

Habitats Regulations Assessment (HRA) of
Forestry England's proposal to introduce
charging across their New Forest car parks



FOOTPRINT ECOLOGY, FOREST OFFICE, BERE ROAD,
WAREHAM, DORSET BH20 7PA
WWW.FOOTPRINT-ECOLOGY.CO.UK
01929 552444



FOOTPRINT
ECOLOGY

Footprint Contract Reference: 784

Date: 11th September 2025 (with minor formatting revision from version previously circulated 7th February 2025)

Version: Final

Recommended Citation: [REDACTED] (2025). Habitat Regulations Assessment (HRA) of Forestry England's proposal to introduce charging across their New Forest car parks. Report by Footprint Ecology.

Summary

The Conservation of Habitats and Species Regulations 2017 (as amended) require the assessment of projects in relation to internationally important sites for biodiversity. These sites include Special Protection Areas, Special Areas of Conservation and Ramsar sites and are known as European sites. The assessment is achieved by means of a Habitats Regulations Assessment (HRA). This report is the HRA of a proposal by Forestry England to introduce parking charges at their car parks within the New Forest.

An HRA asks very specific questions. Firstly, it 'screens' the project to identify if there is a risk that certain aspects may have a 'likely significant effect' on a European site, alone or (if necessary) in-combination with other plans and projects. If the risk of likely significant effects can be ruled out, then the project may be consented but if it cannot, it must be subjected to the greater scrutiny of an 'appropriate assessment' and an 'integrity test'. At this stage, consent can normally only be granted if an 'adverse effect on the integrity' of European sites can be ruled out. Where possible, a project should be amended to avoid or mitigate any conflicts to achieve this outcome.

The proposal relates to 130 different car parks, widely scattered across the New Forest, with the charges applying at all times across the year. Initially two busy car parks will have automatic number plate recognition cameras (ANPR) and 16 car parks will have terminals installed to allow visitors to purchase tickets; over time such infrastructure may be adapted or extended to additional parking locations. Otherwise, tickets can be purchased online and annual permits will be available. The charging is not linked to any desire and plans by Forestry England to expand access provision or to reduce provision.

Forestry England already charge for the use of car parks in many locations across the country, including in the South District. The organisation is expanding the use of charging to help fund the work it does to look after the nation's forest and provide public access and facilities. In the New Forest this includes a wide range of tasks to care for habitats and manage the landscape, including looking after the network of 130 car parks, maintaining hundreds of miles of trails, paths and cycle routes, and carrying out year round visitor-focussed ranger patrols.

The proposal will support the resources required for managing and monitoring access. The charges could also have a positive effect on recreation use by highlighting the need to care for the Forest and perhaps influencing visitor's choice of transport and making visitors think more about their recreation use and implications.

Nonetheless there are potential impacts on the nature conservation interest and likely significant effects are identified for the following sites as a result of a re-distribution or change in access:

- New Forest SAC/SPA/Ramsar (risks relating to changes in levels and distribution of access within the New Forest; change in visitor pattern, change in attitude, Ranger team diverted from other duties and direct habitat loss from the installation of charging infrastructure)
- Dorset Heaths SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
- Dorset Heathlands SPA/Ramsar (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
- Solent & Southampton Water SPA/Ramsar (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
- Solent Maritime SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
- Solent & Isle of Wight Lagoons SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites).

The risks, vulnerable locations and effectiveness of the mitigation proposed are considered in more detail in the appropriate assessment section of the report. Drawing on these findings, it is possible to conclude that adverse effects on integrity can be ruled out for all relevant European sites alone. This conclusion is dependent on a comprehensive package of mitigation measures that Forestry England will undertake that includes the employment of a dedicated ranger team. The conclusion is also dependent on a monitoring programme which will be necessary to ensure any unexpected change or displacement parking to unexpected locations can be addressed quickly before impacts occur. Monitoring is incorporated into Forestry England's proposal. It is only with such monitoring in place that there can be confidence that adverse effects on integrity can be ruled out.

Contents

Summary.....	ii
Contents	1
1. Introduction	3
The proposal to introduce car park charging.....	3
Legislative context.....	5
European sites.....	5
Definitions, references to case law and guidance.....	9
Competent authority and how this HRA should be used	11
Need for HRA	12
2. Relevant European sites.....	14
European sites potentially relevant to the assessment	14
New Forest SAC/SPA/Ramsar	15
The Dorset Heaths	17
The Solent and Southampton Water Coast	17
3. Screening for likely significant effects (Stage 1 of the HRA process)....	22
Impact pathways	22
Screening conclusion	25
4. Appropriate Assessment	26
Introduction	26
New Forest SAC/SPA/Ramsar	29
Risks.....	29
Ecological impacts and the conservation objectives	30
Potentially vulnerable locations.....	34
Mitigation.....	37
Dorset Heaths.....	42
Risks.....	42
Vulnerable locations.....	43
Mitigation.....	46
Solent Coast.....	46
Risks.....	46
Vulnerable locations.....	48
Mitigation	51
5. Integrity Test.....	52
References.....	54
Appendix 1: European sites within 20km of the New Forest National Park..	61
Appendix 2: Relevant European sites.....	64

Acknowledgements

This report has been commissioned by Forestry England. We are grateful to [REDACTED] for overseeing the commission. Our thanks also to [REDACTED] (Forestry England), [REDACTED] (Forestry England), [REDACTED] (Natural England) and [REDACTED] (Natural England) for useful discussion and background.
Cover photo © Footprint Ecology.

1. Introduction

- 1.1 This report is the Habitat Regulations Assessment (HRA) of a proposal by Forestry England to introduce parking charges at their car parks within the New Forest. These car parks are within an area of international importance for nature conservation and the car parks are within or close to a range of sites that are afforded strict legal protection. An HRA is required to test if a plan or project proposal could significantly harm the designated features of such sites.

The proposal to introduce car park charging

- 1.2 Car park charges are being introduced by Forestry England in order to help fund their work, including the on-going management of the Forest such as the maintenance and provision of the existing access. The change is required to fill the gap between the level of core funding provided by the government and the cost of managing sites; many other Forestry England sites across the country now also charge for parking. The charging is not linked to any desire and plans by Forestry England to expand access provision or to reduce provision.
- 1.3 The strategic direction for the management of outdoor recreation in the New Forest National Park is set out in the Recreation Management Strategy¹, and this provides context for this proposal. The strategy recognises the need to support landowners in finding new sources of funding to cover the costs of providing public access and maintaining recreational infrastructure (and especially to fund car park maintenance).
- 1.4 The HRA is based on a document produced by Forestry England², hereafter 'the proposals'. This sets out the details of the infrastructure proposed, parking charges, enforcement etc.

¹ See <https://www.newforestnpa.gov.uk/about-us/recreation-management-strategy/>

² Forestry England New Forest Car Park Charging Proposals HRA. Version 30th October 2024 (with monitoring details confirmed separately).

- 1.5 The proposals involve the introduction of parking charges across approximately 130 car parks, managed by Forestry England and distributed across the New Forest National Park (see Map 1). The project would introduce parking simultaneously across the New Forest in 2026.
- 1.6 Charges will be instigated using a combination of solar-powered credit/debit card terminals (including contactless) and online either in real time (car parks with phone signal) or within 24hrs of their visit (those without phone signal). Infrastructure will involve some car parks with automatic number plate recognition cameras (ANPR) installed, 24 car parks with terminals and signage in all car parks. All infrastructure will meet the minimum requirements set out by the British Parking Association and Forestry England will aim to minimise landscape and other impacts. Where installed, any infrastructure will be within the gravelled areas of existing car parks.
- 1.7 Tariffs will be carefully selected and benchmarked with other areas to ensure they do not discourage responsible parking. The tariffs will enable visitors to pay to park for part or all of the day. There will also be an annual pass available, covering all Forestry England car parks in the New Forest. Two options for an annual pass will be available - a local membership covering the New Forest only, and a Forestry England National Membership covering all Forestry England car parks in England including the New Forest. Both these annual passes will mean the holder does not need to pay any further costs to park.
- 1.8 The tariffs will apply to all users unless exemptions apply which will have been agreed in advance with Forestry England.
- 1.9 The enforcement of car parking charges will be monitored by Forestry England staff known as 'Parking Rangers' (as set out in the proposals). This team (including one manager and one administration role) are anticipated to engage with the public and enforce charges where necessary. They will also report on any perceived problems across car parks (e.g. with the charging system, outbreak of fires and anti-social behaviour) where necessary to ensure that duties of the existing ranger team are not compromised. Fines will be issued to those who

fail to pay, at least a flat rate of £50 (reduced to £25 if paid within 14 days).

Legislative context

- 1.10 The designation, protection and restoration of key wildlife sites is embedded in the Conservation of Habitats and Species Regulations 2017, as amended, which are commonly referred to as the 'Habitats Regulations'. These are domestic law and remain in place post Brexit. The most recent amendments (the Conservation of Habitats and Species (amendment) (EU Exit) Regulations 2019³) take account of the UK's departure from the EU.

European sites

- 1.11 'European sites' are those over which the provisions of the Habitats Regulations exert an influence, through statute or policy. They are the top tier of protected sites in the UK and are of international importance for nature conservation.
- 1.12 Sites that are afforded statutory protection and included within Regulation 8 of the Habitats Regulations are part of a 'national network' and referred to as Habitats sites. Statutory sites comprise the following:
- Special Areas of Conservation (SACs) designated under the 1992 Habitats Directive;
 - Sites of Community Importance (SCI) included on the list of such sites compiled by the European Commission and submitted before the UK left the EU;
 - Candidate SACs (cSACs), submitted by the UK government to the European Commission before Exit day as eligible for selection as an SCI;
 - Special Protection Areas (SPAs) classified under the 1979 Birds Directive;

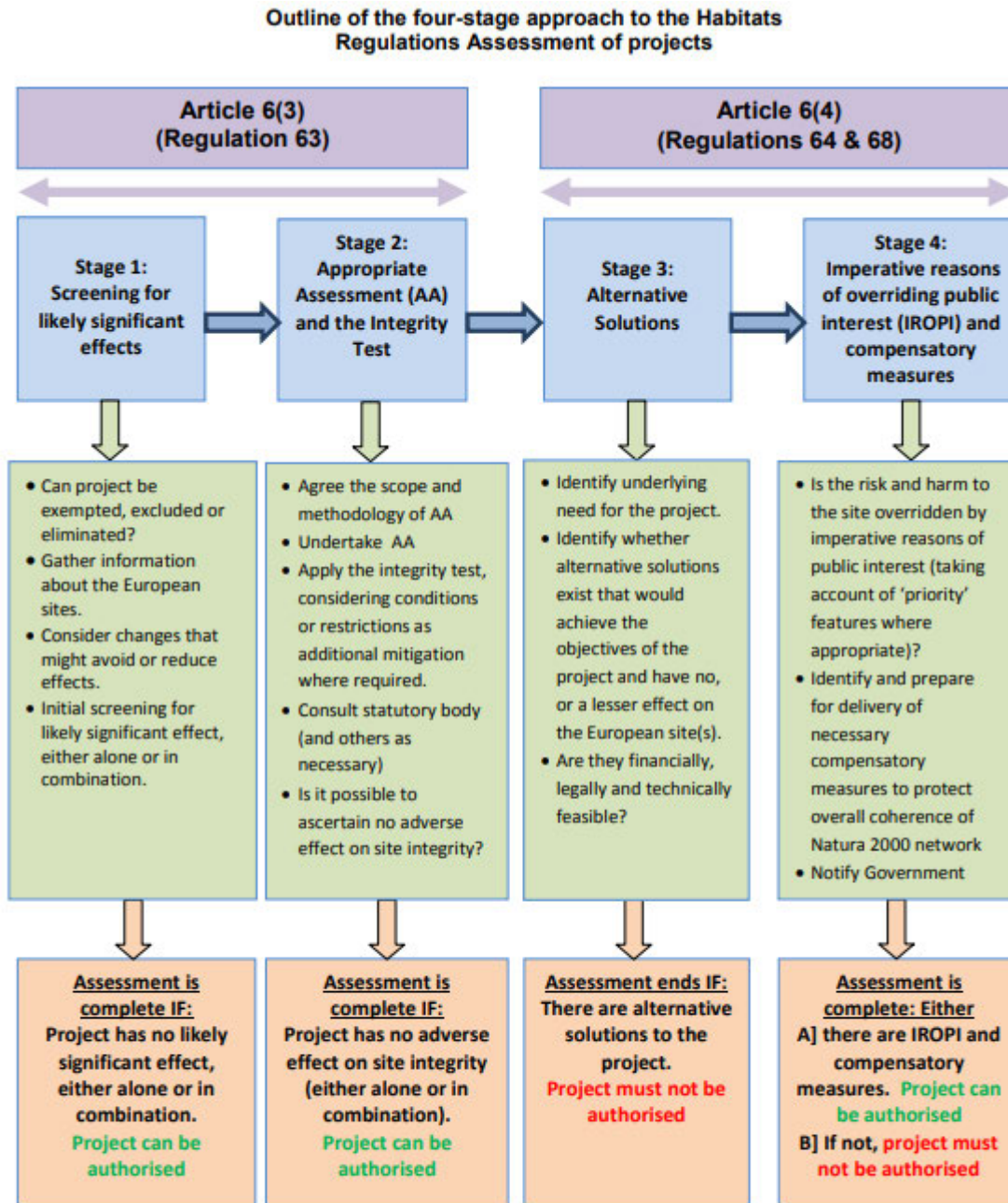
³ The amending regulations generally seek to retain the requirements of the 2017 Regulations but with adjustments for the UK's exit from the European Union. See Regulation 4, which also confirms that the interpretation of these Regulations as they had effect, or any guidance as it applied, before exit day, shall continue to do so.

- 1.13 As a matter of policy, the following sites are also European sites:
- ‘Wetlands of International Importance’ (Ramsar sites, listed under the Convention) or proposed Ramsar sites;
 - Potential SPAs (pSPAs),
 - Possible / proposed SACs
 - Areas providing formal compensation for damage to a European site.
- 1.14 The overarching objectives of the national site network are to maintain, or where appropriate, restore habitats and species listed in Annexes I and II of the Habitats Directive to a Favourable Conservation Status, and contribute to ensuring, in their area of distribution, the survival and reproduction of wild birds and securing compliance with the overarching aims of the Wild Birds Directive.
- 1.15 The appropriate authorities must have regard to the importance of protected sites, coherence of the national site network and threats of degradation or destruction (including deterioration and disturbance of protected features) on SPAs and SACs.

HRA Process

- 1.16 The step-by-step process of HRA is summarised in Figure 1.
- 1.17 After completing an assessment, a competent authority should only adopt a plan where it can be ascertained that there will not be an adverse effect on the integrity of the habitats site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan, or modified the project with restrictions or conditions, in light of their Appropriate Assessment findings.
- 1.18 Where adverse effects cannot be ruled out, further exceptional tests are set out in Regulation 64. In exceptional cases, this allows a project to be taken forward where there are no ‘alternative solutions’, where ‘imperative reasons of overriding public interest’ apply and where compensation can be delivered. It should be noted that meeting these tests is a rare last resort and ordinarily, competent authorities seek to ensure that a plan or project is fully mitigated for, or it does not proceed.

- 1.19 In such circumstances where a competent authority considers that a project should proceed under Regulation 64, they must notify the relevant Secretary of State. Normally, planning decisions and competent authority duties are then transferred, becoming the responsibility of the Secretary of State, unless on considering the information, the planning authority is directed by the Secretary of State to make their own decision on the plan or project at the local level. The decision maker, whether the Secretary of State or the planning authority, should give full consideration to any proposed 'overriding reasons' for which a plan or project should proceed despite being unable to rule out adverse effects on Habitat site interest features, and ensure that those reasons are in the public interest and are such that they override the potential harm. The decision maker will also need to secure any necessary compensatory measures, to ensure the continued overall coherence of the European site network if such a plan or project is allowed to proceed. However, it is understood that Forestry England would not wish to pursue these derogations.



