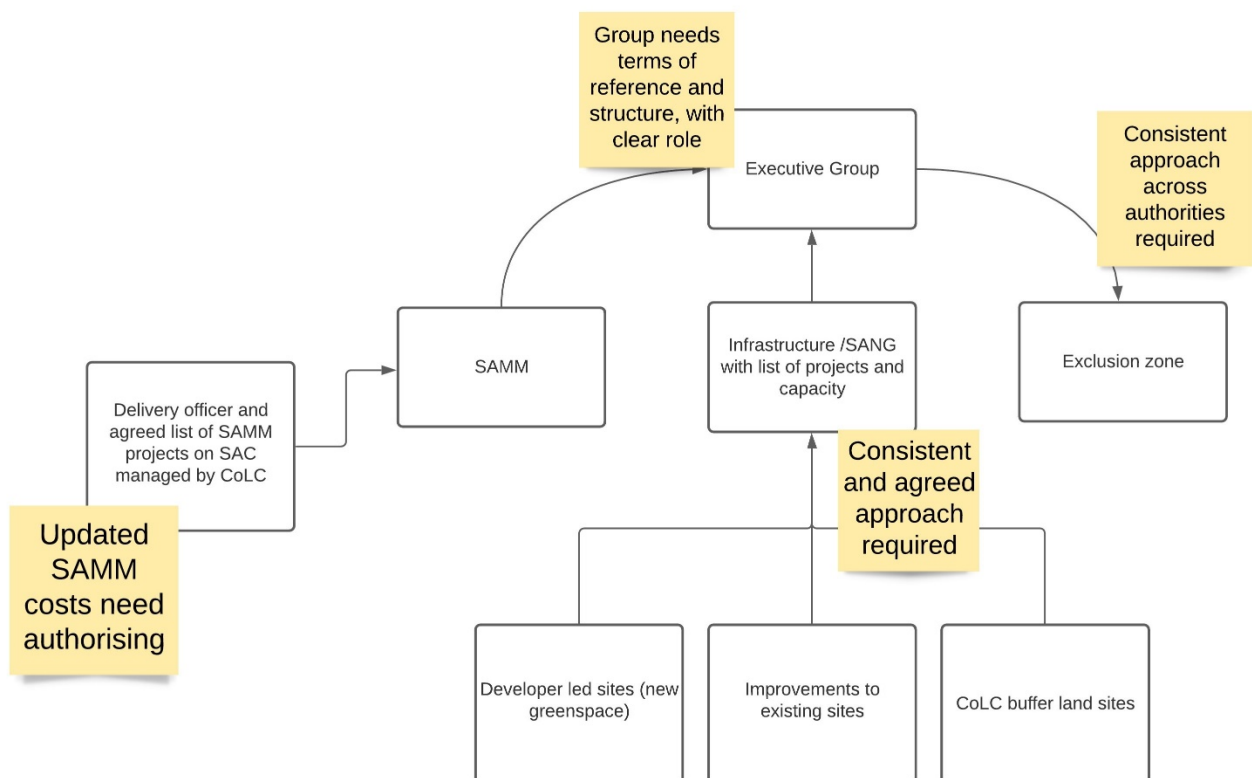


APPENDIX 1: A FRAMEWORK for EPPING FOREST SAC MITIGATION

ISSUES TO BE ADDRESSED & WHOLE FOREST ON-SITE SAMM MITIGATION COSTS

1 .INTRODUCTION

This appended document offers a basic explanation of the Habitats Regulation Assessment (HRA) procedures, and a brief glossary of terms, as background for the main Committee Report (attached). It provides the context for the range of different mitigation measures that are considered essential to the protection of Epping Forest. It also flags up the key issues which remain as hurdles in the achievement of a comprehensive SAC Mitigation Strategy to be agreed with the competent authorities and Natural England. These are highlighted in the diagram below. **Finally, it sets out the costs for on-site SAMM mitigation (Table 3 below) for which the main report seeks approval.**



2. EXPLANATION of PROCEDURES used in HABITATS REGULATIONS ASSESSMENTS (HRA)

Habitats Regulations Assessments

The designation, protection and restoration of European wildlife sites, like **Epping Forest Special Area of Conservation (EFSAC)**, is embedded in the Conservation of Habitats and Species Regulations 2017 (as amended) which are commonly referred to as the 'Habitats Regulations'. The 2017 Habitat Regulations remain in force without any of the amendments relating to Brexit made by The Conservation of Habitats and Species (Amendment) (EU exit) Regulations 2019. These Brexit-related changes are suspended until Implementation Period Completion day and confirm that these provisions will be retained, in the short term at least.

The Habitats Regulations are in place to transpose European legislation set out within the Habitats Directive (Council Directive 92/43/EEC), which affords protection to plants, animals and habitats that are rare or vulnerable in a European context, and the Birds Directive (Council Directive 2009/147/EC), which originally came into force in 1979, and which protects rare and vulnerable birds and their habitats. These key pieces of European legislation seek to protect, conserve and restore habitats and species that are of utmost conservation importance and concern across Europe.

This protection is the way in which the EU and the UK meet their obligations under the Convention on the Conservation of European Wildlife and Natural Habitats (1979) or **Bern Convention**, a binding international legal instrument to which both the EU and UK are independent signatories.

