interpretation relating to visitor behaviour and sensitive features (such as veteran trees and ground nesting birds);
- Education and awareness raising initiatives with visitors around where to go, the need to pick-up after their dog, dogs off lead etc;
- Wider engagement with the local community on site management (via e.g. public forums);
- Measures to address contamination (particularly dog fouling); and
- Monitoring.

At Clumber Park SSSI the following recommendations were made:

- Management of paths to limit desire lines and focus use on particular paths that are appropriately managed;
- Fencing of key areas of ecological importance;
- Increased staff presence and wardening resource;
- Additional resources for signage and interpretation relating to visitor behaviour and sensitive features (such as ground nesting birds);
- Education and awareness raising initiatives with visitors around where to go, the need to pick up after their dog, dogs off lead etc;
- Measures to address contamination (particularly dog fouling);
- Parking and travel related measures to influence the distribution of visitors; and
- Monitoring.

Q3: Zone of Influence

No Sherwood Forest ppSPA-wide ZOI has been established.

A recreational ZOI of 8.9km was identified for the Birklands and Bilhaugh SAC/Sherwood Forest LNR through a review of the RIA visitor survey data. This zone was based on those visitors which are likely to pose a risk in terms of recreational impact (walkers and

dog walkers) and visiting from home at least once a month (67 postcodes). The ZOI was drawn using straight-line distances between the home postcodes and their respective interview location.

The 8.9km ZOI, as mapped, includes portions of NSDC alongside other LPAs including Bassetlaw, Bolsover and Mansfield District Council areas (see **Figure 31**).

At Clumber Park SSSI, a recreational ZOI of 24.7km was identified using only the three most frequent activity types (walkers, dog walkers, and cyclists) identified in the RIAs, and was based on those who visit at least once a month. This ZOI was filtered by Natural England taking into consideration frequency of visits and the SSSI Impact Risk Zone (IRZ) information, and a ZOI of 10km was established. The ZOI was drawn using straight-line distances between the home postcodes and their respective interview location, as shown in **Figure 31**.

Figure 31: Clumber Park SSSI and Birklands and Bilhaugh SAC Zone of Influence © Natural England 2024

Q4: Strategic Approach

No strategic or LPA-led solution has been defined to mitigate recreational impacts upon the Sherwood Forest ppSPA as a whole or any components of this designated area individually.

Whilst policy contained within the NSDC Core Strategy Development Plan Document (DPD) (Core Policy 12 – Biodiversity and Green Infrastructure) and the Allocations and Development Management DPD (Policy DM7 - Biodiversity and Green Infrastructure) aims to protect the Birklands and Bilhaugh SAC component of the ppSPA, delivery of mitigation is agreed on a case-by-case basis between the developer, NSDC and Natural England (NSDC, 2013a; NSDC, 2019).

NSDC are currently in the process of reviewing their Allocations and Development Management DPD and consulted on the Regulation 19 version of this DPD between November 2022 and January 2023 (NSDC, 2022). Policy within this updated version of the DPD provides protection for the ppSPA by ensuring Natural England’s risk-based approach is adopted (Policy DM7 – Biodiversity and Green Infrastructure).

Q5: Policy

Existing planning policy (provided in the Core Strategy DPD and the Allocations and Development Management DPD) aims to protect the Birklands and Bilhaugh SAC component of the ppSPA only. Due to the date of the adopted DPDs, policy wording does not reflect the outputs from the recent RIA undertaken at the SAC on behalf of Bassetlaw District Council (and as such refers to a 5km ZOI – rather than 8.9km as identified by recent visitor survey work). The requirements of these policies are set out in **Boxes 14** and **15**.

Box 14: NSDC Core Strategy DPD (Newark and Sherwood District Council, 2019)

Core Policy 12 – Biodiversity and Green Infrastructure

“The District Council will seek to conserve and enhance the biodiversity and geological diversity of the District by working with partners to implement the aims and proposals of the Nottinghamshire Local Biodiversity Action Plan, the Green Infrastructure Strategy and the Nature Conservation Strategy. The District Council will therefore:

...

Provide for Suitable Alternative Natural Green Space to reduce visitor pressure on the District’s ecological, biological and geological assets, particularly in the Newark area and for 5kms around the Birklands and Bilhaugh Special Area of Conservation;

Core Policy 12 – Biodiversity and Green Infrastructure

...”

Box 15: NSDC Allocations and Development Management DPD (Newark and Sherwood District Council, 2013a)

Policy DM7 – Biodiversity and Green Infrastructure

“New development, in line with the requirements of Core Policy 12, should protect, promote and enhance green infrastructure to deliver multi functional benefits and contribute to the ecological network both as part of on site development proposals and through off site provision. As set out in Core Policy 12 public open space provided in connection within allocations in settlements within a 5km radius of Birklands and Billhaugh Special Area of Conservation, (provided in accordance with the Developer Contributions SPD) shall be designed to reflect the need to provide SANGS in perpetuity to relieve pressure on the SAC. Where SANGS are proposed, their quantity and quality shall be developed and agreed in conjunction with the District Council and Natural England.

Planning permission will not be granted for development proposals on, or affecting, Special Areas of Conservation or Special Protection Areas (European Sites) unless it is directly related to the management of the site for nature conservation and public access and does not significantly harm the integrity of the site.

...”

Q6: Delivery Body

There is no formally designated delivery body. The Developer Contributions and Planning Obligations SPD sets out the requirements for developer contributions (NSDC, 2013b) as shown in **Box 16**. The SPD notes that SANG contributions and requirements will be established with the Council in consultation with Natural England.

Box 16: NSDC Developer Contributions and Planning Obligations Supplementary Planning Document (Newark and Sherwood District Council, 2013b)

Developer Contributions and Planning Obligations Supplementary Planning Document

In the context of Newark and Sherwood District the term ‘Suitable Alternative Natural Green Space (SANGS)’ refers to sites that provide a suitable alternative to the Birklands and Billhaugh SAC for people in the local area wishing to regularly access natural open space for walking, including dog walking. The definition of natural space development by

Developer Contributions and Planning Obligations Supplementary Planning Document

Natural England in the context of Accessible Natural Greenspace (ANGSt) is “places where human control and activities are not intensive so that a feeling of naturalness is allowed to predominate”. In the context of the Birklands and Bilhaugh SAC the terms SANGS refers to:

- Sites that are freely accessible to people living within 5km of the SAC that provide an alternative to the SAC for regular (i.e. more than once a week) walking and dog walking;
- Sites that provide natural space (using the definition above);
- Sites should include some provision for car parking but also be accessible on foot.

Such sites provide the opportunity for multifunctional sites that also enhance Biodiversity. Wherever possible emphasis will be placed on the provision of such open space within the development site.

This will be applied to above developments within a 5km radius of Birklands and Bilhaugh SAC (Edwinstowe and Ollerton). The District Council will work with Natural England to determine whether contributions are appropriate as a result of the impacts of the development.

SANGS could be provided as part of new development or through the improvement and management of existing sites.

- Provision of land either on or off site
- Commuted sum towards the provision of facilities including car parking, pedestrian access arrangements

It is the Council’s expectation that such provision will be provided in perpetuity and this will be set out within the legal agreement

Q7: Types of Development Covered

Whilst no mitigation is required specifically for impacts upon the Sherwood Forest ppSPA, planning policy requires SANG to be delivered for any development within 5km of the Birklands and Bilhaugh SAC. This is likely to be updated to 8.9km to reflect the recent RIA work undertaken at the Birklands and Bilhaugh SAC.

Q8: Developer Contributions

The Developer Contribution SPD (**Box 16**) does not set out a level of developer contribution that will be required towards SANG.

Q9: Timescales for Delivery

The Developer Contribution SPD (**Box 16**) notes that “provision will be provided in perpetuity”. However, specific timescales are not set out.

Q10: Other initiatives

No other initiatives are set out at present. NSDC Allocations and Development Management DPD review suggests emerging policy will provide protection for the ppSPA by ensuring Natural England’s risk-based approach is adopted.

Q11: Monitoring

None.

Q12: Communication Strategy

None.

SANG

Q13: Identify the components that make up the SANG projects.

SANG requirements are determined by NSDC, in consultation with Natural England on a case-by-case basis. There is no strategic SANG available within NSDC.

Q14: Has a green space standard or metric been used to define requirements for SANG?

No, SANG requirements are determined by NSDC, in consultation with Natural England on a case-by-case basis. There is no strategic SANG available within NSDC.

Q15: Is reference made to Accessible Natural Green Space Standards (ANGSt)?

The SPD refers to SANG needing to meet the requirements of ANGSt (**Box 16**).

Q16: Is the quantity of SANG available to the LPA published?

No, SANG requirements are determined by NSDC on a case-by-case basis. There is no strategic SANG available within NSDC.

Q17: Are details available for each SANG?

No, SANG requirements are determined by NSDC on a case-by-case basis. There is no strategic SANG available within NSDC.

SAMM

Q18 and Q19: SAMM

There are no SAMM components.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

There are no multifunctional links set out specifically in the current documentation.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in SANG policy wording.

Solent

Ringed plover (*Charadrius hiaticula*) Credit: Istock images.



Solent – Portsmouth City Council

Summary

Triggers for Mitigation

The Solent coastline contains several designations due its habitats which provide feeding and roosting grounds for a range of over-wintering birds. Designated sites include: Chichester and Langstone Harbours SPA; Portsmouth Harbour SPA; and Solent and Southampton Water SPA.

Recreational Evidence Base

Evidence has been collected in three parts to underpin the Solent Disturbance Mitigation Project (SDMP). Phase I and II reviewed current recreational effects on bird species (Stillman and others, 2009; 2012).

Solutions for recreational impacts

Visitor surveys were undertaken as part of the Phase II and III SDMP work and included visitor surveys and household surveys:

- The Solent Disturbance and Mitigation Project. Phase II - On-site visitor survey results from the Solent region (Fearnley and others, 2010).
- The Solent Disturbance and Mitigation Project. Phase II – results of the Solent household survey (Fearnley and others, 2011).

The 2010 visitor surveys split main user group activities as shown in **Figure 32**.

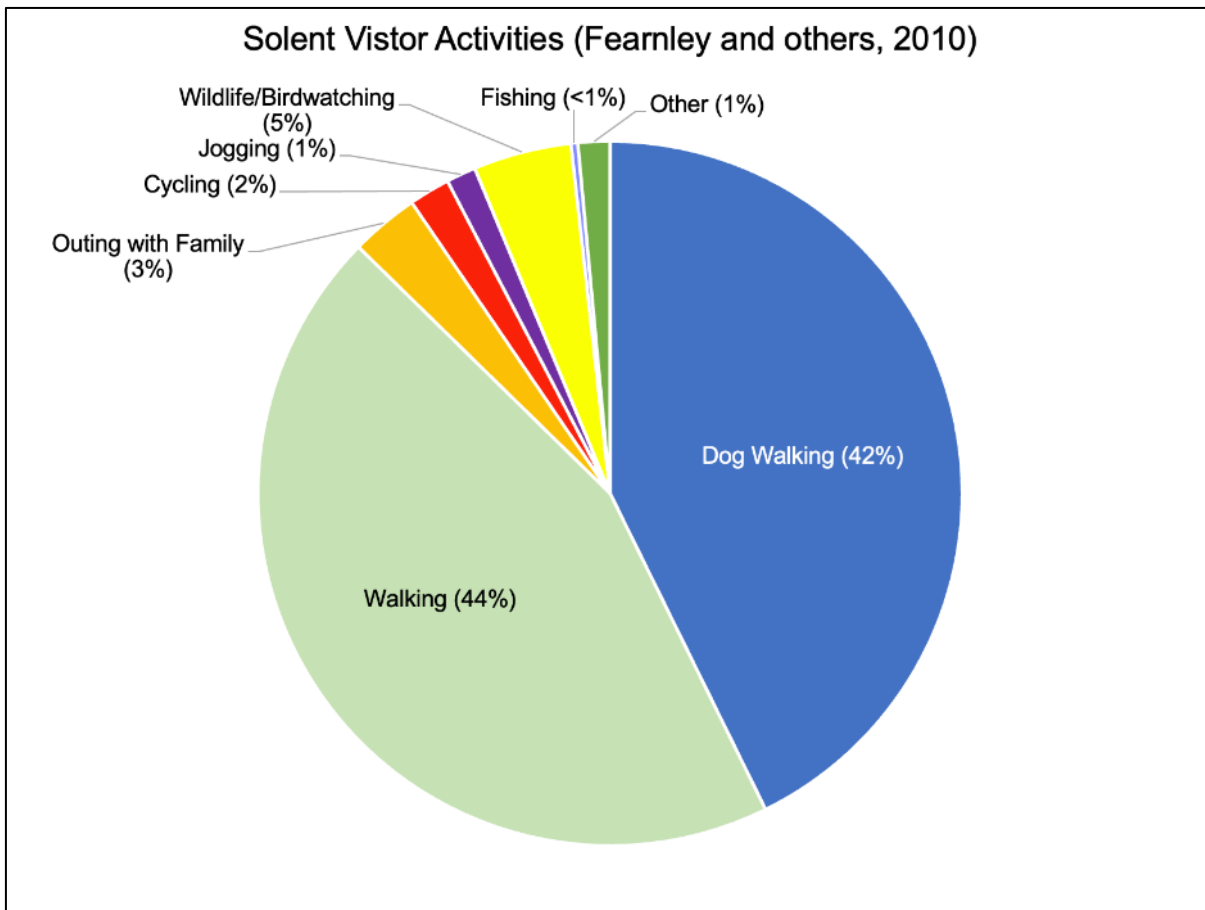


Figure 32: Visitor activities across the Solent designations (adapted from Fearnley and others, 2010)

The Solent Recreation Mitigation Strategy was prepared to mitigate the effects arising from 63,684 new dwellings (3,538 per annum) which are planned between 2016 and 2034 with the ZOI.

A 5.6km ZOI was established, drawn as a straight line from the three Solent SPA boundaries, which is based on the distance in which 75% of coastal visitors to the SPAs live (Liley and Tyldesley, 2013).

Mitigation Solution

The recreational mitigation solution at the Solent comprises the Solent Recreation Mitigation Strategy, delivering the following three-stranded approach (Bird Aware Solent, 2017):

- Raising awareness and encouraging behavioural change of coastal visitors;
- Implementing projects to better manage visitors and provide secure habitats for the birds; and
- Providing and promoting new/enhanced greenspaces in less sensitive areas as an alternative to visiting the coast.

The Solent Recreation Mitigation Partnership coordinates avoidance, mitigation and monitoring measures between the affected LPAs within the Solent region.

SAMM Solutions

Developer contributions are collected by LPAs for each net new dwelling within the 5.6km ZOI of the SPA designations.

Solent Recreation Mitigation Strategy charges in Portsmouth are based the number of bedrooms provided per dwelling, and range from £390 for a one bedroom property to £1,014 for a five bedroom property.

Tariffs apply to all new residential developments including sub-division of existing dwellings, holiday accommodation, changes of use, and accommodation for Gypsies and Travellers, with other developments assessed on a case-by-case basis.

The Mitigation Strategy applies in perpetuity, which is calculated on an 80-year basis to 2114. The total cost of the scheme for the plan period up to 2034 is £1,996,000.00 and is calculated on the basis of 3,538 dwellings per annum coming forward in this period.

SAMM solutions include a team of rangers, raising education and awareness, codes of conduct, site-specific visitor management projects, promotion of new or enhanced greenspace, a delivery officer and monitoring.

SANG Solutions

Part of the scheme aims to identify new strategic greenspaces, and enhancements to existing greenspaces. The SPD mentions two new strategic greenspaces and enhancements to other existing greenspaces at: Alver Valley Country Park; Manor Farm Country Park; Horsea Island Country Park; and Shoreburs Greenways (Bird Aware Solent, 2017). The Solent SANG Visitor Survey mentions three further SANG at Firestone Copse, River Hamble Country Park, and Minerva Heights (Saunders and others, 2022).

A minimum SANG provision standard (such as 8ha/1,000) is not provided; however, the Mitigation Strategy sets out a series of 'essential' and 'desirable' location-based and design-based SANG criteria including:

- Provision of a circular walk of at least 5km.
- Adequate parking provision.
- Clear signage.
- Paths provided to a certain standard.
- Off the lead dog areas and other dog facilities.

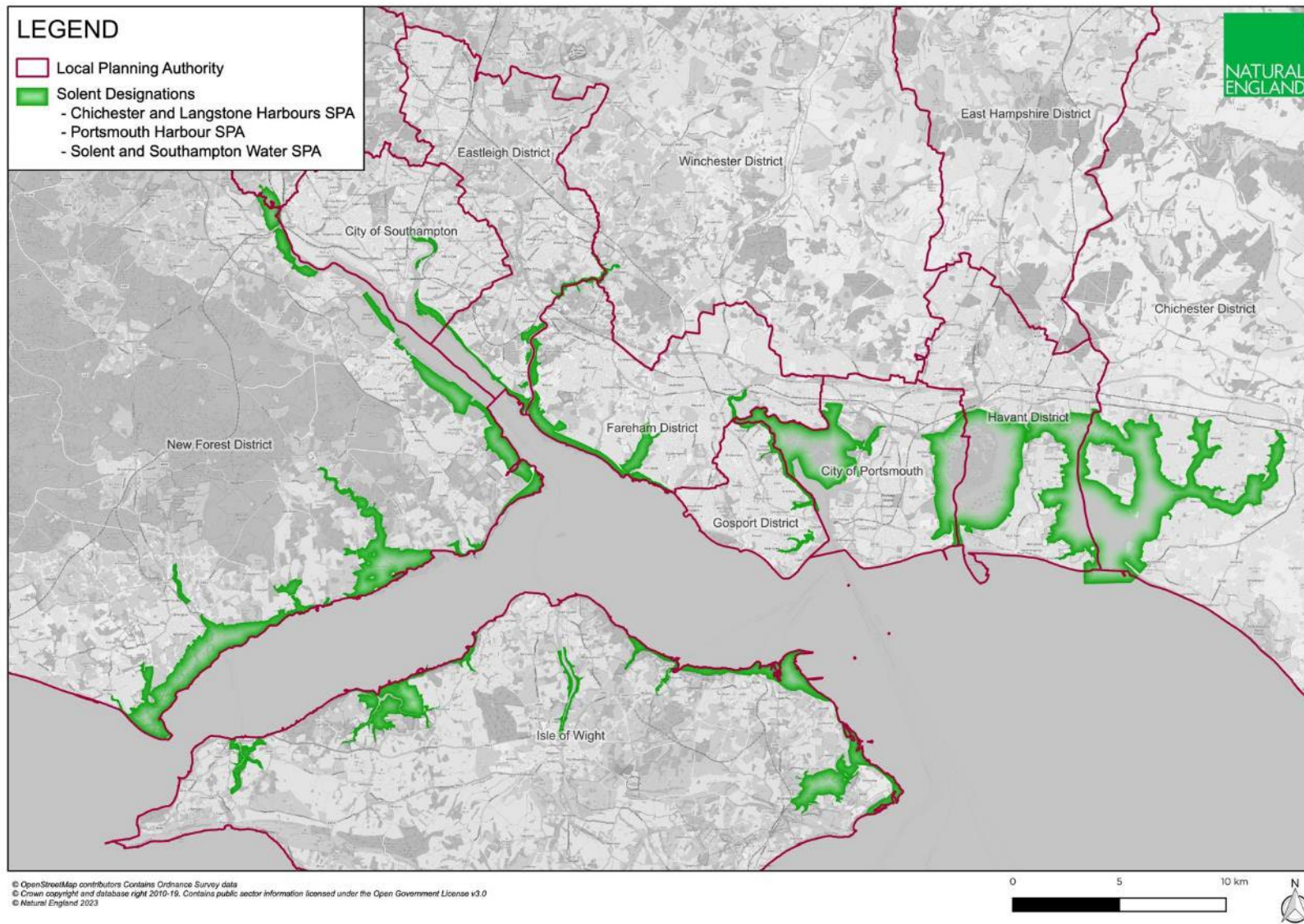


Figure 33: Location of Solent Coastal Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

The Solent coastline encompasses several designations, including three SPAs which together provide essential feeding and roosting grounds for a range of over-wintering birds: Chichester and Langstone Harbours SPA; Portsmouth Harbour SPA; and Solent and Southampton Water SPA (see **Figure 33**). See Appendix A for qualifying features.

Q1: Recreational Impacts Evidence and Background Information

The Solent coast is a popular destination for a wide range of recreational activities, whilst also supporting a large waterbird assemblage including 10% of the global brent geese population (Bird Aware Solent, 2017).

A large body of evidence has been collected regarding recreational pressures and the impact of visitors on wintering birds on the Solent coast, as part of the Solent Disturbance Mitigation Project (SDMP) conducted by Footprint Ecology and Bournemouth University. The SDMP was carried out in three phases:

1. [Phase I](#) collated and reviewed existing information on housing, human activities and birds around the Solent, and reviewed the potential impact of disturbance on birds. It also set out a methodology for the following phases (Stillman and others, 2009).
2. [Phase II](#) involved a range of primary research including data collection regarding visitor rates (from current and future housing), visitor activities in the shore and intertidal habitats, and the effects of recreation on different bird species (Stillman and others, 2012). This included visitor surveys (Fearnley and others, 2010), household surveys (Fearnley and others, 2011) and modelling of impacts. Dog walking was the most frequently observed activity, with walking, cycling and jogging being other common recreational activities.
3. [Phase III](#) set out the proposed Avoidance and Mitigation Strategy including identification of potential mitigation measures that could be adopted (Liley and Tyldesley, 2013). This included possible options for a zonal approach to gathering developer contributions, based on the visitor draw evidence.

Based on the findings of the SDMP, which were endorsed by Natural England, the Solent Recreation Mitigation Partnership was formed in order to coordinate avoidance, mitigation and monitoring measures between the LPAs within the Solent region.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

The SDMP Phase III Report set out the following key recommendations to form the strategic mitigation package (Liley and Tyldesley, 2013):

- A delivery officer;

- A team of wardens/rangers;
- A coastal dog project;
- A review of parking;
- A review of water sport zones and access;
- Codes of conduct pack;
- Series of site-specific projects;
- Water sport permits and enforcement; and
- SANGs/additional GI/alternative roost sites.

Taking into account the evidence collected as part of the SDMP, the Interim Solent Recreation Mitigation Strategy was prepared in 2014, with the final [Solent Recreation Mitigation Strategy](#) adopted in December 2017 (Bird Aware Solent, 2017).

Further research was undertaken to explore potential methods to encourage responsible dog walking as this was a key threat to SPA birds identified in the evidence base (Jenkinson, 2016). The study recommended that the effectiveness of interventions depends on site-specific contexts, but that use of communication (through websites, social media, and other awareness-raising activities targeted at dog walkers) and promotion of alternative greenspaces inland should form the basis of a strategic mitigation approach.

Based on the Interim Mitigation Strategy, and the ongoing research findings, the current Solent Mitigation Recreation Strategy sets out the following three-stranded approach to manage visitors (particularly walkers, cyclists and dog walkers):

- raising awareness and encouraging behavioural change of coastal visitors;
- implementing projects to better manage visitors and provide secure habitats for the birds; and
- providing and promoting new/enhanced greenspaces in less sensitive areas as an alternative to visiting the coast.

The Mitigation Strategy notes that whilst SANGs are generally less applicable to coastal habitats given the specific draw of coastal habitats, they still have a role to play providing they are “closely linked to management at the coast, are targeted in the right locations, and are accompanied by active promotion of their existence”.

Q3: Zone of Influence

A 5.6km ZOI was established, drawn as a straight line from the three Solent SPA boundaries, which is based on the distance in which 75% of coastal visitors to the SPAs live (Liley and Tyldesley, 2013).

The ZOI and affected LPAs are shown in **Figure 34**.

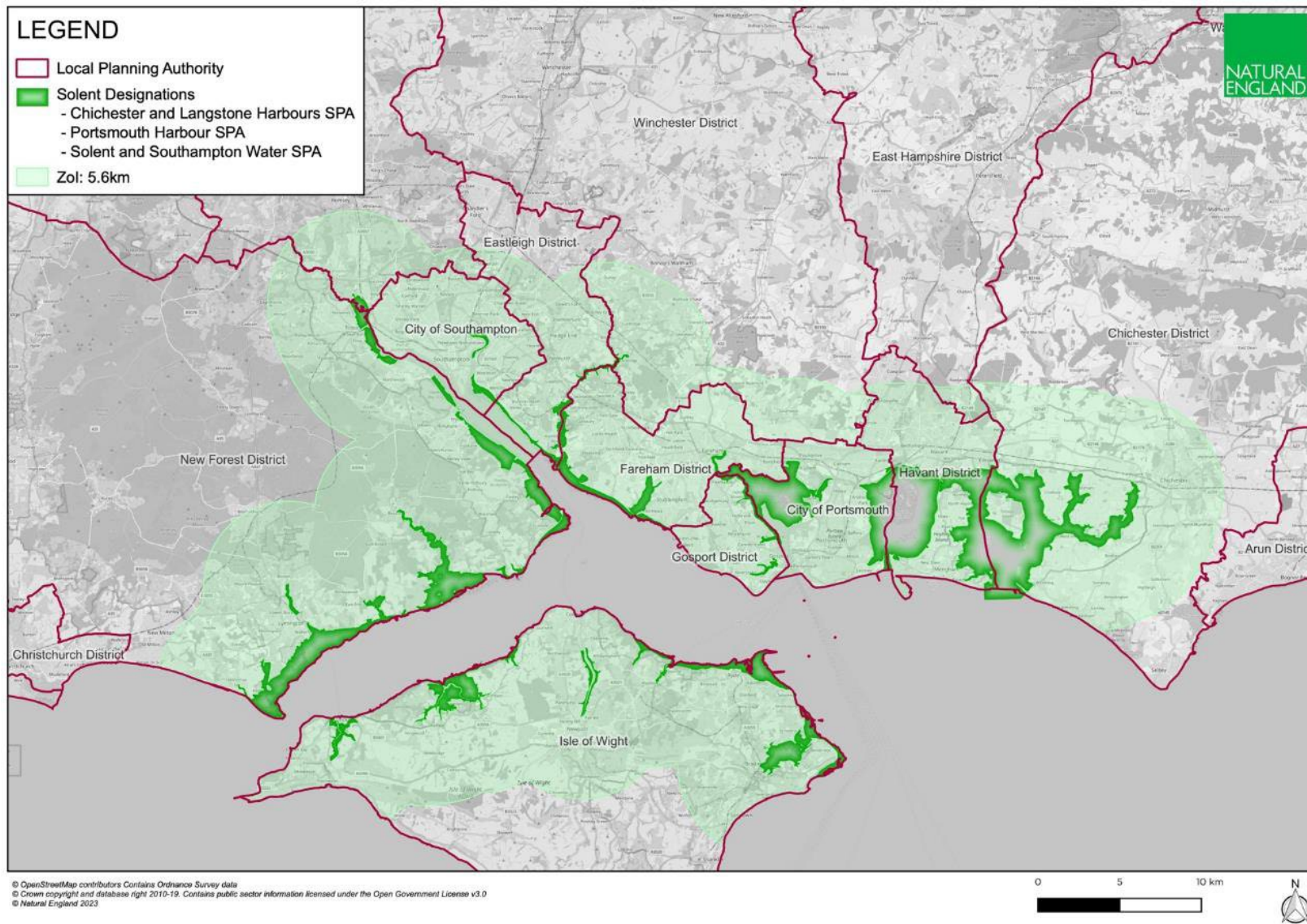


Figure 34: Solent Coastal Designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

The Solent Recreation Mitigation Partnership was set up to coordinate mitigation efforts, and comprises 15 LPAs alongside other bodies:

- Chichester District Council;
- East Hampshire District Council;
- Eastleigh Borough Council;
- Fareham Borough Council;
- Gosport Borough Council;
- Hampshire County Council;
- Havant Borough Council;
- Isle of Wight Council;
- New Forest District Council;
- New Forest National Park Authority;
- Portsmouth City Council;
- Southampton City Council;
- South Downs National Park Authority;
- Test Valley Borough Council;
- Winchester City Council;
- Natural England;
- RSPB;
- Hampshire and Isle of Wight Wildlife Trust; and
- Chichester Harbour Conservancy.

Q5: Policy

The adopted Portsmouth Plan (Portsmouth City Council, 2012) predates the Mitigation Strategy and as such there is no implemented planning policy that directly secures the mitigation requirements which are set out in the Mitigation Strategy in Portsmouth.

Portsmouth City Council are in the process of updating their local plan, with the latest iteration (Regulation 18 Draft) proposed to include 'Policy G1: Biodiversity' which notes the developer contributions to the Solent Recreation Mitigation Strategy as a key indicator. Relevant emerging policy wording is presented in **Box 17**.

Box 17: Emerging Policy wording in the Portsmouth Local Plan 2038 (Portsmouth City Council, 2021)

Emerging Policy G1: Biodiversity

“ ...

Planning permission will be granted where:

Emerging Policy G1: Biodiversity

...

d. Proposals are in line with the requirements of habitat mitigation or compensation schemes effective within the Portsmouth City Council area, including the Solent Recreation Mitigation Strategy.

...”

Q6: Delivery Body

The Solent Recreation Mitigation Partnership (SRMP) (see answer to Question 4 for list of members) is responsible for delivery of the mitigation measures. The Partnership includes a Project Board of officers who oversee the overall strategy and budget, and a Steering Group comprising representatives from each LPA who manage operational tasks.

The Partnership for Urban South Hampshire (PUSH) also provide “governance, political steer and oversight” of the SRMP according to the Mitigation Strategy (Bird Aware Solent, 2017).

Q7: Types of Development Covered

The Mitigation Strategy applies to new residential development built within 5.6km of the SPA designations. This includes sub-division of existing dwellings, holiday accommodation, changes of use, and accommodation for Gypsies and Travellers.

Self-contained student accommodation, retirement properties and temporary/transit Gypsy and Traveller pitches will be assessed on a case-by-case basis, in consultation with Natural England, to determine whether (or to what extent) developer contributions are required, depending on the likelihood of recreational pressure or disturbance to birds being increased.

Q8: Developer Contributions

Developer contributions are collected by LPAs for each net new dwelling within the 5.6km ZOI of the SPA designations, with funds transferred to the Mitigation Partnership who implement the measures. According to the [Portsmouth City Council website](#), effective from 1st April 2022, the current Solent Recreation Mitigation Strategy Charges are:

- 1 bedroom property £390.
- 2 bedroom property £563.
- 3 bedroom property £735.
- 4 bedroom property £864.
- 5 bedroom property or more £1,014.
- Flat Rate £652.

It is noted that although a 'flat rate' is provided on the Portsmouth Council website of £652, the Mitigation Strategy in paragraph 6.14 refers to sliding scale of contributions being used instead of the 'flat rate' standard tariffs (Bird Aware Solent, 2017). It is unclear from the Council website to what development the flat rate would apply.

The tariffs will be reviewed annually to take into account inflation.

A breakdown of the calculated costs is provided in Appendix C of the Mitigation Strategy, with a total cost of £1,996,000 up to 2034, based on the 2016 prices. Information regarding in-perpetuity funding is set out in Appendix D of the Mitigation Strategy up to 2114 (Bird Aware Solent, 2017).

Q9: Timescales for Delivery

The Mitigation Strategy applies in perpetuity, which is calculated on an 80-year basis.

Q10: Other initiatives

The Mitigation Strategy allows developers to provide alternative bespoke mitigation solutions where these would fully mitigate the recreational impact of the development, in agreement with the relevant LPA and Natural England.

As set out in the Mitigation Strategy, larger housing schemes or housing schemes in more sensitive coastal locations (especially those with access to inter-tidal areas) may be required to provide bespoke mitigation measures in addition to financial contributions. The levels of mitigation required in these scenarios will be determined on a case-by-case basis.

The Mitigation Strategy also notes that "Separate mitigation may be required for other impacts which may arise from new housing, e.g. impacts on water quality, noise disturbance, high buildings obstructing bird flight lines, loss or damage to supporting habitats".

Q11: Monitoring

As part of the Mitigation Strategy, developer contributions are used to monitor the effectiveness of implemented mitigation measures. Monitoring is a key element of the Strategy, the findings of which will be used to refine or adjust the mitigation going forward to ensure effectiveness.

The [Bird Aware Solent website](#) provides information on monitoring, including the Solent Recreation Mitigation Partnership Monitoring Plan, annual Disturbance Monitoring Reports, as well as visitor and car park monitoring data.

As set out in the Monitoring Plan, a comprehensive suite of monitoring data is collected and analysed, including through:

- Automated visitor counters;

- Car park counts and vantage point watches;
- Data recording carried out by rangers (recreational activities, bird presence);
- Disturbance levels;
- Visitor numbers in the SPA (face-to-face interviews);
- Bird numbers and distribution;
- Housing completions data collected by LPAs;
- SANG monitoring (i.e. status of SANGs and improvements made to them); and
- Records of ranger time and deployment.

Q12: Communication Strategy

Communication forms a major element of the Mitigation Strategy, with the overall approach of the strategy being to secure behavioural change through raising awareness.