Extract from *The Habitats Regulations Assessment Handbook*: www.dtapublications.co.uk
 © DTA Publications Limited (October 2018) all rights reserved
 This work is registered with the UK Copyright Service

Figure 1: Outline of the assessment of projects under the Habitat Regulations. Though dated prior to the latest amendments to the Regulations, the same tests still apply and it remains valid.

Definitions, references to case law and guidance

- 1.20 This HRA follows principles of case law, both UK and EU. It also refers as appropriate to the Habitats Regulations Assessment Handbook (Tyldesley & Chapman, 2013), to which Footprint Ecology subscribes. We also follow relevant government guidance.
- 1.21 Drawing on the Handbook, other relevant guidance and case law, we clarify the following terms used in the flow chart ((Tyldesley & Chapman, 2013)
- 1.22 In Stage 1, A **'likely significant effect'** following Waddenzee⁴, is a *'possible significant effect; one whose occurrence cannot be excluded on the basis of objective information'*. It is a low threshold and simply means that there is a risk or doubt regarding such an effect. The screening stage is a preliminary examination, sometimes described as a coarse filter, or following Sweetman⁵, as *'a trigger for the obligation to carry out an appropriate assessment'*. There should however be credible evidence to show that there is a real rather than a hypothetical risk of effects that could undermine a site's conservation objectives. This was amplified in the Bagmoor Wind⁶ case where *'if the absence of risk... can only be demonstrated after a detailed investigation, or expert opinion, [then] the authority must move from preliminary examination to appropriate assessment'*.
- 1.23 Following the People Over Wind judgement⁷, when making screening decisions for the purposes of deciding whether an appropriate assessment is required, competent authorities cannot take into account any mitigation measures.
- 1.24 Stage 2 involves the **appropriate assessment and integrity test**. Here a plan can only be adopted if the competent authority can

⁴ Waddenzee: European Courts C-127/02 Waddenzee 7th September 2004, reference for a preliminary ruling from the Raad van State.

⁵ Sweetman: European Court C – 258/11 Sweetman 11th April 2013, reference for a preliminary ruling from the Supreme Court of Ireland.

⁶ Bagmoor Wind: UK courts Bagmoor Wind v The Scottish Ministers, Court of Session [2012] CSIH 93.

⁷ *People Over Wind and Sweetman v Coillte Teoranta* (323-17) [2018] PTSR 1668

demonstrate that it will not adversely affect the integrity of the Habitat site. This is precautionary approach and means it is necessary to show the absence of harm.

- 1.25 Following Champion⁸ **'appropriate'** is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.
- 1.26 The **integrity** of a Habitats site has been described as the 'coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified⁹. An alternative definition, after Sweetman¹⁰, is 'the lasting preservation of the constitutive characteristics of the site'.
- 1.27 In terms of the burden of proof, the HRA of development plans was first made a requirement in the UK following a ruling by the European Court of Justice in EC v UK¹¹. However, the judgement¹² recognised that any assessment had to reflect the actual stage in the strategic planning process and the level of evidence that might or might not be available. This was given expression in the High Court (Feeney)¹³ which stated: *"Each ... assessment ... cannot do more than the level of detail of the strategy at that stage permits"*.
- 1.28 The need to consider possible **in-combination** effects arises at stage 1 – the screening and also at stage 2 – the appropriate assessment and integrity test. The effects of the plan in-combination with other plans or projects are the cumulative effects which will or might arise from the addition of the effects of other relevant plans or projects alongside the plan under consideration. If during the stage 1 screening it is found the subject plan would have no likely effect alone, but might have such an effect in-combination then the appropriate assessment

⁸ *R (on the application of Champion v North Norfolk District Council* [2015] 1 WLR 3170 at para 41

⁹ Para 20 of the ODPM Circ. 06/2005

¹⁰ *Sweetman v An Bord Pleanála* (C-258-11) [2014] PTSR 1092 at paragraph 39

¹¹ *Commission v UK* (C-6/04) [2005] ECR I-9017

¹² *Commission of the European Communities v UK* Opinion of Advocate General Kokott

¹³ *Feeney v Oxford City Council* [2011] EWHC 2699 Admin at paragraph 92

at stage 2 will proceed to consider cumulative effects. Where a plan is screened as having a likely significant effect alone, the appropriate assessment should initially concentrate on its effects alone.

Exceptionally, the Wealden decision¹⁴ requires the impacts of air pollution to be considered alone and in-combination.

Competent authority and how this HRA should be used

- 1.29 Competent authorities must carry out an assessment under the Habitats Regulations (an HRA), to test if a plan or project proposal could significantly harm the designated features of a European site.
- 1.30 Competent authorities include any public body that decides to give a licence, permit, consent or other permission for work to happen, adopt a plan or carry out work for itself. In the case of this report, Forestry England are the competent authority, as well as the project proposer.
- 1.31 Although this HRA has been prepared by Footprint Ecology to help Forestry England discharge its duties under the Habitats Regulations, Forestry England must decide whether to accept this report or otherwise.
- 1.32 Further, it should be noted that this HRA has been prepared for the purposes of preparing and examining the overall proposal for charging. There may be a need for further HRA work if there are discrete applications at individual car parks, for example in relation to the installation of infrastructure. These could involve planning application to the New Forest National Park Authority, in which case the National Park Authority would also be the competent authority, and this document could inform their assessment.

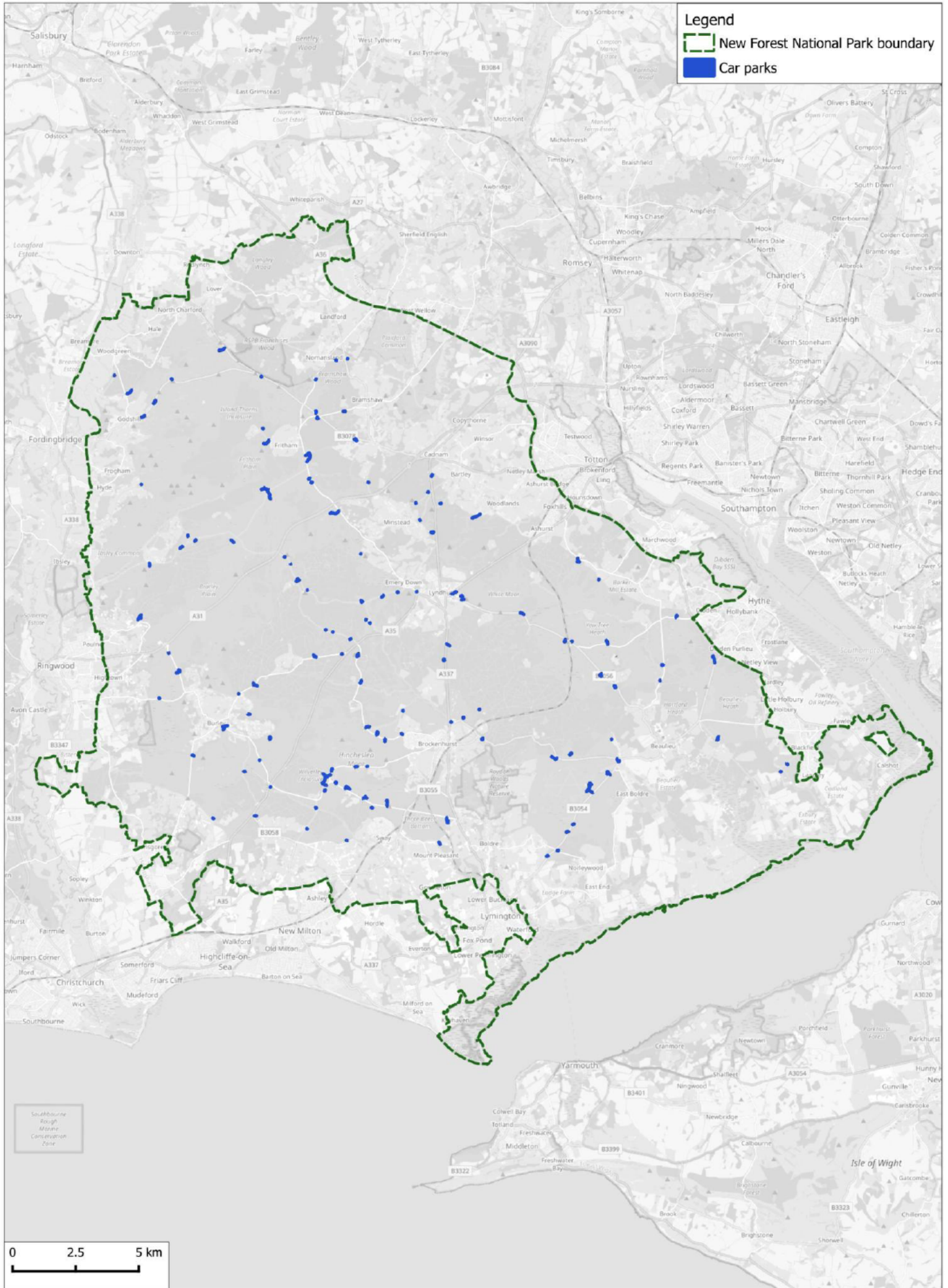
¹⁴ Wealden District Council v Secretary of State for Communities and Local Government, Lewes District Council and the South Downs National Park Authority (Defendants) and Natural England (Interested Party) [2017] EWHC 351 (Admin).

Need for HRA

- 1.33 Stage 1 of Figure 1 (elaborated further in section E5.1 – 5.4 of the Handbook) encourages a brief, ‘pre-screening’ exercise prior to the formal screening test to determine if there is an actual need for an HRA. It explores if a proposed development can be:
- **Exempted** from the need for HRA because it is ‘... directly connected with or necessary to the management of the ... European site’;
 - **Excluded** from the HRA because ‘it is not a project within the meaning and scope of the Habitats Directive’; or
 - **Eliminated** from the HRA because it can easily be shown that there could be no conceivable impact on a European site.
- 1.34 Taking these in turn, and on the basis of current information, the introduction of parking charges represents a ‘project’ within the meaning and scope of the Regulations with the potential to cause harm to European sites. The Habitats Regulations Handbook is clear¹⁵ that if anything is proposed to be done, the key question is whether it is likely to have a significant effect on a European site, either alone or in combination with other plans or projects, and if that is the case, it is a plan or project for the purpose of Article 6 (3).
- 1.35 Although funds from charging will support the management of the New Forest by Forestry England and in particular used to maintain and improve the existing access provision, the purpose of the project is clearly not directly connected with or necessary to the conservation management of the New Forest and so it cannot be made exempt from further assessment.

¹⁵ Para C.3.1

Map 1: Distribution of Forestry England car parks in the New Forest



2. Relevant European sites

European sites potentially relevant to the assessment

- 2.1 It is plausible that charging could result in shifts of access, with visitor use deflected or displaced to other locations. At the core of the New Forest, the New Forest SAC/SPA/Ramsar is clearly relevant. In addition, there could be European sites further afield where recreation use might also be displaced.
- 2.2 Local authorities around the New Forest have used a zone of influence of 13.8km to identify likely significant effects from recreation and the need for mitigation in relation to housing development in their local plans. The 13.8km is derived from visitor surveys (██████ et al., 2020) and reflects the distance within which 75% of those interviewed lived (those visiting the New Forest directly from home rather than holiday makers).
- 2.3 European sites that might be relevant are therefore those that are accessible to people living within 13.8km. Most visitors to the New Forest come from much closer than 13.8km (the median distance for those visiting directly from home was 6.1km) and it is to be expected that those travelling longer distances (and therefore making more of an effort to visit the Forest) are less likely to be deterred or deflected by parking charges.
- 2.4 A 20km radius would therefore seem a reasonable initial area of search for sites that might be relevant in the screening. There are 28 further European sites within a 20km radius of the New Forest National Park. These are shown in Maps 2, 3 and 4 and listed in Appendix 1. Clearly not all these sites need to be included in the screening. Relevant sites will be those that fulfil the following criteria:
- Are accessible for general recreation;
 - Have opportunities to park;
 - Are likely to draw visitors as an alternative destination, and are therefore in locations where reasonable levels of displacement might be conceivable;

- Have qualifying features that could be impacted by a change in visitor use.

2.5 In addition, we might expect any displacement or shift to relate to locations where parking provision is free (or at least a lower cost than that proposed for the New Forest). This may be so for a proportion of visitors, but it is not necessarily the case. It may be that visitors may choose to simply go to another location where they have to pay for parking, simply because they have no other alternatives or base their choice on some other factor beside the cost of parking.

2.6 Having applied these criteria, we can consider the following European sites as relevant to the screening (see Appendix 1 for further background on which sites have been eliminated as not relevant and the rationale for doing so).

- **New Forest SAC/SPA/Ramsar;**
- **The Dorset Heaths:** Dorset Heaths SAC/Dorset Heathlands SPA/Ramsar;
- **The Solent and Southampton Water coast:** (Solent & Isle of Wight Lagoons SAC; Solent Maritime SAC Solent and Southampton Water SPA/Ramsar).

2.7 The above European sites are listed in Appendix 2, which provides details of the qualifying features, links to conservation objectives and other background.

New Forest SAC/SPA/Ramsar

2.8 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.

2.9 The New Forest is classified as an SPA for its breeding and overwintering bird species of European importance. 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*.

- 2.10 The New Forest qualifies 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 heathland, grassland, woodland, wetland, bog and open water habitats, together with three Annex 2 species, Stag Beetle *Lucanus cervus*, and Southern Damselfly *Coenagrion mercuriale*, and Great Crested Newt *Triturus cristatus*.
- 2.11 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 wetland, supporting wetland flora and fauna of international importance, and adding to the global network of Ramsar listed wetlands.
- 2.12 The New Forest is also a National Park, which means there are statutory duties to conserve and enhance natural beauty, wildlife, culture and heritage and to promote opportunities for understanding the qualities of the National Park by the public. The National Park covers the entirety of the New Forest SAC/SPA/Ramsar and extends to the Solent coast. The landscape, scenery, visitor experience and promotion of the National Park mean it has a very particular draw for visitors.
- 2.13 Visitor levels in the New Forest were estimated to be over 15 million visitor days (RJS Associates Ltd., 2018), however it is likely that this figure may have since increased. Since the Covid-19 pandemic there has been a marked shift in how people use their local greenspaces and an increase in recreation overall since the pandemic (Burnett et al., 2021).
- 2.14 Within this report, we refer to the New Forest SAC/SPA/Ramsar to the core area of woodland, heathland and related terrestrial habitats that comprise the European site. Reference to the New Forest or the New

Forest National Park means the wider area that encompasses the coast, towns, villages etc.

The Dorset Heaths

- 2.15 Dorset holds some 7500ha of heathland (see Rose et al., 2000), and much of this is designated as being of European importance. The designated sites are the Dorset Heathlands SPA, the Dorset Heaths SAC, the Dorset Heaths (Purbeck & Wareham) and Studland Dunes SAC and the Dorset Heathlands Ramsar. The Dorset Heaths (Purbeck & Wareham) and Studland Dunes SAC lies well to the west of the New Forest and as such is not relevant to this assessment.
- 2.16 The designations at the international and national levels reflect the conservation importance of the sites, which hold internationally important bird species (breeding Nightjar, Woodlark and Dartford Warbler, wintering raptors such as Merlin and Hen Harrier), all six species of native British reptiles and the Southern Damselfly. The various rare plants include the Dorset Heath, for which the heaths around Poole Harbour are the British stronghold.
- 2.17 The heaths are fragmented and comprise over 40 different SSSIs, spread across the urban conurbation of Bournemouth, Christchurch and Poole as well as the more rural areas to the west and north. Most sites are open to the public and draw people for recreation use (e.g. Panter & Caals, 2020), with heaths such as St. Catherine's and Town Common lying relatively close to the New Forest and potentially providing a relatively similar visitor experience to much of the New Forest and in close proximity.

