Draft City of London Biodiversity Action Plan 2021-2026

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1.0 Introduction

1.1 The City: A unique urban environment

The City of London Corporation is the governing body of the Square Mile dedicated to a vibrant and thriving City, supporting a diverse and sustainable London within a globally-successful UK.

1.2 What is Biodiversity?

Biodiversity is the term used to describe the variety of life on Earth. This includes animals, plants and fungi as well as recognisable wildlife such as birds, mammals and insects. The habitats are the places they live and how they interact with their surroundings as part of the ecosystem. Conserving biodiversity involves restoring and enhancing species populations and habitats as well as implementing measures to promote them in the future. The value of biodiversity extends beyond habitat and species with the benefits extending to a range of economic, social and intrinsic values.

1.3 Biodiversity in the City

The City of London has just under 33 hectares of open spaces which includes parks, gardens, churchyards and hard open spaces such as plazas and improvements to the highway. Most of the open spaces are small, primarily consisting of pocket parks smaller than 0.1 hectares. There is a need for additional open space in the City to provide facilities for residents and the daytime working population to help mitigate the effects of pollution and climate change, to provide facilities for relaxation, tranquillity, agile working, leisure and sport, and to increase biodiversity.

Ground level open spaces are mostly the result of two significant events in the City of London: the Great Fire of London in 1666 and bomb damage caused during World War II. These traumatic events resulted in damaged or destroyed buildings being repurposed and in many cases eventually becoming open spaces for the public to enjoy. Together these small, high quality and intensively used open spaces are highly valued and offer an important resource for biodiversity in the Square Mile. There is also an increasingly important resource for biodiversity at roof top level with the addition of green roofs and roof terraces.

Historically the City's open spaces have been managed primarily for amenity value and public enjoyment. However, recent changes in management practices have placed a greater emphasis on the importance of promoting biodiversity. Raised awareness of the natural environment amongst City workers, residents and visitors has changed the ways in which the public enjoy, value and engage with open space in the Square Mile through interpretation, activities and events.

A full list of types of open spaces in the City of London is listed in <u>Appendix 3</u>: Open space typology and categorisation.

1.4 Why does the City need a Biodiversity Action Plan?

According to the intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) the world is facing a biodiversity crisis. Nature is declining globally at rates unprecedented in human history, and the rate of species extinctions is accelerating, with grave impacts on people around the world now likely. The Report also tells us that it is not too late to make a difference, but only if we start now at every level from local to global.

The Biodiversity Action Plan (BAP) provides a strategic focus to ensure species and habitats are understood and considered throughout the decision making process. The BAP directly supports the overall aim of the City Corporation's Corporate Plan to shape outstanding environments.

The BAP provides a framework to ensure all legislative requirements and regional and national targets for protecting, conserving and enhancing biodiversity are met at a local level.

Outside of the Square Mile, the City Corporation owns or manages almost 4,500 hectares of historic and natural open spaces including Hampstead Heath and Epping Forest. These sites are of significant importance habitats and species and include Sites of Special Scientific Interest, National Nature Reserves and Special Areas of Conservation.

The BAP covers the open spaces, habitats and species in City of London only, regardless of ownership. Open spaces outside of the City of London are covered by the relevant local authorities' Biodiversity Action Plans or alternative policy or strategy. The City Gardens team is responsible for tree and green space management for around 200 sites in the Square Mile including parks, gardens, churchyards, plazas and highway planting.

1.5 Structure of the Biodiversity Action Plan

The aim of the BAP is to produce a set of objectives and actions to assist members of the City of London Biodiversity Action Plan Partnership Group (Partnership Group) and the wider City community in delivering strategically planned biodiversity networks for both the City and Greater London, taking into consideration both local and national priorities.

The BAP will be delivered under the following themes:

Open space and habitat management

Aim: to protect and enhance habitats and species in the City.

Enable land owned and managed by both the City Corporation and privately, to be maintained and enhanced for biodiversity.

The built environment

Aim: to improve green infrastructure in the built environment

Enable biodiversity to be incorporated into the built environment to enhance and connect green spaces.

• Education and community engagement

Aim: to promote a greater understanding of the City's biodiversity

Identify and encourage best practice amongst private landowners and managers as well as develop the skills and knowledge of residents, City workers, school children and students through events, activities and volunteering opportunities.

Data collection, surveys and monitoring

Aim: to improve monitoring and data on biodiversity in the City.

Establish a structured approach to surveying and monitoring of sites to inform ongoing management decisions and identify future areas of priority. This includes professional ecology surveys, citizen science opportunities and records collected by voluntary groups and individuals.

2.0 National and regional policy context

2.1 National policy

In 2018 the Government published 'A Green Future: Our 25 Year Plan to Improve the Environment' which sets goals and targets for improving the environment. The Plan focuses on a number of cross-cutting themes including embedding an 'environmental net gain' principle for development, creating additional green infrastructure, planting trees and developing a Nature Recovery Network to support landscape-scale restoration of nature.

Under the Natural Environment & Rural Communities Act 2006 (NERC), as a public authority in England, the City of London Corporation has a duty to 'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'. This may include promoting biodiversity in planning and development, recognising the importance of conserving and enhancing biodiversity in public authority managed land and buildings and managing green infrastructure to support biodiversity.

The National Planning Policy Framework (NPPF) 2019 states that planning should contribute to conserving and enhancing the natural environment, habitats and biodiversity.

The City Corporation will participate in the emerging requirements to develop a Nature Recovery Strategy and co-ordinate with neighbouring boroughs.

The BAP should also consider national strategies such as The National Pollinator Strategy, which seeks to protect pollinating insects that support food production and the diversity of our environment.

2.2 Regional policy

The London Plan 2021 is an overall strategy document and policy framework for London, which includes green infrastructure, urban greening and biodiversity. Many of the objectives of the London Plan are incorporated and delivered as part of the City Corporation's Local Plan.

The London Environment Strategy includes action to make London cleaner, greener and ready for the future. The strategy includes policies to protect nature conservation sites, create priority habitats, conserve priority species and to ensure net gain in biodiversity.

3.0 Local policy context

3.1 Local policy

The new City of London Local Plan, called City Plan 2036, sets out the City Corporation's vision, strategy and objectives for planning up to 2036, together with policies that will guide future decisions on planning applications.

Once adopted, the new Plan will replace the current City of London Local Plan adopted in January 2015.

Policy OS3 of the draft City Plan 2036 specifically addresses biodiversity and states that development should aim to secure net gains for biodiversity where possible by incorporating measures to enhance biodiversity, including:

- Retention and enhancement of habitats within Sites of Importance for Nature Conservation (SINCs), including the River Thames
- Measures recommended in the City of London Biodiversity Action Plan (BAP) in relation to particular species or habitats
- Green roofs and walls, gardens and terraces, soft landscaping and trees
- Green corridors and biodiversity links
- Wildlife-friendly features, such as nesting or roosting boxes
- A planting mix and variation in vegetation types to encourage biodiversity
- Planting which will be resilient to a range of climate conditions, with a high proportion of native plants
- A lighting scheme designed to minimise impacts on biodiversity

The City Corporation has developed a series of strategies for improving streets and public spaces in the Square Mile which incorporate elements such as tree planting and urban greening. These are integral to supporting biodiversity in the planning process.

The BAP supports the City of London Corporation's Corporate Plan's aims to:

Contribute to a flourishing society

- People enjoy good health and wellbeing
- Communities are cohesive and have the facilities they need

Support a thriving economy

- Businesses are trusted and socially and environmentally responsible
- We have access to the skills and talent we need

Shape outstanding environments

- We have clean air, land and water and a thriving and sustainable natural environment
- Our spaces are secure, resilient and well-maintained

The City of London Open Space Strategy, which was adopted as a Supplementary Planning Document (SPD) in January 2015, sets out the principles to help improve the quality, management and accessibility of the open spaces of the Square Mile. The strategy comprises of ten strategic objectives which include ensuring that existing and new spaces make a positive contribution to the biodiversity value of the City through appropriate plant choice and habitat creation. A full list of the policies that support biodiversity in the City is set out in Appendix 1.

