



New Forest Strategic Access Management and Monitoring Strategy 2023

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Summary

This strategy sets out a package of mitigation measures to address impacts from increased recreation (associated with new housing growth) on the New Forest Special Area of Conservation (SAC)/Special Protection Area (SPA) and Ramsar site. The strategy has been commissioned by the Test Valley Borough Council on behalf of a partnership of local authorities surrounding the Forest.

The strategy addresses plan-led growth within the zone of influence (13.8km from the edge of the New Forest SAC/SPA/Ramsar) and covers the anticipated level of growth (around 45,000 dwellings) to 2036.

The package of mitigation measures relates to access infrastructure, engagement and monitoring and will cost around £22m. Per dwelling tariffs are calculated based on visit rates from each authority, providing a tiered tariff structure that means new housing coming forward closer to the New Forest will contribute more than that further away.

The strategy provides a framework and broad approach that ensures in-combination effects of housing can be addressed and all authorities are working together to an agreed approach, however options remain for each authority to vary the tariff according to dwelling size or type of dwelling (such as flats vs houses).

Contents

Summary	ii
Contents.....	iii
Acknowledgements	iv
1. Introduction and context	1
Overview	1
The New Forest SAC/SPA/Ramsar	1
Recreation use of the New Forest	2
Impacts and importance of access	2
Legislative context	4
Mitigation for housing growth	4
The need for a Strategic Access Management and Monitoring ('SAMM') strategy	6
2. SAMM approaches in other parts of the country	8
Ranger provision	8
Behavioural change	10
Infrastructure change.....	10
Fires	10
3. Scale of growth	11
Indicative estimates of housing change	11
Alternative greenspace provision.....	12
4. Current mitigation and access management measures in place at the New Forest.....	13
Statutory duty associated as a National Park	13
Recreation Management Strategy (RMS)	14
Existing mitigation measures for local housing growth	15
Other relevant visitor management elements	15
5. SAMM package	18
Introduction	18
Project Manager	18
Access infrastructure and projects	20
Parking	20
Gateway Project(s).....	22
Paths and tracks	22
Engagement.....	23
Ranger time	23
Targeted work with dog walkers	27
Fires	27

Monitoring	28
Visitors	28
Vegetation communities, key habitat features and species	29
6. Implementation	39
Developer contributions and in-perpetuity costs	39
Per dwelling tariff	39
Types of development	42
Overlap with other mitigation strategies	42
Governance	44
Review and phasing of measures	45
References	46
Appendix 1: Qualifying features and impact pathways	51
Appendix 2: Selected examples of other European site mitigation schemes	54
Appendix 3: Current mitigation approaches established by relevant local planning authorities	59
Appendix 4: Current ranger provision	62
Appendix 5: Breakdown of SAMM costs	65

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1. Introduction and context

Overview

- 1.1 This strategy sets out the broad approach by which mitigation measures within the New Forest will address impacts from increased recreation (associated with new housing growth) on the New Forest Special Area of Conservation (SAC)/Special Protection Area (SPA) and Ramsar site. It has been commissioned by the Test Valley Borough Council on behalf of a partnership of local organisations¹.

The New Forest SAC/SPA/Ramsar

- 1.2 The New Forest is one of the largest tracts of semi natural vegetation in the country, and as such is one of our most important wildlife sites. The area hosts three international wildlife site designations and is closely located to other international wildlife sites such as the Solent and Southampton Water.
- 1.3 The New Forest is classified as an SPA for its breeding and overwintering bird species of European importance, in accordance with the European Birds Directive. The designation relates to internationally significant breeding populations of Dartford Warbler *Sylvia undata*, Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea*, Honey Buzzard *Pernis apivorus*, Hobby *Falco subbuteo* and Wood Warbler *Phylloscopus sibilatrix* and over-wintering Hen Harrier *Circus cyaneus*.
- 1.4 The New Forest is also designated as an SAC for its habitats and non-avian species of European importance, in accordance with the European Habitats Directive. This designation reflects the unique mosaic of habitats across the New Forest, which includes eight Annex 1 habitats (encompassing heathland, grassland, woodland, wetland, bog and open water), together with three Annex 2 species, Stag Beetle *Lucanus cervus*, and Southern Damsfly *Coenagrion mercuriale*, and Great Crested Newt *Triturus cristatus*.
- 1.5 Also relevant is the New Forest's listing as a Ramsar site, under the Ramsar Convention. This recognises the international importance of the site as a

¹ Comprising BCP Council, Dorset Council, Eastleigh Borough Council, Fareham Borough Council, Forestry England, Natural England, New Forest District Council, New Forest National Park Authority, Southampton City Council, Test Valley Borough Council and Wiltshire Council

wetland, supporting wetland flora and fauna of international importance, and adding to the global network of Ramsar listed wetlands.

Recreation use of the New Forest

- 1.6 The New Forest is also a national park which encompasses the coast and extends to cover the whole of the New Forest SAC/SPA/Ramsar (see Map 1). The New Forest is in fact the smallest and most intensively visited of England's National Parks (NFNPA, 2010) and also has the highest concentration of designated wildlife sites of any of the English national parks.
- 1.7 A wide range of recreational activities take place. Visitor levels to the New Forest National Park are estimated to be over 15 million visitor days (RJS Associates Ltd., 2018). These visitors include local residents visiting for short visits directly from their homes as well as those visiting from further afield that include day trippers and staying tourists. Visitor surveys of the New Forest SAC/SPA/Ramsar in 2018/19 (Liley, Panter, et al., 2020) showed that for most people dog walking (55%) or walking (26%) are the main activities.
- 1.8 Within the New Forest SAC/SPA/Ramsar site, open access to many areas is a legal right. There are in excess of 30,000ha of unenclosed land where people can walk freely (NFNPA, 2010) and this includes the heaths, woodlands and other habitats managed by Forestry England, National Trust, Hampshire County Council and others. There are around 150 formal car parks that provide access onto the SAC/SPA/Ramsar, a further 123 informal parking locations (such as gateways, lay-bys etc) and in addition car parks and visitor facilities inside the villages such as Lyndhurst and Brockenhurst (Panter & Saunders, 2020).

Impacts and importance of access

- 1.9 A challenging issue for UK nature conservation is how to respond to increasing demand for access without compromising the integrity of protected wildlife sites. Areas that are important for nature conservation are often important for a range of other services, including the provision of space for recreation for an increasing population. Such recreation space can be used for a wide variety of activities, ranging from daily dog walks to competitive adventure and endurance sports.
- 1.10 Visits to the natural environment have shown a significant increase in England as a result of the increase in population and a trend to visit the

countryside more (O'Neill, 2019). The issues are particularly acute in southern England, where population density is highest. The Covid-19 pandemic has had a marked effect on how people use local greenspaces, and at many locations across the UK there was a marked increase in recreation use during the pandemic (Burnett et al., 2021). There has been a general trend for rural and natural attractions to become more prominent and there has been a rise in domestic tourism and use of more local greenspace, with the suggestion that such changes might reflect long term shifts in how people use and visit the countryside (Wallace et al., 2023).

- 1.11 There is a strong body of evidence showing how increasing levels of access can have negative impacts on wildlife. Issues are varied and include disturbance, increased fire risk, contamination and damage (for general reviews see: Liley et al., 2010; Lowen et al., 2008; Ross et al., 2014; Underhill-Day, 2005).
- 1.12 The issues are not, however, straightforward. It is now increasingly recognised that access to the countryside is crucial to the long term success of nature conservation projects, for example through enforcing pro-environmental behaviours and a greater respect for the world around us (Richardson et al., 2016). Access also brings wider benefits to society that include benefits to mental/physical health (Keniger et al., 2013; Lee & Maheswaran, 2011; Pretty et al., 2005) and economic benefits (ICF GHK, 2013; ICRT, 2011; Keniger et al., 2013; The Land Trust, 2018). Nature conservation bodies are trying to encourage people to spend more time outside and government policy is also promoting countryside access in general (e.g. through enhancing coastal access).

Legislative context

- 1.13 The designation, protection and restoration of European wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. Importantly, the most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019²) take account of the UK's departure from the EU.
- 1.14 The Regulations provide strict protection for European sites and this extends to local plans. Local planning authorities, as public bodies, are given specific duties as 'competent authorities'. A competent authority should only approve a project or give effect to a plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) (or exceptionally, if there is overriding public interest and no alternatives).

Mitigation for housing growth

- 1.15 The New Forest lies relatively close to a number of settlements and urban areas including Southampton, Salisbury, Bournemouth and Christchurch (see Map 1).
- 1.16 Housing growth in the surrounding area, as set out in local development plans, has been identified as having potentially harmful impacts on the nature conservation designations. A large volume of background evidence sets out the links between where people live and recreation use of the Forest and the impacts associated with such use (Lake et al., 2020; Liley, Clarke, et al., 2020; Liley, Panter, et al., 2020; Liley & Panter, 2020b; Panter & Saunders, 2020). Appendix 1 summarises the various ways recreation use can impact the European site qualifying features of the New Forest SAC/SPA/Ramsar.
- 1.17 In order to ensure no adverse effects on the integrity of the New Forest SAC/SPA/Ramsar from new development, the surrounding local authorities have established a range of mitigation measures. These include the

² The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

provision of alternative natural greenspaces³ to deflect access, and some authorities have established measures within the Forest, such as funding for an increased ranger presence. In line with the extensive evidence studies, and advice from Natural England, it has been recognised that housing growth within 13.8km of the New Forest SAC/SPA/Ramsar will have the potential to generate cumulative impacts. This 13.8km zone (shown in Map 1) encompasses a wide geographic area and spans multiple authorities.

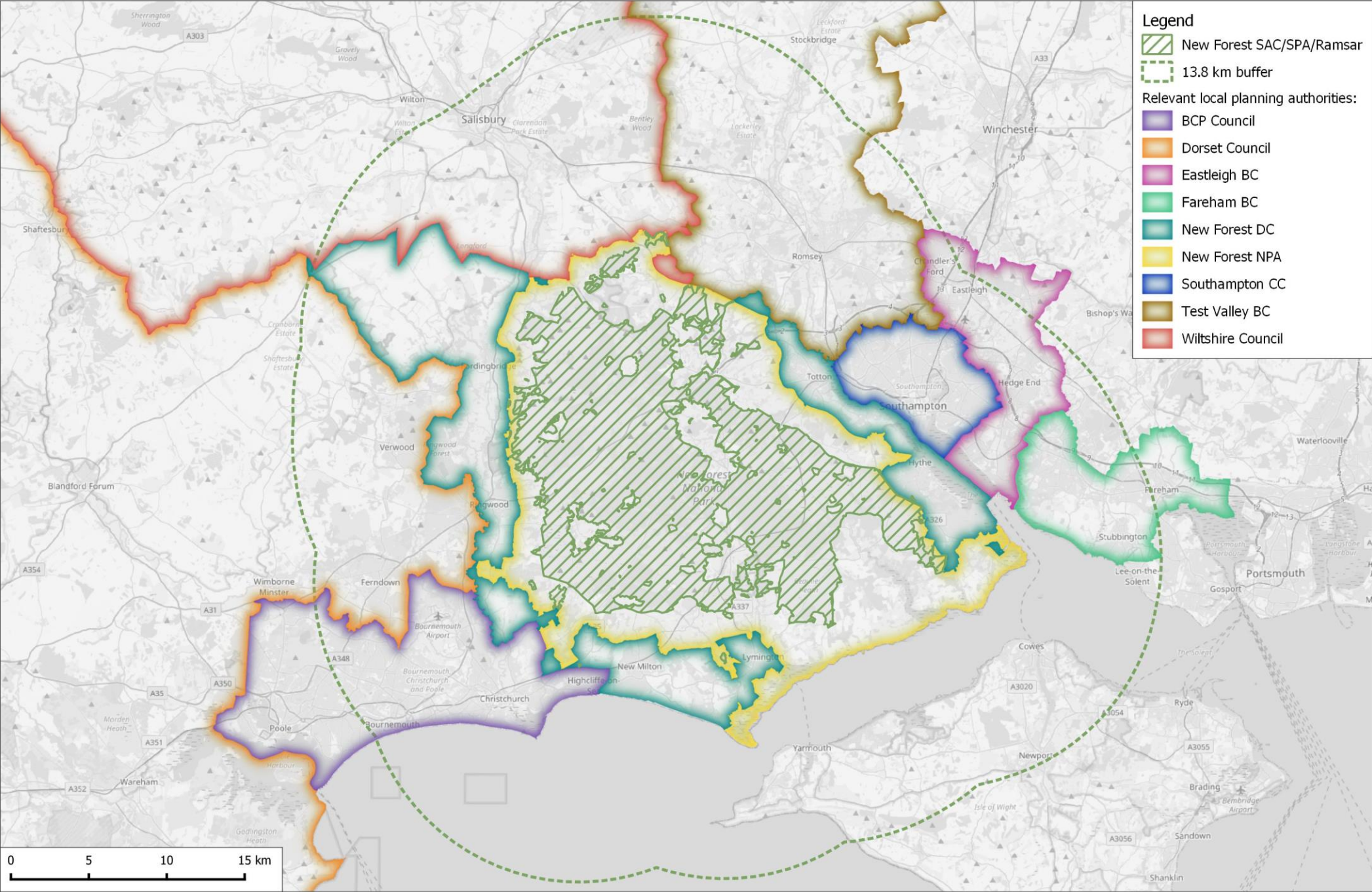
³ These are referred to by various different anacronyms in different authorities and include 'SANGs' – Suitable Alternative Natural Greenspace, 'HIPS' – Heathland Infrastructure Projects and 'ANRGs' - Alternative Natural Recreational Greenspaces

The need for a Strategic Access Management and Monitoring ('SAMM') strategy

- 1.18 This strategy has been commissioned to ensure a comprehensive and joined up approach to mitigation across all relevant authorities (i.e. those that are within the 13.8km zone of influence⁴). The strategy is necessary to ensure the collective mitigation approach includes appropriate strategic access management and monitoring ('SAMM') measures. It is important for local planning authorities to understand the scale of measures that will be required to provide effective and sufficient mitigation as part of their wider mitigation package.
- 1.19 Suitable Alternative Natural Greenspace ('SANGs'), designed to provide alternative destinations for recreation, local to where new housing is built, form a separate, discrete mitigation thread and are outside the scope of this strategy.