Key messages regarding appropriate use of recreational sites are communicated via the Bird Aware Solent brand on social media, through the [website](#), and educational initiatives. Articles, leaflets and newsletters are also published regularly and a range of events, walks and talks held. Bird Aware Solent have also set out a Coastal Code to help educate visitors on how to minimise disturbance to birds.

Dog walkers are an important target audience for communications, with a dedicated staff member to engage with them and develop targeted avoidance/mitigation measures.

SANG

Q13: Identify the components that make up the SANG projects

The SANG element of the Mitigation Strategy includes the identification of new strategic greenspaces, and enhancements to existing greenspaces.

The Mitigation Strategy (Bird Aware Solent, 2017) notes that “The creation of two completely new strategic greenspaces and enhancements to other existing greenspaces is already underway at Alver Valley Country Park; Manor Farm Country Park; Horsea Island Country Park; Shoreburs Greenways”.

The identification of new strategic SANG is encouraged by the Mitigation Strategy, in accordance with the SANG Criteria (see answer to Question 14).

Q14: Has a green space standard or metric been used?

The Mitigation Strategy does not set out a specific metric or standard for calculating the size of SANGs, although a series of ‘essential’ and ‘desirable’ location-based and design-based criteria for SANG are provided in Appendix B of the Strategy, as replicated in **Table 23**. The criteria are intended to apply to strategic SANG rather than bespoke mitigation packages.

Table 23: SANG Criteria presented in the Solent Recreation Mitigation Strategy (Bird Aware Solent, 2017)

Essential or desirable?	Locational criteria	Criteria for design and facilities
<p>Essential</p>	<ul style="list-style-type: none"> • A wholly new site or an enhancement of existing public open space if the site is currently underused and has substantial capacity to accommodate additional recreational activity or could be expanded, taking into account the availability of land and its potential for improvement. • Be in a location where it will divert visitors especially dog walkers away from sections of SPA coast which are sensitive to additional human disturbance and where a significant increase in visitors is predicted. • Be located where it will attract visitors who would otherwise have gone to those sections of coast. • Be large enough to include a variety of paths which enable at least one circular walk of at least 5 km (approx. a 60 min walk). • Be in a location where a SANG would be acceptable in terms of planning policy and traffic generation, and would not have an unacceptable impact on biodiversity e.g. a nature conservation site protected under a local or national designation. • Be sufficiently large to be perceived as a cohesive semi-natural space, offering tranquility, with little intrusion of 	<ul style="list-style-type: none"> • Includes a variety of paths which enable at least one circular walk of at least 5km (approx. a 60 min walk). • Includes adequate car parking for visitors with that car parking being well located in relation to the road network. • Be clearly signed at access points and at key junctions on the surrounding road network, with an information panel at each access point which explains the layout of the SANG and the routes available to visitors. • Access points for visitors arriving on foot must be well located in relation to nearby residential area. • Designed so that the SANG is perceived by users as a cohesive semi-natural space which is safe and easily navigable. • Paths must be clearly discernible, well signposted/waymarked, and have firm, level, well drained surfaces (albeit unsealed to avoid any 'urban feel') in order to be useable throughout the winter. • Movement within the SANG must be largely unrestricted, with plenty of space away from road traffic. • Dogs are welcome and the majority of the sites is suitable for safe off-lead dog exercise. • Dog swimming area. • Dog waste bins.

Essential or desirable?	Locational criteria	Criteria for design and facilities
	artificial structures (except in the immediate vicinity of car parks) and with no unpleasant intrusions of other kinds e.g. wastewater treatment odours.	
Desirable	<ul style="list-style-type: none"> • Has views of the sea which are not too distant or includes a sizeable water feature. • Has a varied topography with some gentle slopes, a mix of open and wooded areas, and a focal point such as a viewpoint, monument etc. 	<ul style="list-style-type: none"> • Car parking would be free of charge in the winter and preferably all year round. • Has multiple access points and with car parking at each rather than in a single location. • Incorporates innovative and attractive dog walking facilities such as dog activity trails, agility courses, enclosed off-lead training/exercise areas, dog washing facilities.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the Mitigation Strategy.

Q16: Is the quantity of SANG available to the LPA published?

There is no apparent centrally publicised inventory of SANGs in the Solent area.

No reference is made to SANG within Portsmouth on the Council website, although the Mitigation Strategy lists existing/emerging SANG projects across the Solent Recreation Mitigation Partnership area (see answer to Question 13), one of which is in Portsmouth (Horsea Island Country Park).

The Solent SANGs Visitor Survey (Saunders and others, 2022) provides information regarding visitor data at five inland SANG Sites including Shoreburs Greenway and Alver Valley Country Park as mentioned in the Mitigation Strategy, as well as three further SANGs: Firestone Copse, River Hamble Country Park, and Minerva Heights.

Q17: Are details available for each SANG?

As set out in answer to Question 16, there is no apparent centrally publicised inventory of SANGs in the Solent area.

Horsea Island Country Park is an emerging Strategic SANG in Portsmouth, with information available [online](#).

SAMM

Q18: SAMM Criteria

No specific criteria are set out to determine the requirements for SAMM. Projects required were based on the extensive and comprehensive evidence base. SAMMs contributions are required for all residential development within the 5.6km ZOI as set out in the Mitigation Strategy (see answer to Question 8).

Q19: SAMM Projects

The SAMM element of the Mitigation Strategy comprises the following package of mitigation measures:

- A team of rangers – seeking to promote behavioural change through increasing awareness and understanding of the Solent's birds and implementing mitigation measures.
- Communications, marketing and education initiatives (see answer to Question 12).
- Initiatives to encourage responsible dog walking.
- Codes of conduct – intended to target specific user groups and club-based activities such as horse riders and watersports.
- Site-specific visitor management and bird refuge projects – including signage, fencing, screening of sensitive habitats to minimise exposure of birds to disturbance, improving inland footpaths.
- Promotion of new/enhanced strategic greenspaces (i.e. SANG).
- Delivery officer.
- Monitoring (see answer to Question 11).

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The Mitigation Strategy identifies potential links with the [PUSH Green Infrastructure Strategy 2017-2034](#) which could help to identify and secure funding for greenspace enhancements in order to increase SANG provision alongside the other multifunctional benefits of GI.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network identified in the Mitigation Strategy.

South East Devon

Grey Plover (*Pluvialis squatarola*) Credit: Istock images.



South East Devon – Teignbridge District Council

Summary

Triggers for Mitigation

The South East Devon coastline is important due to its coastal habitats and the bird populations which these habitat types support. The key European sites in this area include the Exe Estuary SPA and Ramsar, Dawlish Warren SAC and East Devon Pebblebed Heaths SAC/East Devon Heaths SPA.

Recreational Evidence Base

Extensive surveys and studies have been carried out to determine the recreational impacts and disturbances to the relevant European sites:

- South-East Devon European Site Mitigation Strategy (Liley and others, 2014).
- Assessment of recreational impacts on Dawlish Warren SAC (Lake and others, 2010).

Solutions for recreational impacts

In addition, a number of visitors surveys have been undertaken across these South East Devon designations:

- East Devon, Exeter and Teignbridge Household Survey and Predictions of Visitor Use of Greenspaces (Cruickshanks and Liley, 2012).
- South East Devon Visitor Survey 2020-2021 (Caals and others, 2022).
- Exe Estuary SPA and Dawlish Warren SAC Interim Overarching Report Relating to Strategic Planning and Impacts from Recreation (Liley and Hoskin, 2011).
- Exe Visitor Survey 2010 (for Teignbridge District Council) (Liley and others, 2010).
- East Devon Heaths SPA/East Devon Pebblebed Heaths SAC Visitor Survey Report (Ecology Solutions, 2012).
- East Devon Pebblebed Heaths Visitor Management Plan (Liley and others, 2015).

Visitor surveys split main user group activities as shown in **Figures 35** and **36**.

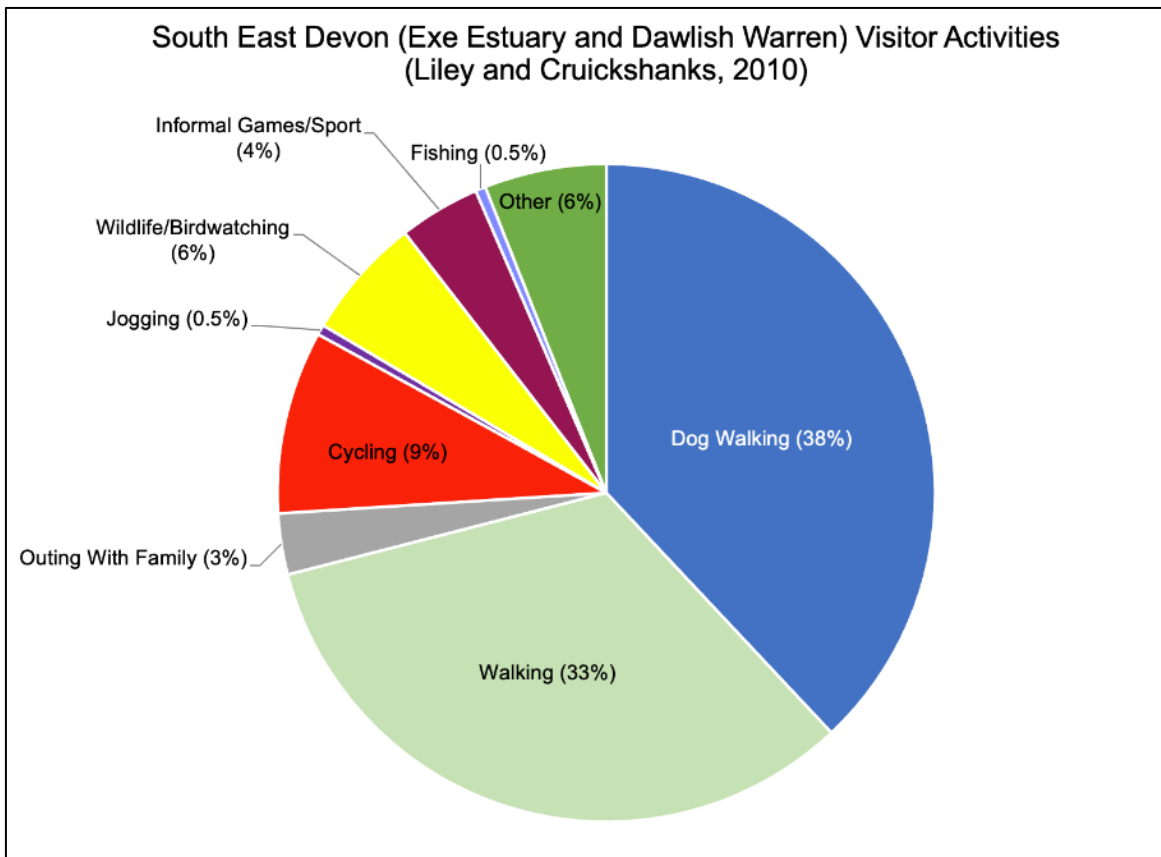


Figure 35: Visitor activities at the Exe Estuary and Dawlish Warren (adapted from Liley and Cruickshanks, 2010)

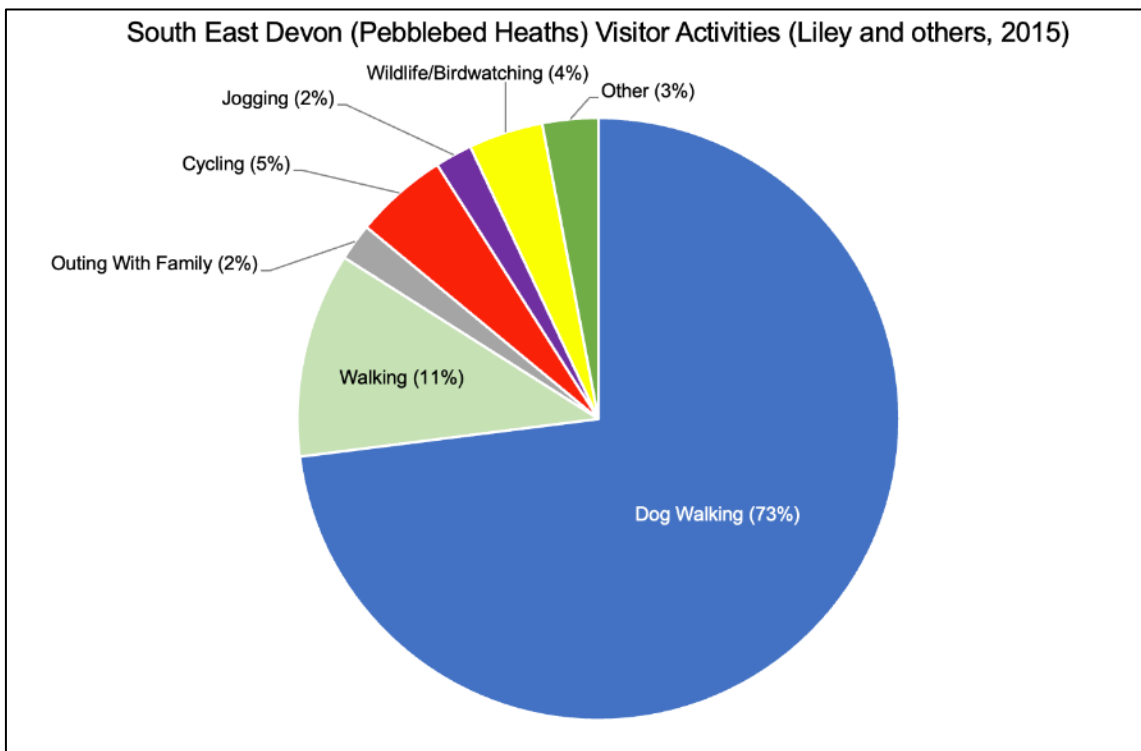


Figure 36: Visitor activities at the Pebblebed Heaths (adapted from Liley and others, 2015)

The [South East Devon European Site Mitigation Strategy](#) is designed on the basis of a combined total for the three affected LPAs of approximately 40,000 homes over their relevant plan periods (Liley and others, 2014).

A ZOI of 10km has been established from the boundary which was based on the distance from European site at which visitor rate curve flattens off to a low constant.

Mitigation Solution

The mitigation package set out in the Mitigation Strategy (Liley and others, 2014) combines on- and off-site SAMM measures including additional provision for dedicated wardens across all sites. It considers effects on East Devon Pebblebed Heaths SAC/SPA in addition to the Exe Estuary and Dawlish Warren sites and also proposes SANG.

The South East Devon Habitat Regulations Executive Committee is a collaboration across the three LPAs (Teignbridge District Council, East Devon District Council, and Exeter City Council) to safeguard the European sites.

Developer contributions within the Exe 10km ZOI are £272 per unit, and £973 for applications within both the Exe and Warren 10km ZOI. For tourist units, contributions are calculated as a percentage of residential unit contribution using average occupancy rates. The calculations include an estimate of the cost of SANG provision, based on the information provided by the three LPAs and a generic set of costs that are applied to all SANGs.

In perpetuity has been taken as 80 years for the purpose of calculating the tariff. The total cost of the tariff was £23,553,767.00.

SAMM Solutions

SAMM projects target the following types of interventions: Habitat management; planning off-site measures (including SANG); on-site access management; education and communications to site users; and enforcement.

SANG Solutions

Four broad locations have been identified for strategic SANGs providing recreational offer across the region, and as such no specific catchment applies. To date, two SANGs have been delivered: Dawlish Countryside Park (28ha) and phase 1 of Ridgetop, South West Exeter (17ha).

The SANG metric applied is 8ha/1,000 population and design standards for specific SANGs are identified in the respective Local Plans. The Teignbridge Local Plan references the Coastal Park between Dawlish and Dawlish Warren and multi-use tracks and trails and open space for informal recreation alongside physical structures, such as bird hides, storage areas for maintenance and possibly a small-scale food and drink outlet and visitor centre. No further information on SANG criteria is provided.

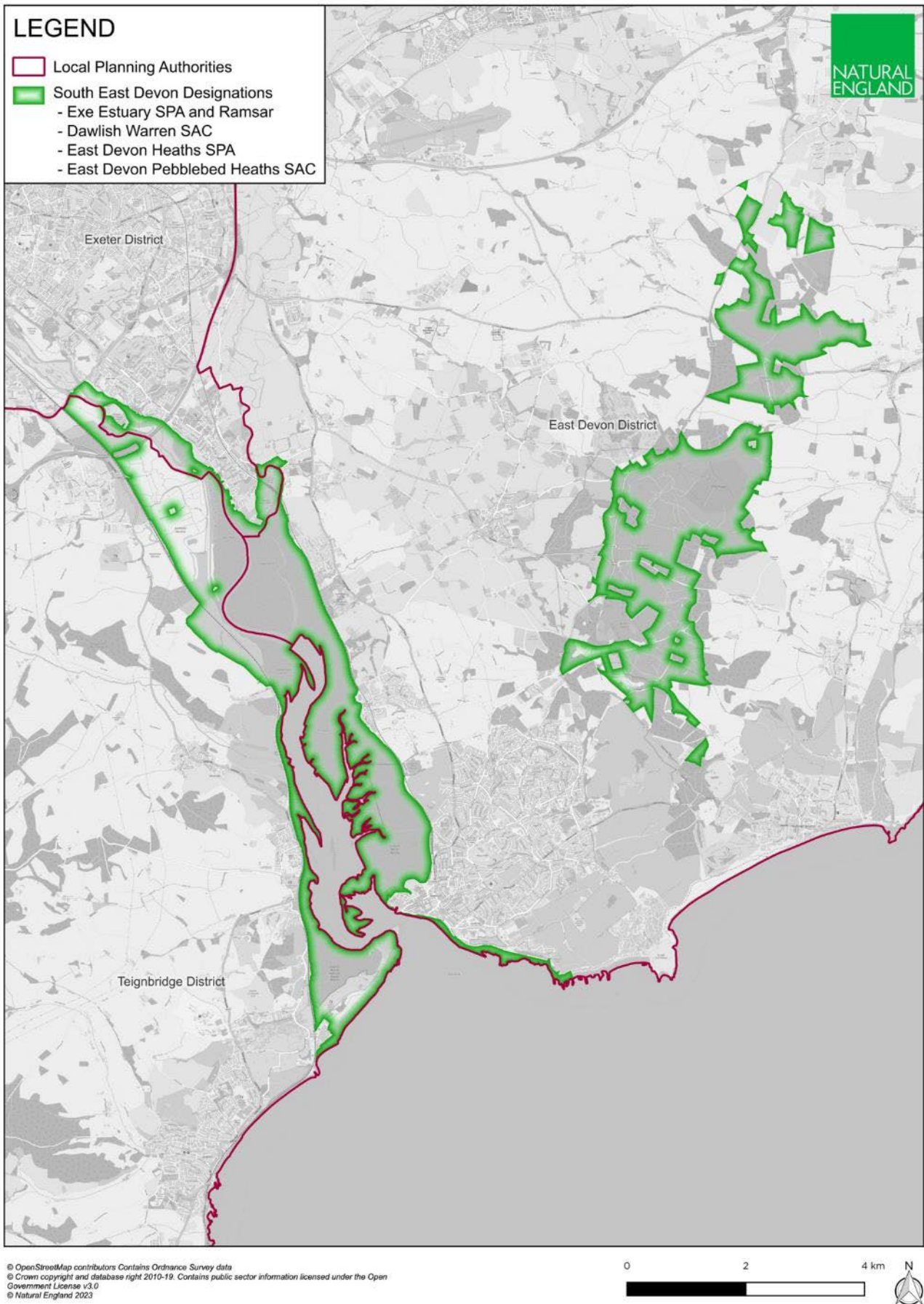


Figure 37: Location of South East Devon Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

The European sites which are relevant to the mitigation strategy in Teignbridge District include the following (**Figure 37**) – see Appendix A for qualifying features:

- Exe Estuary SPA and Ramsar site;
- Dawlish Warren SAC;
- East Devon Pebblebed Heaths SAC; and
- East Devon Heaths SPA.

Q1: Recreational Impacts Evidence and Background Information

Extensive surveys and studies have been carried out to determine the recreational impacts and disturbances to the relevant European sites (Liley and others, 2014). These included a household survey (by post, asking about recreational visits to the three European sites) (Cruickshanks and Liley, 2012) and recent updated visitor surveys across East Devon (Caals and others, 2022).

Recreational Impacts at Exe Estuary SPA and Ramsar Site:

Most of the visitor activity in the estuary is focused around Exmouth, a popular destination for watersports such as powerboating, canoeing and water skiing and recreation associated with the seafront and beaches.

Recreation impacts have been determined based on the [Exe Disturbance Study](#) (Liley and others, 2011) which involved collection of bird and visitor data from nine survey locations across 327ha (below mean high water) of the estuary, including a face-to-face visitor survey on the Exe Estuary (e.g. Liley and others, 2010). Besides the Disturbance Study, information on disturbance impacts was also gathered from modelling of oystercatchers and other shorebirds over time, between 1995 and 2002, as well as Natural England's SSSI condition assessments which indicate decline in the bird species owing to recreation.

Recreational Impacts at Dawlish Warren SAC:

Dawlish Warren is a popular seaside resort for tourists as well as for the local community and their recreation. According to visitor surveys, dog walkers make up the bulk of visitors, followed by walkers, with other visitors including cyclists, birdwatchers, and families out for the day (Liley and others, 2010). Vandalism and lighting fires (e.g. barbecues) were also noted threats to the SAC features.

An [assessment of recreational impacts on Dawlish Warren SAC](#) (Lake, 2010) found that visitor pressure has a significant impact, and adds to the other factors such as coastal erosion, the presence of sea walls, and coastal defences which inhibit the naturally dynamic nature of sand dune habitats, and management techniques.

Recreational Impacts at East Devon Pebblebed Heaths SAC and SPA:

According to Liley and others (2014), there has been no detailed study of the effects of recreation on the Pebblebed Heaths SAC and SPA specifically, although a visitor survey was carried out at the site in 2012 (Ecology Solutions, 2012).

The Pebblebed Heaths have a distinctly rural character, with no directly adjacent towns or villages. Despite this, the heaths are thought to be susceptible to disturbance, wildfires, nutrient inputs, trampling, littering and other visitor-related impacts. Liley and others (2014) report that the heaths are popular with walkers and dog walkers, horse riders and mountain bikers.

Further visitor survey data was collected in spring and summer 2015, with the results analysed in the [East Devon Pebblebed Heaths Visitor Management Plan](#) (Liley and others, 2015). The surveys found that 73% of interviewees were dog walkers, with smaller proportions of walkers without dogs, cyclists, wildlife watchers, joggers, and people on family outings. Furthermore, the majority (71%) of visitors stated they visited at least weekly. Interestingly, when modelling visitor data and overlaying bird distribution data, the analysis found “no significant differences in the presence of nightjar or Dartford warbler territories in areas with high and low visitor pressure and it would appear that other unexplained factors are influencing the bird distributions” (Liley and others, 2015). Further data collection is recommended by the report, to address limitations in the methodology and account for patchy data availability, however.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

Based on the extensive evidence base collected, in particular relating to recreational impacts on the Exe Estuary SPA/Ramsar and Dawlish Warren SAC (see answer to Question 1), the [Exe Interim Report](#) sought to put in place interim guidance for the three affected LPAs (Teignbridge, Exeter and East Devon) to address these adverse effects (Liley and Hoskin, 2011). Several potential mitigation options were explored, based on an overview of current management at the European sites. The report explored the following options to manage or reduce recreational disturbance:

- Location and scale of development – i.e. appropriate spatial planning;
- Alternative recreation sites – including provision of new dog walking areas;
- On-site access management – wardening, use of patrol boat, zoning, fencing; and
- Communication and awareness-raising – through face-to-face contact, signage and leaflets.

Building upon the Interim Report, the updated mitigation package set out in the [South East Devon European Site Mitigation Strategy](#) (Liley and others, 2014) combines on- and off-site strategic mitigation measures (SAMM) including additional provision for dedicated

wardens across all sites. It considers effects on East Devon Pebblebed Heaths SAC/SPA in addition to the Exe Estuary and Dawlish Warren sites.

The Mitigation Strategy also proposes SANGs. Four broad locations for SANG are identified by the Habitat Regulations Partnership Strategy for South-East Devon. These are strategic sites and the benefits of the SANG therefore caters to development across the three LPAs of Exeter, East Devon and Teignbridge (Skinner and Harris, 2020). The committee report states that significant progress has been made with regard to SANG delivery, with land acquisition underway for emerging phases of SANG development (Skinner and Harris, 2020).

For each new home or holiday unit, applicants are required to make a Habitats Mitigation Contribution to provide mitigation for recreation impacts on the European sites (Teignbridge District Council, 2022). There is no specific SPD or report available online which sets out measures that are to be implemented as part of the mitigation strategy.

Q3: Zone of Influence

A 10km ZOI from the boundary of each European site has been established within which funding from developer contributions is collected (Teignbridge District Council, 2022), as shown in **Figure 38**.

The ZOI was determined based on exploration of several potential methods, including the 75th percentile of distance travelled by visitors as used in the Thames Basin Heaths and Dorset Heaths recreational mitigation strategies. The chosen 10km ZOI is based on the “distance from [European] site at which visitor rate curve flattens off to a low constant” (Liley and others, 2014). The implemented ZOI for Pebblebed Heaths and for Dawlish Warren also took into account the presence of the River Exe which acts as a barrier to movement, and therefore only the Exe and Dawlish Warren ZOI apply within the Teignbridge administrative area.

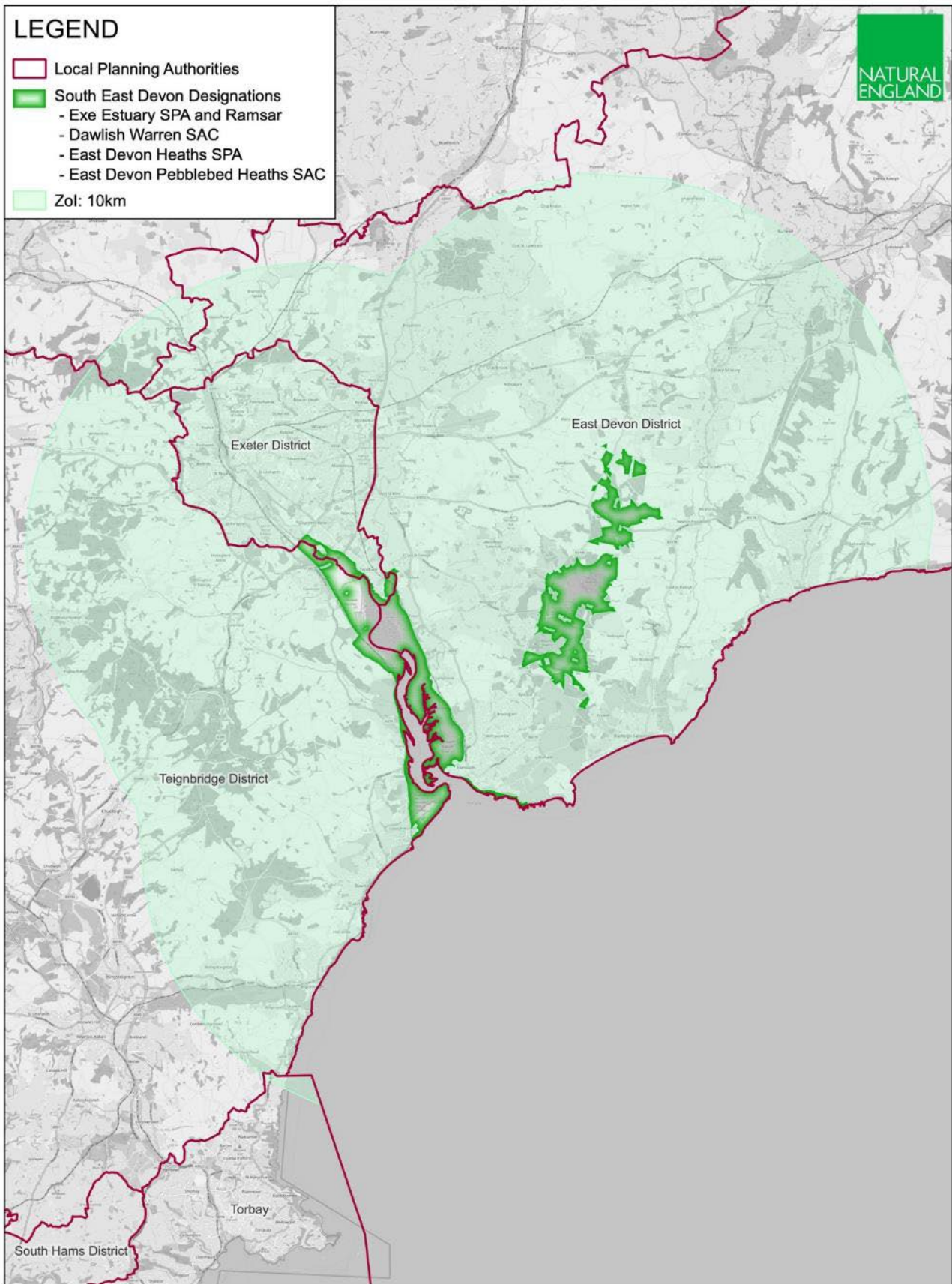


Figure 38: South East Devon Designations Zone of Influence © Natural England 2024

Q4: Strategic Approach

The South East Devon Habitat Regulations Executive Committee, comprised of Teignbridge District Council, East Devon District Council, and Exeter City Council is a collaboration across the three LPAs to safeguard the European sites. This Committee collaborates with other organisations including Natural England, Clinton Devon Estates, the National Trust, the RSPB, the Exe Estuary Management Partnership, and Devon Wildlife Trust (Teignbridge District Council, 2022).

Q5: Policy

The [Teignbridge Local Plan 2013-2033](#) was adopted by the Council on 6th May 2014, and sets out a range of policies focused on the protection and enhancement of biodiversity. With regard to securing the recreational mitigation, relevant policy wording is set out in **Table 24**.

Table 24: Policy wording in the Teignbridge Local Plan 2013-2033 (Teignbridge District Council, 2014)

Policy	Policy Wording
<p>EN10 European Wildlife Sites</p>	<p>“European Wildlife Sites including Dartmoor, South Dartmoor Woods, South Hams, Exe Estuary, Dawlish Warren, East Devon Pebblebed Heaths and Lyme Bay to Torbay will be protected. Development that is likely to have a significant effect on the integrity of a European Wildlife Site will be subject to assessment under the Habitats Regulations 2010 and will not be permitted unless adverse effects can be fully mitigated and/or compensated. Further specific requirements are set out below.</p> <p>...</p> <p>Additional financial contributions and other measures, in line with the Joint Interim Approach or equivalent, will be required from new development to enable management and other mitigation measures at the Exe Estuary and Dawlish Warren. Where evidence emerges, a similar approach will be used for other European sites, for example the Pebblebed Heaths and Dartmoor.</p> <p>...”</p>
<p>WE11 Green Infrastructure</p>	<p>“To achieve the maintenance and expansion of a comprehensive green infrastructure network, promoting good accessibility to green</p>

Policy	Policy Wording
	<p>infrastructure for all, the following will be promoted through determination of planning applications, infrastructure investments and by partnership working:</p> <p>...</p> <p>g) appropriate suitable alternative natural green spaces required by habitat regulations to relieve recreational pressure on European sites;</p> <p>..."</p>
<p>DA7 Dawlish Warren Coastal Park</p>	<p>"An area approximately 22 hectares is identified at Dawlish Warren to create a Coastal Park which shall:</p> <p>a) include suitable alternative natural green space and recreation facilities;</p> <p>...."</p>
<p>SWE3 Ridge Top Park</p>	<p>"An area of approximately 70 hectares is allocated to the south of the A379 at the south west of Exeter as a ridge top park. This site will be suitable alternative natural green space which will include a mix of facilities for recreation purposes</p> <p>..."</p>

Q6: Delivery Body

As answered in Question 4, the mitigation strategy is delivered by the Executive Committee, comprised of representatives from Teignbridge District Council, East Devon District Council, and Exeter City Council in collaboration.

Q7: Types of Development Covered

The Standard Mitigation Contributions apply to developments proposing a net increase in residential dwelling units and tourist accommodations within the 10km ZOI. This also includes:

- hotels, guest houses, lodges, static caravans and touring pitches;
- all types of houses and flats (but not extensions to existing dwellings);
- 'Annex' accommodation within the curtilage of, or associated with, an existing dwelling, where the annex might be used as a separate dwelling when built or subsequently;
- affordable housing as well as market housing;
- student accommodation;

- tied accommodation;
- residential caravans/mobile homes/park homes;
- housing for the 'mobile' elderly; except care homes for elderly or infirm who have significantly reduced mobility;
- applications to increase the operating period of tourist accommodation will contribute for the additional period;
- applications to convert holiday to residential will contribute for any additional occupancy period;
- temporary accommodation permissions will contribute as a proportion of the 20 year life of the Local Plan (e.g. siting of a mobile home for 3 years will contribute 3/20ths of the standard contribution); and
- renewals of temporary permissions will also make proportionate contributions.