3.2 Climate Action Strategy

The City Corporation has adopted a radical Climate Action Strategy which breaks new ground and has the following goals:

- City Corporation scope 1 and 2 emissions are net zero by 2027 and scope 3 emissions are net zero by 2040.
- The City Corporation and its assets are resilient to climate change.
- The City Corporation supports UK and overseas organisations to become climate responsible.

The City Corporation are enacting a variety of measures to mitigate for the impact of this on the Square Mile. This is to ensure that the City of London public spaces and infrastructure are resilient to the effects of climate change.

The following Climate Action Strategy aims are supported and enhanced by the Biodiversity Action Plan:

- Introduce new land management practices across our open spaces aiming to maximise their ability to remove carbon, and optimise their biodiversity and resilience value
- Advocate the importance of green spaces and urban greening as natural carbon sinks, and their contribution to biodiversity and overall wellbeing
- Enhance greening and biodiversity across our public realm and open spaces

Biodiversity and climate change are interconnected. Protecting and restoring ecosystems can help us reduce the extent of climate change and cope with its impact. The BAP supports the creation of biodiverse green infrastructure to support the climate resilience of the Square Mile. This also assists with mitigating and adapting to the impacts on habitats and species and changes in prevalence of pests and diseases.

The BAP plays an important role in raising awareness of the importance of green spaces and urban greening as natural carbon sinks, and their contribution to biodiversity, access to nature and overall wellbeing.

The aim to incorporate more greenery in the City's streets and public spaces is supported by both the City of London Air Quality Strategy and Transport Strategy.

3.3 Lighting

The City of London Lighting Strategy aims to deliver a creative, holistic and smart approach in which light and darkness are better balanced to meet both a functional and aesthetic need. It is vital that impacts of lighting on sensitive species such as bats are considered during design, construction and operation of new developments especially in sensitive areas adjacent to SINCs and near lakes and rivers.

3.4 Urban Greening Factor

The London Plan 2021 states that major development proposals should contribute to the greening of London by including urban greening from the outset of the development design process. Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of greening required in new developments.

In response to this requirement, the draft City Plan 2036 requires that major development proposals will be required to include a UGF calculation demonstrating how the development will meet the City's score of 0.3 as a minimum.

3.5 Biodiversity Net Gain

The draft City Plan 2036 states that development should aim to secure net gains for biodiversity where possible by incorporating measures to enhance biodiversity. The emerging Environment Bill will ensure that the delivery of Biodiversity Net Gain (BNG) through development becomes a mandatory part of the planning process.

4.0 Biodiversity in the City of London

The City Gardens team commissioned Greengage Environmental Ltd to undertake an audit of the BAP. The audit was a desk based exercise primarily based on data provided by Greenspace Information for Greater London (GiGL) and reviewed the City's habitats, species and policy.

The audit highlighted the successes of the current BAP and deficiencies which include:

- Greenspace connectivity and species distribution;
- Habitat diversity;
- Under recording of species;
- Invasive species awareness

To address these deficiencies, the audit recommendations have been identified that can be delivered as part of the Action Plan. The recommendations of the audit target three key areas:

- Improved greenspace connectivity
- Diversification of City habitats and strategic habitat management
- Raising the profile of ecological issues and importance in the minds of the people who access and develop within the City.

City of London Biodiversity Partnership Group

The City of London Biodiversity Partnership Group was established to the support the review the BAP, assist with delivery of the actions and SINC review and selection process. The group consists of representatives from the relevant departments of the City of London Corporation, business, community and resident representatives as well as ecology, species and biodiversity professionals.

As the City is unique in terms of its size, structure, opportunities and challenges for biodiversity, a more landscape-scale approach was developed for the BAP 2016-2020. This means all the elements that influence habitats and species will be considered. Specific action plans will be developed for some species such as the Black Redstart and detailed guidance such as for pollinators in the built environment. This will maximise the benefits across all open and green spaces with specific objectives developed to prioritise actions for specific sites, species or areas of opportunity. Priority habitats and species have been identified at both a UK and London level by the London Biodiversity Partnership.

4.1 Habitats

The main types of habitats located in the City of London are:

- Amenity grassland
- Scattered trees
- Introduced shrub

The BAP can assist with the diversification of habitats in the long term which will both encourage greater species diversity and create habitats that are more resilient to a changing climate.

The 'priority habitats' identified by the London Biodiversity Partnership that are most relevant to the Square Mile are 'parks and urban green spaces' with an 'important habitat' identified as 'built structures'. The action plans have been developed to take into consideration these priority habitats. A further habitat recognised as a London biodiversity target within the City of London is standing water and the Tidal Thames, which is also the City's only Site of Metropolitan Importance for Nature Conservation (SMINC),

Whilst there are some sites with standing water that are dealt with in this BAP, the Tidal Thames is the prime responsibility of the Port of London Authority, with the City's responsibilities for the riverside and foreshore are detailed in draft City Plan 2036 Strategic Policy \$17, Thames Policy Area. This states that development should not have an adverse impact on the SMINC and should seek opportunities to create or enhance riverside habitats.

4.2 Species

Species can be categorised into the following. It should be noted that a single species can be have multiple categories. The definitions are as follows:

- **Protected species** protected by national and international legislation
- **Priority species** species identified of particular conservation importance regionally including at a London and England scale.
- **Target species** flagship species to consider during development and conservation in the Square Mile.

Protected and priority species that GiGL data shows frequently occur in the City and should be considered in the planning process and conservation interventions are detailed in Appendix 2: Protected Species and/or Priority Species records in the City of London.

Following consultation with the Partnership Group and taking into consideration local, regional and national priorities the following species have been selected as target species:

- House Sparrow Passer domesticus
- Black Redstart Progenitures ochruros
- Swift Apus apus
- Peregrine Falcon Falco peregrinus
- Bats Chiropter spp.
- Wild Bees Bumblebees and Solitary Bees
- Stag Beetle Lucanus cervus

These species are exemplars of their ecological niches, the interaction the species has with the surrounding environment, and also are in many cases highly adapted to the urban environment. They have been selected to highlight their importance within the City of London and to focus conservation management and monitoring. The target species selected also take into consideration national priority habitats and species are defined under Section 41 of the Natural Environment & Rural Communities Act 2006.

In addition to the identified target species, records held by GiGL show there are 60 species which are either legally protected or considered of national, regional or local policy.

4.3 Sites of Importance for Nature Conservation

The London Plan identifies the need to protect biodiversity and to provide opportunities for people to access nature through local green spaces. The best examples of key habitats and green spaces are identified as Sites of Importance for Nature Conservation (SINCs). SINCs are non-statutory designated sites identified by local authorities and are recognised as part of the planning process.

In London, sites are categorised of importance at a Metropolitan, Borough and Local level. The London Plan 2021 and London Environment Strategy states that SINCs should be protected.

The following sites have been identified in the City:

Table 1 - Sites of Importance for Nature Conservation in the City of London

Site Ref	Sites	
	Sites of Metropolitan Importance for Nature Conservation (SMINC)	
M031	The River Thames and its Tidal Tributaries	
	Sites of Borough Importance for Nature Conservation (SBINC) Grade 2	
CiBII01	The Temple Gardens	
CiBII02	The Barbican and St Alphage's Garden	
	Sites of Local Importance for Nature Conservation (SLINC)	
CiL01	Pepys Garden and St Olave's Churchyard, Seething Lane	
CiL02	St Paul's Cathedral Garden	
CiL03	Cleary Gardens	
CiL04	St Botolph without Bishopsgate Churchyard	
CiL05	Aldermanbury Gardens	
CiL06	The Roman Wall, Noble Street	
CiL07	Finsbury Circus	

SINCs are key to how the City Corporation delivers biodiversity. The small fragmented nature of the greenspaces across the highly built urbanised Square Mile need to meet many, often competing needs. This results in many SINCs having limited biodiversity potential. The focus needs to be on improving the biodiversity value of the SINCs and linking these sites with new green infrastructure.