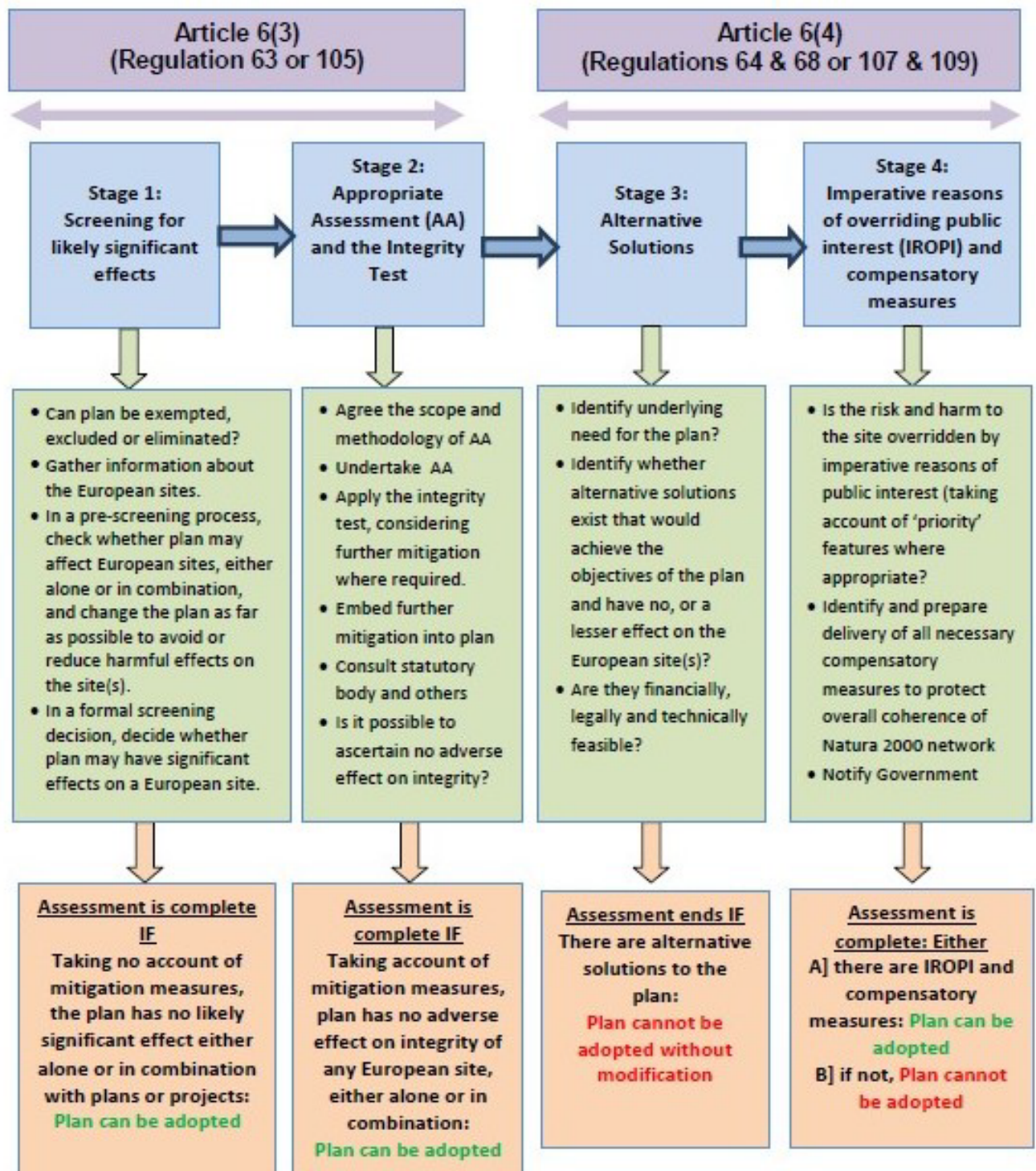
The Habitat Regulations impose specific duties in terms of avoiding deterioration of habitats and species for which sites are designated or classified. Stringent tests have to be met before plans and projects can be permitted, with **the precautionary approach** embedded in the legislation, i.e. it is necessary to demonstrate that impacts will not occur, rather than they will. The overarching objective is to maintain sites and their interest features in an ecologically robust and viable state, able to sustain and thrive into the long term, with adequate resilience against natural influences. Where sites are not achieving their potential, the focus should be on restoration.

The HRA process

The step by step process of HRA is summarised in **Figure 1**.

Within the Habitats Regulations, local planning authorities, as public bodies, are given specific duties as '**competent authorities**' with regard to the protection of sites designated or classified for their species and habitats of European importance.

**Outline of the four-stage approach to the assessment of plans
under the Habitats Regulations**



Extract from *The Habitats Regulations Assessment Handbook*, www.dtapublications.co.uk
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Figure 1: Outline of the assessment of plans under the Habitat Regulations – taken from Tyldesley, D., and Chapman. C., (2013) *The Habitats Regulations Assessment Handbook* (July) (2020) edition UK: DTA Publications Limited

Throughout all stages, there is a continual consideration of the options available to avoid and mitigate any identified potential impacts. A competent authority may consider that there is a need to undertake further levels of evidence gathering and assessment in order to have certainty, and this is the **Appropriate Assessment stage**. At this point the competent authority may identify the need to add to or modify the project, or local plan, in order to adequately protect the European site, and these mitigation measures may be added through the imposition of particular restrictions and conditions.

After completing an assessment, a competent authority should only approve a project or give effect to a local plan where it can be ascertained that there will not be an adverse effect on the integrity of the European site(s) in question. In order to reach this conclusion, the competent authority may have made changes to the plan in light of their Appropriate Assessment findings.

3. GLOSSARY OF TERMS/DEFINITIONS

The principles of case-law, government policy and best practice in HRAs are set out in the HRA Handbook (Tyldesley, Chapman, & Machin, 2020), to which the City of London Corporation (CoLC) subscribes. There is also UK government guidance available.

3.a. Flow Chart (Figure 1 above) terms

Drawing on the Handbook, other relevant guidance and case law:

A '**likely significant effect**' (Stage 1) 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 '*a trigger in order to determine whether an appropriate assessment must be undertaken*'.

When making **screening decisions**, for the purposes of deciding whether an appropriate assessment is required, competent authorities cannot take into account any mitigation measures.

Stage 2 involves the **appropriate assessment and integrity test**. Here a plan can only be adopted if the competent authority can demonstrate that it will not adversely affect the integrity of the European site. This is precautionary approach and means it is necessary to show the absence of harm.

It should be noted that case law has established that '**appropriate**' is not a technical term but simply indicates that the assessment needs to be appropriate to the task in hand.

The **integrity** of a European site has been described as '*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 classified*'. An alternative definition is '*the lasting preservation of the constitutive characteristics of the site*'. Each European site has a set of **Conservation Objectives** by which this integrity is assessed. Natural England has published the detailed Conservation Objectives for Epping Forest SAC which can be found [here](#) and [here](#).

