

London Borough of Newham

**Epping Forest Special Area
of Conservation**
**Recreation Mitigation
Strategy**

Final report

Prepared by LUC

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London Borough of Newham

Epping Forest Special Area of Conservation Recreation Mitigation Strategy

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Contents

| | | | |
|---|-----------|---|-----------|
| Chapter 1 | | Chapter 6 | |
| Introduction | 2 | Monitoring and Review | 31 |
| Purpose of this document | 2 | Monitoring | 31 |
| Epping Forest Special Area of Conservation | 2 | Review | 31 |
| The Habitats Regulations | 3 | | |
| Zone of Influence | 3 | | |
| Strategic Mitigation Approach | 3 | | |
| Strategic Access Management and Monitoring (SAMM) | 4 | Table of Tables | |
| Mitigation requirements | 4 | Table 1.1 SAMM cost apportionment | 4 |
| | | Table 2.1 Unit uplift by type of site | 10 |
| | | Table 2.2 Unit uplift by type of residential unit | 10 |
| | | Table 3.1 Existing Calculation Methods | 14 |
| | | Table 3.2 Vehicles per person by London Borough | 15 |
| | | Table 3.3 Newham visitor uplift calculation | 16 |
| | | Table 4.1 Summary of likely visitor uplift due to proposed recreation mitigation projects | 19 |
| | | Table 5.1 Project deliver, management, and monitoring costs | 29 |
| | | Table 5.2 Tariff ratio per development type | 29 |
| | | Table 6.1 Recreation Mitigation Strategy monitoring indicators | 32 |
| Chapter 2 | 9 | | |
| Development Context | | Table of Figures | |
| Emerging Local Plan | 9 | Figure 1.1 Epping Forest Special Area of Conservation | 7 |
| Local Plan housing requirements | 9 | Figure 1.2 Epping Forest Special Area of Conservation recreational Zone of Interest | 8 |
| | | Figure 2.1 Total population uplift by Side Allocation during the Local Plan period | 11 |
| | | Figure 2.2 Total population uplift resulting from windfall development during the Local Plan period | 12 |
| | | Figure 4.1 Regulation 19 Open space | 20 |
| | | Figure 4.2 Sites of Importance for Nature Conservation | 21 |
| | | Figure 4.3 Epping Forest Special Area of Conservation recreation mitigation projects | 25 |
| | | Figure 4.4 Mitigation projects in relation to Site Allocations | 26 |
| Chapter 3 | 13 | | |
| Epping Forest SAC Visitor Uplift | | | |
| Existing SAC Visitor Uplift Calculation Methodologies | 13 | | |
| Newham uplift calculation | 14 | | |
| Chapter 4 | 17 | | |
| Recreation Mitigation Projects | | | |
| Selection methodology | 17 | | |
| Overarching approach to the Strategy | 18 | | |
| Uplift categories | 18 | | |
| Strategic recreation mitigation projects | 22 | | |
| Local recreation mitigation projects | 23 | | |
| Chapter 5 | 27 | | |
| Funding and Delivery | | | |
| Project costs | 27 | | |
| Tariff and collection | 29 | | |

Chapter 1

Introduction

Purpose of this document

1.1 Newham's Epping Forest Special Area of Conservation (SAC) Recreation Mitigation Strategy (RMS) has been developed in order to mitigate recreational pressure in Epping Forest SAC. The strategy sets out a fully costed set of interventions to enhance existing public green spaces and active travel links to be delivered across the London Borough of Newham (LBN). Interventions such as improving paths, wayfinding, signage, entrances and additional planting areas have been included.

1.2 The strategy outlines to developers that all new homes built within the Zone of Influence (Zoi) will be required to make a financial contribution to the delivery of these interventions, which will be implemented by LBN. Payments will be made to the Council through a legal agreement.

1.3 This strategy will form a key piece of the evidence base for Newham's Local Plan, building on the work undertaken as part of Newham's Green and Water Infrastructure Strategy and the work being undertaken by the borough's park team.

1.4 The strategy aligns with work undertaken by neighbouring boroughs and through the strategic working group on Epping Forest SAC Strategic Access Management and Measures Strategy.

Epping Forest Special Area of Conservation

1.5 Epping Forest is London's largest green space, covering 2,400 hectares of which Epping Forest Special Area of Conservation (SAC) covers 1,600 hectares of Sites of Special Scientific Interest (SSSI) within Greater London and Essex (**Figure 1.1**).

1.6 The SAC is designated for three Annex I habitats: Northern Atlantic wet heaths, European dry heaths, and Atlantic acidophilous beech forests; as well as one Annex II species, the Stag Beetle.

1.7 The Forest comprises wood-pasture with habitats of high nature conservation value including ancient semi-natural woodland, old grassland plains, wet and dry heathland, and scattered wetland, and represents one of the largest continuous semi-natural blocks in the country, characterised by groves of over-mature pollards.

1.8 The plains contain a variety of unimproved acid grasslands uncommon elsewhere in Essex and the London Area, and the Forest as a whole supports a nationally important assemblage of invertebrates, amphibians, and breeding bird community.

1.9 The Forest is owned and managed by the City of London Conservators and is patrolled by Forest Keepers whose role is to assist the public to enjoy the Forest safely and protect the Forest from inappropriate damage or abuse. The Forest Keepers are also attested constables and enforce the Epping Forest byelaws. If necessary, this includes prosecuting byelaw infringement cases in the Magistrates Court.

The Habitats Regulations

1.10 SACs are protected in UK law by the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations). Under the Habitats Regulations, land use plans and projects must not give rise to adverse effects on the integrity of the Epping Forest SAC, either alone or in combination with other plans and projects, and if they are likely to, measures must be secured to remove this impact, otherwise the Competent Authority cannot adopt the plan (in this case the Newham Local Plan) and is obliged to refuse planning permission for development projects subject to the exception tests.

1.11 The legislation sets out that a Habitats Regulations Assessment (HRA) must be undertaken by the relevant competent authority, in this case the London Borough of Newham, where a land use plan either alone or in combination is likely to have a significant effect on an internationally important site. These HRAs consider the overall impacts of growth in combination with neighbouring authorities, and where there are any likely significant effects, adverse effects must be ruled out.

1.12 Local evidence and that from other similar areas has demonstrated the damaging effects of human disturbance on the nature conservation interest of protected sites. Without appropriate and proportionate mitigation measures, the additional recreational pressure that can be directly attributed to development in Newham will damage the features for which the SAC is designated and would contravene the Habitats Regulations.

1.13 Negative impacts could include but are not limited to:

- Eutrophication from dog fouling;
- Soil compaction, vegetation wear, erosion and damage to veteran tree roots;

- Increased fire risk;
- Disturbance of grazing due to interactions between visitors and livestock;
- Direct damage to veteran trees;
- Harvesting of fungi and deadwood;
- Disturbance to invertebrates and other wildlife;
- Spread of disease, pathogens, and invasive species.

1.14 The potential effects of development on Epping Forest were assessed during the HRA process for the Newham Local Plan. The HRA forms part of Newham's Integrated Impact Assessment (IIA) which has been developed alongside the draft Local Plan, continuously assessing it to check how it, and possible alternative options, may impact social, economic and environmental factors within Newham¹.

Zone of Influence

1.15 A recreational Zone of Influence (Zol) for the SAC was calculated based on the 75th percentile method, which calculates the distance from which 75% of visits originate from and is a recognised method for strategic solutions managing recreational pressure in similar circumstances. Based on visitor surveys carried out in 2017 and 2019, a 6.2km buffer drawn around the SAC forms the Epping Forest SAC Zol, as shown in **Figure 1.2**.

1.16 All residential planning applications which are within the 6.2 km Zol are subject to a project level HRA to address recreational impacts both alone and in combination and should seek to deliver or contribute to suitable alternative natural greenspaces (SANGs) in addition to providing sufficient on-site green infrastructure (GI) to meet the daily needs of new residents.

Strategic Mitigation Approach

1.17 There are seven local authorities within the Zol and due to the cumulative nature of the impacts from many individual housing applications, a co-ordinated approach to the mitigation has been developed. A Technical Oversight Group includes representatives from five boroughs which each contribute 2% and over of visits to the SAC, the City of London Conservators, and Natural England. The boroughs are:

- Epping Forest District Council
- London Borough of Waltham Forest

¹ Newham Local Plan IIA (<https://www.newham.gov.uk/planning-development-conservation/newham-local-plan-refresh/5>)

- London Borough of Redbridge
- London Borough of Enfield
- London Borough of Newham

1.18 This Technical Oversight Group has led to the development of a strategic approach involving:

- A formal Governance Agreement between the Local Authorities within the ZOI and the City of London as the Delivery Body for the mitigation programme.
- A programme of Strategic Access Management and Monitoring (SAMM) measures to mitigate the impact of new development.
- Mitigation measures in the form of a Suitable Alternative Natural Greenspace (SANG) toolkit approach to infrastructure improvements that improve access and capacity of existing greenspaces dealt with by each local authority on an individual basis.

Strategic Access Management and Monitoring (SAMM)

1.19 The Epping Forest SAC SAMM strategy focusses on actions that can be applied directly to the SAC and provides a comprehensive approach to mitigating the effects of future development. Existing initiatives within the agreement include:

- A site-wide approach to physically manage additional pressure on surfaced and unsurfaced tracks and paths, provision of enhancements to wayfinding and interpretation, and the on-going monitoring of ecological conditions.
- Managing the increased use of the three visitor hubs that act as attractors and are used on a regular basis by residents, placing focused pressure on these parts of the Forest.
- On-going visitor engagement activities to help raise awareness of the issues facing the Forest and encourage less-damaging behaviours. This includes the management of access pressure points by encouraging people to use different routes at times when some routes may be more vulnerable.
- Visitor surveys for the SAC, relevant SANGs, and buffer lands on a 5 year rotational basis, to ensure that the governance agreement and mitigation strategy can be reviewed and updated appropriately and in a timely manner.