In December 2015, the City Gardens team commissioned the London Wildlife Trust to review SINCs within the Square Mile. This included reviewing existing sites for their grading and boundary as well as three new proposed sites at Postman's Park, St Dunstan in the East Church Garden and Portsoken Street Garden.

The following changes including new and upgraded sites and boundary changes have been recommended. It is intended that these changes will be adopted as part of the draft City Plan 2036:

Table 2 - Proposed Sites of Importance for Nature Conservation in the City of London

Site Ref	Sites	
	Sites of Metropolitan Importance for Nature Conservation (SMINC)	
M031	The River Thames and its Tidal Tributaries	
	Sites of Borough Importance for Nature Conservation (SBINC) Grade 1	
CiBI01	The Barbican Estate, St Alphage Garden and Barber Surgeons'	
	Garden	
	Sites of Borough Importance for Nature Conservation (SBINC) Grade 2	
CiBII01	The Temple Gardens	
CiBII03	Roman Wall, Noble Street and St Anne & St Agnes Churchyard	
	Sites of Local Importance for Nature Conservation (SLINC)	
CiL01	St Olave, Hart Street Churchyard	
CiL02	St Paul's Cathedral Churchyard Gardens	
CiL03	Cleary Garden	
CiL04	St Botolph without Bishopsgate Churchyard	
CiL05	Aldermanbury Gardens	
CiL07	Finsbury Circus Gardens	
CiL08	Postman's Park	
CiL09	Portsoken Street Garden	
CiL010	St Dunstan in the East Church Garden	

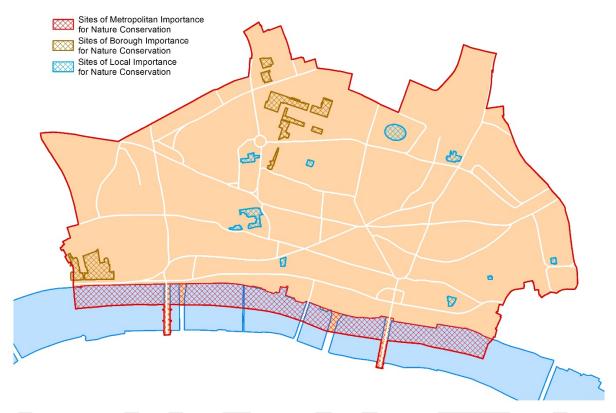


Figure 1 - Map of Sites of Importance for Nature Conservation (SINCs) in the City of London

4.4 Local Natures Reserves

The City of London does not currently have any sites designated as Local Nature Reserves (LNR). Action Plan 1 includes an objective to explore the opportunity to select, declare and manage a site as an LNR.

4.5 Open Spaces Audit

A comprehensive audit of all open spaces owned and managed by the City Corporation and private landowners is carried out by the Department of the Built Environment (DBE).

The draft City Plan 2036 sets out seven Key Areas of Change areas that are likely to experience significant change over the Plan period and present particular opportunities and challenges that warrant a specific policy focus. They Key Areas of Change are:

- Blackfriars
- Pool of London
- Aldgate
- Tower and Portsoken
- City Cluster
- Fleet Street and Ludgate
- Smithfield and Barbican
- Liverpool Street

The Open Spaces Audit will be used to support the BAP by identifying and prioritising biodiversity enhancements and providing access to nature and green space in the Square Mile.

4.6 Access to nature and green space in the City

Areas of deficiency in access to nature are areas in London where people have to walk more than one kilometre to reach an accessible Metropolitan or Borough Site of Importance for Nature.

Both the Sites of Borough Importance for Nature Conservation (SBINC) Grade 2 located in the City of London have reduced or limited public access because they are privately owned or designated for residents' use. The nearest publicly accessible SBINC to the City of London that is managed by the City Corporation is Bunhill Fields Burial Ground. This site is located just outside the City's boundary in the London Borough of Islington.

The review recommended that the The Roman Wall, Noble Street SINC was both updated to a SBINC Grade 2 and extended to include St Anne & St Agnes Churchyard. The SINC has been renamed Roman Wall, Noble Street and St Anne & St Agnes Churchyard as a result.

Once the current recommendations have been adopted via the City Plan 2036, it is recommended that a future SINC review follows any major changes to a SINC. A SINC review would therefore be commissioned following the reinstatement and establishment of the SLINC at Finsbury Circus Gardens including any other proposed changes that are identified.

The opportunity to identify or upgrade sites to SBINC status may be identified as part of a SINC review. However, due to the dense urban nature of the City and the limited size of current local sites, opportunities may be limited. There is a clear deficiency in access to nature in the east of the City and particularly the City Cluster and Aldgate.

The London Plan defines deficiency in access to open space in relation to both the maximum distance residents should have to travel to access a public open space and the size and quality of that open space. The London Plan categorises public open spaces based on their structure and size. Most open spaces in the City are identified as 'Pocket Parks' with a minority of 'Small Open Spaces'. As identified in the London Plan, individuals should have access to these types of spaces within 400 metres of their homes with residential areas outside of this distance potentially defined as deficient in access to open space. Open space provision and types across London are detailed in <u>Appendix 4</u>.

Identifying and maximising both the biodiversity potential and access for public enjoyment of these small sites in the City are of key importance. Management plans will be developed to focus both on enhancing the quality and accessibility of SINCs.

4.7 Achievements and recommendations

The City of London Biodiversity Action Plan 2016-2020 has made the following significant achievements:

- A review of SINCs in the City of London was completed by the London Wildlife Trust (LWT) in 2016.
- A Service Level Agreement (SLA) with GiGL was secured for the Open Space Department (OSD).
- Delivery of a Biodiversity Audit for the City.
- Nine predator-secure bird feeding cages were funded and installed by Friends of City Gardens (FoCG) and bird feeding is carried out by volunteers in ten City gardens.
- FoCG monitor and clean bird boxes each autumn which provide valuable information on usage.
- Barbican Wildlife Group (BWG) has made improvement to habitats in the Barbican Wildlife Garden also undertaking species monitoring and community engagement activities and events.
- Annual breeding bird survey and black redstart sightings report carried out by FoCG.
- Bat activity monitored at 14 different locations over two years and talks and walks funded, organised and delivered by FoCG.
- Bat detection workshops organised by FoCG with support from the Bat Conservation Trust and funded by the City of London Corporation's Central Grants Programme.
- Lunch 'n' learn event on bats and birds in the City delivered to City Corporation staff.
- Planting improvements at Postman's Park to support its proposed status as a SLINC.
- Annual participation in the RSPB Big Garden Birdwatch by volunteers at targeted SLINC sites including the production of a report and the provision of data to GiGL for inclusion in the regional wildlife records dataset.
- Working with corporate volunteers to improve habitats within the parks, gardens, and churchyards of the Square Mile such as increasing shrub cover, installing log piles and leaf composting.
- Bulb planting of nectar-rich early flowering species for early emerging pollinators.
- Enhancement of two churchyard garden with pollinator-friendly species.

4.8 Health and wellbeing benefits of biodiversity

As well as the importance of conserving habitats and species, biodiversity and activities that enhance the environment are beneficial to people. The opportunities that exist for individuals to engage and promote biodiversity in the City of London contribute to an active and healthy lifestyle. Examples include taking part in planting activities in a green space, working to create new habitats, community food growing or using walks and trails to explore nature in the City. Biodiversity is also an important contributing factor in mitigating air pollution with specific planting used to improve local air quality and raise awareness within the community.

The City Corporation is also working with external organisations based in the Square Mile, such as Bart's Health NHS Trust to increase green infrastructure across their sites. Both participating in biodiversity related activities earning Tempo Time Credits and redeeming them on physical activities such as gyms and swimming pools have a positive impact on health and wellbeing. Access to green space and nature is also linked to improving the mental health and wellbeing of individuals as well as creating quiet and tranquil areas for workers, residents and visitors.