⁴ Extending to 15km for larger scale proposals

Map 1: New Forest SAC/SPA/Ramsar and 13.8 km zone of influence.



2. SAMM approaches in other parts of the country

- 2.1 In many other parts of the UK, strategic approaches to mitigation have been established to address recreation impacts. Such strategic schemes ensure cumulative impacts from growth across a wide area can be addressed through the provision of a suite of SAMM measures, often (but not always) accompanied with SANG provision. Staff from many of these schemes now regularly meet to exchange ideas, approaches and techniques and there is much overlap between schemes.
- 2.2 A suite of mitigation measures should function together to provide confidence that adverse effects arising from recreation have been prevented. This is because the combination of measures working together reduces risk and builds in contingency for amending the strategy if some measures do not perform as well as envisaged, once implemented. Other measures can still be functioning in the short term whilst some are revised. An integrated suite of measures delivered together also improves efficiency, which in turn adds to effectiveness with improved value for money.
- 2.3 An overview of a range of different mitigation schemes is provided in Appendix 2 and key interventions are pulled out here. Many of these interventions are widespread and commonly used and there are a range of studies that support their effectiveness (e.g. Allinson, 2018; Burger & Leonard, 2000; Medeiros et al., 2007; Williams et al., 2017); however there is little experimental work or similar to explicitly test or compare how well different interventions work.

Ranger provision

- 2.4 A mobile ranger team is a key component of other mitigation schemes such as those on the Solent, the South-Devon sites, the Thames Basin Heaths and the Dorset Heaths. In these examples the rangers form a mobile team that spend the majority of their time outside, talking to visitors, influencing how visitors behave and showing people wildlife. Rangers link to infrastructure such as SANG provision in that rangers can influence visitor behaviour on the heaths and direct users to other locations – for example encouraging dog walkers who want their dog to be running free to visit a nearby SANG instead.

- 2.5 In these examples the ranger team is a discrete body whose purpose is mitigation delivery (rather than routine management, maintenance, membership recruitment or other such tasks). The team can focus their time at particular sites/locations as required for example targeting areas close to where development comes forward, or if access issues become a concern at a particular location, the staff can be present and target their time accordingly. Monitoring data can help inform the ranger effort and ensure their work is directly linked to where issues from local recreation use are occurring.
- 2.6 Some schemes cover a large area and deploy a relatively large ranger team. For example, the Thames Basin Heaths team is currently around 14 staff⁵, while the Bird Aware Solent team hosts 11 staff including a ranger team (with a lead ranger, a site specialist (responsible for infrastructure type projects), an outreach specialist, a ranger and an assistant ranger, plus 3 seasonal rangers), alongside a dog initiatives officer (i.e. co-ordinating the dog related projects), and a campaigns and engagement officer who oversees social media and other engagement work.
- 2.7 The relatively long-running schemes on the Solent Coast and the Dorset Heaths have been subject to review. On the Solent, the review (Liley et al., 2023) highlighted that the mitigation scheme was providing ranger coverage equivalent to 30 minutes of ranger time per winter per new dwelling and that the level of ranger provision was reaching around 4% of those visitors to the coast over the winter. The suggestion was that the level of ranger provision was low. The Dorset Heaths review (Panter et al., 2021) had similar findings, with the level of ranger provision currently deployed estimated to engage with around 0.7% of the people visiting the heaths per day. This also suggested the level of ranger coverage was relatively low – with scope for ranger provision to be scaled up.
- 2.8 Rangers are deployed to influence behaviour and raise awareness among visitors. Only one scheme (that on the Northumberland Coast) has provided rangers with enforcement powers, relating to dogs off-lead. The Northumberland rangers have the ability to issue fines but have, to date, never had to use those powers. Staff working in Northumberland however indicate that the powers provide them with more confidence to approach

⁵ See the [Thames Basin Heaths Partnership website](#)

people and that the enforcement powers mean that visitors take more notice of the rangers.

Behavioural change

- 2.9 The use of behavioural change techniques has been explored by some strategic approaches, with Natural England funding work on the Solent and Thames Basin Heaths (Barker & Park, 2021). This work highlights how measures to influence behaviour are most likely to be successful if they make the change easy for people to do, capture people's attention, fit with the social group and norms of peers/others and is timed appropriately. Barker & Park provide guidance and suggestions for best practice that include leaflet design and how to get messages right.

Infrastructure change

- 2.10 At Cannock Chase the mitigation approach has focussed on changing the parking provision, closing some small informal parking locations scattered across the SAC while improving and expanding others. This is planned to change the distribution of visitors within the site, make engagement better, ensure good signage and interpretation at the right locations and better options for face-to-face engagement. Visitor use will be more concentrated in the less vulnerable locations. The Cannock Chase scheme has focussed on these major infrastructure changes and to date, does not include SANG provision.

Fires

- 2.11 Other examples of SAMM measures include measures to address fire risk (e.g. relating to barbeques in the South Pennine Moors or the Firewise education project working with schools in Dorset). Fire risk is becoming a key concern at many sites.

3. Scale of growth

Indicative estimates of housing change

- 3.1 Previous work (Liley, Clarke, et al., 2020) drew on data provided by local planning authorities in the vicinity of the New Forest to estimate that anticipated levels of new housing could be around 129,222 new dwellings over the period 2018-2036 within a 25km radius of the New Forest SAC/SPA/Ramsar. This was equivalent to a 16.4% increase in the number of dwellings and could potentially generate (assuming visit rates per dwelling were to remain constant) around 11.4% more visits to the New Forest SAC/SPA/Ramsar. Within 14km (i.e. broadly equivalent to the 13.8km zone of influence) the potential level of growth was estimated to be around 69,000 dwellings⁶.
- 3.2 More recent housing data were provided by the relevant local planning authorities to inform this strategy. These data provide a snapshot of possible future growth from 2023 through to 2036 that would require mitigation (i.e. excluding planned development where mitigation for impacts on the New Forest's designated sites has already been secured etc). These estimates of housing growth are indicative, as each authority is at a different stage in their plan making and for those whose local plans are still at an early stage, the figures represent a best estimate at this point in time. In addition, there remains some uncertainty nationally regarding housing targets for local planning authorities. Totals within 13.8km of the New Forest SAC/SPA/Ramsar are summarised in Table 1 and indicate an overall total of around 45,000.

⁶ This figure is based on the 2018 housing growth figures, for the relevant local authorities only (i.e. those shown in Map 1) and within 14km of the New Forest SAC/SPA/Ramsar.

Table 1: Approximate number of additional dwellings within 13.8km of the New Forest SPA/SAC/Ramsar to 2036, by local planning authority, requiring mitigation.

LPA	Approximate numbers of dwellings likely to come forward by 2036 and requiring mitigation
BCP Council	10,313
Dorset Council	3,144
Eastleigh Borough Council	6,663
Fareham Borough Council	2,572
New Forest District Council	3,204
New Forest National Park Authority	260
Southampton City Council	14,464
Test Valley Borough Council	1,650
Wiltshire Council	2710
Total	44,980

Alternative greenspace provision

3.3 The housing figures provide an indication of the scale of change that requires mitigation. Some of the growth will be accompanied by SANG (or, in the case of the New Forest District Council, Alternative Natural Recreational Greenspace 'ANRG'), including strategic SANGs and SANGs directly linked to development. As such the SAMM strategy does not need to address all the recreation impacts associated with the overall quantum of growth as SANG will provide some of the mitigation. There is also a recognition that new greenspace provision alone is unlikely to fully mitigate increased recreational pressures on the New Forest's designated sites (given the scale and draw of the designated sites). SAMM measures within the designated sites will therefore form an important part of the overall recreation mitigation package, complementing new greenspace provision associated with planned new development.

4. Current mitigation and access management measures in place at the New Forest

- 4.1 Recreation has been managed in the New Forest for many years (see NFNPA, 2010 for background). It was in 1972, following the development of a conservation plan (New Forest Joint Steering Committee, 1971) that the current network of car parks was created and cars were stopped from driving across the lawns and open land. In the early 1990s the 40mph speed limit on unfenced roads was introduced within the Perambulation of the Forest.
- 4.2 SAMM measures need to fit with existing and planned visitor management. This existing visitor management includes that focussed around tourism and staying visitors that may be visiting from well outside the 13.8km zone and even include international tourists. Local planning authorities have also established mitigation measures which are currently delivered in a relatively piecemeal fashion (i.e. authority by authority). It will be important to build on the work already done for example in raising awareness or establishing branding.

Statutory duty associated as a National Park

- 4.3 There are two statutory purposes for national parks in England and Wales. The first is to conserve and enhance natural beauty, wildlife and cultural heritage and the second is to promote opportunities for the understanding and enjoyment of the special qualities of national parks by the public. This second purpose includes opportunities for open air recreation. However, if it appears that there is a conflict between the two national park purposes, greater weight to be attached to the purpose of conserving and enhancing the natural beauty, wildlife and cultural heritage of the national park (this is known as the Sandford Principle⁷). When national parks carry out these purposes, they also have the duty to foster the social and economic well-being of local communities within the national park. The special qualities of the New Forest – and one of the reasons why it is designated as a national park – include the opportunities for recreation. The national park purposes

⁷ Named after Lord Sandford, who chaired the 1974 National Parks Policy Review Committee.

recognise the need to ensure the public's enjoyment of the National Park is not to the detriment of the conservation and enhancement of its wildlife.

Recreation Management Strategy (RMS)

- 4.4 The National Park Authority's Recreation Management Strategy (RMS) sets out a strategic direction for the management of outdoor recreation in the New Forest National Park from 2010 – 2030 (NFNPA, 2010). More recently it has been recognised that the strategy needs updating. Forestry England, Natural England, Hampshire County Council, New Forest District Council, Test Valley Borough Council, the Verderers and the New Forest National Park Authority have been working together on that update, which included a Future Forest consultation in 2017 and further public consultation in 2018.
- 4.5 The update⁸ identified 22 strategic actions which fall under seven broader objectives:
- Convey the things that make the New Forest National Park special to both visitors and local people in more consistent and effective ways, so that they enjoy it, come to value it, want to care for it and do not inadvertently damage it;
 - Address significant and/or widespread negative impacts caused by recreation in the most appropriate, proportionate and effective ways;
 - Reduce the barriers that limit participation in beneficial outdoor recreation among those who need it most;
 - Protect and enhance the New Forest's working and natural landscape, and improve the recreational experience, by influencing where recreation takes place;
 - Increase the level of funding available for recreation management so that it is sufficient to address both existing and upcoming needs;
 - Collate data and evidence to help inform the ongoing management of recreation;
 - Regularly review progress against agreed recreation management actions and adapt forward plans to protect the special qualities of the National Park and enable people to enjoy and benefit from them.

⁸ May 2019 update, <https://www.newforestnpa.gov.uk/app/uploads/2019/07/Recreation-Management-Strategy-Strategic-Actions.pdf>

- 4.6 The Recreation Management Strategy therefore plays a wider role than that required to mitigate the impacts of recreation on the SPA/SAC arising from new development. The Recreation Management Strategy is much broader in its aims and relates to people visiting from anywhere, including people on holiday.

Existing mitigation measures for local housing growth

- 4.7 Appendix 3 summarises current mitigation measures in place, established by the relevant local planning authorities. It is anticipated these will be absorbed into the current strategy. The current mitigation include a People and Wildlife Ranger post (1 full-time post, established in 2015) funded in-perpetuity by New Forest District Council and hosted by the National Park Authority.

Other relevant visitor management elements

- 4.8 Visitor management infrastructure and facilities relevant to the SAMM within the New Forest SAC/SPA/Ramsar include:
- 147 formal car parks (with around 4400 parking spaces) and around 123 other parking locations (lay-bys, gateways etc) (see Map 2) with around 269 parking spaces (these figures exclude town/village centre car parks and lay-bys on the A31). Many of these car-parks were established in the 1970s.
 - Over 100 miles of off-road cycle tracks and a range of promoted walking routes.
 - 10 Local visitor information centres that include shops, cycle hire venues etc that provide leaflets, maps and other information⁹. There are also unstaffed information points based at various locations in the National Park.
 - Visitor information centre at the New Forest Heritage Centre. Forestry England also run the New Forest Reptile Centre and an information and interpretation unit at Bolderwood during weekends and school holidays from April to October.
 - Guidance for visitors on responsible behaviour, including the New Forest Code¹⁰ and a range of information on specific activities.

⁹ See <https://www.newforestnpa.gov.uk/visiting/visitor-information/where-to-get-information/local-information-points/>

¹⁰ See <https://www.newforestnpa.gov.uk/visiting/help-care-for-the-forest/new-forest-code/>

- Online visitor information provision on a range of organisation websites and also the official tourism website¹¹.
- A number of different rangers and other staff with a role in face-to-face engagement. Ranger teams summarised in Appendix 4.
- NPA has an ambassador scheme.
- Public Space Protection Orders (PSPOs) issued by New Forest District Council and applying to the New Forest allowing enforcement to restrict the lighting of fires/barbeques and also covering petting/feeding livestock¹².