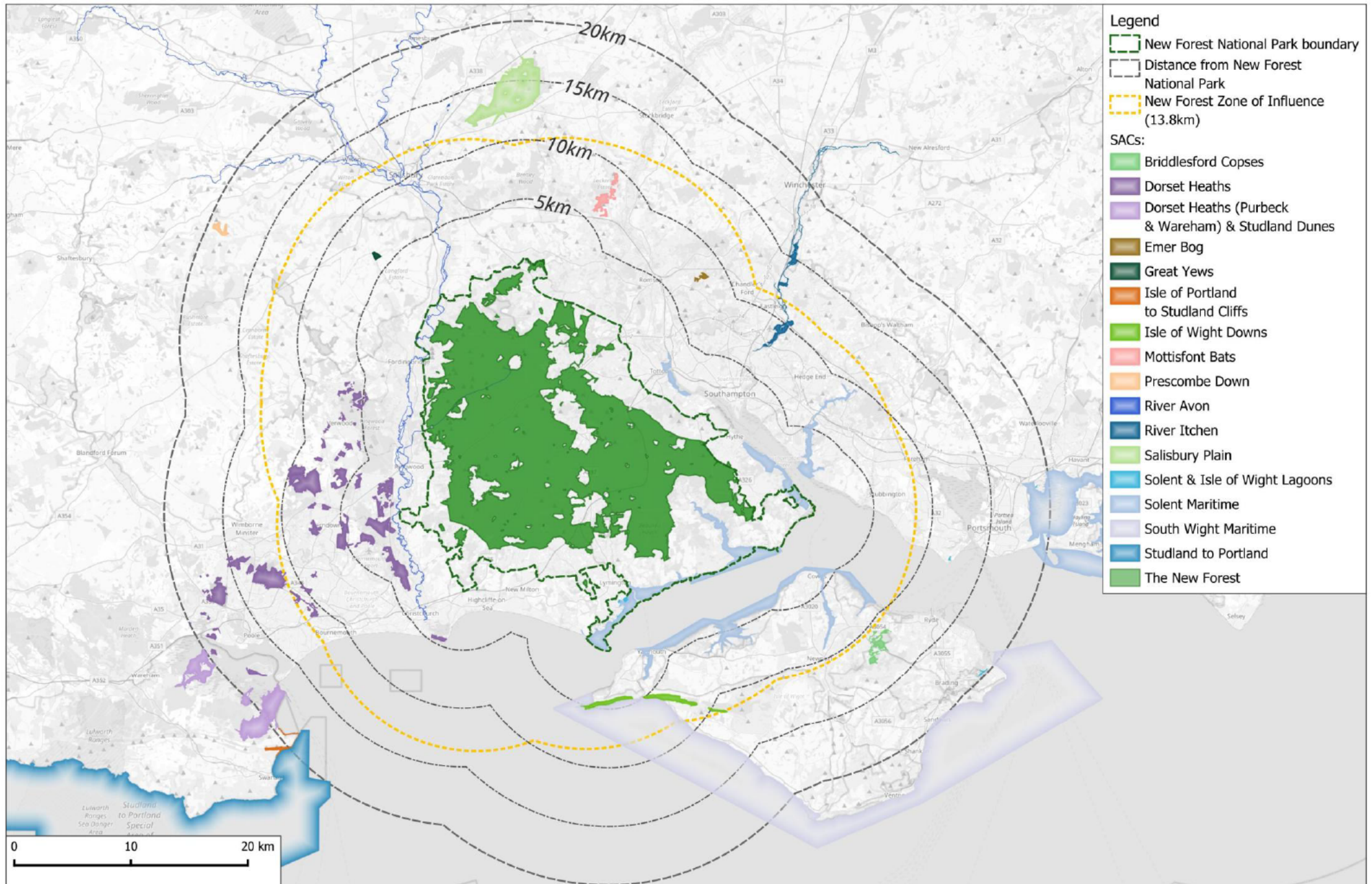
The Solent and Southampton Water Coast

- 2.18 The coast adjacent to the New Forest (to the south and east) falls within a number of European sites. The Solent & Isle of Wight Lagoons qualify as an SAC for coastal lagoons, and these include eight lagoons in the marshes around Keyhaven and Lymington. The Solent Maritime SAC covers a much larger extent and a wide range of coastal habitats, including lagoons, vegetated shingle, saltmarsh and mudflats. It also qualifies for a single species, Desmoulin's Whorl Snail. This SAC

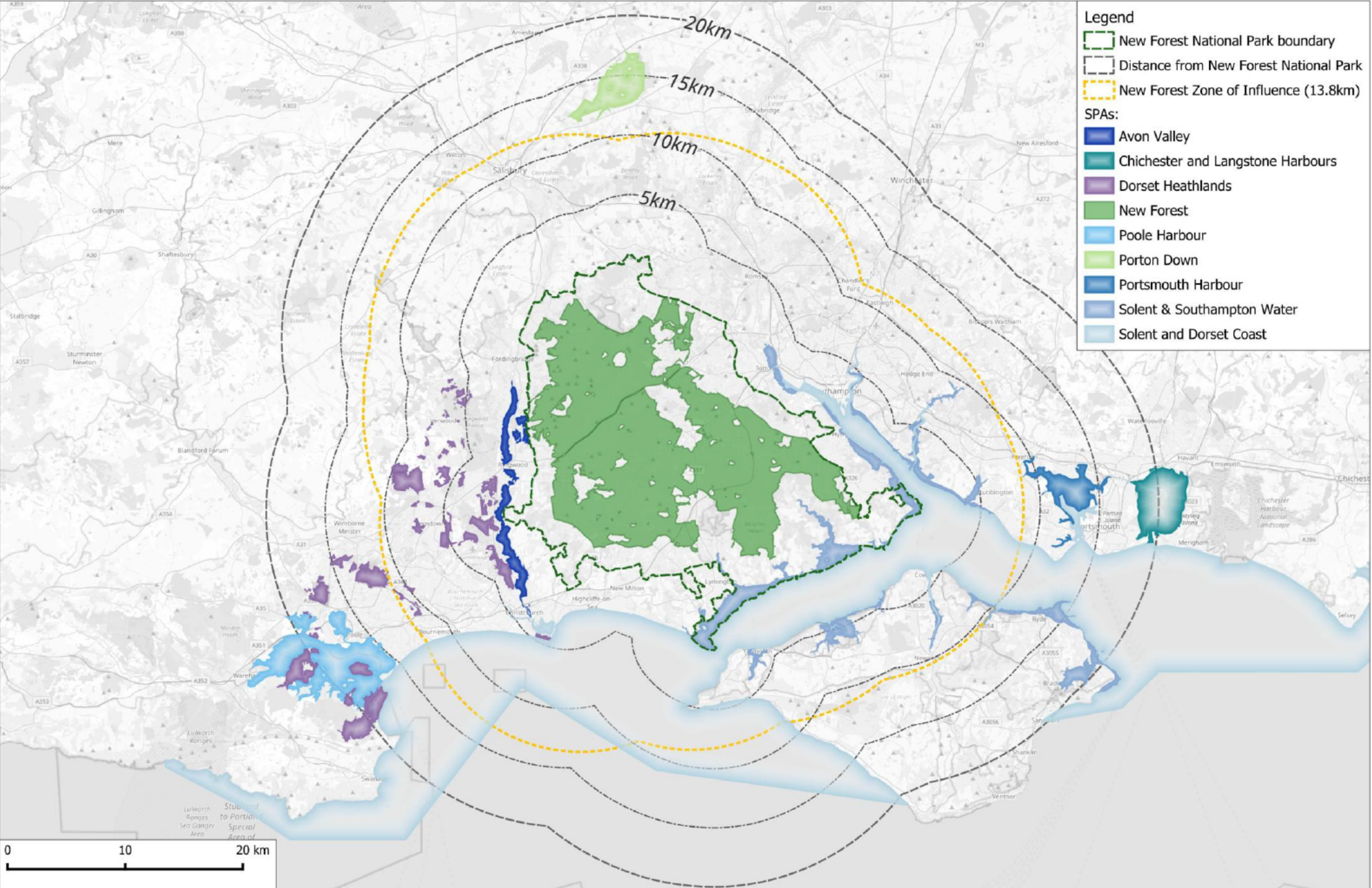
includes Hurst Spit, the coastal areas around Keyhaven and Lymington, the saltmarsh at Calshot and other parts of Southampton Water. The Solent and Southampton Water SPA is classified for a range of non-breeding waterbirds and the non-breeding waterbird assemblage, providing protection for thousands of overwintering birds. These include Brent Goose *Branta bernicula*, Black-tailed Godwit *Limosa limosa*, Ringed Plover *Charadrius hiaticula* and Teal *Anas crecca*. The site is also classified for breeding terns and Mediterranean Gull *Ichthyaetus melanocephalus*. The Solent and Southampton Water Ramsar is listed for a similar suite of bird species, and the listing extends to cover a range of coastal habitats as well as the wetland plant assemblage and the wetland invertebrate assemblage.

- 2.19 The coast also includes the Solent and Dorset Coast SPA which is classified for three species of tern. This SPA incorporates most of the Hampshire and Isle of Wight coastline and adjacent offshore areas and protects the surrounding waters used by the foraging terns. Given the SPA only relates to open water and areas used by foraging terns, it can be excluded from further consideration in this HRA, as there is no plausible way it could be impacted.
- 2.20 The coast is within the National Park and easily accessible in a number of locations, these include some areas such as adjacent to Hurst Spit where there are opportunities to park for free. Options are however relatively limited, often unofficial and may well change with time.

Map 2: SACs within 20km of the New Forest National Park boundary

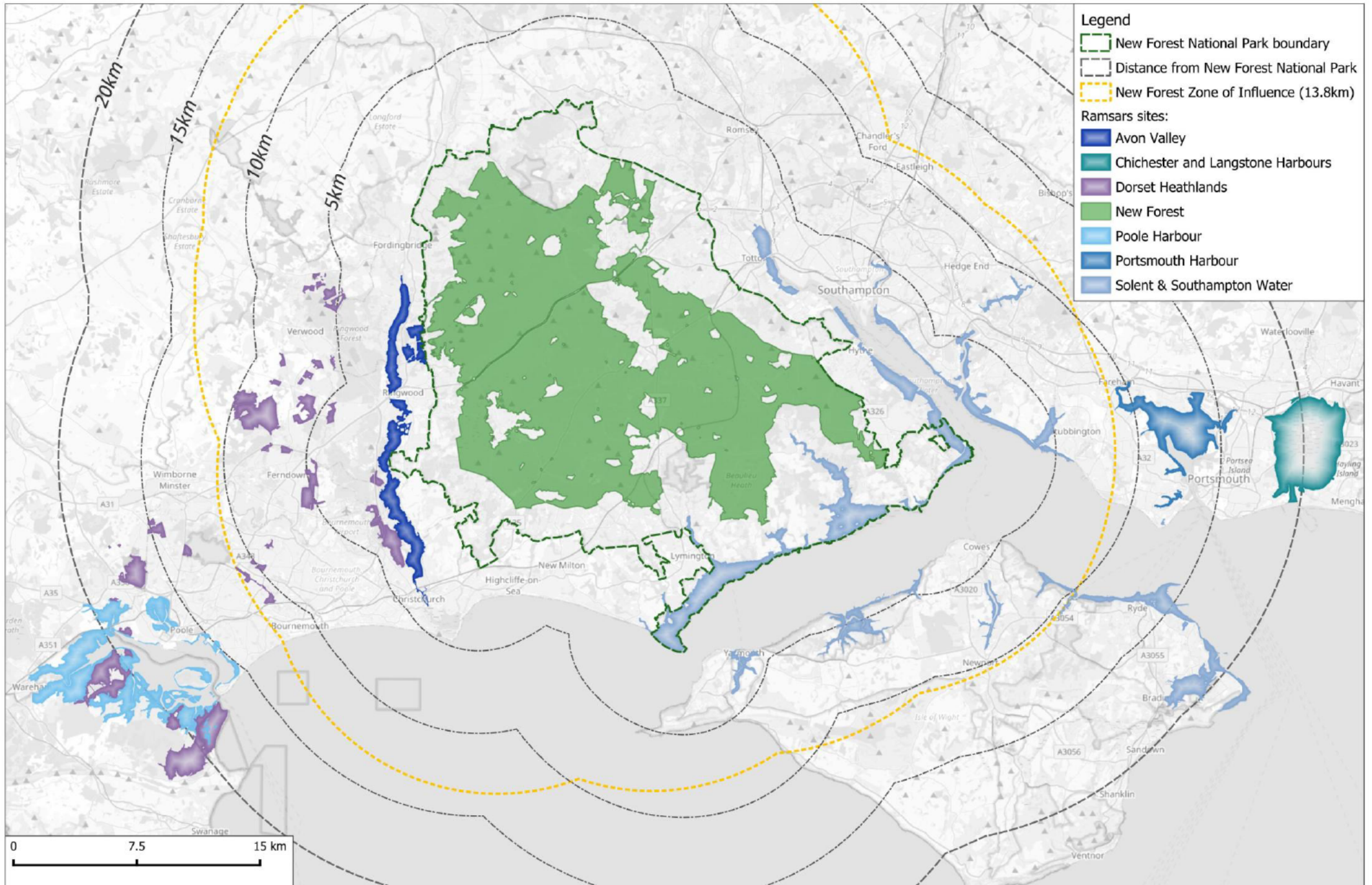


Map 3: SPAs within 20km of the New Forest National Park boundary



Contains Ordnance Survey data © Crown copyright and Database Right 2023. Contains map data © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright Designated site boundaries download from the Natural England website © Natural England.

Map 4: Ramsar sites within 20km of the New Forest National Park boundary



3. Screening for likely significant effects (Stage 1 of the HRA process)

- 3.1 The screening test is seen only as a *'trigger'*¹⁶ for the need for the greater scrutiny provided by an *'appropriate assessment'*. Drawing on the case law, guidance and policy described in earlier sections, this section explores whether there is a risk that the proposed project *could undermine the conservation objectives* of the New Forest SPA/SAC/Ramsar and so result in a *'likely significant effect'* alone or in combination'.
- 3.2 An *'in combination'* assessment is only required where an impact is identified which would have an insignificant effect on its own (a *'residual effect'*), but where likely significant effects may arise cumulatively with other *'plans or projects'*.
- 3.3 The screening in this report looks at the project prior to any avoidance/reduction/mitigation measures in line with People Over Wind; mitigation can only be considered at Appropriate Assessment stage.

Impact pathways

- 3.4 There are six potential ways in which impacts are plausible, these are summarised in Table 1. There are no plausible risks from air quality, as while the charging may result in a change in traffic flows, these are unlikely to be significant where roads cross or run close to a European site and any change will be dispersed and distributed over a wide area. Similarly, any hydrological risks can be ruled out, such as impacts to water quality. Some of the car parks are close to water bodies (such as Hatchet Pond and Janesmoor), yet the proposals will not involve works to extend or change where the car parks are located and any infrastructure works will relate to signs or meters and not involve major digging or other groundworks.

¹⁶ Bagmoor Wind Limited v The Scottish Ministers [2012] CSIH 93

Table 1: Possible impact pathways following the implementation of charging in car parks.

Mechanism	Risk	Relevant European sites	Implication for screening
Changes in levels and distribution of access within the New Forest SAC/SPA/Ramsar	Damage to verges, increase in recreation impacts (such as disturbance, trampling, increased fire incidence) at otherwise quiet locations.	New Forest SAC/SPA/Ramsar	Clearly a risk. There is evidence that charges can result in increased visitor use and there may also be displacement to non-charging locations (e.g. verge parking). Proposal includes mitigation to reduce verge parking. Screened in. Impacts alone.
Displacement to other European sites	Visitors avoid New Forest entirely or occasionally and recreation impacts (disturbance etc) possible at other sites.	The following sites are those with qualifying features that could be sensitive to recreation impacts, are potential alternative sites where displacement could occur and have options to park for free: Dorset Heaths SAC/Dorset Heathlands SPA/Ramsar, Solent & Isle of Wight Lagoons SAC; Solent Maritime SAC Solent and Southampton Water SPA/Ramsar	Clearly a risk for a selection of other sites. Screened in. Impacts alone for Dorset Heaths SAC, Dorset Heathlands SPA/Ramsar, Solent and Southampton Water SPA/Ramsar, Solent Maritime SAC.
Change in visit patterns	Risks from increased recreation impacts (disturbance etc) as a result of visitors changing their behaviour as a result of the charges. For example, visitors may change how long their visit for or use alternative forms of transport.	New Forest SAC/SPA/Ramsar	Risks hard to define. Screened in alone on a precautionary basis.
Change in attitude	An increased level of entitlement in visitors as a reaction to the charging could lead to higher levels or litter, dog fouling and lack of respect for the National Park overall. Risks from public hostility and reputation	New Forest SAC/SPA/Ramsar	Risks hard to define or predict. Screened in alone on a precautionary basis.