Q8: Developer Contributions

According to the [Teignbridge Council website](#), the required developer contributions towards mitigation as of 1st April 2022 per unit are £272 (within Exe 10km ZOI) and £973 (within Exe and Warren 10km ZOI). For tourist units, contributions are calculated as a percentage of residential unit contribution using average occupancy rates:

- serviced accommodation unit - 56%.
- self-catering accommodation unit - 52%.
- touring pitch - 32%.

Table 26 of the Mitigation Strategy provides indicative costs for the various elements of the proposed mitigation package (Liley and others, 2014). These costs come to a total of £23,553,767 and comprise:

- SANGs: £14,400,000.
- Other Cross-site: £5,985,500.
- Exe Estuary SPA, on-site mitigation: £1,361,100.
- Pebblebed Heaths SPA/SAC on site mitigation: £756,000.
- Dawlish Warren SAC on-site mitigation: £501,500.
- Monitoring: £549,667.

The calculated costs include an estimate of the cost of SANG provision, which is based on the information provided by the three LPAs and generic set costs that are applied to all SANGs (Liley and others, 2014).

The 'Accounting for strategic Suitable Alternative Natural Green Space (SANGS), South West Exeter and Dawlish maintenance funding' committee report sets out more recent information regarding developer contributions towards SANG (Skinner and Harris, 2020). Out of four proposed strategic SANGs across the three LPA, Teignbridge has a higher percentage of contribution as two of the SANG sites are within their district (see **Table 25**).

Table 25: Partner authority overall contribution to strategic SANG (Skinner and Harris, 2020)

Local Planning Authority	Total SANG Contribution (%)
Exeter City Council	29.16%
East Devon District Council	27.62%
Teignbridge District Council	43.21%
TOTAL	100%

Q9: Timescales for Delivery

Natural England references the Land Trust's "999-year long-lease and endowment-backed strategy for securing in-perpetuity upkeep, as is expected for SANGS" (Skinner and Harris, 2020).

Liley and others (2014) recommend SANG provision including an ongoing maintenance cost (£1,500 per hectare) on an annual basis over a period of 80 years.

Q10: Other initiatives

The Site Mitigation Strategy report set out a range of potential mitigation measures that could be put in place at the time the report was written (2014). Information is not currently available online to confirm the details, extent and timeframes for project implementation.

Q11: Monitoring

Specific monitoring requirements are set out in the Mitigation Strategy document (Liley and others, 2014):

- Visitor numbers at set locations on all three sites;
- Visitor activities, motivation, profile and behaviour at all three sites;
- Fires, vandalism and other incidents at all three sites;
- Enforcement at all three sites;
- Monitoring of vegetation change at Dawlish Warren;
- Monitoring of accretion and erosion at Dawlish Warren;
- Regular monitoring of petalwort;
- Regular monitoring of breeding Annex I birds on the Pebblebeds;
- Southern damselfly monitoring;
- Continued monitoring of wintering waterfowl on the Exe;
- Disturbance monitoring on the Exe; and
- Continued monitoring of crab tiles.

An ongoing monitoring programme is undertaken on the South East Devon sites. For example, as a part of mitigation strategy in Exe estuary, an annual monitoring programme focused on wildlife refuges commenced in 2018, to identify the “type, frequency and impact of disturbance events at the Exmouth Wildlife Refuge area” and “to determine the level of adherence to the refuge areas” (Harris, 2020).

A botanical survey was co-funded by Teignbridge District Council and the South East Devon Habitat Regulations Partnership to compare changes in the European sites from 2010 and to ascertain human impacts on key botanical species (Harris, 2020).

Information on monitoring is published on the South East Devon Wildlife website, relating to [Exe Estuary](#), [Dawlish Warren](#) and [East Devon Pebblebed Heaths](#).

Q12: Communication Strategy

Key messages regarding appropriate use of recreational sites, and wildlife refuge areas where leisure uses are not permitted and educational initiatives, are communicated through South East Devon Wildlife’s [website](#). Articles, leaflets and newsletters are also published regularly and a range of events, walks and talks are provided. Codes of conduct are provided for each of the European sites, with targeted messaging towards dog walkers communicated through the ‘Devon Loves Dogs’ scheme.

Within the ‘South East Devon Habitat Regulations Executive Committee Core Staff Capacity’ report it is recommended that developer contributions are increased to secure funding for a dedicated Communications Officer (Harris, 2020).

SANG

Q13: Identify the components that make up the SANG projects

The Mitigation Strategy proposed the use of SANGs to divert visitors from European sites and provided an overview and suitability analysis of proposed SANG locations by each of the three LPAs (Liley and others, 2014).

Since the publication of the Mitigation Strategy, four broad locations have been identified for strategic SANGs according to the ‘Accounting for strategic Suitable Alternative Natural Green Space (SANGS), South West Exeter and Dawlish maintenance funding’ committee report (Skinner and Harris, 2020), although only two are referenced in any detail:

- **Dawlish Countryside Park** was the first SANG, which was opened to public in 2017. It is now managed by the [Land Trust](#), with information also provided on the [Teignbridge Council website](#).
- **Ridgetop Park SANG** has been established in south west Exeter, with information on proposed phasing of the SANG development set out in the committee report.

The [South East Devon Wildlife](#) website refers to a third SANG provision at Cranbrook Country Park.

Q14: Has a green space standard or metric been used?

The Mitigation Strategy document recommended provisioning of SANGs based on Natural England's quality guidance (Liley and others, 2014). It is unclear however the exact mechanism by which the existing and emerging SANG provisions (see answer to Question 13) have been determined.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the Mitigation Strategy.

Q16: Is the quantity of SANG available to the LPA published?

See answer to Question 13.

Q17: Are details available for each SANG?

See answer to Question 13.

SAMM

Q18: SAMM Criteria

No specific criteria are set out to determine the requirements for SAMM but the projects set out in the Mitigation Strategy were identified on the basis of evidence gathered around visitor impacts. Consultation with the National Park Authority indicates that a minimum standard of 8ha/1,000 population is applied, and design standards are identified in the respective Local Plans/Core Strategies of Exeter, East Devon and Teignbridge Councils. To date, two SANGS sites have been delivered by the LPAs, which include Dawlish Countryside Park (28ha) and phase 1 of Ridgetop, in south west Exeter (17ha).

Developer contributions are required for all residential and tourism development within the 10km ZOI as set out in the mitigation strategy (see Question 8).

Q19: SAMM elements

The Mitigation Strategy proposes a range of potential measures to form the package of SAMM mitigation, including (Liley and others, 2014):

- **Habitat management** – creating new habitats and managing habitats.
- **Planning and off-site measures** – strategic planning of development to avoid adverse effects, provision of SANG, provision of specific recreation offers such as watersports.
- **On-site access management** – restricted areas and zoning, fenced dog areas, car park management and path design.
- **Education and communications to public/users** – including signage and interpretation, codes of conduct, wardening, establishing Voluntary Marine Reserves, and education initiatives.

- **Enforcement** – pet covenants, legal enforcement e.g. dog control orders, limiting visitor numbers through ticketing/permitting.

In terms of implemented measures, the South East Devon Wildlife website refers to the following elements which have been implemented:

- Two [Wildlife Wardens](#) who deliver the educational programme.
- [Wildlife refuges](#) for protected bird species near Dawlish Warren and Exmouth.
- Codes of conduct for visitor user groups of the [Exe Estuary](#), [Dawlish Warren](#) and [East Devon Pebblebed Heaths](#).
- A patrol boat on the Exe Estuary, to keep all users safe and protect wildlife.
- [Visitor access improvements](#) on the East Devon Pebblebed Heaths.
- [Devon Loves Dogs](#) – a free membership scheme to encourage responsible dog behaviour and protect the countryside.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

There are no multifunctional links set out specifically in the mitigation strategy, although the Teignbridge Local Plan policies identify links between SANG provision and health/community benefits associated with improved GI.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network identified in the Mitigation Strategy.

South Pennines

Merlin (*Falco Columbarius*) Credit: Istock images.



South Pennine Moors – Bradford Metropolitan District Council

Summary

Triggers for Mitigation

The South Pennine Moors SAC/SPA comprise extensive tracts of semi-natural moorland habitats including upland heath and blanket mire and is designated as the South Pennine Moors Phase II SPA and the South Pennine Moors SAC.

Recreational Evidence Base

A number of studies have been undertaken at the South Pennine Moors of features sensitive to recreational impacts including breeding bird surveys and surveys of moorland fringe habitats.

- South Pennine Moorland Fringe Habitat Surveys: Supporting data to inform City of Bradford Metropolitan District Council Core Strategy Development Plan Document. (UEEC, 2014).
- South Pennine Moors SPA/SAC planning framework supplementary planning document (Liley and Hoskin, 2020).

Solutions for recreational impacts

Visitor surveys have been undertaken at the South Pennines over a number of years looking at visitor numbers and visitor profile. This data has been used to inform the mitigation solution.

- Monitor of Engagement with the Natural Environment survey (2009 - 2012): Visit taking in the South Pennines (Burt and others, 2014).
- HRA for the City of Bradford District Core Strategy. Appropriate Assessment Report for the Publication Draft Document (Urban Edge Environmental Consulting, 2014).
- South Pennine Moors SPA/SAC planning framework supplementary planning document (Liley and Hoskin, 2020).

For the purpose of calculating the mitigation tariff (as set out in the South Pennine Moors SPA/SAC Planning Framework SPD) a total of 17,326 houses within the ZOI were taken into consideration.

A recreational ZOI of 7km was established based on the output of visitor surveys and has been applied within the mitigation strategy. Within this 7km a zonal approach is taken to address different effects on the South Pennine Moors SAC/SPA: a presumption against development within 400m to address urbanisation effects (Zone A); Zone B covers 0.4-2.5km from the SAC/SPA boundary and focuses on preventing the loss/deterioration of functionally linked land; and recreational impacts are addressed within Zone C (0.4-7km).

Mitigation Solution

The recreational mitigation solution is set out within the South Pennine Moors SPA/SAC Planning Framework SPD and focuses on mitigation as follows:

- Dedicated staff;
- Education and awareness raising; and
- Infrastructure (including enhancement of existing greenspaces).

The SPD applies to development only within Bradford Metropolitan District. There is no apparent strategic approach in place outside of Bradford.

The required contribution is £375.61 per residential unit within 7km of the SAC/SPA. This has been calculated based on the estimated total cost of the mitigation measures (£6,507,795) and divided by the proposed housing figures within the adopted Bradford Core Strategy (17,326). In perpetuity has been taken as 80 years for the purpose of calculating the tariff.

Tariffs apply to several use classes including C1 (hotels), C2 (residential and residential school/college/training centres), C3 (net additional dwelling, residential annexe, retirement dwelling), C4 (HMO less than six residents) and Sui Generis (HMO over six residents, holiday accommodation, university accommodation and Gypsy and Traveller pitches).

SAMM Solutions

The SAMM element of the mitigation solution comprises dedicated staff, including a delivery officer and rangers, education and raising awareness through websites, social media, signage and interpretation.

SANG Solutions

The third strand of the mitigation strategy is for enhancement of existing greenspaces. Costed projects for the tariff include review and improvements to parking, path improvements, provision of dedicated BBQ areas and a review of current greenspace and its enhancement. Information on availability and capacity of SANG is not provided on the Council website, and there are currently no guidance or standards for its delivery.

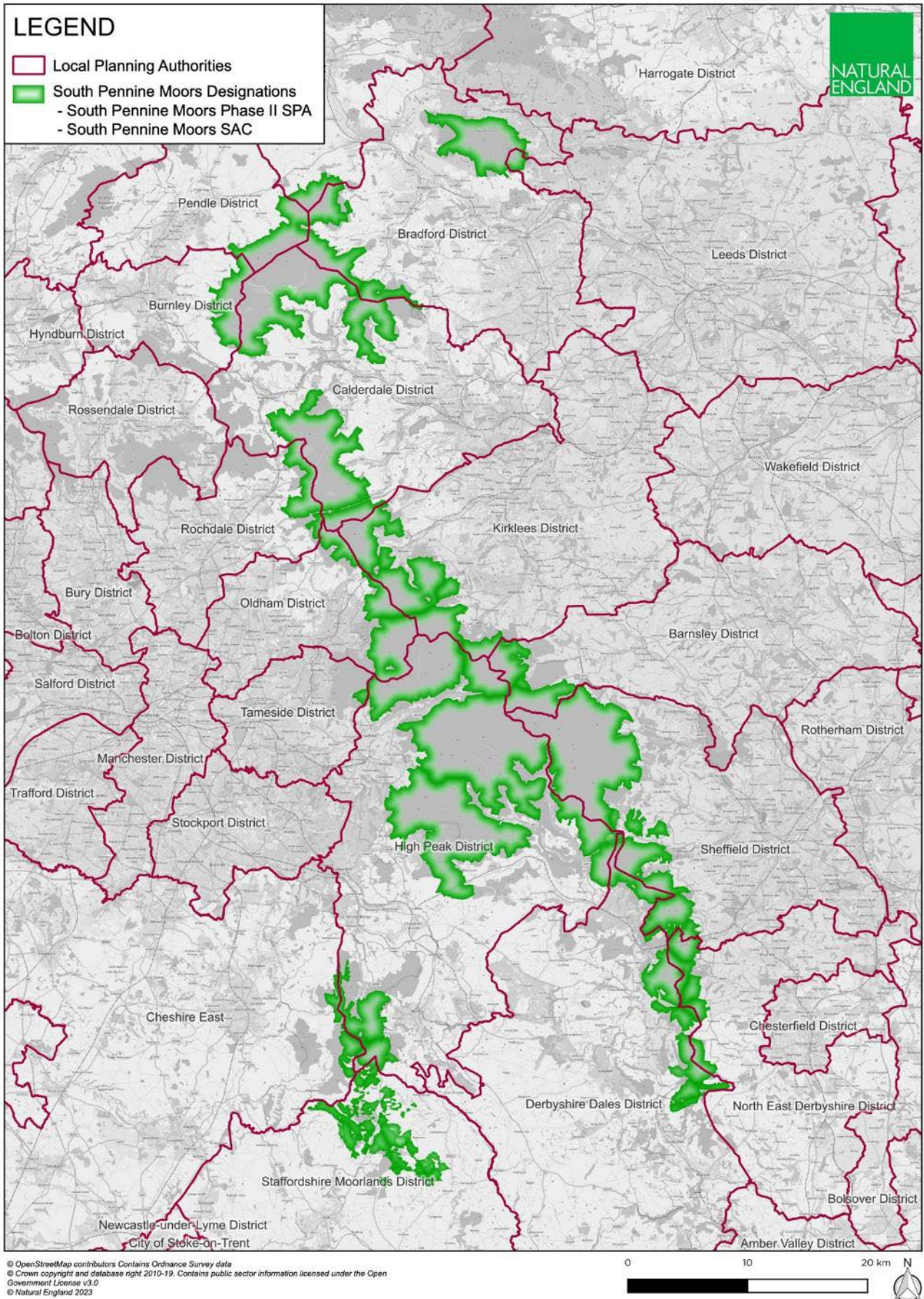


Figure 39: Location of South Pennine Moors Designations © Natural England 2024

Criteria 1: Triggers for Mitigation

Two European sites lie partially within the City of Bradford Metropolitan District: The South Pennine Moors Phase II SPA and the South Pennine Moors SAC (**Figure 39**).

The South Pennine Moors SAC/SPA comprise extensive tracts of semi-natural moorland habitats including upland heath and blanket mire (Natural England, 2014c). The sites are of high ornithological interest, owing to the diverse habitat mosaic – see Appendix A for qualifying features.

Q1: Recreational Impacts Evidence and Background Information

The location of the South Pennine Moors between the urban conurbations of Manchester, Leeds and Bradford, as well as the Peak District and Yorkshire Dales National Parks, means that the area is subject to a high volume of visitors with associated recreational effects.

The South Pennine Moors have been subject to various surveys over several years to better understand the ecological sensitivities and how visitors use the site.

A study commissioned by Natural England and the South Pennines Local Nature Partnership (Burt and others, 2014) analysed visitor data from the 2009-2012 period and found that 82% of visitors lived within 10 miles (approximately 16km) of the South Pennines. Half of all visitors, and the majority of local visitors, used the site for dog walking. Local visitors made up the largest proportion of site users with 34% living within 1 mile (approximately 1.6km) of the site.

Additional research was carried out in 2013 including breeding bird surveys, surveys of moorland fringe habitats, and surveys of visitor activity within the SAC/SPA. The HRA of the adopted Core Strategy (Urban Edge Environmental Consulting, 2014) included analysis of baseline information gathered during these surveys.

Analysis of postcode data collected during the 2013 visitor surveys identified that 75% of Bradford residents travelled from within 5km, whereas 75% of all visitors travelled from within 10km. Based on this, and the point at which visitor numbers levelled out 'tailed off', 7km was chosen as an appropriate ZOI for recreational impacts on the SAC/SPA (Urban Edge Environmental Consulting, 2014). Further visitor surveys were undertaken in 2019, which verified the results of the 2013 surveys in terms of the 'tail off' in visits from postcode origins over 7km from the SPA/SAC and was considered to confirm that the ZOI was appropriate (Liley and Hoskin, 2020).

The HRA of the adopted Core Strategy (Urban Edge Environmental Consulting, 2014) assessed the potential impact of the policies and proposals on the North and South Pennine Moors SPA and SAC. It identified a number of impact pathways which are likely to significantly affect the European sites, including:

- Loss of supporting habitats (directly or indirectly).

- Increases in emissions/air pollution.
- Recreational impacts including walkers, dogs, trampling and erosion.
- Urban edge effects.

Further recreational effects are summarised in the South Pennine Moors Planning Framework (Liley and Hoskin, 2020):

- Disturbance to breeding birds – due to recreational activities such as dog walking, mountain biking, paragliding etc.
- Increased risk of wildfire – linked to BBQs/campfires and discarded cigarettes, leading to long term damage to peat and vegetation.
- Trampling damage – from footfall, bicycles and motorbikes.
- Challenges in achieving suitable management – e.g. livestock worrying, gates left open.
- Dog fouling – leading to eutrophication.

These effects are reflected in the most recent HRA to support the emerging Bradford Metropolitan District Local Plan (Preferred Options) (Liley and others, 2021).

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

The HRA of the adopted Core Strategy identified three main approaches to respond to the risks identified during the HRA process (Urban Edge Environmental Consulting, 2014). These include: (1) a residential development exclusion zone within 400m of the SAC/SPA; (2) provision of alternative sites for informal recreation close to new/existing residential areas; and (3) commitment to develop a SAMM Strategy to better manage access.

The [South Pennine Moors SPA/SAC Planning Framework Supplementary Planning Document](#) (SPD) was adopted in 2021 (Liley and Hoskin, 2020). The SPD sets out the required approach for development in Bradford with respect to the SPA/SAC and was prepared in support of the adopted Core Strategy DPD (City of Bradford Metropolitan District Council (MDC), 2017).

The SPD sets out a strategy to assist developers across Bradford in enabling development whilst ensuring the delivery of consistent and integrated mitigation measures. The mitigation package has been developed to focus on mitigation streams that include:

- Dedicated staff;
- Education and awareness raising; and
- Infrastructure (including enhancement of existing greenspaces).

The SPD recognises that the strategy will need to be updated in light of the emerging Local Plan for Bradford, when adopted (the latest iteration being Regulation 18 'Preferred Options' (City Bradford MBC, 2021)).

Q3: Zone of Influence

A tiered zonal approach has been established to address different effects on the South Pennine Moors SAC/SPA as follows (**Figure 40**):

- **Zone A 0 – 400m** – Urban effects.
- **Zone B 0.4 – 2.5km** – Loss and deterioration of functionally linked land.
- **Zone C 0.4 – 7km** – Recreational impacts

Within Zone A, no residential development that results in a net increase in dwellings will be permitted unless exceptional circumstances can be evidenced.

Within Zone B, applications must be accompanied by a Preliminary Ecological Appraisal or Ecological Impact Assessment to identify the value of the site in providing supporting (functionally linked) habitat to the SPA/SAC, for example foraging habitat for the bird assemblage. Where linkages are identified, it must be demonstrated that the development will not cause a significant loss of habitat through a site-specific HRA and that avoidance/mitigation proposals are in place.

Within Zone C, developers must secure mitigation to address recreational impacts either in the form of a financial contribution to strategic mitigation measures or through bespoke mitigation provision (e.g. provision of SANGs).

Specific circumstances may occur, such as large developments proposed just outside the 7km ZOI, where mitigation would also be required which would be considered on a case-by-case basis by the Council in consultation with Natural England.

The ZOI and affected LPAs are shown in **Figure 40**.

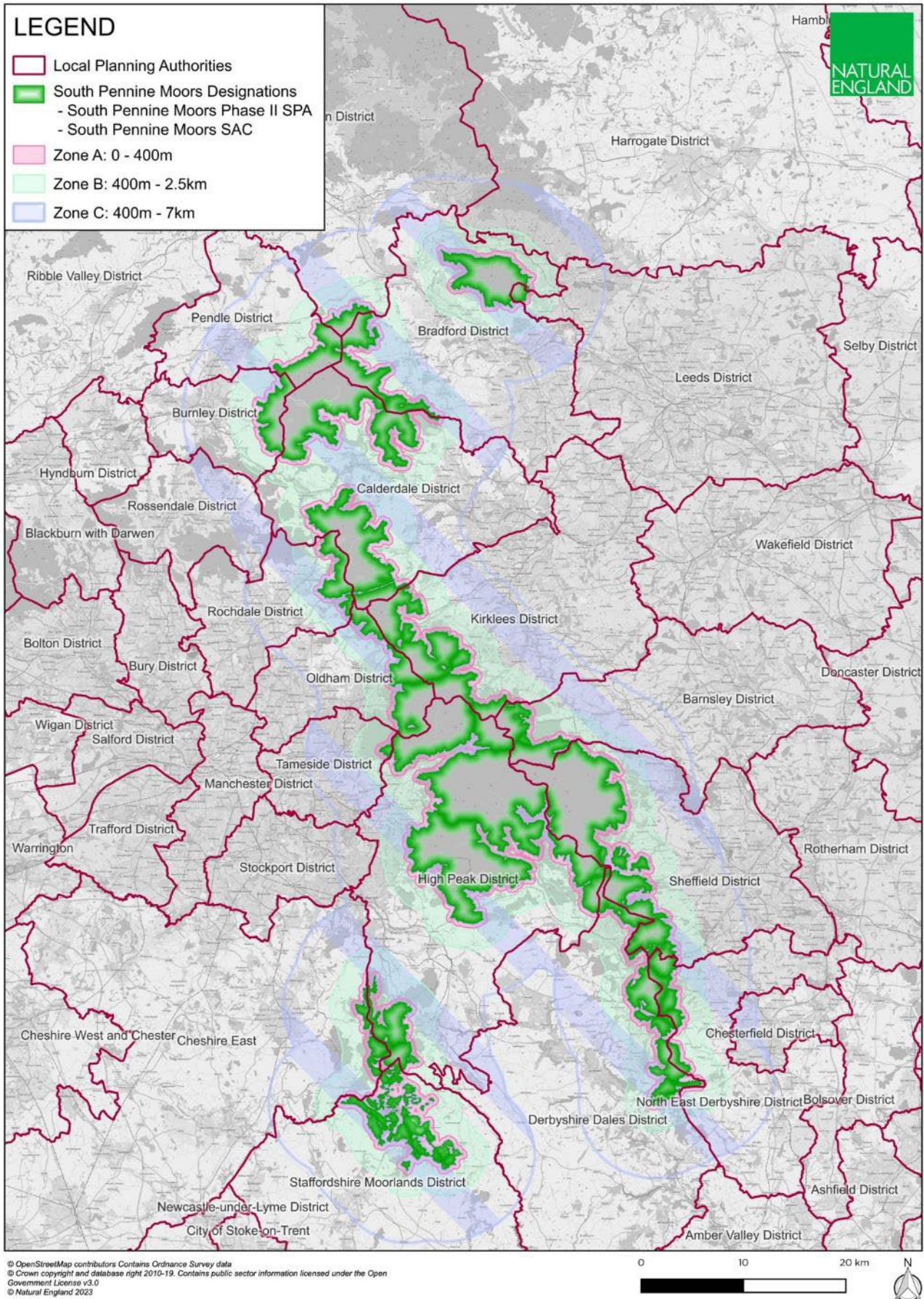


Figure 40: South Pennine Moors Designations Zones of Influence © Natural England 2024

Q4: Strategic Approach

The strategic approach to mitigation as set out in Policy SC8 (**Box 18**) and the SPD relates to Bradford Metropolitan District only.

The identified ZOI and associated mitigation requirements as set out in answer to Question 3 are referred to in neighbouring authority planning policies, such as in relation to site allocations within the emerging Calderdale Local Plan (Calderdale MBC, 2021), however there is no apparent strategic strategy in place outside of Bradford.

Q5: Policy

Policy SC8 of the Bradford Core Strategy Development Plan Document (City of Bradford MDC, 2017) sets out the requirements for applications to be assessed for potential impacts on the South Pennine Moors SPA/SAC with reference to the ZOI approach (see **Box 18**).

Box 18: Core Strategy Policy SC8 (City of Bradford MDC, 2017)

Strategic Core Policy SC8: Protecting the South Pennine Moors SPA and the South Pennine Moors SAC and their zone of influence

“In this Policy:

- Zone A is land up to 400m from the South Pennine Moors Special Protection Area (“SPA”) and South Pennine Moors Special Area of Conservation (“SAC”) boundary;
- Zone B is land up to 2.5km from the SPA and SAC boundary; and.
- Zone C is land up to 7km from the SPA and SAC boundary.

Subject to the derogation tests of Article 6(4) of the Habitats Directive, in all Zones development will not be permitted where it would be likely to lead, directly or indirectly, to an adverse effect (either alone or in combination with other plans or projects), which cannot be effectively mitigated, upon the integrity of the SPA or the SAC.

In conducting the above assessment the following approach will apply:

In Zone A no development involving a net increase in dwellings would be permitted unless, as an exception, the development and/or its use would not have an adverse effect upon the integrity of the SPA or SAC.

In Zone B it will be considered, based on such evidence as may be reasonably required, whether land proposed for development affects foraging habitat for qualifying species of the SPA.

Strategic Core Policy SC8: Protecting the South Pennine Moors SPA and the South Pennine Moors SAC and their zone of influence

In Zone C, in respect of residential developments that result in a net increase of one or more dwellings, it will be considered how recreational pressure on the SPA or SAC, that such development might cause, will be effectively mitigated. The mitigation may be:

- (i) such that the developer elects to offer, either on-site and / or deliverable outside the boundary of the development site, such as the provision of accessible natural greenspace and/or other appropriate measures; or
- (ii) in the form of a financial contribution from the developer to:
 1. The provision of additional natural greenspace and appropriate facilities to deflect pressure from moorland habitats and the long-term maintenance and management of that greenspace.
 2. The implementation of access management measures, which may include further provision of wardens, in order to reduce the impact of visitors.
 3. A programme of habitat management and manipulation and subsequent monitoring and review of measures.

To mitigate impacts on the SPA and SAC due to the increase in population, an SPD will set out a mechanism for the calculation of the financial contributions, by reference to development types, the level of predicted recreational impact on the SPA or SAC, and the measures upon which such contributions will be spent.”

Policy SC8 of the Core Strategy is supported by the South Pennine Moors SPA/SAC Planning Framework SPD (Liley and Hoskin, 2020), which provides further detail and planning guidance and a mechanism for the calculation of required financial contributions.

Q6: Delivery Body

Delivery of the mitigation package is primarily through the Countryside Service of Bradford MDC. The measures have been developed in discussion with Bradford MDC staff, Natural England and other stakeholders, alongside the expertise of the Footprint Ecology team assisting the Council.

Q7: Types of Development Covered

Zone A

In general, no residential development that results in a net increase in dwellings will be permitted in Zone A (400m).

The only types of residential or holiday accommodation that may be permitted within Zone A is replacement dwellings or HMOs (Use Class C3/C4). The following types of development will be considered on a case-by-case basis:

- Use Class C1 (Hotels).

- Use Class C2 (Residential Institutions).
- Use Class C2A (Secure residential institutions).

Any application for non-residential development in Zone A should also demonstrate that the development will not have any adverse effects on any supporting, functionally linked, habitat to the SPA/SAC (as per Zone B requirements).

Zone B

Within Zone B (2.5km) all development (including residential and non-residential development and supporting infrastructure) will require further assessment and habitat surveys to identify potential for functionally linked land prior to development being permitted.

Zone C

Contributions towards mitigation are required for any development within Zone C (7km) of the South Pennine Moors SPA/SAC ZOI that results in a net increase in residential units and may also be required for certain other types of development, to be considered on a case-by-case basis. This includes:

- Net additional dwellings (including changes of use).
- Retirement dwellings intended for permanent residence (Use Class C3).
- Residential accommodation and care to people in need of care (Use Class C2).
- Residential school, college or training centre (Use Class C2).
- HMOs (Use Class C4).
- Gypsy and Traveller pitches (Sui Generis).
- University managed student accommodation (Use Class C4).
- Use as a hotel or as a boarding or guest house (Use Class C1).
- Self-contained holiday accommodation, caravan and touring holiday accommodation (Sui Generis).

Q8: Developer Contributions

The required contribution is £375.61 per residential unit within 7km of the South Pennine Moors SAC/SPA. This has been calculated based on the estimated total cost of the mitigation measures (£6,507,795) and divided by the proposed housing figures within the adopted Bradford Core Strategy (17,326).

According to the SPD (Liley and Hoskin, 2020), a S106 agreement is used to secure this mitigation funding, which is 'ring-fenced' by the Council to be used specifically for this purpose.

The calculation of housing numbers will need to be reviewed and updated with new figures once the new Local Plan for Bradford is adopted.

Q9: Timescales for Delivery

Costs have been derived assuming that mitigation will be delivered in perpetuity, which the SPD defines as 80 years.

Q10: Other initiatives

Beyond SAMM and SANG elements, the mitigation strategy also incorporates a three-tiered zonal approach which includes a presumption against new development within 400m of the SAC/SPA and consideration of potential impacts on functionally linked habitat within 2.5km of the SAC/SPA (see answer to Questions 3 and 7).

Q11: Monitoring

Monitoring forms a key element of the mitigation strategy, as set out in the SPD (Liley and Hoskin, 2020). This includes monitoring of:

- Effective delivery of measures;
- Timely delivery of measures in alignment with housing growth coming forward;
- Checking that mitigation delivery aligns with any peak locations for housing coming forward at any given time; and
- Visitor monitoring and ecological monitoring to check whether measures are effective and what additional measures may be needed over time.

Q12: Communication Strategy

There is no apparent standalone communication strategy, although communication forms a large proportion of the SAMM measures in the form of education and awareness raising (see answer to Question 19). Key communications activities include:

- Strong website presence and communication through social media – this includes promotion of events, visitor information, how to avoid disturbing wildlife and promoting alternative recreation sites.
- New and improved signage and visitor interpretation boards to communicate key messages on-site.
- Educational materials and activities for local schools and funding for school trips so local children can learn the importance of protecting the moors.
- Employment of a full-time ranger with educational focus, to work on-site with community groups, volunteers and children.

SANG

Q13: Identify the components that make up the SANG projects

The SPD recognises the constraints within Bradford District in terms of providing larger strategic SANGs and instead proposes that the mitigation strategy “should focus on maximising opportunities for enhancing the capacity and recreation experience at existing

greenspace sites” (Liley and Hoskin, 2020). Larger sites or urban extensions should however incorporate space for on-site recreational activities.

As part of the SAMM projects (see answer to Question 19), the mitigation scheme provides funds for a review of existing greenspaces near to European sites and enhancement of existing local greenspaces.

Sites for consideration in terms of providing SANG include public parks and gardens and Council-owned countryside sites. The SPD states that “A review of sites and audit will be necessary in order to identify which are likely to work best and to identify a prioritised list of enhancements that will be required”. Costs for such an audit are included within the mitigation tariff (see answer to Question 19).

Q14: Has a green space standard or metric been used?

No green space standard or metric is mentioned within the SPD. The [Bradford MDC website](#) states that the suitability of proposed SANGs will be assessed by the Council, with suitability of SANGs determined through HRA.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the SPD.

Q16: Is the quantity of SANG available to the LPA published?

The SPD and Council website do not refer to any existing SANG that have been provided.

Q17: Are details available for each SANG?

See Question 16.

SAMM

Q18: SAMM Criteria

No specific criteria are set out to determine the requirements for SAMM. SAMM contributions are required for residential and tourism development within 7km (Zone C) of the SPA/SAC as set out in the SPD (see Question 8).

Guidance relating to the forms of development which may cause additional harm to the South Pennine Moors SPA/SAC and requirements for mitigation contributions are set out in the South Pennine Moors Planning Framework SPD (Liley and Hoskin, 2020).