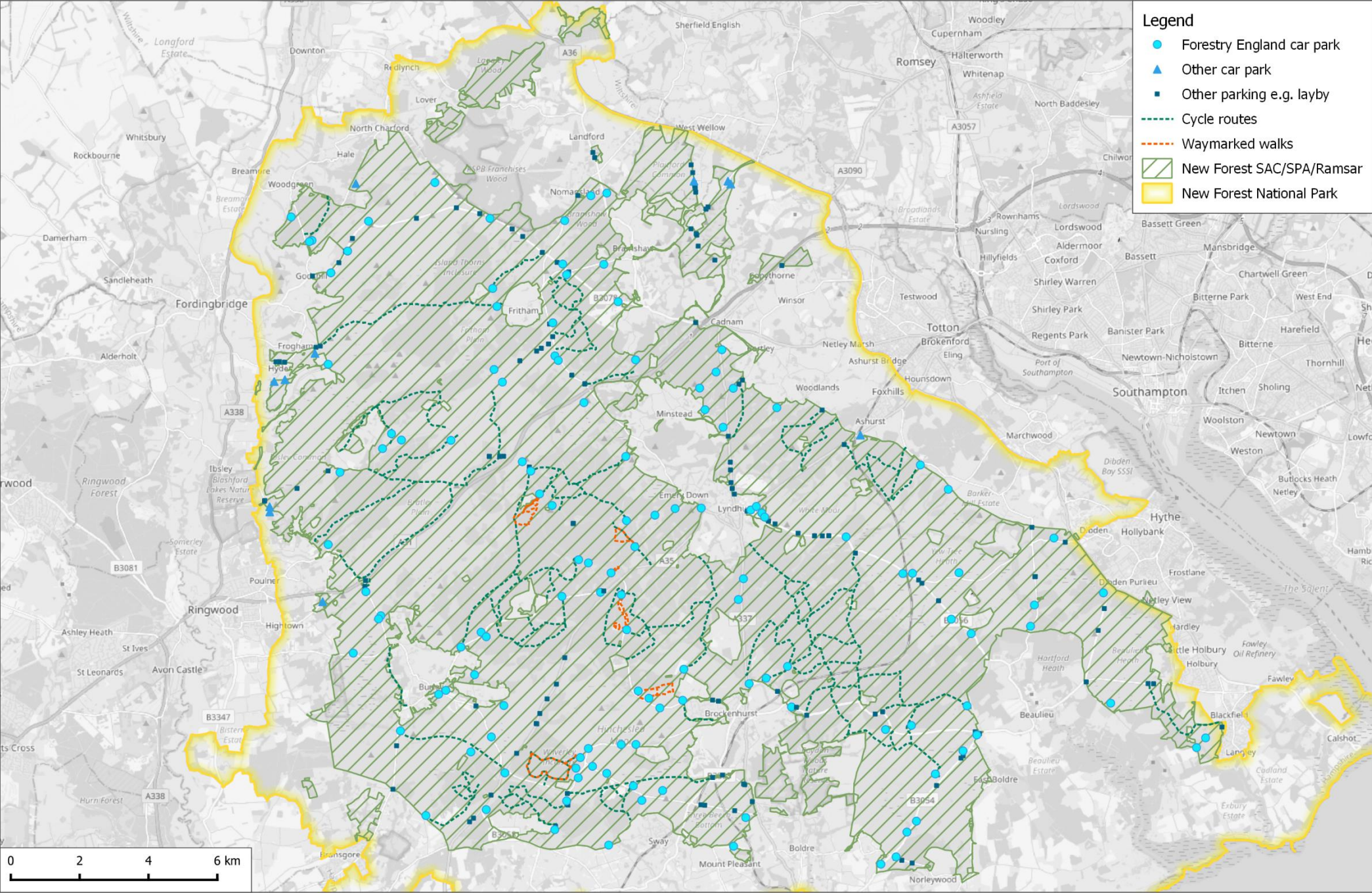
4.9 Many activities are also covered under local byelaws (which are relevant on National Trust and Forestry England land) and all the main landowners require official permission for many activities (including commercial and non-commercial groups events). On the Crown Lands, relevant activities that require permission range from organised races and charitable events to scientific study. Forestry England encourage groups to apply for permission and organise activities and events formally, as this ensures there is a good understanding of what is taking place and a system for appropriate management and control has been established. This ensures that more organised activities and events are not relevant to the SAMM as mitigation is already in place.

4.10 Potential changes in the future include the instigation of car park charges, which Forestry England are considering together with local partners.

¹¹ <https://www.thenewforest.co.uk/>

¹² See <https://www.newforest.gov.uk/article/3205/Public-Spaces-Protection-Orders-consultation>

Map 2: Existing visitor infrastructure.



5. SAMM package

Introduction

- 5.1 The overall aim of the SAMM package is to comply with the Habitat Regulations by ensuring that adverse effects on integrity from recreation use associated with Plan-led housing growth can be ruled out, alone or in-combination.
- 5.2 This can be achieved through:
- Redistributing access in time or space;
 - Changing visitor behaviour to reduce and avoid impacts;
- 5.3 The SAMM measures identified for the New Forest are broken down into three broad themes:
- Access infrastructure and projects;
 - Engagement;
 - Monitoring.
- 5.4 These are summarised in Figure 1 which lists the different components of the SAMM package. The text in this section sets out background and further details structured around these three themes and, at the end of the section, Table 3 provides a clear summary and list of the measures. These measures have been selected based on the level of housing growth and scale of mitigation necessary.

Project Manager

- 5.5 A Project Manager post will be required to oversee the mitigation work, keep the delivery on target, liaise with delivery partners, local authorities and stakeholders. The Project Manager will need to be a full-time post for the initial years of the strategy, particularly while the access infrastructure changes are taking place. In the long term it may be possible for the post to drop to a part-time role.

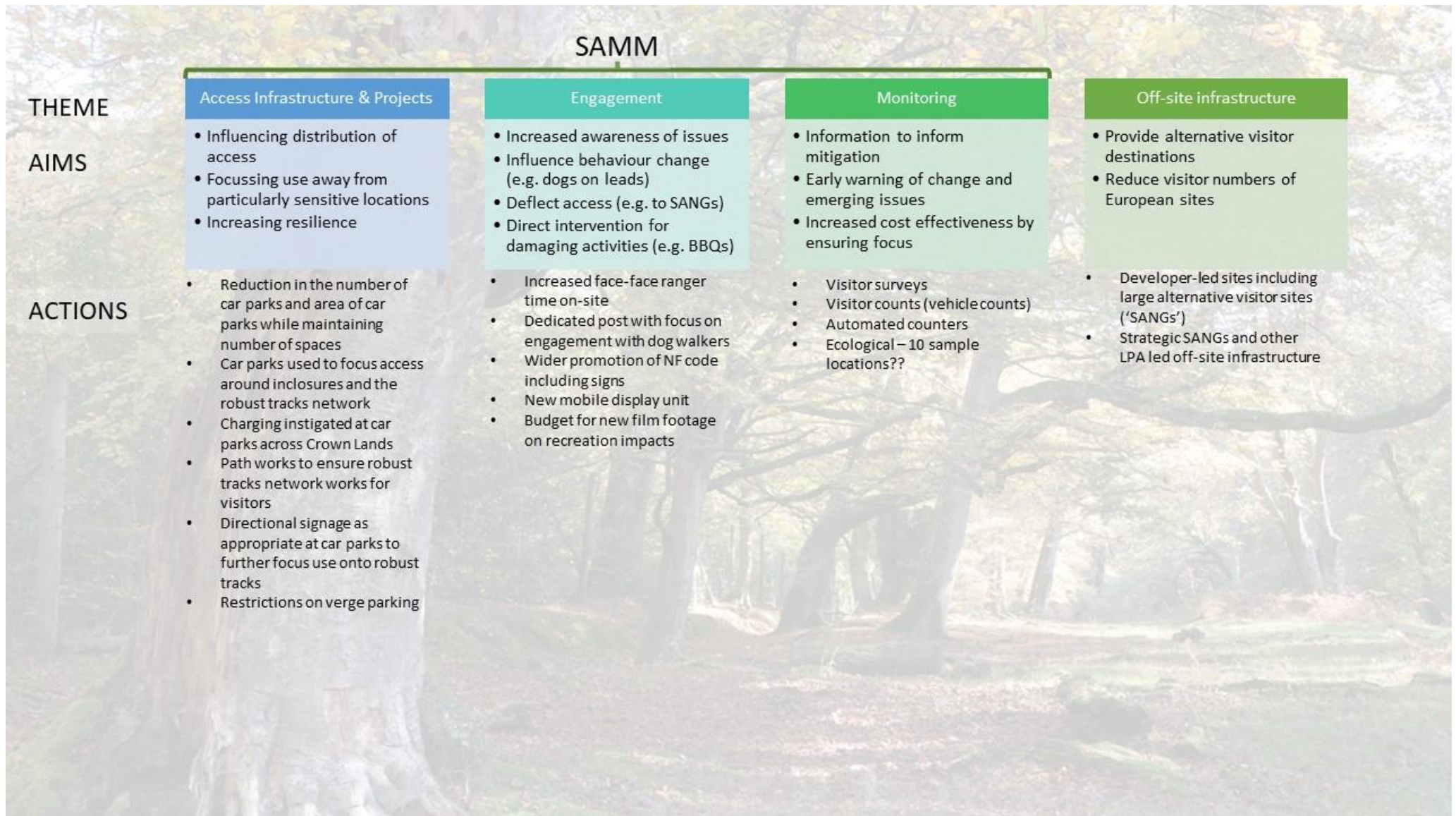


Figure 1: Overview of SAMM package

Access infrastructure and projects

Parking

- 5.6 The current distribution of car parks was established in the 1970s and the number of car parks, their distribution and the number of spaces they provide does not reflect what would be necessary if they were implemented from scratch now. The current situation is costly to maintain, does not focus use in the more robust locations and does not necessarily fit well with the robust path and tracks network.
- 5.7 The on-site visitor survey (Liley, Panter, et al., 2020) showed a clear and striking pattern of high levels of use by local people, particularly dog walkers, at the car parks around the periphery of the New Forest SAC/SPA/Ramsar site. These visitors were driving into the Forest and tending to select the first car park they came to.
- 5.8 There is an opportunity to adjust or relocate existing parking provision within sensitive locations to more environmentally robust locations that can sustain recreational visitors whilst limiting detrimental impacts on the rare habitats and species of the Forest. These might include parking areas within pine woodland inclosures and car parks where dog walking circuits and footfall can be easily directed along well surfaced forestry tracks away from ecologically sensitive areas. This approach may also encourage visitors to use alternative greenspace provided closer to their homes and outside of the designated sites for regular daily dog exercise whilst not excluding access and should help to reduce overall visitor pressure on sensitive habitats in the New Forest SAC/SPA/Ramsar.
- 5.9 Forestry England, working with the National Park Authority and other partners on the RMS steering group, are developing a spatial plan that sets a trajectory to fundamentally shift parking provision within the New Forest. The Plan identifies a set of clearly defined principles and sets out locations where car parks could be removed, locations where parking could be increased/extended and potential locations for new car parks. While the Plan is not currently finalised, it represents the opportunity to deliver significant mitigation and will ensure parking provision is fit for purpose in the future. It is anticipated that the plan will result in an overall reduction in the overall area of land used for parking, a reduction in the number of locations where parking is possible while retaining the same number of parking spaces.

5.10 In order to progress the Plan, it will be necessary to:

- Finalise the broad principles and overall approach such that relevant parties (including Natural England) have agreed to it (i.e. how many car parks to close, which to expand etc)
- Programme relevant consultation and engagement;
- Undertake the detailed design and survey work to allow specifications for works and detailed plans for individual car parks to be drawn up;
- Undertake necessary assessment (for example HRA) and any refinements to address nature conservation, landscape or other constraints alongside the detailed design;
- Commissioning of works/implementation including oversight and liaison.

5.11 Forestry England are considering the implementation of parking charges within the New Forest, and this is relevant as the implementation of charging will potentially contribute to the long-term costs of maintaining car parks and other visitor infrastructure. Charging could change visitor use and numbers, though there is evidence that implementing charging would not necessarily mean that use will decline (Weitowitz et al., 2019). The level of charges implemented and the potential for seasonal or annual permits could potentially influence how much parking affects use by local residents visiting sites regularly. The implementation of any car park charging would be likely to happen prior to the spatial plan and it could not be relied on to have any mitigation benefit. The SAMM is based on the assumption that parking charges could be established and that Forestry England would be able to maintain car parks in the future.

5.12 While existing work has already taken place on the spatial plan, further work is clearly required. Ultimately some of the work to change or close car parks could be very simple to undertake, involving little more than blocking entrances with a gate or low bund. Some sites will be more complex. Recent works at Hatchett Pond have cost in the region of £150,000 to move and redesign a single car park, and this highlights the considerable costs and logistical challenges that may be involved at particularly sensitive sites or where there are particular constraints (for example regarding drainage). Given the strict protection afforded through the Habitats Regulations, alongside Commons legislation and landscape issues there are likely to be particular challenges in finalising and implementing the spatial plan.

5.13 Costs are therefore included within the SAMM to assist with implementation of the spatial plan, and these would cover consultancy support, design and

money to fund works on the ground. Given the current uncertainty around what will be in the spatial plan an indicative sum is allocated towards this element of SAMM and this will need revision over time.

