HIGH BEACH

Individual Site Plan

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Author	*Fiona Martin/Geoff Sinclair*
Land Area	*225 ha*
Compartment Numbers	*9, 10, 14, 17(part), 18*
Designations	*Epping Forest Land (1878 Act)* *Special Area of Conservation (SAC)* *Site of Special Scientific Interest (SSSI)* *Metropolitan Green Belt*

High Beach

INDIVIDUAL SITE PLAN

1. SUMMARY

High Beach is an extensive area of ancient wood pasture occupying a high ridge between the valleys of the Lea and Roding and forms the traditional heart of the northern half of Epping Forest. The High Beach area has an especially high conservation value for the internationally important habitats and species present, and the abundance of ancient beech pollards in the locality; these are reflected in the area being part of the Epping Forest Special Area of Conservation (SAC), a statutory designation of international conservation importance.

High Beach has a long history as the 'Epping Forest' destination. As a result, this distinctive brand attracts a large number of visitors of all types, especially at weekends and on Bank Holidays. The area is, however, relatively remote from the public transport network and the parking availability is frequently insufficient to cope with the demand, with substantial local traffic problems at peak times.

Substantial housing growth is planned in the surrounding districts under a number of Local Plans, with consequent predicted additional visitor pressure. As part of the development of these Local Plans, a SAC Mitigation Strategy is being developed, which will have significant influence on the High Beach area. The SAC Mitigation Strategy is being developed by Epping Forest District Council and the London Boroughs of Waltham Forest, Redbridge and Newham to mitigate the anticipated effects of new housing developments on Epping Forest. This Individual Site Plan lists current management considerations and site-specific issues that the wider mitigation strategy will need to address, but the ISP will also evolve alongside this and other Forest-wide strategies.

Looking ahead, there is a need to protect the nature and heritage conservation features of the High Beach area, whilst also improving the experience of visitors to this part of Epping Forest. The ISP presents a site-specific framework for decision-making and a work programme that is aimed at ensuring a sustainable future for the nature conservation, heritage and amenity interests of the High Beach area.

2. INTRODUCTION

Individual Site Plans (ISPs) aim to review and collate the City Corporation's property management considerations at specific locations, to give an overview of current practice and outline longer term plans. An important part of the process is to work with key local stakeholders to ensure that we capture the management issues impacting each site. Site selection is based around areas of Epping Forest that have a high number of competing issues and/or high visitor numbers.

The ISPs reflect the current level of activity at each site; however, an important part of each ISP is the identification of any potential improvement and enhancement projects that require additional resources, including support from external operational stakeholders, for example in the form of grant funding or volunteer person-hours. The information gathered in each report will be used by the City Corporation to prioritise work and spending on each site as part of the development of the 'London's Great Forest' 2020-30 Management Strategy.

Each ISP will aim to follow the same structure, outlined below:

- **Background** – a brief description of the extent of the site covered by the ISP;
- **Property Management Context** – a list of property management constraints such as legal and statutory obligations directly relevant to the management activity or location;
- **Management Considerations** – a list of identified management considerations for the site, with respect to ecology, conservation, community, heritage, landscape, protection and any other identified management issues;
- **Management Strategy** – a summary of the key overall objectives for managing the site, as identified by the audit;
- **Outline Management Programme** – a summary of the management actions identified for the site as a result of the audit and consultation process, with anticipated timelines for completion;
- **Potential Enhancement Projects Requiring External Support** – a list of projects that would enhance the quality of one or more aspects of the site, for which additional support would be required;
- **External Operational Stakeholders** – a list of external stakeholders who have an operational input to the site, who have been consulted as part of the compilation of the Individual Site Plan;
- **Bibliography** – a list of existing reports (if available) that have formed part of the audit for the ISP; and
- **Appendices** – including a detailed activity plan.

3. BACKGROUND

3.1 Introduction

High Beach is an extensive area of ancient wood pasture occupying a high ridge between the valleys of the Lea and Roding and forms the traditional heart of Epping Forest. Epping Forest is one of the earliest publicly-accessible landscapes in England, predating the UK's National Parks by nearly 80 years. It is managed in perpetuity by the City of London Corporation, as The Conservators of Epping Forest, guided by the responsibilities and powers provided by the Epping Forest Acts 1878 and 1880 and subsequent amending legislation, including most recently the Open Spaces Act 2018. The High Beach area has an especially high conservation value for the internationally important habitats and species present, and the abundance of ancient beech pollards in the locality.

The five Forest compartments surrounding High Beach lie within the Special Area of Conservation (SAC) and are also covered by other designations, including Site of Special Scientific Interest (SSSI). The SAC status and the SAC conservation objectives (Natural England, 2018 & Jan 2019a), as well as the SSSI condition, will be central to considerations of future management options.

High Beach also has a long history as the 'Epping Forest' destination and this distinctive brand attracts a large number of visitors, especially at weekends and on Bank Holidays. There is a long tradition of people meeting on Queen's Green, whilst young couples come to the Pillow Mounds to admire the view and spend time together. Visitors of all ages enjoy the view from the Pillow Mounds and the opportunity to walk amongst the ancient trees (Adams, J., pers. comm.). The history of

High Beach, combined with the brown tourist signs directing visitors to the location as 'Epping Forest Centre', availability of car parking, public toilets, an easy access path, a Visitor Centre, two tea huts and a large gastropub with entertainment venue attached ('Kings Oak'), all ensure that the High Beach area is one of the more popular areas for visitors in Epping Forest.

Based on local knowledge from the Epping Forest Heritage Trust volunteers who run the Visitor Centre (Adams, J, pers. comm.), it would seem that High Beach attracts a diversity of visitors, including a proportion of new visitors who come off the M25 from Essex, north & west London and some from Hertfordshire and Cambridgeshire. Some visitors from distant locations used to live in the area and have come back to visit - these visitors make use of the Visitor Centre to ask questions about what has changed since they moved away, other visitors from afar come with local residents who are showing off their local Forest area, whilst others are just exploring - including first time visitors. Most are coming for a day/half day out, looking for walks and cycle paths, and making use of the catering facilities, Visitor Centre and public toilets (Adams, J, pers. comm.). Snapshot surveys suggest that the Visitor Centre at High Beach has a high proportion of first time visitors. Equally, there is a local community of people who make a point of visiting the same tea hut at around the same time each day or week, often during 'off-peak' times. These include regular walkers and runners, those walking their dogs, cyclists, and others looking for a cup of tea in a beautiful location, with the chance of bumping into someone they recognise.

The area is however relatively remote from the public transport network (up to 55 mins walk from Loughton Tube Station via Baldwins Hill and the Forest's shared use paths) and the parking availability is frequently insufficient to cope with the demand, with substantial local traffic congestion at peak times. A recent visitor survey across the whole of Epping Forest found that 77% of visitors arrived by car (Liley et al (Footprint Ecology), 2018); this percentage is likely to be even higher at High Beach, given the lack of public transport to the area.

Looking ahead, there is a need to plan to protect the nature and heritage conservation features of the High Beach area whilst also improving the experience of visitors to this part of Epping Forest.

3.2 High Beach Forest Management Compartments

High Beach comprises five Forest management compartments (9, 10, 14, 17 and 18) covering a total area of approximately 225 hectares (9% of Epping Forest), all situated within Epping Forest District. Figure 1a illustrates the locations of the High Beech compartments, car parks and other features of interest, whilst Figure 1b shows the features of interest in the centre of High Beach in more detail. From the High Beach area, Epping Forest extends north into St Thomas' Quarters (management compartment 6), east into Great Monk Wood (compartment 11) and Loughton Camp (compartment 19) across the Epping New Road (A104) and south into Hill Wood (compartment 21). The Woodredon Farm Buffer Land (owned and managed by COL, but not part of Epping Forest under the 1878 Parliamentary Act) is also just to the north of the High Beach area, and there is further farmland to the west of High Beach.

The south eastern edge of the town of Waltham Abbey (population 21,149 in the 2011 census) is around 800m from the north western tip of the High Beach area at Honey Lane. To the east, the western edge of the town of Loughton (population 31,106 in the 2011 census) is just under 2km away through Forest land. Loughton Underground Station is 2.8km away from the centre of the High Beach area.

There are approximately 13 km of COL managed paths within the High Beach area as detailed in the Path Management Policy Development Note (COL, 2020a).

3.3 Pillow Mounds and Queen's Green

The centre of the High Beach area is known as the Pillow Mounds (compartment 14), a site of regional archaeological interest, being the remains of post medieval rabbit warrens, whose use continued into the 19th century (Essex County Council Historic Environment Branch, 2010). This area is also the location of a popular viewpoint across the Lea Valley and into Hertfordshire, which has, however, increasingly become obscured in the last 50 years by secondary tree growth over heathland and the expanding crowns of mature trees.

The compartment is a mosaic of slopes, streams, woodland and clearings with botanically important acid grassland and heather; as well as a large number of immense and ancient Beech pollards of unparalleled international conservation importance, which support an important range of mycorrhizal fungi and saproxylic invertebrates.

On level ground at the apex of the Pillow Mounds slope is an area of short-mown grassland, bounded by a series of low wooden posts, known as Queen's Green. There are two trees on Queen's Green - 'Victoria's Oak' (an American Red Oak), which is a replacement for a tree planted by Queen Victoria in 1882, and an English Oak planted by His Royal Highness The Duke of Sussex, in 2017. Just opposite on the northeast corner of the access road to the Visitor Centre is a Cyprus Oak.

3.4 Paul's Nursery

Just east of Paul's Nursery Road, in compartment 18, 14 hectares within Epping Forest were set up as a plant nursery in 1860 by the famous horticulturalists, the Paul family, on the site of an old gravel working. The nursery rose to prominence from 1867 under the ownership of George Laing Paul, but was recognised as an illegal enclosure under the Epping Forest Act 1878 and returned to the Forest in 1921 upon George Laing Paul's death. George Laing Paul had a passion for exotic plants, particularly *rhododendrons* and *azaleas,* which can still be seen in the area today, along with a number of other species which survive from the time of Paul's Nursery, such as Holm Oak, Japanese Maple and Copper Beech. The ubiquitous and very popular double pink Hawthorn variety known as 'Paul's Scarlet' is associated with the nursery. The Garden House also survives; this very grand potting shed is currently unoccupied.

The Epping Forest Visitor Centre, owned by COL and within Epping Forest land, but operated by Epping Forest Heritage Trust, is also located within the Paul's Nursery compartment, on land behind the 'King's Oak'. The Visitor Centre is part of a complex of buildings on Forest Land, the remainder of which are leased to the Field Studies Council for the Epping Forest Field Centre. Both the Epping Forest Visitor Centre and the Field Centre buildings sit within a raised circular bank comprising the remains of the first ever motorcycle speedway track in the UK. The High Beach area is a focal point for motorcycle enthusiasts who regularly meet up at The Original Tea Hut, a short distance to the south of the speedway location.

The area comprises mature Beech forest with open glades and regeneration of Beech, Birch and Oak where the ancient Beech trees have fallen, especially to the south of Paul's Nursery. The area close to Nursery Road was once open heath on sandy soils, but over the last 50 years, it has become colonised with secondary Birch woodland.

3.5 Fernhills to High Beach Church

Southwest of Queen's Green and the centre of High Beach is an area known as 'Fernhills to High Beach Church' (Compartment 17). This management compartment is in fact two distinct areas – one around High Beach southwest of Queen's Green, and another centred on Fernhills and Trueloves, two later additions to Epping Forest. The part of the management compartment around High Beach, with which this ISP is concerned, comprises four broadly triangular areas of

Forest criss-crossed by the minor roads of the High Beach village. High Beach Church forms an enclosure within this area; the wooded areas around the Church consist mainly of secondary woodland that has colonised former open heathland. To the west of the Church is High Beach Green and area of acid grassland which is increasingly being enclosed by expanding woodland.