Q19: SAMM Projects

Mitigation measures are presented in the SPD relating to four broad categories:

- Staff;
- Education and awareness raising;
- Infrastructure, parking and travel; and

- Monitoring.

The SPD provides a comprehensive breakdown of associated costs for each element of the strategy, a summary of which is provided in **Table 26**.

Table 26: Mitigation measures set out in the SPD (Liley and Hoskin, 2020)

Mitigation measure for recreation	Cost
Delivery Officer	£414,500
Ranger (education)	£788,000
Ranger (practical / access infrastructure)	£2,955,000
Ranger (ecological / monitoring)	£591,000
Audit of signage	£1,500
Graphic design for new signage / interpretation	£8,000
Interpretation boards	£20,000
Signage and waymarking	£28,000
Awareness raising strategy	£20,000
Development of education material	£25,000
Schools transport	£46,000
BBQ guidance	£7,500
Social media and website	£14,000
Review of existing greenspaces near to European sites	£10,000
Enhancement of local greenspace	£500,000
Provision of BBQ areas	£25,000

Mitigation measure for recreation	Cost
Path improvements	£350,000
Dog bins	£34,400
Review of parking	£10,000
Parking improvements	£100,000
Review of current monitoring and monitoring strategy	£10,000
Visitor interviews	£40,000
Visitor numbers and activities	£100,000
Ecological	£100,000
Total (including 10% contingency)	£6,507,795

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The SPD does not directly mention multifunctional links, although the mitigation strategy in itself seeks to facilitate enjoyment of and recreation in the countryside including the moorlands themselves, whilst avoiding harm to the qualifying features of the SPA/SAC designations.

Q21: Nature Recovery Network

No reference to the Nature Recovery Network is made in the current SPD.

However, effects on Functionally Linked Land are addressed through the ZOI approach, whereby applications within Zone B must be accompanied by ecological assessments to determine the presence and/or condition of habitats with functional linkage to the SAC/SPA, in addition to contributions towards recreational mitigation (see answer to Question 3).

Thames Basin Heaths

Woodlark (*Lullula arborea*) Credit: Istock Images



Thames Basin Heaths SPA – Bracknell Forest Council

Summary

Triggers for Mitigation

The Thames Basin Heaths SPA forms part of an extensive complex of lowland heathland in southern England that supports important breeding birds including nightjar, woodlark and Dartford warbler. It consists of 13 SSSIs scattered across 11 LPAs within Hampshire, Berkshire and Surrey. The SPA is under pressure from increased recreational pressure, urbanisation and other land uses.

Recreational Evidence Base

Extensive research was undertaken by Natural England in 2005 which indicated that the existing level of recreational pressure was having a detrimental effect on the three species of birds for which the SPA was designated (Liley and others, 2005).

Solutions for recreational impacts

The 2005 work included a study of visitor access patterns and was followed up by further visitor surveys in 2012 and 2013.

- Visitor Access Patterns on the Thames Basin Heaths (Liley and others, 2005).
- Results of the 2012/13 visitor survey on the Thames Basin Heaths SPA (Fearnley and Liley, 2013).
- Visitor Access Patterns on the Thames Basin Heaths SPA: Visitor Questionnaire Survey 2018. (Southgate and others, 2018).

The 2018 visitor surveys split main user group activities as shown in **Figure 41**.

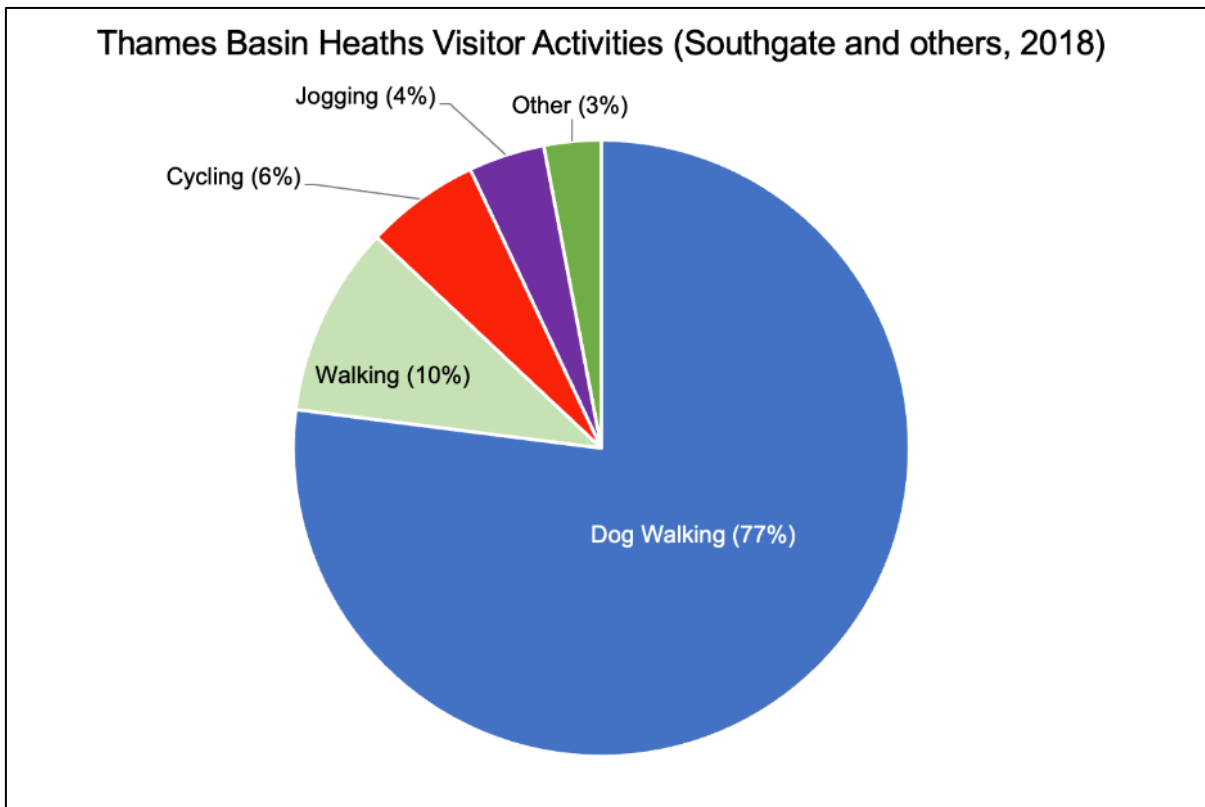


Figure 41: Visitor activities across the Thames Basin Heaths (adapted from Southgate and others, 2018)

The visitor survey work led to the identification of three ZOI as follows:

- **Zone A:** From 0m to 400m straight line distance from the SPA – presumption against development to address urbanisation effects.
- **Zone B:** From 400m to 5km straight line distance from the SPA – application of mitigation.
- **Zone C:** From 5k to 7km straight line distance from the SPA – development assessed on a case-by-case basis.

The 11 LPAs within the ZOI are Waverley Borough Council, Guildford Borough Council, Surrey Heath Borough Council, Woking Borough Council, Bracknell Forest Borough Council, Hart District Council, Wokingham Borough Council, Elmbridge Borough Council, Runnymede Borough Council, The Royal Borough of Windsor and Maidenhead and Rushmoor Borough Council. The LPAs work together through the Joint Strategic Partnership (JSP) to provide a strategic approach to mitigation across the SPA.

Based on evidence collated around public access and disturbance impacts, the Thames Basin Heaths SPA Delivery Framework was agreed by all affected LPAs in 2009. This aims to ensure any new residential development mitigates against additional recreational pressure at the SPA (TBH Joint Strategic Partnership Board (JSPB), 2009).

Mitigation Solution

Mitigation set out in the Delivery Framework is implemented in Bracknell through the Thames Basin Heaths SPA SPD (Bracknell Forest Borough Council, 2018). The mitigation strategy comprises a two-pronged approach:

- Provision of SANG; and
- Access management and monitoring measures (SAMM).

There is a presumption against development 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.

Developer contributions are collected for new development between 400m to 5km of the SPA to fund SAMM projects.

Development between 5km-7km is assessed on a case-by-case basis.

The duty to consider likely significant effects upon the SPA applies to proposals of one or more net new dwellings units falling within Use Class C3 and conversions to C3, C4 (HMO), proposals for new units of staff residential accommodations, C1 (hotels), C2 (residential institutions) and C2 and C3 (care homes on a case-by-case basis).

SAMM Solutions

SAMM contributions are required from all new net residential development with the ZOI. The SAMM Legal Agreement was signed by Bracknell Forest Borough Council, Natural England and the other ten affected LPAs in July 2011. The project was implemented from 14 July 2011 and comprises the following:

- Promote SANGs as new recreational opportunities for local people and particularly encourage their use during the breeding bird season;
- Provide on-the-ground wardening service to supplement existing wardening efforts
Provide a 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.

SAMM contributions are based on guidance issued by Natural England, details of which can be found in the Thames Basin Heaths SAMM Project Tariff Guidance (Natural England, 2011). An estimate of the number of houses (2,824 per year over 17 years) for the tariff was taken from the South East Plan (2009). Consultation with Natural England suggests there are approximately 50,000 homes expected to come forward within the ZOI as of 2022.

At the Thames Basin Heaths JSPB meeting held on 19th November 2020 it was agreed that the tariff applied to new dwellings built within the 5km SPA buffer zone, and used to fund the SAMM project, should increase from an average of £630 to £796.95 per dwelling from the start of the financial year 2021 to 2022.

In perpetuity has been taken as 125 years for the purpose of calculating the SAMM tariff. The total annual cost of SAMM (Natural England, 2011) was £536,560.00. Consultation with Natural England suggests that the overall cost is approximately £31.5 million (2022).

SAMM projects target the following types of interventions:

- Staff and wardening (including an education and communications officer and project coordinator); and
- Monitoring.

SANG Solutions

Three types of SANG are promoted which include Strategic SANGs, Bespoke SANGS and Third Party SANGS. All SANG must comply with Natural England's SANG Quality Guidance which include a set of 'must have', 'should have' and 'desirable' requirements:

- SANG must provide a circular walk of between 2.3-2.5km.
- SANG must be provided to a minimum standard of 8ha/1,000 people within 400m-5km.
- SANG applies to development over 50 homes from 5km to 7km and should provide 2ha/1,000 people.
- Facilities which must be provided (including car parking requirements, signage and interpretation etc).
- Key features (including habitat variety and safe access for visitors and dogs).
- Catchments apply to all SANG (with the exception of development of 10 homes or less).

Current and emerging SANG are listed in the SPD with information provided on the type of SANG, area and catchment. The Council's website notes that Council-owned SANG is limited in capacity and has been provisionally allocated to the planned development sites that do not require a bespoke SANG solution as set out in the Site Allocations Local Plan (SALP) HRA and agreed with Natural England.

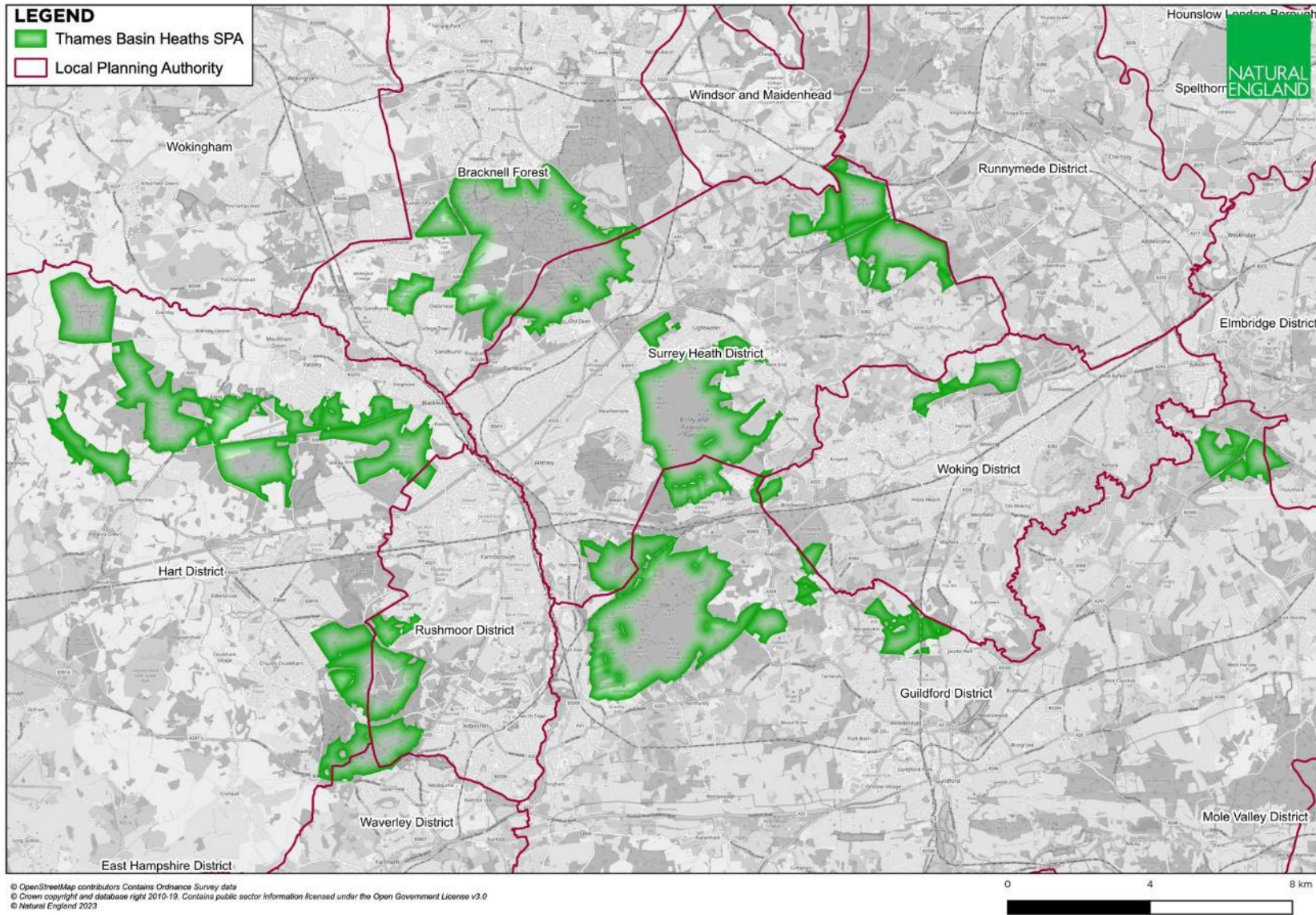


Figure 42: Location of Thames Basin Heaths SPA © Natural England 2024

Criteria 1: Triggers for Mitigation

Thames Basin Heaths SPA

The Thames Basin Heaths SPA forms part of an extensive complex of lowland heathland in southern England that supports important breeding birds (Natural England, 2016) (see **Figure 42**). It covers over 8,000ha across Surrey, Hampshire and Berkshire and is scattered across 11 LPAs including Bracknell Forest. Habitats across the SPA comprise agricultural, unimproved heathland, scrub and woodland. The breeding birds it supports are strongly associated with these habitat types – see Appendix A for qualifying features.

Two areas of the SPA lie within Bracknell Forest. These are:

- Broadmoor to Bagshot Heaths Site of Special Scientific Interest (SSSI); and
- Sandhurst to Owlsmoor Bogs and Heaths (also known as Wildmoor Heath) SSSI.

Q1: Recreational Impacts Evidence and Background Information

The once continuous area of heathland, scrub and woodland is now fragmented by roads, urban development and farmland (Natural England, 2016). As a result, the remaining isolated areas of heathland are under pressure from urban development, including increased recreational pressure and urbanisation effects due to the proximity of housing and associated infrastructure. Extensive research undertaken by Natural England in 2005 indicated that the existing level of recreational pressure was having a detrimental effect on the three species of Annex I birds for which the SPA was designated (Liley and others, 2005). These ground-nesting birds are subject to disturbance from people and their pets using the SPA for recreational purposes and this affects their breeding success. The 2005 research was followed up by further surveys in 2012 and 2013 to assess visitor access patterns and to extend and provide a comparison with the 2005 work (Fearnley and Liley, 2013). This body of work provided part of the evidence base which supported the identification of mitigation solutions to address recreational and urbanisation impacts.

Based on evidence collated around public access and disturbance impacts, the Thames Basin Heaths SPA Delivery Framework was agreed by all affected LPAs in 2009. This aims to ensure any new residential development mitigates against additional recreational pressure at the SPA (TBH Joint Strategic Partnership Board (JSPB), 2009). Bracknell Forest Council has adopted its own guidance in accordance with the Framework, known as the [Thames Basin Heaths SPA SPD](#) (Bracknell Forest Borough Council, 2018).

A further piece of visitor survey work has been undertaken to establish visitor access patterns across the Thames Basin Heaths in 2018 (Southgate and others, 2018).

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

As noted in the answer to Question 1, extensive surveys have indicated that an in-combination adverse impact on the integrity of the SPA is likely to result from any residential planning applications within 5km of the SPA which result in a net increase in housing. For larger residential developments, this may also apply within 5-7km of the SPA.

The JSPB sets out a two-pronged approach to mitigation to address recreational impacts on the SPA through provision of SANG to attract people away from the SPA and hence reduce pressure on it; and SAMM (including monitoring) to reduce the effect of people who visit the SPA (JSPB, 2009). This is implemented in Bracknell's administrative area through the Thames Basin Heaths SPA SDP (Bracknell Forest Borough Council, 2018).

Q3: Zone of Influence

Three ZOI are set out (Bracknell Forest Borough Council, 2018) (see **Figure 43**):

- **Zone A:** From 0m to 400m straight line distance from the SPA.
- **Zone B:** From 400m to 5km straight line distance from the SPA.
- **Zone C:** From 5k to 7km straight line distance from the SPA.

There is a presumption against residential development within 400m of the SPA (Zone A). Applications for non-residential development in Zone A will be assessed on a case-by-case basis, in agreement with Natural England. Between 400m and 5km from the SPA (Zone B) development can be permitted and avoidance and mitigation measures should be applied. Applications for residential development in Zone C will be assessed on a case-by-case basis, in agreement with Natural England (Bracknell Forest Borough Council, 2018).

An HRA will be needed, and agreed with Natural England, to demonstrate that any development within these zones will not have an adverse impact on the integrity of the SPA (Bracknell Forest Borough Council, 2018).

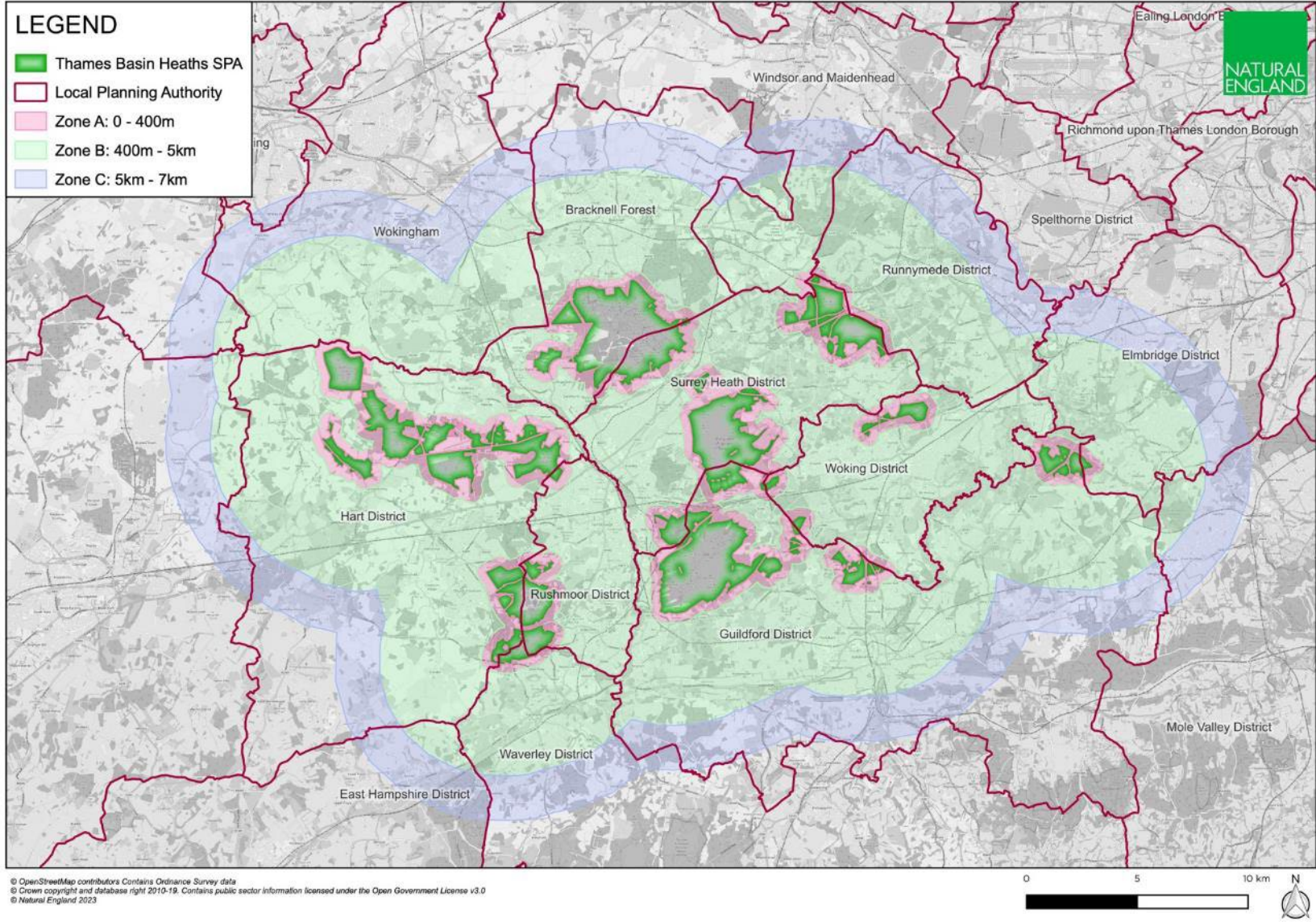


Figure 43: Thames Basin Heaths SPA Zone of Influence © Natural England 2024

Q4: Strategic Approach

The 11 LPAs within the ZOI are: Waverley Borough Council, Guildford Borough Council, Surrey Heath Borough Council, Woking Borough Council, Bracknell Forest Borough Council, Hart District Council, Wokingham Borough Council, Elmbridge Borough Council, Runnymede Borough Council, The Royal Borough of Windsor and Maidenhead and Rushmoor Borough Council (Bracknell Forest Borough Council, 2018).

The affected LPAs work together through the Joint Strategic Partnership (JSP) to provide a strategic approach to mitigation across the Thames Basin Heaths SPA.

Q5: Policy

The Thames Basin Heaths SPA SPD provides an avoidance and mitigation strategy to show how the adverse effects of development on the integrity of the SPA should be avoided and mitigated in Bracknell (Bracknell Forest Borough Council, 2018).

The Council is currently in the process of reviewing its local plan. The emerging local plan is currently at Examination and once adopted, will replace the saved policies in the Bracknell Forest Borough Local Plan (2002) and the Core Strategy (2008). Policies which currently secure recreational mitigation solutions are set out in **Table 27**.

Table 27: Planning policy which secures mitigation solutions

Policy/ Plan	Policy References	Notes
Bracknell Forest Council Core Strategy DPD (February 2008)	CS14 Thames Basin Heaths Special Protection Area	This sets out the principle of the protection of the Thames Basin Heaths SPA in Bracknell Forest. This is likely to be superseded by the Comprehensive Local Plan.
Site Allocations Local Plan (July 2013)	SA4 Land at Broadmoor, Crowthorne SA5 Land at Transport Research Laboratory, Crowthorne SA6 Land at Amen Corner (North), Binfield SA7 Land at Blue Mountain, Binfield SA8 Land at Amen Corner (South), Binfield	These policies set out the SPA avoidance and mitigation requirements for development allocations in Bracknell Forest.

Policy/ Plan	Policy References	Notes
	SA9 Land at Warfield SA10 Royal Military Academy, Sandhurst	
Bracknell Forest Borough Local Plan (2002)	EN3 Nature Conservation	This sets out the principle of the protection of the Thames Basin Heaths SPA in Bracknell Forest. This is likely to be superseded by the Comprehensive Local Plan.

Box 19 sets out proposed wording in the emerging Local Plan which will continue to ensure mitigation solutions are secured once adopted.

Box 19: Emerging Local Plan (Bracknell Forest Borough Council, 2021)

Emerging Local Plan Policy Wording: LP 17

“Thames Basin Heaths Special Protection Area

1. New development which, either alone or in combination with other plans or projects, is likely to have a significant adverse effect on the integrity of the Thames Basin Heaths Special Protection Area (SPA) without appropriate avoidance and mitigation measures will be refused.
2. Where development is proposed that is likely to have a significant adverse effect on the integrity of the SPA it must be demonstrated that adequate measures will be put in place to avoid or mitigate any such effects. Such measures must be agreed with the Council and Natural England. In order to assist the Council in carrying out an Appropriate Assessment, the developer will be required to provide such information as the Council may reasonably require for the purpose of the assessment. For larger residential developments which are not Local Plan allocations this may include an air quality assessment of the likely significant effects on the SPA. Applications for non-residential development will be dealt with on a case by case basis.

Zones of Influence

3. Where Suitable Alternative Natural Greenspace (SANG) and Strategic Access Management and Monitoring (SAMM) mitigation measures are required for residential development the Council will follow a consistent approach to mitigation, based on the following zones of influence:

Emerging Local Plan Policy Wording: LP 17

- i. A straight line distance of between 0 to 400 metres from the SPA boundary. This will be an 'exclusion zone' where mitigation measures are unlikely to be capable of protecting the integrity of the SPA. Proposals for a net increase in dwellings within this zone will not be permitted unless it can be demonstrated through an Appropriate Assessment that there will be no adverse effect on the integrity of the SPA.
- ii. A straight line distance of between 400 metres and 5 kilometres from the SPA boundary. Within this zone measures must be provided for all residential proposals for 1 or more net new dwellings to ensure that the integrity of the SPA is protected. Mitigation measures will be based on a combination of the provision of SANG and SAMM measures and will be delivered prior to occupation and in perpetuity.
- iii. A straight line distance of between 5 and 7 kilometres from the SPA boundary. Within this zone residential developments with a net increase of more than 50 dwellings will be dealt with on a case by case basis and are likely to be required to provide appropriate mitigation based on a combination of SAMM and the provision of SANG to a lower standard than within the 400m – 5km zone.
- iv. Mitigation measures will be delivered prior to occupation and in perpetuity.

SANG Standards

4. The provision of SANG will meet the following standards and arrangements:

- i. Within the 400m – 5km zone a minimum of 8 hectares of SANG land (after discounting to account for current access and capacity) will be provided per 1,000 new occupants;
- ii. Residential developments of net 9 dwellings or fewer will not be required to be within a specified distance of SANG land provided it is ensured that a sufficient quantity of SANG land is in place to cater for the consequent increase in residents;
- iii. Developments of 10 or more net dwellings will need to be within the catchment of a specified SANG and a sufficient quantity of SANG land must be in place to cater for the consequent increase in residents;
- iv. Small developments as set out in supporting guidance will be required to provide developer contributions towards strategic SANG facilitated by the Council subject to available SANG capacity unless there are other material considerations;
- v. Large developments as set out in supporting guidance may be expected to provide bespoke SANG;

Emerging Local Plan Policy Wording: LP 17

vi. SANG will accord with Natural England's SANG Guidelines and include a combination of benefits such as biodiversity enhancement, green infrastructure and, potentially, new recreational facilities;

vii. Developments which use third party SANG capacity will need to demonstrate to the Council that this has been agreed with the landowner and that there is sufficient SANG capacity in the correct location to mitigate their development.

SAMM Contributions

5. A developer contribution will be made toward the SAMM Project for each net additional dwelling. This will provide an SPA-wide wardening and education service and monitor the effectiveness of the avoidance and mitigation measures and visitor pressure on the SPA.

Further Evidence

6. Where further evidence demonstrates that the integrity of the SPA can be protected using different linear thresholds or with alternative mitigation measures (including air quality mitigation and standards of SANG provision different to those set out in this policy) these must be agreed with the Council and Natural England."

Q6: Delivery Body

All LPAs within the ZOI work together to deliver The Thames Basin Heaths SPA Delivery Framework. The JSPB meets twice a year and oversees matters pertaining to SAMM project and the monitoring of SANGs. This joint working also fulfils Duty to Cooperate requirements (Bracknell Forest Borough Council, 2018).

Natural England currently hosts the project coordinator for the SAMM element, whilst Hampshire County Council manages the finances. SAMM projects are implemented on the ground by the Thames Basin Heaths Partnership (which includes the LPAs, land managers and nature conservation bodies).

Q7: Types of Development

The strategy applies to all types of development with the possibility of causing likely significant effects on the SPA (Bracknell Forest Borough Council, 2018):

- Proposals for one or more net new dwelling units falling within Use Class C3 (Dwelling houses);
- Conversion of B1 office or B1(c) light industrial use class to residential (C3);
- A change of use from a dwelling house (C3 use) to HMO (C4 use);
- A change of use from either C3 or C4 uses to a large HMO i.e., 6 or more people sharing (sui generis);

- Proposals for one or more net new units of staff residential accommodation;
- C1 (hotel use) and C2 (residential institutions); and
- C2 and C3 care homes (considered on a case-by-case basis in agreement with Natural England).

Q8: Developer Contributions

The JSPB has agreed that SAMM contributions should be applied on a ‘per bedroom’ basis. **Table 28** sets out contributions per dwelling to SAMM for market dwellings (Bracknell Forest Borough Council, 2018).

Table 28: SAMM Contributions per Dwelling (Bracknell Forest Borough Council, 2018)

Dwelling Size	SAMM Contribution per dwelling
1 bedroom	£399
2 bedrooms	£526
3 bedrooms	£711
4 bedrooms	£807
5 bedrooms	£1,052

SANGs are delivered through three routes as follows (Bracknell Forest Borough Council, 2018):

- **Strategic SANGs** are Council owned and managed SANG towards which developers pay a financial contribution. These are usually reserved for development with a net increase of between 1 and 108 dwellings. Contributions are normally funded through CIL receipts.
- **Bespoke SANG** are new open spaces on large development sites or off-site which are normally transferred to Council ownership with maintenance funds to secure long term management. These are provided for sites with a net increase of 109 or more dwellings. Contributions are normally funded through S106 agreements.
- **Third party private SANG** are privately owned and provided and sometimes transferred to Council ownership with maintenance funds to secure long term management. Contributions are normally funded through S106 agreements.

Strategic SANG contributions are set out in **Table 29**. Separate rates are provided by the Council for affordable housing and prior approval applications as set out in the SPD. The SPD provides an estimate of £65,477 per hectare cost for bespoke SANGs which allows

for estimated interest rates and inflation to be applied over the in-perpetuity period of 125 years.

Table 29: Contributions for market housing (Bracknell Forest Borough Council, 2018)

Dwelling Size	SAMM Contribution per dwelling
1 bedroom	£4,403
2 bedrooms	£5,193
3 bedrooms	£6,112
4 bedrooms	£6,838
5 bedrooms	£7,886

Q9: Timescales for Delivery

Avoidance and mitigation measures are provided so that they can function in perpetuity, which is defined in the SPD as at least 125 years (Bracknell Forest Borough Council, 2018).

The in-perpetuity period of 125 years also applies to the maintenance and management of the SANG.

Q10: Other initiatives

In addition to SANG and SAMM, there is a presumption against development within 400m of the SPA boundary (Bracknell Forest Borough Council, 2018).

Q11: Monitoring

Monitoring is carried out through various SAMM projects. The Council conducts its own monitoring, reports periodically to the JSPB on SANG delivery within the Borough (to ensure sufficient capacity), and contributes monitoring data related to SAMM contributions quarterly to the JSPB. As part of the SAMM projects, analyses are carried out regarding visitor usage of the SPA, SANGs, and Annex 1 Bird populations on SPA sites (Bracknell Forest Borough Council, 2018).

Q12: Communication Strategy

Communication is delivered through elements of the SAMM projects (as discussed in answer to Question 19) which aim to educate and raise awareness regarding the sensitives of the SPA.

The [Thames Basin Heaths Partnership website](#) (2023) also documents work with the local community to educate and raise awareness through talks, wardening, social media presence and promotion of dog guides etc.

SANG

Q13: Identify the components that make up the SANG projects.

As discussed in answer to Question 8, three types of SANG are promoted which include Strategic SANGs, Bespoke SANGS and Third Party SANGS (Bracknell Forest Borough Council, 2018).

All SANGs must comply with the [Natural England SANG Quality Guidance](#) which is provided on the Council website planning pages. This guidance includes a site quality checklist for SANG, listing a set of ‘must have’, ‘should have’ and ‘desirable’ requirements for SANG (Natural England, 2021b; Bracknell Forest Borough Council, 2018). This sets requirements such as minimum SANG size, walking route length (including a minimum 2.3-2.5km circular walking route), facilities which must be provided (including car parking requirements, signage and interpretation etc), and key features (including habitat variety and safe access for visitors and dogs).