Gateway Project(s)

- 5.14 There may be opportunities for the provision of additional access facilities that are connected to the New Forest SAC/SPA/Ramsar and lie outside the European site boundary. Such opportunities could well be very limited and the amount of mitigation that might be achieved would be very site specific. There may be constraints around grazing, planning permission etc. Nonetheless, were such opportunities to arise (for example through work with local landowners or land that comes up for sale), the mitigation benefits could be significant and cost effective in the long term. Good opportunities would be where adjacent farmland, paddocks or other land has no current public access and could be made accessible, with the potential to set parking back and off the New Forest SAC/SPA/Ramsar and to provide dedicated areas for dog walking or other activities. These spaces could then be managed in a similar way and be in the same local landscape to the Forest. There may also be potential to improve existing rights of way on the periphery, which would act as alternative recreational routes to those found within the New Forest SAC/SPA/Ramsar.
- 5.15 No specific cost has been allocated to such provision, but should opportunities arise, there should be scope to review the mitigation budget and reallocate monies if there is demonstratable mitigation benefit. These measures could also be part of the SANG component for relevant authorities. Furthermore, there may also be other relevant funding sources and as such developer contributions could be used as part funding.

Paths and tracks

- 5.16 Robust paths and tracks form a network across the New Forest enhancing the visitor experience and reducing the impact of footfall on the natural environment (Lake et al., 2020). The paths are unbounded, although they may have geotextile and geogrid footings and, where they pass through wet habitat, bridges or other simple infrastructure may be present.
- 5.17 Maintenance of paths and tracks can be a component in directing visitors and focussing use, helping to ensure visitors stick to the robust path network. Works on paths will link to the spatial plan, as the car parks where use will be focussed will need to have suitable path provision directly from

the car park. There are also short gaps in the robust path network across the Forest. Most gaps are small, less than 100m in length. Creating new sections of appropriate paths to join the network together would protect the sensitive natural habitat, and in wetter areas prevent the spread of footfall across the open forest. Examples of path works and indicative costs are provided by Paths for All (2021). All maintenance work and any new sections of path would need to be undertaken sensitively to ensure use of appropriate materials and avoid any net loss of habitat. A range of key species depend on path/track edges and bare ground and any work will therefore need to be carefully planned and fit with the species and habitats present. Appropriate signs/waymarkers may also be required to direct visitors.

Engagement

Ranger time

5.18 A mobile ranger team is a key component of other mitigation schemes such as those on the Solent, the South-Devon sites, the Thames Basin Heaths and the Dorset Heaths. In these examples the rangers form a mobile team that spend the majority of their time outside, talking to visitors, influencing how visitors behave and showing people wildlife. In these examples the ranger team is a discrete body whose purpose is mitigation delivery (rather than routine management, maintenance, membership recruitment or other such tasks). Monitoring data can help inform the ranger effort and ensure their work is directly linked to where issues from local recreation use are occurring.

5.19 There is a clear role for increased ranger time in the New Forest, in particular increased Ranger time could:

- Direct people away from areas where there is sensitive wildlife;
- Reinforce good/responsible behaviour;
- Explain issues around dogs out of control and target talking to those whose dogs are not under control;
- Approach those cycling off cycle routes, approaching livestock, parking on verges or any visitors starting fires/barbeques;
- Watch for wild fires and report them swiftly (e.g. prolonged hot weather periods and peak visitor days);
- Show people wildlife, highlight the importance of the New Forest for wildlife and celebrate that richness;
- Some basic monitoring and recording (e.g. of incidents).

- 5.20 Ranger time can be targeted to particular locations (e.g. around the periphery, car parks where particular uses or issues occur etc). Rangers can focus where there are particular concentrations of breeding or roosting birds or other sensitive wildlife. It is likely that ranger provision will have a particular mitigation role in the short-term, as the infrastructure works may displace visitors and there may be some public opposition to them. It may be some time before the infrastructure works are effective as mitigation.
- 5.21 The National Park Authority and Forestry England are the main parties currently deploying rangers, while the National Trust, the Wildlife Trust and Hampshire County Council also have staff with an on-site presence in and around the New Forest. The rangers in each of these organisations have slightly different job descriptions, tasks and cover different areas. There is an existing ranger forum that provides some consistency of approach and collaboration on the ground.
- 5.22 Nonetheless, the varied ranger presence and different organisations hosting ranger staff (some of which overlap spatially) potentially creates confusion for visitors, there is a risk of mixed messaging, ranger provision is potentially more expensive and there is a risk of staff being diverted by other organisation priorities. Ultimately having multiple different ranger teams may be less effective than where a single ranger team delivers mitigation.
- 5.23 Additional ranger time will be important and there are different ways in which such ranger provision could be delivered. In the long term the best approach will be to have a dedicated ranger team with a mitigation role that is clearly distinct and separate from other work streams. The National Park Authority People and Wildlife Ranger post (as funded by developer contributions in NFDC) provides a potential model. This will ensure transparency, provide a clear separation from other duties of the delivery organisation and ensure consistency. In the short term the ranger forum will play a key role and close collaboration and shared working practices will be important. There is some work to be done to establish the best way to host and deliver the ranger provision. It may be that in the short-term hosting within different organisations cannot be avoided. Along with hosting, it will be necessary to clearly define roles, in particular with respect to enforcement. Whether mitigation rangers should have enforcement powers (e.g. in relation to the relatively new PSPOs relating to livestock petting/feeding and fires/barbeques) could be open to debate and should be reviewed over time.

- 5.24 Estimating the level of additional ranger provision necessary is difficult. Assuming an increase in access associated with new housing of around 11.4% based on the growth in relevant local plans and an estimate of 6 million current visits per year (see Liley, Clarke, et al., 2020) would mean around 684,000 additional person visits per year (assuming visit rates match visits from current housing and there is no additional deflection from alternative greenspace provision). This is perhaps around 325,714 groups¹³ and assuming individuals typically visit around 166 times per year, would mean rangers would need to engage with around 2000 new groups of people.
- 5.25 One way to consider the issue is a check of other mitigation schemes as to the level of warden provision. A review of ranger provision on the Solent (Liley et al., 2023) suggested ranger provision was too low – and calculated that in 2021/22 the ranger time was equivalent to around 30 minutes ranger time over the winter per new dwelling (that came forward within the zone of influence during the year). If new housing growth around the New Forest is likely to be in the region of 4,000 new dwellings per year (within the 13.8km zone of influence) then the equivalent levels of ranger time would be 2000 hours per year. If a full-time ranger is able to achieve 800 hours per year out talking to visitors¹⁴ then this would require a ranger team of 2-3 full-time equivalents.
- 5.26 Equating ranger hours to dwellings is harder to calculate for the heathland mitigation schemes such as Dorset or the Thames Basin Heaths. However, it is possible to consider ranger coverage in terms of the area of the heaths. On the Thames Basin Heaths, 9 rangers were employed per year over the period 2015-2019 (Liley & Panter, 2020a) and the Thames Basin Heaths are around 8000ha, so the provision is around 1 ranger per 888ha. Given the New Forest is around 30,000ha then equivalent coverage would be 34 rangers. The Thames Basin Heaths are fragmented and not as contiguous as the New Forest, which means ranger presence can be more focussed.
- 5.27 In Table 2 we estimate the number of ranger posts that might be necessary to achieve different levels of coverage for the New Forest car parks, based on the number of car parks and different amounts of coverage per car park. If we assume a ranger post might involve 200 days actually out and engaging

¹³ Assuming a group size of 2.1 (Liley, Panter, et al., 2020)

¹⁴ 800 hours is relatively conservative and could be achieved with 4 hours on site per day, 200 days per year

with visitors in the New Forest per year, an assumption that a ranger might cover 3 car parks in a day (potentially allowing 1-2 hours at each, plus travel time) and an aim to visit each car park roughly weekly over the year (50 visits per year car park) would mean a team of 12.5 rangers is required (based on the current number of car parks), this would drop to 9.4 posts if 4 car parks could be covered per day. Clearly one of the advantages of consolidating car parking would be to make engagement easier and reduce the amount of ranger time needed.

Table 2: Estimates of ranger posts to achieve different levels of coverage of New Forest car parks.

	Scenario 1: 3 car parks covered per day	Scenario 2: 4 car parks covered per day
Ranger days per yr per post	200	200
Car parks visited per day	3	4
Car parks total	150	150
Visits to each car park per year	50	50
Number ranger posts required	12.5	9.4

- 5.28 These figures are a guide and it is potentially impossible at this stage to set a definitive level of coverage. A more realistic approach could be to initially aim for an increased ranger team of around 5 staff, and for these roles and the scale of the team to be reviewed periodically. The role and need for ranger time is likely to change with time, for example as the number and distribution of car parks shifts.
- 5.29 The ranger team needs to be adequately resourced and this should include mobile information provision, printed material and social media content/support. The existing New Forest Code has been widely promoted and updated and has been widely distributed, but there is scope to increase how this is promoted, used and ensure it remains high profile for all visitors.
- 5.30 There are also roles for volunteers to help support ranger team. Showing people wildlife and highlighting the presence of local wildlife are tasks particularly suitable to volunteers.

Targeted work with dog walkers

- 5.31 In addition to the ranger team, there is merit in dog focussed posts. Dogs are a particular issue in terms of contamination, disturbance and livestock worrying and influencing dog walkers should be a target for mitigation delivery. The National Park Authority have already been working with the New Forest Dog Owners Group and have been running events.
- 5.32 These could be extended, and 2 dog focussed posts are included in the SAMM to run regular guided walks, promote SANGs and areas for dog walking. This would build on mitigation measures that have already been undertaken, such as the provision of dedicated dog activity areas in Totton and Gang Warily at Fawley, by New Forest District Council. In the longer term, working with relevant partners, there is the potential to establish a dog project, potentially learning from projects at other heathland sites such as Dorset¹⁵, South-east Devon¹⁶ and the Thames Basin Heaths¹⁷. There is also scope to link with the work being undertaken by Bird Aware Solent (who also have staff with a dog focus). Over time it may work for the two New Forest posts to diverge, with one taking on more of a site based, patrolling role (even with scope for enforcement, as appropriate and necessary).

Fires

- 5.33 Wildfire is an increasing concern with climate change. Access plays a role in increasing the risk of fire (through barbeques, campfires, discarded cigarettes etc) and high visitor numbers may also exacerbate fighting fires (e.g. through hindering access by emergency services). The existing PSPO relating to fires and current land management (grazing and controlled burns in the winter limit the amount of flammable material) both help to ameliorate risks. Nonetheless, due to the scale and changing risk the SAMM includes elements to help address the additional risks from recreation use. A wildfire forum or some level of proactive co-ordination between partner agencies will increase awareness among staff and ensure all are prepared. Resources could also be used to support increased training and equipping of staff, for example through bringing in specialists to run training, review procedures and work with partners.

¹⁵ See <https://www.dorsetdogs.org.uk/>

¹⁶ See <https://www.devonlovesdogs.co.uk/>

¹⁷ See <https://www.tbhpartnership.org.uk/heathland-hounds/>

Monitoring

- 5.34 Monitoring is required to help inform mitigation, confirming efficacy or highlighting where additional measures or changes are required (e.g. focussing ranger time at key locations). Monitoring also plays a key role in furthering understanding about changes to recreation behaviour and how this may be impacting key biological features of the forest. Visitor monitoring would show changes in car park use and changes in behaviour (for example, how people are spreading out from car parks, changes in activities etc.). Vegetation, key habitat features and bird monitoring would show any impacts of any observed changes. Integrating the results from the different strands (together with existing monitoring already carried out, such as specific species monitoring) will be vital in providing an overall narrative of change.
- 5.35 Monitoring should therefore include visitor numbers and behaviour, vegetation communities and key habitat features and species. Monitoring should also include a record and analysis of livestock incidents (including worrying, issues with the public etc.) which should be integrated with existing data, e.g. on traffic incidents. This monitoring should allow any changes to be picked up or hotspots flagged, enabling interventions to be targeted as necessary. For example, repeated incidents at a car park could be used to target ranger time at that location.

Visitors

- 5.36 Visitor numbers could be quickly and effectively monitored by conducting regular vehicle counts at all of the forest car parks, and these repeated at similar times in different years (every 2-3 years). This would provide a metric for understanding levels of recreational use at different points through the year as well as identifying longer term trends in where visitors are going, feeding into the spatial plan and how ranger time is targeted to different locations. Data collection could follow the same method as the vehicle counts conducted in 2018/19 (Panter & Saunders, 2020), which would act as a baseline for data comparison. The routes and parking locations that are included in the counts will need to be reviewed periodically to take into account any changes in parking provision. It would be possible to add visual counts (vantage point counts) into the methodology, for example at a sub-sample of car-parks a visual count undertaken at the time of the visit to record the number of people, number of dogs, dogs on leads etc within a predefined count area (visible from the car park).

- 5.37 Face-to-face visitor interviews carried out on-site would provide more detailed information on where visitors are coming from, how often they visit, where they go and their awareness of the forest's ecology. These data will identify any changes in visitor patterns and behaviour over time and can be used to assess the effectiveness of mitigation measures, informing future delivery. The surveys could follow the same method as the 2018/19 visitor surveys (Liley, Panter, et al., 2020) but at a subset of locations (e.g. 20 locations rather than the 60 locations used in 2018/19). Surveys should be carried out at busy locations with a good geographical spread across the forest. These locations are likely to include, but not necessarily be limited to, car parks. Surveys should be repeated every 3-5 years.

Vegetation communities, key habitat features and species

- 5.38 Any impacts of changes in recreational pressure and behaviour identified through visitor monitoring could be measured at 20 locations (as above). Measures could include:
- (i) Fixed point photography each site.
 - (ii) Sampling vegetation in specified habitats within a defined zone (e.g. 500m, but this could be based on visitor behaviour) around the location. Variables measured for each habitat selected for monitoring are likely to include percentage cover of different plant species and bare ground and a measure of vegetation volume (e.g. using a drop disc).
 - (iii) Systematically recording visual signs of damage, deterioration or contamination linked to access, e.g. dog fouling.
 - (iv) Recording changes in unsurfaced paths ("desire lines"). These could be evaluated in a GIS using aerial imagery (e.g. comparing the number of paths crossing each grid square within the monitoring zone between years).
 - (v) Changes in key habitat features. These will depend on the features present at each site and should be informed through site visits and consultation with experts with knowledge of the sites before monitoring is started. Relevant features could include (but need not be limited to) the abundance of deadwood within woodland, the extent and diversity of marginal vegetation in waterbodies; specific

vulnerable habitats (e.g. bogs); and presence and population size of any key species not currently monitored.