3.6 Wake Valley

To the northeast of Queen's Green is an area known as Wake Valley (Compartment 10), a mosaic of beech wood-pasture and heathland with a number of spring lines, streams, ponds, and the Wake Valley Bog Complex). Wake Road, which links High Beach with Woodridden Hill and the Wake Arms roundabout, cuts across compartment 10. In comparison to the other compartments comprising the High Beach area, this part of the Forest receives relatively few visitors. As a result of its relative quietness, Wake Valley is an important location for a number of scarce plant and animal species of conservation importance, as well as being a favoured spot for seeing the deer that roam the Forest and graze the heathlands and acid grasslands.

3.7 Honey Lane Quarters

Honey Lane Quarters (Compartment 9) lies on the northern edge of the area that most visitors associate with High Beach. A broadly triangular area bounded by Claypit Hill, Woodridden Hill and the Verderers Ride, Honey Lane Quarters is a steeply-sloping northwest-facing compartment. It comprises mainly wood pasture, grassland of conservation importance for scarce plant species (Big View), a grassy plain (Honey Lane Plain), and Honey Lane car park at the base of the hill in the northwest corner. A COL official natural path (see Glossary) heads east from the Honey Lane car park parallel to Woodridden Hill, providing visitors with access to St Thomas' Quarters and the buffer lands of the Woodredon Estate. The Honey Lane car park is the location of an historic thatch-roofed drinking trough and fountain. Rifle Butts Ride is of historical interest, as it was the location of a rifle range built in 1863 for the 22nd Essex Rifles, with the rifle butts located at intervals up the steep hill along what is now Rifle Butts Ride. The actual rifle butts still exist as earthworks along the ride. As well as being of botanical importance, Big View is a notable viewpoint, though it is much less well known than the view from Pillow Mounds due to its location.

4. PROPERTY MANAGMENT CONTEXT

4.1 Statutory Designations

- Special Area of Conservation (SAC): All five High Beach compartments are encompassed by the Epping Forest Special Area of Conservation. As such they form part of an internationally important site within a network of such sites across Europe and are specially protected under UK law by The Conservation of Habitats and Species Regulations 2017 (as amended), often simplified to The Habitats Regulations or The Habs Regs. The qualifying features of Epping Forest SAC are wet heathland with Cross-leaved Heath, dry heath, Beech forests on acid soils and the presence of Stag Beetle. All four of these SAC qualifying features are present across this area, with Beech forest habitat and Stag Beetle throughout all the constituent compartments, and wet and dry heaths covering much of Compartment 10.
- Site of Special Scientific Interest (SSSI): All five High Beach compartments are within the designated *Epping Forest Site of Special Scientific Interest* (SSSI). The SSSI is regularly assessed for its 'favourable condition' to ensure that the wildlife habitats support the range of scarce species for which it was designated. Condition assessments are

undertaken on a unit (compartment) basis by Natural England, who assess unit condition against SSSI condition targets.

- The ecological condition of each compartment has been assessed by Natural England (NE), as follows:
    - Compartment 9 (Honey Lane Quarters, NE unit 109): assessed as 'unfavourable – recovering' in January 2010, based on an assessment of habitats and veteran trees, and invertebrate, bryophyte and fungi assemblages. However, notwithstanding the assessment, Natural England states that '*there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen, and the anticipated recovery of the compartment will not occur unless an extensive grazing regime is re-introduced as planned*'.
    - Compartment 10 (Wake Valley, NE unit 110): assessed as 'unfavourable – recovering' in January 2017, based on an assessment of the wood pasture, wetland features and heathland/acid grassland. The compartment is assessed as 'recovering' on the basis of the rolling programme of pollarding, crown reduction and halo work. Natural England further mentions that '*targeted tree management around ponds may be beneficial to submerged vegetation, and targeted grazing and grassland management would benefit the heathland / grassland*'.
    - Compartment 14 (Pillow Mounds, NE unit 114): assessed as 'unfavourable – recovering' in March 2017. The condition of the Pillow Mounds acid grassland, excessive Holly in the wood pasture shrub layer, and sub-optimal bryophyte diversity close to high recreational areas and roads are all factors contributing to its current unfavourable condition. The compartment is assessed as 'recovering' on the basis of recent management activities, including bracken/bramble clearance on the Pillow Mounds, recreational management activities, and halo work and re-pollarding of veteran trees.
    - Compartment 17 (Fernhills to High Beech, NE unit 117): assessed as 'unfavourable – no change' in March 2017, based on the condition of the wood pasture canopy, and wetland features being unfavourable due to *Crassula helmsii* dominance.
    - Compartment 18 (Paul's Nursery, NE unit 118): assessed as 'favourable' in January 2010, based on an assessment of habitats and veteran trees, and invertebrate, Odonata, bryophyte and fungi assemblages. However, notwithstanding the assessment, Natural England states that '*there remains a very significant issue relating to air quality and the related deposition of acidity and of nitrogen. Many veteran trees within the unit display clear symptoms of stress, and some of the waterbodies are in a sub-optimal condition*'.
- Metropolitan Green Belt: The Epping Forest District Local Plan Submission Version (December 2017) states in Policy SP6 'Green Belt and District Open Land' that "the openness of the Green Belt will be protected from inappropriate development in accordance with national planning policy. The same level of protection will be applied to areas of District Open Land." The whole of Epping Forest within Epping Forest District is designated Metropolitan Green Belt.

4.2 Tree Safety

- Tree Safety: There are four different tree safety zones identified for each of the five compartments around High Beach:
    - Red + Zone Trees along main roads, around car parks, on Queen's Green, along the easy access path at High Beach, around the Visitor Centre/Field Study Centre buildings and in the nearby heavily frequented woodland; all areas are surveyed annually by specialist external tree safety consultants.
    - Red Zone Trees alongside minor highways are surveyed every two years by specialist external tree safety consultants.

- Amber Zone Trees in areas highly frequented by the public and where trees abut properties, are surveyed every three years by specialist external tree safety consultants.
- Green Zone Trees alongside the official all-weather and natural path network (see Glossary) as identified on the Epping Forest visitor map are surveyed by City Corporation staff and volunteers on a five-year rotation.

4.3 Wildfire Risk

- Barbeques and fires, although against the byelaws, are still used by some visitors and pose a significant risk to the important heathland and veteran tree habitats of the SAC, as well as the wider environment and neighbouring properties and roads. Wildfire is more prevalent and more likely to become out of control in open grass and heathland habitats where the fuel-load (particular vegetation types and structures) is also high. The key habitat in the High Beach area requiring a wildfire risk assessment is heathland. The two locations encompassed by this ISP that are covered by both a site-specific risk assessment but also site-specific wildfire management plans and wildfire response plans (the latter required by Essex Fire & Rescue Service) are Sunshine Plains North and South.
- The Epping Forest Field Centre has a designated and licensed fire pit for its environmental education activities.

4.4 Invasive Non-Native Species (INNS)

- Oak Processionary Moth (*Thaumetopoea processionea*): The larvae of the non-native Oak Processionary Moths are a risk to human health (GB non-native species secretariat, 2020) and they are present throughout Epping Forest. Future responses will involve removal of the nests, especially at lower levels, with some pesticide treatment in limited cases, such as in high visitor access areas, e.g. the Pillow Mounds.
- New Zealand Pigmyweed (*Crassula helmsii)*: This invasive non-native species is present in Wake Valley Pond and Little Wake Pond West, and dominant in Speakman's Pond. *Crassula helmsii* is almost impossible to eradicate from a water body once established; it is currently managed by conservation volunteers.
- Other INNS are also present in the High Beach management compartments as follows:
  - Himalayan Balsam in compartments 9 and 14;
  - Turkey Oak in compartment 14;
  - Rhododendron in compartment 18;
  - Japanese Knotweed in compartment 18 (previously treated and not seen in 2020);
  - Muntjac deer across all compartments;
  - Least Duckweed in Wake Valley bomb crater pond and Wake Arms pits;
  - White Water Lily in Little Wake Pond (west);
  - Various non-native fish, and possibly terrapins, discharged into the ponds by visitors; and,
  - Sycamore across all compartments.
- An Invasive Species and Biosecurity Policy (COL, in prep) will review the high-risk species and prioritise monitoring and controlling INNS and other invasive species in Epping Forest. Biosecurity policy will be developed alongside the INNS policy, and biosecurity protocols developed for each species or location as required.

4.5 Infrastructure

- Information boards/signposts: There are a large number of COL signs in the High Beach area, of various ages, designs and functionality. Signage and interpretation are being reviewed across Epping Forest and a strategy

should be complete in 2021. The issues around signage are considered in more detail in the Access and Visitor Services sections of this ISP.

- Forest Furniture:
    - Oak bollards: Queens Green is distinctively enclosed with over 100 sawn oak bollards, spaced around 2.5 m apart.
    - Forest furniture: A number of wooden picnic benches and seats are provided by COL in the High Beach area; these are positioned close to the tea huts and Visitor Centre. There is one bench to the side of the Pillow Mounds, but further benches have not been installed on the Pillow Mounds and Queen's Green in order to preserve their natural aspect.
    - Rubbish bins: Following a review of bin provision to better tackle the significant litter problem on the Pillow Mounds area in 2015, the number of bins was increased. This has helped to speed litter collection as more waste is put in bins and not discarded on site or in bags alongside over-full bins, which are then ripped open by foxes. However, there remains a significant litter problem at High Beach, which is a combination of a number of inter-related issues that will be addressed as part of a future review of litter management.

4.6 Property / Boundaries / Wayleaves

- High Beach Visitor Centre: The Visitor Centre is located in a stand-alone building owned by COL, who remain responsible for the building's exterior and interior. Epping Forest Heritage Trust operate the Visitor Centre on behalf of COL, but COL provide stock and materials for the displays and shop, outlined in the Management Agreement between the two parties.
- Forest lodges: There are two COL Forest lodges off Paul's Nursery Road near to the 'Kings Oak', and a further lodge (Dairy Farm), off Church Road to the southwest of High Beach.
- Garden House: The closure of Paul's Nursery, and the return of the land to Epping Forest, transferred ownership of the Garden House to COL.
- Field Centre buildings: The main Field Centre teaching building (also known as the Qvist building) and the attached timber classroom are owned and maintained by COL. All three ancillary buildings (Harting Lodge and Buxton Lodge and Ravensmead Hostel) are also leased by COL to the Field Centre for staff accommodation.
- 'Kings Oak': The 'Kings Oak' buildings and shingle car park are not within Forest land, though these are owned by COL and leased to tenants who operate a gastropub and entertainment venue.
- Public toilets: In the 1960s, Epping Forest District Council (EDFC) constructed a toilet block in the car park of the 'Kings Oak', on COL (but not Epping Forest) land. The ownership of the toilet block was transferred to COL in 2005; Epping Forest District Council and Waltham Abbey Town Council continue to provide a maintenance grant for the upkeep of these public toilets by COL. Changing legislation and developing user demands means there is a need to review the long-term toilet provision needs at High Beach.
- Thatched shelter: A thatched shelter with a horse drinking trough and fountain is located at the northwest corner of Honey Lane Quarters (Compartment 9). It is locally listed by Epping Forest District Council as being of architectural or historical merit, though it is currently out of operation.
- Tea huts: The tea hut structures are owned by the current tenants, who supply their own utilities from cannisters / generators / batteries. The Original Tea Hut has had access to the mains water since 2016.
- Wayleaves: There are 91private property accesses across Forest Land in the High Beach area; the majority of these have extant wayleave agreements. An Access Audit (COL, in prep) is currently ongoing, which will audit all

third party access on Forest Land in the area and pursue wayleave agreements for those property accesses currently without an agreement.