1.20 The total cost of the SAMM programme is £24,817,468, with this cost borne by each responsible local authority as a percentage of pressure caused by new development and apportioned over a period of 80 years to reflect the 'in-

perpetuity' on-going management and maintenance of the interventions:

Table 1.1 SAMM cost apportionment

| Authority | % of pressure caused by development | Apportionment (80 years) |
|--------------------------------|-------------------------------------|--------------------------|
| Epping Forest District Council | 15.66 | £3,886,415.65 |
| Waltham Forest | 68.13 | £16,908,141.66 |
| Redbridge | 12.51 | £3,104,665.38 |
| Newham | 1.18 | £292,846.13 |
| Enfield | 2.52 | £625,400.22 |
| SAMM programme total | | £24,817,468.00 |

Mitigation requirements

Traditional SANG mitigation standard

1.21 The role of SANG is to provide alternative green space to divert visitors from visiting sensitive, protected sites, such as the Epping Forest SAC. The effectiveness of SANG as mitigation depends upon the location and design and should be of sufficient quality and provision that the SANG is more attractive than the SAC to users of the kind that currently visit.

1.22 SANG may be created from:

- Existing green space of SANG quality with no existing public access or limited public access, which could be made fully accessible to the public;
- Existing green space, which is already accessible, but which could be changed in character so that it is more attractive to the specific group of visitors who might otherwise visit the SAC; or
- Land in other uses which could be converted into SANG.

1.23 Natural England has specific requirements about the types of intervention measures that should be applied to SANG sites:

Must haves

- For sites larger than 4ha there must be adequate parking for visitors, unless the site is within 400m walking distance of the developments linked to it. The amount of car parking space should be determined by the anticipated use of the site and reflect the visitor catchment of both the SANG and the SAC;

- Possible to complete a circular walk of 2.3-2.5km;
- Car parks must be easily and safely accessible by car and should be clearly sign posted;
- The accessibility of the site must include access points appropriate for the visitor use the SANG is intended to cater for;
- Must have a safe route of access on foot from the nearest car park and/or footpaths;
- SANG with car parks must have a circular walk which starts and finishes at the car park;
- Designed so that they are perceived to be safe by users; they must not have tree and scrub cover along parts of the walking routes;
- Paths must be easily used and well maintained but most should remain unsurfaced to avoid the site becoming to urban in feel;
- Must be perceived as semi-natural spaces with little intrusion of artificial structures, except in the immediate vicinity of car parks. Visually sensitive way-markers and some benches are acceptable;
- SANG larger than 12 ha must aim to provide a variety of habitats for users to experience;
- Largely unrestricted access with plenty of space provided where it is possible for dogs to exercise freely and safely off lead; and
- Free from unpleasant intrusions (e.g. sewage treatment works smells etc).

Should have

- Clearly sign-posted or advertised in some way; and
- Leaflets and/or websites advertising their location to potential users.

Desirable

- An owner to be able to take dogs from the car park to the SANG safely off the lead;
- A gently undulating topography;
- Access points to have signage outlining the layout of the SANG and the routes available to visitors;
- A naturalistic space with areas of open (non-wooded) countryside and areas of dense and scattered trees and shrubs. The provision of open water is encouraged and

desirable on sites. However large areas of open water cannot count towards capacity; and

- A focal point such as a viewpoint, monument etc within the SANG.

Toolbox approach to mitigation

1.24 In London, the urban nature of the boroughs and the quantum of development proposed means that the traditional SANG standard is not feasible. This standard was developed for the Thames Basin Heaths Special Protection Area (SPA) and, while it has been successfully applied in other locations within England, these have all been outside of heavily urbanised environments such as that within the London Borough of Newham.

1.25 In a 2022 letter to the boroughs involved in the Technical Oversight Group², Natural England acknowledges that greenspace usage and provision is different in a highly urbanised environment recognising that there is scope for mitigation provision to be better suited to the locality in which it is coming forward:

"As a more standardised approach is developed across the London boroughs in the Epping Forest Zone of Influence, we realise that this alternative approach needs to address both the quantum of greenspace improvements required, and the range of improvements that could be considered as avoidance measures."

1.26 Natural England's advice to the London boroughs in the Epping Forest Zone of Influence set out a number of measures which may be considered acceptable forms of SANG type mitigation in addition to traditional SANGs. This modified 'toolbox' approach to SANG delivery includes:

- Traditional SANG, meeting the 8ha minimum standard, meeting the guidelines;
- SANG networks, either not meeting the standard or all of the traditional guidelines, but does provide a semi natural experience of a size greater than 2ha for the local population;
- Strategic SANG, provided by a third party such as the Olympic Park;
- Offsite Public Rights of Way improvements away from the SAC;
- Wardens provided to manage visitor engagement on SANGs in other green spaces in the Borough;

² [appendix-d-natural-england-updated-letter-to-authorities-sept-2022.pdf](#)

- A new education centre or facility focused on managing behaviours at the SAC;
- Fenced dog training areas where people can train and exercise dogs without being on the SAC;
- Contributions to other GI in the vicinity;
- Contribution to the City of London for something else outside of the SAMM project requirements.