NEW FOREST CAR PARKS HRA 2024

Mechanism	Risk	Relevant European sites	Implication for screening
	damage to Forestry England, with implications for future work in the New Forest. Negative reactions could jeopardise support from public for other initiatives.		
Ranger team diverted from other duties	Risk that Forestry England and other organisation's staff (e.g. NPA rangers) time is diverted, with a risk that other critical work (wider engagement, habitat management etc.) not undertaken.	New Forest SAC/SPA/Ramsar	Likely significant effect alone.
Habitat loss from installation of parking charge infrastructure	Risks of direct loss of habitat where infrastructure such as ticket machines and signage installed within the European site.	New Forest SAC/SPA/Ramsar	Risks low as new infrastructure will have limited footprint and likely to entirely within boundaries of existing car parks. Nonetheless a clear risk and likely significant effect alone.

Screening conclusion

- 3.5 The screening has identified likely significant effects alone for the following sites as a result of a re-distribution or change in access:
- New Forest SAC/SPA/Ramsar (risks relating to changes in levels and distribution of access within the New Forest; change in visitor pattern, change in attitude, Ranger team diverted from other duties and direct habitat loss from the installation of charging infrastructure)
 - Dorset Heaths SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
 - Dorset Heathlands SPA/Ramsar (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
 - Solent & Southampton Water SPA/Ramsar (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
 - Solent Maritime SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites);
 - Solent & Isle of Wight Lagoons SAC (risks relating to displacement from core areas of the New Forest SAC/SPA/Ramsar to other European sites).
- 3.6 The above should be considered in the appropriate assessment (stage 2).

4. Appropriate Assessment

Introduction

- 4.1 The implementation of parking charges could affect access in a range of ways, with only some of these changes likely to result in a risk to European sites (Figure 2). In many ways, the implementation of parking charges could be positive, as it could mean that there are more funds available for visitor management of the New Forest (such as the ability to fund resurfacing of car parks with appropriate material), better visitor infrastructure/management of access and it is possible that there could be a net reduction in visitor use. Some visitors may choose to travel by other means, utilising the cycle network or using public transport.
- 4.2 From Figure 2 a range of scenarios are possible and it is hard to predict what level of displacement or shifts in visitor use might occur, when and where. Many of the alternative opportunities to park are limited in scale and therefore a very scattered redistribution is likely, rather than all the displacement occurring at a single place. Clearly only a proportion of visitors may wish to avoid charging and actively seek out alternatives. It may be that any displacement is relatively short-term, as more of a knee-jerk reaction to change or it could be that displacement persists more in the long-term. How visitors respond is likely to be influenced by how the implementation of the charging is communicated, the scale of reaction to the proposals, the potential to manage and limit verge parking, and how other organisations (besides Forestry England) manage their parking provision.
- 4.3 Accurate predictions of the scale of impact and precise locations that will be affected is therefore difficult. Vehicle counts across the New Forest SAC/SPA/Ramsar in 2018/19 indicated there were typically around 1,000 cars parked at any one time (median count of 1,006 across 15 different counts) and ranged from 370 – 2,908 (the latter on a bank holiday weekend). On average around 7% of vehicles counted were on verges or informal parking locations.

4.4 While we cannot predict the level of likely displacement, there is some indication that it may be relatively low and potentially change might be relatively short-term. For example:

- Visitor surveys at Upton Country Park suggested around 5% of use might be displaced to nearby heathland areas following car park charging being introduced (Liley, 2016).
- A survey in the Cairngorms indicated 82% of visitors thought paying to park to be reasonable (Phillip & Macmillan, 2009);
- At Burnham Beeches SAC, parking charges were introduced in August 2011; prior to this (2009-2011) estimates of visitor numbers (Wheater & Cook, 2016) showed an increase and after charging was introduced they numbers dropped by around 20% such that levels were similar to 2009/10. From 2014, estimated visitor numbers increased such that in 2016 (when car park charges were increased) the levels were not dissimilar to 2011. These data suggest that there was initial deflection/reduction in use but over time the overall effect on visitor numbers was negligible.
- At Chobham Common, surveys prior to the introduction of charging (Liley et al., 2018) indicated that 71% of users would not have parked at the location where interviewed if parking charges were instigated; of these, 55% indicated they would have gone somewhere else entirely, 44% indicated they would have parked somewhere else nearby, but still visited the same area and 5% were not sure/didn't know.
- A study from the Netherlands found that during the first year following the introduction of parking charges there was an initial decrease (10%) of cars, but subsequently use increased again (Beunen et al., 2006).
- Models of potential displacement following the introduction of visitor fees at Japanese National Parks predicted marked variation between parks, due to the differences between them in the range of alternative locations, ease of access and remoteness (Shoji et al., 2023).
- There is also general evidence that countryside locations where parking charges are levied tend to be busier than non-charging locations of a similar size, i.e. locations with charging to get more visits rather than act as some kind of deterrent (Weitowitz et al., 2019).

4.5 Monitoring of all parking locations within the New Forest will commence prior to parking charges being implemented and this will help identify the baseline. Monitoring will include regular counts of parked vehicles across all parking locations around the New Forest

(including ones not managed by Forestry England). There is also scope for visitor surveys to gather data on visitor attitudes and the extent to which parking charges have changed behaviour (although such surveys are not necessary for mitigation, see later parts of this HRA including Table 3). Monitoring is set out in a separate document that accompanies Forestry England’s proposal.

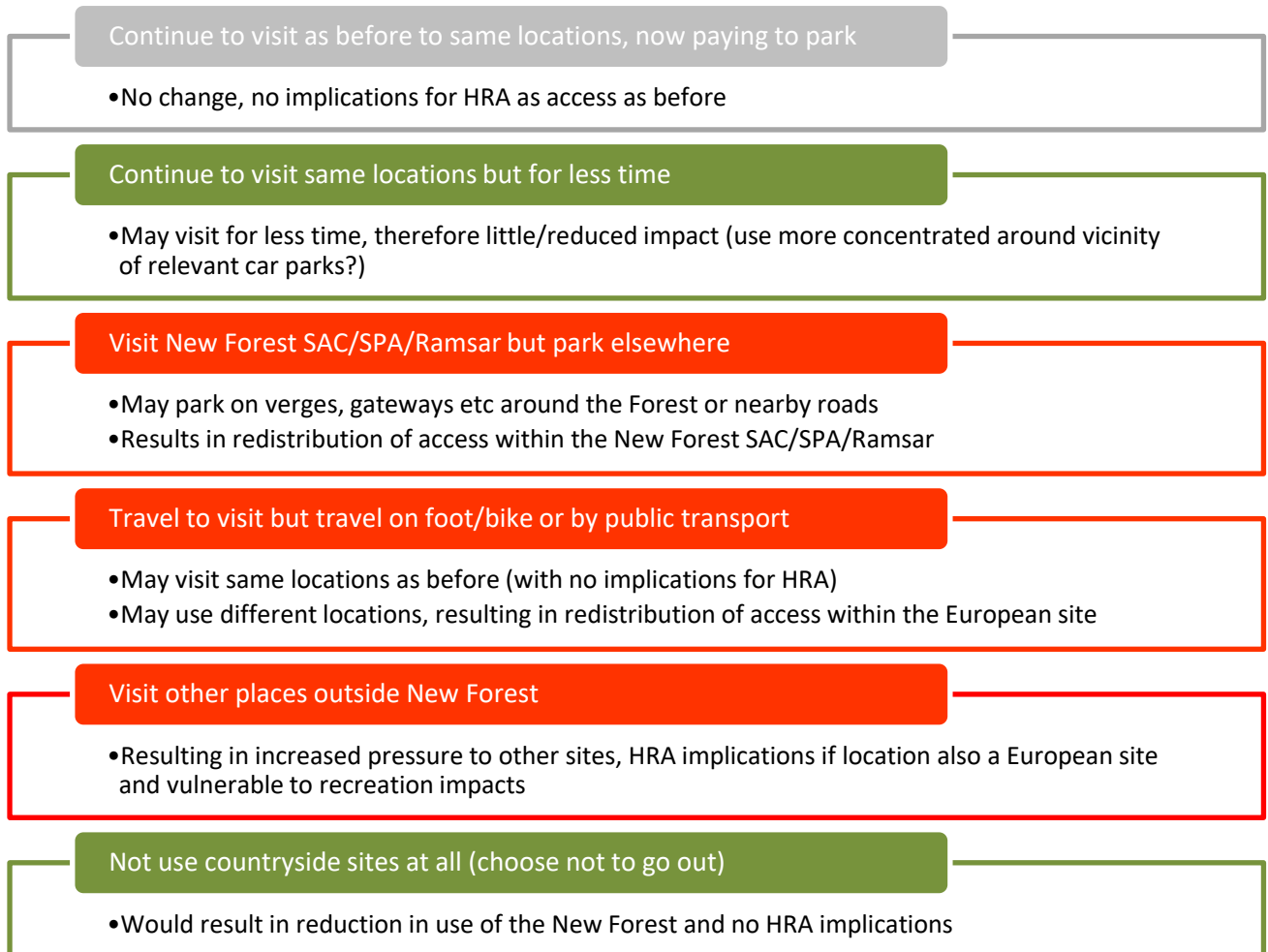


Figure 2: Potential implications for different visitor responses to the introduction of parking charges. Green shading indicates responses that result in a reduction in visitor numbers to the New Forest Sac/SPA/Ramsar and have no implications for the HRA; red shading indicates responses which result in a change of use with HRA implications, grey shading indicates no change, i.e. visitor use would remain as current.

New Forest SAC/SPA/Ramsar

4.6 The screening has identified likely significant effects alone for the following impact pathways within the New Forest SAC/SPA/Ramsar:

- Changes in levels of distribution and access;
- Change in visit patterns;
- Change in attitude;
- Ranger team diverted from other duties;
- Habitat loss from installation of parking change infrastructure.

Risks

4.7 There is a risk that some visitors may still choose to visit the same areas but will be reluctant to pay for parking, and as such utilise gateways, verges or car parks that are not on land managed by Forestry England. This will result in a change in the distribution of visitors across the New Forest SAC/SPA/Ramsar with some areas potentially becoming busier while others become less busy.

4.8 It is also possible that visitors may continue to access the same locations and pay for parking, however the parking charging might cause them to change their behaviour. Visitor data collected during 2018-19 (Liley et al., 2020) suggests visitors to the New Forest will typically spend around 95 minutes on site. This varies by activity, for example dog walkers will spend slightly less time on site (approximately an hour) and walkers, cyclists and wildlife enthusiasts will typically spend longer, over two hours. The visitor data also indicated that virtually all of their routes walked/cycled/run during their visit (typically <3km) were within New Forest European sites. People may decide to change their dwell time (and consequently where they walk) in order to fit with the charging regime. This could involve people staying longer than the typical 95 minutes because they have paid for the parking (say 2 hours) or it may conversely mean they visit for just an hour in order to pay less.

4.9 Parking charges may also generate public hostility and reputational damage for Forestry England. This could have implications for how people behave on site and could lead to public outcry or opposition to management or other initiatives Forestry England undertake in the

future. Forestry England and the National Park authority have ranger teams that undertake engagement, education work and influence visitor behaviour, and these rangers play a vital role in looking after the Forest and delivering other mitigation (such as addressing recreation impacts from housing growth, ██████████, et al., 2023). There is a risk, at least in the short term that parking charges might result in ranger time being diverted from other duties to addressing issues with visitors not understanding how to work machines, where to get tickets or dealing with complaints/enforcement etc.

- 4.10 Finally, there is a risk that the parking machines and other infrastructure such as signage may result in a direct loss of habitat and direct damage from concrete etc.

Ecological impacts and the conservation objectives

- 4.11 Any changes in recreation use could lead to a number of impacts relevant to the European site qualifying features, including damage, contamination, disturbance and increased fire incidence (see Lake et al., 2020 for review and discussion in context for the New Forest). Public access/disturbance is recognised by Natural England in the Site Improvement Plan for the Forest as a pressure on the site¹⁷.
- 4.12 Damage to the habitats for which the New Forest SAC is designated (and the habitats which in turn support the SPA/Ramsar features), can be realised through footfall (or wheels) on individual species, vegetation and soils. Issues relate to vegetation wear, soil compaction and erosion, i.e. largely unintentional consequences from the passage of people, pets and vehicles. These issues relate to plants and soils, but then changes in habitat extent (e.g. through the widening of footpaths and path erosion) and structure can also have consequences for a range of species and trampling can result in direct mortality for some fauna. In addition, damage can be deliberate, for example vandalism.

¹⁷ <https://publications.naturalengland.org.uk/publication/5174614971908096>

- 4.13 Vehicles parking on road verges are a long-standing concern as verge parking can lead to localised damage alongside some roads. Repeated wear will result in bare edges and a loss of vegetation, likely to be of particular concern for those verges with specialist flora such as Small Fleabane *Pulicaria vulgaris* (Lake et al., 2020). Parking in gateways may have similar impacts and may also block legitimate access, with implications for emergency services (e.g. responding to fires) and commoners.
- 4.14 Nutrient levels in soil (particularly nitrogen and phosphorous) are important factors determining plant species composition. On heathland, dog fouling is the equivalent to applying a high level of fertilizer, resulting in a reduction in species richness and the presence of species typically associated with more 'improved' habitats. The impacts of dog fouling can often be seen in the form of grassy edges of paths on many heaths with high levels of access. This can be exacerbated by trampling, which has a lesser effect on species such as grasses, which grow from the base rather than the tip.
- 4.15 Dogs will typically defecate within 10 minutes of a walk starting, and as a consequence most (but not all) deposition tends to occur within around 400m of a site entrance (Taylor *et al.*, 2005). In addition, most faeces are deposited close to the path, with a peak at approximately 1m from the path edge (Shaw et al., 1995). Dogs will also typically urinate at the start of a walk, but they will also urinate at frequent intervals during the walk. The total volume deposited on sites may be surprisingly large (De Frenne et al., 2022; Harris, 2023).
- 4.16 Dogs are also being increasingly recognised as an issue with respect to water quality. The tick and flea treatments used on dogs are toxic to a range of invertebrates and have been widely reported from water bodies (e.g. Diepens et al., 2023), including a recent study from the New Forest¹⁸. Dogs swimming in ponds can also cause contamination through increased turbidity (Denton & Groome, 2017).