4.9 Education and community engagement

The work of promoting and enhancing SINCs provides a valuable opportunity for individuals to share and learn new skills, knowledge and experience as well as bringing together residents, workers and visitors with a shared passion for biodiversity. This form of engagement can be vital in encouraging local residents to become champions in promoting the quality and understanding of biodiversity in the City. For this reason, biodiversity enhancement is used as a platform for many events and activities in the City's green spaces.

4.10 Sustainability in the built environment

The built environment represents an important habitat in the City. It includes historic structures and monuments as well as new developments. Historic walls, churchyards and monuments may support plants which are protected or of notable species of local importance as well as provide nesting sites for birds. The sustainability of new structures in the built environment is now a crucial element of building design, with opportunities to support and enhance biodiversity. Developers can include green roofs and walls to contribute towards Building Research Establishment Environmental Assessment Methodology (BREEAM) certification through the creation of new habitats to support local biodiversity. At rooftop level there is increasing space for biodiversity delivered through green roofs.

As set out in the draft City Plan 2036 proposals for major developments will be required to achieve a minimum BREEAM rating of 'excellent' and aim for 'outstanding' against the current, relevant BREEAM criteria at the time of application. It is important that both existing structures and new developments include features that enhance and compliment the network of green infrastructure across the City and take habitats and species into consideration. Planners and developers have the opportunity to incorporate biodiversity using features such as nest boxes, biodiverse roofs and sustainable drainage systems (SuDs). As open space at ground level is limited, green roofs provide an excellent opportunity to create habitat comparable to open mosaic habitat which is also priority habitat in decline.

New developments or refurbishments must not negatively impact existing habitats without including adequate mitigation. For example, the Black Redstart population in the City is estimated to be at least 10 % of the UK breeding population. This is regarded as 'significant' and any changes to the rooftop habitat must be carefully considered. Similarly, the Peregrine Falcon is also an urban success story with a pair nesting in the City. These unique habitats need to be preserved without disturbance to ensure these rare species are protected.

5.0 Target species

The following target species have been selected as flagship species for their wider conservation value and importance. In general, they have been selected for their low population and vulnerability in the City as species to consider within development and conservation. They also act as a focus for raising awareness and targeting biodiversity conservation actions. Many of the actions to promote these species will have wider positive benefits to biodiversity in the Square Mile.

5.1 House Sparrow – Passer domesticus

Once a common sight in parks and gardens across the UK, it is now widely acknowledged that there has been a severe decline in the UK House Sparrow population. It is estimated that Greater London lost 70% of its House Sparrow population between 1994 and 2001. Due to this rapid population decline the species has received the highest level of conservation concern, red status, with the species needing urgent action. The reasons for this decline are complex and include disease, availability of food, air pollution and loss of habitat and nesting sites. The decline in House Sparrows has also been observed in the City with a few isolated colonies on the City fringes including Fortune Street Park and the Tower of London.

The priority actions for House Sparrows may also have a positive impact on all bird species present in the City, with interventions based in specific sites. Guidance will be developed and included in an ecology toolkit and SINC management plans to ensure habitat interventions are tailored to the needs of the House Sparrow. These recommendations will include provision of nest boxes, planting seed rich species, trialling supplementary feeding of protein-rich food during the nesting season and establishing more areas of dense shrub cover. It is also vital to engage with partner organisations and residents through citizen science initiatives to gain a greater understanding of the House Sparrows' remaining presence in the City.

5.2 Black Redstart – Phoenicurus ochruros

The Black Redstart is a small robin-sized bird that has adapted to live in the urban environment. There are fewer than 100 breeding pairs in the UK and the Black Redstart features on the red list of birds of conservation concern. The Black Redstart was first reported in London in the 1920s and the species has adapted to living in industrial and urban areas. The population increased significantly following the Blitz when bombsites provided the ideal habitat. The rubble between the bombed-out shells of buildings replicated the bare and stony cliffs of the Black Redstarts' natural habitat.

Central London and specifically the City of London are an extremely important location for this species, with a significant percentage of the national breeding population located in the Square Mile. The population is probably made up of resident pairs and breeding birds that travel from western to southern England between March and May and returning to wintering sites from September. The Black Redstart's population has seen a drop in numbers over the decades which have mainly been linked to loss of breeding sites as buildings have been redeveloped. The increase in the number of green roofs in the City is likely to be the key to continued success of this species in the Square Mile. A species action plan will be developed to provide developers and building managers with advice on enhancing their roofs for the Black Redstart.

5.3 Swift – Apus apus

Swifts are summer visitors to London that arrive in April and leave in August to over-winter in Africa. They feed on insects and other invertebrates. Swifts nest in the crevices of cliff faces and have adapted to make the urban landscape their home by taking advantage of features that replicate this environment, favouring the eaves and roof space of buildings. Modern building design and the redevelopment of buildings has meant Swifts have been excluded from suitable breeding sites which have led to their significant decline in the UK. It is recommended that building management guidelines include retrofitting of Swift nesting boxes in refurbished buildings as well as new developments along the Thames riverside. Once there's a greater understanding of the Thames Riverside environment, opportunities for other species such as the House Martin may be identified.

5.4 Peregrine Falcon – Falco peregrinus

Peregrine Falcons have been present in the City for several years. They are given the highest degree of legal protection under Schedule 1 of the Wildlife and Countryside Act 1981. The species is present in many urban areas with the nesting sites closely monitored. Around 20% of the European peregrine population breeds in the UK and therefore it is important to protect this species.

The Peregrine Falcon's natural habitat is cliff ledges. These birds are attracted to the City as tall buildings mimic this habitat. The species also act as a natural predator of pigeons. One pair regularly nests in the City and has successfully raised young for several years. It is important that the nesting sites of these birds are protected, that artificial nests are installed at appropriate locations and building managers and occupiers are made aware of their significance and protected status.

5.5 Bats – Chiroptera spp.

There are 17 species of bats in the UK with the Common Pipistrelle, Pipistrellus pipistrellus, being the most common species in the inner London boroughs. Bats forage on insects such as moths and beetles and have specific roosting and hibernating preferences. They forage over water and use tree lines to aid navigation. The Common Pipistrelle is the species that has been identified most frequently as roosting and foraging within the City but other crevice-roosting species are also likely to be present.

Bat activity monitoring by Friends of City Gardens has provided a vital insight and valuable data on presence of bats across the City. This data can support further opportunities to target monitoring to gain knowledge of roosts and commuting and foraging routes. Bats are regularly seen over the Barbican lakes and gardens, but they are also widespread elsewhere in the City.

Further surveying and monitoring are required to establish their distribution in the Square Mile. A group of volunteers has now been trained by FoCG to undertake bat walks which will take place during the summer months.

There continues to be a significant threat to bats in the UK in terms of loss of roosting, maternity and hibernating sites in both natural and artificial structures. Loss of suitable feeding sites and disruption of flight paths due to artificial lighting also have an impact on bat populations.

It is vital to raise awareness on the law protecting bats and their roosts from disturbance and the opportunities to increase individuals' knowledge and understanding of the potential for bats in the Square Mile. Interventions to protect habitats for bats in the City must include considering the impact of surrounding development. Habitat enhancements can include night-scented planting and appropriately-positioned artificial roosting sites such as bat boxes or bat bricks incorporated into buildings.

5.6 Wild bees (bumblebees and solitary bees)

Wild bees, which includes bumblebees and solitary bees, face serious decline from a range of pressures including habitat loss, pesticide use and climate change. Along with other types of pollinators such as wasps, butterflies, moths and hoverflies, these insects are vital to our environment with many of our food crops dependant on pollinators. The City is also home to domesticised honey bees managing in hives, often at roof level, by beekeepers.

Urban areas can provide a diverse range of flowering plants which extend the season and availability of pollen and nectar as well as providing nesting opportunities. This can be achieved by including nectar-rich planting in landscaping schemes and providing suitable nesting sites, either within the landscape or as artificial structures. Biodiverse roofs which provide an open mosaic habitat can also contribute towards providing suitable habitat.