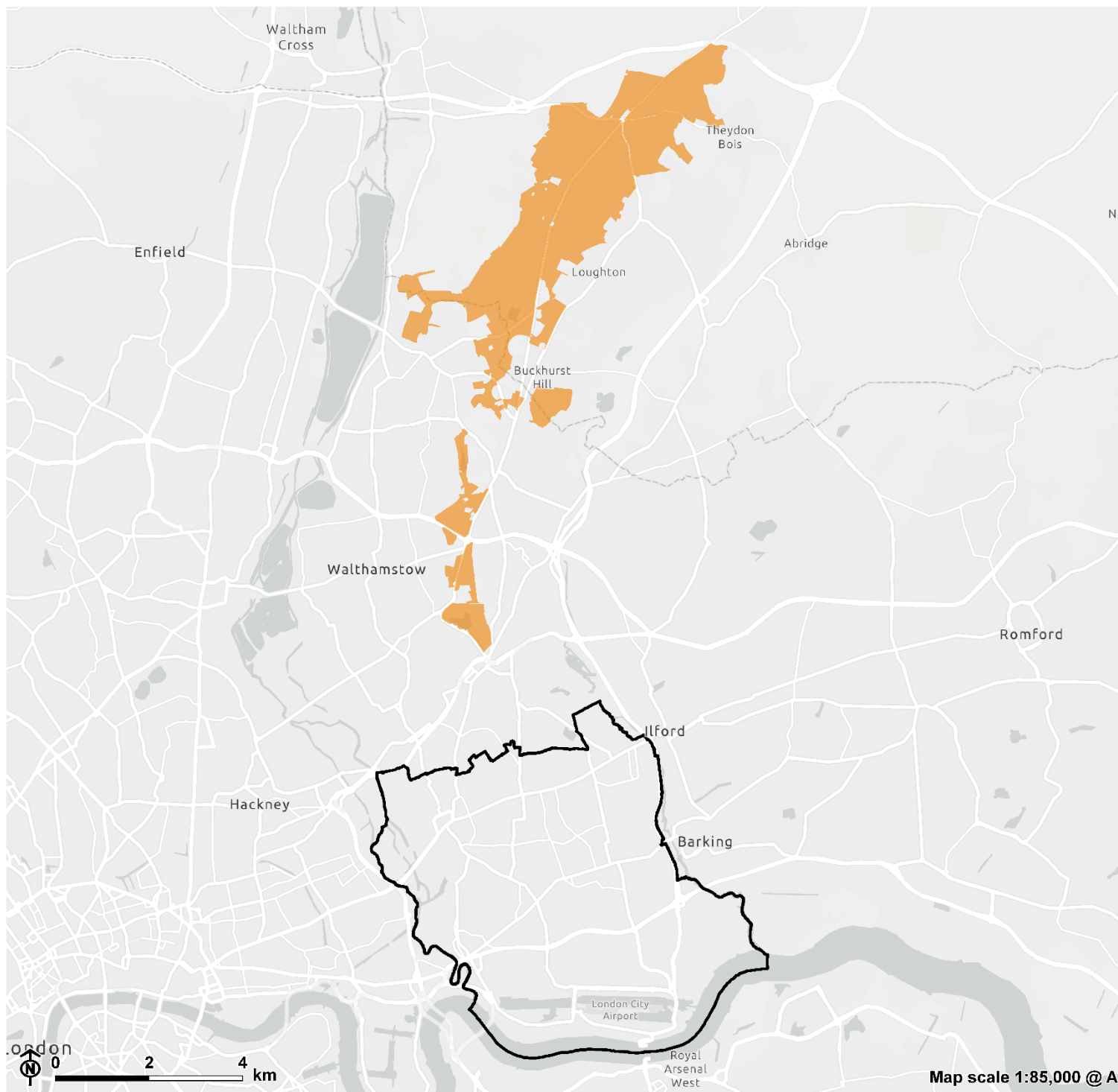


Figure 1.1: Epping Forest Special Area of Conservation context

- London Borough of Newham
- Epping Forest Special Area of Conservation

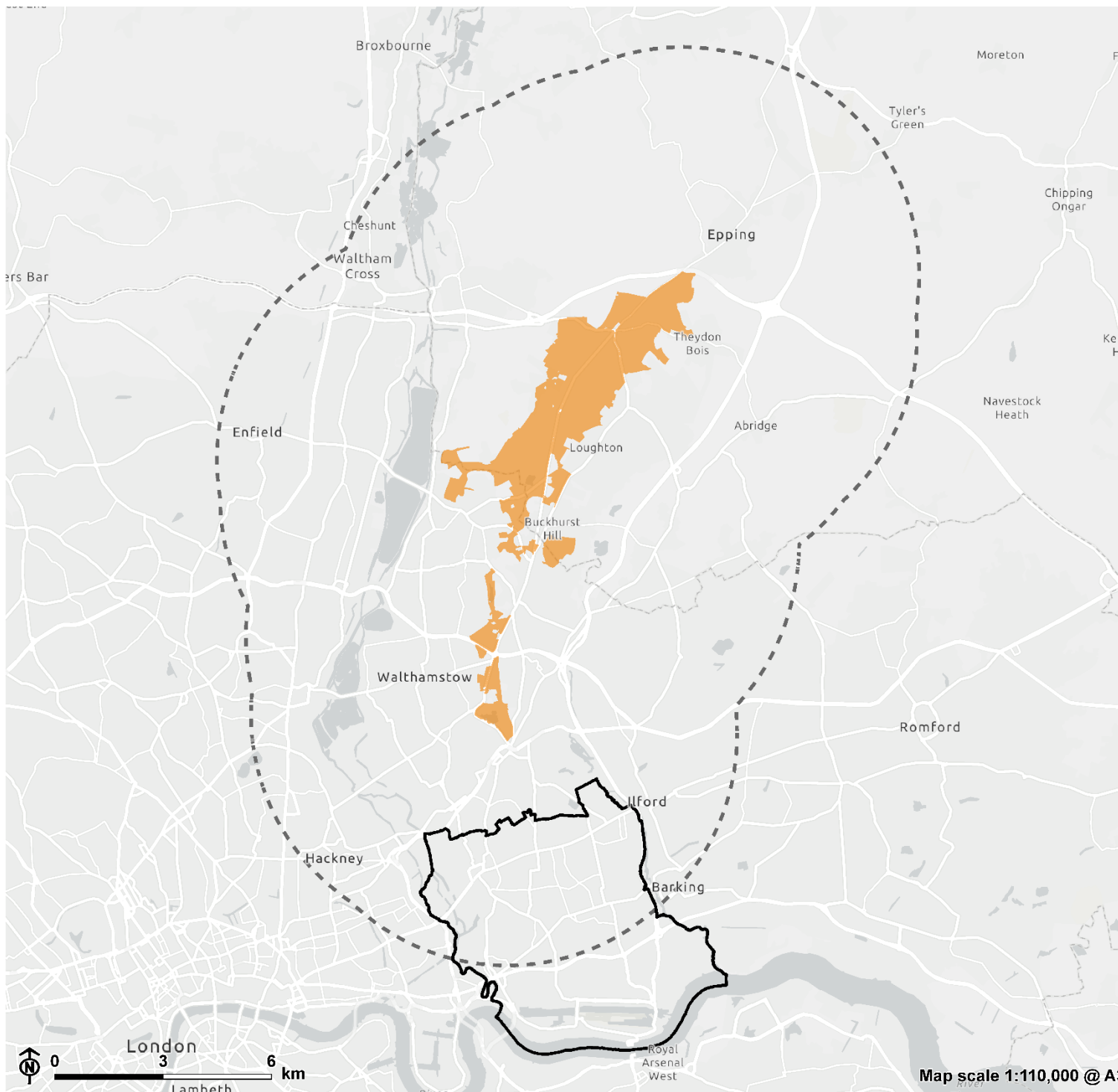


Figure 1.2: Epping Forest Special Area of Conservation recreational Zone of Interest

- London Borough of Newham
- Zone of Influence (Zoi)
- Epping Forest Special Area of Conservation

Chapter 2

Development Context

2.1 This chapter details the population uplift that will occur due to the development that could come forward to meet the required housing levels in the Newham Local Plan period.

Emerging Local Plan

2.2 Consultation on the Draft Submission Newham Local Plan (Regulation 19) took place last year. The next stage is for the Local Plan to be submitted to the Secretary of State for Examination, and once adopted will cover the period running to 2038. It is the key planning document which the Council uses to assess planning applications and to decide where regeneration and development happen in Newham, helping to guide decisions on:

- The location, amount and type of development in the borough;
- The standards that development should meet;
- What development should look like;
- What services and infrastructure are needed and where; and
- How all residents will benefit from the growth and development.

Local Plan housing requirements

2.3 Policy H1 (Meeting housing needs) in the Regulation 19 Newham Local Plan states that Newham will enable a net increase of between 51,425 and 53,784 residential units between 2023-2038. This will be achieved through the majority of new residential units being brought forward on site allocations, but also supporting residential developments that come forward on windfall sites (unallocated or undesignated land). The residential sites that are allocated through the Newham Local Plan, as well as the sites that were assessed through the Strategic Housing Land Availability Assessment (SHLAA) have been filtered for this strategy to identify sites within the Zol and to remove sites which have been completed, consented or with full planning permission.

2.4 Based on housing trajectory figures supplied by LB Newham, the total residential units to be delivered on the filtered sites within the Zol during the Local Plan period is 17,635.25, and this has been multiplied by the Newham average occupancy rate of 3.04. The number of residential units has been adjusted in accordance with Newham housing

assumptions to take into account the different occupancy levels and uses of development types, through the application of an occupancy ratio as below:

- Small houses in multiple occupancy (HMOs) (6 or less bedrooms) and older people accommodation have no ratio applied;
- All other non-self-contained communal accommodation bedrooms (including Sui Generis HMOs/Co-living) are divided by 1.8;
- Student accommodation bedrooms are divided by 2.5.

2.5 This is detailed below in **Tables 2.1 and 2.2** showing the population uplifts attributable to the type of site and development type:

Table 2.1 Unit uplift by type of site

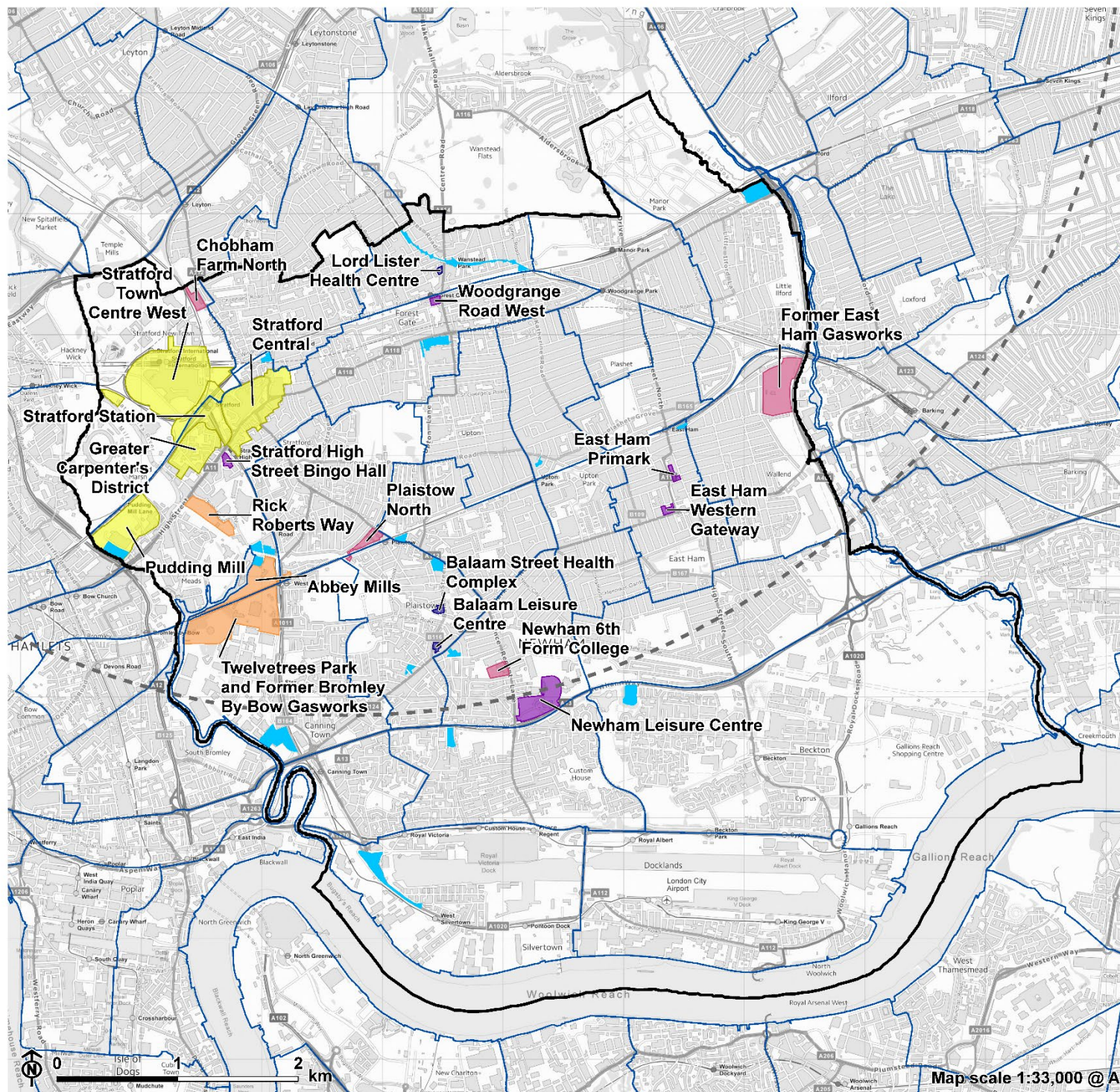
| Type of site | Units | Population uplift |
|--|-----------------|-------------------|
| Local Plan (Reg19) Site Allocations | 12000 | 36480 |
| Local Mixed Use Allocation (LMUA) (Site Allocations) | 481 | 1462.24 |
| SHLAA (windfall) | 2106 | 6402.24 |
| Other windfall | 3048.25 | 9266.68 |
| Total | 17635.25 | 53611.16 |

Table 2.2 Unit uplift by type of residential unit

| Type of site | Self-contained units | Non-self-contained units |
|--------------------------------|----------------------|--------------------------|
| Site Allocations | 11910 | 571 |
| Windfall | 4804.25 | 350 |
| Total units | 16714.25 | 921 |
| Total population uplift | 50811.32 | 2799.84 |