In combination: the need to consider possible in-combination effects arises at stage 1 – the screening stage - and also at stage 2 – the appropriate assessment and integrity test stage. The effects of a local 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 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.

3.b. A glossary of other terms

Competent Authority: Competent authorities are any public body individual holding public office with a statutory remit and function, and the requirements of the legislation apply where the competent authority is undertaking or implementing a plan or project, or authorising others to do so. Regulation 63 of the Habitats Regulations sets out the HRA process for plans and projects, which includes development proposals for which planning permission is sought. Additionally, Regulation 105 specifically sets out the process for assessing emerging land use plans, including local plans.

Mitigation: mitigation measures are those measures brought to bear to avoid, cancel or reduce the effects of a plan or project (e.g. a local plan) on an internationally-important site, like EFSAC, and to ensure its integrity is not adversely affected or compromised.

SANGS: this acronym stands for 'Suitable Alternative (or Accessible) Natural Green Space' and is the name given to land of a quality and type suitable to be used in mitigation to protect an SAC from harm by recreational pressure by being made accessible to and attracting a sufficient number of visitors (and visits) away from the SAC

SAMM: this acronym stands for 'Strategic Access Management and Monitoring' measures that are put in place within an SAC, like Epping Forest, to mitigate for on-site recreational pressure. Monitoring is an essential part of such measures to ensure that they are working as expected and that the integrity of the site (see above) is not being compromised.

4.SUMMARY of IMPACTS COMPARED to other INTERNATIONALLY-IMPORTANT SITES

Impacts of recreation at Epping Forest SAC

A summary of potential impacts is provided in **Table 1 below** and also see **Appendix 2 LUC report** for details of impacts at the three hub sites examined for that SAMM assessment.

A detailed review of impacts is beyond the scope of this appendix. However, there are many reviews of recreation and urban impacts to ancient woodland and heathland and also studies from other sites which provide much useful background (Anderson & Radford, 1992; Corney et al., 2008; Lake, Liley, & Saunders, 2020; Liley, Read, & Barnard, 2016; Marzano & Dandy, 2012; Ryan, 2012; Saunders, Liley, Panter, & Weitowitz, 2019; Underhill-Day, 2005).

Table 1: Summary of potential nature conservation impacts (to the SAC interest) from recreation and urban effects linked to increased levels of surrounding development at Epping Forest.

Type of impact	Examples
Contamination	Dog fouling (nutrient enrichment from faeces and urine)
	Litter
	Fly-tipping
	Spread of disease (e.g. plant pathogens)
	Spread of non-native species (can be both unintentional and deliberate)
	Pollution from run-off (surrounding roads and hard surfaces/parking areas)
Disturbance	Risks to Stag Beetle from removal/moving of deadwood
Fire	Increased fire incidence linked to increased recreation use (BBQs, camp fires etc.)
Trampling/wear	Soil compaction and damage from high levels of footfall
	Loss of vegetation cover
	Erosion
	Direct damage to veteran trees from climbing/vandalism etc.
Harvesting	Collection of wood
	Collection of fungi
Difficulties in management	Challenges in maintaining grazing regime with high levels of access and dogs
	Public pressure for more facilities, path surfacing, cafes, events, different management etc.
	Management of veteran trees potentially made more challenging due to need for more regular checks and need to ensure public safety
Fragmentation	Loss of supporting habitats
	Isolation (lack of connectivity with other woodland or semi-natural habitat)

It is important to note that the above impacts can potentially interact and together may amplify the overall impact beyond the sum of the individual effects. While individually some of the impacts may potentially be minor, or relatively uncommon (e.g. damage from wildfires), taken together the impacts are substantial and a wide range of studies clearly show that the conservation importance of woodlands and heathlands in urban compared to more rural settings is compromised (Fornal-Pieniak, Ollik, & Schwerk, 2019; Lintott et al., 2014; Rayner et al., 2015; e.g. Sadler, Small, Fiszpan, Telfer, & Niemelae, 2006; Sanz & Caula, 2015; Underhill-Day, 2005; Vergnes, Pellissier, Lemperiere, Rollard, & Clergeau, 2014).

For Epping Forest specifically, the SAC [Site Improvement Plan](#) produced by Natural England for the SAC lists under-grazing, public access/disturbance, changes in species distributions and invasive species within the prioritised list of issues and all are factors potentially linked to the impacts of the surrounding urban growth. The plan, under public access/disturbance, states: *“Epping Forest is subject to high recreational pressure. There is a high general level of footfall in Epping Forest throughout the year, including periods of significant use, and resulting in a diverse range of impacts which include mountain biking and unmanaged fires. Population and visitor numbers are likely to continue to increase.”*

These various impacts are more complex when considered in the wider context of the issues facing Epping Forest. For example, climate change will result in more stormy weather, increased risk of droughts and greater risk/incidence of wildfires (see **Figure 3 below**). These will all add to the issues facing the trees and heathlands, increasing stress and potentially interacting with recreation and urban pressure to exacerbate the problems.

Furthermore, Epping Forest has a significantly higher residential, urban population within its Zone of Influence when compared to any other similar internationally-protected site in the UK (see Figures 2a and 2b below).