Several of the Action Plans support wild bees and other pollinators in a number ways. This includes developing guidance on supporting pollinators in the built environment, producing an ecology toolkit and biodiversity checklist and advice notes for developers. SINC management plans will identify site specific opportunities, protect existing features and amend maintenance regimes to improve the quality and diversity of habitats. Solitary bee species are typically under recorded in the City. The action to develop a biological recording strategy will assist with developing a greater understanding of pollinators and supporting flora in the Square Mile so interventions can be tailored to support specific species.

5.7 Stag Beetle – Lucanus cervus

The Stag Beetle is the UK's largest ground living beetle with concentration in population in south-west London. The Lesser Stag Beetle has been observed in the Barbican Wildlife Garden. Stag Beetles have a lengthy life cycle lasting up to seven years from egg to adult. The larvae rely on dead or decaying wood such as fallen trees, branches and stumps. The Stag Beetle is a nationally threatened species. The population decline is related to habitat loss due to development and the sanitisation of parks and gardens with the removal of dead and rotting material. Predators such as foxes can also disrupt the Stag Beetles from completing their life cycle.

Raising public awareness of the Stag Beetle, its life cycle and the benefits of dead and decaying wood, leaf litter and not 'tidying up' green spaces will help create suitable habitats for the wider invertebrate population. Leaf composting areas will be introduced in all SINC sites as an outcome of site-specific SINC management plans. Log piles have been installed in most of the existing SINCs and will be built in newly designated sites. Stag Beetles act as an excellent flagship species to both engage with the public and promote positive habitat management for all invertebrates.

6.0 Target habitats

Two target habitats have been identified where there is the opportunity to create or enhance space for biodiversity within new or existing green spaces or the built environment. These habitats are also an important part of supporting the target species.

6.1 Open mosaic habitat

'Open mosaic habitats on previously developed land' has been identified as a priority habitat to create or restore in the London Environment Strategy. This habitat is typical of old industrial sites and was common in the City in the form of rubble of bomb damaged buildings following the Second World War. Biodiverse roofs can be created to replicate this habitat to create a range of conditions to support flora and invertebrate communities. This can be achieved with varying substrate depths, areas of bare ground and appropriately selected wildflower seeds and plug plants to suit the conditions. Features such as pebbles and stones, sandy mounds, logs and rope as well as created areas with water. Singing posts and nesting boxes for Black Redstarts can also be incorporated.

6.2 Standing open water

Standing water, in the form of ponds and lake in the City, is identified as a priority habitat in the London Environment Strategy. Ponds and lakes are important for supporting a range of wildlife including invertebrates, dragonflies, amphibians and birds as well as feeding ground for bats. There is the opportunity to improve the quality of existing ponds and lakes, create new ponds and incorporate access to water into the design of biodiverse roofs. SuDs schemes can also contribute towards increasing access to water for wildlife including pollinators as well as incorporating features such as bird baths.

7.0 Action Plans

To deliver the objectives of the BAP, four action plans have been developed. These deliver the key themes that support both the priority species and wider biodiversity priorities in the Square Mile.

Action Plan 1: Open space and habitat management

Aim: to protect and enhance habitats and species in the Square Mile

Action Plan 2: The built environment

Aim: to improve green infrastructure in the built environment

Action Plan 3: Education and community engagement

Aim: to promote a greater understanding of the City's biodiversity

Action Plan 4: Data collection, survey and monitoring

Aim: to improve monitoring and data on biodiversity in the City

7.1 Action Plan 1: Open space and habitat management

It is intended that recommendations of the review of SINCS in 2016 will be adopted via the City Plan 2036. The BAP also requires the City Corporation to develop SINC management plans for sites managed both by the City Corporation and explore what equivalent documents may be in place for privately owned/managed sites.

The SINC management plan for each site will identify and develop agreed biodiversity enhancements and promote good management with a clear framework for delivery and annual review of progress. The SINC management plans will identify the specific actions for each site enabling the City Corporation to engage in a dialogue with interested parties and identify funding opportunities.

The range of enhancements will include:

- Increasing shrub cover and berry-bearing plants including hedges.
- Providing continuous vertical habitats from ground level to the tree canopy to create dense cover for roosting and nesting.
- Planting a range of nectar and pollen-rich species, including nightscented varieties that will provide forage for pollinators throughout the year.
- Amending management practices that may harm biodiversity, and introducing practices that will enhance habitats, such as leaf composting and mulching.
- Considering the biodiversity value of planting when redesigning, refurbishing or enhancing current open spaces.
- Considering the impact of climate change on biodiversity choosing plants that are resilient to a range of climate impacts.
- Retaining and increasing deadwood for invertebrates in open space sites either as log piles or as a support for ivy, as well as for fungi.

Many of the City's open spaces such as the churchyards have a stronaly historic character that underscores their biodiversity to powerful effect. A number include historic structures such as parts of the Roman and medieval City wall, exposed Victorian building basements, elements of former churches damaged or altered after the Second World War, arayestones damaged or destroyed in the Blitz, and memorial structures. Their structures provide an excellent host for mosses, lichens and ferns, as well as other wall-dwelling species. Many of these sites are unique habitats that will be surveyed and monitored. The SINC management plans for those sites will require all interested parties, including departments within the City Corporation, Historic England and Natural England, to be made aware of any proposed developments. The sites will be managed taking into consideration the habitat features identified and the desirability of maintaining their unique historic character. Many of these sites and structures are designated assets such as scheduled ancient monuments, listed buildings, or within conservation areas and Historic Parks and Gardens, all of which have statutory protection.

The BAP will identify opportunities to understand and contribute towards the River Thames as a Site of Metropolitan Importance for Nature Conservation. The City's artificial structures and river walls and foreshore provide an important habitat for wildlife with the Thames itself providing an important ecological corridor through the heart of London. Developments guided by the Thames Strategy and Riverside Walk Enhancement Strategy must protect biodiversity and encourage enhancements to this wildlife corridor as well as improve water quality with the use of SuDS. The City Corporation works with both the Environment Agency and Port of London Authority to enhance biodiversity along the River Thames. The Thames Tideway Tunnel which will improve water quality and associated biodiversity in the Thames by reducing sewer discharges into the river.

7.2 Action Plan 2: The built environment

The built environment includes all new and existing buildings, structures and public realm developments. Action Plan 2 focuses on the important contributions the built environment can make to supporting biodiversity. These include:

- Green roofs and walls
- Tree planting
- Environmental enhancement schemes
- Biodiversity-rich planting schemes
- SuDs
- Installation of artificial nest boxes for targeted species

The draft City Plan 2036 supports the installation of biodiverse extensive or intensive green roofs and green walls on all appropriate developments. This has the potential to contribute significantly to the biodiversity and climate resilience of the City of London, complementing the network of green spaces at ground level. Well-designed green roofs provide the ideal opportunity to create the open mosaic habitat typical of brownfield sites, replicating the habitat favoured by species such as the Black Redstart. Although green roofs may have constraints depending on their location, they can provide favourable growing conditions such as a sunny aspect, which may be limited at ground level. This can increase the planting palette available to designers and provide opportunities for biodiversity. Roof gardens and terraces also play an important role in allowing access to amenity space for building occupiers and the wider community with the added value of providing connected aerial habitats.

The City has an established network of ground level open spaces. Both street trees and environmental enhancement projects have the potential to improve the connectivity of SINCs, green spaces and associated habitats. The draft City Plan 2036 acknowledges the importance of enhancement schemes which include trees and soft landscaping that promote biodiversity and link existing green spaces and routes in green corridors. The City of London Tree Strategy Part 2 also promotes the aim to increase existing stock and encourage green corridors that contribute to the biodiversity of the City.

Significant opportunities exist to improve the connectivity of green spaces and their biodiversity value. Development of the built environment has the potential to enhance the habitats of priority species that have adapted to and made the Square Mile their home. All buildings and infrastructure must therefore positively contribute to a range of sustainability issues and opportunities with biodiversity a key component. It is imperative that at an early stage in any development or landscape improvement that consideration must be given to both the impact of new developments and potential for biodiversity enhancements are assessed. To ensure the maximum benefits to biodiversity are realised, the context of where the site sits in relation to the local biodiversity network, assessing assets such as individual trees, open spaces, SINCs, water bodies and how the development can enhance, contribute and not detract from what is already there.