Catchments are specified for all SANGs, within which a development needs to be located in order to use a particular SANG as a SPA avoidance and mitigation measure. These are as follows:

- A SANG of 2-12ha will have a catchment of 2km;
- A SANG of 12-20ha will have a catchment of 4km; and
- A SANG of 20ha+ will have a catchment of 5km.

Guidance notes that developments with a net increase of less than 10 dwellings do not need to be within a specified distance of a SANG.

Q14: Has a green space standard or metric been used?

SANG standards are set out in the SPD depending on distance from the SPA as shown in **Table 30**.

Table 30: SANG Standards for Net Increase in Dwellings (Bracknell Forest Borough Council, 2018)

Zone of Influence	SANG Standard	Comments
A: From 0m to 400m straight line distance from the SPA	No standard	There is a presumption against any net increase in residential developments within this zone. A Habitats Regulations Assessment will be needed, and agreed with

Zone of Influence	SANG Standard	Comments
		Natural England, to demonstrate that any development within this zone will not have any adverse effect on the SPA and/or the acceptability of any avoidance and mitigation measures provided.
B: From 400m to 5km straight line distance from the SPA	At least 8ha per 1,000 persons	Some development schemes require SANGs to be significantly in excess of 8ha per 1,000 persons especially those which lay in close proximity to the SPA.
C: Beyond 5km to 7km straight line distance from the SPA	Likely to be at least 2 hectares per 1,000 persons but will be assessed on a case-by-case basis in agreement with NE.	Only affects developments over 50 dwellings

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the SPD; however, this is reflected in the standard required for SANG between 5km – 7km from the SPA.

Q16: Is the quantity of SANG available to the LPA published?

Table 8 of the SPD provides details on all agreed and emerging SANGs in the Council's administrative area (Bracknell Forest Borough Council, 2018).

Q17: Are details available for each SANG?

As noted in answer to Question 16, Table 8 of the SPD lists all the current and emerging SANGs. Information is provided on the type of SANG (strategic, bespoke and third party), sizes, SANG catchment area and planning status.

Q18: SAMM Criteria

SAMM projects have been designed to focus on specific impacts identified through the evidence base gathered on recreational impacts (discussed in answer to Question 1).

Q19: SAMM Projects

The SAMM projects aims to achieve the following:

- Promote SANGs as new recreational opportunities for local people and particularly encourage their use during the breeding bird season.
- Provide on-the-ground wardening service to supplement existing wardening efforts.
- Provide a 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.
- Monitor birds (Annex 1) on SPA sites.

Table 31 summarises the annual cost of each project to be delivered through SAMM (Natural England, 2011).

Table 31: SAMM Project Annual Costs (Natural England, 2011)

SAMM Project	Annual Cost
Staff and wardening service	£390,000
Monitoring including capital costs	£55,500
Contingency	£43,900
Administrative body fees	£20,000
Natural England management fee	£10,000
VAT contingency	£17,160
Total cost	£536,560

All details of the strategic avoidance measures and tariffs are present in Thames Basin Heaths SAMM Project Tariff Guidance (Natural England, 2011).

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

The SANG Quality Guidance (see answer to Question 13) notes that it is desirable for SANG to 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 is also encouraged and desirable on site.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the SPD.

Thames Basin Heaths SPA – Rushmoor Borough Council

Summary

The triggers for mitigation, recreational evidence base, solutions for recreational impacts and ZOI for Rushmoor are the same as for the other 11 LPAs within Hampshire, Berkshire and Surrey and are stated in the preceding section for **Bracknell Forest** Borough Council.

Triggers for Mitigation

The Thames Basin Heaths SPA forms part of an extensive complex of lowland heathland in southern England that supports important breeding birds including nightjar, woodlark and Dartford warbler. It consists of 13 SSSIs scattered across 11 LPAs within Hampshire, Berkshire and Surrey. The SPA is under pressure from increased recreational pressure, urbanisation and other land uses.

Recreational Evidence Base

Extensive research was undertaken by Natural England in 2005 which indicated that the existing level of recreational pressure was having a detrimental effect on the three species of birds for which the SPA was designated (Liley and others, 2005).

Solutions for recreational impacts

The 2005 work included a study of visitor access patterns and was followed up by further visitor surveys in 2012 and 2013:

- Visitor Access Patterns on the Thames Basin Heaths (Liley and others, 2005).
- Results of the 2012/13 visitor survey on the Thames Basin Heaths SPA (Fearnley and Liley, 2013).
- Visitor Access Patterns on the Thames Basin Heaths SPA: Visitor Questionnaire Survey 2018 (Southgate and others, 2018).

The 2018 visitor surveys split main user group activities as shown in **Figure 41**.

The visitor survey work lead to the identification of three ZOI as follows:

- **Zone A:** From 0m to 400m straight line distance from the SPA – presumption against development to address urbanisation effects.
- **Zone B:** From 400m to 5km straight line distance from the SPA – application of mitigation.
- **Zone C:** From 5k to 7km straight line distance from the SPA – development assessed on a case-by-case basis.

The 11 LPAs within the ZOI are Waverley Borough Council, Guildford Borough Council, Surrey Heath Borough Council, Woking Borough Council, Bracknell Forest Borough

Council, Hart District Council, Wokingham Borough Council, Elmbridge Borough Council, Runnymede Borough Council, The Royal Borough of Windsor and Maidenhead and Rushmoor Borough Council. The LPAs work together through the Joint Strategic Partnership (JSP) to provide a strategic approach to mitigation across the SPA.

Based on evidence collated around public access and disturbance impacts, the Thames Basin Heaths SPA Delivery Framework was agreed by all affected LPAs in 2009. This aims to ensure any new residential development mitigates against additional recreational pressure at the SPA (TBH Joint Strategic Partnership Board (JSPB), 2009).

Mitigation Solution

Rushmoor have been working with LPAs in their Housing Market Area (HMA), Hart District Council and Surrey Council, to deliver cross-boundary SANG solutions. Jointly they commissioned work to investigate alternative and complementary avoidance and mitigation measures, which could be delivered in order to mitigate net new residential development within the HMA. Rushmoor's approach to mitigation reflects the outputs of this study, particularly in relation to the use of networks to deliver SANG.

Mitigation set out in the Delivery Framework is implemented in Rushmoor through the Avoidance and Mitigation Strategy (Rushmoor Borough Council, 2022).

The mitigation strategy comprises a two-pronged approach:

- Provision of SANG; and
- Access management and monitoring measures (SAMM).

There is a presumption against development within 400m of the SPA, measured as a straight-line distance from the SPA perimeter to the point of access on the curtilage of the dwellings.

Developer contributions are collected for new development between 400m to 5km of the SPA to fund SAMM projects.

Development between 5km-7km is assessed on a case-by-case basis.

The duty to consider likely significant effects upon the SPA applies to proposals for new net residential development in land use classes C3, C4 (residential development) and proposals for one or more net new units of ancillary staff residential accommodation.

SAMM Solutions

As with **Bracknell Forest**, SAMM contributions are required from all new net residential development with the ZOI in Rushmoor, and the same SAMM Legal Agreement applies, which was signed by Natural England and the 11 partner LPAs in July 2011. The project was implemented from 14 July 2011 and comprises the following:

- Promote SANGs as new recreational opportunities for local people and particularly encourage their use during the breeding bird season;
- Provide on-the-ground wardening service to supplement existing wardening efforts
Provide a 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.

In Rushmoor, the SAMM tariff from April 2022 has been increased to £840.78 per dwelling and is reflected in the Avoidance and Mitigation Strategy. This ranges from £379.80 for HMO single occupancy bedroom to £1,404.21 for a 5 plus bedroom dwelling.

To inform the Thames Basin Heaths SAMM Project Tariff Guidance an estimate of the number of houses (2,824 per year over 17 years) was taken from the South East Plan (Natural England, 2011). In perpetuity has been taken as 125 years for the purpose of calculating the SAMM tariff. The total annual cost of SAMM was £536,560.00 (Natural England, 2011). Consultation with Natural England suggests that the overall cost is approximately £31.5 million (2022).

SANG Solutions – Rushmoor Council

In Rushmoor, SANG is formed of strategic and bespoke SANG. Strategic SANG is delivered at three sites within Rushmoor: Hawley Meadows and Blackwater Park (at capacity); Rowhill (remaining capacity 1 residential unit); and Southwood Woodlands (remaining capacity 2 residential units). Rushmoor also work with Hart to use SANG capacity at their sites, Bramshot Farm and Hawley Park Farm. SANG contributions range from £2,842.04 for an HMO single occupancy bedroom to £15,722.32 for a 5+ bedroom dwelling (depending on the SANG).

SANG must comply with the same set of criteria as detailed for Bracknell and set by Natural England (Natural England, 2021b). However, there are additional ‘should have’ and ‘desirable’ criteria to reflect a hierarchical approach to SANG provision:

- SANGs should link into longer walks of 5km or more through footpath or other green networks.
- Larger SANGs or those grouped close together should aim to provide longer walks of 5km or more.
- Design and management of the SANG should contribute to relevant Biodiversity Opportunity Area priority habitat restoration/creation objectives, where appropriate.

Criteria 1: Triggers for Mitigation

Thames Basin Heaths SPA

The character of and features for which the Thames Basin Heaths is designated as a SPA are described in the **Bracknell Forest** case study.

Q1: Recreational Impacts Evidence and Background Information

As noted for the **Bracknell Forest** case study, Rushmoor is one of 11 LPAs that sit within the ZOI for the SPA and form part of the Thames Basin Heaths JSPB.

Rushmoor Borough lies wholly within 5km of the Thames Basin Heaths SPA. Therefore, the Council has adopted the Rushmoor TBH SPA Avoidance and Mitigation Strategy (2022) for the purposes of “determining whether or not a proposed development scheme or development plan document is likely to have a significant effect upon the SPA”.

Rushmoor Borough Council, together with Hart District Council and Surrey Council (part of the same Housing Market Area (HMA)), has worked collaboratively to deliver access to cross-boundary SANG solutions. As opportunities for SANG are reducing, together they commissioned a study to investigate alternative and complementary avoidance and mitigation measures, which could be delivered in order to mitigate net new residential development within the HMA. The outputs of this study are discussed further in the **Review Summary** section of the report, and have informed development of the most recent version of their mitigation strategy (Rushmoor Borough Council, 2022). Overall, the joint commission recommended the use of SANG networks (including linear and smaller SANG), which may not meet all of Natural England’s SANG ‘must have’ criteria (such as a circular walk of 2.3-2.5km) but which could accommodate recreational routes and deliver ‘visible equivalence’, supported by a package of SAMM.

Criteria 2: Mitigation Solution(s)

General

Q2: Solutions Considered

Similarly to **Bracknell Forest**, the mitigation solution for Rushmoor comprises a mix of SANG and SAMM to deliver recreational mitigation.

Q3: Zone of Influence

Based on the South East Plan policy and the Thames Basin Heaths Delivery Framework, the [Avoidance and Mitigation Strategy](#) (Rushmoor Borough Council, 2022) identifies two zones around the SPA which include (see **Figure 43**):

- Within 400m (measured from the SPA perimeter to the point of access on the curtilage of the dwellings); and

- 400m from the perimeter of the SPA (measured to the nearest part of the curtilage of the dwelling) to 5km from the perimeter of the SPA (measured from the primary point of access to the curtilage of the dwelling).

Residential development that would result in a net gain of units is not permitted within 400m of the SPA boundary unless, in exceptional circumstances and in agreement with Natural England, an appropriate assessment demonstrates that there will be no adverse effect on the SPA (Rushmoor Borough Council, 2022).

Q4: Strategic Approach

The strategic approach taken towards mitigation within Rushmoor and across all 11 affected LPAs is summarised in the **Bracknell Forest** case study.

Rushmoor, along with Hart and Surrey Heath Councils, have 86% of their HMA within the 5km zone (i.e. where SANG and SAMM is required). For the purpose of providing access to cross-boundary SANG solutions, the Councils have collaborated to deliver development and new SANGs in the HMA region. As outlined in answer to Question 1, opportunities for implementing SANG are reducing and this has been subject to a study which has informed the Mitigation Strategy (Rushmoor Borough Council, 2022).

Q5: Policy

Box 20 highlights the overarching policy relating to the protection of the Thames Basin Heaths SPA in the Rushmoor Local Plan (Rushmoor Borough Council, 2022).

Box 20: Policy for Thames Basin Heaths SPA in Rushmoor Local Plan (Rushmoor Borough Council, 2019)

Rushmoor Local Plan Policy NE1 Thames Basin Heaths Special Protection Area

“The mechanism for delivering this policy is set out in the Council’s Thames Basin Heaths delivery Framework prepared by the Thames Basin Heaths Joint Strategic Partnership. 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:

- 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
- Contributions towards Strategic Access Management and Monitoring measures.”

Q6: Delivery Body

As noted for the **Bracknell Forest** case study, all LPAs within the ZOI work together to deliver The Thames Basin Heaths SPA Delivery Framework. SAMM projects are

implemented on the ground by the Thames Basin Heaths Partnership (which includes the local councils, land managers and nature conservation bodies).

Q7: Types of Development

Reflecting the precautionary principle and the need to consider the in-combination effects of development, the Council’s Avoidance Strategy applies to all proposals for new net residential development in the following classes (Rushmoor Borough Council, 2022):

- Proposals for one or more net new dwelling units falling within use classes C3 and C4 (residential development); and
- Proposals for one or more net new units of ancillary staff residential accommodation.

It is assumed that replacement dwellings will not lead to increased recreational pressure, and therefore, will have no likely significant effect on the SPA and will not be required to contribute to the provision of avoidance measures (Rushmoor Borough Council, 2022).

All other applications for planning permission in the vicinity of the SPA will need to be subject to a full Appropriate Assessment. It is important to note that (Rushmoor Borough Council, 2022):

- permitted development (such as the conversion of retail or office space to residential units) is not exempt from the Habitats Regulations and therefore avoidance and mitigation measures will be required.
- all housing-led development in the Borough is considered 'habitats development'. This means that the ability to seek permission in principle introduced in June 2018 does not apply.

Q8: Developer Contributions

SAMM

The SAMM tariff from April 2022 was increased to £840.78 per dwelling in line with the Consumer Prices Index including housing costs (CPIH) inflation rate. The payment of SAMM contributions is secured through a Section 106 planning obligation. **Table 32** shows SAMM charges which are applied by size of dwelling (Rushmoor Borough Council, 2022).

Table 32: SAMM charges for each dwelling size (Rushmoor Borough Council, 2022)

Property Type	SANG contribution per dwelling
HMO single occupancy bedroom	£379.80
1 bed/ studio/ bedsit dwelling	£532.78

Property Type	SANG contribution per dwelling
2 bedroom dwelling	£701.58
3 bedroom dwelling	£948.45
4 bedroom dwelling	£1,077.16
5+ bedroom dwelling	£1,404.21

SANG

The following sites were implemented as SANG to mitigate new residential development from 25th February 2022, however they are either full or close to capacity (Rushmoor Borough Council, 2022):

- Hawley Meadows and Blackwater Park (remaining capacity- zero).
- Rowhill (remaining capacity- 1 residential unit).
- Southwood Woodlands (remaining capacity- 2 residential units).

Contributions for long-established SANG sites within the Rushmoor Borough are set out in **Table 33**. Contributions are required from residential developments to secure established SANG for the 2022-23 year (based on a standard cost of £2,842.04 per person).

Table 33: Developer contributions required to secure established SANG capacity in Rushmoor (Rushmoor Borough Council, 2022)

Property Type	SANG contribution per dwelling
HMO single occupancy bedroom	£2,842.04
1 bed/ studio/ bedsit dwelling	£3,978.90
2 bedroom dwelling	£5,257.41
3 bedroom dwelling	£7,105.10
4 bedroom dwelling	£8,100.09
5+ bedroom dwelling	£10,515.89

Southwood Country Park SANG

The creation of Southwood Country Park as a SANG has allowed for the construction of approximately 2,450 homes. This SANG has a catchment of 5km. There was still capacity for 210 residential units at Southwood Country Park as of 25th February 2022 (Rushmoor Borough Council, 2022). **Table 34** sets out the contributions that will be required in respect of the Southwood Country Park SANG allocation (based on a standard cost of £3,414.03 per person).

Table 34: Developer contributions required to secure Southwood Country Park SANG capacity in Rushmoor (Rushmoor Borough Council, 2022)

Property Type	SANG contribution per dwelling
HMO single occupancy bedroom	£3,414.03
1 bed/ studio/ bedsit dwelling	£4,779.85
2 bedroom dwelling	£6,316.00
3 bedroom dwelling	£8,535.60
4 bedroom dwelling	£9,730.03
5+ bedroom dwelling	£12,632.00

Bespoke SANGs

The Mitigation Strategy requires large residential developments to provide bespoke mitigation that provides a combination of benefits including SANG, biodiversity enhancement and GI. Where developers propose a bespoke solution, this is assessed on its own merits under the Habitats Regulations and agreed by the Council in consultation with Natural England. The following Local Plan allocations provide bespoke mitigation (Rushmoor Borough Council, 2022):

- **Blandford House and Malta Barracks:** The site received outline planning consent in May 2020 for up to 180 dwellings and includes the provision of 13.74ha of SANG (Blandford Woods SANG). Additional SANG capacity (approximately 10ha) is likely to be available at this site (once implemented), however allocation of this surplus capacity is unlikely to be fully within the Council's control.
- **Wellesley:** Development for up to 3,850 new homes has provided a bespoke solution of SANG provision. This has been secured through a Section 106 legal agreement attached to a planning permission granted in March 2014. There is no surplus capacity available at this SANG.

Securing Strategic SANG capacity within Hart District

In November 2017 it was agreed, via a memorandum of understanding, that Hart District would make SANG capacity of up to 3,600 people (1,500 residential units) available to lessen the effects of development proposals that would deliver new housing in Rushmoor, primarily at Bramshot Farm and Hawley Park Farm. Developers are therefore able to engage into a contractual agreement with Hart District Council, when supported by Rushmoor, and receive formal confirmation that they have secured enough mitigation capacity (Rushmoor Borough Council, 2022).

Table 35 sets out the contributions that will be required in respect of SANG located in Hart District for 2022-2023 year.

Table 35: Developer contributions required to secure SANG in Hart District 2022-2023 (Rushmoor Borough Council, 2022)

Property Type	SANG contribution per dwelling
HMO single occupancy bedroom	£4,249.28
1 bed/ studio/ bedsit dwelling	£5,948.99
2 bedroom dwelling	£7,861.16
3 bedroom dwelling	£10,623.19
4 bedroom dwelling	£12,110.44
5+ bedroom dwelling	£15,722.32

Q9: Timescales for Delivery

A minimum time period of 125 years has been defined as ‘in perpetuity’ in local plans of other neighbouring LPAs such as Bracknell (Bracknell Forest Borough Council, 2018).

Q10: Other initiatives

In addition to SANG and SAMM, it is assumed that “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” within the 400m of the SPA (Rushmoor Borough Council, 2022).

Q11: Monitoring

The SAMM projects incorporate elements of monitoring in respect of visitors to the SPA and to SANGs. The projects also include monitoring of Annex 1 birds across the SPA.

The Council reports on the implementation of the Mitigation Strategy, including the use of SANG capacity, the implementation of SANG, and consideration of the need for more SANG, through the Annual Monitoring Report that the Council is expected to submit as part of the Rushmoor Local Plan. As a member of the JSPB, the Council stays involved in finding and implementing SPA mitigation, particularly in examining more cross-boundary solutions (Rushmoor Borough Council, 2022).

Q12: Communication Strategy

Communication is a key element of the SAMM projects. This includes education and engagement with the local community and user groups, and promotion of alternative greenspaces. There is a dedicated [website for SAMMS](#) used to promote key messages and provide education to users on the sensitivities of the SPA and the role of SANGs. The wardening team engage with dog walkers and promote the 'Heathland Hounds' initiative which seeks to promote a code of conduct for dogs on the heaths.

SANG

Q13: Identify the components that make up the SANG projects

The following standards have been set out for the provision of SANG in Rushmoor Borough Council (2022):

- SANG should be provided on the basis of a minimum of 8ha of SANG land (after discounting to account for current access and capacity) provided in perpetuity per 1,000 new occupants.

In addition:

- Allocated SANG capacity will be funded by developer contributions reflecting the need to maintain the SANG in such a way as to meet the agreed SANG criteria, in perpetuity.
- Alternatively, SANG may be provided by developers for individual developments with the agreement of the Council and Natural England.
- The creation of SANG is subject to guidance, which includes a number of requirements and is set out in Appendix 2 of the Mitigation Strategy.
- The catchment of SANG will depend on the individual site characteristics and location and their location within a wider GI network. In line with the Delivery Framework the following should be used as a guide:
 1. SANG of 2 – 12 ha will have a catchment of 2km;
 2. SANG of 12 – 20ha will have a catchment of 4km; and
 3. SANG of 20ha+ will have a catchment of 5km.

If there is sufficient quantity and quality of SANG to accommodate the resulting increase in population, it must be identified, available, and functional in the Borough (or agreed upon in an adjacent district) prior to completion. This does not apply to developments that

include fewer than 10 dwellings within 5km of the SPA boundary. However, developers of sites with fewer than 10 houses must help to fund avoidance measures.

SANG guidelines, provided at Appendix 2 of the Mitigation Strategy, includes a site quality checklist for SANG, listing a set of 'must have', 'should have' and 'desirable' requirements for SANG (Natural England, 2021b). The checklist included in the 2022 Mitigation Strategy has been informed by the Hart, Rushmoor and Surrey Heath review of the approach to mitigation (as set out in answer to Question 1) and includes additional elements which could be considered for SANG, taking a hierarchical approach. These include addition of one 'should have' and two 'desirable' requirements:

- 'Should haves':
 - SANGs should link into longer walks of 5km or more through footpath or other green networks.
- 'Desirables':
 - Larger SANGs or those grouped close together should aim to provide longer walks of 5km or more.
 - Design and management of the SANG should contribute to relevant Biodiversity Opportunity Area Priority habitat restoration/creation objectives, where appropriate.

Q14: Has a green space standard or metric been used?

Answered within Question 13.

Q15: Is reference made to Accessible Natural Green Space Standards?

No reference is made specifically to ANGSt in the Mitigation Strategy.

Q16: Is the quantity of SANG available to the LPA published?

Answered within Question 8.

Q17: Are details available for each SANG?

The answer for Question 8 covers lists of SANGs and their capacities. Information on SANG locations and catchments is provided in Appendix 3 of the Avoidance and Mitigation Strategy 2022. In addition, the Council provides detailed information for SANGs on their community, parks and leisure website pages; these include Rowhill Nature Reserve, Southwood Country Park and Southwood Woodlands. Information provided here includes information on site location and facilities and wildlife and ecology.

Q18: SAMM Criteria

The SAMM projects are based on the extensive evidence base which has been collated to inform the mitigation solution alongside ongoing monitoring of projects, visitors and birds.

Q19: SAMM Projects

A list of SAMM projects (and costings) is provided in answer to Question 19 of the **Bracknell Forest** case study.

Criteria 3: Wider Benefits

Wider Benefits

Q20: Multifunctional Links

As noted in answer to Question 13, a new 'desirable' feature for SANGs is that they should contribute to relevant Biodiversity Opportunity Area priority habitat restoration/creation objectives where appropriate. This provides a connection between SANG and wider landscape ecology.

Q21: Nature Recovery Network

There are no links with the Nature Recovery Network specifically mentioned in the Mitigation Strategy.

Review summary

Hengistbury Head Beach. Credit: Istock images.



Review Summary

Overview

Information gathered from the LPA case study review illustrates a range of approaches regarding the development and implementation of mitigation strategies to address recreational impacts on European sites. Each case study follows a similar sequence of stages that can be summarised as follows, and shown in **Figure 44**:

1. **Triggers for mitigation** – the identification of recreation impacts at European sites and upon their qualifying features, and the evidence base that has been collected to support this;
2. **Quantitative and qualitative evidence base** – the collection of a targeted evidence base (i.e. visitor surveys) to allow identification of recreational ZOI, and inform options considered to address recreational impacts;
3. **Implemented mitigation solution** – on the basis of the evidence base, the proposed package of mitigation solutions including the component projects (i.e. SANG, SAMM or both), and the mechanism for implementation of, and securing contributions to, and delivering mitigation;
4. **Communications** – Communication of mitigation solutions to the public and developers to implement the strategy; and
5. **Review and monitoring** – Monitoring and review to inform the scope of projects (in response to housing growth) and understand their effectiveness over time.

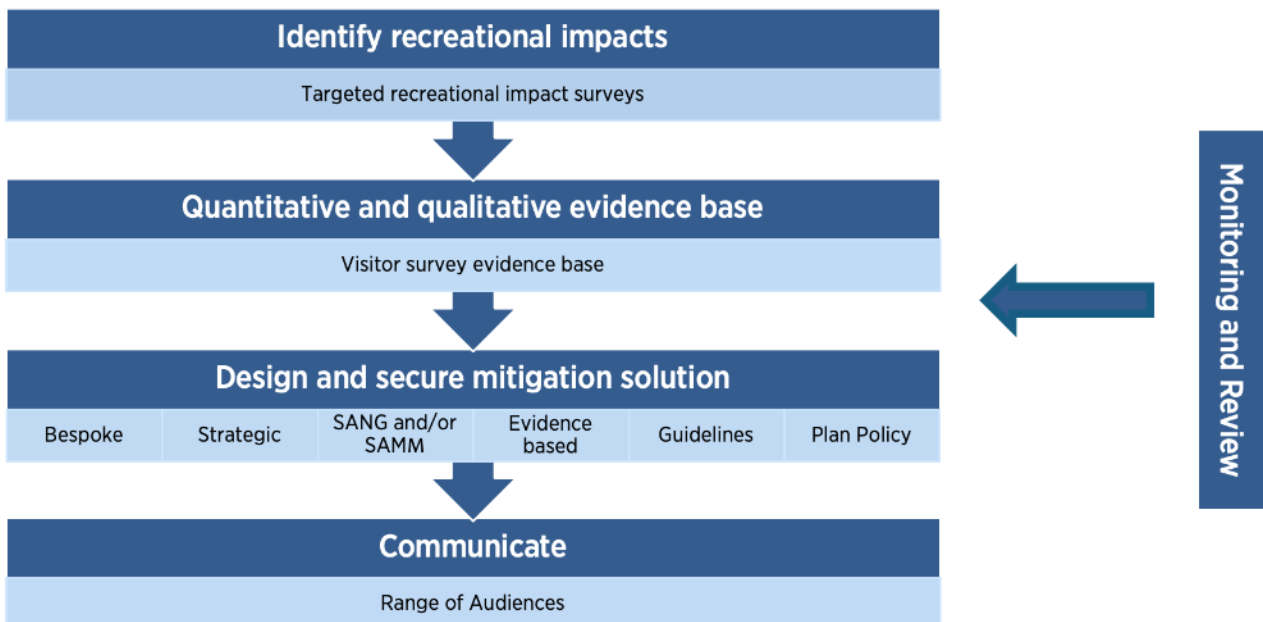


Figure 44: Stages in the preparation of mitigation strategies to address recreational impacts

Triggers for Mitigation

Designations and qualifying features

European site characteristics

The LPA case studies and corresponding European sites considered in this report have a wide geographic distribution across the country which is reflected in the habitat types and species for which they are designated, as listed in **Box 21** and shown in **Figure 45**. This includes coastal habitats (such as designations in Northumbria, Liverpool City Region, Norfolk and South East Devon), sites which include heathland (such as Ashdown Forest, Cannock Chase, Dorset Heaths and Thames Basin Heaths) and/or woodland (Epping Forest and New Forest).

Box 21: The 14 strategic mitigation solutions considered in this report and shown in Figure 45

- 1: Ashdown Forest
- 2: Cannock Case
- 3: Dorset Heaths
- 4: Epping Forest
- 5: Essex
- 6: Liverpool City Region
- 7: New Forest
- 8: Norfolk
- 9: Northumbria / Durham Coast
- 10: Sherwood Forest
- 11: Solent
- 12: South East Devon
- 13: South Pennine Moors
- 14: Thames Basin Heaths

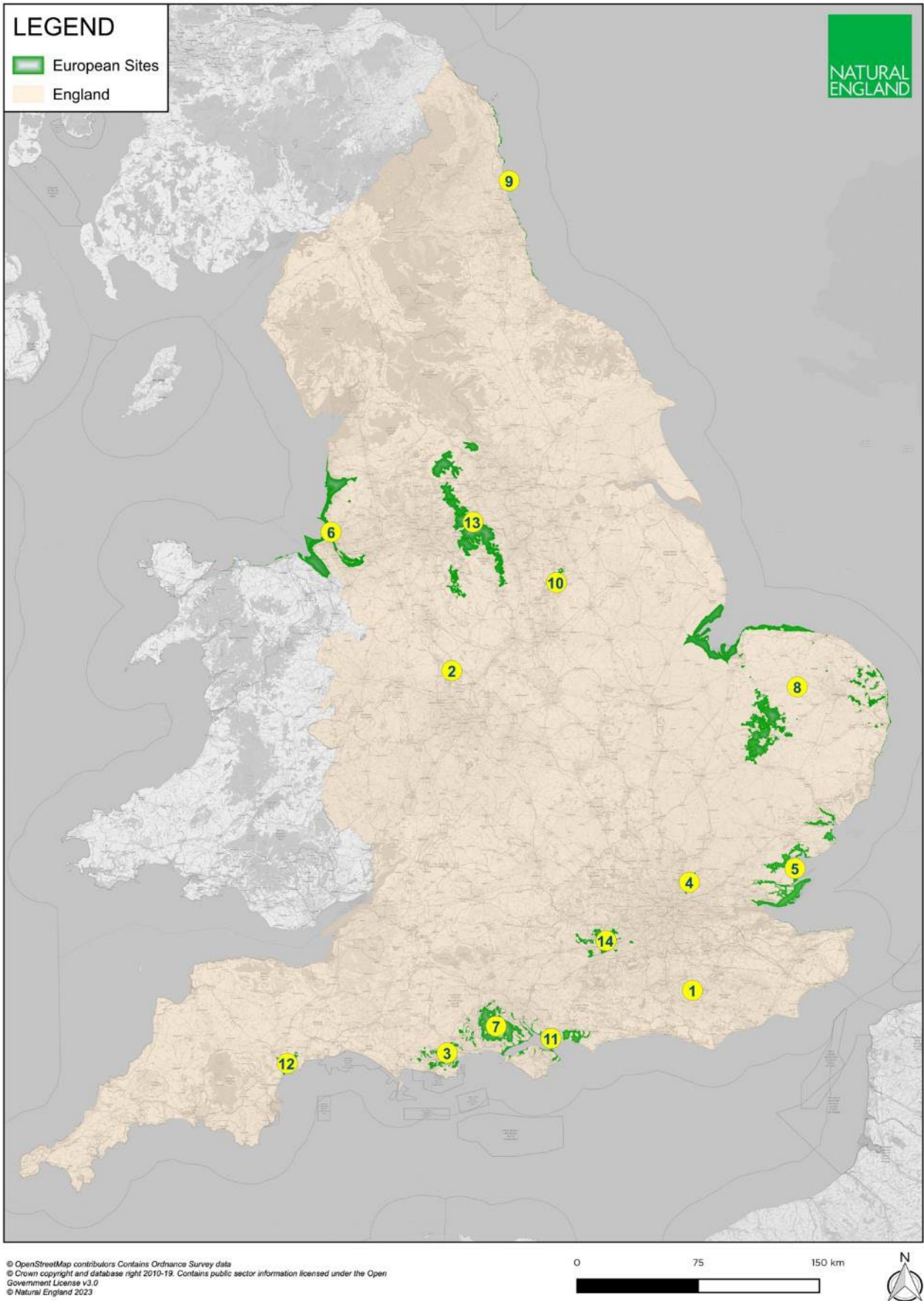


Figure 45: Location of European sites considered within the case studies © Natural England 2024

Heathland is the prevalent habitat considered across the case studies included in this study, followed by woodland (primarily deciduous woodland), rivers and estuaries (including mudflats and sandflats), and coastal habitats (salt marsh, sand dunes and sea cliffs). Smaller proportions of other habitats were also included, such as grassland, marshes and marine areas. An approximate breakdown of habitat types by area at the European sites within the scope of this report is shown in **Figure 46**.