4.7 Highway Verges

- Highway verges: All the verges around the High Beach area suffer from significant encroachment from parked cars, especially at weekends and bank holidays, when the number of visitors exceeds the number of official car parking spaces at High Beach.
- Temporary Traffic Regulation Order (TRO): A TRO was introduced on 22 May 2020 on the roads around High Beach. Further details about the scheme can be found in a later section of this ISP (Access).
- Sightlines at car park entrances and road junctions are cut annually by COL in June/July.

4.8 Utilities

- Thames Water have an underground reservoir adjacent to the Pillow Mounds, not on Epping Forest land. There has been a regular history of prolonged leaks from this facility running in to Speakmans Pond, which was fixed in autumn 2019.

5. MANAGEMENT CONSIDERATIONS

5.1 Ecology and Nature Conservation

- Outstanding conservation value: Epping Forest is a unique landscape, distinct from the surrounding countryside as a result of over a thousand years of sustainable management by people and their domestic animals. "*In 1878, Epping Forest was a complex and balanced system, every acre the product of centuries of peculiar land uses, and a thing of distinction and beauty; with its combination of pollards and heather, there was probably nothing quite like it in the world*" – taken from Oliver Rackham's *The History of the Countryside* (1986). The resulting wood pasture habitat with ancient pollards is a landscape of immense conservation value due to its rarity. It is one of a few remaining large-scale examples of wood pasture in England and encompasses one of the largest populations of ancient trees in any site in Europe. This wood pasture also supports outstanding assemblages of invertebrates and amphibians, and an important breeding bird community. The High Beach area includes most of these high nature conservation value habitats, including ancient semi-natural woodland, scrub, acid grassland, heathland, marsh and open water.
- Climate change: This over-arching and increasingly serious problem needs to be factored into management decisions for the site and, particularly, the protection of its scarce habitats and species. The effects of climate change will increase the susceptibility of the trees and vegetation to diseases and extremes of weather.
- Favourable Condition of the SSSI compartments/units - Site Improvement Plan (SIP): Management work will need to try to address the two key problems for favourable condition identified by Natural England: air pollution and recreational pressure in the Site Improvement Plan (Natural England, 2016). To address the former, a close working relationship is required with other stakeholders, particularly Epping Forest District Council through the updating of its Local Plan and its highways and development proposals. Recreational pressure also needs to be considered and this ISP outlines possible management proposals that will help address the issues of visitor numbers and help to protect habitats such as the wood pasture with its ancient pollards and acid grassland/heather. Natural England also specifically mentioned '*the reintroduction of extensive grazing as planned is key to the anticipated recovery of unit 109 (Epping Forest Compartment 9, Honey Lane Quarters)*'; extensive grazing was

reintroduced to areas of Epping Forest in 2002, and grazing was expanded into new areas of the Forest as part of the 'Branching Out' project.

Wood pasture and ancient/keystone pollards

- High Beach includes a significant proportion of the ancient wood pasture in Epping Forest, with a profusion of ancient pollards. Pollard management went into decline in the 19th century and as a result trees grew beyond the optimal stage for reworking, with the condition of some trees subsequently declining.
- Between 2009-2019, COL Epping Forest undertook the Branching Out Project (funded by the National Lottery Heritage Fund - NLHF), which included specialist crown reduction work on 1050 keystone Beech and Oak pollards within Epping Forest, 250 of which were in the High Beech area. The keystone trees were chosen as those in most need of specialist management, from 24,508 ancient trees that were mapped and recorded as part of the project. A proportion of these keystone Beech and Oak trees will be further crown reduced in the next cycle of works as part of a future Countryside Stewardship application.
- The area also holds a large number of hornbeam pollards, of which a proportion will receive work to stabilise their structures, with the aim of improving their condition and therefore longevity.
- Threats to longevity of keystone trees, hornbeam pollards and other trees include:
    - Historic lack of suitable management, which is being addressed through the Countryside Stewardship scheme;
    - Climate change, leading to increased instances of drought and storm events;
    - Atmospheric pollution and localised pollution from vehicles on the roads through High Beach, which is partially addressed through the Temporary Traffic Order in the High Beach area (see Access section);
    - Pests and diseases, to which trees stressed by climate change and pollution are more susceptible;
    - Visitor pressure, which has led to two situations that adversely impact ancient trees in the area:
        - Soil compaction arising from the trampling pressure of visitors, which reduces the ability of water to move through the soil so there is inadequate movement of oxygen to roots, and in dry periods, compacted soils can become so hard that root systems cannot grow through the soil, leading to poor root systems.
        - Tree safety requirements in response to the red hazard category of busy public access areas has resulted in recommendations for interventions that potentially undermine the conservation value of some ancient trees, e.g. through dead wood removal in the tree crown.
- In 2019, a fencing trial was implemented around one tree to test the effectiveness of this approach for protecting these trees in a cost and landscape effective way. Materials used were round posts with a green polypropylene rope running through a hole in the top and this low cost approach appears to be successful.

Acid grassland and heathland

- Acid grasslands are so-called because they are characterised by nutrient-poor (low nitrogen and phosphorus content) and acidic soils (those with a low pH – sandy/gravelly). They are closely associated with and often interleave with wet and dry heathlands where heather and other ericaceous plants are characteristic. The low nutrients and acidic conditions favour a wide diversity of specialist native plants that can thrive where the more common, faster-growing grasses cannot easily survive. Acid grassland and both wet and dry heathland are UK Biodiversity Action Plan habitats, habitats for which the Forest is partly notified under the SSSI and the heathlands

are SAC habitats. As such, they are a top priority for wildlife conservation nationally and in High Beach are represented by the following areas.

- Sunshine Plain (Wake Valley, compartment 10) is a regionally important wet heathland with Cross-leaved Heath, Creeping Willow, Cotton Grass, Sundew and Heather, with *Sphagnum*, Heath Rush, Carnation Sedge and Tormentil. Grass Snakes and Lizards are both common on Sunshine Plain. Sunshine Plain north and south have been grazed by Epping Forest's herd of English Longhorn cattle for the past five years with some intended rest years.
- Big View (Honey Lane Quarters, compartment 9) is a steep, northwest-facing clearing with a mosaic of acid grassland, heathland and spring-fed boggy patches. It is botanically important with species such as heath milkwort (the only site in Epping Forest for this plant) and is also an important site for Orthoptera (grasshoppers and crickets). There are recent records of Grass Snake in this area.
- Paul's Nursery (compartment 18) has patches of acid grassland and heathland, where there are recent records of lizards, Grass Snake and all three newt species.

- The quality of the acid grassland and heathland in the High Beach area is being adversely impacted by the following significant issues:
  - Decline in grazing: Natural England has made it clear in its condition assessments that grazing needs to be reinstated on a much more widespread basis in order for management compartments to be returned to 'favourable condition' (Natural England, 2010 and 2017). For example, Rushey Plain is a priority for inclusion in a future Countryside Stewardship agreement.
  - Bracken, scrub and tree encroachment: The remaining open areas of acid grassland and heathland around High Beach are being colonised by scrub, trees and Bracken, with specialist species sparsely represented, or absent. For example, in the past, Petty Whin and Harebell have been recorded from High Beech Green, but their status is now uncertain due to Oak and Sycamore colonisation.
  - Air pollution: Deposition of nitrogen pollutants from the air is causing a rise in soil fertility, allowing more competitive plant species to dominate the less competitive specialist acid grassland plant species.
  - Visitor impact: Increasing visitor pressure impacts grassland in various ways, for example:
    - High visitor pressure on the Pillow Mounds has led to a decline in the grass cover, leading to exposed soil areas which over time have become severely eroded (CDTS, 2009);
    - Wake Road bisects Sunshine Plain north and south, which affects the ability of COL to graze both halves of this open area as one unit;
    - Cattle have been regularly disturbed by mountain biking at Big View, which is a key area to graze but also a popular challenging route for bikers and a small number of mountain bikers fell trees / dig holes to create jumps, damaging the natural aspect of the Forest;
    - Dogs contribute to nutrient enrichment of infertile habitats through defecation and urination. These effects are generally concentrated around car parks, on paths and at site entrances, with observed symptoms of enrichment being the dominance of nutrient-loving species, resulting in the reduction of plant species diversity; and,
    - The excretion of veterinary medicines with dog faeces is detrimental to the invertebrate fauna of the Forest. Dogs infected with neospora (a parasite) can harm cattle grazing on Forest land if they ingest the contaminated faeces; similarly, the infected faeces can become incorporated into the haylage harvested from Forest grassland areas.

- A number of measures are being introduced to address increasing visitor pressure on Epping Forest – see Access and Visitor Services sections of this ISP for further details. As part of these new measures, a Code of Conduct for Dog Owners (COL, 2020b) has been published and disseminated on social media.

Bog habitat

- Adams (2017) surveyed the bog habitats of Epping Forest, including those in the High Beach area. Management recommendations for the bogs of the High Beach area are provided in Appendix 2. Woodland encroachment appears to have resulted in these important wetland habitats declining in recent years and even being lost. The key areas concerned are as follows.
    - Wake Valley Bog Complex:
        - Upper Wake Valley Bog: This bog was formerly the only site in Essex for Marsh Violet, but the plant was lost under a dense bed of Pendulous Sedge. Recent work by conservation volunteers has removed the sedge and the volunteers will continue to manage the bog; the bog does still support a good population of Marsh Fern.
        - Wake Valley Pond Margin Bog: The pond margin is dominated by a reed bed, with *Sphagnum inundatum* in the less dense reed areas, with a few small patches of *S. denticulatum* and *S. squarrosum*. The bog was once the last colony of Marsh St. John's-wort in Essex, but has now been lost, partly as a result of trampling by visitors and anglers to the pond margins. The issue of trampling needs to be addressed in future management of the bog.
    - Field Centre Bog Complex: A series of small boggy areas occur in several spring heads within Wake Valley, with scattered patches of *Sphagnum* species. The springs arise from old gravel extraction hollows. Water runs from these springs in the winter months into a ditch that eventually merges with Loughton Brook. However, the bog complex at the spring heads has gradually declined in recent years, due to drying out, shading by Bracken and Birch invasion. Recently, volunteers have undertaken work to remove trees and Bracken from the site.
    - Historic bogs:
        - Long Bog: This bog, parallel to Wellington Hill, was famous to Victorian naturalists for *Sphagnum* species, but these are no longer present. The former bog is now a stream, heavily shaded by Birch. In recent years, conservation volunteers have removed young trees to open the bog and created dams to increase water storage. Several large trees require removal by COL staff.
        - Rat's Lane Bog: A former bog known as 'Rat's Lane Bog' once supported three distinct *Sphagnum* colonies; however, the growth of numerous sapling Sycamore, Hornbeam, Beech and Cherry Laurel have partially dried the bog and blocked out the light, causing the bog to infill. The area is still humid and therefore supports a good population of epiphytes. Conservation volunteers have been working to remove young trees, but COL staff are needed to remove the larger trees, having due regard to those harbouring epiphytes of conservation interest.

Spring lines and streams

- There are a number of spring lines around High Beach that feed into small streams, which then feed into the River Lea catchment to the west of High Beach, or the Roding catchment to the east. These streams provide valuable habitat for plant and aquatic invertebrate species of conservation interest. For example, the Wake Valley streams that feed Wake Valley Pond have been known to have a rich flora; past records include Lady Fern, Broad Buckler

and Male Fern, along with Lesser Spearwort, Yellow Pimpernel and Great Horsetail. The streams are currently over-shaded and trees have invaded their margins.