¹⁸ <https://www.bbc.co.uk/news/uk-england-hampshire-68400630>

- 4.17 Besides dog fouling, other forms of contamination can include litter, fly tipping and the spread of non-native species, which can be spread on people's clothing or pets' fur. Studies have shown such vectors to distribute a range of non-native species and often over considerable distances (Anderson et al., 2015; Wichmann et al., 2009).
- 4.18 Fires can be caused accidentally from discarded cigarettes, by sparks from a campfire, BBQs (particularly the disposable BBQs that are placed on the ground), from fireworks, as a result of a controlled fire getting out of control, from discarded bottles in strong sunlight, from children playing with matches or similar, and even from deliberate arson. As such fire incidence can be directly linked to access. Climate change has meant that major fires are now more frequent and more severe (Jolly et al., 2015; Moffat & Gazzard, 2019) and heathland areas are particularly vulnerable. Impacts of fire on heathlands are reviewed by Underhill-Day (2005) and can include direct mortality, loss of habitat, loss of vegetation, damage to soils and vegetation change. Impacts can last many years.
- 4.19 Disturbance occurs where human activity influences an animal's behaviour or survival. By far the majority of the literature (and there are thousands of studies) focuses on birds (Brawn et al., 2001; Hill et al., 1997; for general reviews see Hockin et al., 1992; Lowen et al., 2008; Showler, 2010; Steven et al., 2011; Whitfield et al., 2008). The presence of people in the countryside will influence wildlife in many ways. For many species, the people or their pets (e.g. dogs) are a potential threat and as such it is to be expected that the response will be to modify behaviour, for example fleeing.
- 4.20 Disturbance can have a range of different impacts potentially affecting distribution, breeding success and health. Impacts can be chronic, for example otherwise suitable nesting habitat being completely avoided (e.g. Liley & Sutherland, 2007) or more short-term in nature, for example birds becoming alert and then resuming the initial activity (e.g. Fernandez-Juricic et al., 2001). For both nightjar and woodlark studies have shown recreation use affects the distribution of birds within sites, such that busy areas are avoided (Liley et al. 2006;

Mallord et al. 2007; Lowe, Rogers & Durrant 2014). For Dartford warblers, breeding productivity is lower in territories where access levels are high (Murison et al. 2007), this is because disturbed birds nest later in the season. For nightjars there is also evidence of breeding success being lower on busier sites and busier parts of sites (Murison 2002). For woodlarks at least, there are clear population-level impacts as a result of the presence of people on the heaths (Mallord et al. 2007).

- 4.21 It is often difficult to separate different types of activities as at many sites multiple activities tend to overlap in space and time. Nonetheless, dogs are often identified as having a disproportionate effect (Banks & Bryant, 2007; Cavalli et al., 2016; Gómez-Serrano, 2021; Harris, 2023; Lafferty, 2001; Liley & Fearnley, 2012; Taylor et al., 2007; Thomas et al., 2003); dogs are likely to be perceived as a greater threat, will actively chase birds and are able to track wildlife by smell.
- 4.22 High levels of access can also have issues for site management and take staff time and resources away from other management duties. Achieving effective conservation grazing on sites with high levels of access can be more challenging as recreational pressure can result in: worrying of animals by dogs, increased incidence of road accidents (although many may not be due to recreation), transfer of diseases, feeding and petting livestock and gateways etc may become blocked, limiting access for commoners. Worrying from dogs can also lead to animals behaving differently and becoming dangerous.
- 4.23 Visitors who consider the Forest first and foremost as a recreational destination may be less willing to take into account requirements dictated by land use or the wildlife of the Forest (such as keeping dogs under control). Parking charges could lead to the expectation of certain access rights, that certain areas should be primarily available for recreational pursuits or lead to a lack of willingness to see changes required for conservation or pastoral purposes, particularly changes that might result in a perceived loss of amenity.
- 4.24 As such it is clear there is the potential to undermine the conservation objectives for the New Forest in a range of ways. In particular, in terms

of the extent and distribution of qualifying natural habitats and habitats of qualifying species and the structure and function of qualifying natural habitats or habitats of qualifying features.

Potentially vulnerable locations

4.25 While Forestry England manage most of the New Forest car parks and charging will be instigated across the whole area, there are many miles of verges across the New Forest SAC/SPA/Ramsar and a range of locations where visitors might choose to park instead. Map 5 shows 281 parking locations within or in close proximity to New Forest European sites that could be vulnerable to displacement. Of those, we have identified 21 car parks that currently do not have charging and these are listed in further detail in Table 2. The remaining 260 parking locations comprise verges, laybys, gateways and roadside spaces. These have primarily been identified from survey work in 2018/19 (Panter & Saunders, 2020a) and therefore may not all be relevant or necessarily reflect the current situation. We have also drawn on Forestry England spatial data that identifies locations where verge parking is already perceived an issue. It should be noted that there may be additional areas that are vulnerable to increased verge/roadside parking within the villages, particularly on the western side of the New Forest SAC/SPA/Ramsar.

Table 2: Car parks and similar locations within the New Forest SAC/SPA/Ramsar that are likely to be vulnerable to displacement. Table indicative only and other locations may be picked up from monitoring. Table does not include verge parking locations and informal parking.

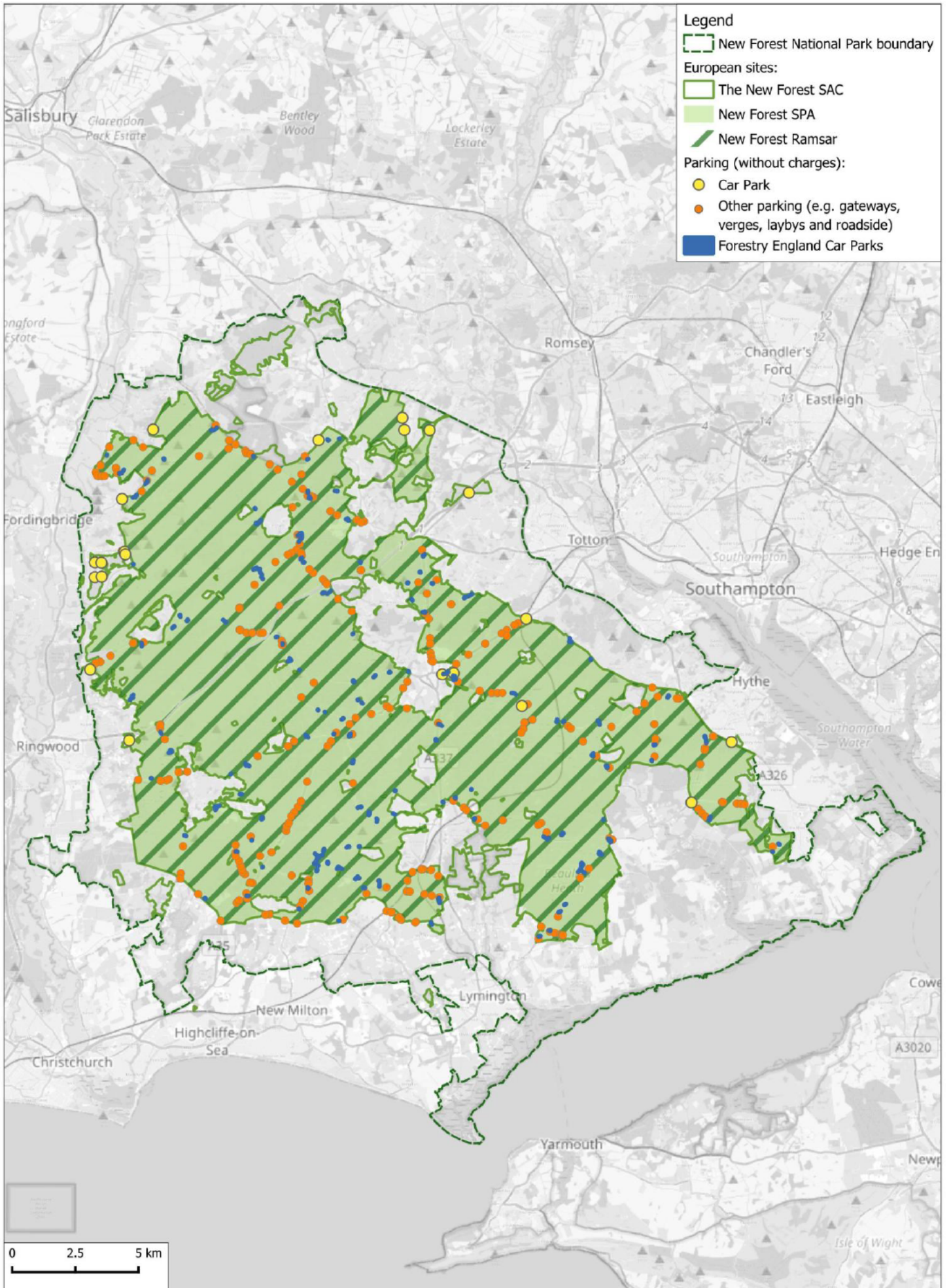
Name	Description
Blackhill	Large car park on edge of forest near Furzley, owned by National Trust.
Hyde Cricket Ground	A large open car park with access from the main road. Mainly used by school (opposite) and cricket club. Multiple access points to wider New Forest.
Hale Purlieu	Owned by National Trust. Access onto the forest, with Turf Hill (proposed FE charging) on opposite side of open forest area.
Land south of Abbots Well Rd	First parking area, leading into Abbots Well Road formal car park.
Abbots Well	Formal car park off Abbots Well Road.
Rockford Common	Owned by National Trust, adjacent to Rockford Sandpit.

NEW FOREST CAR PARKS HRA 2024

Name	Description
Hightown Common	Owned by National Trust, near to Picket Hill and Forestry England Parking locations at Picket Post and Vereley car park.
Royal Oak pub car park	Pub car park with potentially some level of recreational use. Direct access to forest and 900m from FE car park (Moonhills).
Lyndhurst Cemetery	Close proximity to Forestry England car parks where charging will be implemented (Boltons Bench, Boltons Queens, Boltons Cricket and Parc Pale).
Appletree Court	As above.
Fighting Cocks pub car park	On the edge of New Forest European sites with access to the forest. Pub is approximately 400m down the road from Godshill Cricket Car Park (proposed FE charging).
Car park opposite Lamb Inn	On edge of New Forest sites, with laybys directly off the road. 320m down the road from Bramshaw Wood (proposed FE charging).
West Wellow	Formal car park on the edge of Canada Common, owned by Wellow Parish Council.
Car park near Canada Common	Small parking area at end of the lane leading directly onto Canada Common.
Car park near Church of Holy Ascension, Hyde	End of quiet lane and parking linked to Church. Access possible onto the wider forest.
Car park near Denny Wood Campsite	Parking just after Denny Wood campsite sign, pull in off road. Access directly onto forest behind.
Gorley Common	Within SAC boundary and multiple access points onto forest (Gorley Common).
Becky's Orchard	As above.
Outside site boundary, but impacts possible to New Forest sites:	
Parking near Forest Front Nature Reserve	Edge of forest but close (40m) to the SAC boundary.
Lyndhurst Road Parking	Edge of forest but close (100m) to SAC boundary.
Empress of Blandings pub car park	Edge of forest but close (70m) to SAC boundary.

4.26 In addition, impacts associated with changes in public attitude, rangers being diverted or direct habitat loss could occur across the New Forest SAC/SPA/Ramsar.

Map 5: Potential displacement parking locations within the New Forest European sites



Contains Ordnance Survey data © Crown copyright and Database Right 2023. Contains map data © OpenStreetMap contributors. Terms: www.openstreetmap.org/copyright Designated site boundaries download from the Natural England website © Natural England.

Mitigation

- 4.27 A range of mitigation measures are proposed or can be instigated as needed (e.g. triggered by monitoring). Many of these are incorporated into the proposal. Measures are summarised in Table 3.
- 4.28 To some extent the scale of risk is uncertain, and therefore there is uncertainty around the level of mitigation required and where. Charging for parking is now common across countryside sites in England and many visitors are likely to accept the change as part of the norm, as such risks could be low. It is however necessary that Forestry England have considered all possible scenarios, can adapt mitigation accordingly and that the right levels of mitigation are in place at the outset. Monitoring will be key to this process.
- 4.29 Any inappropriate parking may soon get out of hand, as visitors will realise that others are getting away with not paying and follow suite. It will not take many cars parking along a verge before damage occurs. As such the monitoring must function as an early warning system and measures be targeted accordingly.
- 4.30 In particular, the presence of parked cars on particular verges/roadsides across more than two dates¹⁹ should trigger one or more of the following at that location:
- Dedicated ranger time to speak to the people parking there and make sure they are aware of options for passes, how to get tickets etc and the impacts of parking on verges;
 - Leaflets under windscreen wipers;
 - Ditch and banking;
 - Dragons teeth;
 - Civil enforcement;
 - Implementation of parking charges (potentially possible at some tarmaced roadsides etc within Forestry England management).
- 4.31 Should the monitoring indicate continuing issues that are unresolvable through the above, then there are further avenues that

¹⁹ i.e. the trigger is such that on more than 2 separate transects the data show verge parking or use of gateways etc. in the same location. There may need to be reference to the baseline data to check that this reflects displacement parking.

can be resorted to. The monitoring results will provide the potential for multi-agency approach to parking across the New Forest and the potential for clearways, providing an option to enforce verge parking. A further option would be for Forestry England to remove the parking charges entirely.

Table 3: Mitigation measures relating to the New Forest SAC/SPA/Ramsar

Mitigation Measure	Further details	Issues addressed	Scope to change
Additional ranger provision (anticipated team size of 10 rangers and 5 vehicles)	Dedicated Forestry England team on the ground from the outset; flexible resource with ability to focus their time at vulnerable locations.	Enforcement, Displacement parking within the SAC/SPA/Ramsar, any negative public reaction or concerns raised by visitors.	Deployment can be potentially focussed/changed if/when issues arise
Charging instigated at additional locations	It is possible that some locations where displacement parking occurs could have charging applied and fall within Forestry England's remit, for example some large surfaced laybys where currently charging is not proposed.	Displacement parking within the SAC/SPA/Ramsar	Likely to be limited opportunity but new locations where viable to introduce charging may be revealed from the monitoring
Comms plan	Plan covers all aspects of communication – online, social media, media, membership communication, etc. Messaging will be clear around the need for charging and its benefits to the landscape, motivations to encourage compliance and include the availability of membership/discounted parking schemes (and how to apply). On-site signage will also be clear to ensuring high awareness of charging, a positive customer experience and compliance. Communications need to be shared with and amplified by partners also sharing information with regular and occasional visitors to the Forest (i.e. tourism bodies, NPA, etc).	Negative public attitudes, with scope to promote positive aspects of the introduction of charging although this may take time for acceptance to be achieved.	Comms plan incorporates flexibility, setting key messages and responses necessary where different scenarios occur. Key messaging incorporated throughout comms – dogs on leads, fire risk, not petting livestock etc.
Installation of dragon's teeth or ditch and bank	Road verges that are most at risk and where such measures are feasible will have these installed prior to charging being implemented (as set out in the proposals). Additional works will be triggered by monitoring data and live responses from ranger team as to where issues start.	Displacement parking within the SAC/SPA/Ramsar	Can be ramped up as required and where monitoring data shows verge parking taking place.

NEW FOREST CAR PARKS HRA 2024

Mitigation Measure	Further details	Issues addressed	Scope to change
Monitoring	Monitoring will involve driving transects counting parked cars, including those parked on verges etc and including parking locations outside Forestry England ownership. These will be mapped. Ticket sales will also provide a metric of use and enable long term comparison of trends in use. Transects will be undertaken at variable times of day and initially twice per week.	Displacement parking within the SAC/SPA/Ramsar	Frequency of transects can be adapted and decrease over time. Initially should be frequent enough to pick up change quickly and this will trigger specific action (engagement by ranger team, further ditch/banking or dragon's teeth, targeted comms). More than 2 occurrences of inappropriate parking should trigger specific interventions at those locations.
Free parking key users of the Forest	Key users such as those working in the Forest can be excluded from charges. This can be extended to cover Commoners, those undertaking surveys, specialist agencies carrying out works etc.	Limits risks of key users not being able to access	
Ability to purchase parking pass	Annual passes will be easily available.	Displacement parking within the SAC/SPA/Ramsar; public reaction	Can be further promoted as necessary.
Leafleting	Leaflets placed under car windscreen wipers to inform visitors parking inappropriately of the issues and let them know they have been noticed.	Displacement parking within the SAC/SPA/Ramsar	Cars can be targeted as needed.
Liaison and collaboration	Regular meetings with other organisations ²⁰ with car parks and ranger teams, providing opportunity for Forestry England to provide support, share monitoring results. These commencing well before mitigation needed, so all ready. Ideally other organisations to implement parking charges at the same time.	Displacement parking within the SAC/SPA/Ramsar, any negative public reaction or concerns raised by visitors.	Enables collaborative working to resolve any issues that emerge.

²⁰ These will include Beaulieu Estate, Hampshire County Council, Parish Councils, the National Trust etc.