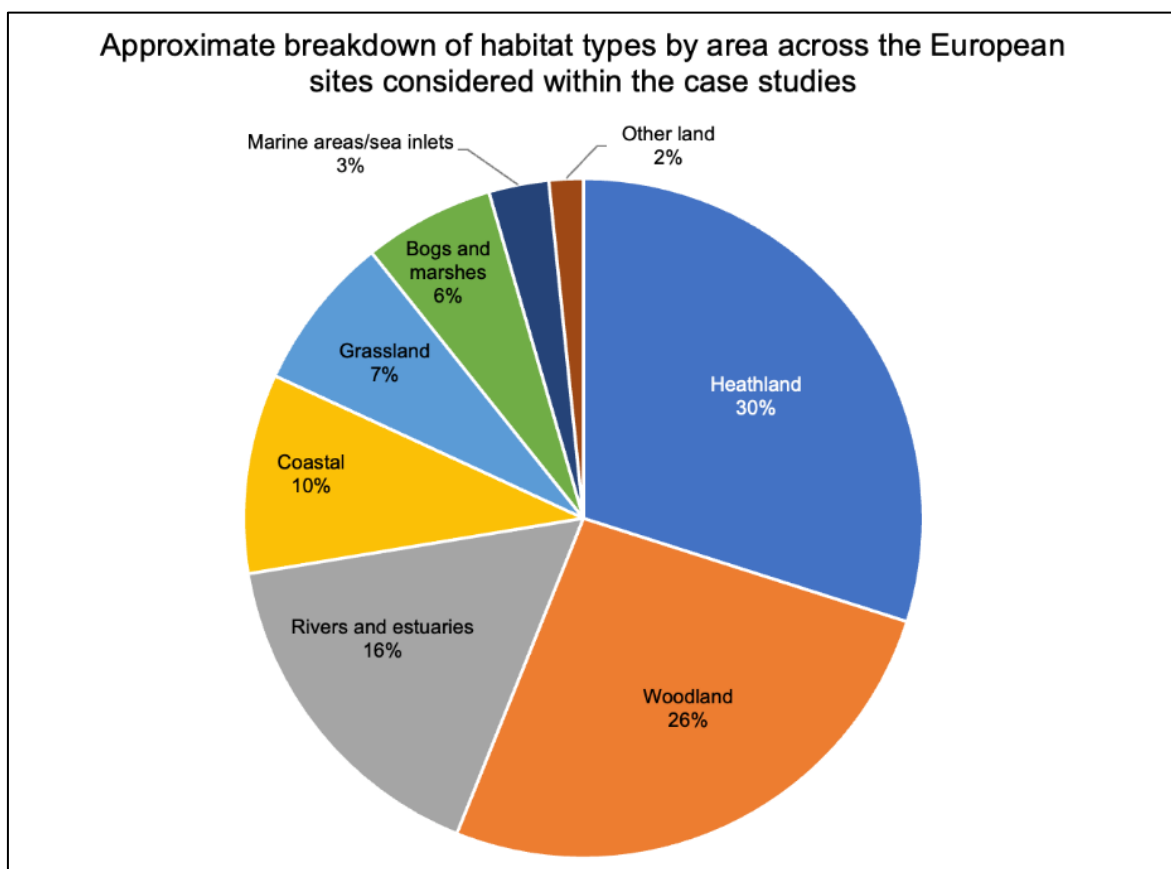


Figure 46: Approximate breakdown of habitat types by area across the European sites considered within the case studies (derived from JNCC Standard Data Forms for [SPA](#) and [SAC](#) (JNCC, 2022))

Note: Figure 46 presents data for SAC and SPA only and is averaged where multiple designations overlap. It is intended for indicative purposes only.

It should be noted that the chosen case studies represent a sample of 14 approaches to recreational mitigation across the country and are not necessarily indicative of all recreational approaches across England's European site network. These case studies have been chosen to capture a broad overview of best practice techniques and challenges faced when developing strategic solutions to recreational impacts.

Identification of recreational impacts and underpinning evidence

The first step in developing a mitigation strategy is the identification of recreation as a threat to European sites and/or their qualifying features. Evidence on recreation impacts is drawn from data provided by Natural England in the conservation objectives, site improvement plans and supplementary advice relating to European sites, as well as evaluation through the HRA process. The majority of case studies show that further specific studies are then carried out to gain a better understanding of how recreation is affecting the designated sites and/or specific features within them.

The identified recreational impacts can be categorised as follows:

- Direct impacts on habitats (e.g. loss of or damage to habitats through recreational activity);
- Indirect impacts on habitats (e.g. loss of or damage to habitats which supports a qualifying species); and
- Disturbance to qualifying species.

Breeding and over-wintering birds are known to be particularly sensitive to disturbance from recreation (e.g. Finney and others, 2005; Mallord and others, 2006). Many species of which rely on specific habitat types for parts of their life cycle. As such, the case study review has identified a general focus on mitigation of impacts on birds, including ground-nesting heathland bird species and waterbird assemblages at coastal sites, with recreational impacts largely attributed to disturbance. Other noted species within the case studies which may be sensitive to recreation include species of beetles and invertebrates which rely on deadwood habitats, as well as botanical species and veteran trees.

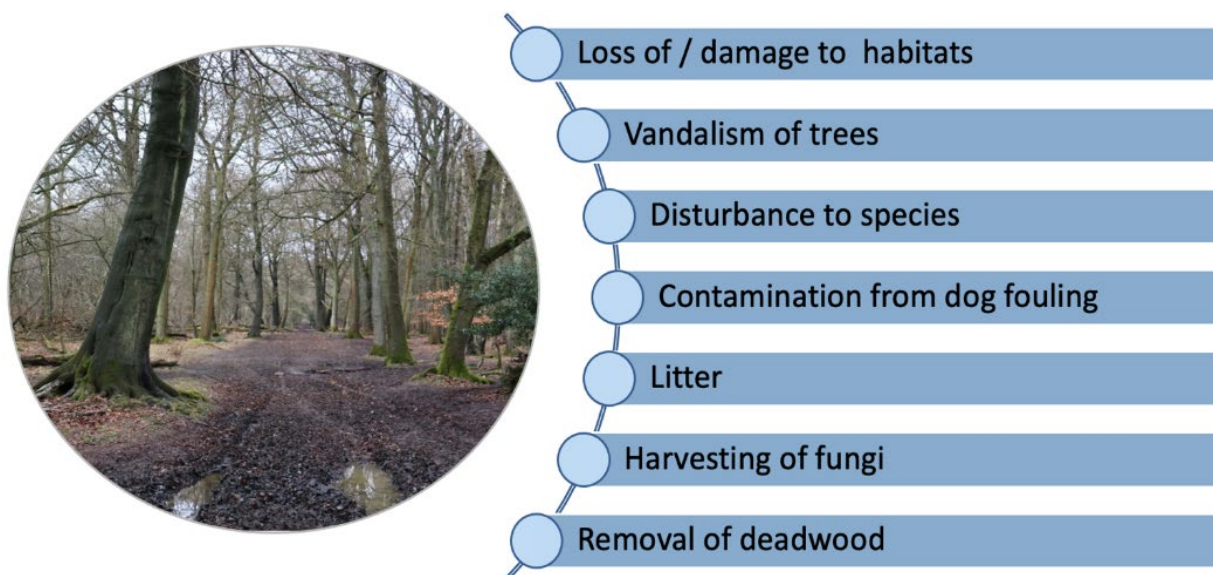


Figure 47: Key threats from recreation

Identified key threats from recreation include trampling and vegetation damage, erosion, littering, fire risk, nutrient inputs (primarily due to dog fouling), climbing of trees, collection of dead wood (e.g. for den building), vandalism, disturbance to species (particularly breeding birds), spread of pathogens (e.g. *Phytophthora*), and other impacts associated with interference in land management (as shown in **Figure 47**).

These recreational impacts often act in combination with a range of other threats and pressures, such as habitat loss and fragmentation, urbanisation effects, air quality, lighting, visual and hydrology effects; these other effects have not been considered in detail within this report.

Visitor surveys have been undertaken to support mitigation solutions for all reviewed case studies, and some sites have a long history of visitor surveys regardless of recreational concerns. This represents best practice as these surveys provide a robust evidence base upon which to base a mitigation solution. In general, visitor surveys identify how a site is used by visitors, the visitor origin and visitor profiles (see **Visitor surveys** section).

Many of the case studies are also supported by a body of evidence which focuses on the nature and extent of recreational impacts specifically. This has often been collected through habitat surveys, to understand the extent and condition of habitats, and/or species surveys to understand population distribution and response to disturbance. These studies are used to gain an understanding of the nature and extent of recreational impacts upon specific habitats and species and inform targeted approaches to mitigation which are European site-specific.

In some cases, however, there is a lack of evidence which directly links recreational impacts to the European sites or qualifying features. This is a key piece of the evidence base that is required to inform their mitigation strategies and should clearly identify where impacts are arising and how this is affecting a site. Only from this understanding can a good mitigation solution can be designed. Although similar habitat types are likely to be exposed to similar pressures from visitors, in some instances mitigation solutions have relied on evidence gathered from elsewhere in the country. Mitigation solutions such as those implemented at the Thames Basin Heaths and Dorset Heaths have led the way. Mitigation solutions which have subsequently emerged often draw on the body of evidence prepared in support of these solutions.

An example of where a good recreational evidence base has been collected is Sherwood Forest ppSPA (see **Newark and Sherwood** case study). This has been informed by the outputs of Recreational Impact Assessments (RIAs) and targeted bird surveys of nightjar and woodlark and habitat mapping. It also included site walkovers to map and classify the extent and nature of recreational impacts and accompanying visitor surveys. These RIAs focused on component sites within the wider ppSPA designation area (Birklands and Bilhaugh SAC/Clumber Park SSSI).

Triggers for Mitigation – Summary of current best practice

- A robust and regularly updated evidence base is required to identify and quantify recreational impacts.
- Recreational impact assessments are commissioned to identify the nature and extent of visitor pressures and associated impacts on the ecological features of the specific European designations.
- Bespoke evidence is gathered to ensure that the nuances of each designation and the different ecological/geographical factors and challenges faced are captured, to help inform the development and implementation of a mitigation strategy that is fit for purpose and 'ground-truthed'.

Quantitative and Qualitative Evidence Base

Visitor surveys

As set out in the **Designations and qualifying features** section, the collection of visitor survey information is common amongst all case studies. This is an essential step in understanding overall visitor numbers, visitor origin, visitor use of a site (i.e. recreational activities undertaken) and visitor profile.

The key purpose of visitor surveys is to help shape mitigation. Surveys therefore need to identify who is visiting a site, where they have come from, as well as how and why they are using the site. This information is essential when developing a targeted and bespoke mitigation solution. Surveys should also be repeated over time to gain an understanding as to how use may vary between season (such as in Essex) and be influenced by other factors, such as the weather, school holidays and bank holidays. Ongoing and consistent surveys are an essential element of baseline information required to inform mitigation options.

It is important that visitor surveys are carried out systematically and across an entire designation to gain a good understanding of visitor use. An example of this is at the Dorset Heaths (see **Dorset** case study) where the 'Visitor Access Patterns on the Dorset Heathlands' report emphasised the importance of standardised and holistic visitor surveys across the component sites, stating "Only with information collected in a standard way across a range of sites can a general understanding of access patterns be achieved" (Clarke and others, 2006).

It is also important to identify any evidence gaps, such as under-surveyed areas, and ways in which surveying can be streamlined or standardised to ensure consistency in data collection over time and useful outputs. Visitor counts and car park counts (including use of automated counters) have also been carried out at some sites and may help to streamline data collection.

Visitor surveys involve interviews being held at various locations across a designation (with appropriate interview locations determined by site-specific characteristics, key routes, access points, site manager input etc.), using a standard questionnaire. Typically, information gathered through visitor questionnaires includes (but is not limited to) the following:

- **Type of visit** – whether visitors are on holiday, a day trip, or visit from home.
- **Visitor activities** – the main activity undertaken on that day, and why they chose the site in question for this activity.
- **Duration of visit** – how long are they planning to spend at the site.
- **Frequency of visit** – to identify if they are regular, occasional or first-time visitors.
- **When they visit** – the typical time of day/year they tend to visit.
- **Mode of transport** – how visitors travelled to the interview location.

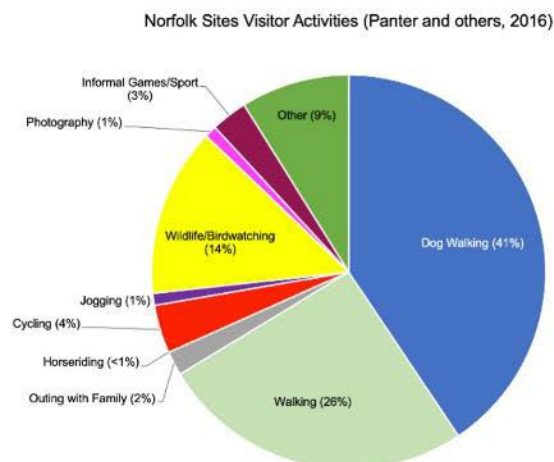
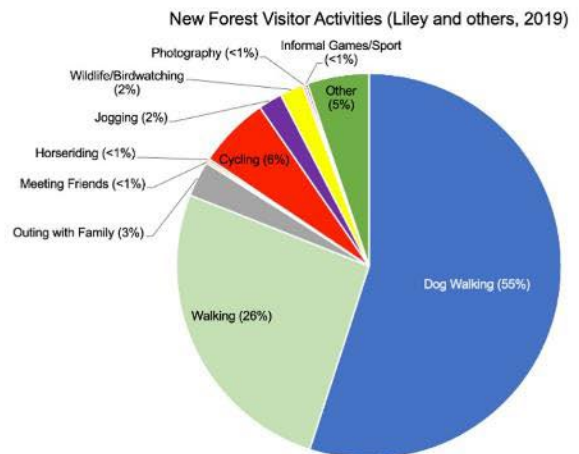
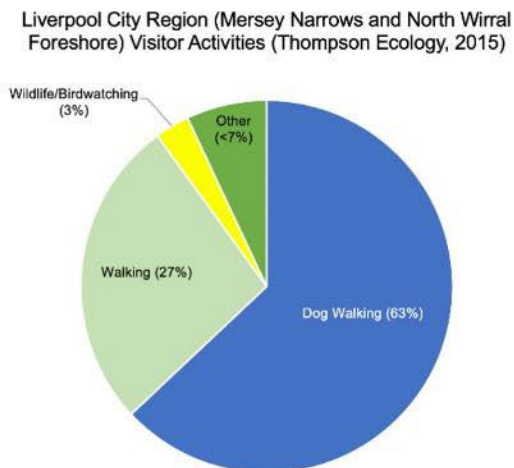
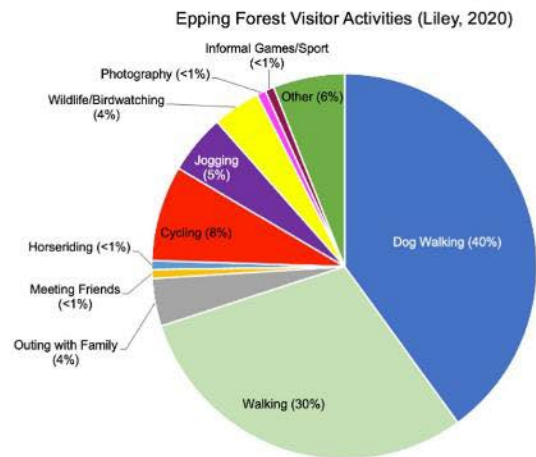
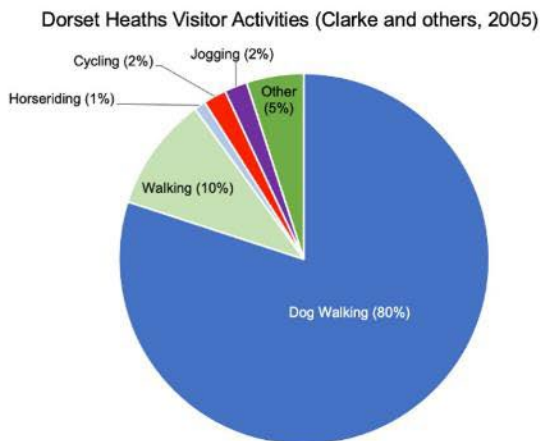
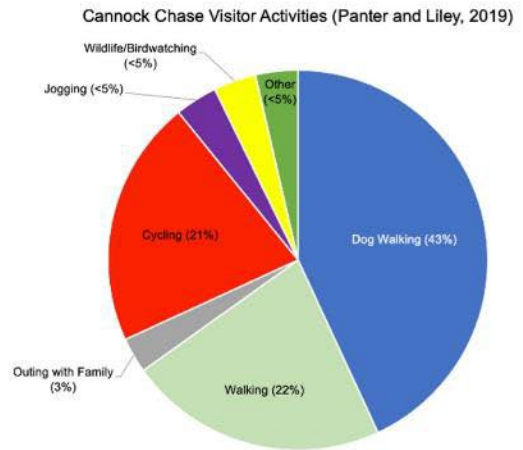
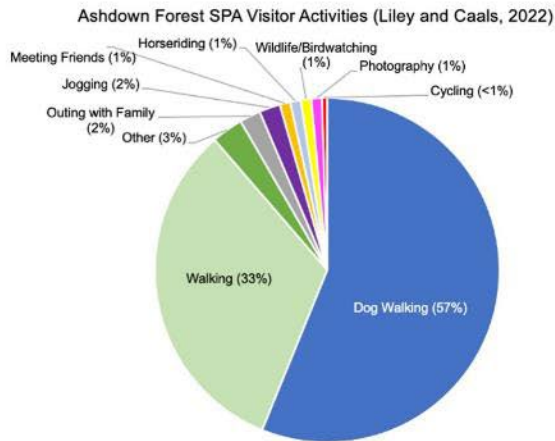
- **Routes taken within the site** – length and location.
- **Visitor origin** – postcode data, to identify distance travelled to reach the site.

Visitor surveys sometimes also include questions regarding visitors' awareness of the environmental designations, importance of the sites, existing management/restrictions in place (or, the mitigation strategy once implemented – see **Monitoring and review** section) and alternative designations which may be used. For example, questions in this regard are shown in the Pebblebed Heaths Visitor Management Plan (Liley and others, 2015).

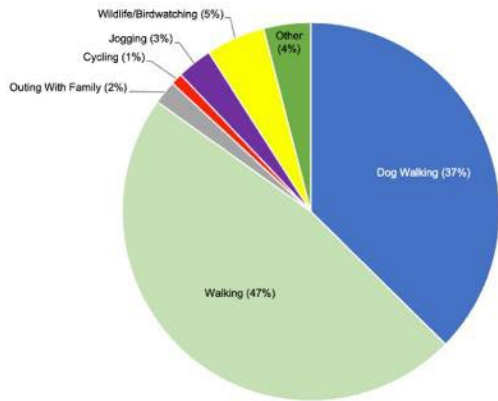
Furthermore, questions are sometimes tailored to specific sensitivities of the site, for example, the East Devon Visitor Survey included a question regarding whether visitors have accessed the open sandflats/mudflats at the Exe Estuary (Caals and others, 2022).

An important piece of information to gather to inform a mitigation solution is to understand the user groups i.e. how people use a site. Analysis of visitor data for each case study (where available), shows that dog walking is the most common reason users visit the majority of the sites, followed by walking without dogs (see **Figure 48**). Only Sherwood Forest and the Solent showed that walkers without dogs outnumbered those with dogs. Smaller proportions of visitors engage in other activities such as cycling, horse riding, wildlife watching and family outings. Cannock Chase has a notably higher proportion of cyclists than other sites, at approximately 21%. Norfolk has a higher number of wildlife watchers than other sites, at approximately 14%. This information helps to tailor mitigation solutions to users of each designation.

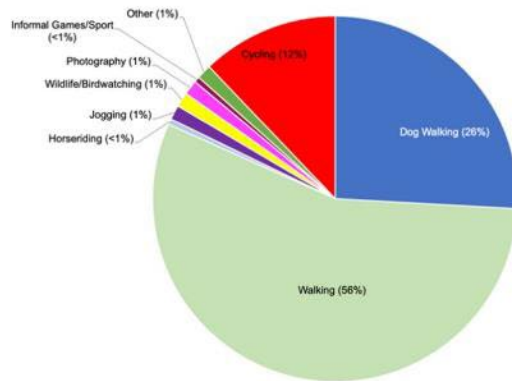
It should be noted that the frequency of different site users does not necessarily relate to the level of disturbance caused. As stated in the Cannock Chase SAC Visitor Impacts Mitigation Report, for example, “Only general conclusions on potential impacts can be drawn by looking at the percentages of different users as their effects are different. For example, a single horse can cause more damage to soils and vegetation, but a dog walker can cause more disturbance to wildlife species, especially mammals and birds” (Underhill-Day and Liley, 2012).



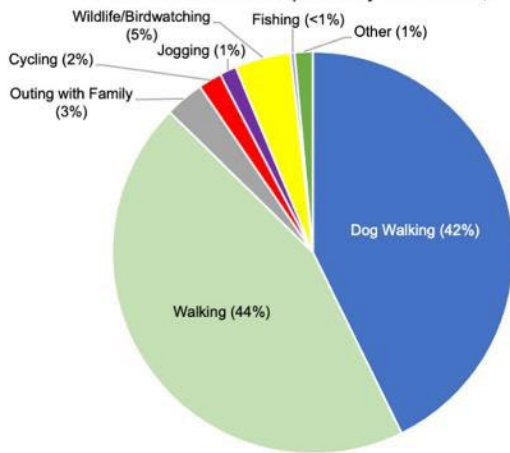
Sherwood Forest (Birklands and Bilhaugh SAC) Visitor Activities (Saunders and others, 2021)



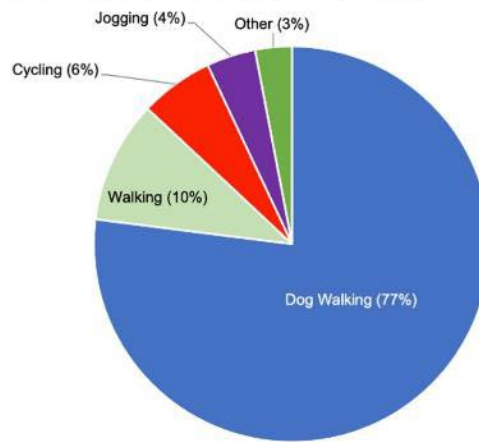
Sherwood Forest (Clumber Park SSSI) Visitor Activities (Saunders and others, 2021)



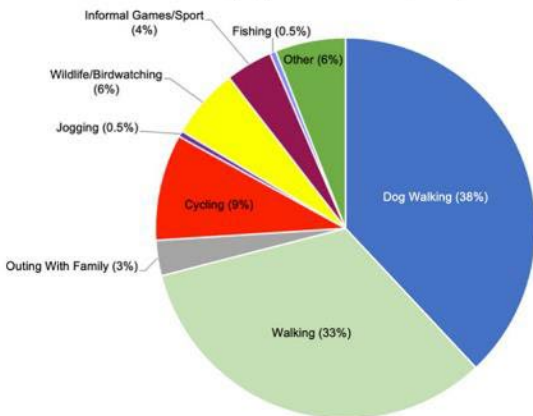
Solent Vistor Activities (Fearnley and others, 2010)



Thames Basin Heaths Visitor Activities (Southgate and others, 2018)



South East Devon (Exe Estuary and Dawlish Warren) Visitor Activities (Liley and Cruickshanks, 2010)



South East Devon (Pebblebed Heaths) Visitor Activities (Liley and others, 2015)

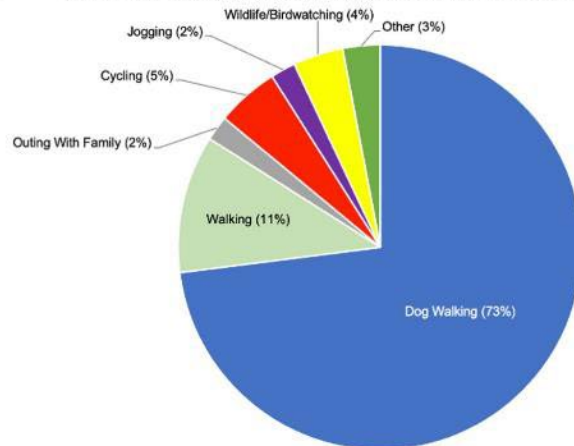


Figure 48: Overview of visitor usage data derived from visitor surveys undertaken to inform strategic solutions

Zone of Influence

Zones of Influence (ZOI) are used to define the area within which new development would trigger likely significant effects on the integrity of European sites from recreation. Establishing an appropriate ZOI is an important consideration for mitigation strategies, as the ZOI defines the geographical area in which recreational mitigation solutions will apply.

75th percentile method

The most common method for defining ZOI is by using the distance 75% of visitors to a designated site originate from. This data is obtained through visitor surveys (or household postal survey in the case of South East Devon – see **Teignbridge** case study) which gather home postcode data from site users (as discussed in the **Visitor surveys** section). This data is typically applied as a straight-line distance from the designation boundary. The 75th percentile method has become the industry standard approach, originating through work at the Dorset Heaths and Thames Basin Heaths and now rolled out at several other sites including Cannock Chase (15km), Ashdown Forest (7km), Epping Forest (6.2km) and the Solent (5.6km).

Variations on the 75th percentile method

Liley and Caals (2021) reflect that “the appropriate area or distance of any zone of influence to be defined should be based on a site-by-site analysis, in light of all available evidence”. As such, some site-specific variations on the 75th percentile approach have been established.

For example, the strategy for the South Pennine Moors (see **Bradford** case study) has established a ZOI which is weighted slightly towards locals because they are the most common visitors. The HRA of Bradford’s Core Strategy reported that the 75% of Bradford residents travelled from within 5km, whereas 75% of all visitors travelled from within 10km (Urban Edge Environmental Consulting, 2014). Based on this, and the point at which visitor numbers levelled out, a 7km was chosen as an appropriate ZOI.

For the Essex RAMS, the 75th percentile method is applied to each of the Essex Coast European sites separately, as opposed to other strategies which consider multiple designations together (e.g. Dorset Heaths). For several of the European sites in Essex, both winter and summer visitor surveys have been carried out, and the larger 75% used to define the ZOI to ensure that year-round effects are captured. At most sites, winter surveys indicated visitors travelled a greater distance, but for others (Blackwater Estuary SPA and Ramsar/Benfleet and Southend Marshes SPA and Ramsar) summer was found to be the season when visitors travelled a greater distance (see **Chelmsford** case study).

Similarly to the Essex RAMS, the emerging Norfolk GIRAMS identifies ZOIs for each of the relevant European sites. Further, the GIRAMS includes the calculation of a separate ZOI for both residential and tourism development which reflects the distances travelled by both tourists and residents in Norfolk.

Consideration of tourist data

In the emerging Norfolk GIRAMS, the tourism ZOIs are very large, ranging up to 248km from the Broads (Broadland SPA and Ramsar, Breydon Water SPA and The Broads SAC), which may mean that their application is less useful in practice. Tourists would also probably be less influenced by recreational mitigation schemes (i.e. SANG), as they are likely to be visiting for specific reasons and with specific destinations in mind. Therefore, a tourist ZOI may be more applicable in terms of gaining a better understanding of overall visitor numbers/pressures on the site for the SAMM aspects of mitigation strategies. As such, GIRAMS recommends application of mitigation tariffs for tourism development throughout Norfolk (see **Breckland** case study).

Tourist data is sometimes filtered out of visitor survey data to establish ZOIs. For example, in the New Forest, the emerging 13.8km ZOI reflects the distance travelled by 75% of people on a short visit/day trip (Liley and others, 2019b). Whilst the New Forest is also a popular destination for tourists, research has shown that although tourists do visit from a wide geographic area, they make up a minority of total visits when compared to local people who visit frequently (Liley and Caals, 2021). Liley and others (2019b) recommend that “Tourist use could be mitigated strategically through an approach based on applications for planning permission relating to tourist use (rather than extending the zone of influence), for example whereby tourist-related development contributed towards strategic mitigation or delivered bespoke mitigation”.

Tiered ZOI approach

Several of the LPA case studies use a zonal approach to mitigation, most commonly applying a 400m exclusion zone to avoid urbanisation effects rather than explicitly for recreation (e.g. cat predation and dumping of garden waste etc.). For example, this is seen at Ashdown Forest, Dorset Heaths, South Pennine Moors and Thames Basin Heaths. A slight variation along this theme is also demonstrated at Epping Forest (see **Waltham Forest** case study) whereby bespoke mitigation is required for development within 400m of the SAC.

Further to this, some LPAs have adopted a multi-tiered ZOI approach to take into account site-specific factors. This includes the South Pennine Moors SAC/SPA, where three zones have been established (Liley and Hoskin, 2020):

- **Zone A: 0 to 400m** – presumption against development.
- **Zone B: 400m to 2.5km** – ecological assessments required to identify and avoid any loss and deterioration of functionally linked land.
- **Zone C: 400m to 7km** – recreational avoidance and mitigation measures apply.

Three zones have also been established for Thames Basin Heaths (Bracknell Forest Borough Council, 2018):

- **Zone A: 0 to 400m** – presumption against development.
- **Zone B: 400m to 5km** – recreational avoidance and mitigation measures apply.

- **Zone C: 5km to 7km** – applications will be assessed on a case-by-case basis to determine any mitigation requirements.

Whilst not set out in formal tiered zones, applications in South East Dorset beyond the 5km ZOI are assessed on a case-by-case basis. This is because larger developments situated just outside the ZOI may also be required to contribute to recreational mitigation if they are deemed likely to generate similar effects on the Dorset Heaths.

Other approaches

As set out in the **Newark and Sherwood** case study, the ZOI for the Clumber Park SSSI component was identified using only the three most frequent activity types (walkers, dog walkers, and cyclists) identified in the RIAs, and was based on those who visit at least once a month. This was then further filtered to reflect the SSSI IRZ information. For the Birklands and Bilhaugh SAC component, a recreational ZOI of 8.9km was identified based on visitors who are likely to pose a risk in terms of recreational impact (walkers and dog walkers) and those who are visiting from home at least once a month.

In Breckland (see **Breckland** case study), the emerging GIRAMS is complemented by further species-specific mitigation solutions. This provides a series of buffers within which mitigation is implemented for stone curlew, nightjar and woodlark associated with the Breckland SAC/SPA. This includes a 'primary buffer' area covering 1.5km from the SPA boundary for areas that support, or are capable of supporting, stone curlew, and a 'secondary buffer' covering areas that have a functional linkage to the SPA and are within 1.5km of the boundary. There is also a 400m exclusion zone to address urbanisation impacts upon nightjar and woodlark.

A slightly different approach is also demonstrated for South East Devon, where three European sites are considered together. Use of the 75th percentile method was considered amongst other options including weighted distances and 'convex hull' mapping (see Liley and others, 2014), but the chosen strategy uses a 10km ZOI which is the "distance from [European] site at which visitor rate curve flattens off to a low constant". This reflects 72.7-84.2% of visits to the Exe Estuary, 54.7-55.8% of visits to Dawlish Warren and 70.8-86.5% of visits to Pebblebed Heaths (Liley and others, 2014). The implemented ZOI for Pebblebed Heaths and for Dawlish Warren also took into account the presence of the River Exe which acts as a barrier to movement, and therefore only the Exe and Dawlish Warren ZOI apply within the Teignbridge administrative area.

Mitigation options considered

Mitigation options considered for the majority of case studies include provision of alternative space for recreation (i.e. SANG) and strategic access management and monitoring (SAMM) type projects such as: on-site habitat management; management of access and visitor infrastructure (predominantly paths and signage); education and awareness-raising including codes of conduct, wardens, events and websites/social media; and monitoring.

Several of the case studies show extensive work in determining options, for example the ‘Towards a Liverpool City Region’ Evidence Report sets out various considerations for the emerging RMS (MEAS, 2021). Similarly, as part of the Solent Disturbance Mitigation Project the Phase III Report set out a range of recommendations to form the strategic mitigation package (Liley and Tyldesley, 2013). To inform the Essex RAMS, stakeholder workshops were undertaken to gather localised information such as locations of visitors at the coast and their recreational activity, recreational disturbances, and current mitigation measures in place (Chelmsford City Council, 2020a).

Hart, Rushmoor and Surrey Heath SPA Mitigation Project Approach

Hart District Council, Rushmoor Borough Council and Surrey Heath Borough Council are part of a group of 11 LPAs which need to take into consideration the recreational pressures from new housing growth upon the Thames Basin Heaths SPA (see **Bracknell Forest** and **Rushmoor** case studies).

Hart, Rushmoor and Surrey Heath together form the HRSH Housing Market Area (HMA) and have worked collaboratively to deliver access to cross-boundary mitigation solutions. The three councils were awarded funding by the Ministry of Housing, Communities and Local Government 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. The outputs of this research project are reported upon in the SPA Mitigation Project (Hart, Rushmoor and Surrey Heath, 2021).

Mitigation options considered

The research project considered 11 mitigation options as set out in **Table 37** under four key themes: Group A, B, C and D. These options were identified through a review of existing case studies and were investigated further to identify whether they could provide an effective avoidance or mitigation measure (or measures) for the SPA.

Table 36: Options considered within the Hart, Rushmoor and Surrey Heath SPA Mitigation Project (Hart, Rushmoor and Surrey Heath, 2021)

Group	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	Options
Group B – Habitat Management / Restoration	Option 6 – Habitat Management
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 Restrictions	Option 9 – Car Parking Availability/Access Option 10 – Dog Control Option 11 – Access Restrictions

The options for mitigation considered which have been identified in the case studies, as well as the review of the Hart, Rushmoor and Surrey Heath (HRSH) SPA Mitigation Project are discussed in further detail within the **SANG** and **SAMM** sections.