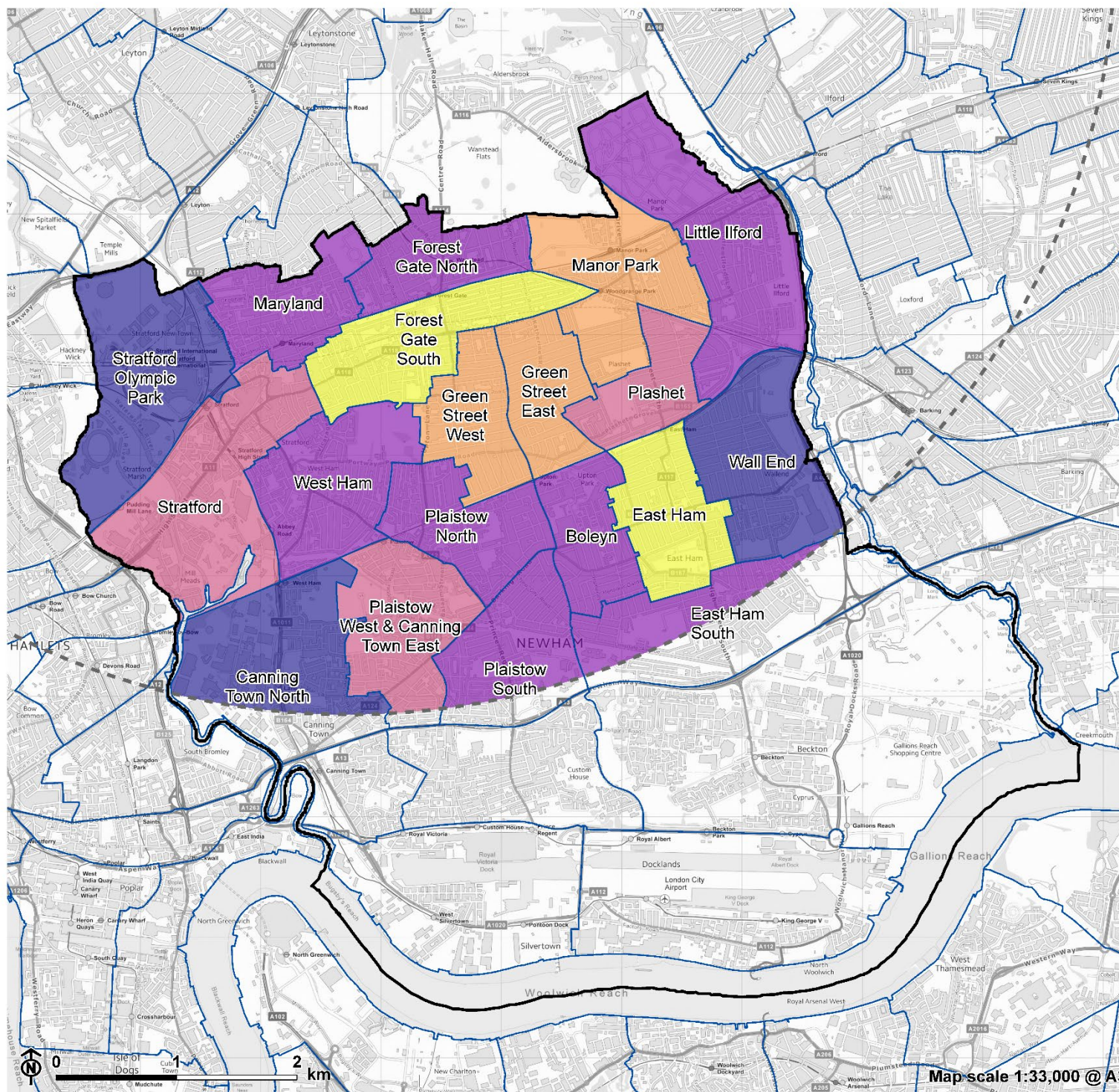
2.6 Total population uplift per Site Allocation and total population uplift from windfall developments per Ward are shown in **Figures 2.1 and 2.2** respectively.

Figure 2.1: Population uplift by Site Allocation during the Local Plan period



- London Borough of Newham
- Ward
- Zone of Influence (Zol)
- Local Mixed Use Area
- Population increase per site allocation**
- Low
- Medium
- High

Figure 2.2: Population uplift by Ward resulting from windfall developments sites during the Local Plan period



Chapter 3

Epping Forest SAC Visitor Uplift

3.1 This chapter discusses the existing methods used by neighbouring London Boroughs for the calculation of Epping Forest SAC visitor uplift relating to local plan developments, and presents the methodology approved in consultation with Natural England related to new residential development in areas of Newham within the Zol.

Existing SAC Visitor Uplift Calculation Methodologies

3.2 The existing approaches can be broken down into three distinct calculations, described below and shown in **Table 3.1**:

- 1. Developing a daily SAC visit frequency per resident** – A 'catchment area' is selected and expressed as a percentile of the distance at which visitors to the SAC originate according to the 2017 Epping Forest Visitor Survey, with 100% representing the maximum reported travel distance. There is currently no standard for this catchment area or guidance to inform selection. The existing strategies use either the median travel distance (50th percentile) and the Zol (75th). This catchment area percentile is multiplied by the population within the catchment area to give an estimated SAC visit frequency per catchment area resident per year and then divided by the total days in a year to give a daily frequency.
- 2. Local Plan period population increase** – Multiplies the number of residential units proposed within the Epping Forest SAC Zol during the Local Plan period with a selected occupancy rate to determine the estimated total population increase within the Zol from development within the local plan period.
- 3. SAC daily visitor uplift** – Multiplies the Local Plan population increase by the SAC daily visit frequency to calculate the estimated amount of new daily visits to the SAC directly resulting from development within the Zol.

3.3 Current Epping Forest SAC SANG Strategies prepared by neighbouring London Boroughs all use a similar approach based around inputs labelled **a – e** below, with the resulting calculation shown in **Table 3.1**:

- a. Total annual site visits
- b. Catchment area
- c. Population within catchment area
- d. New residential units within ZoI resulting from relevant Local Plan
- e. Occupancy rate

Table 3.1 Existing Calculation Methods

| | | | | | | | |
|---|---|---|---|---|-----|---|---|
| 1 | Total visits by catchment area residents per year | = | a | x | b | = | z |
| | Number of visits by individual catchment area resident per year | = | z | ÷ | c | = | y |
| | Number of visits by individual catchment area resident per day | = | y | ÷ | 365 | = | x |
| 2 | Local Plan population increase | = | d | x | e | = | w |
| 3 | SAC visitor uplift per day | = | x | x | w | | |

Assumptions and variance

Frequency of visits

3.4 The key assumption with this calculation is that it assigns a standard individual frequency of visit to the whole catchment area, meaning that the likelihood of any given individual that originates from within the catchment area visiting the SAC is viewed as a constant. The assignment of a singular visitation frequency to the SAC does not take into account the preferred methods of travel to the SAC and associated barriers (car ownership, public transport travel time and accessibility), or the findings from the Epping Forest Visitor Survey 2019, that the visitation rates increase with proximity to the SAC, with nearly 20% of visitors living within 1km and a median distance of travel from point of origin of 2.6km.

Catchment area

3.5 As there is no standard catchment area or guidance for selection, different catchment areas have been applied by boroughs resulting in different visitor frequencies being produced, which will then become a source variance when calculating the SAC daily visitor uplift.

Visitors to Epping Forest SAC

3.6 The main sources of variance between studies centre around up-to-date variables and accuracy in calculations. For example, the Waltham Forest Green Spaces and Places SPD Part 1 and the Redbridge Natural Greenspace Improvement Strategy cite a visitor figure (visits to Epping Forest SAC) that is quoted within the 2017 and 2019 visitor survey, but is actually taken from the 2017 City of London Corporation (CoL) Management Plan Consultation that cites a 2014 visitor

survey. An uplift of 12% was applied in accordance with supporting information from the CoL, giving a revised visitor figure of 4.8 million. Compare this to the most recent figures of 9.2 million from the 2023 Epping Forest Annual Review, and the same calculation would result in a near doubling in the SAC visitor uplift.

Population yields from development

3.7 Occupancy rate per dwelling is another potential source of variance, mainly due to the accuracy levels achievable. The Waltham Forest Green Spaces and Places SPD Part 1 and the Redbridge Natural Greenspace Improvement Strategy both apply the national average occupancy rate (2.4 people per dwelling), with Enfield using a borough-specific a rate of 2.75 people per dwelling.

Newham uplift calculation

3.8 The method utilised in this strategy for London Borough of Newham focusses on estimating a Newham-specific uplift by using the borough as the catchment area in combination with available Newham-specific SAC survey data. Justification for this method is evidenced by use of differential visitor rates in the Epping Forest SAMM Strategy that references the low visitation rates from Newham when calculating the apportionment of SAMM contributions (as shown in **Table 1.1**). The SAMM strategy highlights the 2019 visitor survey findings that only 2% of visitors to the SAC originated from Newham.

3.9 Also of note are the hierarchy of reported travel methods to the SAC, and low relative access to these methods within Newham:

- The 2017 visitor survey found that 77% of total interviewees arrived by car, 14% on foot, 5% by bicycle, 2% by tube, and 1% by bus.
- The 2019 survey found that 66% of total interviewees arrived by car, 25% on foot, 4% by bicycle, 2% by tube, 1% by overground train, and 1% by bus.
- **Table 3.2** displays the number of passenger vehicles (car, light goods van, motorbike) per person per London Borough. The dataset shows a mean of 0.337, median of 0.332 and a standard deviation of 0.1, meaning that whilst Newham's vehicles per person (0.220) cannot be considered statistically significantly low, it is in the lowest quartile (Q1), compared to Waltham Forest and Redbridge (Q2), and Enfield (Q3).

3.10 A connectivity assessment was undertaken using Transport for London's WebCAT planning tool, that measures public transport access levels and time travel statistics. Chingford Tube Station was selected as the other primary stations for accessing the SAC are outside of the WebCAT's GLA data boundary. The analysis showed longer relative public transport travel time for Newham residents to visit the SAC when compared to the travel time for other boroughs within the ZoI. There is better access from Newham to the most southerly areas of Epping Forest via bus and overground routes, however the visitor data shows that most visits are by car to the main Epping Forest SAC sites North of Chingford, with 92% of visitors in 2017 and 77% of 2019 visitors when adjusted to account for the survey location outside of the SAC.