Open Water

- Notwithstanding the presence of *Crassula helmsii* (an invasive non-native species) in Speakman's Pond, Wake Valley Pond and Little Wake Pond (west), some of water bodies in the High Beach area are of high ecological importance. In particular:
    - Wake Valley Pond: Wake Valley Pond is a key dragonfly site, surveyed most recently by OPAL in 2010-11) (OPAL, 2019), supporting a large population of Downy Emerald.
    - Little Wake Pond (west): This largely open pond, with relatively clear deep water and submerged deadwood was surveyed in 2019 as part of a Countryside Stewardship application (COL, in prep). Small pockets of emergent vegetation are present around the edges (Yellow Iris, Common Spike Rush, Soft Rush, Reed Sweet Grass). Aquatic vegetation is quite good and in places quite dense (Broad-leaved Pondweed, Hornwort, Floating Sweet-grass, Fringed Water Lily, Horned Pondweed and Bladderwort species). Non-native White Water Lily has been present for decades. The pond is very important for breeding Common Toad, other breeding amphibian species include Common Frog, Smooth Newt and Palmate Newt. The presence of Great Crested Newt (a protected species) was confirmed in 2018 via eDNA sampling methods, this is the first record of this species for this pond. The pond supports a healthy dragonfly population with at least ten species being present, including locally important species (Downy Emerald and Hairy Dragonfly). Crucian carp and Rudd have been recorded from this pond in the past. Due to its location, the pond has large amounts of leaf litter and there is significant encroachment of sallow scrub, particularly along its eastern and southern banks.
    - Oak Plain Pond and three Field Centre ponds: All four of these ponds are important for the presence of Great Crested Newt, a protected species. Within the grounds of the Field Centre, Lily Pond and the Bird Garden Pond are plastic lined, whilst Frog Pond is clay lined.
- Fish surveys of the main aquatic bodies in Epping Forest are undertaken regularly by COL staff.
    - Wake Valley Pond: This pond was last surveyed in November 2015, and found to contain Perch, Rudd, Roach and Common Carp. No Pike were caught, unlike surveys in previous years, which may indicate poaching (Pallet, 2015).
    - Wake Valley Bomb Crater: This deep-sided pond, created by a WWII bomb, had very few small fish when surveyed in 1996. Fishing is not permitted; the few fish in the pond are thought to have been stocked from the nearby Wake Valley Pond (Wheeler, 1996).
    - Shallow ephemeral ponds: Wake Arms Pits, Speakman's Pond and a number of other small ponds around High Beach are all small shallow waterbodies resulting from former gravel extraction within Epping Forest. These ponds are generally ephemeral, drying up in the summer months, and consequently have no long-term fish populations. As such, no fish surveys are undertaken on these ponds.
- An amphibian survey was undertaken on the ponds and lakes within Epping Forest in 2013 (Catherine Bickmore Associates, 2014) to assess their suitability for amphibians and make management recommendations. At the time, Little Wake Pond West was assessed as being of medium importance for amphibians and medium priority for management; however, as the presence of Great Crested Newt was confirmed in 2018, the pond is now considered to be of high importance for conservation and future management. Wake Valley Pond and Wake Bomb Crater Pond were assessed as being of medium importance for amphibians and low priority for

management. The four Wake Arms Pits were deemed to be of low importance for amphibians and low priority for management. Further details of the survey and specific management recommendations are in Appendix 3.

5.2 Heritage and Landscape

The High Beach area has a rich heritage with a number of features of historical interest, dating from the Mesolithic period through to modern times, as well as exposed geology of local interest.

- Geology of High Beach: GeoEssex has been documenting local geological sites in Essex as part of an Essex Local Geodiversity Action Plan (GeoEssex, 2013), and High Beach is listed as one of 50 best Local Geological Sites (LoGS) identified through this research (GeoEssex, 2020):
    - Stanmore Gravel: The high ground around the 'King's Oak High Beach' is capped with pebble gravel (Stanmore Gravel) which may have been deposited by an unknown river that flowed north from the Weald of Kent to join the ancestral Thames during the Quaternary Period; well-rounded pebbles from this gravel are revealed on the many footpaths hereabouts (GeoEssex, 2020).
    - Bagshot Sand: Beneath the gravel is Bagshot Sand dating from the Upper Eocene (38-33.9 million years ago), which is visible on the steeply sloping paths of the Pillow Mounds to the north-west.
- Mesolithic period (10,000 – 4,000 BC): There is settlement evidence from High Beach in the form of a large flint scatter and associated stake-holes, and pit-like features (Essex County Council, 2015).
- Saxon period (410 – 1066 AD): The wood pasture system of pollarded Oak and Beech is thought to have been established in the High Beach area in this period (Essex County Council, 2015). This system of pollard management persisted in the High Beach area until the Victorian period but lapsed until the restart of pollard management in the late 20th century. Many ancient lapsed Oak and Beech pollards remain in the High Beach area and are of huge historical, as well as conservation, importance.
- Pillow Mounds: The Pillow Mounds are of regional archaeological significance, being the remains of post medieval rabbit warrens, whose use continued into the 19th century (Essex County Council Historic Environment Branch, 2010). They are the next most important group of pillow mounds in the county of Essex after those in Hatfield Forest (Essex County Council Historic Environment Branch, 2010).
- Alfred, Lord Tennyson: Alfred, Lord Tennyson was the Poet Laureate during much of Queen Victoria's reign and a favourite of the Queen. He lived at Beech Hill House in High Beach village between 1837 to 1840; his remains are interred in Westminster Abbey.
- Victorian period: The Queen's Green is where Queen Victoria, during a ceremonial visit on Saturday May 6 1882, dedicated Epping Forest to "the use and enjoyment of my people for all time", planting an American Red Oak to commemorate the dedication (its replacement still stands in the same location). It was estimated by the Times that over half a million people came to High Beach to view the ceremony and, in Victorian times, High Beach was a favourite day out destination for people from the East End of London, who arrived in their thousands in charabancs and trains.
- Paul's Nursery: To the east of Nursery Road are the remains of Paul's Nursery (1860-1921), where exotic plants are still visible, along with the Garden House and the parts of the outline of the nursery grounds. A Conservation Statement (Place Services, in draft) charts the history of the famous nursery and concludes in its statement of significance that the site is of 'low-medium' significance (Places Services, in draft).
- 'Kings Oak': The 'Kings Oak' name is thought to have arisen from the time when King Henry VIII reputedly waited at High Beach for news of Anne Boleyn's execution. The Victorian building is currently a gastropub and entertainment venue and has hosted famous visitors – the Kray Twins stayed in a room upstairs (https://www.i-loveessex.com/reviewsblog/2017/2/27/the-kings-oak-high-beach-epping-forest). Justin Bieber popped in for

lunch in 2016, creating a social media frenzy which advertised the 'Kings Oak' (and therefore High Beach as a destination) far and wide (https://kingsoakhotel.com/justin-bieber-dines-kings-oak/). It has also hosted the filming of the TV series 'TOWIE'. The 'Kings Oak' has a very well-known and distinctive cultural and heritage value.

- Motorcycle speedway: The 'Kings Oak' was also the venue for the first ever official motorcycle speedway meeting in England, which was held on 19 February 1928 (http://www.defunctspeedway.co.uk/High%20Beech.htm). A raised circular bank still exists around the Field Centre buildings at the back of the 'Kings Oak'; this is all that remains of the athletics track where the motorcycle racing took place. Approximately 30,000 people came to view the first motorbike race, around ten times as many as had been catered for by the organisers, and speedway races continued to be hugely popular throughout the 1930s, though the track eventually closed in 1949. The 100 year anniversary of the first race will be in 2028, when large numbers of motorcycle racing enthusiasts may be expected to make a pilgrimage to the trackway in celebration of the anniversary.
- Original Tea Hut: The 'Original' Tea Hut is of local heritage value, as it has been owned and operated by the same family since its opening in 1930. The tea hut was opened to serve customers from the nearby motorcycle speedway, and is still much frequented by motorcyclists, along with other Forest visitors.
- Fred J. Speakman: Fred Speakman was one of Britain's best known naturalist-authors in the 1960s. He converted 'Roseville' in the village of High Beach into a nature study centre, which he operated between 1959-1979. The Borough of Walthamstow became a pioneer of childhood environmental education, sending primary school children who often lived in working class urban areas on fortnightly visits to be taught by Speakman at 'Roseville'. As demands for trips to the Forest increased, the new London Borough of Waltham Forest (LBWF) purchased the Suntrap Centre in 1967, sending all final year primary school children to make eight visits a year to the centre, which is located on the outskirts of High Beach village. The Suntrap Centre is currently (2020) undergoing a major refurbishment funded by the LBWF.
- Epping Forest Field Centre: The Epping Forest Field Centre was established in 1970 in COL buildings to commemorate the European Year of Conservation, and still provides valuable outdoor education at the same location.
- Most recently, on the 15th March 2017 His Royal Highness The Duke of Sussex planted an English Oak tree on Queen's Green to commemorate his visit to High Beach and surrounding parts of Epping Forest as the Queen's representative for The Queen's Commonwealth Canopy (QCC).
- The more well-known of the historical features outlined above combine to create the distinctive High Beach 'brand', such that visitors to High Beach come from much further afield compared to other locations within Epping Forest. The presence of Queen's Green and the 'Kings Oak' in particular have provided a focus for large numbers of visitors since Victorian times, with a very strong tradition of visiting High Beach at the weekends, especially in the summer months, and on bank holidays. There is a long tradition of people meeting on Queen's Green, whilst young couples come to the Pillow Mounds to admire the view and spend time together. Visitor numbers at High Beach are an increasing concern, with negative impacts on heritage features, including an international important population of ancient pollarded trees.

5.3 Access

Car parking

- 77% of visitors to Epping Forest arrive by car (Liley *et al* (Footprint Ecology), 2018), with this percentage likely to be even higher at High Beach, given the lack of public transport to the area.
- Public car parks: Eight public car parks are open for free use across the High Beach area, though at times, some are busier than others. All car parks should be vacated one hour after sunset; six of them are currently gated and

locked each night. Two car parks, Pillow Mounds and the Visitor Centre, have a tarmac surface, with a total of six disabled parking bays. A further car park is operated by the 'Kings Oak'.

- Field Centre car park: The Field Centre has a dedicated car park for the use of its customers, including coach parking.
- On-road parking: A temporary Traffic Regulation Order (TRO) was introduced on 22 May 2020 on the roads around High Beach, to address long-standing on-road parking issues. The scheme is implemented by Essex County Council; it seeks to improve visitor safety and prevent the obstruction of local roads by inconsiderate parking. The effectiveness of the temporary TRO will be monitored closely by ECC for 18 months.
- Before the end of this period, and if there is a need to amend the scheme, a formal public consultation will take place, enabling members of the public to provide feedback on the proposals. The combined impact of the closure of Fairmead Road and the temporary TRO will be considered as part of this process.
- There is still a significant issue with insufficient car parking capacity, especially on weekends and bank holidays.
- Car parking charges: COL proposes to charge for the use of Epping Forest car parks, in order to maintain access for genuine Forest users, to manage competing demands and to generate sufficient income to offset the estimated cost of continued car park provision (COL, 2020c).

Public transport

- There is currently no direct public transport to the main visitor destination at the Pillow Mounds in High Beach. As part of the Heritage Lottery Fund (HLF, now NLHF) Branching Out Project, a trial public bus service was funded by COL and Essex County Council, running on Sundays and bank holidays between 3 April and 30 October 2011. The circular bus route ran from Loughton underground station to Chingford station, via High Beach. Overall, the venture was evaluated as being a success, with around 30 passengers per day, of which 70% were concessions. The bus route was discontinued after the first summer due to lack of ongoing funding. The final evaluation report for the trial bus service can be found in COL (2011).
- As part of the overarching Sustainable Visitor Strategy (COL, in prep), the connectivity between existing public transport connections (local bus stops and train/underground stations) and popular locations within Epping Forest, such as High Beach, will be assessed. Management works, such as signposting and waymarking, will be identified, to improve these connections and facilitate visitor access on foot or by bike.
- Cycling Strategy and Code of Conduct: The COL Cycling Strategy (in prep.) sets out a strategy for cycling in Epping Forest that encourages responsible cycling, whilst safeguarding sensitive areas of the Forest. A new code of conduct (COL, 2020d) is being disseminated on social media to raise awareness of the new Cycling Strategy and the existence of 'no cycling' areas within Epping Forest.