- (vi) Changes in breeding bird populations e.g. within 1km of key locations, using standard methods.

5.39 Biological monitoring should be informed by site knowledge to ensure that the relevant features/habitats are selected for monitoring at each site. It should take into account any changes in management (e.g. prescribed burns, scrub management, habitat restoration etc. also changes to infrastructure e.g. car park surfacing or drainage). Timing should be reviewed, but every three years is suggested as an initial approach.

Table 3: List of measures. Those identified as initial priorities are ones which should be the focus in the initial years of the project.

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
Access infrastructure	Redistribution of parking	Major programme of capital works to redistribute parking, aligning to the inclosures, moving car parks further into the Forest and focusing parking linked to the robust tracks network through Forestry England's spatial plan	FE, Verderers, Natural England and possibly others	Most visitors arrive by car and network of car parks a legacy from decades back. Clear opportunity to make clear difference in where and how people can access parts of the Forest and reduce pressure	Needs to follow/coincide with work on robust tracks network and likely to require a rolling programme of works over a number of years. Links to promotion and potential for car parks to work for particular user groups too - e.g. means of clearly marking/directing cyclists to those car parks on the cycle routes. Costs need to include consultant fees to cover HRA, civil engineering aspects etc as well as actual works.	
Access infrastructure	Robust tracks network improvements	Programme of works to improve robust tracks, creating clear obvious and promoted routes that are relatively robust	FE	Network already exists and is mapped, however some areas such as Holmsley require additional linkages etc. and good path links between car parks and inclosures are not always present	Priority to establish before or alongside changes to parking; also links to promotion, way marking etc. Any infrastructure will require the Verderers permission.	
Access infrastructure	Path maintenance	Programme of maintenance works to the robust track network	FE	Maintenance of robust path network and main tracks in relation to visitor use	Rolling programme of maintenance works. Any infrastructure will require the Verderers permission.	

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
Access infrastructure	Verge parking	Restrictions on verge parking	FE, NPA, NT, parish councils, Verderers etc.	Important to ensure verge parking doesn't increase with changes to car parks. Restricting verge parking part of overall approach to focus recreation use more	Precise measures involved and timing depends to some extent on changes to car parking, implementation of spatial plan and instigation of charging. Verge parking particularly a problem in the villages where impacting on a number of rarities including Small Fleabane, Chamomile, Pennyroyal etc.	✓
Access infrastructure	Waymarking	Waymarking to ensure clear routes from car parks and directing visitors on the robust tracks.	FE	Changes to parking and robust tracks may create some confusion.	Part of a package to ensure clear direction for visitors and focus of use. There are existing waymarkers and cycling markers and scope.	
Overarching	Project Manager post	Post to oversee infrastructure works, budget oversight	various	Post necessary to drive works forward and manage budget	Project manager post necessary in-perpetuity; initially full-time post and major focus on infrastructure works, in longer term could shift to a part time post with more admin/oversight role	✓
Engagement	Enforcement of PSPOs	Powers to enforce PSPOs (fire and livestock petting)	FE, NPA, NT	Ensures potential for rangers or others to ensure compliance	Could be rangers, keepers or others undertaking the enforcement and how enforcement powers used may need to be reviewed over time	

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
Engagement	Dog walking engagement officers	Dedicated posts with remit to work with dog walkers and promote responsible behaviour, working with existing dog forum	NPA (could be others)	Ensures engagement with dog walking community and focus on key issues around disturbance to ground nesting birds, livestock and dog fouling	Role would support rangers and work with them, as well as establishing dedicated events, providing material and close working with relevant groups and stakeholders. Focus on positive engagement but scope to shift some of the funds (and potentially one role) to more enforcement related work as necessary/appropriate	✓
Engagement	Increased ranger time	5 full time	FE, NPA, NT and other landowners and partners	Face-face engagement to influence behaviour and raise awareness	Currently different ranger teams in place with overlapping roles. Long term aim to ensure joined up, coherent approach.	✓
Engagement	Ranger training and collaboration	Budget for team building sessions, training and collaboration	FE, NPA, NT	Currently there are different ranger teams in place with short term need to ensure comprehensive, joined up coverage and consistent messaging with agreed rules for the whole New Forest. Need for consistency across commons, crown land etc. NF code well	Short term need to ensure no gaps between ranger provision across different organisations	✓

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
				subscribed tool but a need for consistency in messaging and approach		
Engagement	Ranger resources (vehicles)	2 Vehicles for additional rangers	FE, NPA, NT	Vehicles provide clear visible presence and essential to access areas	Vehicle costs may need to change with time (for example ebikes may provide alternative)	✓
Engagement	Wildfire forum	Proactive co-ordination between partner agencies and support for increased training and equipping of staff	FE, NPA, NT and other partners (including emergency services)	Wildfire an increasing risk and concern and even with PSPO wildfires are more likely, more intense and likely to take longer to extinguish. Access and visitors exacerbate risk. Role for forum to ensure partners are informed, trained and prepared	Already a recognised concern and emergency procedures etc in place. SAMM would provide some additional strategic resources to ensure additional risks linked to access addressed	✓
Engagement	NF destination website	Web content providing information for regular and more casual visitors, encompassing walking routes, cycling routes, areas for different activities etc.	NPA	Potential for better information provision directing users to locations (the robust tracks and redistributed parking locations) and targeted towards more local residents	Go New Forest is existing main portal (tourist focussed) with other information scattered on various websites. Potential for this to be expanded and improved.	

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
Engagement	Mobile Display Unit	Mobile Unit including base vehicle, conversion and kitted out with interpretation and resources	NPA	Mobile base for interpretation provision and ability to move and target locations as necessary	Displays and material to include/be relevant for local visitors	
Engagement	Comms campaigns post	Post at NPA to provide communication support and campaigns to raise awareness and influence behaviour	NPA	Social media and availability of fresh material online are key		
Engagement	Educational campaign material (NF code signs, leaflets etc)	Costs to cover additional printing and other costs for material	NPA	Ensures budget for adequate material for rangers and others	£13,000/year educational campaigns materials (NF Code signs/leaflets etc)	
Engagement	Marketing budget for social posts/film creation	Budget to fund short film clips and video content for social media and web	NPA	Short films and clips provide fresh content for social media and web and can focus on issues live at the time	£5,000/year marketing budget for promoted social posts/film creation	
Engagement	New camera/video equipment	Purchase of equipment	NPA	Short films and clips provide fresh content for social media and web and can focus on issues live at the time. Need for additional equipment identified by NPA.	£3,000 one-off for new camera/video equipment (current is end of life).	

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
Monitoring	Long term visitor monitoring - vehicle counts	Driving a set route around the forest on several dates through the year, counting the number of parked vehicles at each parking location. To be repeated every 2/3 years to pick up changes over time.	Fieldwork could be conducted by rangers from NFNPA, FE etc.	This provides a simple method of gauging how many people are visiting the forest at particular times through the year, and also enables longer term trends in visitor patterns to be identified.	Routes and parking locations will need to be regularly reviewed to take into account any changes to parking.	✓
Monitoring	Long term visitor monitoring - visitor interviews	Face-to-face interviews with visitors, using the same method as the 2018/19 visitor survey, but at a subset of locations, dovetailed with the ecological monitoring. To be repeated every 5 years.	Third party would be best to avoid any bias in interviewees' responses. With permission from relevant landowners.	This will provide more detailed up-to-date information on how visitors are using the forest for outdoor recreation and where they are coming from.	In 2018/19, 60 locations were used, but for ongoing monitoring a subset of 15-20 locations could be used and these dovetailed to the locations used for ecological monitoring.	
Monitoring	Incident log of livestock worrying (dogs), petting	Incident log for livestock worrying and petting incidents published annually (as the vehicle incidents currently are)	NPA or Commoners Defence Association	Provides clear record of number of incidents so any patterns can be picked up and addressed (e.g. through ranger provision)	Livestock traffic incidents are already logged and analysed. Would require some database or recording system to be established and maintained and some means to ensure consistent recording effort.	✓
Monitoring	Monitoring changes in impacts to vegetation at key	For a sample of around 20 car parks, undertaking (i) vegetation monitoring including species cover, bare ground, vegetation volume within different	NE, FE, possibly others	To monitor any impacts of changing recreational pressure around key recreation locations and	Interpretation of monitoring should take this into account. Where monitoring highlights damage is occurring this will be	✓

New Forest SAMM Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
	recreation locations (including, but not limited to, car parks)	habitat types; (ii) analysis of footpaths (using aerial imagery). Baseline plus repeat every 3 years.		guide future interventions, such as ranger activities.	able to trigger closure of car parks at short notice to allow recovery.	
Monitoring	Monitoring changes to key features at key recreation locations (including, but not limited to, car parks).	Key habitat feature monitoring depending on vegetation type and features present (e.g. abundance of deadwood within woodland; extent and diversity of marginal vegetation in ponds, pools and along streamsides; particular habitat features such as bogs; presence and population size of any key species not currently monitored). Baseline plus repeat every 3 years.	NE, FE	Data on change to inform other mitigation strands (e.g. ranger provision and other engagement)	Requires identification of key features within defined distance of retained car parks and should be tailored to each site.	✓
Monitoring	Monitoring changes in breeding bird populations at key recreation locations (including, but not limited to, car parks).	For a sample of around 20 car parks, monitoring any changes in breeding bird populations within 1km, baseline plus repeat approx every 3 years.	NE, FE	To provide insights into changes in breeding bird populations due to changing patterns of recreational behaviour and to inform any further mitigation measures required.	Targeting Annex I pops and breeding waders only	✓
Monitoring	Narrative of change	Collation and analysis of SAMM monitoring data plus existing ongoing monitoring data to assess changes in recreation impacts as a result of SAMM strategy measures	3rd party	To ensure that results from various monitoring strands are brought together to give an overall narrative of		

New Forest S A M M Strategy 2023

Type of measure	Mitigation measure	Description	Parties involved in delivery	Justification	Notes	Initial priority
				changes due to changes in recreational pressure and to help identify where adjustments to measures may be needed.		

6. Implementation

Developer contributions and in-perpetuity costs

- 6.1 Mitigation is secured for the duration of the impact and it is assumed the strategy will run for as long as it is required, adjusting as necessary to changing levels of house building and the impacts arising.
- 6.2 Some measures in this strategy are short-term, one-off measures while others need to run for many years, often extending well outside the Plan period. Changes to access infrastructure (the redistribution of car parks), the provision of SANGs (which are secured indefinitely) alongside the increased awareness raising and education work should ensure that need and annual cost for SAMM can decrease with time. Appendix 5 shows the time period each measure is costed for. These times and costs will need to be subject to regular review.

Per dwelling tariff

- 6.3 The cost of the mitigation package is around £21,628,060 (see Appendix 5 for breakdown).
- 6.4 The zone of influence is broad and encompasses a wide area. Within the zone of influence there are around 45,000 new dwellings anticipated by 2036 that will require mitigation (Table 4). If all dwellings coming forward within the zone were contribute an equal amount, this would give a tariff of £489. Given the scale of the zone of influence, and the effect of Southampton Water, visit rates to the New Forest from housing in different local authorities vary, and in particular development that is close to the New Forest is likely to generate a much higher level of recreation use. There is therefore justification in the tariff reflected the scale of impact of a single dwelling in each authority. Using the data from the visitor survey in 2018/19 (Liley, Panter, et al., 2020), we calculated a visit rate per authority¹⁸ and used this to apportion tariffs per local authority so that the per dwelling tariffs are

¹⁸ These visit rates were calculated as the number of interviewees in the survey from each local authority (and that had visited directly from home on a short visit) (see Table 13 in Liley, Panter *et al.* 2020) divided by the number of residential properties in the authority at that time.

proportionate to the likelihood that a resident from that authority might visit the New Forest SPA/SAC/Ramsar.

- 6.5 These calculations were based on the number of interviewees in the survey in relation to the number of houses in the authority area at the time the survey was conducted. By way of a simple example, if the survey involved 10 interviews with residents in authority A (where there were 1000 houses) and 20 interviews with residents from authority B (where there were 10,000 houses), then then the per dwelling tariff for authority A needs to be 5x higher than the tariff for authority B. Having derived a figure for each authority we simplified these with a set value for the two closest authorities (£2,700 per dwelling) and for all other authorities we set the tariff by rounding up to the nearest £100 (Table 4).
- 6.6 Due to the rounding up, the tariffs allow some contingency (around 3.6% of the cost of the SAMM), which will address any uncertainty linked to visit rates varying within authority boundaries or variation in the housing numbers that actually come forward. The tariffs will need to be inflation linked and adjusted annually. Each local authority will need to add any relevant administrative costs and there is also the potential for each authority to vary the tariff according to dwelling type (e.g. flats vs houses) or number of bedrooms as is relevant to the authority.

Table 4: Summary of visitor data, levels of housing growth anticipated for each authority that will require mitigation and the tariffs per authority.