Table 3.2 Vehicles per person by London Borough

| Local Authority | Passenger vehicles | Population | Vehicles per person |
|------------------------|--------------------|------------|---------------------|
| Tower Hamlets | 54371 | 310,306 | 0.175 |
| Hackney | 47764 | 259,146 | 0.184 |
| Islington | 40511 | 216,589 | 0.187 |
| Southwark | 65141 | 307,637 | 0.212 |
| Camden | 45161 | 210,136 | 0.215 |
| Newham | 77175 | 351,036 | 0.220 |
| Lambeth | 71731 | 317,654 | 0.226 |
| Haringey | 69900 | 264,238 | 0.265 |
| Westminster | 55732 | 204,236 | 0.273 |
| Hammersmith and Fulham | 50676 | 183,157 | 0.277 |
| Wandsworth | 91435 | 327,506 | 0.279 |
| Lewisham | 84392 | 300,553 | 0.281 |
| Kensington and Chelsea | 43110 | 143,375 | 0.301 |
| Greenwich | 86951 | 289,068 | 0.301 |
| Waltham Forest | 85357 | 278,425 | 0.307 |
| Brent | 104671 | 339,816 | 0.308 |
| Barking and Dagenham | 72773 | 218,869 | 0.332 |
| City of London | 2859 | 8,583 | 0.333 |
| Ealing | 132255 | 367,115 | 0.360 |
| Redbridge | 112682 | 310,260 | 0.363 |
| Hounslow | 107995 | 288,181 | 0.375 |
| Merton | 82644 | 215,187 | 0.384 |

| Local Authority | Passenger vehicles | Population | Vehicles per person |
|----------------------|--------------------|------------|---------------------|
| Barnet | 153289 | 389,344 | 0.394 |
| Croydon | 156518 | 390,719 | 0.401 |
| Harrow | 106963 | 261,203 | 0.410 |
| Enfield | 136152 | 329,984 | 0.413 |
| Richmond upon Thames | 84186 | 195,278 | 0.431 |
| Kingston upon Thames | 73553 | 168,063 | 0.438 |
| Sutton | 98770 | 209,639 | 0.471 |
| Bexley | 120121 | 246,472 | 0.487 |
| Havering | 130641 | 262,052 | 0.499 |
| Bromley | 164574 | 329,991 | 0.499 |
| Hillingdon | 155900 | 305,909 | 0.510 |

SAC visitor uplift calculation for London Borough of Newham

3.11 The visitor uplift calculation utilised in this strategy for London Borough of Newham uses the values listed below and is shown in **Table 3.3**. This approach and assumptions have been agreed in consultation with Natural England.

- Total annual site visits = 9,204,289
- Catchment area = 3% (2% attributed to visits from Newham residents in 2019 visitor survey plus an additional 1% precautionary buffer as recommended by Natural England).
- Population within catchment area (Newham) = 351,036
- New residential units resulting from Local Plan = 17,635.25
- Occupancy rate = 3.04

Table 3.3 Newham visitor uplift calculation

| | | | | | | |
|---|---|------------|---|----------|---|---------------|
| Total visits by catchment area residents per year | = | 9,204,289 | x | 0.03 | = | 276,128.67 |
| Number of visits by individual catchment area resident per year | = | 276,128.67 | ÷ | 351,036 | = | 0.78661069 |
| Number of visits by individual catchment area resident per day | = | 0.78661069 | ÷ | 365 | = | 0.002155 |
| Local Plan population increase | = | 17,635.25 | x | 3.04 | = | 53,611.16 |
| SAC visitor uplift per day | = | 53,611.16 | x | 0.002155 | = | 115.54 |

Chapter 4

Recreation Mitigation Projects

4.1 This Chapter describes the projects that have been selected to provide recreation mitigation for the development allocated through the Newham Local Plan, to reduce visitor pressure on Epping Forest SAC. It explains the project selection process, including the projects that have been selected to develop further and gives the rationale behind the rejection of the other potential projects that were discussed with LB Newham and Natural England.

Selection methodology

4.2 Selection of potential green space project sites was conducted through a process of geospatial analysis, consultation with LB Newham officers, and on-site review with Natural England representatives.

Initial site review

4.3 Initially, a long list of sites was formulated by reviewing green spaces, SINC's, and green links (**Figures 4.1 and 4.2**) that met some or all of the following criteria:

- Within the ZOI
- Within 400m of proposed development sites
- Within LB Newham's ownership
- With some capacity for an uplift in the number of visits – either through:
 - Opening up public access where there is currently no public access
 - Improving the capacity of a site to accommodate more visits through enhancement for recreation
 - Creating a network of sites, with improved access and enhancements to create a greater offer overall than an individual site could offer

4.4 This initial sifting of Newham's green space data set then excluded sites based on the following high-level criteria:

- Type of green space (the following were excluded): play areas, cemeteries, community growing spaces, hospital, 'landscaping around premises', railway cutting, railway embankment, road island / verge, school sites, sports facilities.
- Size of green space: sites below 0.2ha excluded (as having very low capacity for visitor uplift).

Shortlisting

4.5 The outcome of the initial review exercise was a preliminary shortlist of potential project sites. Information on existing levels of use for these sites was provided by LB Newham's Park Management team to identify sites with relatively low use levels, and sites with the potential to accept additional daily visits following enhancement. Green spaces that could provide relatively good local access from planned development were also prioritised. Sites initially selected but removed during the shortlisting process include:

- **Queen Elizabeth Olympic Park** – The site already contains a wide variety of habitat and placemaking provisions so would be difficult to select distinct projects that will demonstrate the appropriate uplift outcomes. The site is not wholly within LB Newham's ownership which adds a level of complication to the monitoring and 'in perpetuity' maintenance requirements.
- **May Green** – Very small site with limited potential for uplift.
- **Aldersbrook Woods** – Removed due to risk that this project would increase access from Newham up into Epping Forest (Wanstead Flats section) rather than deflecting visits south.
- **Channelsea Footpath** – Shown to have a limited scope for improvements.
- **Chandos Road open space** – Small green space with limited scope for improvements that are unlikely to lead to meaningful uplift.

Viability testing

4.6 The shortlist of recreation mitigation projects was then developed in order to produce initial capital, monitoring, and maintenance costings, and assign an uplift total. These more detailed proposals were then subjected to viability testing by LB Newham to determine whether the total tariff cost was appropriate and deliverable alongside the Local Plan. The following sites were removed from the final project list (**Table 4.1**):

- **Hermit Road Recreation Ground**
- **Little Ilford Park**

Overarching approach to the Strategy

4.7 The projects identified can broadly be divided into four categories. These categories form the key components of delivering a recreation mitigation network in Newham:

- **Strategic provision:** Recreation mitigation through enhancements to a green space in Newham that is strategically important by virtue of its size, location, and

ease of access from areas which will be subject to high levels of development in the future.

- **Local provision:** Recreation mitigation at a local level by enhancing existing green spaces that are known to have low use levels and where there are opportunities for enhancement that will provide a suitable natural greenspace offer.
- **Green Links and connections:** Enhancements to routes that provide improved connections to active travel routes, promoted routes, and improve access to recreation mitigation provision.
- **Promotion and communications:** Measures to promote and support the use of green spaces within Newham to reduce pressure on Epping Forest SAC.

Uplift categories

4.8 Following the identification of recreation mitigation sites and enhancement projects, a potential 'person visits per day uplift' has been estimated for each site in consultation with representatives from London Borough of Newham and Natural England officers. This is based on the likely capacity of each site to accommodate additional visits, informed by a combination of the existing levels of use, size of site, nature of interventions proposed and professional judgement.

4.9 A cautious approach has been employed to ensure that sufficient mitigation will be provided. Each site has been grouped into one of several uplift categories. These are presented as bands, giving the option of referring to the median which provides a likely uplift and for comparing the 'minimum' likely uplift with the number of additional visits that will likely need to be mitigated.

4.10 This provides the most cautious approach for 'testing' whether the proposed mitigation sites in the Strategy will be sufficient to avoid Newham Local Plan's adverse effects on the Epping Forest SAC. This reflects the approach taken within neighbouring local authorities' recreation mitigation strategies, which have been endorsed by Natural England.

Additional daily visits to Epping Forest SAC arising during the new Local Plan period (up to 2038) is estimated to be **115.54** (see **Table 3.3**).