5.4 Visitor Services

- Public toilets: A public toilet block, including a disabled access toilet, is located in the car park of the 'Kings Oak'; The facilities would benefit from updating with for example the addition of baby changing facilities and aligning the disabled toilet provision with current standards.
- Disabled access and temporary traffic order: The 'red lines' on Paul's Nursery Road currently prevent disabled users of the toilets from parking in front of the toilet block to access the facilities. Instead, these users are being charged for parking in the 'Kings Oak' car park. There is the potential to alter the 'red lines' to provide disabled parking in front of the toilet block and improving the access path to the toilets from the road. In the future, there

may be scope to improve the access path from the Visitor Centre (which has dedicated disabled spaces) to the toilet block as well.

- Managed Paths: COL provide approximately 13 km of managed paths across the High Beach area with an even wider network of desire paths. The managed path network comprises the following (see Glossary):
    - 5.8 km of official all-weather and natural paths;
    - 1.4 km of Public Rights of Way;
    - 1.7km of waymarked trails (easy access trail and part of the Beech trail); and,
    - 4.3 km of informal paths.
- The large number of desire and informal paths means that even with a good quality map, navigating the path network requires good local knowledge. This restricts the ability and/or confidence of new visitors to find their way to High Beach from wider afield on foot rather than by car, and also inhibits visitors at High Beach from exploring further.
- Waymarked Trail: The Beech Trail is around 2.5 miles/4km long, over various terrain, including steep inclines on unsurfaced paths and sections on surfaced rides, but taking walkers past some of Epping Forest's most spectacular ancient trees. Waymarking signage has been installed at the maximum spacing which some users might find insufficiently frequent and the trail crosses the very busy A104 (Epping New Road) twice, where the 40mph speed limit is regularly exceeded. Nonetheless, the trail is very popular with visitors (Adams, J, pers. comm.), who appreciate the variety it offers and the opportunity to explore Epping Forest, and view both its ancient trees and Loughton Camp, an Iron Age hillfort, through which the Beech Trail passes.
- Easy Access Trail at High Beach: This easy access trail is one of four provided by COL across Epping Forest; it is around 720m long, on broadly level ground, and is popular with visitors for the opportunity to get close to several ancient Beech pollards. Parts of the trail have surface damage that will need addressing to ensure the continued accessibility of the trail.
- The Epping Forest Visitor Centre: This is housed in a COL-owned building, but operated by the Epping Forest Heritage Trust since 5 April 2014 on behalf of COL. COL is currently responsible for the maintenance of the building and for providing supplies to the Visitor Centre, such as leaflets and stock for the shop. A fuller discussion of the Epping Forest Visitor Centre can be found in the next section of this ISP (Community).

5.5 Community

<u>Epping Forest Visitor Centre at High Beach</u>

- The Visitor Centre at High Beach has been operated by the Epping Forest Heritage Trust since 5 April 2014 on behalf of COL, providing to date for 120,000 visitors. Currently operating under COVID-19 restrictions, the centre was previously open Thursdays to Sundays and Bank Holidays all year round, from 10am-4pm in the summer months (early April to end of October) and 10am-3pm in the winter months (November to end of March) and is staffed by volunteers. The visitor centre is tucked away behind the 'Kings Oak', with no obvious access from the main (Pillow Mounds) car park on the far side of Queens's Green and its lack of visibility has been identified as a difficulty (LUC, 2020).
- A recent National Lottery Heritage Fund Grant is funding an Epping Forest Heritage Trust project (2020/2021) to explore ways of operating the Visitor Centre and managing visitor provision at High Beach in the future. COL will partner with EFHT in the future of the Visitor Centre; topics under discussion will consider the pros and cons of the Visitor Centre at High Beach, the viability of its business model and whether the building should be repurposed,

with visitor information provided in another way. Alternative methods of providing visitor information could include 'pop up' information points and/or COL staff, EFHT staff and volunteers on Queen's Green.

Field Centre

- The Epping Forest Field Centre was established in 1970 in COL buildings to commemorate the European Year of Conservation. It offers a wide variety of outdoor education courses for schools and the wider community. Students access the Forest around High Beach for their studies, especially the areas either side of the A104 Epping New Road. However, the largely natural paths around the centre make access for less abled students difficult, and the open nature of the centre means the general public can access the land around the centre, which introduces safeguarding concerns. This is exacerbated by the lack of clearly signposted trails from Queen's Green towards High Beach Church and Paul's Nursery – instead, visitors follow the access road into the Field Centre grounds.

Catering facilities

- There are five catering facilities in and around High Beach.
    - 'Kings Oak': This Victorian-built icon of High Beach is both a gastropub, serving food, and an entertainment venue, catering for weddings and other special occasions.
    - 'Kings Oak' Tea Hut: Attached to the main gastropub and run by the 'Kings Oak' is a tea hut which serves light refreshments all day.
    - 'Oyster Shack and Seafood Bar': Located adjacent to the 'Kings Oak Tea Hut', this catering facility is open from 10am to 6pm Friday to Sunday.
    - Mandy's Tea Hut (synonyms: Acorn Tea Hut, Carl's Kiosk): This tea hut is located at the northern end of the Pillow Mounds car park; anecdotally, the tea hut seems to be a favourite of walkers and cyclists, as well as visitors to the High Beach Visitor Centre.
    - Original Tea Hut: This tea hut is located around 1km to the south of High Beach and is a favourite of motorcyclists. The nearest toilet facilities are the public toilets in the car park of the 'Kings Oak'.

Other community activities

- Fishing: Fishing is allowed in Wake Valley Pond to those holding an Environment Agency rod licence, but not in any of the other ponds in the High Beach area. A T-shaped fishing platform is needed to reduce trampling of the pond margin bog by anglers.
- Orienteering: Chigwell and Epping Forest Orienteering Club operate orienteering races across Epping Forest, including in the High Beach area.
- High Beach Church: The Church of the Holy Innocents, which is the parish church for the village of High Beach, is located in an enclosure within the Forest, and comprises the church buildings and a small cemetery. There is no car park provided by the church, nor is there any public transport. COL have provided a small defined parking area for church officials and the temporary TRO scheme has been modified around the church to allow parking.

5.6 Anti-social behaviour

- High Beach is substantially impacted by anti-social behaviour problems.
    - Public sex environment: A public sex environment (PSE) is facilitated by the rural nature and relative isolation of High Beach, as well as the inability to close the Pillow Mounds car park and the Rushey Plain

Turnaround overnight. The impacts of the PSE are managed by COL and the Essex Police Service (EPS) to NPCC (formerly ACPO) guidance.

- Drug use: Drug-taking of all classes drugs is frequent around High Beach, in particular Nitrous Oxide (NOx, laughing gas) cannisters, marijuana and alcohol.
- Fly-tipping: In the period 6 June 2019 – 5 June 2020, almost 21% of fly-tips in Epping Forest occurred in the High Beach area (the figure was 16.5% for the previous year). This is despite the High Beach compartments comprising approximately 8% of the total Forest area. This is likely to be in part because it is a well-known location in the Forest and because the rural nature of High Beach means that there are no streetlights, making it an attractive location to dump illegal waste.
- Accidental and deliberate fire setting: In the period 6 June 2019 – 5 June 2020, just over 7% of wildfires (down from almost 12% the previous year) recorded in Epping Forest occurred in the High Beach compartments, which is in proportion with the land area of these compartments (8%). Fire hazard reduction and management measures, including access and habitat management, are being enhanced as part of a Major Incidents and Emergencies Response Plan (COL, in prep.).
- Littering: A large amount of litter is collected from Queen's Green and the Pillow Mounds, especially at the end of busy summer days and following unlicensed spontaneous social events.

- Management to reduce anti-social behaviour: The COL will be working with stakeholders including the Police Services and Epping Forest District Council to develop an Anti-Social Behaviour Management Plan (COL, in prep.) for High Beach.

5.7 Local Plans

- Local Plans: The Local Plans for both Epping Forest District Council (EDFC) and the adjacent Local Authorities are being revised and all are planning a significant increase in housing and employment space (see Appendix 4 for detailed information).
- The northern half of Epping Forest SAC is wholly within Epping Forest District Council; as such, a strategic Habitats Regulations Assessment (HRA) is required for EFDC's new Local Plan. In addition, other Local Plans will also involve review by strategic HRAs, including the forthcoming Local Plan of the London Borough of Waltham Forest (LBWF) that, as drafted, would increase significantly the number of houses within 3km of Epping Forest.
- EFDC Local Plan Submission Version Examination-in-Public: Following the conclusion of the examination-in-public, the Planning Inspector determined that "*I cannot conclude beyond reasonable scientific doubt (as the parties all agree that I must) that the Plan will not adversely affect the integrity of the SAC until steps have been taken towards resolving it*" (Phillips, 2019). Natural England (the statutory advisory body on matters relating to SACs and the Habitats Regulations), the Conservators of Epping Forest and EFDC, along with other relevant London Boroughs, are in the process of formulating and agreeing an SAC Mitigation Plan for the whole of Epping Forest SAC. The SAC Mitigation Plan will aim to either avoid or mitigate adverse impacts on the Forest that would be due to three identified factors: increased recreational pressure, more general urbanisation impacts and air pollution.
- SAC Mitigation Plan: There are three key aspects to the Epping Forest SAC Mitigation Plan that relate to recreational pressure on the Forest:
    - Zone of Influence (ZoL): The recreational Zone of Influence around the SAC is defined as the distance, as determined by standardised visitor survey(s), which encompasses up to ¾ of visitors (not including holiday-makers) that travel to visit Epping Forest SAC. EFDC has recently commissioned a second Visitor Survey

(Liley *et al*, Footprint Ecology, 2020) to update its HRA. However, the current accepted Zone of Influence from the 2017 Visitor Survey is 6.2km.

- Strategic (visitor) Access Management and Monitoring measures (SAMMs): Natural England and The Conservators are working with EFDC, Harlow District Council and the London local authorities to agree the management and monitoring measures necessary to avoid any negative impacts on the SAC arising out of the various Local Plans affecting the Zol area, in order to safeguard the integrity of the SAC. The funding of these measures is also currently under review, although some monies have already been collected from developers.
- Suitable Alternative Natural Green Spaces (SANGS): The provision of SANGS is a key aspect required to avoid negative impacts on the integrity of the Epping Forest SAC from increased recreational pressure resulting from new Local Plan developments. SANGS are, or contain significant amounts of, semi-natural habitats of a sufficient size and high quality that local residents, and those from further afield, will choose to visit them as an effective alternative to a visit to Epping Forest SAC. Such alternative provision should have the effect of alleviating the pressure of additional visits to the SAC from the increased residential population and the subsequent impact of these visits. Natural England and The Conservators are currently liaising with EFDC and other local authorities over the provision, location and quality of suitable alternative natural green spaces.

- Honeypot locations with Epping Forest: High Beach is already a very well-known location, with existing negative impacts on the features of conservation interest of the Epping Forest SAC, e.g. soil erosion (CDTS, 2009). The developments arising out of the new Local Plans are likely to add further negative impacts to the High Beach area, unless there are robust SAMMs to better manage the visitors who come to High Beach and high quality SANGS to provide realistic alternatives to a visit to High Beach. Long term monitoring of visitor impact is also crucial to avoid creeping, attritional damage to the integrity of the SAC in the future. The levels at which the SAC Mitigation Plan tariffs, or alternatives, are set are also critical, to ensure adequate funding for the SAMMs and in-perpetuity management of the SANGS.