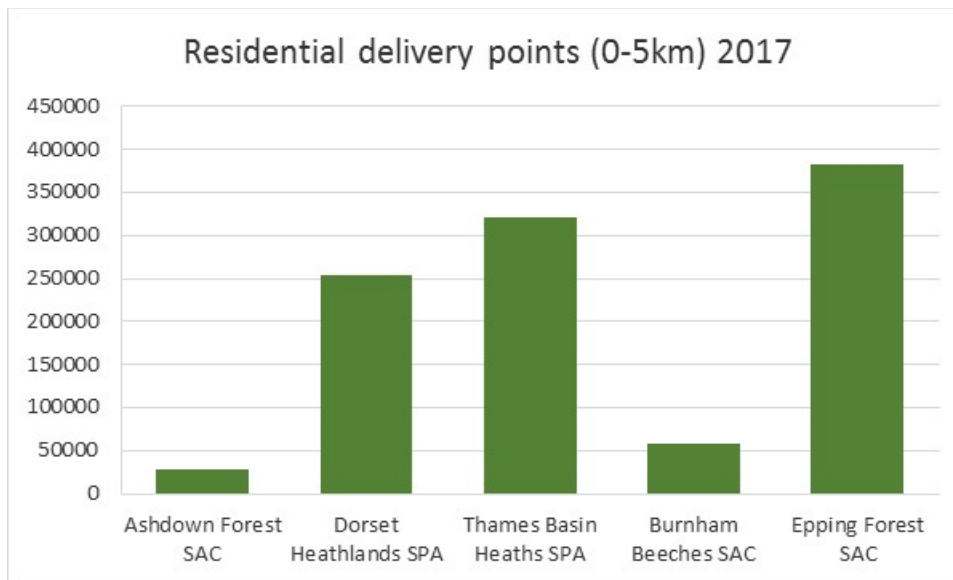


Figure 2a

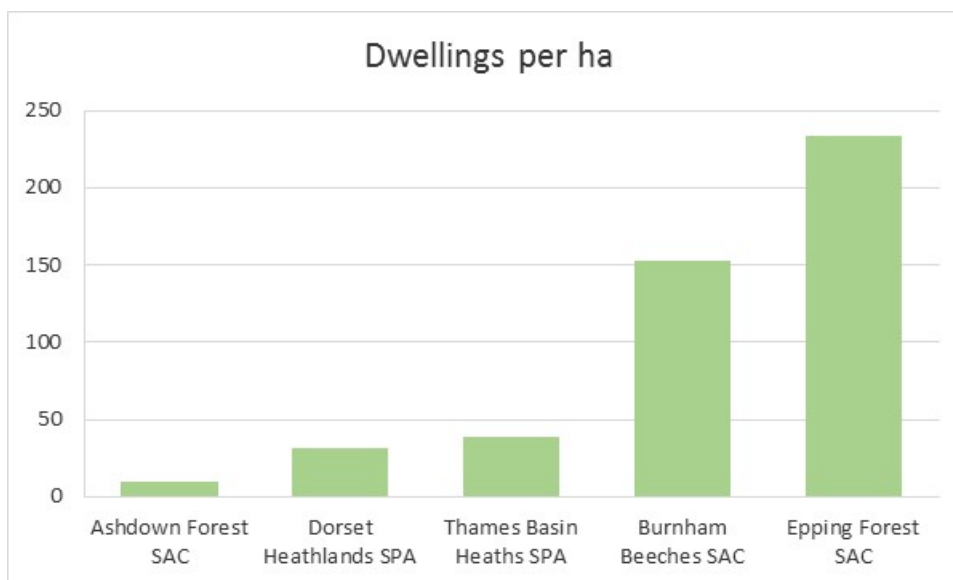


Figure 2b

Figures above show comparison between Epping Forest and selected other European sites showing number of dwellings (in 2017) within 5km radius per ha of European site (Figure 1b) and the number of residential delivery points (in 2017) within 5km (Figure 1a). (These figures are taken from an unpublished Footprint Ecology report (2017) to the Conservators of Epping Forest).

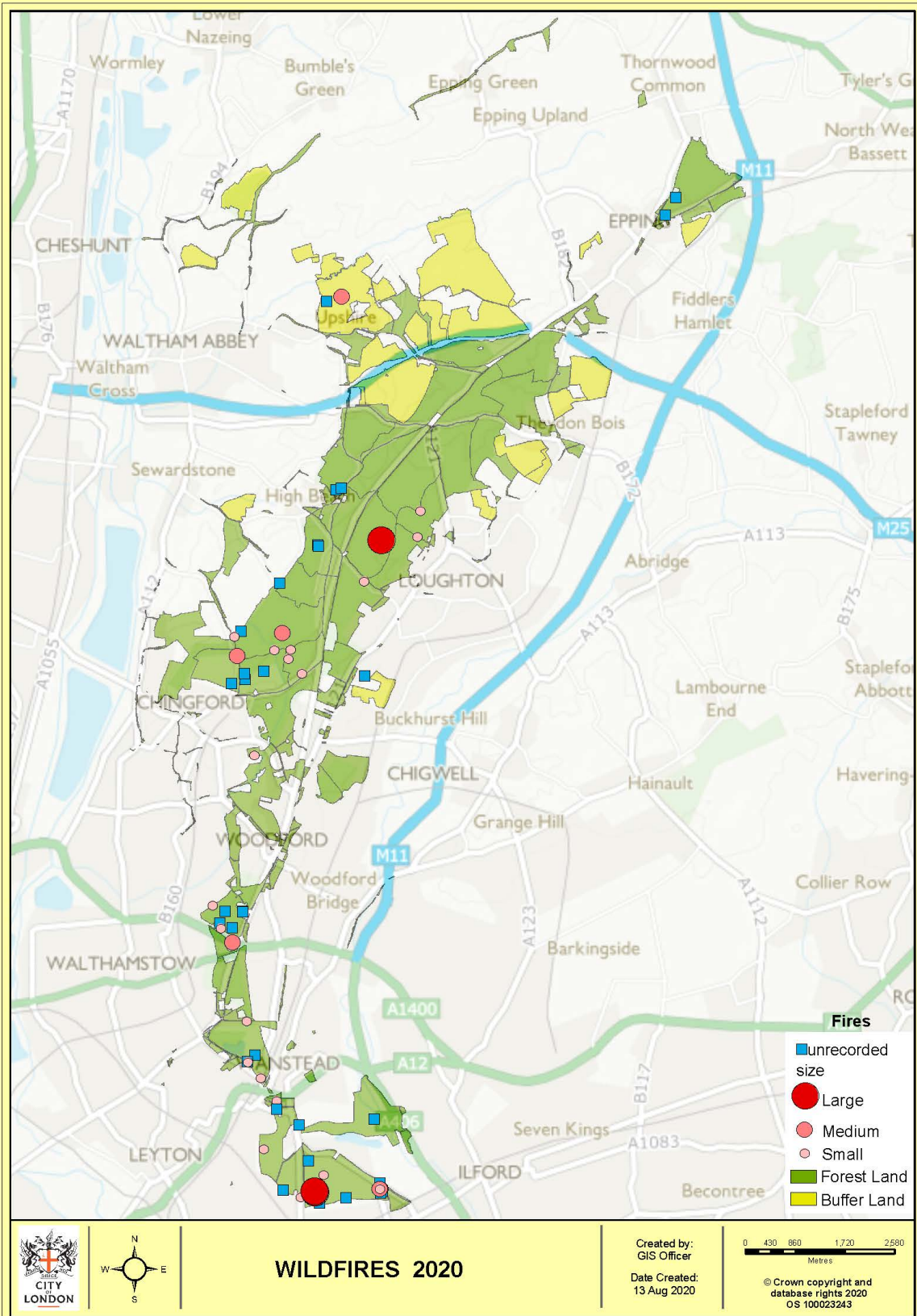


Figure 3: Wildfires recorded in Epping Forest in 2020 and attended by Forest Keepers and/or the Fire & Rescue Services for London or Essex.