NEW FOREST CAR PARKS HRA 2024

Mitigation Measure	Further details	Issues addressed	Scope to change
Charging model used	Car park charges carefully selected so as to be in keeping with other areas and regularly reviewed.	Displacement parking within the SAC/SPA/Ramsar (may also influence public reactions)	Regular review ensures charging always in line with other locations that also charge within the New Forest. Scope to reduce cost of passes or all parking charges.
Strict procedures for installation of infrastructure	Terminals installed in 24 car parks and 2 car parks with ANPR; in all cases this infrastructure will be limited in extent, installed in gravelled areas only (within existing car parks) and with limited concrete anchor. All signage to be wooden post inserted directly into the ground with no concrete.	Direct habitat loss	No further change needed as measures avoid any harm.
Parking charges instigated at other organisation's car parks	There is potential for parking charges to be introduced at non-Forestry England car parks within the New Forest. Hampshire County Council are already pursuing this approach on their own car parks ²¹ .	Displacement parking within the SAC/SPA/Ramsar (may also influence public reactions)	Different organisations could implement at different times.
Civil enforcement	Scope for civil enforcement for parking in certain locations by the local authority.	Displacement parking within the SAC/SPA/Ramsar in select areas	

²¹ Consultation in early 2024, see <https://www.hants.gov.uk/aboutthecouncil/haveyoursay/consultations/future-services-consultation/rural-countryside-parking>

Dorset Heaths

4.32 The screening has identified likely significant effects alone for the following impact pathways within the Dorset Heaths:

- Displacement to other European sites.

Risks

4.33 Relevant sites within the Dorset Heaths are the Dorset Heaths SAC, the Dorset Heathlands SPA and the Dorset Heathlands Ramsar.

4.34 Recreation impacts to the Dorset Heaths are a long standing concern (De Molinaar, 1998; Haskins, 2000; Liley et al., 2007; Panter et al., 2021; Underhill-Day, 2005) and recognised by Natural England in the Site Improvement Plan²² as both a current pressure and a threat.

4.35 Many of the impacts from recreation to the Dorset Heaths are similar to those already identified for the New Forest (see above) and include:

- Damage from trampling/wheels etc leading lead to vegetation wear, soil compaction and erosion;
- Contamination from dog fouling;
- Impacts of disturbance to heathland birds are a key concern;
- Increased fire risk;
- Impacts to management, such as challenges with livestock grazing.

4.36 Recreation and urban effects can clearly therefore undermine the conservation objectives. For the Dorset Heathlands SPA, the supplementary advice for each species states in relation to disturbance:

“Disturbance caused by human activity is particularly significant within parts of the Dorset Heathlands SPA because of its proximity to large urban areas. Without avoidance measures, the cumulative effect of new housing would be likely to lead to an increase in urban pressures (e.g. an increase in wildfires, damaging recreational uses, introduction of incompatible plants and animals, loss of vegetation and soil erosion and disturbance by humans and their pets –

²²

<https://publications.naturalengland.org.uk/publication/5181909839642624#:~:text=The%20SIP%20consists%20of%20three,containing%20contextual%20information%20and%20links.>

Underhill-Day 2005) on parts of the SPA with negative effects on [relevant species] likely. A strategic approach to avoiding and mitigating these potential impacts arising as a result of new residential development has been developed for the Dorset Heathlands in response to the significant levels of housing growth.”

4.37 Similarly, the supplementary advice for the two Dorset Heaths SACs highlight the issues with respect to recreation and urban effects, in relation to the structure and function of the SACs:

“Typical species such as the rare reptiles are vulnerable to effects associated with heaths in urban locations such as a high incidence of fires, predation by domestic cats and trampling or disturbance of egg-laying sites. Public access to lowland heathland from nearby residential developments and other proposals that lead to an increase in visitor numbers, or changes in the pattern of public access may increase the frequency of these effects. These effects are most marked within 400m of heathland. A strategic approach to avoiding and mitigating for potential impacts arising from recreational pressure as a result of new residential development has been developed for the Dorset Heathlands in response to the significant levels of growth in emerging regional plans. The mitigation strategy for the Dorset Heathlands has now been in place since 2006, The Dorset Heathlands Planning Framework Supplementary Planning Document 2015 – 2020 (SPD) sets out the detailed approach to the avoidance and mitigation of adverse effects of development on the Dorset Heathlands. The guiding principle of the SPD is that there is no net increase on urban pressures”.

Vulnerable locations

4.38 The Dorset Heaths that are closest to the New Forest are the ones that are likely to be most vulnerable to any change. The following heaths could be potentially relevant:

- Town Common;
- St. Catherine’s;
- Sopley Common,
- Avon Heath;
- Cranbourne Common and areas within Ringwood Forest such as Stephen’s Castle;
- Holt Heath;
- West Parley
- Ferndown.

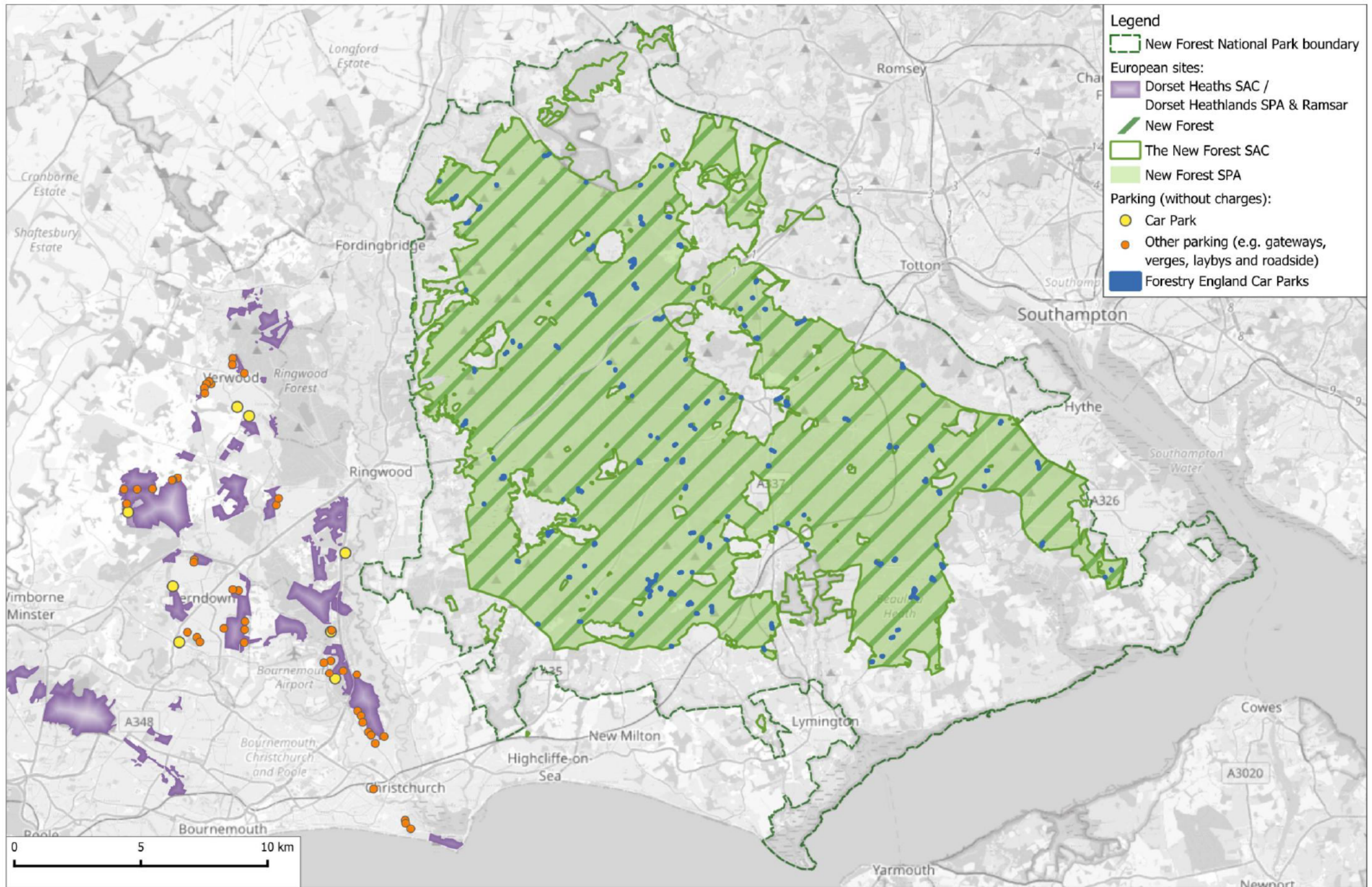
4.39 Car parks in the eastern part of the Dorset Heaths that are potentially relevant are shown in Map 6. A total of 8 car parks (without car parking charges) and 45 roadside/verges/laybys have been identified in relation to the Heaths. These have been largely extracted from data held and collected by the Dorset Heaths Partnership²³ (see Panter et al., 2021 for description and review).

Table 4: Potentially vulnerable parking locations around the Dorset Heaths, where displacement is a risk. The list is not meant to be exhaustive.

Name	Relevant European site	Description
Potterne Park	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Within park but direct access via park to Verwood Heaths.
Whitesheet (Holt Heath)	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Forestry Commission car park on the edge of Holt Heath.
Matchams View (Avon Heath)	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Located at the centre of Leybrook Common (Avon Heath).
Car park off Wimborne Road (Ferndown)	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Formal car park for Ferndown Common.
Matchams Lane Forest car park (Ramsdown)	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Forestry England car park on the edge of Hurn Forest, with direct access from the forest onto Barnsfield Heath.
Ramsdown car park, near Christchurch Football Club (Sopley Common)	Dorset Heaths SAC; Dorset Heathlands SPA & Ramsar.	Nearby to access points for Sopley Common.

²³ <https://www.dorsetheaths.org.uk/>

Map 6: Potential displacement parking locations associated with the Dorset Heaths SAC & Dorset Heathlands SPA & Ramsar



Mitigation

- 4.40 The Dorset Heaths comprise a range of fragmented heaths and the locations where change may occur are quite dispersed. Risks are potentially low, will be site specific and potentially short-term in nature. They may be hard to predict. Counts of parked cars around the Dorset Heaths are undertaken regularly by the Dorset Heaths Partnership. These counts are long-established, and part of the mitigation delivered by the Dorset Heaths Partnership with respect to local housing growth. These data are reviewed on an annual basis by the Dorset Heaths Partnership and used to inform mitigation delivery.
- 4.41 Forestry England will remain in close contact with the Dorset Heaths Partnership and support them as necessary with the monitoring and review of results. Furthermore, Forestry England will maintain close contact with staff at the individual sites identified as vulnerable, such that should any issues arise, Forestry England can support the organisations involved. This could be through ranger support, survey/monitoring etc. It should be noted that many of the potential locations where displacement may occur are adjacent or close to the Forestry England sites at Hurn and Ringwood Forest, and therefore Forestry England as an organisation has staff covering these areas and in the vicinity.

Solent Coast

- 4.42 The screening has identified likely significant effects alone for the following impact pathways for the Solent Coast:
- Displacement to other European sites.

Risks

- 4.43 Coastal habitats and species are vulnerable to a range of recreation impacts, that could be triggered by additional recreation use linked to displacement. Reviews such as Saunders *et al.* (2000) and Lowen *et al.* (2008) provide context and background. Natural England's site

improvement plan for the Solent²⁴ identifies public access and disturbance as a current threat.

4.44 Many of the impacts are similar to those already identified for the New Forest and Dorset Heaths (see above) and include:

- Damage from trampling/wheels etc leading lead to vegetation wear, soil compaction and erosion (relevant to vegetated shingle, saltmarsh and foredune habitats in particular);
- Contamination from dog fouling and contamination of water from dogs swimming (potentially relevant to saline lagoons);
- Impacts of disturbance to birds a key concern for breeding terns (Liley, Saunders, et al., 2023) and wintering waterbirds (Liley et al., 2010; Liley, Panter, et al., 2023) with mitigation for recreation (associated with new housing growth) established through Bird Aware Solent;
- Increased fire risk (potentially a low risk, but can be relevant to reed beds);
- Impacts to management, such as challenges with livestock grazing.

4.45 The above have the potential to undermine the conservation objectives of the two SACs with respect to distribution of the feature, extent and structure and function. For the Solent and Southampton Water SPA the supplementary conservation advice sets targets for the qualifying features to reduce the frequency, duration and / or intensity of disturbance. For the wintering bird features, the advice highlights the Bird Aware Solent project and need for mitigation from increased recreation and refer to evidence from survey or monitoring that shows disturbance levels are having a likely significant effect on the features of the Solent SPAs.

²⁴ This plan covers the Solent and Southampton Water SPA and the Solent Maritime SAC as well as some additional SPA sites. See: <https://publications.naturalengland.org.uk/publication/4692013588938752#:~:text=The%20SIP%20consists%20of%20three,containing%20contextual%20information%20and%20links.>

Vulnerable locations

- 4.46 The following Solent Coast sites are relevant to the appropriate assessment: Solent & Isle of Wight Lagoons SAC; Solent Maritime SAC Solent and Southampton Water SPA/Ramsar.
- 4.47 The most relevant parts of the coast are those between Hurst Spit running east, including the Southampton Water coastline up to and around Southampton. Map 7 shows the coast parking locations that are potentially relevant to the various Solent European sites.
- 4.48 The locations in Map 7 have been plotted primarily from data collected by Bird Aware Solent and within a broad area of focus of 5km from the New Forest National Park boundary. We have excluded locations on the Isle of Wight as it is unlikely displacement will relate to sites on the other side of the Solent. A total of 56 parking locations have been identified along the Solent Coast. Of those, there are perhaps around six car parks that might be vulnerable to displacement and in addition there are a range of laybys and more informal parking locations, such as New Lane/Saltgrass Lane near the base of Hurst Spit where there is currently free parking (see Table 5 for further details).
- 4.49 The geography is such that marked increases in access to the New Forest coast to the south (Hurst Spit to Calshot), as a result of displacement, may be relatively unlikely, as most people will have had to pass through the New Forest and past a range of other locations where they could visit instead of a Forestry England car park. The Southampton Water coastline north of Calshot, which is perhaps more accessible includes the saltmarsh areas around Dibden and there are fairly limited parking options at the moment, as Map 7 shows.

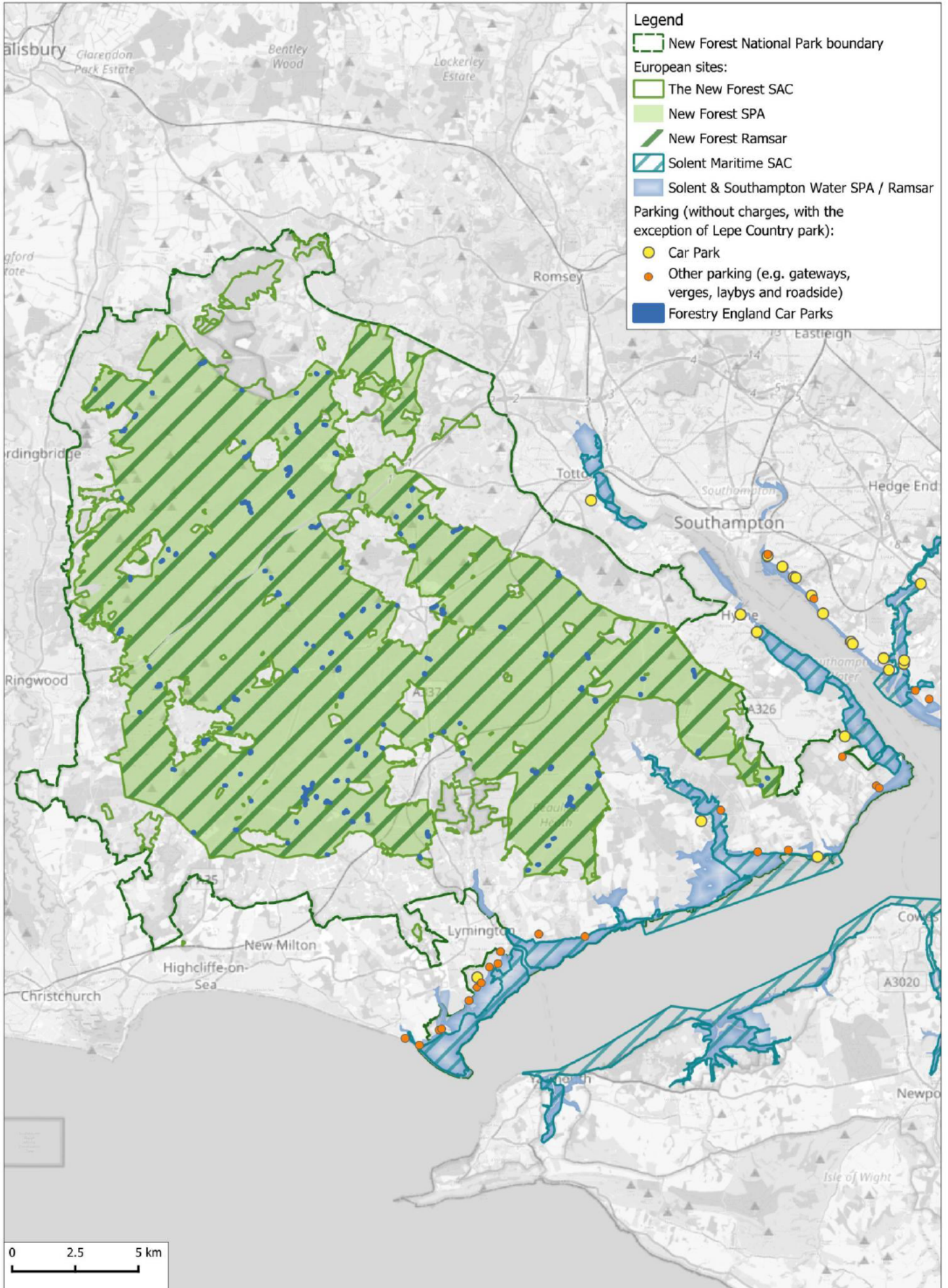
Table 5: Potentially vulnerable parking locations around the Solent Coast where displacement may be a risk. The list is not intended to be exhaustive.