Considerations for not negatively impacting on the existing biodiversity network include:

- Ensuring lighting associated with construction sites does not unnecessarily illuminate nearby open spaces and disrupt bat foraging routes.
- Ensuring new lighting in public realm enhancement schemes does not have an adverse impact on biodiversity.
- Over provision of nesting boxes for territorial species in an area that can only support small numbers e.g. Peregrine falcon

Assets that should be considered to be included in any enhancement include:

- Installing well positioned and specified artificial nesting boxes or habitats.
- Retrofitting artificial structures to improve habitats for species such as bats and pollinators.
- Providing standing water on site
- Introducing log piles and other deadwood habitats
- Diverse planting schemes that provide habitat and food for wildlife

Temporary assets that can be introduced during development or on vacant sites include:

- Introducing temporary green walls or other pollen and nectar-rich features on construction sites and on hoardings which in some circumstances may be in place for many years.
- Taking advantage of vacant sites such as planters, beds or borders or areas undergoing redevelopment by sowing wildflower species to provide pollen and nectar as well as a temporary visual amenity.

Wherever possible providing interpretation on the background and history of a site as well as importance of features such as street trees and green roofs. Such suggestions can be developed in guidance and advice notes to support the BAP.

7.3 Action Plan 3: Education and community engagement

Action Plan 3 covers a wide remit, including:

- Promoting a greater understanding of the City's biodiversity and informing stakeholders how their work or leisure might impact on the natural environment.
- Providing opportunities for stakeholders to contribute towards initiatives designed to enhance biodiversity in open spaces and to learn new skills.
- Encouraging volunteers and City Gardeners to work together on biodiversity projects.

The City has several established community and resident groups that engage in activities which promote and enhance the value of biodiversity in the community. These activities include:

- Weekly gardening sessions to support biodiversity at the Barbican Wildlife Garden by the BWG supported by a City Gardener.
- Workshops and other activities organised by BWG.
- Weekly garden maintenance sessions and one-off green space projects organised by FoCG volunteers for residents and corporate volunteers.
- Bird feeding and bird bath cleaning in 10 City gardens by FoCG volunteers
- Monthly Bee Walks to support the national recording scheme run the Bumblebee Conservation Trust.
- Data collection and reporting to GiGL by FoCG and BWG volunteers.
- Nic's Secret Garden and Plant Rescue Nursery created and maintained by a City Gardener, with the assistance of BWG volunteers in an otherwise unused City space.
- Middlesex Street Gardeners' Club and Golden Lane Estate Allotment Group – "Golden Baggers"
- Support and participation of campaigns such as the Royal Horticultural Society(RHS) 'It's Your Neighbourhood and London in Bloom that bring together City businesses, residents and community groups to have a positive impact on biodiversity in the Square Mile.
- The use of social media and dedicated websites by FoCG, BWG and Golden Baggers.

Community and resident groups provide a significant contribution in supporting biodiversity in terms of raising awareness of species and improving habitats. Their work should be supported and assistance provided in identifying funding streams that support their work.

National award schemes such as RHS Britain in Bloom and the Green Flag Awards and Green Heritage Site Accreditation managed by Keep Britain Tidy recognise the importance of considering biodiversity in all aspects of parks and open spaces management. The schemes also provide a stimulus for managers to strive for excellence and promote their achievements to a wider audience. The City Gardens team will encourage City businesses to undertake corporate social responsibility (CSR) commitments in the City's green spaces. This will provide the ideal opportunity for City businesses and their employees to gain a greater understanding of the network of open spaces available in the City and make a positive contribution to biodiversity. This has a positive impact on building a stronger and engaged community in the City as well as developing the skills of individuals.

The City Gardens team will support colleagues, residents, businesses and visitors in raising awareness of the value of biodiversity in the urban landscape and how they can help to protect and enhance it. The City Corporation supports the London-wide campaign to raise awareness of what SINCs are and their importance in the context of both the City and London.

Biodiversity is an excellent platform to engage with children and to increase their understanding of the natural world. There are two state primary schools that take the majority of the City's resident children – The Aldgate School in the east of the City and Prior Weston, a London Borough of Islington primary school on the north-west edge of the City, adjoining Fortune Street Park, as well as another primary school, City of London Academy Islington (CoLPAI) also on the north-west edge of the City. In addition to these state schools there are several private schools and nurseries in or on the fringes of the Square Mile. Volunteer groups already work with both state schools and other nurseries to provide learning opportunities and support gardening activities. Both the City Corporation and volunteer and community groups can be of key importance in working with schools to support curriculum-based biodiversity activities. The City Gardens team will also identify and support opportunities for adult learning, both for individual personal development and to support biodiversity.

The City Corporation website will be developed to include information on biodiversity of the City, raise awareness of SINCs and explain what individuals and businesses, especially though volunteering and CSR, can do to support biodiversity in the Square Mile. Communication channels should be used to raise awareness how biodiversity is being supported as well as disseminate good practice guidance. They will also be used to signpost respondents to other more detailed sources of information and how they can engage with delivery of the BAP.

7.4 Action Plan 4: Data collection, surveys and monitoring

It is essential that data on species and habitats is systematically collected and digitally recorded. This information can be used to inform planners and developers, help shape management plans and demonstrate the importance of green spaces and associated green infrastructure features. The data collected is a vital element for developing an evidence base for evaluating the success of interventions, and guiding future work. It is important that the data is publicly accessible, and that the City Corporation contributes to the regional and national agenda to understand and protect biodiversity.

Analysis of the available data on protected species in the City shows a varied distribution of protected species which can possibly be linked to under-recording and monitoring of species. The lack of species records does not necessarily mean lack of presence. There is no evidence of recent species records for several SINCs, which limits the ability to assess their current situation. Therefore, there is a need to target the monitoring of SINCs and in particular underreported SINCs. The management and monitoring of green roofs once installed is also an important to improve the understanding of how green roofs contribute to urban biodiversity.

GiGL is London's environmental record centre. It receives, collates and manages detailed information on aspects of open spaces, including habitat and species information. This data is available to planners and developers, to enable them to make informed decisions to protect and enhance biodiversity. GiGL's habitat and species datasets provide valuable information and it is important that this information is understood and considered to ensure that informed decisions are made.

More can be done to encourage the monitoring of successful habitats, provide information to make enhancements and inform future projects. The City Gardens team, planners and volunteers will actively engage with developers and building managers to encourage more ecological surveys of these habitats and the sharing of information. Data is invaluable to support funding bids and further ensure that projects and developments take into consideration the specific conditions that influence biodiversity in the City.

The Open Spaces Department (OSD) has a Service Level Agreement (SLA) with GiGL which provides access to data and services that can inform the decision making process to protect and enhance biodiversity. The data and interpretation provided by GiGL has been essential for supporting the SINC Review process and Biodiversity Audit as well as providing the evidence base for the BAP. The Action Plan highlights the need to continue to maintain an SLA with GiGL and promote and utilise the data and services available. The datasets held by GiGL should be reviewed to ensure they are an accurate reflection of the open space provision and urban greening in the Square Mile. The OSD will work in conjunction with the DBE when commissioning, collating and monitoring data.

The BAP identifies the need to monitor protected, priority and City specific target species. This can be achieved by a combination of data collection methods including commissioning systematic and targeted species surveys to gain a better understanding of the species and supporting habitats. A biological recording strategy will be developed to identify the priorities for monitoring from a species data perspective. The strategy will identify opportunities to inform the City's community about the City's open spaces and biodiversity and identify both existing and new opportunities to engage, such as RSPB Big Garden Birdwatch and City Nature Challenge. Species monitoring and recording also provides an accessible, achievable and measurable outcome for investment in biodiversity identification and survey training.