Local Planning Authority	Interviewees from home in original survey and within 13.8km (%)	Number of interviewees in original survey per 1000 dwellings 'visit rate'	Potential amount of housing needing to be mitigated (%)	Suggested per dwelling tariff	Overall contribution per authority based on suggested tariff and level of housing needing to be mitigated
New Forest National Park	874 (23)	56.0	260 (1)	£2,700	£702,000
New Forest District	1781 (48)	26.2	3204 (7)	£2,700	£8,650,800
Test Valley	154 (4)	6.3	1650 (4)	£700	£1,155,000
Wiltshire	147 (4)	5.8	2710 (6)	£600	£1,626,000
Dorset	108 (3)	3.9	3144 (7)	£400	£1,257,600
Southampton	268 (7)	2.5	14,464 (32)	£300	£4,339,200
BCP	290 (8)	2.4	10,313 (23)	£300	£3,093,900
Eastleigh	84 (2)	1.7	6663 (15)	£200	£1,332,600
Fareham	25 (1)	0.7	2572 (6)	£100	£257,200
TOTAL	3731 (100)		44,980 (100)		£22,414,300

Types of development

- 6.7 This strategy applies to any future development, including those granted planning permission and coming forward via permitted development rights that result in a net increase in residential units (i.e. C3 Use Class), located within 13.8km of the New Forest SAC/SPA/Ramsar. Large sites just beyond the 13.8km, out to 15km may also need to provide mitigation and will be assessed on a case by case basis, with the option available for them to contribute to the SAMM if appropriate.
- 6.8 While the strategy is focussed towards C3 Use Class, there are other uses and forms of development that may have impacts from recreation, such as:
- Houses in Multiple Occupation (sui generis);
 - Residential institutions within the C2 Use Class where the residents are not severely restricted by illness or mobility;
 - Student accommodation;
 - Sites for gypsy, travellers and travelling showpeople;
 - Tourist accommodation, including self-catering, caravan and touring holiday accommodation.
- 6.9 For the above types of development, this strategy provides a means of ensuring effective mitigation can be delivered, but each will need to be assessed on a case-by-case basis. While in general each unit for the above could be considered a single dwelling, there may be a need to adjust the rate of SAMM contribution for different types and off-site infrastructure provision will need to be considered on a case-by-case basis. For example, the SAMM rate could be adapted according to occupancy rates for tourist accommodation. Project level HRA for tourist applications will need to consider the location and type of use with respect to the New Forest, as for example a city centre hotel in Southampton would have a very different impact compared to a campsite around the periphery of the New Forest.

Overlap with other mitigation strategies

- 6.10 There are a number of other established mitigation strategies with a SAMM contribution that overlap the zone of influence, for example the 5km zone of influence for the Dorset Heaths covers BCP and part of Dorset Council areas while the Solent mitigation strategy covers all areas within 5.6km of the relevant Solent European sites.

- 6.11 In general, it is assumed that new development within the relevant zones of influence will need to contribute towards each different SAMM, as the measures relate to different sites and issues. While there might be some areas of overlap (e.g. around education work or awareness raising about fires on the Dorset Heaths and New Forest), the messages and issues are not directly equivalent and it cannot be assumed that such measures designed for one site will work in the same way for another.
- 6.12 New green infrastructure and or SANG could however potentially work for multiple European sites and there may not necessarily be a need for development to contribute or deliver multiple SANG sites.

Governance

- 6.13 It will be important, looking forward, that there is flexibility and regular review as to how money is spent and what is needed on the ground. A number of factors (such as Covid, extreme weather conditions, the cost-of-living crisis) have had an impact on visitor behaviour, visitor numbers, access infrastructure etc. in recent years. Some of the costs within the SAMM package are estimates or notional figures and will be refined over time. Changes in housing delivery will effect how much mitigation revenue is collected and therefore the amount of spend that is available. There is uncertainty as to how priorities might need to change in the future. Such uncertainty can only be addressed through good monitoring, adaptive mitigation and regular review.
- 6.14 Certain elements within the mitigation package have the scope to adapt and flex as conditions and priorities change. Furthermore, it is possible that additional opportunities may arise, for example as a result of changing land ownership. It is important therefore that the governance is flexible and responsive enough to enable developer contributions to be shifted to different components of the strategy easily. Annual reviews of budgets and the ability for the Project Manager to adjust finances as appropriate (with rapid approval) will be key.
- 6.15 We also highlight the importance of the various delivery partners who will need to undertake the SAMM measures. The Project Manager will oversee the commissions with these bodies, in line with authorisation from an oversight group comprising representatives from the local authorities. This approach is summarised in and will allow flexibility as priorities change, as the Project Manager can liaise directly with the delivery partners and gain necessary authorisation via the oversight group.

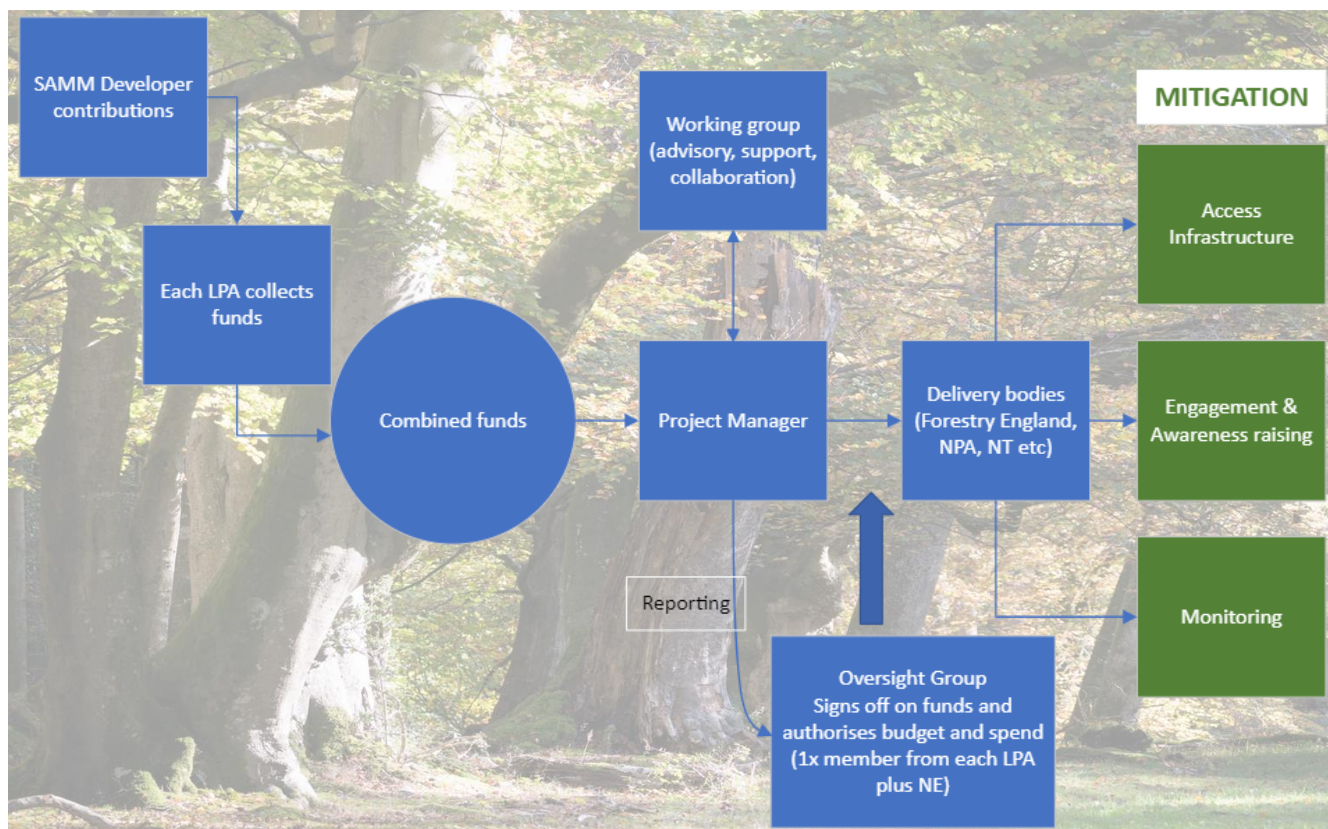


Figure 2: Overview of governance

Review and phasing of measures

- 6.16 This strategy should be comprehensively reviewed and updated on a 5-year basis, providing the opportunity to adjust the key measures and overall approach. In the interim, annual reviews of the budget and adjustments will be necessary. Measures (such as ranger provision) can be scaled up or down and phasing of implementation adjusted, as necessary, to accommodate changes in the volumes and distribution of housing.
- 6.17 The strategy covers the period through until 2036 but there is some uncertainty around some measures in terms of their cost and implementation. This uncertainty will be addressed through annual review and updates to budgets as some of the initial work commences and the Project Manager is in post.

References

- Allinson, E. (2018). *The role of suitable alternative natural greenspace in protecting high value wildlife sites* [PhD, Southampton]. <https://eprints.soton.ac.uk/427307/>
- Barker, J., & Park, T. (2021). *Using Behavioural Insights to Reduce Recreation Impacts on Wildlife: Guidance and Case Studies from Thames Basin Heath and the Solent* (Natural England Commissioned Report No. 329). Behavioural Insights Team for Natural England.
- Burger, J., & Leonard, J. (2000). Conflict resolution in coastal waters: The case of personal watercraft. *Marine Policy*, 24(1), 61–67. [https://doi.org/10.1016/S0308-597X\(99\)00013-5](https://doi.org/10.1016/S0308-597X(99)00013-5)
- Burnett, H., Olsen, J. R., Nicholls, N., & Mitchell, R. (2021). Change in time spent visiting and experiences of green space following restrictions on movement during the COVID-19 pandemic: A nationally representative cross-sectional study of UK adults. *BMJ Open*, 11(3), e044067. <https://doi.org/10.1136/bmjopen-2020-044067>
- ICF GHK. (2013). *The economic impact of Natural England's National Nature Reserves* (Natural England Commissioned Report No. NECR131).
- ICRT. (2011). *The Economic Potential of Nature Tourism in Eastern Yorkshire* (p. 61). <http://mediafiles.thedms.co.uk/Publication/YS-EY/cms/pdf/YNT%20ICRT%20Report,%20Nature%20Tourism%20in%20Eastern%20Yorkshire.pdf>
- Keniger, L. E., Gaston, K. J., Irvine, K. N., & Fuller, R. A. (2013). What are the Benefits of Interacting with Nature? *International Journal of Environmental Research and Public Health*, 10(3), 913–935. <https://doi.org/10.3390/ijerph10030913>

Lake, S., Liley, D., & Saunders, P. (2020). *Recreation use of the New Forest SAC SPA Ramsar: Impacts of recreation and potential mitigation approaches* (No. 499). Footprint Ecology / Test Valley BC.

Lee, A. C. K., & Maheswaran, R. (2011). The health benefits of urban green spaces: A review of the evidence. *Journal of Public Health*, 33(2), 212–222.
<https://doi.org/10.1093/pubmed/fdq068>

Liley, D., Clarke, R., Panter, C., & Saunders, P. (2020). *Recreation use of the New Forest SAC/SPA/Ramsar: Overview of visitor results and implications of housing change on visitor numbers* (Published Report No. 499). Footprint Ecology / Test Valley BC.

Liley, D., Lake, S., Underhill-Day, J., Sharp, J., White, J., Hoskin, R., Cruickshanks, K., & Fearnley, H. (2010). *Welsh Seasonal Habitat Vulnerability Review*. Footprint Ecology / CCW.

Liley, D., & Panter, C. (2020a). *Hart, Rushmoor and Surrey Heath SPA Mitigation Project: Access Management Research Study* (Unpublished Report for Rushmoor Borough Council No. 600). Footprint Ecology.

Liley, D., & Panter, C. (2020b). *Recreation use of the New Forest SPA/SAC/Ramsar: Results of a telephone survey with people living within 25km* (Unpublished No. 499). Footprint Ecology / Test Valley BC.

Liley, D., Panter, C., Caals, Z., & Saunders, P. (2020). *Recreation use of the New Forest SAC/SPA/Ramsar: New Forest visitor survey 2018/19* (Unpublished No. 499). Footprint Ecology / Test Valley BC.

Liley, D., Panter, C., Saunders, P., & Caals, Z. (2023). *Initial review of the effectiveness of the Bird Aware Solent strategy*. Report by Footprint Ecology for Bird Aware Solent.

- Liley, D., & Underhill-Day, J. (2013). *Thames, Medway & Swale Estuaries—Strategic Access Management and Monitoring Strategy (N Kent SARMP)*. Footprint Ecology / Medway Council.
- Lowen, J., Liley, D., Underhill-Day, J., & Whitehouse, A. T. (2008). *Access and Nature Conservation Reconciliation: Supplementary guidance for England*. internal-pdf://NECR013 Access and N C Reconciliation - Supp Guidance-2802587904/NECR013 Access and N C Reconciliation - Supp Guidance.pdf
- Medeiros, R., Ramosa, J. A., Paivaa, V. H., Almeidac, A., Pedroa, P., & Antunes, S. (2007). Signage reduces the impact of human disturbance on little tern nesting success in Portugal. *Biological Conservation*, 135(1), 99–106.
- New Forest Joint Steering Committee. (1971). *Conservation of the New Forest*.
- NFNPA. (2010). *New Forest National Park Recreation Management Strategy 2010-2030*. New Forest National Park Authority.
- O'Neill, R. (2019). *Monitor of Engagement with the Natural Environment – The national survey on people and the natural environment. Headline report 2019* (NECR No. 275). Natural England and the Office for National Statistics.
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/828552/Monitor_Engagement_Natural_Environment_2018_2019_v2.pdf
- Panther, C., Liley, D., Caals, Z., Saunders, P., & Clarke, R. (2021). *Urban development and the Dorset Heaths: Long term analysis & evidence base review* (Unpublished No. 616). Footprint Ecology / Urban Heaths Partnership / English Nature.

Panter, C., & Saunders, P. (2020). *Recreation use of the New Forest SPA/SAC/Ramsar: New Forest Vehicle Counts 2018/19* (Unpublished No. 499). Unpublished report by Footprint Ecology for Test Valley Council.