Vegetation loss and poaching along a pathway



Ground compaction, soil and vegetation loss at Connaught Water



Mountain bike ramps and erosion

5. PROTECTION MEASURES & MITIGATION APPROACHES in other parts of the UK

In other parts of the UK, strategic approaches to mitigation have been established where multiple local authorities have worked together to establish a series of avoidance and mitigation measures carefully designed to resolve the in-combination impacts associated with local development. These strategies enable development but, crucially, also ensure that adequate mitigation is secured and carefully planned.

By securing the mitigation up front the local authorities, as competent authorities, can be confident that adverse effects on integrity on an internationally-protected site can be ruled out at local plan-level. Furthermore, mitigation measures might be easier to secure and work best if established strategically, in this way, rather than piecemeal with each development application.

The need for an integrated framework of measures

A suite of mitigation measures should function together, as a framework for management action, to have confidence that adverse effects arising from recreation have been prevented. **In most instances when developing a strategy for development, each measure taken alone is unlikely to give that certainty.** A combination of measures, developed and targeted after analysis of available information, gives greater certainty. This is because the combination of measures working together reduces risk and builds in contingency for amending the strategy if some measures do not perform as well once implemented. Other measures can still be functioning in the short term whilst some are revised. An integrated suite of measures delivered together also improves efficiency, which in turn adds to effectiveness with improved value for money.

Rangers and infrastructure projects (including SANGs) are common themes in strategic mitigation for European sites, and all schemes also include monitoring to target and hone interventions. Other measures within these schemes have included dog projects, interpretation, changes to infrastructure, codes of conduct and various engagement approaches. Many of these interventions are widespread and commonly used and there are a range of studies that support their effectiveness (e.g. Allinson, 2018; Burger & Leonard, 2000; Medeiros et al., 2007; Williams et al., 2017). Many of the measures bring wider benefits besides simply providing mitigation.

An overview of a range of different mitigation schemes is provided in **Table 2** below. The table only gives examples of schemes relating to recreation and urban effects. The table only includes schemes that are established. It should also be noted that there are also a number of schemes in development.

Key points to draw from Table 2 below include:

- Many schemes are long running (e.g. Dorset and Thames Basin Heaths are both approaching 15 years), highlighting that the approach can work well and in these examples the mitigation schemes have developed and grown over time;
- Schemes are in place across the country that relate to a range of SAC/SPA sites and different issues;
- Mitigation approaches vary, with a package of measures tailored to each individual site – there is no set package or standard approach;

In some cases the scheme is set out in a joint Supplementary Planning Document (SPD) that covers multiple local planning authorities; there are also examples where authorities have an agreed overarching strategy (but no SPD). **The City Corporation as the Conservators of Epping Forest (CoLC), has over the last three years in responding to local plans, consistently called for the Epping Forest mitigation scheme to be set out in SPDs and to ensure some kind of coherent framework given the inherent complications and administrative differences across the London-Essex boundary.**

Table 2: Summary of other European site mitigation schemes and broad approaches for mitigation in-place. ZOI refers to zone of influence (e.g. for collection of developer contributions). Hyperlinks relate to project specific websites or relevant local authority pages with further information and details.

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
Dorset Heaths	Recreation and urbanisation; 2 heathland SACs and 1 SPA/Ramsar	400m	5km	Instead of SANGs, broader approach involving 'heathland infrastructure' which include SANG but also other measures e.g. BMX park, fire hydrants on heaths.	Urban heaths partnership undertakes wardening across different sites	Dog Project (Dorset Dogs), wider engagement, education work (including fire focus)	Automated counters, vehicle counts, interviews, fire records, bird monitoring.	Long running scheme with various changes in emphasis since started in 2007. Mitigation is set out in a joint SPD.
Thames Basin Heaths	Recreation and urbanisation; heathland SPA	400m	5km	Minimum of 8ha of SANGs per 1000 residents	Thames Basin Heaths Partnership, currently c. 9 full time equivalents	Dog Project, education work and dedicated education officer.	Automated counters, vehicle counts, interviews, fire records, bird monitoring.	Long-running scheme. Each local authority has produced their own SPD/mitigation in line with agreed strategic approach.
South-east Devon	Recreation and urbanisation; sand dune SAC, heathland SPA/SAC and estuary SPA/Ramsar.	400m around heathland only	10km	Some SANG at strategic locations identified in strategy	2 Full-time equivalents.	Dog Project, bird refuges on estuary, patrol boat on estuary, codes of conduct.	Targeted work on effectiveness of refuges; some visitor survey work	3 local authorities, and various zones reflecting the relevant European sites.
Solent	Recreation impacts for 3 coastal SPA/Ramsar sites	No	5.6km	Some SANGs plus other infrastructure set out in mini 'Access	Team of rangers	Awareness raising and wider promotion.	Automated counters, vehicle counts, interviews, targeted work	Bird Aware Project established with strong branding. More site-specific