Name	Relevant European site (distance)	Description
The Chequers Inn	Solent & Southampton Water SPA/Ramsar (260m); Solent Maritime SAC (560m).	Small car park designated for pub use.
Bucklers Hard Parking	Solent & Southampton Water SPA/Ramsar (250m);	Near The Captain's Table pub, but primarily provides parking for historic

NEW FOREST CAR PARKS HRA 2024

Name	Relevant European site (distance)	Description
	Solent Maritime SAC (250m).	shipping yard. Access to Beaulieu River.
Quayside parking / near Jolly Sailor pub	Solent & Southampton Water SPA/Ramsar (0m); Solent Maritime SAC (0m).	Small parking area on quayside, near Ashlett Green, a sailing club and pub.
Large layby on Shore Road	Solent & Southampton Water SPA/Ramsar (15m); Solent Maritime SAC (15m).	Small parking area next to the road, in very close proximity to Southampton Water and associated marshes.
Seashells Bar & Lounge	Solent & Southampton Water SPA/Ramsar (35m); Solent Maritime SAC (860m).	Close proximity to European sites via promenade behind eateries.
Eling Car Park	Solent & Southampton Water SPA/Ramsar (310m); Solent Maritime SAC (310m).	Large car park with access to associated cemeteries and boardwalks across Bartley Water. Near to Eling and Bury Marshes SSSI.
Roadside parking on Tanners Lane	Solent & Southampton Water SPA/Ramsar (30m); Solent Maritime SAC (30m).	Existing issues around roadside parking, direct access to coast and European sites.
Lepe Country Park	Solent & Southampton Water SPA/Ramsar (30m); Solent Maritime SAC (30m).	Concerns raised about displacement here, despite existing car park charges. Facilities and restaurants available easy access to the coast and European sites.

Map 7: Potential displacement locations associated with the Solent Coast



Mitigation

- 4.50 The Solent Coast around the New Forest is relatively inaccessible and there are relatively few parking locations. Some, such as the car park at Keyhaven or the parking at Lepe, have parking charges. Any change is therefore likely to be small and potentially dispersed. Risks are therefore relatively low but hard to predict.
- 4.51 Counts of parked cars along the Solent Coast are undertaken regularly by Bird Aware Solent. These counts are long-established, and part of the mitigation delivered by Bird Aware Solent with respect to local housing growth. These data are reviewed by Bird Aware Solent and used to inform mitigation delivery.
- 4.52 Forestry England will remain in close contact with Bird Aware Solent and support them as necessary with the monitoring and review of results. Furthermore, Forestry England will maintain close contact with staff at the individual sites identified as vulnerable, such that should any issues arise, Forestry England can support the organisations involved. This could be through ranger support, assistance with survey/monitoring etc. Forestry England has the potential to undertake work to improve and better manage access at locations such as Tanners Lane, where Forestry England own adjacent land and the road verges. There are therefore ways in which Forestry England can directly address issues, in light of monitoring results.

5. Integrity Test

- 5.1 This is an HRA report for a proposal to introduce car park charging across the existing car parks within or immediately adjacent to The New Forest SAC/SPA/Ramsar, including the installation of a small number of ticket machines and other infrastructure at selected locations within car parks. The HRA report has been prepared to help Forestry England discharge its duties under the Habitats Regulations 2017 (as amended). The outcomes allow the following conclusions to be drawn:
- 5.2 In terms of impacts from recreational pressure, it can be concluded that **mitigation ensures beyond reasonable scientific doubt that adverse effects on the integrity of the New Forest SAC/SPA/Ramsar can be avoided alone.** The proposal involves very limited infrastructure that will be installed solely in existing gravelled (i.e. unvegetated) areas of car parks. Impacts associated with displacement will be addressed through a dedicated ranger team and monitoring. The ranger team will be sufficiently large to cover the whole Forest. The monitoring will be necessary to identify if any displacement parking is taking place and the rangers can then address this, with a range of options at their disposal. This approach addresses the uncertainty around the scale of displacement and where it might occur, and is a flexible approach that can adapt over time. Monitoring is set out in Forestry England's proposal and the conclusions of this HRA are dependent upon the monitoring being implemented. The mitigation and monitoring will ensure any residual effects will be avoided, and there is therefore no need for an in-combination assessment.
- 5.3 Displacement may also occur to parking locations beyond the New Forest. Risks have been identified for the Dorset Heaths (Dorset Heaths SAC, Dorset Heathlands SPA/Ramsar) and the Solent Coast (Solent & Isle of Wight Lagoons SAC; Solent Maritime SAC Solent and Southampton Water SPA/Ramsar). For these European sites it can be concluded that **mitigation ensures beyond reasonable scientific doubt that adverse effects on the integrity can be avoided alone.**

- 5.4 This conclusion is reached as while any change is likely to be hard to predict, it is likely to be relatively dispersed, short term and potentially low. A watching brief, relying on the existing monitoring already in place and established (to inform the mitigation for recreation impacts associated with housing), is proposed, involving regular counts of parked vehicles. Forestry England will remain in close contact with the relevant organisations. Should marked change occur at particular locations, Forestry England will provide some support to the relevant organisations, as needed. This could involve additional ranger time or funding to assist with engagement or monitoring. This approach addresses the uncertainty around the scale of displacement and where it might occur, and is a flexible approach that can adapt over time. This will ensure any residual effects will be avoided, and there is no need for an in-combination assessment.
- 5.5 Consultation with Natural England should be undertaken.

References

- Anderson, L. G., Rocliffe, S., Haddaway, N. R., & Dunn, A. M. (2015). The Role of Tourism and Recreation in the Spread of Non-Native Species: A Systematic Review and Meta-Analysis. *PLOS ONE*, *10*(10), e0140833.
<https://doi.org/10.1371/journal.pone.0140833>
- Banks, P. B., & Bryant, J. V. (2007). Four-legged friend of foe? Dog-walking displaces native birds from natural areas. *Biology Letters*, *3*(6), 611–613.
- Beunen, R., Jaarsma, C. F., & Regnerus, H. D. (2006). Evaluating the effects of parking policy measures in nature areas. *Journal of Transport Geography*, *14*(5), 376–383.
<https://doi.org/10.1016/j.jtrangeo.2005.10.002>
- Brawn, J., Robinson, S., & Thompson III, F. (2001). The role of disturbance in the ecology and conservation of birds. *Annual Review of Ecology and Systematics*, *32*(2001), 251–276.
- Cavalli, M., Baladrón, A. V., Isacch, J. P., Biondi, L. M., & Bó, M. S. (2016). Differential risk perception of rural and urban Burrowing Owls exposed to humans and dogs. *Behavioural Processes*, *124*, 60–65. <https://doi.org/10.1016/j.beproc.2015.12.006>
- De Frenne, P., Cougnon, M., Janssens, G. P. J., & Vangansbeke, P. (2022). Nutrient fertilization by dogs in peri-urban ecosystems. *Ecological Solutions and Evidence*, *3*(1), e12128. <https://doi.org/10.1002/2688-8319.12128>
- De Molinaar, H. J. G. (1998). *On-the-spot appraisal of the Dorset heathland, UK. Report and recommendations to the standing committee on The Convention on the Conservation of European Wildlife and Natural Habitats*. Council of Europe.

Denton, J., & Groome, G. (2017). Dogs and ponds: A case study from Headley Heath.

Conservation Land Management, 15(2), 4–8.

Diepens, N. J., Belgers, D., Buijse, L., & Roessink, I. (2023). Pet dogs transfer veterinary medicines to the environment. *Science of The Total Environment*, 858, 159550.

<https://doi.org/10.1016/j.scitotenv.2022.159550>

Fernandez-Juricic, E., Jimenez, M. D., & Lucas, E. (2001). Alert distance as an alternative measure of bird tolerance to human disturbance: Implications for park design.

Environmental Conservation, 3, 263–269.

Gómez-Serrano, M. Á. (2021). Four-legged foes: Dogs disturb nesting plovers more than people do on tourist beaches. *Ibis*, 163(2), 338–352.

<https://doi.org/10.1111/ibi.12879>

Harris, S. (2023). Beware the dog: The ecological and environmental impacts of pet dogs. *British Wildlife*, 34(7), 487–496.

Haskins, L. (2000). Heathlands in an urban setting—Effects of urban development on heathlands of south-east Dorset. *British Wildlife*, 11(4), 229–237.

Hill, D., Hockin, D., Price, D., Tucker, G., Morris, R., & Treweek, J. (1997). Bird disturbance: Improving the quality and utility of disturbance research. *Journal of Applied Ecology*, 34((2)), 275–288.

Hockin, D., Ounsted, M., Gorman, M., Hill, D., Keller, V., & Barker, M. A. (1992).

Examination of the effects of Disturbance on birds with reference to its importance in Ecological Assessments. *Journal of Environmental Management*, 36, 253–286.

- Jolly, W. M., Cochrane, M. A., Freeborn, P. H., Holden, Z. A., Brown, T. J., Williamson, G. J., & Bowman, D. M. J. S. (2015). Climate-induced variations in global wildfire danger from 1979 to 2013. *Nature Communications*, 6(1), 1–11.
<https://doi.org/10.1038/ncomms8537>
- Lafferty, K. (2001). Birds at a Southern California beach: Seasonality, habitat use and disturbance by human activity. *Biodiversity and Conservation*, 10(11), 1949–1962.
- Lake, S., Liley, D., & Saunders, P. (2020). *Recreation use of the New Forest SAC SPA Ramsar: Impacts of recreation and potential mitigation approaches* (499). Footprint Ecology / Test Valley BC.
- Liley, D. (2016). *Visitor survey report from Upton Country Park, February 2016* (317). Footprint Ecology / Borough of Poole.
- Liley, D., Caals, Z., Shellswell, C., & Lake, S., S. (2023). *New Forest Strategic Access Management and Monitoring Report*. Footprint Ecology.
- Liley, D., Clarke, R. T., Underhill-Day, J., & Tyldesley, D. T. (2007). *Evidence to support the Appropriate Assessment of development plans and projects in south-east Dorset*. Footprint Ecology / Dorset County Council. [internal-pdf://Footprint et al Dorset evidence base, January 8th 2007-2871396608/Footprint et al Dorset evidence base, January 8th 2007.pdf](#) [internal-pdf://Footprint et al Dorset evidence base MAPS, January 8th 2007-3139838720/Footprint et al Dorset evidence base MAPS, January 8th 2007.pdf](#)
- Liley, D., & Fearnley, H. (2012). *Poole Harbour Disturbance Study*. Footprint Ecology / Natural England.

- 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 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* (711). Report by Footprint Ecology for Bird Aware Solent.
- Liley, D., Saunders, P., & Rush, E. (2023). *Review of the likelihood of impacts on breeding birds around the Solent from increasing recreational disturbance from new housing* (772). Footprint Ecology / Bird Aware Solent.
- Liley, D., Stillman, R. A., & Fearnley, H. (2010). *The Solent Disturbance and Mitigation Project Phase II. Results of bird disturbance fieldwork, 2009/10*. Footprint Ecology / Solent Forum.
- Liley, D., & Sutherland, W. J. (2007). Predicting the population consequences of human disturbance for Ringed Plovers *Charadrius hiaticula*: A game theory approach. *Ibis*, 149(s1), 82–94. <https://doi.org/doi:10.1111/j.1474-919X.2007.00664.x>
- Liley, D., Weitowitz, D., & Hoskin, R. (2018). *Habitats Regulations Assessment for proposed charges at Surrey car-parks* (Unpub. 442). Footprint Ecology / Surrey County 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

- Moffat, A., & Gazzard, R. (2019). Wildfire adaptation and contingency planning in south east England—Implementation of current legislation and policy. *Quarterly Journal of Forestry*, 113(3), 160–165.
- Panter, C., & Caals, Z. (2020). *Dorset Heaths 2019 Visitor Survey* (Unpub. Report 545). Urban Heaths Partnership.
- Panter, C., Liley, D., Caals, Z., Saunders, P., & Clarke, R. (2021). *Urban development and the Dorset Heaths: Long term analysis & evidence base review* (616). Report by Footprint Ecology for the Urban Heaths Partnership.
- Panter, C., & Saunders, P. (2020a). *Recreation use of the New Forest SPA/SAC/Ramsar: New Forest Vehicle Counts 2018/19* (Unpublished 499). Unpublished report by Footprint Ecology for Test Valley Council.
- Panter, C., & Saunders, P. (2020b). *Recreation use of the New Forest SPA/SAC/Ramsar: New Forest Vehicle Counts 2018/19* (Unpublished 499). Unpublished report by Footprint Ecology for Test Valley Council.
- Phillip, S., & Macmillan, D. C. (2009). Car park charging in the Cairngorms National Park. *Scottish Geographical Journal*, 122(3), 204–222.
- Saunders, C., Selwyn, J., Richardson, S., May, V., & Heeps, C. (2000). *A review of the effects of recreational interactions within UK European marine sites*. UK CEED & Bournemouth University.
- Shaw, P. J. A., Lankey, K., & Hollingham, S. A. (1995). Impacts of trampling and dog fouling on vegetation and soil conditions on Headley Heath. *The London Naturalist*, 74, 77–82.