Paths for all. (2021). *Estimating price guide for path projects (2021)*.

<https://www.pathsforall.org.uk/resource/estimating-price-guide-for-path-projects>

Pretty, J., Griffin, M., Peacock, J., Hine, R., Selens, M., & South, N. (2005). A countryside for health and well-being: The physical and mental health benefits of green exercise. *Countryside Recreation*, 13(1), 2–7.

Richardson, M., Cormack, A., McRobert, L., & Underhill, R. (2016). 30 Days Wild: Development and Evaluation of a Large-Scale Nature Engagement Campaign to Improve Well-Being. *PLOS ONE*, 11(2), e0149777.

<https://doi.org/10.1371/journal.pone.0149777>

RJS Associates Ltd. (2018). *New Forest National Park Recreation and Leisure Visits*.

Unpublished report commissioned by the New Forest National Park on behalf of the Recreation Management Strategy Steering Group.

Ross, K., Liley, D., Austin, G., Clarke, R. T., Burton, N. H., Stillman, R. A., Cruickshanks, K., & Underhill-Day, J. (2014). *Housing development and estuaries in England: Developing methodologies for assessing the impacts of disturbance to non-breeding waterfowl*. Footprint Ecology, unpublished report for Natural England.

The Land Trust. (2018). *The Economic Value of Greenspaces*. The Land Trust.

Underhill-Day, J. C. (2005). *A literature review of urban effects on lowland heaths and their wildlife*. English Nature. internal-pdf://EN RR 623, John Day literature review of

urban effects-3794804480/EN RR 623, John Day literature review of urban effects.pdf

Wallace, C., Chen, X., Garrison, S., & Shaddock, J. (2023). *The impact of covid-19 on cultural tourism. Introductory article for special issue of tourism culture and communicationcommunication* [Text]. Cognizant Communication Corporation.
<https://doi.org/10.3727/109830422X16600594683508>

Weitowitz, D. C., Panter, C., Hoskin, R., & Liley, D. (2019). Parking provision at nature conservation sites and its implications for visitor use. *Landscape and Urban Planning, 190*, 103597. <https://doi.org/10.1016/j.landurbplan.2019.103597>

Williams, D. R., Child, M. F., Dicks, L. V., Okendon, N., Pople, R. G., Showler, D. A., Walsh, J. C., zu Ermgassen, E., & Sutherland, W. J. (2017). Bird Conservation. In W. J. Sutherland, L. V. Dicks, N. Okendon, & R. K. Smith (Eds.), *What Works in Conservation 2017*. Open Book Publishers.
<http://www.conservationevidence.com/actions/309>

Appendix 1: Qualifying features and impact pathways

The table below is drawn from Lake et al. (2020) and shows the potential vulnerability of key habitats and species to recreational pressure in the New Forest SAC/SPA/Ramsar. Changing perception may impact on any habitat or species.

Feature	Disturbance	Fire	Trampling	Contamination	Changing perceptions	Harvesting	Notes
3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)			✓	✓	✓		Loss of transitional vegetation, shoreline erosion, introduction of non-native species and contamination through increased turbidity and veterinary compounds
3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i>			✓	✓	✓		As above
H4010 Northern Atlantic wet heaths		✓	✓	✓	✓		Trampling and dog fouling on path edges and around car parks
H4030 European dry heaths		✓	✓	✓	✓		As above
H6410 <i>Molinia</i> meadows		✓	✓	✓	✓		As above
H7150 Depressions on peat of the <i>Rhynchosporion</i>				✓	✓		Habitat can be relatively accessible as can occur on the edges of peaty paths and habitat is vulnerable to trampling and erosion as well as nutrient enrichment
91D0 Bog woodland					✓		Likelihood of most impacts relatively low due to inaccessibility
H91E0 Alluvial forests			✓		✓		Disturbance of deadwood, vegetation loss, damage to veteran trees. Compaction and erosion of stream banks and honeypot sites.
H9120 Atlantic acidophilous beech forests			✓	✓	✓	✓	As above
H9130 <i>Asperulo-Fagetum</i> beech forests			✓	✓	✓	✓	As above
H9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains			✓	✓	✓	✓	As above

New Forest SAMM Strategy 2023

Feature	Disturbance	Fire	Trampling	Contamination	Changing perceptions	Harvesting	Notes
H7230 Alkaline fens				✓	✓		Many impacts limited due relative inaccessibility
7140 Transition mires and quaking bogs				✓	✓		Many impacts limited due relative inaccessibility
Dartford warbler	✓	✓			✓		Evidence that breeding can be delayed where high levels of access
Nightjar	✓	✓			✓		Evidence for disturbance impacts on territory distribution and breeding success
Woodlark	✓	✓			✓		Evidence of lower densities where access levels high
Hen harrier	✓				✓		Potentially vulnerable at roost sites.
Honey buzzard	✓				✓		Potentially vulnerable around nest sites
Wood Warbler	(✓)				✓		Ground-nesting and disturbance may add to pressures on rapidly disappearing species
Hobby	✓				✓		Potentially vulnerable around nest sites
Southern Damselfly	✓		✓	✓	✓		Potentially vulnerable - Localised and likely to remain in known locations
Stag Beetle					✓		Loss/disturbance of deadwood habitat
Inverts: Heather/heathland specialists		✓			✓		
Inverts: Broad-leaved woodland/saproxyllic species					✓	✓	Loss/disturbance of deadwood habitat
Inverts: Bog and mire specialists					✓		
Inverts: Wetland, pool & stream specialists				✓	✓		
Plants: Wet valley mire & bog pool species				✓	✓		Vulnerable to trampling but habitat inaccessible
Plants: Damp, bare ground species			✓	✓	✓		Trampling likely to be beneficial up to a threshold beyond which it is damaging
Plants: Pond margins species			✓	✓	✓		Particularly vulnerable at easily accessed ponds
Plants: Wet heath species			✓	✓	✓		Localised trampling and eutrophication may be an issue
Plants: Wet woodland species			✓	✓	✓		Localised trampling and eutrophication may be an issue

New Forest SAMM Strategy 2023

Feature	Disturbance	Fire	Trampling	Contamination	Changing perceptions	Harvesting	Notes
Plants: New Forest lawns			✓	✓	✓		Localised trampling and eutrophication may be an issue
Plants: Other grassland/pool habitats			✓	✓	✓		Localised trampling and contamination may be an issue

Appendix 2: Selected examples of other European site mitigation schemes

This appendix summarises a selection of other European site mitigation schemes and broad approaches for mitigation in-place. The table only gives examples of schemes relating to recreation and urban effects¹⁹. The table only includes schemes that are established, and it should be noted that there are also a number of schemes in development. Hyperlinks relate to project specific websites or relevant local authority pages with further information and details. ZOI refers to zone of influence (e.g. for collection of developer contributions).

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZOI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
Dorset Heaths	Recreation and urbanisation; heathland SPA and 2 heathland SACs	400m	5km	Heathland infrastructure projects (including SANG) for all development. Bespoke SANG for sites with around 50 dwellings or more.	Dedicated wardening team (Urban Heaths Partnership) and through local authorities	Dog project, fire projects (including education and awareness raising) and variety of other projects	Automated counters, vehicle counts, interviews, bird monitoring.	Long-running scheme with joint SPD.
Thames Basin Heaths	Recreation and urbanisation; heathland SPA	400m	5km	Minimum of 8ha of SANGs per 1,000 residents	Thames Basin Heaths Partnership, currently c. 9 full time equivalents	Dog Project, education work and dedicated education officer.	Automated counters, vehicle counts, interviews, fire records, bird monitoring.	Long-running scheme. Each local authority has produced their own SPD/mitigation in

¹⁹ Note that there are also schemes addressing water quality, air quality etc.

New Forest S A M M Strategy 2023

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
								line with agreed strategic approach.
South-east Devon	Recreation and urbanisation; sand dune SAC, heathland SPA/SAC and estuary SPA/Ramsar.	400m around heath-land only	10km	Some SANG at strategic locations identified in strategy	2 Full-time equivalents.	Dog Project, bird refuges on estuary, patrol boat on estuary, codes of conduct.	Targeted work on effectiveness of refuges; some visitor survey work	3 local authorities, and various zones reflecting the relevant European sites.
Solent	Recreation impacts for 3 coastal SPA/Ramsar sites	No	5.6km	Some SANGs plus other infrastructure set out in mini 'Access Management Assessments' each focussed on different sections of coast.	Team of rangers, engagement staff and a monitoring officer.	Awareness raising and wider promotion, dedicated dog post	Automated counters, vehicle counts, interviews, targeted work testing effectiveness of ranger presence.	Bird Aware Project established with strong branding. More site-specific projects and awareness raising work still being developed.
Cannock Chase	Recreation impacts to heathland SAC	400m	15km	No	Delivery Officer and Engagement Officer only so far	Parking strategy and access management strategy for the SAC with series of interventions and targeted measures.	Vehicle counts, interviews.	6 local authorities have signed a joint memorandum of understanding which ensures joint approach
North Kent	Recreation impacts for 3	No	6km	No	3 rangers	Dog Project, Codes of Conduct, Signage and	Liley & Underhill-Day (2013)	4 local authorities, each with slightly different

New Forest S A M M Strategy 2023

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
	coastal SPA/Ramsar sites					Interpretation and Site-Specific Enhancements		approaches to developer contributions.
Essex Coast	Recreation impacts for 9 coastal SPA/Ramsar sites and 1 SAC	No	4.5-20.8km	No	Ranger team being built up over time, will include water-based ranger.	Education and communication, codes of conduct, habitat-based measures.	Visitor surveys, bird monitoring and vegetation monitoring	11 local planning authorities, joint SPD in preparation.
Burnham Beeches	Recreation and urbanisation impacts for a woodland SAC	500m	5.6km	No	1 Engagement Ranger/SAC Ambassador	Electronic interpretation, events and promotion, access plan/carrying capacity study	Visitor surveys, soil and ecological impacts	Each local authority will develop their own mitigation approach. Chilterns and South Bucks described.
Suffolk Coast	Recreation impacts for 8 coastal/estuary sites including mix of SAC, SPA and Ramsar	No	13km	Large sites only	Delivery officer and team of rangers	Dog Project, codes of conduct, signage and interpretation, awareness raising, range of site-specific projects	Visitor surveys (counts and interviews), bird monitoring,	4 local authorities and joint strategy covering numerous sites along large stretch of coast
South Tyneside	Recreation impacts for coastal SAC and a coastal SPA	No	6km	No	Delivery office and 0.5 full time equivalent ranger post	Dog Project, review of parking.	Automated counters and bird surveys	Interim strategy established.
Poole Harbour	Recreation impacts for coastal SPA and Ramsar	No	Variable, not based on	Rolling 5-year programme of Infrastructure Projects	Project coordinator and a warden	Leaflets, litter clearance and engagement	Visitor and bird surveys	2 local authorities with a joint SPD

New Forest S A M M Strategy 2023

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
			specific distance					
South Pennine Moors SPA	Recreation, urban effects and supporting habitat for moorland SPA and SAC	400m	7km for recreation; 2.5km for supporting habitat	Improvements to existing GI	3 rangers and a delivery officer	Interpretation, awareness raising, access infrastructure, parking.	Visitor surveys, ecological monitoring	SPD
Northumberland Coast	Coastal SPA/Ramsar and suite of coastal SSSI. Wintering, passage and breeding bird interest plus dune plants/habitats.	none	0-7km (all development); 7-10km (developments of 10+ units, tariff 50% of the 0-7km rate)	None	2 wardens and support costs	Wardens key element to the mitigation. Wardens have enforcement powers in relation to dogs (PSPOs).	Monitoring	
Ashdown Forest	Heathland SPA/SAC	400m	7km	Strategic SANGs and developer led SANGs	Ranger managed by Ashdown Forest Conservators	SAMM strategy updated in 2023 and includes a range of plans and further studies	Bird and visitor monitoring	
All Cornish sites	3 different coastal/marine SAC sites and 1 SPA site classified	none	12.3-12.5km	Developer led	Dog warden visits 5hrs per month to Penhale Dunes	Campaigns around dog fouling, measures to control/better manage parking		Single SPD covering all European sites in Cornwall

New Forest S A M M Strategy 2023

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
	for wintering waterbirds							
Chilterns Beechwoods	Beech woodland and grassland SAC	500m	12.6km	8ha per 1000 residents; developer led or LPA	2 rangers and a delivery officer	Tree protection measures, ride management, signage, interpretation, gateway/hubs and parking changes	Visitor numbers, ecological impacts, tree health.	Focuses on the Ashridge Estate part of the SAC
Cotswold Beechwoods	Beech woodland and grassland SAC	none	15.4km	8ha per 1000 residents; developer led or LPA	2 rangers and a delivery officer	Parking changes, interpretation, signage, awareness raising strategy	Production of a monitoring strategy, visitor interviews,	

Appendix 3: Current mitigation approaches established by relevant local planning authorities

The table below summarises current approaches to mitigation for recreation impacts and the New Forest. This information has been provided by the commissioning local authorities.