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
				Management Assessments' each focussed on different sections of coast.			testing effectiveness of ranger presence.	projects and awareness raising work still being developed.
Cannock Chase	Recreation impacts to heathland SAC	400m	15km	No	Delivery Officer and Engagement Officer only so far	Parking strategy and access management strategy for the SAC with series of interventions and targeted measures.	Vehicle counts, interviews.	6 local authorities have signed a joint memorandum of understanding which ensures joint approach
North Kent	Recreation impacts for 3 coastal SPA/Ramsar sites	No	6km	No	3 rangers	Dog Project, Codes of Conduct, Signage and Interpretation and Site Specific Enhancements	Liley & Underhill-Day (2013)	4 local authorities, each with slightly different approaches to developer contributions.
Essex Coast	Recreation impacts for 9 coastal SPA/Ramsar sites and 1 SAC	No	4.5-20.8km	No	Ranger team being built up over time, will include water-based ranger.	Education and communication, codes of conduct, habitat-based measures.	Visitor surveys, bird monitoring and vegetation monitoring	11 local planning authorities, joint SPD in preparation.
Burnham Beeches	Recreation and urbanisation impacts for a woodland SAC	500m	5.6km	No	1 Engagement Ranger/SAC Ambassador	Electronic interpretation, events and promotion, access plan/carrying capacity study	Visitor surveys, soil and ecological impacts	Each local authority will develop their own mitigation approach. Chilterns and South Bucks described.

Area	Issues & sites addressed by mitigation strategy	'Exclusion zone'	ZoI	SANGs/GI	Wardening	Other mitigation measures	Monitoring measures	Further details and notes
Suffolk Coast	Recreation impacts for 8 coastal/estuary sites including mix of SAC, SPA and Ramsar	No	13km	Large sites only.	Delivery officer and team of rangers	Dog Project, codes of conduct, signage and interpretation, awareness raising, range of site specific projects	Visitor surveys (counts and interviews), bird monitoring,	4 local authorities and joint strategy covering numerous sites along large stretch of coast
South Tyneside	Recreation impacts for coastal SAC and a coastal SPA	No	6km	No	Delivery office and 0.5 full time equivalent ranger post	Dog Project, review of parking.	Automated counters and bird surveys	Interim strategy established.
Poole Harbour	Recreation impacts for coastal SPA and Ramsar	No	Variable, not based on specific distance	Rolling 5 year programme of Infrastructure Projects	Project coordinator and a warden	Leaflets, litter clearance and engagement	Visitor and bird surveys	2 local authorities with a joint SPD
New Forest	Recreation impacts for SAC/SPA/Ramsar	No	District wide (note Test Valley currently apply a 13.6km zone)	8ha per 1000 residents for sites over 50 dwellings	Funding for additional National Park ranger time	Programme of enhancement of footpaths/rights of way and existing open spaces.	Site condition, visitor patterns.	Link and details given relate to New Forest District. Each authority currently following own approach with longer term aim for a more joined-up approach

6. KEY ISSUES and COSTS for EPPING FOREST SAC MITIGATION

In many cases these schemes (in Table 2 above) have been difficult to set up and some are complex, involving multiple European sites and a range of local authorities. They provide useful context and background and highlight key issues that are relevant to Epping Forest.

6.a. Governance

As Table 2 examples show, where there are multiple local authorities involved in a scheme there is a clear governance structure with a body responsible for key decisions relating to funding and resources. For example, in the Thames Basin Heaths there is the Joint Strategic Partnership (JSP). There is a board that comprises one elected member from each local authority and the board is advised by a range of bodies that include Natural England and major landowners. The role of the board is to act as a vehicle to ensure joint working and collaboration and to retain an overview of the mitigation measures implemented (including the coordination of SANG and SAMM). The board make key decisions on the award of funding to delivery bodies and the amount of money directed towards SAMM. The Board meets twice a year (as a minimum) and receives reports and updates, including from the SAMM project coordinator.

Such a governance structure allows mitigation to be tailored to particular circumstances and the budget adjusted as necessary to apportion what reserves are set aside (for in-perpetuity funding) and approve budget for SAMM. Having such a body ensures that there is fairness and a consistency of approach, with clear terms of reference and a reporting structure.

CoLC has repeatedly called for a robust governance structure to be set up and has raised concerns about the lack of such governance for the EFSAC Mitigation Strategy. This is now an urgent priority.

6.b. SAMM versus SANGS/Infrastructure projects

Most schemes have a clear split between SANGS and SAMM with both integral to the mitigation package.

SAMM: SAMM payments are used to fund wardening, on-site access management, education/awareness raising and monitoring. Where there are multiple landowners and organisations then a separate body is established to deliver the mitigation, for example Bird Aware Solent, the Thames Basin Heaths Partnership or the Urban Heaths Partnership (in Dorset). Where there is a single or main landowner, then it makes sense for them to deliver the mitigation, as is the case at Burnham Beeches SAC (Table 2) and, of course, Epping Forest. **The SAMM proposals set out in Table 3 below (and in detail for three key visitor hubs in the LUC Report in Appendix 2) would be delivered by CoLC funded through the mechanisms set up by the competent authorities under their respective local plans.**

SANGS: Off-site infrastructure (SANGS) can be delivered in a range of ways. For large developments, the developer can provide greenspace, potentially directly linked to the development site. In some cases, local authorities will create and manage SANGS, drawing on funds from multiple developments. These are often referred to as 'strategic SANGS'. A good example is the Dawlish Countryside Park in Teignbridge. This is a SANG for the Exe Estuary SPA and Dawlish Warren SAC and is a large, well promoted site ideally situated to draw access away from the European sites.

CoLC considers strategic SANGS to be essential for the protection of Epping Forest given the very high density of urban residential dwellings in the EFSAC Zone of Influence and the proposed increases in population in each authority area.

There are also examples where existing spaces have been improved – for example Shepherd’s Meadow in Bracknell or Upton Country Park in Dorset. CoLC has considered strategic SANGS as essential to the protection of the EFSAC given the higher density of dwellings. Existing spaces can be improved through new car parking, better access, promotion, vegetation management, paths and other facilities. In some cases, the approaches are quite novel, for example a BMX track/jumps in Dorset. These infrastructure projects can be varied but must draw visitors away from the relevant European site.

An Epping Forest framework or “toolkit” of options: there need to be clear guidelines for SANGS/infrastructure projects as to what will work at Epping Forest, with criteria for the design, types of infrastructure, size etc, as is the case in Dorset and the Thames Basin Heaths. There needs to be agreement across local authorities and with Natural England on the kind of projects that will work and their mitigation capacity. This needs to be tailored to fit the particular and unique challenges around Epping Forest. The CoLC has a number of potential sites and possible projects that could be included in such a list.