4.11 Recreation mitigation projects have been grouped into the following uplift categories:

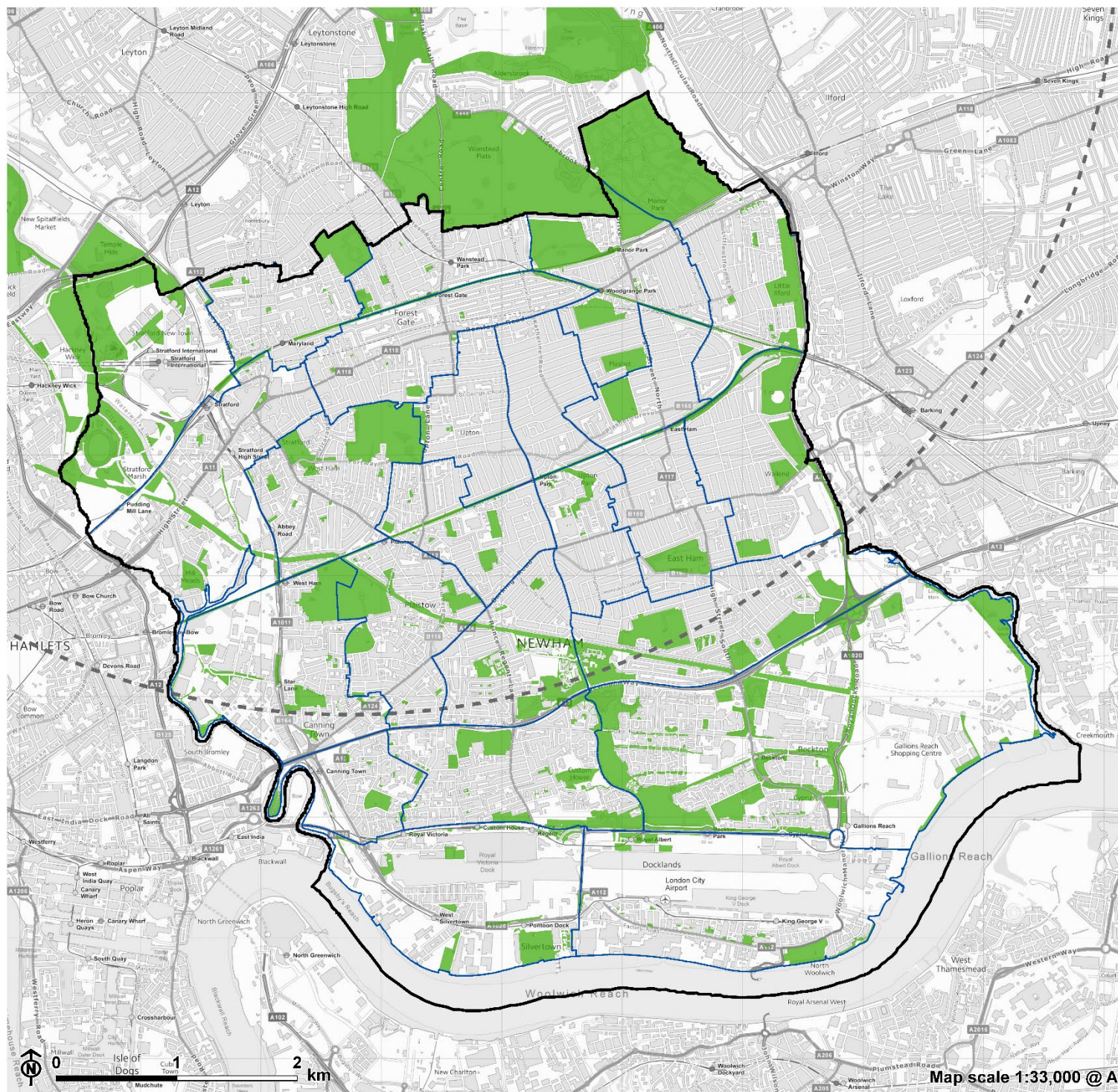
- Low – 2-14 visits per day
- Moderate – 15-35
- High – 36-120
- Very high – 120+

Table 4.1 Summary of likely visitor uplift due to proposed recreation mitigation projects

| Mitigation category (see para. 4.2) | Recreation mitigation project | Uplift category | Uplift range | | |
|--|-------------------------------|-----------------|--------------|--------|---------|
| | | | Minimum | Median | Maximum |
| Strategic | Beckton Masterplan Site | Very high | 120 | 120 | 120* |
| Local | Star Park | Moderate | 15 | 25 | 35 |
| Green link | The Greenway | Moderate | 15 | 25 | 35 |
| Total daily visit uplift | | | 150 | 170 | 190 |

**The maximum uplift for the Beckton Parks Masterplan is likely to be significantly greater than 120 visits per day. However, a cautious approach has been taken due to the fact that only some components of the overall Masterplan would be delivered through the recreation mitigation strategy.*

Figure 4.1: Reg. 19 open space



- London Borough of Newham
- Ward
- Zone of Influence (ZoI)
- Reg. 19 open space

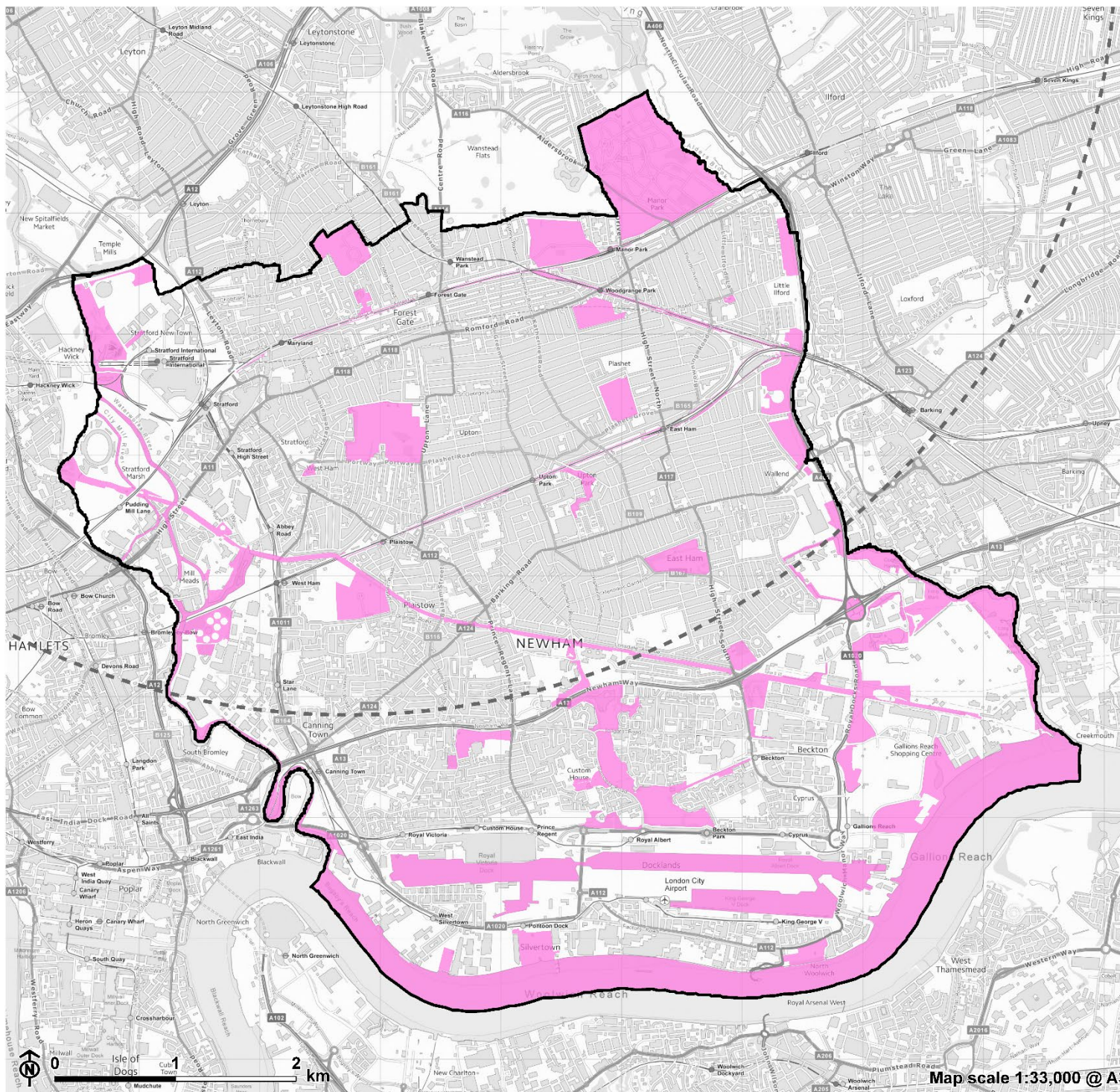


Figure 4.2: Reg. 19 Sites of Importance for Nature Conservation

- London Borough of Newham
- Zone of Influence (Zoi)
- Reg. 19 Site of Importance for Nature Conservation

Strategic recreation mitigation projects

4.12 The following sections describe the strategic recreation mitigation projects included in this strategy, and the enhancements needed.

4.13 The site locations are shown in **Figure 4.3** and the sites in relation to Site Allocations are shown in **Figure 4.4**.

Beckton Masterplan Site

4.14 The Beckton Masterplan, which was approved and adopted in January 2024 by Newham Council, provides a significant opportunity to develop a strategic scale recreation site that can service a large area of the borough.

4.15 Co-designed with over 1000 residents, the Beckton Parks Masterplan commits to delivering a gold standard green space that will benefit everyone living and working Newham. The masterplan presents a framework for a series of schemes and improvements over time on a project-by-project basis and safeguards these spaces for the future linked to the communities' priorities.

4.16 Although the Masterplan site lies outside of the Zol, the scale, quality, and demonstrable community need for the new green space meant that, through a series of discussions and site visits with Newham staff and Natural England, this site once completed will be considered a borough-wide destination and attraction.

4.17 The Beckton Masterplan brings together several green spaces as part of a cohesive design and with a phased delivery plan that allows several discrete projects to be delivered by the Newham Recreation Mitigation Strategy over the course of the Local Plan Period. Elements of the Masterplan that are suitably located, provide suitable mitigation, and access to high quality greenspace that is natural in character have been identified.

4.18 Due to low car ownership and a reliance on public transport in Newham, access to a strategic site via public transport is an important consideration, in addition to access to greenspaces via walking and cycling. It should be noted that large areas of planned new development within Newham, particularly within Stratford, will have good public transport links to the Beckton Masterplan site.

4.19 Beckton Park is accessible via two DLR stations; Beckton Parks DLR which leads directly into the park and Beckton DLR that brings you onto Beckton Corridor. Beckton Bus Station is located nearby. The site is also advantageously located to access via the Greenway, which provides a strategic active travel route running from Stratford to Beckton and which connects to several Site Allocations within the Zol.

4.20 This site is the largest area of connected, local authority managed, green space in Newham that has the capacity to serve the borough as a destination green space through implementation of the Beckton Parks Masterplan.