Solutions for Recreational Impacts – Summary of current best practice

- ZOI clearly communicate the geographic area over which the mitigation solution will apply.
- The 75% method is an appropriate starting point to define ZOI, but it is important to ensure that locally specific factors and up-to-date surveys are taken into account when considering incorporation of weighting for frequency/type of visitors.
- Appropriate, and bespoke, options for mitigation are explored, in collaboration with landowners, site managers and other stakeholders to gather local knowledge and ensure they are fit for purpose for the specific site and visitor profile.

Implemented Solutions

Mitigation strategies

Developer contributions

The total cost of each mitigation package varies across each case study, depending on the overall objectives of each solution. The costs range from approximately £500,000 to over £20 million.

The majority of LPA case studies use developer tariffs set as a standard per unit cost, which apply across all residential dwelling houses including flats, studios or other residential development use type. This approach is demonstrated in Mid Sussex, Stafford, Waltham Forest, Chelmsford, Wirral, New Forest National Park, Breckland, Teignbridge and Bradford.

A slightly different mechanism is seen in North Tyneside, where a tiered approach to costing is used. New residential units within 6km of the coast contribute 75% of total cost of coastal mitigation (£337 per net dwelling unit), whereas new residential units beyond 6km of the coast contribute 25% of total cost of coastal mitigation (£151 per net dwelling unit) (North Tyneside Council, 2019).

Standard tariffs are broken down into two categories by Dorset Council, with a fixed tariff of £387 which is adjusted for average occupancy to £406 per house and £277 per flat (Dorset Council and BCP Council, 2020a).

Alternatively, some LPAs have set costs which are scaled depending on the number of bedrooms proposed per dwelling to account for the relative levels of recreational use expected per person. This applies for Portsmouth, Bracknell Forest and Rushmoor.

Some LPAs use a separate costing mechanism for SANG and SAMM. This is because SAMM is often delivered strategically by a number of LPAs, whereas SANG is often delivered by LPAs individually. For example, in its [SANG Contribution document](#) Mid Sussex Council provides details about the types of development which require SANG and how this will be calculated (see **Mid Sussex** case study).

Timescales

Mitigation solutions must be delivered over the lifetime of a project to ensure that they are effective under the requirements of the Habitats Regulations. This period of time is often defined as 'in perpetuity'. The interpretation of in perpetuity varies between case studies, although it is defined within the Perpetuities and Accumulations Act (2009) as 125 years.

The Essex RAMS has been costed for the period of March 2018 to 2038 in line with local plan periods (Chelmsford City Council, 2020a), although the package of mitigation actions set out in the RAMS will need to be implemented in perpetuity, which is defined as 125 years in the HRA Strategy Document (Essex County Council, 2018). The Strategy

Document states that “After the current Strategy lifetime, future timetables will need to be prepared based on reviews of the Strategy itself and its evidence base”.

Similarly, the emerging Norfolk GIRAMS document recognises in perpetuity requirements and the 125-year definition, but the current RAMS package of projects has been costed only to 2038 in line with local plan timescales (Place Services, 2021).

North Tyneside Council’s SPD sets out an overall cost for the mitigation package over the local plan period in the same way as Essex RAMS and Norfolk GIRAMS; however, the SPD does not specifically mention requirements in perpetuity (North Tyneside Council, 2019).

All other case studies demonstrate that mitigation is secured in perpetuity, although there are slight differences in the definition of this, ranging from 80 years to 125 years.

Partnership approach

Most case studies have adopted a partnership approach for preparation and delivery of the SAMM element of each mitigation strategy, ranging from two LPAs (Dorset Heaths) to 15 LPAs (Solent), whereas a number of LPAs have taken an individual approach to delivery of the SANG elements. This reflects the delivery of SANGs within LPA boundaries and the differences between scale and location of this mitigation element.

At the time of writing, a partnership approach has not been undertaken for mitigation at the Northumbria/Durham Coast with North Tyneside Council having its own SPD. The same applies for the South Pennine Moors for Bradford Council and the Sherwood Forest ppSPA for Newark and Sherwood District Council. There is an emerging strategic approach for the New Forest and for Liverpool City Region.

A partnership approach demonstrates in-combination effects have been taken into consideration and mitigated in line with the requirement of the Habitats Regulations. Furthermore, a partnership approach ensures transparency and provision of consistent advice and communication for a European site which may straddle multiple LPA administrative boundaries.

Types of development covered

All reviewed case studies focus primarily on mitigation requirements for residential dwellings, however several LPAs set out mitigation requirements for additional use classes as outlined below.

Tourist development

A number of LPAs set out the requirement for tourist development to make mitigation contributions, including caravan/camping sites to provide contributions in addition to residential development. However, five of the LPA approaches reviewed in this study do not address tourists specifically. As discussed in the **Wirral** case study, according to the Evidence Report, the emerging RMS will focus on residential development only and will

not address tourism development (MEAS, 2021). Similarly, for Essex RAMS (see **Chelmsford** case study), the SPD notes that proposals for tourist accommodation which could give rise to recreational pressure on the designated sites must be subject to an HRA Appropriate Assessment and is separate from the mitigation strategy (Chelmsford City Council). A similar approach is used for Thames Basin Heaths (see **Bracknell Forest** and **Rushmoor** case studies). For Epping Forest, Waltham Forest Council's strategy also only specifies requirements for development with a net gain in residential units and not tourism (see **Waltham Forest** case study).

A case-by-case approach seems the most commonly used method regarding tourist development, since the requirement to provide contributions towards mitigation should align with the likelihood of the development generating further recreational pressure at a designated site. For example, North Tyneside's SPD notes that leisure developments may also be required to contribute towards mitigation (see **North Tyneside** case study). In such cases, the required contribution will be determined on a case-by-case approach in discussion between applicant and the Council, and the amount of contribution will depend on the nature and size of the development and degree of negative impact (North Tyneside Council, 2019).

Other developments

Other types of development are generally considered on a case-by-case basis, for example residential care homes and institutions, and accommodation for the elderly. This is due to the variations in mobility of residents in these use classes. For example, in the ZOI for South East Devon, standard mitigation contributions apply to housing for the 'mobile elderly', with exceptions for contributions for developments which would house elderly or infirm people who have significantly reduced mobility (i.e. they would not increase recreational pressure at the designations) (see **Teignbridge** case study). This approach is taken for several of the case studies.

Thresholds

In general, mitigation contributions are required for developments resulting in a net gain in residential dwellings (and relevant other developments as outlined above). However, an exception to this is in Wirral, where the Interim Approach document states that developer contributions are only required for developments of 10 or more homes (Wirral Metropolitan Borough Council, 2022). This could potentially result in smaller developments leading to in-combination effects which need to be addressed outside the strategic approach.

For SANG, a threshold of 50 homes is sometimes used to trigger this requirement. This approach is used in Dorset as set out in the Planning Framework SPD (Dorset Council and BCP Council, 2020a) although consultation with Dorset Council has revealed that this is only applied as a rough guideline.

SANG

SANG approaches

There are three broad categories of SANG proposed across the mitigation strategies: Strategic, bespoke and third-party. These three routes for SANG delivery are adopted for the Thames Basin Heaths mitigation strategy (see Bracknell Forest and **Rushmoor** studies) and are described as follows (Bracknell Forest Borough Council, 2018):

- **Strategic SANG** are Council owned and managed SANG towards which developers pay a financial contribution. These are usually reserved for development with a net increase of between 1 and 108 dwellings. Contributions are normally funded through CIL receipts.
- **Bespoke SANG** are new open spaces on large development sites or off-site which are normally transferred to Council ownership with maintenance funds to secure long term management. These are provided for sites with a net increase of 109 or more dwellings. Contributions are normally funded through Section 106 agreements.
- **Third party private SANG** are privately owned and provided and sometimes transferred to Council ownership with maintenance funds to secure long term management. Contributions are normally funded through Section 106 agreements.

Other case studies have shown that LPAs have selected only one particular category of SANG. For example, in Mid Sussex the only SANG element of the strategy that is referenced on the Council website relates to strategic SANGs, with one existing SANG now at capacity (East Court and Ashplats Wood), and an emerging SANG (Hill Place Farm) (Mid Sussex District Council, 2016).

Some strategies do not include a requirement for SANG, for example the Essex RAMS where it was determined that the specific draw of the coastal sites could not be effectively replicated, although the strategy document notes that individual LPAs may choose to identify SANG (Essex County Council, 2018). In contrast, within South East Devon, strategic SANG have been implemented despite the coastal nature of the European sites (Liley and others, 2014).

Other alternative recreation approaches

The case studies have demonstrated a range of other potential infrastructure projects that may not be officially labelled as SANG but also seek to complement the recreational offer outside of the designated sites and therefore provide an alternative destination.

Examples include targeted mitigation approaches such as Heathland Infrastructure Projects (HIPs) at the Dorset Heaths (see **Dorset** case study) which in some cases seek to address specific visitor user groups, such as mountain bikers, by providing an appropriate off-site track to redirect this activity away from heathland sites. Other examples include providing an improved PRow route which offers a scenic sea view, or secure dog walking areas, again intending to draw visitors away from a designated site.

The emerging Enhanced Green Infrastructure (EGI) components of the mitigation strategy in Norfolk (see **Breckland** case study) recommends that LPAs undertake audits to explore whether GI provision could be improved to offer an additional recreational resource close to where people live. This audit would use a set of EGI Quality Criteria to ensure social, economic and environmental benefits – a similar concept to SANG, although with wider benefits incorporated.

Several other case studies include proposals to enhance GI or other existing recreational greenspaces. Interestingly, several of the case studies include such wording within the SAMM elements of their strategy, perhaps indicating a reluctance of LPAs to use this terminology when the majority of SANG guidance is focused on larger/strategic SANG provision (see **Methods to define SANG** section).

For example, the South Pennine Moors, the SPD (see **Bradford** case study) recognises the constraints within Bradford in terms of providing larger strategic SANGs and instead proposes that the mitigation strategy “should focus on maximising opportunities for enhancing the capacity and recreation experience at existing greenspace sites” (Liley and Hoskin, 2020). Whilst technically representing SANG, enhancement of local greenspace is a costed element of the SAMM strategy. Similarly, for Cannock Chase (see **Stafford** case study), Stafford’s local plan policy and SAMM strategy includes a requirement for contributions ‘Special Projects’ which are not referred to directly as SANG but provide alternative recreational spaces, such as a mountain bike centre, outside the designation boundary of the SAC (Stafford Borough Council, 2014). In contrast, the **Waltham Forest** case study highlights the Council’s intention to ‘upgrade’ and connect existing greenspaces to make these sites into SANG, recognising the urban setting of Waltham Forest and the need to take a toolbox type approach to SANG mitigation (London Borough of Waltham Forest, 2022).

Methods to define SANG

The case studies have shown (where information is available) that most LPAs use a standard calculation of 8ha per 1,000 population to calculate what a traditional SANG should offer in terms of mitigation capacity. The requirement for 8ha per 1,000 head of population originated through evidence prepared in support of the Examination in Public of the South East Plan in 2007 (Government Office for the South East, 2009) to mitigate recreational impacts upon the Thames Basin Heaths SPA, and is widely used for SANG across the South East of England.

As referred to in the **Mid Sussex, Bracknell Forest** and **Rushmoor** case studies, Natural England SANG guidance (developed specifically for the Thames Basin Heaths SPA) sets out a number of ‘must have’, ‘should have’ and ‘desirable’ requirements for a SANG. The Thames Basin Heaths Delivery Framework (TBH Joint Strategic Partnership Board, 2009) requires LPAs to have regard to these SANG guidelines, stating “In assessing the required quality for new SANG land regard should be had to the guidance published by Natural England”, however the guidance acknowledges that some deviations from the standard set of criteria may be acceptable. Research undertaken as part of HRS Mitigation Study

has shown that in practice, the extent to which the 'must have', 'should have' and 'desirable' features are incorporated within a SANG varies on a site-by-site basis (e.g. see Hart, Rushmoor and Surrey Heath, 2021). In this regard, many of the case studies have highlighted that LPAs determine whether SANG are suitable mitigation for a specific development, through liaison with Natural England officers.

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.

The case studies have highlighted that, although many LPAs refer to Natural England's SANG guidelines, they also tailor SANG requirements depending on the visitor evidence base and specific user groups. For example, with regard to circular walk requirements, the Solent Recreational Mitigation Strategy (see **Portsmouth** case study) states SANG must be "large enough to include a variety of paths which enable at least one circular walk of at least 5 km (approx. a 60 min walk)" (Bird Aware Solent, 2017). Whereas, for both Northumbria/Durham Coast (see **North Tyneside** case study) and Norfolk (see **Breckland** case study) a distance of 2.7km is recommended (see HRA for North Tyneside (Capita, 2017) and GIRAMS EGI Criteria (Place Services, 2021)).

In Waltham Forest, advice given to the Council by Natural England indicated that whilst traditional SANG should be delivered at a minimum of 8ha/1,000 population, "This advice also recognises that this standard may not be possible in urban areas, and notes that SANG networks should, as a minimum, provide a semi-natural experience of a size greater than 2ha for the local populous" (Natural England, 2021a). Waltham Forest has therefore taken a toolbox approach to SANG which reflects the urban nature of the borough, integrating SANG into part of its wider Green Spaces and Places SPD by enhancing existing green spaces and providing green links to achieve SANG.

The HRSH Mitigation Project Study has identified that in the HMA SANG is often in practice delivered with less capacity than 8ha/1,000 population, due to discounts for elements such as existing visitors and biodiversity sensitivities (Hart, Rushmoor and Surrey Heath, 2021).

Natural England's GI Framework states that "a higher standard than the Accessible Greenspace Standards ... is often set, i.e. a SANGs Standard of 8 hectares per 1,000 head of new population. The effectiveness of SANGS as mitigation will also depend upon the location and design" (Natural England, 2023). This is interesting to note, when the case studies have demonstrated a range of standards implemented by LPAs including higher targets than 8ha/1,000 in some instances.

Consultation with Dorset Council's heathland mitigation team indicates that the approach to define the size of SANG varies. Although the 8ha/1,000 population is used as a minimum standard up to approximately 16ha per 1,000 is provided where possible. The size of SANG sought depends more on its location, and visitor expectations, rather than a standardised metric. For example, within urban edges where visitors would expect sites to

be busier, SANG is likely to be required at the lower end of the scale (8ha/1,000) whereas more rural sites where visitors expect a quieter location, the Council strive for SANG towards the higher end of the scale (16ha/1,000).

In Dorset, flexibility in approach is seen as a beneficial factor. Smaller more targeted HIPs have been shown to be effective, despite not being quantified in the same way as traditional SANG – i.e. not directly associated with a quantum of housing.

The HRSH Mitigation Project Study identifies alternative recreational sites (not SANG) which people visit and the reasons for visits and was informed by a SANG Research Study which investigated green space options using an online greenspace survey (Land Use Consultants, 2020) and a Mitigation Capacity Review (Ecological Planning and Research, 2021). Outputs showed that SANG networks could be effective in delivering SANG, in particular when delivered through a cluster of linked sites. The research provided evidence that SANG networks, already in place around the Thames Basin Heaths SPA, are effective and this was further supported by a Mitigation Capacity Review (Ecological Planning and Research, 2021). SANG networks may include enhancing and delivering SANG as part of a connected network of sites (with sites 2ha or greater in size), through a linear network, or through enhancement of/connection to existing recreational routes in a similar way to Waltham Forest's approach. The effectiveness of this type of SANG is dependent on their ability to deliver as many of the Natural England Thames Basin Heaths SPA SANG criteria as possible and, in particular, a 2.3km circular walk. The features required for their success are likely to depend upon their location in relation to new housing and the user groups they are aimed at, for example daily dog walking resources would be required closer to home. Recommendations set out in the Mitigation Study include taking forward SANG networks (with sites over 2ha in size), linear SANG and links to SANG network as a suitable avoidance/mitigation option and have been incorporated into Rushmoor's current approach to SANG. The Mitigation Study further noted that where there is any shortfall in SANG quality criteria, such as a shorter circular walk or a linear location, these "should 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" (Hart, Rushmoor and Surrey Heath, 2021).

The Mitigation Project Study also looked at opportunities for larger SANG (greater than 20ha) to have larger catchments (over 5km). It indicated that people are willing to travel further to a site with a range of facilities and provisions. This is reflected in established recreational ZOI for European sites that have been derived nationally based on visitor research. An example where a large ZOI has been identified is Cannock Chase SAC. Here visitors were shown to come from a 15km ZOI, drawn by the variety of facilities provided at the site including opportunities for mountain biking and tree top climbing. The distance people choose to travel depends on their recreational needs. The Mitigation Study suggested that dog walkers are less willing to travel a large distance to reach a site, with 50% only willing to walk up to 15 minutes (1.2km). However, visitors travelling for a specific recreational experience, as in the case for Cannock Chase SAC, are likely to travel further. The Mitigation Study notes that for the Thames Basin Heaths SPA

specifically, which is located in a heavily urbanised location, alternative greenspace sites which would support a catchment of over 5km are unlikely to be readily available and the success of such sites, or extension of catchment sizes, would need to be underpinned by a robust evidence base. A SANG with a larger catchment and a certain type of visitor draw could however be explored further for certain types of European sites, particularly those with a larger recreational draw.

The Mitigation Study noted that '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. These could 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.

SAMM

SAMM (Strategic Access Management and Monitoring), although targeted to site-specific impacts and responding to specific visitor profiles and other site characteristics, generally target the following types of interventions throughout the case study review:

- Promoting education and awareness through codes of conduct, interpretation, events, information, wardens and officers;
- Access management within the site through infrastructure, signage and interpretation;
- Promotion of SANGs; and
- Monitoring of visitors and bird populations to identify trends and the success of mitigation.

The HRSH Mitigation Study included a review of options relating to habitat management (Group B), access management (Group C) and access restrictions (Group D) to manage visitor impacts through enhanced strategic access measures at European sites (see **Table 37**). Whilst this study focused specifically on the Thames Basin Heaths SPA, some of the options around access restrictions and controls may provide additional and complimentary SAMM measures which could be teamed with establishing thresholds and criteria to define carrying capacity at European sites and achieve sustainable levels of recreational use. This may include temporarily closing and diverting routes in response to the weather, site specific conditions and the 'health' of ecological features, car park controls and/or ticketing to ensure sustainable visitor numbers are maintained. Such options would need to work closely with SANGs and alternative projects targeted at specific user groups and would be reliant on high quality monitoring feedback loops. Such options would also need to be assessed for compliance with statutes.

Securing mitigation

The case study review showed that recreational mitigation solutions are secured through local plan policies which set out the broad requirements for developments within specified ZOI to provide mitigation.

Owing to the timescales of the different local plan periods, some LPAs in the case studies did not have an adopted local plan policy which implemented their mitigation strategy, but many had proposed policies in emerging local plans, or some wording in adopted plans which is proposed to be updated in new plans. For example, Newark and Sherwood District Council's emerging update to the Allocations and Development Management Development Plan Document (Newark and Sherwood District Council, 2022).

Out of the 16 LPA case studies, 7 were found to have adopted SPDs which set out mitigation requirements, providing further detail and guidance to complement the wording of the local plan policies. This approach seems to be helpful in clearly communicating the requirements and expectations to developers, as well as providing further context to explain the purpose of, and background to, the mitigation strategy.

Wirral Borough Council currently has an adopted Interim Approach to Avoid and Mitigation Recreation Pressure in Wirral (Wirral Metropolitan Borough Council, 2022), although the emerging Liverpool City Region RMS is expected to replace this in time (see **Wirral** case study).

Some LPAs have a document which sets out the recreation mitigation solution, which is not adopted formally as an SPD. This includes the Solent Mitigation Strategy (see **Portsmouth** case study), the South East Devon European Site Mitigation Strategy (see **Teignbridge** case study) and the Thames Basin Heaths Avoidance and Mitigation Strategy (see **Rushmoor** case study).

Implemented Solution – Summary of current best practice

- A partnership approach demonstrates in-combination effects are mitigated in line with the requirement of the Habitats Regulations and enables consistent and transparent advice regarding specific European sites.
- It is important that any guidelines for SANG or other recreational provisions are evidence based, in relation to the European sites in question, to ensure the greatest likelihood of effectiveness.
- Whilst guidelines are useful, it should also be noted that a degree of flexibility is likely to be beneficial in allowing a suite of different provisions to be created.
- The implemented solution should be clearly communicated to residents and developers within the LPA area, with policy wording in adopted local plans to secure this and ideally an SPD which provides further information to supplement that in the policy.

Communications

Communication to site users

Once implemented, it is important that the mitigation strategy is effectively communicated to the public and site users, to ensure understanding and behavioural change. Based on the case studies, all SAMM strategies include an element of communication, delivered through a range of projects including some or all of the following:

- Codes of conduct for site users, and particularly for dog owners.
- Rangers/wardens who patrol the site to engage with site users in person.
- Leaflets and interpretation boards on-site, to convey information regarding the designated European sites and important species, and how to avoid harm to them.
- Use of websites and social media to raise awareness, promote events, provide visitor information and promote SANGs.
- Educational programmes held by rangers/wardens, for example welcoming school trips so that the younger generations can learn about the sites and how to protect them.
- Offering volunteering opportunities so the local communities can get involved in mitigation projects.
- Events to raise awareness of the mitigation and build public understanding of the threats and pressures that visitors pose to the sites.

Some case studies have shown the use of a public-facing 'brand' to communicate their key messages to the public regarding mitigation and how to enjoy recreation at the site without causing disturbance, for example [Bird Aware Solent](#) and [Bird Aware Essex](#) (see **Figure 49**). Many aspects of each mitigation strategy are published on the websites, including information about events, codes of conduct, and highlighting the importance of the sites for wildlife.

Similarly, where partnerships have been formed to manage and deliver on-site mitigation, central websites dedicated to showing this can be effective in communicating messages and keeping the public up to date with events, newsletters and information on the work that is being carried out (see **Figure 49**). This includes the [Urban Heaths Partnership](#) for Dorset (in addition to the [Dorset Dogs](#) website), which also includes publication of annual Heathland Mitigation Delivery Reports, which set out the range of delivery techniques used to allow for communication with site users, as well as partner organisations and developers and demonstrates the level of engagement across the websites and social media channels (e.g. see UHP, 2022). Another example is the [Thames Basin Heaths Partnership](#) website, where key messages are communicated to site users (Thames Basin Heaths Partnership, 2023).

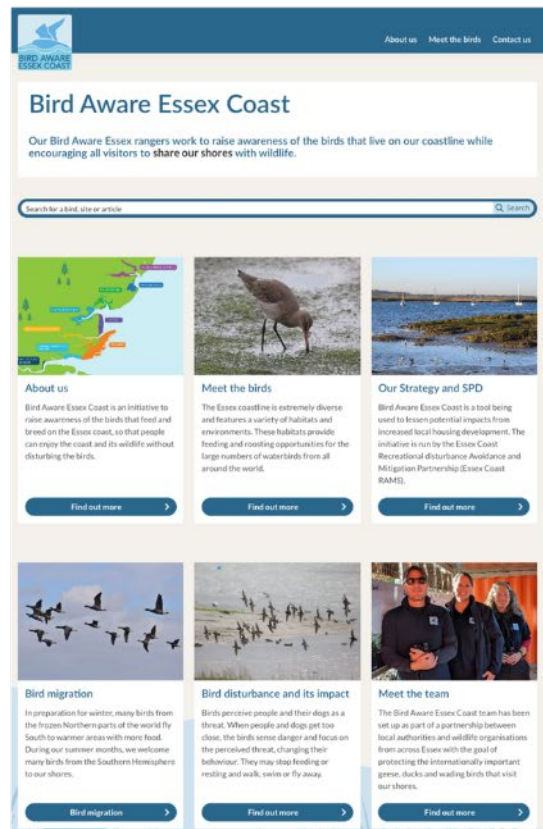
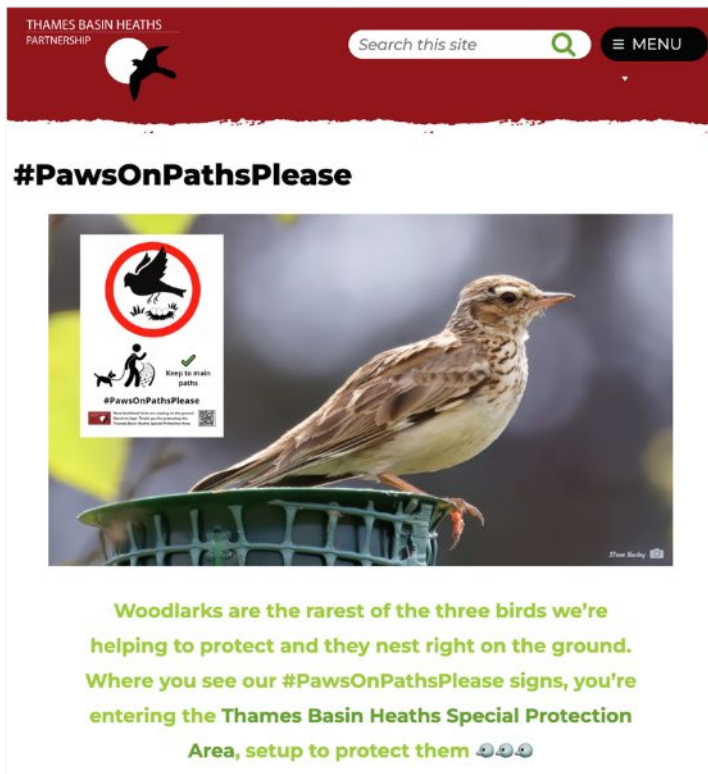
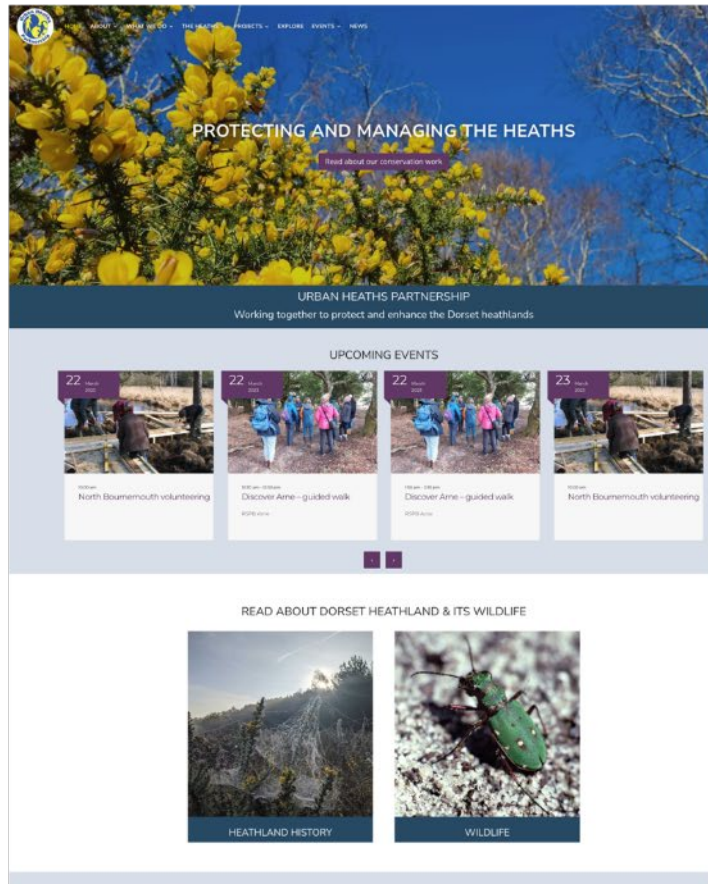
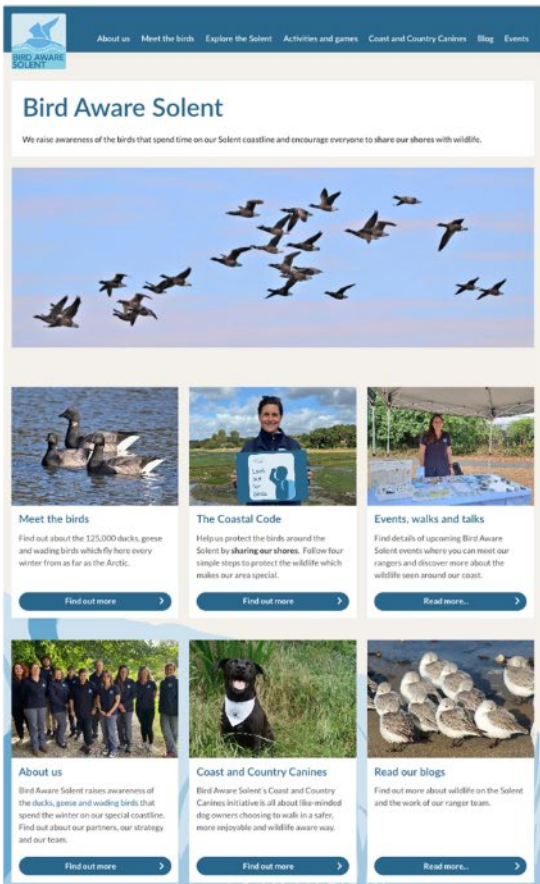


Figure 49: Screenshots from Bird Aware Solent website (top left), Dorset Urban Heaths Partnership website (top right), Thames Basin Heaths Partnership website (bottom left) and Bird Aware Essex Coast (bottom right)

Communication to developers

In addition to communication with site users and the general public, it is important that there is clear communication regarding mitigation requirements for developers or applicants for planning permission. Messages are most easy to follow when set out clearly in an SPD and on LPA websites, with well-defined guidance. The case studies have highlighted that not all LPAs publish this information on their websites and in some cases, it was difficult to find the most up-to-date requirements. It is recommended that LPAs ensure clear communication online is prioritised, with mitigation information regularly updated. Although, as discussed throughout this report, there may be some case-by-case decisions that need to be made depending on the proposed use and location of the development in question.

Communication between partnerships

Information exchange and sharing of findings between different mitigation solutions would help the development of robust and effective strategies based on best practice. Key findings from each strategy, including strengths and challenges faced at different stages of the solution's development, could be shared to help streamline the process especially for those strategies that are currently emerging. Sharing of information and best practice could be facilitated through workshops or forums between different LPA officers and other partner bodies or other stakeholders.

To date, Natural England has acted as a guide for LPAs, leading and supporting the development and implementation of strategic mitigation solutions. All case studies refer to either working in partnership with Natural England and/or requiring Natural England sign-off on the solutions and projects, particularly SANG. Going forward there may be further opportunities to streamline this process with standard advice and approaches, and drawing on the growing body of best practice to ensure that the most effective strategies are implemented. This may help to overcome political barriers involved in developing strategic approaches.

Communications – Summary of current best practice

- Communication with site users is important to raise awareness of the importance of the designated sites, as well as to ensure that compliance with the strategy is maximised and expectations are clear.
- Information regarding the implemented mitigation strategy and expectations for developers are most easy to follow when presented in an SPD and on the LPA website, setting out a clear set of guidance.
- Workshops or forums could be useful to share best practice between different mitigation solutions.

Monitoring and Review

Ongoing research and monitoring are vital components of any mitigation strategy, to evaluate the effectiveness of the implemented solution and inform future projects. This often forms a costed element of the SAMM strategy, and includes monitoring projects such as:

- **Visitor surveys** – ongoing visitor surveys repeating the same methodology to identify any changes in visitor profile, or visitor usage of the site over time. Automated counters to remotely monitor visitor numbers are also used at some sites, e.g. Cannock Chase (see Stafford case study) and the Solent (see Portsmouth case study).
- **Vehicle/car park counts** – to review use of car parks, and gauge visitor numbers and distribution.
- **Ecological surveys** – to identify the number and distribution of species/condition of habitats and how these change over time after implementation of the strategy.
- **Assessment of on-site infrastructure** – such as monitoring the condition of paths, car parks etc.
- **Incident recording** – such as fires and vandalism, which may help to identify any areas which need better targeting of mitigation measures.
- **Monitoring of SANGs** – to identify visitor numbers and behaviours, any under-used areas, and capacity of SANG.

Dedicated monitoring strategies have been prepared for some sites, such as the [Ashdown Forest SPA Monitoring Strategy](#) document which lists a range of monitoring projects, both on-site and off-site including bird and visitor surveys (Liley, 2018).

In some cases, regular monitoring reports are published online which helps to enable transparency. For example, at the Dorset Heaths, Monitoring Reports are prepared annually by Footprint Ecology to summarise the data collected by the UHP, with the latest published iteration being for the 2019-2020 financial year (Panter and Caals, 2021).

For other case studies, whilst the monitoring forms a key part of the SAMMs projects, the outputs for monitoring after implementation of the solution are not always available online. In addition, it is not always easy to identify which elements of the strategy are effective at avoiding or mitigating recreational impacts and identifying improvements of overall ecological health of European sites.