6. HIGH BEACH MANAGEMENT STRATEGY

'London's Great Forest', a strategy and management plan for Epping Forest 2020-2030 sets out five key strategic priorities for Epping Forest, these being:

1. A welcoming destination for all;
2. A beautiful Forest, sustaining internationally and nationally important wildlife habitats in an ancient wood-pasture mosaic;
3. An inspiring space for people's health, recreation and enjoyment;
4. A range of special heritage landscapes which are protected and celebrated; and,
5. A resilient environment, where challenges are embraced, and opportunities explored.

Within the context of the overarching strategy and management plan for the whole of Epping Forest (above), this ISP identifies a series of local management strategy objectives for High Beach, to be implemented over the next 5-10 years (Table 1). These include detailed habitat and species conservation measures that have been agreed with Natural England and supported with grant-aid for four of the five Forest compartments as part of a new 10-year Countryside Stewardship Scheme (CSS) agreement (Jan 2020 – Dec 2029). Proposals to manage recreational pressure and air pollution impacts on the SAC will also form part of these High Beach objectives within a broader SAC Mitigation Strategy that is being developed in partnership with other competent authorities (e.g. EFDC) and Natural England.

The City of London Corporation will also discharge its obligations with respect to property management issues, as identified in this ISP.

Table 6.1: Management Strategy Objectives for High Beach

High Beach Management Strategy Objectives		Epping Forest Management Strategy Objectives
A	To implement a programme of conservation measures that will contribute towards improving the conservation status of the Epping Forest SAC and the favourable condition of the SSSI compartments around High Beach.	2, 5
B	To ensure that COL offers a visitor experience to High Beach in a sustainable and welcoming way.	1, 3, 4, 5
C	To finance an Infrastructure Improvement Programme for High Beach, partly derived from income generated locally	5
D	To encourage local community involvement in the management and enhancement of the Forest at High Beach.	1, 3, 4
E	To seek the mitigation of the impact of additional visits from new developments within Epping Forest SAC's Zone of Influence.	1, 2, 5

7. OUTLINE MANAGEMENT PROGRAMME FOR HIGH BEACH

Objective	Action	Timing[1] (ongoing/years/subject to funding)
City Corporation obligations, A, B	*Site safety and legal work* • Continue to undertake COL statutory requirements with respect to site safety and legal work. This includes managing tree safety and Forest furniture according to relevant City Corporation Policies; and, • Following completion of the Access Audit (COL, in prep), complete wayleave agreements with outstanding third parties to safeguard the Forest's boundaries.	• Ongoing
A, D, E	*Habitat Management* • Agree a funded programme of conservation measures for the High Beach area. Key targets for the programme are as follows: • Protection of ancient trees, including through pollarding, crown reduction, fencing and soil condition amelioration.	• *(dates to be agreed)*

[1] Ongoing = task is ongoing on cyclical basis in current management of the site, 2019 = first year of new task, subject to funding = additional funding required for task / project to be progressed

Objective	Action	Timing[1] (ongoing/years/subject to funding)

	• Extension of the wood-pasture habitat, with the long-term vision of creating a working wood-pasture landscape across Epping Forest:
	  ○ Review the feasibility of widespread cattle grazing of wood-pasture around the acid grassland and heathland areas, including Rushey Plain; and,
	  ○ No further loss of the acid grassland and heathland areas around High Beach, particularly through the restoration of the eroded areas of the Pillow Mounds (CDTS, 2009).
	• Continued restoration of the five bogs in the High Beach area to the extent that this is possible, given the topography and ground conditions (see Appendix 2).
	• Preparation of an aquatic habitat management strategy and plan for the streams and their sources, ponds (see Appendix 3) and ditches in the area.
	• Identify measures, with partners through the SAC Mitigation Strategy, to reduce air pollution from road traffic impacting the SAC.	

City Corporation obligations, A, D	*Invasive species management*
	• Monitor and control invasive species to ensure we meet statutory and COL agreed policies and guidelines, including:
	  ○ Oak Processionary Moth management, nest removal and awareness raising with visitors through signage and other communication methods; and,
	  ○ Control of *Crassula helmsii* and other INNS in ponds, with a risk-based hierarchical approach to control.
		• *(dates to be agreed)*

B, C, D	*Visitor Services*
	• Within the context of the forthcoming Sustainable Visitor Strategy (due 2021), prepare an Access Statement for High Beach. Key aspects of this statement to include:
	• Agreeing a SAC Mitigation Strategy with Epping Forest District Council, other Local Authorities and Natural England;
	• Works to improve visitor access:
	  ○ Improving connections between the eight public High Beach car parks and Queen's Green to encourage better usage of these;
	  ○ Improving and waymarking foot and cycle access options for visitors to get to High Beach without a car, e.g. from bus stops in Loughton and more distant car parks such as Wake Valley;
		• *(dates to be agreed)*

Objective	Action	Timing[1] (ongoing/years/subject to funding)
	○ Providing new circular paths around High Beach of varying lengths, to lessen the pressure on sensitive ecology (see LUC, 2020); ○ Developing a further range of waymarked routes in the High Beach area (e.g. to Connaught Water, Buffer Land) to meet the diverse needs of Forest visitors and to link into the wider Forest; ○ Providing finger posts at key Forest path junctions in the High Beach area, to direct visitors towards points of interest, such as the Visitor Centre, 'Kings Oak' and church; and, ○ Promoting a circular cycle route that connects with cycle paths beyond Epping Forest, as per Epping Forest Cycling Strategy (COL, in prep). • Reviewing the potentially damaging impacts caused by mountain bikers on sensitive locations, such as the Pillow Mounds, and agreeing solutions to address these concerns as part of the Epping Forest Cycling Strategy (COL, in prep). • Reviewing the route of the waymarked Beech Trail - it currently passes through Loughton Camp (a no cycling zone) but is used by mountain bikers. • Promoting alternative locations to High Beach to visitors as part of the Sustainable Visitor Strategy (COL, in prep), for example by encouraging the provision of a refreshment kiosk at the Honey Lane car park by a third party (COL, 1986). • Reviewing the need for the current brown tourist signs.	
City Corporation obligations, B, E	*Enforcement* • Ensure the Antisocial Behaviour Management Plan and Enforcement Strategy (COL, in prep) reflect the operational concerns at High Beach. • Continuing to undertake anti-social behaviour management in conjunction with local stakeholders and partners e.g. Police, NEPP and Local Authorities.	• 2021 • Ongoing
A, B, C, D, E	*Resourcing* • Develop an Investment Resourcing Plan for High Beach in conjunction with the emerging SAC Mitigation Strategy. To achieve the required site investment, key aspects of the Plan will include: ○ Identifying investment needs; ○ Identifying potential on-site income generation; ○ 10-year external grant funding from Countryside Stewardship with further grant-funding opportunities explored;	• *(dates to be agreed)*

Objective	Action	Timing[1] (ongoing/years/subject to funding)
	○ Identifying income opportunities arising from the Epping Forest SAC Mitigation Strategy, resulting from the emerging Local Authority Local Plans; and, ○ Identifying potential community support opportunities (see next section).	
B, D, E	*Community* • Develop a Community Engagement Plan for High Beach, in line with the Community Planning Toolkit (https://www.communityplanningtoolkit.org/). Key aspects of the Plan will include: ○ Facilitating local community involvement in the management and future development of High Beach, in particular with litter picking and orienting visitors; ○ Review the future sustainable use and management of the Epping Forest Visitor Centre with EFHT; and, ○ Identifying community measures to reduce anti-social behaviour in and around High Beach.	• *(dates to be agreed)*
B, D	*Heritage* • Prepare and implement proposals to repair and control the erosion of the Pillow Mounds; • Review the feasibility of restoring the well-known view from the top of the Pillow Mounds area to its full extent, to help meet aspirations to provide a unique and memorable visitor experience at High Beach. Implement works as appropriate.	• *(dates to be agreed)*

8. POTENTIAL ENHANCEMENT PROJECTS REQUIRING EXTERNAL ADDITIONAL SUPPORT & RESOURCES

Additional support needs to be sought from local businesses and community partners to take forward the following projects:

- Visitor access infrastructure: Unquantified at present is the long-term development of the visitor access infrastructure to meet changing community needs, linked to future substantial housing and other development in the area. Works arising from such developments does not form part of the current site expenditure and additional funding will need to be identified to progress any changes and also to develop plans and mitigation proposals.
- The construction of fishing platforms at Wake Valley Pond will require funding to acquire materials. There is the potential for this to be constructed by volunteers.
- Bog and pond management proposals are well suited to volunteer work with a few tasks only requiring specialist support such as from the arborist teams.
- Any road traffic air pollution control measures identified will require additional financial support.
- Some habitat management works will be dependent on obtaining Countryside Stewardship grant aid.

- Erosion control measure on the Pillow Mounds will require additional funding, with some actions being potential volunteer projects.
- Actions to improve litter management and to reduce anti-social behaviour will require significant practical volunteer/community support.
- Others??

9. EXTERNAL OPERATIONAL STAKEHOLDERS

To be completed

10. GLOSSARY OF TERMS AND ACRONYMS

Term / Acronym	Definition
Acid grassland	Nutrient poor acidic soils and grassy-mossy vegetation, including sheep's sorrel, tormentil, heath bedstraw, wavy hair-grass and sheep's-fescue. Heathers, such as ling, bell heather and cross-leaved heather, may also be present, and the grassland may be a mosaic of herbs and shrubs.
ACPO	Association of Chief Policer Officers (replaced in 2015 by NPCC)
APA	Archaeological Priority Area
BGA	Blue-green algae
BSE	Bovine Spongiform Encephalopathy
COL	City of London Corporation
Desire path	Visitor defined routes where the use as indicated on the user defined Strava App indicates a lower level of use. No active management
EA	Environment Agency
EF	Epping Forest
EFHT	Epping Forest Heritage Trust
Gravel workings	An area using for the extraction of gravel, often in a river valley where the water table is high, so that they may naturally fill with water to form ponds or lakes
High risk	In the context of the Flood and Water Management Act 2010, the Environment Agency classifies water bodies as being 'high risk' if an uncontrolled release of water could result in loss of life.
HLF	Heritage Lottery Fund, now superseded by National Lottery Heritage Fund (NLHF)
ISP	Individual Site Plan
Large raised reservoir	In the context of the Reservoirs Act 1975, a water body is classified as a large raised reservoir if it impounds more than 25,000 cubic metres of water
LBR	London Borough of Redbridge
LBWF	London Borough of Waltham Forest
LGBT	Lesbian, Gay, Bi and Transgender
LoGS	Local Geological Sites, as listed by GeoEssex: http://www.geoessex.org.uk/introduction_and_best_sites.html
MPS	Metropolitan Police Service
NE	Natural England

Term / Acronym	Definition
NEPP	Northeast Essex Parking Partnership
NLHF	National Lottery Heritage Fund
NPCC	National Police Chiefs' Council (replaced ACPO in 2015)
NSNO	'No Second Night Out' (Mayor London initiative)
OPM	Oak Processionary Moth
PRoW	Public Rights of Way - paths identified on the definitive map that the public have a legally protected right to pass and re-pass. Depending on the specific path's status people will be able to access on foot, cycle or horseback
PSE	Public Sex Environment
SAC	Special Area of Conservation (European designation)
SINC	Site of Importance for Nature Conservation (local designation)
SSSI	Site of Special Scientific Interest (UK designation)
Waymarked trail	Nine waymarked circular paths established across Epping Forest and the Buffer Lands. Each trail follows official, informal and desire paths as well as Public Rights of Way (PRoW) with some on PRoW on land not managed by the City of London
Wood pasture	An area that has been management by a long-established tradition of grazing, allowing the survival of multiple generations of trees, characteristically with some veteran/ancient trees.
Official all-weather path	Paths identified on the Official Epping Forest map as all-weather paths promoted for use by horse riders, cyclists and pedestrians.
Official natural path	Paths identified on the Official Epping Forest map as natural paths promoted for use by horse riders, cyclists and pedestrians, usually seasonally closed.
Public Right of Way (PRoW)	Paths identified on the definitive map that the public have a legally protected right to pass and re-pass. Depending on the specific path's status, people will be able to access on foot, cycle or horseback.
Easy Access Trail	Four trails promoted as 'Easy Access' with a level, firm, non-slip surface and regular benches and passing places for wheelchairs. Located at High Beach, Connaught Water, Knighton Wood and Jubilee Pond. Cycling and horse riding are not allowed.
Informal path	These paths have been identified using the Strava App, which collects geolocational data from users who are often cyclists and runners. This shows where recreation is occurring. Further routes may be added to the informal path network if local information warrants the path's inclusion.
Waymarked Trail	Nine waymarked circular paths established across Epping Forest and the Buffer Lands. Each trail follows official, informal and desire paths as well as Public Rights of Way (PRoW), with some on PRoW on land not managed by the City of London.