6.c. Exclusion Zone

For many of the examples of mitigation schemes, a development exclusion zone is fundamental to ensuring the mitigation package is effective. European sites, where there are exclusion zones, include heathland and woodland SAC sites, for example the Thames Basin Heaths (400m), the Dorset Heaths (400m), Cannock Chase (400m), Burnham Beeches (500m). Within the zone there is a presumption against development, i.e. ensuring no increase in the number of dwellings. The reason for a 400m exclusion zone is that there are particular risks associated with development in such close proximity and furthermore mitigation options are not as effective.

The case of Hatfield Forest NNR, although not an internationally-protected site, is instructive for Epping Forest as it lies on similar soils with ancient pollarded trees and grasslands. This site is highlighted in the main Committee report at paragraph 22.

Recreation use is much higher from homes directly adjacent to the European site and it is typically considered very difficult to deflect such access with alternative greenspace, as there is little scope to intercept visitors or provide significant alternatives. Fire risk, fly-tipping and other urban effects are also more acute where development is in close proximity to the boundary.

SAMM Mitigation approaches such as access management and wardening are likely to be less effective in mitigating pressures from dwellings in close proximity to European sites as it is harder to intercept visitors who enter from multiple informal access points (e.g. back gardens and cut-throughs) and people are likely to use the sites at a wide range of times of day (and even during the night). With increased risk and limited effectiveness for mitigation, adverse effects on integrity cannot be ruled out.

A review of the exclusion zone approach in Purbeck by Aecom (Riley, Down, Hoffman Heap, Jackson, & Honey, 2016) to consider whether there was any scope to refine the exclusion zone approach concluded that there was *“no evidential basis on which to move away from a 400m ‘no net new residences’ zone, given the high level of existing housing within very close proximity (400m) to the*

European sites and the likelihood that a similarly high level of net new housing would come forward without strategic controls.”

Around Epping Forest SAC, in the view of CoLC, such an exclusion zone should also be fundamental to mitigation and a consistent policy approach is needed across all local authorities. At the EFDC Local Plan Examination-in-Public, using the Council’s data on how residents access the Forest, CoLC put forward a proposed 800m residential exclusion zone for new development. CoLC recognises that the London situation may need to be considered as different and will request that Natural England provides a view. However, CoLC considers that there should be a minimum exclusion zone which would be consistent across all local authorities.

6.d. Comprehensive ‘in perpetuity’ funding for SAMM proposals

The **Table 3** below sets out the full range of SAMM mitigation measures for which approval is sought from the Epping Forest & Commons Committee as set out in the recommendations and summary of the main Committee Report (attached).

TABLE 3 - EPPING FOREST SAC: PROPOSED *WHOLE-FOREST* SAMM MITIGATION MEASURES and 25-year COSTS

(including LUC report (Sept 2020) costs from Table 4.7, **Appendix 2** for the three hubs at High Beach, Chingford and Leyton Flats)

Strand 1a – Mitigating Recreational Impacts							
<i>Descriptor</i>	<i>Capital Initiation Costs</i>	<i>Capital Funding Duration</i>	<i>Annual Costs or other</i>	<i>Funding Duration (Years)</i>	<i>Total Cost</i>	<i>Cost Calculation Notes</i>	<i>Rationale and justification</i>
Traffic control and car impact reduction measures and monitoring, as part of Integrated Forest Transport Strategy (including physical management of car parks)	n/a	n/a	tbc	Capital Years 2-10	£350,000	<ul style="list-style-type: none"> ➤ Road closure/Traffic Regulation Orders (e.g. Fairmead Road) (£35,000 in total by Year 5); ➤ Car Park controls (gates, CCTV) (£18,000 per car park – 5 car parks – one per year Years 2-6) for seasonal restrictions and night-time control of access; ➤ Re-locating car park capacity and resurfacing/surfacing ➤ Improved access for non-car use – incl. new, safer crossing points over main roads (A104, A121) to provide links along Forest visitor trails and circuits from peripheral Forest entrance areas (e.g. Honey Lane, Chingford-The View 'hub') 	<ul style="list-style-type: none"> ➤ Re-direct/exclude cars from more sensitive sites & during sensitive periods of the year, (e.g. heathlands in SAC and relocate capacity to deal with increased visitor pressure). ➤ Re-locating car park capacity – closures and expansions with additional surfacing improved surfacing possible (e.g. increasing car park capacity away from High Beach; costs not including Chingford or Leyton hubs either – see LUC Report (Sept 2020 – in Appendix 2)) ➤ seasonal car park closures and seasonal capacity shifts;

High Beach and Honey Lane Quarters 'hub' Improving resilience: increasing visitor capacity while reducing damage	See LUC report	See LUC report	See LUC report	25 years minimum See LUC report	£2,551,065.50	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2
Chingford hub	See LUC report	See LUC report	See LUC report	25 years minimum See LUC report	£6,556,804.60	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2
Leyton Flats/Hollow Ponds	See LUC report	See LUC report	See LUC report	25 years minimum See LUC report	£5,033,507.50	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2
Physical management of paths and tracks across other SAC areas <i>Dealing with increasing wear-and-tear.</i>	n/a	1 year (easy access path)	£15,000 (easy access path)	24 years for annual work plus £15,000 for easy access path repair/upgrade in SAC (excluding	£375,000	<ul style="list-style-type: none"> ➤ Upgrade easy access path – @ £15/m - Lords Bushes/ Knighton (Year 3) (£15,000) ➤ Annual repair and upgrade to SAC ride/path/Multi-user trail (MUT*) network to cope with increased annual use @ £30/m – 0.5km per year each year (£15K) 	<ul style="list-style-type: none"> ➤ Upgrade easy access path/ "visitor offer" to take greater visitor pressure away from central area and towards urban edge of Forest nearer London transport ➤ Maintenance of access infrastructure (especially *MUTs) to accommodate increase use and protect vulnerable beech forest and