Planning Authority	Approach to New Forest recreational impact mitigation
Bournemouth, Christchurch, Poole Council	BCP Council does not currently have a strategy specifically relating to mitigating recreational impacts on the New Forest. However, the Council has been operating a long-term strategy (since 2007) to mitigate the adverse impacts of new residential on the integrity of the Dorset Heaths. The current iteration of the strategy is contained on the Dorset Heathlands Planning Framework SPD 2020-2025²⁰. Alongside the provision of infrastructure projects such as SANGs a crucial part of the strategy is the collection of SAMMs contributions. These are used to secure the day-to-day costs of helping local people to alter harmful behaviour through raising awareness of the issues and value of the protected sites, which includes employing wardens to manage visitor pressures on the heathland and delivering awareness and education programmes particularly in local schools. In addition, the Council has adopted the Poole Harbour Recreation SPD 2019-2024 which also includes a strategy to collect SAMMs contributions alongside contributions for infrastructure projects specific to Poole Harbour. In a similar way to the heathland strategy these SAMMs contributions are used to raise awareness of the value of the harbour and the issues it faces to help people behave ways that are less harmful. The general increased awareness of the issues and value of protected sites promoted by these strategies over a number of years should continue to have beneficial influence on the behaviour of people who may choose to visit the New Forest as well as the Dorset Heathlands and Poole Harbour.

²⁰ [Dorset Heathlands Planning Framework 2020-2025 Supplementary Planning Document](#)

Planning Authority	Approach to New Forest recreational impact mitigation
Dorset Council	The Dorset Heathlands Planning Framework 2020-2025 Supplementary Planning Document²¹ came into effect on 1 April 2020. It provides a framework for funding and delivering effective mitigation measures in the form of Heathland Infrastructure Projects (HIP) and Strategic Access Management and Monitoring (SAMM) for Dorset heaths habitat sites. The council considers that HIP positioned within the 13.8 km 'zone of influence' is also likely, in part, to provide effective mitigation for the impacts of residential development in Dorset Council area on New Forest habitat sites²². The Poole Harbour Recreation 2019-2024 Supplementary Planning Document came into effect on 1 April 2020. It provides a framework for funding and delivering effective mitigation measures in the form of Poole Harbour Infrastructure Projects (PHIPS) and SAMM. The council considers that mitigation delivered in the nearby Poole Harbour Recreation Zone could also provide effective mitigation for the impacts of residential development in Dorset Council area on New Forest habitat sites.
Eastleigh Borough Council	The majority of the Borough is within the 13.8km catchment area. The Council approved an interim strategy in March 2022²³ based on the delivery of proportionate SANG within the borough and contributions to measures within the National Park Authority and to monitoring. SANG will be delivered through both the provision of new and improvements to existing greenspace.
New Forest District Council	The Recreation Mitigation Strategy was originally established in the Local Plan Part 2 (2014) and revised in the Local Plan Part One: Planning Strategy in 2020. Policy ENV1: 'Mitigating the impacts of development on International Nature Conservation Sites' sets out the approach and is accompanied by supporting 'Mitigation for Recreational Impacts SPD'²⁴. This mitigation strategy includes a greenspace and also a SAMM element.
New Forest National Park Authority	The whole National Park falls within the 13.8km catchment area. Updated Mitigation Strategy²⁵ covering recreational impacts from new residential and visitor accommodation across the whole of the National Park adopted in Summer 2020. This updated strategy is considered fit for purpose and will continue to be applied by the National Park Authority to mitigate the impacts of new development in the interim until a more strategic approach is developed.
Southampton City Council	The whole of the city is within the 13.8km catchment area. The Council has ring-fenced CIL contributions from residential development to be spent on New Forest mitigation. This will deliver a package of improvements to semi-natural and natural

²¹ [Dorset Heathlands Planning Framework 2020-2025 Supplementary Planning Document](#)

²² 'Visitor use of the New Forest by residents of Dorset and implications for the Dorset Local Plan' (9 May 2022)

²³ [interim strategy in March 2022](#)

²⁴ [Mitigation for Recreational Impacts SPD](#)

²⁵ [Updated Mitigation Strategy](#)

Planning Authority	Approach to New Forest recreational impact mitigation
	greenspace within the city and contribute to measures within the National Park Authority. It is proposed that CIL funding is transferred to the New Forest NPA each year to support the delivery of mitigation measures within the designated sites.
Test Valley Borough Council	Part of the Borough is within the 13.8km zone. The Council's interim mitigation framework ²⁶ (2014) is now being applied to the updated zones of influence. The Council is in the process of preparing a revised New Forest Mitigation Supplementary Planning Document ²⁷ on this matter.
Wiltshire Council	The interim Mitigation Strategy ²⁸ uses an 8km zone of influence to Sept 2021, following which the 13.8km zone is adopted for qualifying residential and tourism development. The approach to mitigation involves a combination of measures depending on type and size of development: direct provision of suitable alternative natural green space (SANGs) as part of developments; or offsite measures - access and visitor management in the new forest itself and/or strategic SANG. Direct provision is funded directly by the developer, whereas CIL is used for off-site measures. Mitigation is also required for larger developments in the 13.8km to 15km buffer zone where Habitat Regulations Assessment demonstrates potential for adverse effects. This interim strategy is considered fit for purpose and will continue to be applied by Wiltshire Council to mitigate the impacts of new development until a more strategic approach is developed.
Fareham Borough Council	Fareham Borough Council have adopted an interim approach to mitigating recreational impacts on the New Forest's internationally designated sites – see Report to the Executive for Decision - (Director of Planning and Development) -20 April 2015 (fareham.gov.uk) ²⁹ . As part of this, the Borough Council prioritises greenspace provision and enhancements in the borough, supported by the transfer for some contributions to the New Forest NPA to be spent within the New Forest's designated sites. Fareham Borough Council has also undertaken updated interviews with residents to see how frequently they visit the New Forest's designated sites.

²⁶ [interim mitigation framework](#)

²⁷ [New Forest Mitigation Supplementary Planning Document](#)

²⁸ [interim Mitigation Strategy](#)

²⁹ [Report to the Executive for Decision - \(Director of Planning and Development\) -20 April 2015 \(fareham.gov.uk\)](#)

Appendix 4: Current ranger provision

The table overleaf summarises the current levels and number of rangers working in and around the New Forest.

Organisation	Size of ranger resource	Geographical remit of the ranger team	Core functions/role of the ranger team
NFNPA	1 Lead Ranger, 3 Area Rangers, 1 People & Wildlife Ranger (funded as mitigation by NFDC) 2 full time, 3 part time ranging from 32-25.5 hours p/w) 1 Assistant Ranger pending (Mitigation) 1 or 2 Seasonal Rangers (Mitigation + NFDOG + New Forest Show Soc) 2 Apprentice Rangers	New Forest National Park boundary and surrounds	On the ground presence promoting responsible behaviour through engagement, information and events. Liaison with local communities. Leading volunteer tasks. Promoting New Forest Code. Social media.
Forestry England	Currently: 3 Full-time rangers 2 assistant rangers (largely based at Reptile Centre) 3 seasonal rangers In addition, Forestry England have a team of keepers and also a team of volunteer rangers	Forestry England land	Engagement work, site checks, permissions etc.
RSPB	1 Site Manager 1 Cameron's Cottage Project Officer 1 Warden FT 2 Long term volunteers	Franchises Lodge	Site management and maintenance Volunteer management. Education and engagement through Cameron's Cottage
HCC	1 Manager 2 Rangers 1 Senior Ranger, 1 engagement ranger	Lymington/Keyhaven & New Forest sites e.g. Abbotswell Lepe Country Park	

Organisation	Size of ranger resource	Geographical remit of the ranger team	Core functions/role of the ranger team
Bird Aware	1 Ranger with focus on New Forest sites	New Forest West	Engagement and education about winter SPA species along the coastline. Project based on coast and covers whole Solent including the Isle of Wight
National Trust	2 Rangers, 1 Engagement and Education officer	National Trust land within Mottisfont and South Area Portfolio including New Forest. Reactive work in the New Forest as resources allow.	
Wildlife Trust	1 Reserves Officer, 1 Engagement Officer 1 P/T warden	Blashford Lakes	
	1 Reserves Officer 1 Apprentice	Roydon Woods	

Appendix 5: Breakdown of SAMM costs

The table overleaf matches the structure in Table 3 (which see for detailed descriptions of the measures) and here the broad costs for each are set out. Costs are calculated to cover costs in the long term, with some measures involving implementation over many years (up to 80 years in total).

New Forest S A M M Strategy 2023

Mitigation measure	One-off/Capital cost	Rolling cost	Multiplier for rolling cost	Total cost	Notes on how cost calculated
Redistribution of parking	£1,200,000			£1,200,000	Notional figure of £1m for works and £200,000 for design work, planning and assessment work. Spend would need to be spread over different years. Once established maintenance costs covered by Forestry England (as currently)
Robust tracks network improvements	£280,000			£280,000	Notional figure as precise details of works required to be established alongside spatial plan and car park works. Costs assume some changes to paths with around £100 per sq m for unbound paths and estimate of total length 2km. Plus 200m of board walks at £150 per sq m and 10 5m bridges at £5000 each. Costs likely to need to be spread over a number of years.
Path maintenance		£15,000	80	£1,200,000	Small annual budget to ensure paths and tracks maintained for recreation and addressing localised issues - could cover gates, path/track surface etc. Approx. £15 per sq m depending on type of maintenance / repair and an estimated 1000m of repairs per year. Potential for spending to vary with years and be pooled.
Verge parking	£50,000			£50,000	Notional cost to contribute towards low wooden posts, ditches, printed material etc, as required
Waymarking		£20,000	5	£100,000	Small budget for some additional markers and posts etc as required. Cycle route marker posts around £100 per post
Project Manager post		£59,000	50	£2,950,000	£40,000 annual salary, plus 35% (to cover NI, superannuation, etc.) and £5000 per annum support costs. Costed for 50 years on expectation of 10 years full time and around 70 years part time
Enforcement of PSPOs	£10,000			£10,000	budget to contribute towards training and other costs
Dog walking engagement officers		£90,656	10	£906,560	£27,000 annual salary, plus 35% (to cover NI, superannuation, etc.) and £15000 per annum support costs (to cover promotional material, transport etc). 2 posts for 10 years.
Increased ranger time		£201,640	50	£10,082,000	5 fte equivalent posts with costs extended to cover 50 years. £27,000 annual salary, plus 35% (to cover NI, superannuation, etc.) and £5000 per annum support costs. Some ranger provision potentially required in-perpetuity however team can shrink over time as SANGs and infrastructure changes become relevant. 50 years for 5 posts gives potential for size of team to be regularly reviewed and potential for it to shrink or expand (in short term) as priorities require and ensure in perpetuity coverage.
Ranger training and collaboration		£2,500	5	£12,500	Annual budget to fund joint training, facilitation etc. Short term as in longer term potential to ensure clearer divides in responsibility and roles

New Forest S A M M Strategy 2023

Mitigation measure	One-off/Capital cost	Rolling cost	Multiplier for rolling cost	Total cost	Notes on how cost calculated
Ranger resources (vehicles)		£9,950	80	£796,000	£32,000 EV purchase, replaced every 10 years, £1500 for livery, £2000 p.a. insurance, 5000 miles p.a. at 0.25p per mile electricity. Assumed to be rolling annual cost for 2 vehicles.
Wildfire forum		£5,000	10	£50,000	Flexible resource to allow specialist training, strategy support, collaboration between organisations and awareness raising among staff of risks. Relatively short term (20 years) as increased ranger provision and spatial plan will reduce risks in long term.
NF destination website	£10,000	£2,000	80	£170,000	budget to contribute to updates and material online
Mobile Display Unit	£25,000	£7,500	80	£625,000	rolling cost assumes £5000 annual cost for mileage, insurance etc. And £2500 for replacement/overhaul on 10 year basis
Comms campaigns post		£40,800	10	£408,000	£3400 per month to cover salary and support costs. Costed for 10 years as engagement and awareness raising measures should potentially be able to be stepped back once infrastructure changes established
Educational campaign material (NF code signs, leaflets etc)		£13,000	80	£1,040,000	£13000 per year, rolling cost
Marketing budget for social posts/film creation		£5,000	10	£50,000	rolling budget for 10 years to fit with campaign comms post
New camera/video equipment	£3,000			£3,000	1 off expenditure identified
Long term visitor monitoring - vehicle counts		£20,000	40	£800,000	Estimated cost for survey carried out by a consultancy, including analysis and reporting. Based on 15 counts through the year, repeated every 2 years for 80 years.
Long term visitor monitoring - visitor interviews		£40,000	11	£440,000	Estimated cost for survey carried out by a consultancy, including analysis and reporting. Based on 20 survey locations with 4 days spent at each. (e.g. 2 days in autumn and 2 days in spring) . Costed for repeat surveys every 3 years for 30 years – however interval could be extended to allow coverage over longer time window
Incident log of livestock worrying (dogs), petting		£1,000	20	£20,000	Rolling small budget to ensure data collected and maintained. May need more in early years to establish online recording system
Monitoring changes in impacts to vegetation at key recreation locations (including, but not limited to, car parks)		£25,000	5	£125,000	Assumption of survey fieldwork involving around 2 person days per location. Costs to cover 5 pulses in total, allowing repeat monitoring over extended period to determine change following implementation of spatial plan and other interventions.

New Forest SAMM Strategy 2023

Mitigation measure	One-off/Capital cost	Rolling cost	Multiplier for rolling cost	Total cost	Notes on how cost calculated
Monitoring changes to key features at key recreation locations (including, but not limited to, car parks).		£27,000	5	£135,000	Assumption of around 2 person days of monitoring time per location and 20 locations, with additional time for set up. Costs to cover 5 pulses in total, allowing repeat monitoring over extended period to determine change following implementation of spatial plan and other interventions.
Monitoring changes in breeding bird populations at key recreation locations (including, but not limited to, car parks).		£30,000	5	£150,000	Assumption of survey involving around 3 visits to 20 survey locations and a day per visit per location. Costs to cover 5 pulses in total, allowing repeat monitoring over extended period to determine change following implementation of spatial plan and other interventions.
Narrative of change		£5,000	5	£25,000	Desk-based study to bring ecological and visitor results together and provide narrative. Assumption of around 8 person days consultancy time
Total				£21,628,060	