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12. LIST OF APPENDICES

1. Detailed Activity Plan
2. Management recommendations for the bogs of the High Beach area
3. Amphibian survey results and management recommendations for ponds in the High Beach area
4. Local Plans – detailed information
5. Figures

13. APPENDIX 1: Detailed Activity Plan

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
AW - Gateway sign	Sign	**High Beach:** east end of car park	Jun	2021		1	Cut back all ground and arborial vegetation that would impead the visual impact of the sign.	N	M
AW - Gateway sign	Sign	**High Beach:** west end of car park	Jul	2021		1	Cut back all ground and arborial vegetation that would impead the visual impact of the sign.	N	M
AW - Pedestrian access infrastructure	10	**High Beach**: Wake Valley Pond		2025		0	**Fishing management**: Reduce bank side trampling through installing fishing platforms and access management	C	???
AW - Pedestrian access maintenance	10 & 14	**High Beach**: Benches	Sep	2021		1	**Bench Maintenance**: Condition monitoring inspection undertaken and maintenance as per Forest Standard (20 benches (Check))	C	M
AW - Pedestrian access maintenance	10 & 14	**High Beach**: Benches	Jun	2021		1	**Bench Maintenance**: Maintainenance visit to ensure the benches meet the Forest Standard.	C	M
AW - Pedestrian access maintenance	10 & 18	**High Beach:** Easy access trail	May	2021		1	**Path Management**: Cut path verge and around Forest Furniture as required	C	M
AW - Pedestrian access maintenance	10 & 18	**High Beach:** Easy access trail	Jul	2021		1	**Path Management**: Cut path verge and around Forest Furniture as required	C	M
LAW – Tree management works	14	**High Beach**: Pillow Mounds view management		2022		0	**Landscape view management**: Following on from planning work to assess options (see below), undertake tree works to restore the extensive view from the Pillow Mounds to as close to its former extent as possible, commensurate with good arboricultural practice.	C	Arb
NWH - Grazing work	11 & 14	**High Beach**		2023		1	**Grazing Work**: Undertake extended grazing works as recommended in the review	C	GRZ
NWH - Maintenance work	14	**High Beach**: Long Bog				0	**Bog Management**: Tree and shrub clearance to reduce shading and drainage of the bog.	C	Arb/Vol
NWH - Maintenance work	14	**High Beach**: Rat's Lane Bog				0	**Bog Management**: Tree and shrub clearance to reduce shading and drainage of the bog. Note the conservation needs of the epiphytes on trees.	C	Arb/Vol
NWH - Water body management	10	**High Beach**: Little Wake Pond		2024		0	**Waterbody Management**: Initial works to improve habitat quality for amphibians through tree management to ensure suitable conditions for the pond edge vegetation in line with recommendation by Bickmore (2014).	C	Arb/Vol

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
OC - External Advisory	All	**High Beach**		2022		0	**Planning - Community Engagement Plan**: Develop a Community Engagement Plan for High Beach area, including review of the sustainable management of the visitor centre and communcity mechanisms to reduce anti-social behavior.	C	HOP/HVS
OC - External Advisory	All	**High Beach**:		2025		0	**Planning - SAC Mitigation**: With local partners identify measures and mechanisms to reduce air pollution from road traffic on the SAC	C	HOC
OC - Internal Advisory	10 & 14	**High Beach**		2022		0	**Planning**: Review the feasibility of widespread cattle grazing of wood-pasture around the acid grassland and heathland areas, including Rushey Plain.	C	GRZ
OC - Internal Advisory	NA	**High Beach:** Access Statement		2022		0	**Planning:** Prepare an Access Statement to improve the welcoming and postive feel at site entrances and reduce the visitor impact on sensitive habitats.	C	HVS/HOP
OC - Internal Advisory	14	**High Beach**: Pillow Mounds view management		2022		0	**Planning**: Assess options to restore the extensive view from the Pillow Mounds to as close to its former extent as possible. Plan and impleent a public awareness campaign prior to start of works.	C	Arb
OC - Internal Advisory		**High Beach**: Pillow Mounds erosion management		2023		0	**Planning**: Review erosion control options for the area to allow the recovery of the acid grassland and the sustainable repair of rill/gulley erosion.	C	HOP
OC - Internal Advisory	All	**High Beach:** Resourcing Plan		2022		0	**Planning:** Prepare a Resourcing Plan for High Beach including, income opportunities arising from the Epping Forest Mitigation Strategy and potential community support opportunities	C	HOP/HVS
OC - Internal Advisory	17	**High Beach:** Speakmans Pond				0	**Planning:** Review management options for the *Crassula* infestation in the pond (Include linked issue to other ponds in the area)	C	HOC
OC - Internal Advisory	All	**High Beach**: Streams, ditches & ponds		2024		0	**Planning**: Prepare an aquatic habitat management strategy and plan for the streams and their sources, ponds and ditches in the area	C	HOC

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
OC - Internal Advisory	NA	**High Beach**: Sustainable Access	Dec	2021		0	**Planning**: Pilot project. Improving and waymarking foot and cycle access options for visitors to get to High Beach without a car, e.g. from bus stops in Loughton and more distant car parks such as Wake Valley	C	HVS/HOP
OC - Internal Advisory		**High Beach**: The Beech Trail	Dec	2021		0	**Planning**: Review the route of the waymarked Beech Trail to find options to deter cycle users accessing and thereby damaging Loughton Camp Ancient Monument	C	HOP/HVS
OC - Internal Advisory	10	**High Beach**: Wake Valley Pond				0	**Planning**: Review the management of the pond margins and identify solution to the trampling problems and the possible regeneration of Marsh St Johns Wort	C	HOC/Con
SL - Grass cutting	10	**High Beach:** Queens Green	May	2021		1	**Cut and leave** the grass on Queens Green.	C	G
SL - Grass cutting	10	**High Beach:** Queens Green	Jul	2021		1	**Cut and leave** the grass on Queens Green.	C	G
SL - Grass cutting	10	**High Beach:** Queens Green	Sep	2021		1	**Cut and leave** the grass on Queens Green.	C	G
SL - Highway verge management	Road	**High Beech:** Claypit Hill	Sep	2023		3	Zone 1 & 2 maintenance and statutory crown lift. Approx. total cutting distance 2,030 m	N	Con
SL - Highway verge management	Road	**High Beech:** Manor Road	Sep	2023		3	Zone 1 & 2 maintenance and statutory crown lift Approx total cutting distance 1,030 m	c	Con
SL - Highway verge management	Road	**High Beech: P**ynest Green Lane	Sep	2023		3	Zone 1 & 2 maintenance and statutory crown lift Approx. total cutting distance 1,390 m	c	Con
SL - Highway verge management	Road	**High Beech:** Wellington Hill	Sep	2023		3	Zone 1 & 2 creation and statutory crown lift Approx. total cutting distance 1,122 m	c	Con
SL - Highway verge management	8	**High Beach:** Queens Green	May	2021		1	**Bollard Management**: Strim bollards around Queens Green	C	M
SL - Highway verge management	8	**High Beach:** Queens Green	Jul	2021		1	**Bollard Management**: Strim bollards around Queens Green	C	M
SL - Highway verge management	8	**High Beach:** Queens Green	Sep	2021		1	**Bollard Management**: Strim bollards around Queens Green	C	M
SL - Highway verge management	Road	**High Beach:** Robin Hood roundabout	Nov	2021		1	Zone 1 and 3 maintenance: Bomford cut zone 1/3 and strim banks Approx. total cutting distance 150 m.	N	Arb
SL - Highway verge management	Road	**High Beech:** Church Road, Crossroads and Avey Lane	Nov	2021		1	Zone 2 Maintenance cut as per highways vegetation management specification. NB Crossroads and its approach from the junction with Fairmead road to have stump regrowth and herbaceous vegetation cut	C	Con

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
							back to ensure exsiting open area is maintained. Approx. total cutting distance 3142m.		
SL - Highway verge management	Road	**High Beech**: Lippits Hill	Nov	2021		1	Zone 2 Maintenance cut as per highways vegetation management specification. Approx. total cutting distance 1167m.	C	Con
SL - Highway verge management	Road	**High Beech:** Mott Street	Nov/Dec	2021		1	Zone 2 Maintenance cut as per highways vegetation management specification. Some sections may not be possible to cut back a full metre and cutting should ensure vegetation is clear of the road. Approx. total cutting distance 1454 m.	C	Con
SL - Highway verge management	Road	**High Beech:** Pauls Nursery Road	Sep	2023		3	Zone 1 & 2 maintenance Approx. total cutting distance 1,374 m	N	Con
SL - Legal obligation work	18	**High Beach**: Toilets		2021		0	**Access for disabled users**: Identify and implement options to improve access to toilets for less able users.	C	FM
SL – Path condition monitoring	10 & 18	**High Beach** Easy access trail	Jun	2021		1	**Path Management**: Safety and condition monitoring in accordance with the Path Management Policy Development note requirements	C	K/Vol
SL - Sight lines	17	**High beach:** Church Road	Aug	2021		1	Cut back all site lines where required on car parks bridleway exits / road junctions etc. All woody vegetation as per zone 2 or 3 as needed. Zone 1 cleared were access is needed to zone 2 by Brushcutter. Or noted for later Bomford cutting.	C	M
SL - Sight lines	18	**High Beach:** Paul's Nursery Road	Sep	2021		1	Cut back all site lines where required on car parks bridleway exits / road junctions etc. All woody vegetation as per zone 2 or 3 as needed. Zone 1 cleared were access is needed to zone 2 by Brushcutter. Or noted for later Bomford cutting.	C	M
WMM - Wood pasture management	10 & 14	**High Beach**: Woodpasture		2021		1	**Cut and collect**: Cut and collect grass and herbage in restored woodpasture areas. Additional areas will be added as further areas are restored.	C	Arb
WMM - Ancient / veteran tree maintenance	All	**High Beach**: Ancient tree management		2021		1	**Ancient tree management**: Undertake pollarding and crown reduction works as specified in the Countryside Stewardship Scheme.	C	Arb/Con

Operational Activity	CMPT	Location	Month	Year	Area (Ha)	Cycle	Description	Zone	Team
WMM - Ancient / veteran tree maintenance	10 & 14	**High Beach**: Ancient tree management		2022		5	**Ancient tree management**: Undertake root protection and access exclusion works on notable vulnerable trees.	C	Arb
WMM - Pest and disease management	All	**High Beach**		2020		1	**Invasive non native species management**: Monitoring and control of Oak Processionary Moth (OPM) in line with Forestry Commission guidance.	C	Con
WMM - Wood pasture restoration	10 & 14	**High Beach:** Woodpasture		2022		1	**Woodpasture restoration**: Initial works to extend the existing area of woodpasture as specified in the Countryside Stewardship Scheme.	C	Arb/Con

14. APPENDIX 2: Management recommendations for the bogs of the High Beach area

Ken Adams was commissioned on behalf of City of London Corporation to undertake a survey of the bog habitats of Epping Forest and provide an assessment of their ecological status, as well as management recommendations (Adams, 2017). The results of the surveys and ecological status assessments are within the main body of this ISP; the management recommendations are outlined in the table below and full details can be found in Adams (2017).