- Shoji, Y., Kim, H., Tsuge, T., & Kuriyama, K. (2023). Impact of user fees for visitors to national parks in the presence of alternative sites. *Annals of Tourism Research Empirical Insights*, 4(2), 100104. <https://doi.org/10.1016/j.annale.2023.100104>
- Showler, D. (2010). *What is the impact of public access on the breeding success of ground-nesting and cliff-nesting birds* (Systematic Review; Completed Review Report CEE 05-10). Collaboration for Environmental Evidence, Bangor University. <http://www.environmentalevidence.org/Documents/SR16.pdf>
- Steven, R., Pickering, C., & Guy Castley, J. (2011). A review of the impacts of nature based recreation on birds. *Journal of Environmental Management*, 92(10), 2287–2294. <https://doi.org/10.1016/j.jenvman.2011.05.005>
- Taylor, E. C., Green, R. E., & Perrins, J. (2007). Stone-curlews *Burhinus oedicnemus* and recreational disturbance: Developing a management tool for access. *Ibis*, 149, 37–44. <https://doi.org/10.1111/j.1474-919X.2007.00645.x>
- Thomas, K., Kvitek, R. G., & Bretz, C. (2003). Effects of human activity on the foraging behavior of sanderlings *Calidris alba*. *Biological Conservation*, 109(1), 67–71. [https://doi.org/10.1016/S0006-3207\(02\)00137-4](https://doi.org/10.1016/S0006-3207(02)00137-4)
- Tyldesley, D., & Chapman, C. (2013). *The Habitats Regulations Handbook* (April 2024 update). DTA Publications. <https://www.dtapublications.co.uk/handbook/>
- 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](internal-pdf://EN%20RR%20623%2C%20John%20Day%20literature%20review%20of%20urban%20effects-3794804480/EN%20RR%20623%2C%20John%20Day%20literature%20review%20of%20urban%20effects.pdf)

- 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>
- Wheater, C. P., & Cook, P. A. (2016). *Burnham Beeches Visitor Survey Report 2015/16*. Unpublished report for Corporation of London.
- Whitfield, D. P., Ruddock, M., & Bullman, R. (2008). Expert opinion as a tool for quantifying bird tolerance to human disturbance. *Biological Conservation, 141*(11), 2708–2717.
- Wichmann, M. C., Alexander, M. J., Soons, M. B., Galsworthy, S., Dunne, L., Gould, R., Fairfax, C., Niggemann, M., Hails, R. S., & Bullock, J. M. (2009). *Human-mediated dispersal of seeds over long distances. 276*(1656), 523–532. <https://doi.org/10.1098/rspb.2008.1131>

Appendix 1: European sites within 20km of the New Forest National Park

The table below lists all European sites within 20km of the New Forest National Park boundary. The sites unlikely to be affected by the implementation of car parking charges are highlighted in pale green and do not need to be considered for screening.

Habitat site	Distance to NFNPA boundary (km)	Relevance of site to New Forest Car Parks closure
SACs		
Bridlesford Copses	10.7	Public access through the site however unlikely to be directly affected by car parking charges.
Dorset Heaths	0.8	Within 1km of National Park boundary and publicly accessible. Some similar range of habitat.
Dorset Heaths (Purbeck & Wareham) & Studland Dunes	17.4	Unlikely to be directly affected by car parking charges as the Dorset Heaths (Purbeck & Wareham) are a distance from the New Forest.
Emer Bog	7.3	Limited public access, a public footpath and limited parking for approximately 3 cars.
Great Yews	6.1	No public access.
Isle of Wight Downs	4.1	Unlikely to be directly affected by car parking charges. Isle of Wight is an attraction in its own right, and this particular site has a SIP in place to target levels of public access.
Isle of Portland to Studland Cliffs	18.6	Unlikely to be directly affected by car parking charges. Visitors likely to visit Isle of Portland to Studland Cliffs as an attraction in their own right.
Mottisfont Bats	5.8	Mostly owned by National Trust with public access. Could provide an alternative destination for some regular users however unlikely to be affected by changes to car parking charges.
New Forest SAC	-	Within National Park boundary.
Prescombe Down	18.0	Publicly accessible via public footpaths through the nature reserve.
River Avon	-	Partially within the National Park boundary, however largely wetland and inaccessible.
River Itchen	6.6	Some levels of public access are promoted along the river. Unlikely to be affected by car parking changes.
Salisbury Plain	11.6	Unlikely to be affected by car parking charges as the Salisbury Plain is a distance from the New Forest and an attraction in its own right.
Solent & Isle of Wight Lagoons	12.2	Unlikely to be directly affected by car parking charges, limited public access.
Solent Maritime	-	Partially within National Park boundary.

NEW FOREST CAR PARKS HRA 2024

Habitat site	Distance to NFNPA boundary (km)	Relevance of site to New Forest Car Parks closure
South Wight Maritime	3.8	Unlikely to be directly affected by car parking charges. Isle of Wight is an attraction in its own right.
Studland to Portland	17.8	Unlikely to be directly affected by car parking charges. Visitors likely to visit Isle of Portland to Studland Cliffs as an attraction in their own right.
SPAs		
Avon Valley	-	Partially within National Park boundary, however largely wetland and inaccessible.
Chichester & Langstone Harbours	18.2	Unlikely to be directly affected by car parking charges as Chichester and Langstone Harbours are a distance from the New Forest and contain a different range of habitats.
Dorset Heathlands	0.8	Within 1km of National Park boundary and publicly accessible. Some similar range of habitat.
New Forest SPA	-	Within the National Park boundary.
Poole Harbour	14.8	Unlikely to be directly affected by car parking charges as Poole Harbour is a distance from the New Forest and contain a different range of habitats.
Porton Down	12.4	Unlikely to be affected by car parking charges as it is a distance from the New Forest and an attraction (Salisbury Plain) in its own right.
Portsmouth Harbour	8.9	Unlikely to be directly affected by car parking charges as Portsmouth Harbour is a distance from the New Forest and contain a different range of habitats.
Solent & Southampton Water	-	Partially within National Park boundary.
Solent & Dorset Coast	-	Directly borders the National Park.
Ramsar		
Avon Valley	-	Directly borders the National Park, however largely wetland and inaccessible.
Chichester & Langstone Harbours	18.2	Unlikely to be directly affected by car parking charges as Chichester and Langstone Harbours are a distance from the New Forest and contain a different range of habitats.
Dorset Heathlands	0.8	Within 1km of National Park boundary and publicly accessible. Some similar range of habitat.
New Forest Ramsar	-	Within the National Park boundary.
Poole Harbour	15.4	Unlikely to be directly affected by car parking charges as Poole Harbour is a distance from the New Forest and contain a different range of habitats.
Portsmouth Harbour	8.9	Unlikely to be directly affected by car parking charges as Portsmouth Harbour is a distance from the New Forest and contain a different range of habitats.

NEW FOREST CAR PARKS HRA 2024

Habitat site	Distance to NFNPA boundary (km)	Relevance of site to New Forest Car Parks closure
Solent & Southampton Water	-	Partially within the National Park boundary.

Appendix 2: Relevant European sites

Relevant European site for the assessment work, with a description of each European site and their qualifying features.

European site	Distance from NFNP (km)	Qualifying features	Description
SACs			
Dorset Heaths	0.8	H4030 European dry heaths H7230 Alkaline fens H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>) H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> H7150 Depressions on peat substrates of the Rhynchosporion H7210# Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> H9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains S1044 <i>Coenagrion mercuriale</i> : Southern damselfly S1166 <i>Triturus cristatus</i> : Great crested newt	The Dorset heaths are an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.
The New Forest	-	H7140 Transition mires and quaking bogs H7150 Depressions on peat substrates of the Rhynchosporion H3110 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) H3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoëto-Nanojuncetea</i> H4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> H4030 European dry heaths	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year. The New Forest SAC supports an extensive and complex mosaic of habitats including wet and dry heaths and associated bogs and mires, wet and dry grasslands, ancient pasture woodlands, frequent permanent and temporary ponds and a network of streams and rivers. These habitats support an exceptional variety of flora and fauna including

NEW FOREST CAR PARKS HRA 2024

European site	Distance from NFNP (km)	Qualifying features	Description
		<p>H6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>)</p> <p>H7230 Alkaline fens</p> <p>H9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion roboripetraeae</i> or <i>Ilici-Fagenion</i>)</p> <p>H9130 <i>Asperulo-Fagetum</i> beech forests</p> <p>H9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains</p> <p>H91D0# Bog woodland</p> <p>H91E0# Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p> <p>S1044 <i>Coenagrion mercuriale</i>: Southern damselfly</p> <p>S1083 <i>Lucanus cervus</i>: Stag beetle</p> <p>S1166 <i>Triturus cristatus</i>: Great crested newt</p>	<p>notable species such as southern damselfly, stag beetle and great crested newt.</p>
<p>Solent Maritime</p>	<p>-</p>	<p>H1110. Sandbanks which are slightly covered by sea water all the time</p> <p>H1130. Estuaries</p> <p>H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats</p> <p>H1150. Coastal lagoons*</p> <p>H1210. Annual vegetation of drift lines</p> <p>H1220. Perennial vegetation of stony banks; Coastal shingle vegetation outside the reach of waves</p> <p>H1310. Salicornia and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand</p> <p>H1320. <i>Spartina</i> swards (<i>Spartinion maritimae</i>); Cord-grass swards</p>	<p>The Solent Maritime encompasses a total of eight estuaries (four coastal and four bar-built) between the Isle of Wight and Southampton. The Solent is unique in Europe for its double tides which gives way to a complexity of marine habitats.</p>

NEW FOREST CAR PARKS HRA 2024

European site	Distance from NFNP (km)	Qualifying features	Description
		H1330. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) H2120. Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ("white dunes"); Shifting dunes with marram S1016. <i>Vertigo moulinsiana</i> ; Desmoulin's whorl snail	
Solent & Isle of Wight Lagoons SAC	-	Coastal lagoons	The Solent and Isle of Wight Lagoons SAC encompasses a series of coastal lagoons, including percolation, isolated and sluiced lagoons. The site includes eight lagoons in the marshes in the Keyhaven to Lymington area, one lagoon at Farlington Marshes in Langstone Harbour, four lagoons located behind the sea-wall at Bembridge Harbour and one lagoon at Gilkicker, near Gosport. Each lagoon has its own unique conditions with salinities varying from brackish to hypersaline and substrates ranging from soft mud to muddy sand with a high proportion of shingle. These sheltered conditions support a diverse fauna including large populations of three notable species: the nationally rare foxtail stonewort <i>Lamprothamnium papulosum</i> , the nationally rare lagoon sand shrimp <i>Gammarus insensibilis</i> and the nationally scarce starlet sea anemone <i>Nematostella vectensis</i> .
SPAs			
Dorset Heathlands	0.8	A224(B) <i>Caprimulgus europaeus</i> : European Nightjar (B) A246(B) <i>Lullula arborea</i> : Woodlark (B) A302(B) <i>Sylvia undata</i> : Dartford Warbler (B) A082(NB) <i>Circus cyaneus</i> : Hen Harrier (NB) A098(NB) <i>Falco columbarius</i> : Merlin (NB)	The Dorset heathlands is an extensive lowland heathland area in southern England. Formerly a single tract divided only by river valleys it is now fragmented. The heathlands comprise a wide range of different habitat types related to variation in soils, hydrology, water chemistry and land use history.
New Forest	-	A072(B) <i>Pernis apivorus</i> : European honey-buzzard (B) A082(NB) <i>Circus cyaneus</i> : Hen Harrier (NB) A099(B) <i>Falco subbuteo</i> : Eurasian Hobby (B)	The New Forest is a large and complex ecosystem and one of the largest remaining relatively wild areas in the South of England attracting enormous numbers of visitors each year.

NEW FOREST CAR PARKS HRA 2024

European site	Distance from NFNP (km)	Qualifying features	Description
		A224(B) <i>Caprimulgus europaeus</i> ; European Nightjar (B) A246(B) <i>Lullula arborea</i> ; Woodlark (B) A302(B) <i>Sylvia undata</i> ; Dartford Warbler (B) A314(B) <i>Phylloscopus sibilatrix</i> ; Wood Warbler (B)	The SPA supports an extensive and complex mosaic of habitats which hold internationally important populations of breeding and over-wintering birds.
Solent & Southampton Water	-	A046a <i>Branta bernicla bernicla</i> ; Dark-bellied brent goose (NB) A052 <i>Anas crecca</i> ; Eurasian teal (NB) A137 <i>Charadrius hiaticula</i> ; Ringed plover (NB) A156 <i>Limosa limosa islandica</i> ; Black-tailed godwit (NB) A176 <i>Larus melanocephalus</i> ; Mediterranean gull (B) A191 <i>Sterna sandvicensis</i> ; Sandwich tern (B) A192 <i>Sterna dougallii</i> ; Roseate tern (B) A193 <i>Sterna hirundo</i> ; Common tern (B) A195 <i>Sterna albifrons</i> ; Little tern (B) Waterbird assemblage	Solent & Southampton Water SPA is protected for its series of estuaries and adjacent coastal habitat that support internationally important breeding populations of gulls and terns. The site is also important for over-wintering wildfowl.
Ramsar			
Dorset Heathlands	0.8	Criterion 1: Contains particularly good examples of (i) northern Atlantic wet heaths with cross-leaved heath <i>Erica tetralix</i> and (ii) acid mire with <i>Rhynchosporion</i> . Contains largest example in Britain of southern Atlantic wet heaths with Dorset heath <i>Erica ciliaris</i> and cross-leaved heath <i>Erica tetralix</i> . Criterion 2: Supports 1 nationally rare and 13 nationally scarce wetland plant species, and at least 28 nationally rare wetland invertebrate species. Criterion 3: Has a high species richness and high ecological diversity of wetland habitat types and transitions, and lies in one of the most biologically-rich wetland areas of lowland Britain, being continuous with three other Ramsar sites: Poole Harbour, Avon Valley and The New Forest.	Extensive and fragmented, these heathland areas are centred around the estuary of Poole Harbour and are adjacent to the urban conurbation of Bournemouth and Poole. The heathland contains numerous examples of wet heath and acid valley mire, habitats that are restricted to the Atlantic fringe of Europe. These heath wetlands are among the best of their type in lowland Britain. There are also transitions to coastal wetland and fen habitat types. The wetland flora and fauna includes a large assemblage of nationally rare and scarce species, especially invertebrates.

NEW FOREST CAR PARKS HRA 2024

European site	Distance from NFNP (km)	Qualifying features	Description
The New Forest	-	<p>Criterion 1: Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.</p> <p>Criterion 2: The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.</p> <p>Criterion 3: The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England.</p>	<p>The New Forest is an area of semi-natural vegetation including valley mires, fens and wet heath within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. The habitats present are of high ecological quality and diversity with undisturbed transition zones.</p> <p>The suite of mires is regarded as the <i>locus classicus</i> of this type of mire in Britain. Other wetland habitats include numerous ponds of varying size and water chemistry including several ephemeral ponds and a network of small streams mainly acidic in character which have no lowland equivalent in the UK. The plant communities in the numerous valleys and seepage step mires show considerable variation, being affected especially by the nutrient content of groundwater. In the most nutrient-poor zones, <i>Sphagnum</i> bog-mosses, Cross-Leaved Heath, Bog Asphodel, Common Cottongrass and similar species predominate. In more enriched conditions the communities are more fen-like.</p>
Solent & Southampton Water	-	<p>Criterion 1: The site is one of the few major sheltered channels between a substantial island and mainland in European waters, exhibiting an unusual strong double tidal flow and has long periods of slack water at high and low tide. It includes many wetland habitats characteristic of the biogeographic region; saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.</p> <p>Criterion 2: The site supports an important assemblage of rare plants and invertebrates. At least 33 British Red Book</p>	<p>The sheltered harbours and estuaries of the Solent are notable for its large range and extent of habitats. Eelgrass beds occur continuously along the shores of the Isle of Wight and in patches along the northern Solent. The intertidal area is also favourable for abundant benthic fauna and green algae, which support the migratory over-wintering populations of wildfowl and wader that frequent the Solent. A number of brackish lagoons such as Keyhaven-Lymington contain internationally important communities of rare and endangered invertebrate and plants.</p>

NEW FOREST CAR PARKS HRA 2024

European site	Distance from NFNP (km)	Qualifying features	Description
		<p>invertebrates and at least eight British Red Data Book plants are represented on site.</p> <p>Criterion 3: The higher plants <i>Orobanche purpurea</i> and <i>Spartina maritima</i> are considered vulnerable and endangered, respectively, in the GB Red Book.</p> <p>Criterion 4: The Mediterranean gull (<i>Larus melanocephalus</i>) is included in CITES Appendix I.</p> <p>Criterion 5: Species with peak counts in winter: waterfowl.</p> <p>Criterion 6: Species/populations occurring at levels of international importance. Species with peak counts in winter: Black-tailed godwit, <i>Limosa limosa islandica</i>; Dark-bellied brent goose <i>Branta berincla bernicla</i>; Eurasian teal <i>Anas crecca</i>.</p>	