- **Size:** 36.49 ha
- **Existing use level:** high
- **Uplift potential:** 120
- **Designations:** Borough Grade I SINC
- **Ownership and management:** LB Newham

Existing provision

- A network of parks with a good range of created habitats, including a lake, a smaller pond and extensive areas of scrub and woodland.
- The main lake in the north of the park supports common breeding waterfowl, including mute swan and tufted duck. A smaller pond in the southeast contains vegetation at the edges and supports amphibians and dragonflies. Several broad belts of scrub and young woodland, composed of a wide variety of native trees and shrubs, provide valuable habitat for birds.
- Facilities include car parking, cycle paths, nature and woodland trails, picnic area, toilet (including disabled facilities), playgrounds, and cafe. The Capital Ring passes through the site.
- Masterplan proposals delivered alongside recreation mitigation projects include:
 - A new Community Farm with Green Skills Hub.
 - Boat House Café, Ecological Lake and Lido.
 - Inclusive Play Park, Play Trail and Adventure Play.
 - Pavilion and Sports Hub.
 - Beckton Meadows.
 - Skate hub.
 - Management of the Parks as one 'landscape', adopting a 'country park' approach to the network of parks which will create connectivity across all the spaces.
 - New entrances, notice boards, signposts, maps and street-furniture to create a consistency in look and design that creates a local feel.
 - Increased accessibility as well as improve connectivity between the local communities.

Enhancement projects to be funded under the Strategy

4.21 Phase 1

- Woodlands
 - Accessible paths including seating and wayfinding
 - Woodland management
 - Low-level lighting along woodland edge
 - Meandering woodland pathways
- Primary entrances (5 total)
- Secondary entrances (10 total)

4.22 Phase 2

- Primary entrances (4 total)
- Secondary entrances (15 total)

4.23 Phase 3

- Primary entrances (3 total)
- Secondary entrances (9 total)
- Dog Park. Includes CCTV, wayfinding, and seating

Local recreation mitigation projects

Star Park

4.24 This is an urban park in a predominantly residential area. The park consists of intensively managed amenity grass, semi-mature parkland trees, and a combination of formal and informal provision for children and young people.

- **Size:** 3.6 ha (excluding play area and sports provision)
- **Existing use level:** Medium
- **Uplift potential:** 25
- **Designations:** Local SINC
- **Ownership and management:** LB Newham

Existing provision

- Floodlit multi-use games area (MUGA).
- Football pitch (informal with no changing rooms).
- Equipped play area (NEAP) with informal and incidental play.
- Wheelchair access including some accessible play equipment.

Enhancement projects to be funded under the Strategy

- Entrance review including signage and interpretation.
- Ecological planting and adapted maintenance regimes with a 'wildlife friendly' approach including interpretation and explanation. Could include low intensity improved grassland with spring bulbs.
- Fenced dog-park.
- Miyawaki (micro/pocket) forest planting.
- Community orchard.
- Improving connectivity / greening between the two halves of the park.
- Natural play / 'play on the way' features.
- Park is close to green link from Former Gasworks Site Allocation (N7.SA2) and would benefit from wayfinding. The existing masterplan for this park would need to be reviewed with residents prior to finalising plans. Consultation would be required on several interventions.

The Greenway

4.25 The Greenway is a 7km green link footpath and cycleway on the top of the embankment of Thames Water's northern outfall sewer. The western end of the Greenway is Victoria Park, with the route running alongside Wick Lane, under the East Cross Route to Fish Island, before crossing the River Lea into Newham and continuing to Stratford and West Ham. The eastern end is at Royal Docks Road in Beckton.

4.26 The dominant habitats of the Greenway are grassland and sycamore woodland, as well as bramble, dwarf elder and hawthorn mixed scrub. Uncommon plants include common broomrape, warty-cabbage and Bermuda grass. A nationally rare moss *Rhynchostegium megapolitanum*, grows beside the path between Old Ford and Stratford and insects including the nationally rare ground bug *Stictopleurus abutilon* can be found. Birds breeding here include blackcap, whitethroat, lesser whitethroat and sedge warbler. Passage migratory species have included whinchat and common wheatear. The site is also of value for butterflies, with the adjacent Old Ford Nature Reserve supporting long-established populations of small heath, small copper, wall and common blue.

- **Size:** 7km / 20ha
- **Existing use level:** High
- **Uplift potential:** 25
- **Designations:** Borough Grade I SINC
- **Ownership and management:** LB Newham

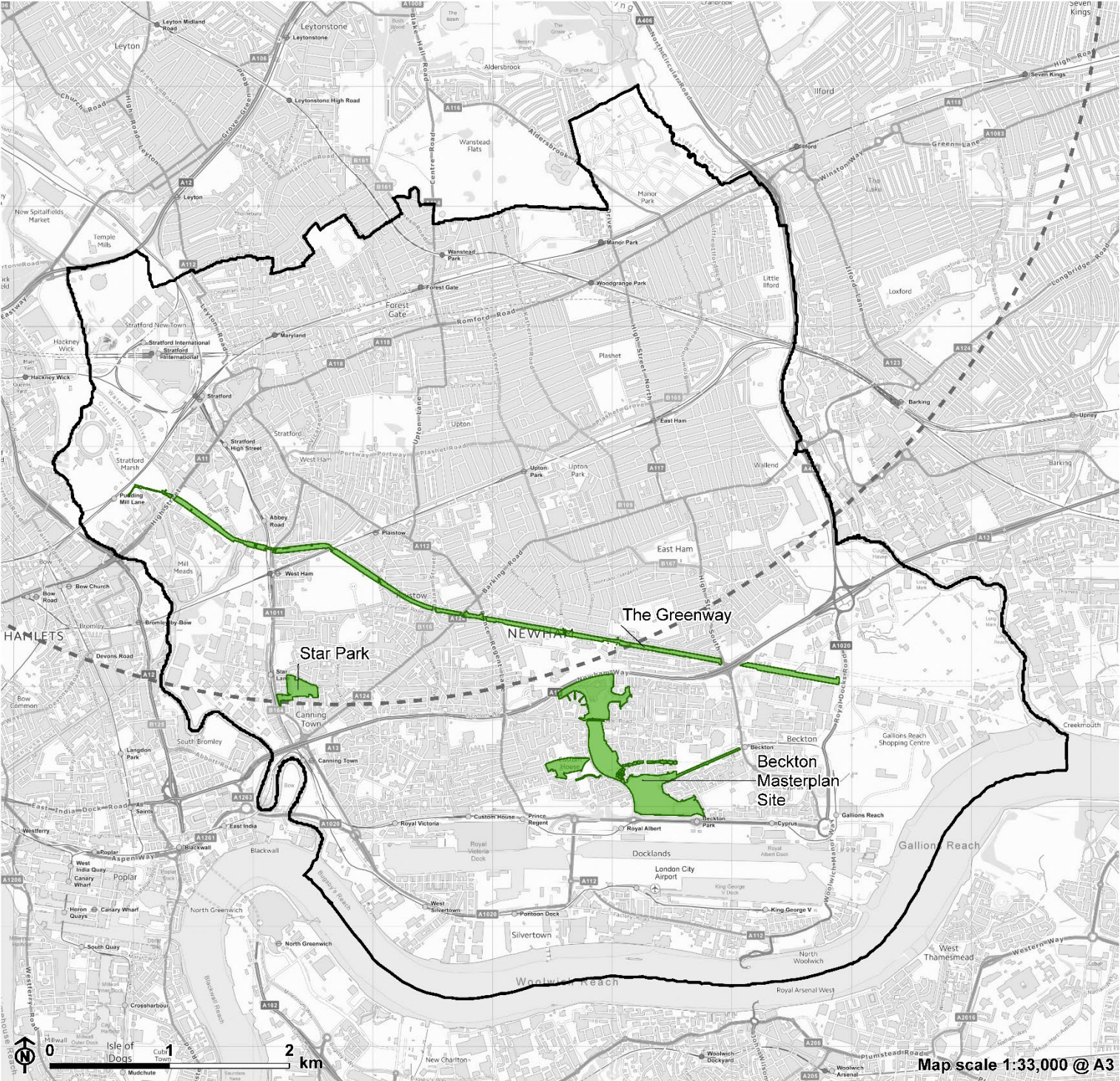
Existing provision

- A strategic green corridor providing easy access to the Beckton Parks Masterplan site from multiple locations in Newham. Within 400m of the following site allocations:
 - **N7 Three Mills** sites SA1 Abbey Mills, SA2 Twelvvetrees Park and Former Bromley By Bow Gasworks;
 - **N8 Stratford and Maryland** sites SA3 Greater Carpenters District, SA4 Stratford High Street Bingo Hall, SA7 Rick Roberts Way, SA9Pudding Mill;
 - **N9 West Ham** site SA1 Plaistow North;
 - **N10 Plaistow** sites SA1 Balaam Leisure Centre, SA2 2 Newham 6th Form College, SA3 Newham Leisure Centre, SA4 Balaam Street Health Complex;
 - **Local Mixed Use Areas** LMUA 7 Dulcia Mills and LMUA15 Esk Road.
- Mixed use, surfaced path between Stratford and Beckton.
- Habitat enhancements such as The Greenway Pollinator Trail including over 6km of wildflower verges and the Wild Bee Garden
- Multiple access points.
- Lighting.