				High Beach Masterplan)			heathland vegetation (excludes areas within High Beach Chingford or Leyton Flats (see above and LUC Report (Sept 2020))).
Signage at transport nodes- Map and Interpretation including installation			£2500	4 years – one per year	£10,000	➤ Map and Interpretation board signposting sustainable routes to Forest at main train stations: Chingford, Loughton, Theydon Bois, Epping	➤ Increase use of public transport access to Forest and reduce car impact
Interpretation roll out Forest-wide			£2000	10 years	£20,000	➤ Installation of interpretation boards across Forest SAC areas encouraging visitors to stay local	➤ Access information – panels and waymarking/SAC-specific habitat information interpretation
Visitor engagement campaigns			£2000	10 years	£20,000	➤ Production of promotional material; banners, leaflets, pop-up stalls to assist volunteer Forest Ambassadors (see below)	➤ Community out-reach work (also see above work for Mitigation Officer tasks)
Bicycle hire scheme			£6000	Year 3	£6,000	➤ Installation of cycle parking drop off points working in partnership with cycle hire business in Forest and surrounding open spaces e.g. Lee Valley	➤ Encourage sustainable travel and sustainable links to other open spaces to spread visitor pressure
Cycle Map			£2000	Year 3	£2,000	➤ Production of cycle map to encourage visits by cycle / cycle hire instead of car	➤ Reduce car travel within SAC road network

SAC Ambassadors	See LUC report	See LUC report	See LUC report	25 years minimum See LUC report	Included in High Beach/Chingford and Leyton hub costs above	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2	See LUC report: Epping Forest SAC Mitigation Strategy (September 2020) in Appendix 2
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Mitigation Strategy Development & Visitor Masterplan Consultancy advice	n/a	n/a	90 days at £500 per day average	Year 1 & Years 8, 15, 22 (for review) ESTIMATED NO. DAYS – 90 days	Up to £45,000	<ul style="list-style-type: none"> ➤ up to 60 days' consultancy in Year 1; ➤ 10 days' consultancy for review and report and independent oversight of Strategy in Year 8 ➤ Further reviews at Years 15 and 22 (20 days) 	<ul style="list-style-type: none"> ➤ Masterplan: engage consultant to produce spatial strategy for visitors; ➤ Project plan and refine costs for proposed SAMMs (below) and advise on relative contribution of SANGs ➤ Ensure Habs Regs Assessments of SAMM Projects in SAC if required by NE ➤ Liaison with NE, MoU LPAs and CoL officers to pull together and report on detailed mitigation options and requirements ➤ Involved with recruitment of the delivery officer post (see below)
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Mitigation Strategy Delivery Officer (Project Management and field monitoring experience)	£10,200	1 Year	£50,477	Years 2-25 24 Years	£1,221,648	<ul style="list-style-type: none"> ➤ Scale D SCP 1035 £32,000 + Outer London Weighting £3,350 = £35,350 + 31.8% On Costs £11,245 (overheads, workstation training) + ULEZ compliant electric lease £6,289 	<ul style="list-style-type: none"> ➤ Key liaison person for project consents from Natural England and any detailed assessment work required by NE ➤ Contribute to new Forest Transport Strategy and liaise with highways authorities ➤ Procurement, implementation and supervision of contractors ➤ Management of SAC Ambassadors and volunteers ➤ SAC part of Sustainable Visitor Strategy implementation - coordinating with Visitor Services Team ➤ Advice on SANGs development possibly including CoL 'buffer lands' ➤ SAC Impacts Monitoring Strategy ➤ Community out-reach ➤ Annual report to all Mitigation Strategy/MoU partner organisations and contributing developers
Apprentice	£10,200	7 years	£25,807	Years 2-25 24 years	£629,568	<ul style="list-style-type: none"> ➤ Level 3 London Living Wage £18,990 + 31.8% on-costs £6,040 (overheads, workstation, training,) + College Sponsorship £2,070 – 2 years = £25,807 	<ul style="list-style-type: none"> ➤ Lowest cost option to ensure assistance for Mitigation Delivery Officer, particularly in monitoring projects and gathering evidence on biodiversity impacts. ➤ assist with community out-reach and volunteers supervision.

Strand 2 – Monitoring and Evaluating Mitigation Impacts							
Visitor Surveys (incl for relevant SANGS and buffer lands)		5 years' costs	n/a	Years 4, 9, 14, 19, & 24	£125,000	➤ Delivery by external consultants	<ul style="list-style-type: none"> ➤ Visitor survey to include survey across two periods in any one calendar year– including summer months (Jun -Aug incl) ➤ The Year 1 survey to cover the Jun-Aug period only – to be used to build on the outputs from the Autumn 2017 survey. ➤ Expanded to include SANGs sites where applicable to look at interactions ➤ To assess relative contributions of local authority areas and changing distributions of visitors and changing visitor demands
Monitoring visitor impacts on soils and ecology of SAC				Baseline (by Year 2, then Years 4, 8, 12, 16, 20, 24) – 7 occasions x £15,000 plus bi-annual FPPs (£2,000 each year repeated every 2 years) – 13 occasions	£131,000	➤ Delivery by External consultants and possibly FPPs with volunteer assistance	<ul style="list-style-type: none"> ➤ Baseline and 'controls' set-up plots on heathlands and at visitor pressure areas by Year 2 ➤ Repeat monitoring of vegetation plots Years 4, 8, 12, 16, 20, 24 and selected beech tree health ➤ Bi-annual Fixed-Point Photograph (FPPs) monitoring of main erosion areas ➤ Soil compaction/penetrometer testing – repeat plots
Rolling External Project Evaluation	n/a	n/a	£5,000	Every two years – excluding Years 1, 8 ,15 and 22 9 years in total	£45,000	➤ Delivery by External consultants (excluding Years 1, 8, 15 and 22 covered by Mitigation Development consultants)	➤ External consultancy to evaluate projects annually and provide briefing reports to Mitigation Strategy Delivery Officer and Oversight Group
Strand 1 Sub-Total					£16,820,594		
Strand 2 Sub-Total					£ 301,000		
Total for 25 YEARS					£17,121,594		
Total for 125 YEARS					£62,626,158		

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