Table A: Summary of management recommendations for the bogs of the High Beach area

Bog Name		**Management Recommendations (Adams, 2017)**
Wake Valley Complex	**Upper Wake Valley Bog**	Several large patches of Bramble are invading the bog and need removing, along with a proportion of the Pendulous Sedge on a rotational mosaic of cuts, to prevent it taking over the whole bog. Additional damming of the stream with logs would help guarantee the water level.
	Wake Valley Pond Margin Bog	A series of fishing platforms around the pond edge are required to prevent further trampling and loss of *Sphagnum* species.
Field Centre Bog Complex		Bracken and Bramble removal is needed to halt the decline of the bog complex.
Long Bog (now lost)		To restore this bog, around ten large Birch trees require removal, Sphagnum species should be reintroduced, and the area between the former bog and Wellington Hill de-scrubbed to restore the former heathland vegetation, which would reintroduce much-needed light to the bog and surrounding vegetation. The Pillow Mounds lower slope has a seepage draining into the Long Bog stream. Apart from harbouring the extremely rare Star Sedge, this area is rapidly being enveloped in hundreds of Aspen saplings. The source tree needs to be removed and the saplings removed or this area will be wooded by the end of 2021.
Rat's Lane Bog (now lost)		Clearance of the sapling trees, Laurel and Bracken would let in the light and allow some marshy vegetation to develop. Several Birch, Hornbeam and Oak logs have fallen over the stream, but there is no water flow even in winter for them to impede. At the very bottom end some of the giant Sycamores present a hazard as they could fall onto adjoining properties. Two already have fallen, but luckily away from the party line. Clearance and stump grinding of the trees in this area would undoubtedly regenerate the Shield Fern and Giant Horsetail bog.

15. APPENDIX 3: Amphibian Survey Results and Management Recommendations for ponds in the High Beach area

Catherine Bickmore Associates was commissioned on behalf of City Corporation to undertake an amphibian survey of the ponds and lakes of Epping Forest (Catherine Bickmore Associates, 2014). The first objective of the study was to categorise the ponds in terms of importance for amphibians with particular reference to great crested newt. The second was to categorise the ponds according to management priority, with recommendations for management actions for amphibians.

Table B: Summary of results of pond survey for amphibians and management recommendations

Waterbody name	HIS (Habitat Suitability Index)	Invasive non-native species	Fish present (in 2013) (Y/N)	Other factors affecting suitability	Designation	Amphibians recorded	Importance for amphibians	Priority for management	Management recommendations (Catherine Bickmore Associates, 2014)
Little Wake Pond West	0.65	None recorded	N	None	Y (SSSI and SAC)	**Great Crested Newt** (confirmed by eDNA sampling in 2018), Common Toad, Smooth Newt, Common Frog	**High**	**High**	Reduce scrub/shade, encourage understorey terrestrial habitat and aquatic macrophyte growth
Wake Bomb Crater Pond	0.68	None recorded	Y	None	Y (SSSI and SAC)	Common Toad, Smooth Newt	Medium	Low	Deepen, reduce reed cover and shade, encourage understorey growth in terrestrial habitat
Wake Valley Pond	0.51	None recorded	Y	None	Y (SSSI and SAC)	Common Toad, Smooth Newt, Common Frog	Medium	Low	Reduce shade and improve terrestrial habitat
Wake Arms Pit 1	0.65	None recorded	N	Lack of egg laying vegetation. Deep leaf litter	Y (SSSI and SAC)	Smooth Newt, Palmate Newt, Common Frog	Low	Low	Reduce shade, encourage macrophytes (possibly through removing leaf litter)
Wake Arms Pit 4	0.68	None recorded	N	None	Y (SSSI and SAC)	Smooth Newt, Palmate Newt	Low	Low	Reduce shade from small trees, create refugia, encourage vegetation growth, possibly deepen
Wake Arms Pit 3	0.64	None recorded	N	None	Y (SSSI and SAC)	Smooth Newt	Low	Low	Reduce shading from small trees, encourage vegetation growth, possibly deepen
Wake Arms Pit 2	0.62	None recorded	N	Lack of egg laying vegetation. Deep leaf litter	Y (SSSI and SAC)	Smooth Newt	Low	Low	Cut scrub/small trees (make refugia), reduce shade, encourage aquatics/emergents

Note: The presence of Great Crested Newt in Wake Valley Pond was confirmed in 2018; the pond is now considered to be of high importance for conservation and future management.

16. APPENDIX 4: Local Plans – detailed information

- Habitats Regulations 2017 and Epping Forest Special Area of Conservation (SAC): all competent authorities (as defined by Regulation 7 of The Habs Regs) must undertake a formal assessment of the implications of any new plans or projects that are likely to have a significant effect on the designated interest features of protected European Sites (such as Epping Forest SAC) before deciding whether to undertake, permit or authorise such plans or projects (Regulation 63 of The Habs Regs). The first stage of the assessment involves formal *screening* for any Likely Significant Effects (either alone or in combination with other plans or projects). Where these effects cannot be excluded, assessing them in more detail through an *appropriate assessment* (AA) is required to ascertain that an adverse effect on the *integrity* of the site can be ruled out. Where such an adverse effect on the site cannot be ruled out, and no *alternative solutions* can be identified, then the project can only then proceed if there are *imperative reasons of over-riding public interest* and if the necessary *compensatory measures* can be secured.
- Strategic Housing Market Assessment (SHMA): Epping Forest (EFDC), Harlow, Uttlesford and East Hertfordshire District Councils have cooperated in the production of the West Essex and East Hertfordshire SHMA (Opinion Research Services, 2017), to assess the overall housing need for their housing markets. For EFDC these housing needs must be met over the 22-year lifetime of the new EFDC Local Plan (2011 – 2033). The distribution of the housing need, identified by the SHMA, was agreed in a Memorandum of Understanding (March 2017) between the four district councils, Essex and Hertfordshire County Councils and Highways England. For Epping Forest District Council, the housing need was set at 11,400 net additional homes to be provided between 2011-2033 (EFDC Local Plan Report-on-Site-Selection (Local Plan Document EB802B) Dec 2017). This compares to a target of 2,400 dwellings for the previously adopted Local Plan (EDFC, 2008), a greater than four-fold increase in the number of new dwellings.
- Habitats Regulations Assessment: Epping Forest District Council (EFDC) commissioned a strategic Habitats Regulations Assessment of the Local Plan Submission Version (EFDC, 2017), published in January 2019 (the HRA) (AECOM, 2019). This HRA found that the Plan would be likely to have a significant adverse effect, without mitigation, upon the Epping Forest SAC in respect of both atmospheric pollution and disturbance from recreation/urbanisation. An Appropriate Assessment (AA) of its implications for the integrity of the SAC was therefore undertaken. For both pathways of impact, the AA concluded that with mitigation, the Plan would not have an adverse effect on the integrity of the SAC either alone or in combination with other plans or projects (AECOM, 2019). However, this HRA is undergoing significant revisions for reasons set out below.
- EFDC Local Plan Submission Version Examination-in-Public: At the Planning Inspector's hearing to examine the Local Plan Submission Version, both Natural England and the Conservators of Epping Forest (The Conservators) strongly challenged the robustness of the HRA in terms of its methodology and conclusions. Given the uniqueness of the Forest and its high-risk status, the Planning Inspector stated in her closing remarks that '*she could not conclude beyond reasonable scientific doubt that the Local Plan will not adversely affect the integrity of the SAC until steps have been taken towards resolving it*' (Phillips, L, 2019).
- Further work: The Planning Inspector noted at the conclusion of the public hearing that '*achieving sufficient confidence in any necessary mitigation measures is clearly challenging*'. The Inspector stated '*that physical measures (road works) to which specific benefits could be attributed would themselves harm the SAC; and while schemes for road charging and completely car-free development might warrant future consideration, they could not realistically be implemented to support this Plan*'. Therefore, the Inspector stated that '*the Council must either be clearer about the benefits of the mitigation proposed in the HRA; provide robust habitat/location specific evidence to demonstrate that*

any effects of development would not be adverse; or avoid the effects by altering (or potentially reducing) the pattern of growth proposed in the Plan' (Phillips, L, 2019).

- Updates to the Local Plan process: EFDC has made public a letter sent to the Planning Inspector on 21 January 2020 (EFDC, 2020a), updating the Inspector regarding progress made on the additional work required to ensure compliance with the Habitats Regulations with respect to the integrity of the SAC. Currently, further research is being undertaken on transport and air quality modelling, as well as consolidating the EFDC Infrastructure Delivery Plan. The updated timetable has been acknowledged by the Planning Inspector (Phillips, L, 2020). EDFC also issued a position statement on Epping Forest SAC on 30 April 2020 (EFDC, 2020b), reiterating the need '*to ensure that mitigation measures are in place which can be relied upon to avoid effects to the SAC*'.
- Recreational Zone of Influence: With respect to disturbance from recreation/urbanisation, Natural England, the statutory body advising competent authorities, like EFDC, on Special Areas of Conservation (SACs), has issued interim advice relating to the emerging strategic approach for the Epping Forest SAC Mitigation Strategy (Natural England, 2019b). This advice defines the recreational Zone of Influence (ZoI) around the boundary of Epping Forest SAC as 6.2km, being the distance up to which more than ¾ of visitors will travel to visit Epping Forest SAC - see also the Epping Forest Visitor Survey 2017 (Liley et al (Footprint Ecology), 2018).
- Open space provision: The northern half of the Epping Forest SAC is wholly within Epping Forest District and therefore will come under pressure to accommodate increased visitor numbers associated with new Local Plan developments within the ZoI. The Planning Inspector requires 'Main Modifications' to the EFDC Local Plan Submission Version, which will need to address the issue of disturbance from recreation/urbanisation (as well as air quality, see above). One option being considered by the key stakeholders is the provision of Suitable Alternative Natural Green Space (SANGS) within Epping Forest District, so that adverse impacts can be avoided. The SANGs proposed will be in addition to any on-site mitigation measures agreed (see SAMMs above), and the extent of the on-site measures may be modified in the light of any effects of any future SANGs.
- Epping Forest SAC Mitigation Strategy: there is an interim Strategy which includes what are termed as Strategic (visitor) Access Management Measures (SAMMs). This interim Strategy was prepared by and approved by Epping Forest District Council in consultation with the wider SAC Oversight Group. However, a final SAC Mitigation Strategy incorporating other mitigation measures for the SAC is still required to be completed. The current proposed measures and costs for SAMMs are being refined by the City of London Conservators of Epping Forest with the help of specialist consultants, LUC, to be presented to the other competent authorities (including London Boroughs) and Natural England for future agreement. The funding for the final SAC Mitigation Strategy will need to take into account these more detailed proposals, a network of suitable alternative natural green spaces (SANGS) and air pollution mitigation measures.

17. APPENDIX 5: Figures

Figure 1a: Locations of named features in the High Beach area

Figure 1b: Locations of named features in the centre of High Beach