8.0 Funding opportunities

The City Gardens team will work with volunteers to access funding and sponsorship opportunities as they arise. These may be national schemes run by corporates, Heritage Lottery funding, Community Infrastructure Levy (CIL) funds, planning obligations commonly referred to as section 106 agreements or other City funds including the Social Value element of the City Corporation's procurement process.

9.0 How the BAP will be monitored and delivered

As progress towards achieving the actions of the BAP is made, it is important to record and communicate this to the members Partnership Group as well as the wider public. Lead Partners will update their actions on an annual basis and meet to review progress made. Biodiversity information, including the annually updated actions which will be provided to committee and made available to the Partnership Group.

Table 3 - Action Plan 1: Open space and habitat management

Action No	Action	Lead Partner	Contributing Partner	To be completed by
OSHM1.1	Adopt via the City Plan 2036, the recommendations of the 2016 review of Sites of Importance of Nature Conservation (SINCs) in the City of London.	Col PP	Col OSD	2022
OSHM1.2	Schedule and secure funding for a future SINC review. Identify any proposed new sites, boundary changes or upgrades to be included as part of the review.	CoL OSD	SINC landowners/ managers	2025
OSHM1.3	Assess the potential of the Barbican Wildlife Garden to qualify as a Local Nature Reserve (LNR) and consider if that is an appropriate designation for this garden.	CoL CCS CoL OSD	BWG Col PP	2023
OSHM1.4	Commission and secure funding of an ecologist to produce SINC management plans for all City Corporation managed SINC sites. Work with landowners and managers to develop management plans for privately owned/managed sites.	CoL OSD		2026
OSHM1.5	Carry out a baseline survey and commission and adopt a black redstart species action plan.	CoL OSD	FoCG	2024
OSHM1.6	Set up of a multi-departmental working group to develop guidance on managing historic walls, memorials and structures for biodiversity.	Col HES	CoL OSD CoL CS	2024

Table 4 - Action Plan 2: The built environment

Action No	Action	Lead Partner	Contributing Partner	To be completed by
BE2.1	Develop an ecology toolkit and biodiversity checklist for the City of London Corporation staff as tool to support projects and public realm schemes.	CoL OSD	Col DBE	2022
BE2.2	Following the enactment of the Environment Bill, assess how the City Corporation will meet its duties as a local planning authority in respect to aspects of the bill that are covered by amendment to the Town and Country Planning act, such as Biodiversity net gain.	CoL PP	Col OSD	2026
BE2.3	Following the enactment of the Environment Bill, assess how the City Corporation will meet its duties as a local authority and implement strategies that are not covered by amendments to the Town & Planning Act.	CoL OSD	Col PP	2026
BE2.4	Develop Sustainability Planning guidance encompassing, but not limited to, Green infrastructure, Biodiversity and Climate Resilience to ensure Developers and Planning officers take appropriate steps at pre-planning application and design development stages to meet local policy and national legislation.		CoL OSD	2024
BE2.5	Review and amend the existing planning application validation process to incorporate consideration of whether biodiversity surveys and reports are relevant and necessary for an application.	CoL DM	Col OSD	2022

Table 5 - Action Plan 3: Education and community engagement

Action No	Action	Lead Partner	Contributing partner	To be completed by
ECE3.1	Provide advice, guidance and training to support the BAP both for City Corporation employees and the wider City community including residents, businesses, visitors, schools, colleges, developers and land managers.	CoL OSD	BAP PG	2026
ECE3.2	Support resident and community groups that contribute to local and national species recording and monitoring initiatives, through providing direct support for initiatives, by providing training and by collecting and promoting best practice that current groups have demonstrated.	CoL OSD	FoCG BWG	2026
ECE3.3	Develop guidance on supporting pollinators in the built environment by enabling biodiversity partnership working group.	CoL OSD	BAP PG	2023
ECE3.4	Promote and disseminate guidance for the London Invasive Species Initiative (LISI) species to raise awareness of these species and how they should be managed.	CoL OSD		2022

Table 6 - Action Plan 4: Data collection, surveys and monitoring

Action No	Action	Lead Partner	Contributing partner	To be completed by
DCSM4.1	Maintain, improve, promote and utilise the information and services available via the GiGL SLA including to be achieved through providing internal training.	CoL OSD	CoL DM CoL PP CoL M&I	2026
		COL PP COL DM	т	2022
DCSM4.3 Produce a biological recording strategy to target SINCs with under-recording of species and promote good practice. To include identification of target sites, promotion of best practice, identifying and promoting appropriate recording methods for different audiences and promoting e.g. i-record for public and staff.		2023		
DCSM4.4	Identify funding to carry out a black redstart and bat baseline survey to guide future management interventions and enhancements.	ine CoL OSD 2025		
DCSM4.5	Undertake below ground mapping to identify opportunities and barriers for establishing new green infrastructure and SuDs within the public realm.	Col ERT	GiGL	2024

Table 7 - Key for action plan tables

Abbreviation	Organisation
CoL OSD	City of London Corporation, Open Spaces Department
CoL DBE	City of London Corporation, Department of Built Environment
CoL PP	City of London Corporation, Planning Policy
CoL DM	City of London Corporation, Development Management
CoL M&I	City of London Corporation, Monitoring & Information team
CoL CS	City of London Corporation, City Surveyor's Department
COL ERT	City of London Corporation, Environmental Resilience team
CoL CCS	City of London Corporation, Community and Children's Services
BAP PG	City of London Biodiversity Action Plan Partnership Group
FoCG	Friends of City Gardens
BWG	Barbican Wildlife Group
GIGL	Greenspace Information for Greater London

10.0 Appendices

10.1 Appendix 1: National, regional and local policy

The list below outlines the key policy and legislation at a local, regional and national level to which the BAP contributes towards their delivery and support:

National policy

A Green Future: Our 25 Year environment Plan

Natural Environment and Rural Communities (NERC) Act (2006)

National Planning Policy Framework 2019

Regional policy

The London Plan 2021

London Environment Strategy 2018

Local policy

City of London Local Plan 2015

Draft City Plan 2036

City of London Climate Action Strategy 2020-2027

City of London Air Quality Strategy 2019-2024

City of London Transport Strategy May 2019

City of London Lighting Strategy 2018

Joint Health and Wellbeing Strategy 2017-2020

City of London Tree Strategy Part 1 SPD 2012

City of London Tree Strategy Part 2 2012

City of London Open Spaces Strategy SPD 2015

City Gardens Management Plan 2011 – 2016

10.2 Appendix 2: Protected Species and/or Priority Species records in the City of London

Common name	Scientific name
Frequently occurring	
Black Redstart	Phoenicurus ochruros
Buff-tail Bumblebee	Bombus Terrestris
Common Cardar Bee	Bombus Pascuorum
	Rana temporaria
Common Frog Common Pipistrelle	Pipistrellus pipistrellus
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Dunnock	Prunella modularis
Grey Heron	Ardea cinereal
Grey Wagtail	Motacilla cinereal
Herring Gull	Larus argentatus
House Sparrow	Passer domesticus
Kestrel	Falco tinnunculus
Lesser Black Backed Gull	Larus fuscus
Peregrine falcon	Falco peregrinus
Small Garden Bumblebee	Bombus Hortorum
Starling	Sturnus vulgaris
Swift	Apus apus
White-tailed Bumblebee	Bombus Lucorum
Wigeon	Anas Penelope
Woodcock	Scolopax rusticola
Rarely Occurring	
Arctic tern	Sterna paradisaea
Avocet	Recurvirostra avosetta
Cinnabar	Tyria jacobaeae
Common Porpoise	Phocoena phocoena
Common Seal	Phoca vitulina
Early Bumblebee	Bombus pratorum
Firecrest	Regulus ignicapilla
Gadwall	Anas Strepera
Goldcrest	Regulus regulus
Hedgehog	Erinaceus europaeus
House Martin	Delichon urbicum
Jersey Tiger	Euplagia quadripunctaria
Kittiwake	Rissa tridactyla
Red-tailed Bumblebee	Bombus lapidarius
Lesser Redpoll	Acanthis cabaret
Little egret	Egretta garzetta
Meadow Pippet	Anthus pratensis
Mistle Thrush	Turdus viscivorus
Mute Swan	Cygnus olor
Nathusius's Pipistrelle	Pipistrellus nathusii
Pied Plycatcher	Ficedula hypoleuca
-	
Purple Emperor	Apatura iris
Red kite	Milvus milvus
Redwing	Turdus iliacus