Enhancement projects to be funded under the Strategy

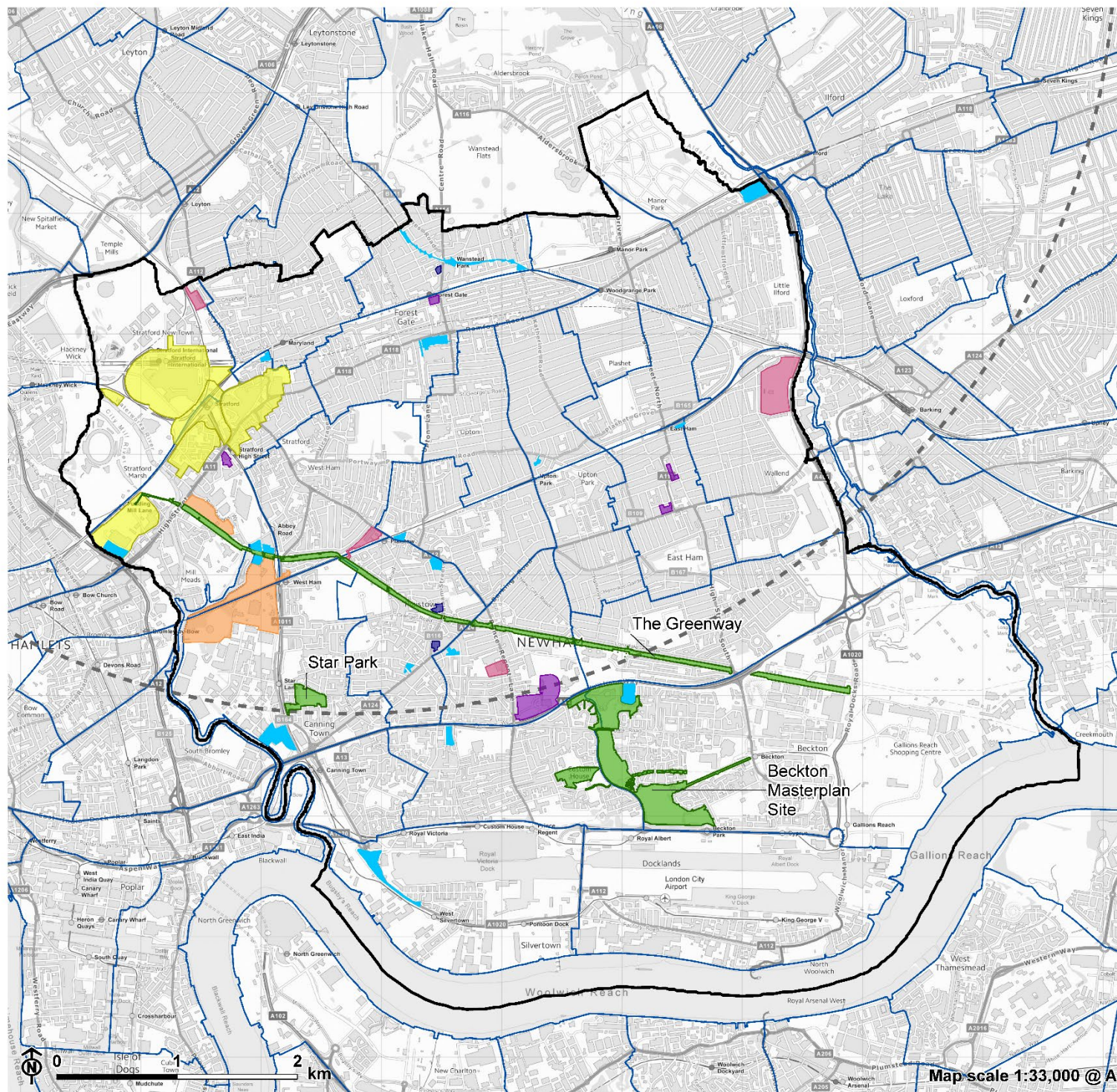
- Enhanced wayfinding and connectivity, specifically focussed on connections to areas of new development, the Beckton Parks Masterplan site and other green spaces.
- Development of a nature trail to connect the Wild Bee Garden and Community Orchard.

Figure 4.3: Epping Forest Special Area of Conservation recreation mitigation projects



- London Borough of Newham
- Project site

Figure 4.4: Mitigation projects in relation to Site Allocations



- London Borough of Newham
 - Ward
 - Zone of Influence (Zoi)
 - Local Mixed Use Area
 - Project site
- Population increase per site allocation**
- Low
 - Medium
 - High

Chapter 5

Funding and Delivery

5.1 This Chapter breaks down the tariff that will be assigned to new developments to fund the recreation mitigation works set out in the 'Enhancements' section of the previous chapter, and details the process through which financial contributions will be sought from developers.

Project costs

5.2 Costs for each project have been assigned based on the average capital delivery cost of traditional SANG enhancement projects and revenue maintenance costs per square metre. Maintenance costs have been applied for a term of 80 years to meet Natural England's 'in perpetuity' requirements.

5.3 Costs used are as below:

■ Capital costs

- £3.40 per square metre
- £34,000.00 per hectare

■ Maintenance costs

- £0.22 per square metre
- £2,200.00 per hectare

5.4 Costs were developed using Spon's External Works and Landscape Price Book 2025 and assumes the following features will be enhanced or renovated, with maintenance costs taken at market rate and assuming that the project will be maintained in perpetuity, which is defined as an 80-year period:

- Bins;
- Benches;
- Signs;
- Gates and entrances;
- Scrub/Miyawaki planting;
- Species rich grassland;
- Pond/wetland;
- Hedges;
- Specimen trees; and
- Paths and surfaces.

5.5 This average cost has been applied to all sites with the exception of the Beckton Masterplan site which has a fully costed delivery plan. The maintenance costs for the Beckton Masterplan Site have been applied only to the enhancement projects listed in **Chapter 4** that will be funded by the tariff.

Table 5.1 Project delivery, management, and monitoring costs

| Project | Median visitor uplift | Capital costs | In-perpetuity maintenance costs | Visitor monitoring costs | Total |
|--------------------|-----------------------|----------------------|---------------------------------|--------------------------|----------------------|
| Beckton Masterplan | 120 | £1,751,600.00 | £1,185,779.40 | £2,205.00 | £2,939,584.40 |
| The Greenway | 25 | £9,290.00 | £74,320.00 | £2,205.00 | £85,815.00 |
| Star Park | 25 | £124,100.00 | £642,400.00 | £2,205.00 | £768,705.00 |
| Total | 170 | £1,884,990.00 | £1,902,499.40 | £6,615.00 | £3,794,104.40 |

5.6 These cost calculations are based on an estimate that assets will need to be replaced every five to ten years and on the Council's experience of managing similar sites. The costs of managing the site in perpetuity covers a period of 80 years.

Monitoring

5.7 A monitoring cost has also been included within the final tariff to establish a baseline visitor number for the mitigation sites and will be undertaken 5 years post-completion to measure whether the projects are successful in reaching the mitigation levels originally estimated. This cost is based on an external consultant undertaking the visitor survey work and totals **£2,205.00** per site.

Tariff and collection

Tariff

The total project delivery and monitoring cost for the delivery of the London Borough of Newham Epping Forest SAC Recreation Mitigation Strategy is **£3,794,104.40**.

When divided by the adjusted unit increase during the local plan period this will total:

£215.14 per unit

Tariff application

5.8 To apply the tariff across all development types as they come forward, the below ratios should be used according to the development type to ensure that the costs are correctly calculated per additional unit or room.

Table 5.2 Tariff ratio per development type

| New development type | % of tariff per additional residential unit or room |
|---------------------------------------|---|
| Standard residential | 100% |
| Small HMO (6 or less residents) | 100% |
| Sui Generis HMO (7 or more residents) | 56% |
| C2 residential institution | 56% |
| Student accommodation | 40% |

Developer contributions

5.9 The current estimate of Recreation Mitigation charge per net additional unit is £215.14 per dwelling in 2025 and is to be uprated each year in line with BCIS Cost inflation indices for Construction works

5.10 The Recreation Mitigation Tariff will be applied to the following developments within the Zol:

- New dwellings of 1+ units (excluding replacement dwellings and extensions but including homes granted through the prior approvals process)
- Residential care homes and residential institutions (excluding nursing homes)
- Residential caravan sites (excluding holiday caravan and campsites)
- Gypsy, traveller and travelling show-person plots
- Student accommodation
- Houses in Multiple Occupation (HMOs) – Class C4 and Sui Generis)

- All other non-self contained communal accommodation (including co-living)

5.11 Applicants may use the following payment routes:

- If the scheme will require a legal agreement in respect of other planning obligations under section 106 of the Town and Country Planning Act 1990 (as amended), the Epping Forest SAC Recreation Mitigation Tariff payment can be included within the schedule of charges in the legal agreement. Payment will be required at commencement.
- If the scheme will not require a legal agreement to secure other planning obligations, payment can be made under Section 111 of the Local Government Act 1972.
- If the scheme will not require a legal agreement to secure other planning obligations, but an applicant would rather complete a unilateral undertaking, in accordance with Section 106 of the Town and Country Planning Act 1990 (as amended) to make the tariff payment, than a section 111 Payment, this is possible but will be charged at £2,000 plus tariff. Payment will be required at commencement.

Chapter 6

Monitoring and Review

Monitoring

6.1 This Recreation Mitigation Strategy will be monitored every 5 years and kept under review, with this paid for in part from the tariff. The monitoring indicators proposed for the recreation mitigation projects in **Table 6.1** allow an assessment of the performance of the Strategy in the delivery of its objectives and to provide transparency on income and expenditure.

6.2 The financial income and expenditure information will be presented in the Council's annual Infrastructure Statement. The performance of the strategy will be reported in the Council's Authority Monitoring report, as part of planning policy monitoring.

Review

6.3 Through the monitoring process, the Council will aim to ensure there is sufficient capacity within the correct catchment areas to provide effective mitigation for new residential dwellings. The Newham Epping Forest SAC Recreation Mitigation Strategy will be reviewed and updated to reflect 5-year monitoring outputs.

6.4 Should the level of mitigation fall below the levels required, or should updated SAC survey data show that Newham is responsible for a greater proportion of the visitors to the SAC than reflected in the currently available surveys, the daily uplift calculation, tariff, and project list should be reviewed and updated in coordination with Natural England.

Table 6.1 Recreation Mitigation Strategy monitoring indicators

| Theme | Indicators | Source | Frequency |
|-------------------------------------|--|--------------------|---|
| Visitor uplift | Site visits per day (to the mitigation project sites) | Visitor surveys* | Pre-project inception, and 5 years post-completion during the Local Plan period |
| Funding | S106 contributions agreed and received | S106 monitoring | Annually |
| Expenditure | Total project expenditure (delivery and maintenance costs) | Internal reporting | Annually |
| Recreation Mitigation site capacity | Homes/units delivered in Borough | Internal reporting | Annually |

** Visitor surveys include interviews and counts of people at entrance(s) to the mitigation site. Visitor interviews will take place with a random sample of people, and questions will seek data on visitor origins, profile, and behaviour including the types of activity undertaken and duration of stay. Additional questions will seek feedback on the new improvements the likelihood that visitors will regularly return.*