Monitoring and Review –best practice

- A consistent and comprehensive monitoring strategy is essential to ensure that the mitigation strategy is effective, and to review the need for any changes required over time.

Wider Links and Landscape Ecology Approach

Wider links

The primary goal of all strategic solutions is, and should be, to mitigate adverse recreational effects on the integrity of a European site. However, components of strategic mitigation solutions, in particular the SANG element, provide an opportunity to integrate with other strategies such as Local Nature Recovery Networks, Green Infrastructure provision and also play a role in delivering Biodiversity Net Gain. Opportunities to incorporate wider links and take into consideration impacts upon areas of functionally linked land and provide mitigation, seem to be generally overlooked by the case studies but there is potential for the strategies to provide a number of multifunctional benefits.

Access to nature

Mitigation strategies present opportunities to develop innovative solutions which seek to allow the enjoyment of nature in a way which avoids harm to the designation itself. This may include some on-site measures but can primarily be addressed through careful consideration of SANG provision.

At the European sites themselves, improved/contained recreational activity with well-maintained infrastructure (implemented through SAMM) that protects the designated features whilst allowing managed recreation could also lead to benefits in this regard. Furthermore, raising awareness of the nature conservation value of designated sites and promoting volunteering opportunities has the potential to lead to wider benefits in terms of the conservation and enhancement of biodiversity. Educational activities may help to inspire younger people and local communities to get involved with nature conservation and gain a better understanding of the importance of the European sites, as well as strengthening their sense of local identity.

Off-site, it is important that the recreational offer provides an attractive visitor experience outside of the European site designations to reduce visitor pressure. Improved strategic access in general, linking to SANG, would seem the best approach to achieve this. This should include consideration of wider access management, teamed with management at the designated sites, to ensure a sustainable level of recreation and prevent adverse impacts on their features.

Benefits could be achieved through gathering a robust evidence base which allows conclusions to be drawn in terms of how visitors are using the designated sites, including their expectations and desires, to enable the most effective alternatives to be developed. This information could then be translated to the 'must have', 'should have' and 'desirable' criteria for SANG as discussed within the **Methods to define SANG** section, as well as the flexible approach applied for the Dorset Heaths in terms of targeted recreational projects. There is likely to be greater engagement with alternative recreational facilities where they are properly managed and have desirable facilities, such as longer walking routes, and dedicated spaces for off-lead dog walking.

Wider improvements to access management, beyond SANG alone, have been considered through some of the case studies. This includes projects to provide better connections between SANG and other recreational facilities, as well as delivering new formal SANG (e.g. see **Waltham Forest**, **Wirral** and **Dorset** case studies). Furthermore, the HRSH SPA Mitigation project found that SANG networks were effective (see **Methods to define SANG** section). In addition to improving the recreational offer and diverting visitors from European sites, improved provision and connectivity of GI is likely to give rise to widespread benefits to ecosystem services, including but not limited to climate change mitigation and adaptation, active travel, health and wellbeing, and landscape character.

Access to nature and outdoor recreation is known to be beneficial to mental and physical wellbeing. [Natural England's GI Framework](#) provides a structure to analyse where greenspace in urban environments is needed most, emphasising the benefits of active and healthy lifestyles to improve wellbeing and address inequalities, in addition to natural capital benefits and more resilient ecosystems (Natural England, 2023).

Nature Recovery Networks

An important consideration regarding multifunctional benefits is the potential to link mitigation strategies with Local Nature Recovery Strategies (LNRS). In developing a strategic approach to address recreational mitigation requirements with other LPA partners and stakeholders, this would provide a good opportunity to also consider biodiversity issues more holistically. This could also include consideration of areas suitable for off-site Biodiversity Net Gain requirements, which is likely to become a key issue following net gain becoming mandatory from November 2023. SANGs may therefore have a role to play in a package of measures including Biodiversity Net Gain and other local nature initiatives, which could together contribute towards a Nature Recovery Network. There may also be opportunities to integrate other schemes such as nutrient mitigation habitats for nutrient offsetting. Although, care must be taken to ensure that all statutory requirements are satisfied in terms of the Habitats Regulations. Where additionality can be achieved, this could however be explored.

The [Environmental Improvement Plan](#) (EIP) (DEFRA, 2023) also highlights the importance of strategic actions to tackle a range of environmental issues, and sets out a number of targets and goals, including rolling out LNRS to identify areas to create and restore habitat, and Biodiversity Net Gain to enhance the built environment.

The GI Framework provides clear guidance about the quantity and quality of greenspace required to deliver multiple benefits for climate, health and prosperity, and includes a target stating that residents should be able to access a greenspace (or blue space) within 15 minutes' walk of their home (Natural England, 2023). This goal is reflected in the EIP.

Wider Links and Landscape Ecology Approach – Recommendations for best practice

- Links between mitigation solutions and wider initiatives should be explored. This may include links between SANG and wider access management, consideration of impacts upon areas of Functionally Linked Land, GI, LNRN and BNG.

Conclusions and Recommendations

Based on the case study review the following conclusions have been drawn and recommendations have been made to ensure the process of identifying, designing and securing a mitigation solution follows best practice.

Triggers for mitigation

- A robust and regularly updated evidence base is required to identify and quantify recreational impacts.
- Recreational impact assessments are commissioned to identify the nature and extent of visitor pressures and associated impacts on the ecological features of the specific European designation.
- Bespoke evidence is gathered to ensure that the nuances of each designation and the different ecological/geographical factors and challenges faced are captured, to help inform the development and implementation of a mitigation strategy that is fit for purpose and 'ground-truthed'.

Quantitative and qualitative evidence base

- ZOI clearly communicate the geographic area over which the mitigation solution will apply.
- The 75% method is an appropriate starting point to define ZOI, but it is important to ensure that locally specific factors and up-to-date surveys are taken into account when considering incorporation of weighting for frequency/type of visitors.
- Appropriate, and bespoke, options for mitigation are explored, in collaboration with landowners, site managers and other stakeholders to gather local knowledge and ensure they are fit for purpose for the specific site and visitor profile.

Implemented solution

- A partnership approach demonstrates in-combination effects are mitigated in line with the requirement of the Habitats Regulations and enables consistent and transparent advice regarding specific European sites.
- It is important that any guidelines for SANG or other recreational provisions are evidence based, in relation to the European sites in question, to ensure the greatest likelihood of effectiveness.
- Whilst guidelines are useful, it should also be noted that a degree of flexibility is likely to be beneficial in allowing a suite of different provisions to be created.
- The implemented solution should be clearly communicated to residents and developers within the LPA area, with policy wording in adopted local plans to secure this and ideally an SPD which provides further information to supplement that in the policy.

Communications

- Communication with site users is important to raise awareness of the importance of the designated sites, as well as to ensure that compliance with the strategy is maximised and expectations are clear.
- Information regarding the implemented mitigation strategy and expectations for developers are most easy to follow when presented in an SPD and on the LPA website, providing a clear set of guidance.
- Workshops or forums could be useful to share best practice between different mitigation solutions.

Monitoring and review

- A consistent and comprehensive monitoring strategy is essential to ensure that the mitigation strategy is effective, and to review the need for any changes required over time.

Wider benefits

- Links between mitigation solutions and wider initiatives should be explored. This may include links between SANG and wider access management, consideration of impacts upon areas of Functionally Linked Land, GI, LNRN and BNG.

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Appendix 1 – European Site Qualifying Features

Ashdown Forest SAC (Natural England, 2018b)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
- European dry heaths
- *Triturus cristatus*; Great crested newt

Ashdown Forest SPA (Natural England, 2019d)

- *Caprimulgus europaeus*; European nightjar (Breeding)
- *Sylvia undata*; Dartford warbler (Breeding)

Benfleet and Southend Ramsar (JNCC, 2008a)

- Dark-bellied brent goose, *Branta bernicla bernicla*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandica*
- Species/populations identified subsequent to designation for possible future consideration: Dunlin, *Calidris alpina alpina*

Benfleet and Southend Marshes SPA (Natural England, 2019e)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)

Birklands and Bilhaugh SAC (Natural England, 2018c)

- Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland

Black Water Estuary Ramsar (JNCC, 2008b)

- Damselfly *Lestes dryas*
- Flies *Aedes flavescens*
- *Erioptera bivittate*
- *Hybomitra expollicata*
- Spiders *Heliophanus auratus* and *Trichopterna cito*
- Beetles *Baris scolopacea*
- *Philonthus punctus*
- *Graptodytes bilineatus* and *Malachius vulneratus*

- Flies *Campsicemus magius* and *Myopites eximia*
- Moths *Idaea ochrata* and *Malacosoma castrensis*
- Spider *Euophrys*
- Dark-bellied brent goose, *Branta bernicla bernicla*
- Grey plover, *Pluvialis squatarola*
- Dunlin, *Calidris alpina alpina*
- Black-tailed godwit, *Limosa limosa islandica*
- Common shelduck, *Tadorna tadorna*
- European golden plover, *Pluvialis apricaria apricaria*
- Common redshank, *Tringa totanus totanus*

Blackwater Estuary SPA (Natural England, 2019f)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Aythya ferina*; Common pochard (Breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Sterna albifrons*; Little tern (Breeding)

Breckland SAC (Natural England, 2018d)

- Inland dunes with open *Corynephorus* and *Agrostis* grasslands; Open grassland with grey-hair grass and common bent grass of inland dunes
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; Naturally nutrient-rich lakes or lochs which are often dominated by pondweed
- European dry heaths
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*); Alder woodland on floodplains
- *Triturus cristatus*; Great crested newt

Breckland SPA (Natural England, 2019g)

- *Burhinus oedicephalus*; Stone-curlew (Breeding)
- *Caprimulgus europaeus*; European nightjar (Breeding)
- *Lullula arborea*; Woodlark (Breeding)

Breydon Water Ramsar (JNCC, 2008c)

- Tundra swan, *Cygnus columbianus bewickii*, NW Europe
- Northern lapwing, *Vanellus vanellus*, Europe - breeding
- Pink-footed goose, *Anser brachyrhynchus*, Greenland, Iceland/UK

- Eurasian wigeon, *Anas penelope*, NW Europe
- Northern shoveler, *Anas clypeata*, NW and C Europe
- European golden plover, *Pluvialis apricaria apricaria*, *P. a. altifrons* Iceland and Faroes/E Atlantic
- Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe

Breydon Water SPA (Natural England, 2019h)

- *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- *Recurvirostra avosetta*; Pied avocet (Non-breeding)
- *Pluvialis apricaria*; European golden plover (Non-breeding)
- *Vanellus vanellus*; Northern lapwing (Non-breeding)
- *Philomachus pugnax*; Ruff (Non-breeding)

Broadland Ramsar (JNCC, 2008d)

- Tundra swan, *Cygnus columbianus bewickii*, NW Europe
- Eurasian wigeon, *Anas penelope*, NW Europe
- Gadwall, *Anas strepera strepera*, NW Europe
- Northern shoveler, *Anas clypeata*, NW and C Europe
- Pink-footed goose, *Anser brachyrhynchus*, Greenland, Iceland/UK
- Greylag goose, *Anser anser anser*, Iceland/UK, Ireland

Broadland SPA (Natural England, 2019i)

- *Botaurus stellaris*; Great bittern (Breeding)
- *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- *Cygnus cygnus*; Whooper swan (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)
- *Anas strepera*; Gadwall (Non-breeding)
- *Anas clypeata*; Northern shoveler (Non-breeding)
- *Circus aeruginosus*; Eurasian marsh harrier (Breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Philomachus pugnax*; Ruff (Non-breeding)

Cannock Chase SAC (Natural England, 2018e)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath.
- European dry heaths.

Chichester and Langstone Harbours SPA (Natural England, 2019j)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)

- *Anas crecca*; Eurasian teal (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Anas clypeata*; Northern shoveler (Non-breeding)
- *Mergus serrator*; Red-breasted merganser (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris alba*; Sanderling (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- *Numenius arquata*; Eurasian curlew (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Arenaria interpres*; Ruddy turnstone (Non-breeding)
- *Sterna sandvicensis*; Sandwich tern (Breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Colne Estuary Ramsar (JNCC, 2008e)

- *Branta bernicla bernicla*; Dark-bellied brent goose
- *Tringa totanus*; Common redshank
- Black-tailed godwit, *Limosa limosa islandica*

Colne Estuary SPA (Natural England, 2019k)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Aythya ferina*; Common pochard (Breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Sterna albifrons*; Little tern (Breeding)

Crouch and Roach Estuaries Ramsar (JNCC, 2008f)

- Dark-bellied brent goose, *Branta bernicla bernicla*

Crouch and Roach Estuaries SPA (Natural England, 2019l)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- Waterbird assemblage

Dawlish Warren SAC (Natural England, 2019m)

- Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland
- Humid dune slacks
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes");

- *Petalophyllum ralfsii*; Petalwort

Dee Estuary Ramsar (JNCC, 2011)

- Redshank, *Tringa tetanus*
- Teal, *Anas crecca*
- Shelduck, *Tadorna tadorna*
- Oystercatcher, *Haematopus ostralegus*
- Curlew, *Numenius arquata*
- Pintail, *Anas acuta*
- Grey plover, *Pluvialis squatarola*
- Knot, *Calidris canutus islandica*
- Dunlin, *Calidris alpina alpina*
- Black-tailed godwit, *Limosa limosa islandica*
- Bar-tailed godwit, *Limosa lapponica*
- Redshank, *Tringa tetanus*

Dee Estuary SAC (Natural England, 2018f)

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
- Annual vegetation of drift lines
- Vegetated sea cliffs of the Atlantic and Baltic coasts; Vegetated sea cliffs
- *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); Atlantic salt meadows
- Embryonic shifting dunes; Shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram
- Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland
- Humid dune slacks
- *Petromyzon marinus*; Sea lamprey
- *Lampetra fluviatilis*; River lamprey
- *Petalophyllum ralfsii*; Petalwort

Dee Estuary SPA (Natural England, 2019n)

- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)

- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- *Numenius arquata*; Eurasian curlew (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Sterna sandvicensis*; Sandwich tern (Non-breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Dengie Ramsar (JNCC, 2008g)

- Sea kale *Crambe maritima*
- Sea barley *Hordeum marinum*
- Golden samphire *Inula crithmoides*
- Lax flowered sea lavender *Limonium humile*
- The glassworts *Sarcocornia perennis* and *Salicornia pusilla*
- Small cord-grass *Spartina maritima*
- Shrubby sea-blite *Suaeda vera*
- Eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*.
- Weevil *Baris scolopacea*
- Horsefly *Atylotus latistriatus*
- Jumping spider *Euophrys brownig*
- Dark-bellied brent goose, *Branta bernicla bernicla*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandica*
- Bar-tailed godwit, *Limosa lapponica lapponica*

Dengie SPA (Natural England, 2019o)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)

Dorset Heaths SAC (Natural England, 2018g)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
- European dry heaths
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
- Depressions on peat substrates of the *Rhynchosporion*; Depressions on peat substrates
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)

- Alkaline fens; Calcium-rich springwater-fed fens
- Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland
- *Coenagrion mercuriale*; Southern damselfly
- *Triturus cristatus*; Great crested newt

Dorset Heaths (Purbeck and Wareham) and Studland Dunes SAC (Natural England, 2019p)

- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram
- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*); Coastal dune heathland
- Humid dune slacks
- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*); Nutrient-poor shallow waters with aquatic vegetation on sandy plains
- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
- Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*; Wet heathland with Dorset heath and cross-leaved heath
- European dry heaths
- *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
- Depressions on peat substrates of the *Rhynchosporion*
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)
- Alkaline fens; Calcium-rich springwater-fed fens
- Old acidophilous oak woods with *Quercus robur* on sandy plains; Dry oak-dominated woodland
- Bog woodland
- *Coenagrion mercuriale*; Southern damselfly
- *Triturus cristatus*; Great crested newt

Dorset Heathlands SPA (Natural England, 2019q)

- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Falco columbarius*; Merlin (Non-breeding)
- *Caprimulgus europaeus*; European nightjar (Breeding)
- *Lullula arborea*; Woodlark (Breeding)
- *Sylvia undata*; Dartford warbler (Breeding)

Dorset Heathlands Ramsar (JNCC, 2008h)

- Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath *Erica tetralix* and (ii) acid mire with *Rhynchosporion*.

- Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath *Erica ciliaris* and cross-leaved heath *Erica tetralix*.
- Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species.
- Has a high species richness and high ecological diversity of wetland habitat types and transitions, and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.

Durham Coast SAC (Natural England, 2018h)

- Vegetated sea cliffs of the Atlantic and Baltic coasts

East Devon Heaths SPA (Natural England, 2019r)

- Dartford warbler *Sylvia undata*; (Breeding)
- European nightjar *Caprimulgus europaeus*; (Breeding)

East Devon Pebblebed Heaths SAC (Natural England, 2019s)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with crossleaved heath
- European dry heaths
- *Coenagrion mercuriale*; Southern damselfly

Epping forest SAC (Natural England, 2018i)

- Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*). (Beech forests on acid soils).
- European dry heaths.
- Northern Atlantic wet heaths with *Erica tetralix*. (Wet heathland with cross-leaved heath.
- Stag beetle (*Lucanus Cervus*).

Essex Estuaries SAC (Natural England, 2018j)

- Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks
- Estuaries
- Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
- *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud
- *Spartina* swards (*Spartinion maritimae*); Cord-grass swards
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*);
- Mediterranean saltmarsh scrub

Exe Estuary Ramsar (JNCC, 2008i)

- Waterfowl assemblage of international importance
- Dark-bellied brent goose, *Branta bernicla bernicla*

Exe Estuary SPA (Natural England, 2012)

- Avocet (*Recurvirostra avosetta*)
- Slavonian Grebe (*Podiceps auritus*)
- Dark - bellied Brent Goose (*Branta bernicula bernicula*)
- Oystercatcher (*Haematopus ostralegus*)
- Grey plover (*Pluvialis squatarola*)
- Black tailed godwit (*Limosa limosa*)
- Dunlin (*Calidris alpina*)

Foulness Estuary Ramsar (JNCC, 2008j)

- Dark-bellied brent goose, *Branta bernicla bernicla*
- Eurasian oystercatcher, *Haematopus ostralegus ostralegus*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandica*
- Bar-tailed godwit, *Limosa lapponica lapponica*

Foulness Estuary SPA (Natural England, 2019t)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- *Recurvirostra avosetta*; Pied avocet (Breeding)
- *Charadrius hiaticula*; Ringed plover (Breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)
- *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Sterna sandvicensis*; Sandwich tern (Breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)

Great Yarmouth North Denes SPA (Natural England, 2019u)

- *Sterna albifrons*; Little tern (Breeding)

Hamford Water Ramsar (JNCC, 2008k)

- *Branta bernicla bernicla*; Dark-bellied brent goose
- *Recurvirostra avosetta*; Pied avocet
- *Charadrius hiaticula*; Ringed plover

- *Pluvialis squatarola*; Grey plover
- *Limosa limosa islandica*; Black-tailed godwit
- *Tringa totanus*; Common redshank

Hamford Water SPA (Natural England, 2019v)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Recurvirostra avosetta*; Pied avocet (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Sternula albifrons*; Little tern (Breeding)

Liverpool Bay SPA (Natural England, 2019w)

- *Gavia stellata*; Red-throated diver (Non-breeding)
- *Melanitta nigra*; Common scoter (Non-breeding)
- *Hydrocoloeus minutus*; Little gull (Non-breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sternula albifrons*; Little tern (Breeding)
- Waterbird assemblage

Martin Mere Ramsar (JNCC, 2008l)

- Pink-footed goose, *Anser brachyrhynchus*
- Tundra swan, *Cygnus columbianus bewickii*
- Whooper swan, *Cygnus cygnus*
- Eurasian wigeon, *Anas penelope*
- Northern pintail, *Anas acuta*

Martin Mere SPA (Natural England, 2019x)

- Bewick's Swan, *Cygnus columbianus bewickii* (non-breeding)
- Whooper Swan, *Cygnus Cygnus* (non-breeding)
- Pink-footed goose, *Anser brachyrhynchus* (non-breeding)
- Eurasian teal, *Anas crecca*
- Northern pintail, *Anas acuta*; (Non-breeding)
- Waterbird assemblage

Mersey Estuary Ramsar (JNCC, 2008m)

- Common shelduck, *Tadorna tadorna*
- Black-tailed godwit, *Limosa limosa islandica*

- Common redshank, *Tringa totanus tetanus*
- Eurasian teal, *Anas crecca*
- Northern pintail, *Anas acuta*
- Dunlin, *Calidris alpina alpina*

Mersey Estuary SPA (Natural England, 2019y)

- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Pluvialis apricaria*; European golden plover (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- Waterbird assemblage

Mersey Narrows and North Wirral Foreshore SPA (Natural England, 2019z)

- *Limosa lapponica*; Bar-tailed godwit (non-breeding)
- *Hydrocoloeus minutus*; Little gull (non-breeding)
- *Calidris canutus islandica*; Knot (non-breeding)
- *Sterna hirundo*; Common tern (non-breeding)
- *Sterna hirundo*; Common tern (breeding)
- Waterbird assemblage

Norfolk Valley Fens SAC (Natural England, 2018k)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath European dry heaths
- Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco- Brometalia*); Dry grasslands and scrublands on chalk or limestone
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)
- Alkaline fens; Calcium-rich springwater-fed fens
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*); Alder woodland on floodplains
- *Vertigo angustior*; Narrow-mouthed whorl snail
- *Vertigo moulinsiana*; Desmoulin's whorl snail

North Norfolk Coast Ramsar (JNCC, 2008n)

- Sandwich tern, *Sterna (Thalasseus) sandvicensis sandvicensis*,
- Common tern, *Sterna hirundo hirundo*,
- Little tern, *Sterna albifrons albifrons*

- Red knot, *Calidris canutus islandica*
- Pink-footed goose, *Anser brachyrhynchus*
- Dark-bellied brent goose, *Branta bernicla bernicla*,
- Eurasian wigeon, *Anas penelope*,
- Northern pintail, *Anas acuta*,
- Ringed plover, *Charadrius hiaticula*
- Sanderling, *Calidris alba*,
- Bar-tailed godwit, *Limosa lapponica lapponica*

North Norfolk Coast SAC (Natural England, 2018I)

- Coastal lagoons
- Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves
- Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*); Mediterranean saltmarsh scrub
- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram
- Fixed dunes with herbaceous vegetation ("grey dunes"); Dune grassland
- Humid dune slacks
- *Lutra lutra*; Otter
- *Petalophyllum ralfsii*; Petalwort

North Norfolk Coast SPA (Natural England, 2019aa)

- *Botaurus stellaris*; Great bittern (Breeding)
- *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)
- *Circus aeruginosus*; Eurasian marsh harrier (Breeding)
- *Circus pygargus*; Montagu's harrier (Breeding)
- *Recurvirostra avosetta*; Pied avocet (Breeding)
- *Calidris canutus*; Red knot (Non-breeding)
- *Sterna sandvicensis*; Sandwich tern (Breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Northumbria Coast Ramsar (JNCC, 2008o)

- *Calidris maritima*; Purple sandpiper (non-breeding)
- *Arenaria interpres*; Ruddy turnstone (non-breeding)
- *Sterna albifrons*; Little tern (breeding)

Northumbria Coast SPA (Natural England, 2019bb)

- *Calidris maritima*; Purple sandpiper (non-breeding)
- *Arenaria interpres*; Ruddy turnstone (non-breeding)
- *Sterna albifrons*; Little tern (breeding)

Thames Estuary and Marshes Ramsar (JNCC, 2008p)

- Ringed plover, *Charadrius hiaticula*
- Black-tailed godwit, *Limosa limosa islandica*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandi*
- Dunlin, *Calidris alpina alpina*
- Common redshank, *Tringa totanus tetanus*

Outer Thames Estuary and Marshes SPA (Natural England, 2019cc)

- *Gavia stellata*; Red-throated diver (Non-breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sternula albifrons*; Little tern (Breeding)

Portsmouth Harbour SPA (Natural England, 2019dd)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Mergus serrator*; Red-breasted merganser (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

Ribble and Alt Estuaries Ramsar (JNCC, 2008q)

- Lesser black-backed gull, *Larus fuscus graellsii*
- Ringed plover, *Charadrius hiaticula*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandica*
- Sanderling, *Calidris alba*
- Dunlin, *Calidris alpina alpina*
- Black-tailed godwit, *Limosa limosa islandica*
- Common redshank, *Tringa totanus tetanus*
- Lesser black-backed gull, *Larus fuscus graellsii*
- Tundra swan, *Cygnus columbianus bewickii*
- Whooper swan, *Cygnus cygnus*
- Pink-footed goose, *Anser brachyrhynchus*
- Common shelduck, *Tadorna tadorna*
- Eurasian wigeon, *Anas Penelope*
- Eurasian teal, *Anas crecca*
- Northern pintail, *Anas acuta*

- Eurasian oystercatcher, *Haematopus ostralegus ostralegus*
- Bar-tailed godwit, *Limosa lapponica lapponica*

Ribble and Alt Estuaries SPA (Natural England, 2019ee)

- *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- *Cygnus cygnus*; Whooper swan (Non-breeding)
- *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)
- *Pluvialis apricaria*; European golden plover (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)
- *Calidris alba*; Sanderling (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Philomachus pugnax*; Ruff (Breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Larus fuscus*; Lesser black-backed gull (Breeding)
- *Sterna hirundo*; Common tern (Breeding)
- Waterbird assemblage
- Seabird assemblage

Dersingham Bog Ramsar (JNCC, 2008r)

- Supports an important assemblage of invertebrates - nine British Red Data Book species have been recorded.

Roydon Common and Dersingham Bog SAC (Natural England, 2018m)

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

Sefton Coast SAC (Natural England, 2019ff)

- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes")
- Fixed dunes with herbaceous vegetation ("grey dunes")
- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

- Dunes with *Salix repens* ssp. *argentea* (*Salicion arenaria*)
- Humid dune slacks
- *Triturus cristatus*; Great crested newt
- Petalwort *Petalophyllum ralfsii*

Solent and Southampton Water SPA (Natural England, 2019gg)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Anas crecca*; Eurasian teal (Non-breeding)
- *Charadrius hiaticula*; Ringed plover (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Larus melanocephalus*; Mediterranean gull (Breeding)
- *Sterna sandvicensis*; Sandwich tern (Breeding)
- *Sterna dougallii*; Roseate tern (Breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Stour and Orwell Estuaries Ramsar (JNCC, 2008s)

- Stiff saltmarsh-grass *Puccinellia rupestris*
- Small cord-grass *Spartina maritima*
- Perennial glasswort *Sarcocornia perennis*
- Lax-flowered sea lavender *Limonium humile*
- Eelgrasses *Zostera angustifolia*, *Z. marina* and *Z. noltei*
- Muscid fly *Phaonia fusca*
- Horsefly *Haematopota grandis*
- Spiders *Arctosa fulvolineata* and *Baryphema duffeyi*
- Swollen spire snail *Mercuria confusa*
- Common redshank, *Tringa totanus tetanus*
- Dark-bellied brent goose, *Branta bernicla bernicla*
- Northern pintail, *Anas acuta*
- Grey plover, *Pluvialis squatarola*
- Red knot, *Calidris canutus islandica*
- Dunlin, *Calidris alpina alpina*
- Black-tailed godwit, *Limosa limosa islandica*
- Common redshank, *Tringa totanus tetanus*

Stour and Orwell Estuaries SPA (Natural England, 2019hh)

- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Recurvirostra avosetta*; Pied avocet (Breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)

- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)

South Pennine Moors Phase II SPA (Natural England, 2019ii)

- *Falco columbarius*; Merlin (Breeding);
- *Pluvialis apricaria*; European golden plover (Breeding); and
- Breeding bird assemblage.

South Pennine Moors SAC (Natural England, 2018n)

- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath;
- European dry heaths;
- Blanket bogs;
- Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface; and
- Old sessile oak woods with *Ilex* and *Blechnum*.

Thames Basin Heath SPA (Natural England, 2019jj)

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

The Broads SAC (Natural England, 2018o)

- Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp.*; Calcium-rich nutrient-poor lakes, lochs and pools
- Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation; Naturally nutrient-rich lakes or lochs which are often dominated by pondweed
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
- Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by great fen sedge (saw sedge)
- Alkaline fens; Calcium-rich springwater-fed fens
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*,
- *Salicion albae*); Alder woodland on floodplains
- *Vertigo moulinsiana*; Desmoulin's whorl snail
- *Lutra lutra*; Otter
- *Liparis loeselii*; Fen orchid
- *Anisus vorticulus*; Little whirlpool ram's-horn snail

The New Forest Ramsar (JNCC, 2008t)

- Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.
- The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.
- The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England.

The New Forest SAC (Natural England, 2018p)

- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*); Nutrient-poor shallow waters with aquatic vegetation on sandy plains
- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*; Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Northern Atlantic wet heaths with *Erica tetralix*; Wet heathland with cross-leaved heath
- European dry heaths
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows
- Transition mires and quaking bogs; Very wet mires often identified by an unstable 'quaking' surface
- Depressions on peat substrates of the *Rhynchosporion*
- Alkaline fens; Calcium-rich springwater-fed fens
- Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*); Beech forests on acid soils
- *Asperulo-Fagetum* beech forests; Beech forests on neutral to rich soils
- Old acidophilous oak woods with *Quercus robur* on sandy plains
- Bog woodland
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*); Alder woodland on floodplains
- *Coenagrion mercuriale*; Southern damselfly
- *Lucanus cervus*; Stag beetle
- *Triturus cristatus*; Great crested newt

The New Forest SPA (Natural England, 2019kk)

- *Pernis apivorus*; European honey-buzzard (Breeding)

- *Circus cyaneus*; Hen harrier (Non-breeding)
- *Falco subbuteo*; Eurasian hobby (Breeding)
- *Caprimulgus europaeus*; European nightjar (Breeding)
- *Lullula arborea*; Woodlark (Breeding)
- *Sylvia undata*; Dartford warbler (Breeding)
- *Phylloscopus sibilatrix*; Wood warbler (Breeding)

The Wash Ramsar (JNCC, 2008u)

- Eurasian oystercatcher, *Haematopus ostralegus ostralegus*, Europe and NW Africa -wintering
- Grey plover, *Pluvialis squatarola*, E Atlantic/W Africa -wintering
- Red knot, *Calidris canutus islandica*, W and Southern Africa (wintering)
- Sanderling, *Calidris alba*, Eastern Atlantic
- Eurasian curlew, *Numenius arquata arquata*, *N. a. arquata* Europe (breeding)
- Common redshank, *Tringa totanus totanus*,
- Ruddy turnstone, *Arenaria interpres interpres*, NE Canada, Greenland/W Europe and NW Africa
- Pink-footed goose, *Anser brachyrhynchus*, Greenland, Iceland/UK
- Dark-bellied brent goose, *Branta bernicla bernicla*,
- Common shelduck, *Tadorna tadorna*, NW Europe
- Northern pintail, *Anas acuta*, NW Europe
- Dunlin, *Calidris alpina alpina*, W Siberia/W Europe
- Bar-tailed godwit, *Limosa lapponica lapponica*, W Palearctic
- Ringed plover, *Charadrius hiaticula*, Europe/Northwest Africa
- Black-tailed godwit, *Limosa limosa islandica*, Iceland/W Europe
- European golden plover, *Pluvialis apricaria apricaria*, *P. a. altifrons* Iceland and Faroes/E Atlantic
- Northern lapwing, *Vanellus vanellus*, Europe - breeding

The Wash SPA (Natural England, 2019II)

- *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)
- *Anser brachyrhynchus*; Pink-footed goose (Non-breeding)
- *Branta bernicla bernicla*; Dark-bellied brent goose (Non-breeding)
- *Tadorna tadorna*; Common shelduck (Non-breeding)
- *Anas penelope*; Eurasian wigeon (Non-breeding)
- *Anas strepera*; Gadwall (Non-breeding)
- *Anas acuta*; Northern pintail (Non-breeding)
- *Melanitta nigra*; Black (common) scoter (Non-breeding)
- *Bucephala clangula*; Common goldeneye (Non-breeding)
- *Haematopus ostralegus*; Eurasian oystercatcher (Non-breeding)
- *Pluvialis squatarola*; Grey plover (Non-breeding)
- *Calidris canutus*; Red knot (Non-breeding)

- *Calidris alba*; Sanderling (Non-breeding)
- *Calidris alpina alpina*; Dunlin (Non-breeding)
- *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)
- *Limosa lapponica*; Bar-tailed godwit (Non-breeding)
- *Numenius arquata*; Eurasian curlew (Non-breeding)
- *Tringa totanus*; Common redshank (Non-breeding)
- *Arenaria interpres*; Ruddy turnstone (Non-breeding)
- *Sterna hirundo*; Common tern (Breeding)
- *Sterna albifrons*; Little tern (Breeding)
- Waterbird assemblage

Winterton-Horsey Dunes SAC (Natural England, 2018q)

- Embryonic shifting dunes
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes"); Shifting dunes with marram
- Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)
- Humid dune slacks

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