Common name	Scientific name
Rarely Occurring	
Rook	Corvus frugilegus
Rudy Darter	Sympetrum sanguineum
Shag	Phalacrocorax aristotelis
Short-eared Owl	Asio flammeus
Silver-washed Fritillary	Argynnis paphia
Skylark	Alauda arvensis
Song Thrush	Turdus philomelos
Stag Beetle	Lucanus cervus
Stock Dove	Columba oenas
Swallow	Hirundo rustica
Tawny Owl	Strix aluco
Tree Sparrow	Passer montanus
Willow Warbler	Phylloscopus trochilus
Wryneck	Jynx torquill

10.3 Appendix 3: Open space typology and categorisation

The open space typologies used for the City of London Open Spaces Audit are identified in the table below:

Typology	Primary Purpose
Civic Spaces	Civic and market squares, and other hard-surfaced areas designed for pedestrians. Providing a setting for civic buildings, public demonstrations and community events.
Primary Civic Spaces	Civic and market squares.
Secondary Civic Spaces	Other hard-surfaced areas designed for pedestrians.
Parks and Gardens	Accessible, high-quality opportunities for informal recreation and community events.
Cemeteries and Churchyards	Quiet contemplation and burial of the dead often linked to the promotion of wildlife conservation and biodiversity.
Amenity Spaces	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas.
Natural and semi-natural greenspaces	Wildlife conservation, biodiversity and environmental education and activities.
Local Green Corridors	Wildlife conservation, biodiversity, environmental education and activities.
Provision for Children and Young People	Areas designed primarily for play and social interaction involving children and young people, such as equipped play areas, ball courts, (and) skateboard areas.
Outdoor Sports Facilities	Participation in outdoor sports, such as pitch sports, tennis, bowls, athletics or countryside or water sports.
Allotments, Community Gardens and Urban Farms	Opportunities for those people who wish to do so to grow their own produce as part of the long-term promotion of sustainability, health and social inclusion. Open countryside located on the boundary of an urban area.

10.4 Appendix 4: Public Open Space Categorisations

The table below provides an overview of the Public Open Space categories as defined in the London Plan 2021. Spaces are categorised according to their size, facilities and local importance and provide a clear method to evaluate open space provision and type across Greater London.

Open Space Categorisation	Size Guidelines	Distances from homes
Regional Parks	400 hectares	3.2 to 8 kilometres
Metropolitan Parks	60 hectares	3.2 kilometres
District Parks	20 hectares	1.2 kilometres
Local Parks and Open Spaces	2 hectares	400 metres
Small Open Spaces	Under 2 hectares	Less than 400 metres
Pocket Parks	Under 0.4 hectares	Less than 400 metres
Linear Open Spaces	Variable	Wherever feasible

10.5 Appendix 5: Registered Parks & Gardens

The following sites in the City of London feature on the Historic England 'Register of Historic Park and Gardens of special historic interest in England' which identifies sites of particular historic significance:

Site	Grade
Finsbury Circus	
Golden Lane Estate	II
Designed Landscape	
Inner Temple	II
Middle Temple	II
The Barbican	*

10.6 Appendix 6: Glossary

Explanation of terms used in BAP:

All London Green Grid

The All London Green Grid (ALGG) is a Greater London Authority (GLA) framework to promote the design and delivery of 'green infrastructure' across London.

Barbican Wildlife Group (BWG)

The BWG is a group of volunteer local residents who, with the City Gardens team, preserve, protect and enhance biodiversity in Barbican Wildlife Garden for the education and enjoyment of all Barbican Estate residents and guests. BWG also promotes the conservation the Garden's many habitats and its retention as a wildlife haven within the City. It also aims to foster and promote biodiversity within the Estate and to work with like-minded groups and organisations to promote and foster biodiversity within and beyond the Square Mile.

Biodiversity

Biodiversity is the term used to describe the variety of life on Earth. This includes wildlife such as animals, birds and plants, the habitats which are the places they live and how they all interact which their surroundings as part of the ecosystem.

Building Research Establishment Environmental Assessment Methodology (BREEAM)

BREEAM is the world's leading sustainability assessment method for master planning projects, infrastructure and buildings. It addresses a number of lifecycle stages such as new construction, refurbishment and in-use.

Citizen Science

Citizen science is scientific research conducted by amateur or non-professional enthusiasts. Citizen science may be performed by individuals or groups of volunteers and interested parties.

City of London Corporation

The City of London Corporation provides local government and policing services for the financial and commercial heart of Britain, the 'Square Mile'.

City Gardens, Open Spaces Department

The City Gardens team are responsible for tree and green space management for around 200 open spaces in the Square Mile including parks, gardens, churchyards, plazas and highway planting. The City Gardens team is also responsible for Bunhill Fields Burial Ground just outside the City boundary in the London Borough of Islington.

Corporate Social Responsibility (CSR)

CSR is a process which companies choose to follow to take responsibility for their actions and encourage positive impacts through their activities on the environment, consumers, employees, shareholders, communities and all other members of the public who may also be considered as stakeholders.

Department for Environment Food & Rural Affairs (Defra)

Defra is a UK government department responsible for safeguarding our natural environment, supporting our world-leading food and farming industry, and sustaining a thriving rural economy. Our broad remit means we play a major role in people's day-to-day life, from the food we eat, and the air we breathe, to the water we drink.

Friends of City Gardens (FoCG)

A community group of volunteers comprising City residents, City of London Guides, City workers and other interested parties. They support the City Gardens Team and have a special interest in promoting and enhancing biodiversity.

Greenspace Information for Greater London (GiGL)

GiGL is the capital's environmental records centre that collates, manages and makes available detailed information on London's wildlife, parks, nature reserves, gardens and other open spaces.

Green Corridors

Almost continuous areas of open space which are linked. They can act as wildlife corridors and serve amenity, landscape and access roles.

Green Infrastructure

A strategically planned and managed network of green spaces and other environmental features vital to the sustainability of any urban area. This includes although not exclusively trees, green roofs and walls and green corridors.

Draft City Plan 2036

The City Corporation's Local Plan for the future development of the City of London, setting out what type of development the City Corporation expects to take place and where. It sets out the City Corporation's vision, strategy and objectives for planning up to 2036, together with policies that will guide future decisions on planning applications.

London Biodiversity Partnership

The London Biodiversity Partnership was formed in 1997 to bring together organisations to benefit wildlife and boost the capital's green space.

National Planning Policy Framework (NPPF)

Sets out government's planning policies for England and how these are expected to be applied.

Open Mosaic Habitat

Open Mosaic Habitats on Previously Developed Land (OMH) is defined by the Defra. They are found mainly in urban and formerly industrial areas and have high biodiversity value. This value includes rare plants, mosses, lichens and a large number of rare invertebrates, especially bees, wasps and beetles.

Open Space

Open space is land which is not built on and which has some amenity value or potential for amenity value. Amenity value is derived from the visual, recreational or other enjoyment which the open space can provide, such as historic and cultural interest and value. This includes open spaces in public or private ownership.

Sites of Importance for Nature Conservation (SINCs)

Sites are designated as SINCs to highlight areas of ecological value in the City. The sites are graded as being of Metropolitan (SMINCs), Borough (SBINCs), or Local (SLINCs) importance.

Sustainable Drainage System (SuDS)

A range of sustainable measures for surface water management which reduce the amount, flow or rate of surface water discharge into sewers.

Open Spaces Department

The City of London Corporation owns and manages a number of Open Spaces, Parks and Gardens in and around London as part of its commitment to sustaining a world class city. Each open space is a unique resource managed for the use and enjoyment of the public and for the conservation of wildlife and historic landscape.

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