Southwark Biodiversity Action Plan 2013 – 2019

Making Space for Natural Neighbours

Final draft 2013







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Foreword

Southwark's open spaces and built environment provide homes for a range of common and rare wildlife, including birds, bats, invertebrates and plants. This Biodiversity contributes to our health and wellbeing, provides places for us to enjoy and helps us to adapt to the challenge of climate change.

The Council, both as civic leader and a major landowner in Southwark, has a responsibility to protect the borough's natural heritage and leave a lasting legacy for the future. Fulfilling this responsibility for our environment and the multitude of species it sustains is only possible when we understand the complex web of interactions between the species and habitats present.

In 2010 the council promised to increase biodiversity in Southwark and I am pleased to report that the biodiversity of Southwark's green spaces is improving and the percentage of all local spaces in where positive conservation management has taken place now stands at 76 per cent. Some of the work includes:-

- Brenchley Gardens and Snowsfields School Nature Garden had enhancements to their ponds, building stag beetle loggeries and native planting by ecology officers and volunteers,
- Southwark's Parks and open spaces increased their habitats of wildflower meadow, ponds and reedbed by 0.5 hectares.
- Russia Dock Woodland had extensive ecological enhancement including the creation of new meadow, new reedbed, and enhancement of the wet woodland.
- Over 500 volunteers have worked with the parks department to manage and enhance the wildlife of Southwark.

Building on this success this plan sets out how we will continue the important work of conserving and enhancing our environment. It sets out the guiding principles of how we will work together with our partners to deliver this plan. The Action Plan has been developed by the Council in collaboration with the Southwark Biodiversity Partnership and I would like to thank them for their contribution and support.

Councillor Barrie Hargrove,

Cabinet Member for Transport, Environment and Recycling

Executive Summary

Nature conservation in cities is very important. The fragmentation of the natural habitats in the wider countryside and the dominance of agri industry mean that wildlife is increasingly reliant on the urban environment for its survival. The matrix of parks and open spaces and gardens joined together by wildlife corridors provides the opportunity for wildlife to flourish and for people to experience a stimulating recreational experience in the urban environment.

To meet this challenge Southwark Council believes that the conservation and enhancement of the natural environment and biodiversity is important for a number of reasons:

- To meet our legal commitments under the Natural Environment and Rural Communities Act 2006.
- For our health and wellbeing
- Helps to regulate our environment
- Helps to provide a sense of place and community pride
- Provides an education and engagement resource

The Biodiversity Action Plan (BAP) covers 5 themes:

- The Natural Environment and Ecosystems Services
- The Urban Forest
- The Built Environment
- Climate Change and Sustainability
- Connecting with Nature

The plan will guide the Southwark Council and its partners in conserving the natural environment and its flora and fauna. Actions in the BAP are classified as 3 types:

- Operational actions which address current management of flora and fauna.
- Planning actions which support spatial policies or address development management.
- Resources actions which set actions for increasing habitats and species in Southwark. These include aspirational targets for long term increase of natural habitat and species in line with national and regional targets.

This plan will produce tangible results and result in the following benefits for Southwark:

- Improved open space and safer parks
- Increased educational opportunities through events and training
- Increased health through promotion of walks and volunteering activities
- Greening the borough through habitat management and creation
- Increased cultural and leisure opportunities
- Improved environmental management
- Increased awareness of wildlife and conservation
- Increased populations of endangered species

 Increased sustainability of the built environment through green roofs and SUDs schemes

This plan has been developed in accordance to national and regional policies on biodiversity. The BAP has also incorporated the key objectives of Southwark strategies and policies such as the Core Strategy 2011, the Sustainable Community Strategy and the Open Spaces Strategy.

The plan will be delivered by Southwark Council in partnership with the Southwark Biodiversity Partnership and the wider community. Partners and community groups manage some of our Local Nature Reserves and sites of Importance for Nature Conservation.

We will report our progress to Department Environment of Food and Rural Affairs (DEFRA) through the Biodiversity Action Reporting System and through the Southwark Corporate Plan. The partnership will report progress on an annual basis.



Belair Park Lake

Section 1

1. Introduction

The second Southwark Biodiversity Action Plan outlines how Southwark Council will work with its partners to conserve, enhance, and promote biodiversity in Southwark. This BAP will update and supersede previous Biodiversity work undertaken for the Council from 2006 to 2011.

Following the Lawton Review 2010, 'making space for nature', the government published the Natural Environment White Paper 'Securing the value of nature' 2011 and the Biodiversity 2020 strategy. This was supported by the UK National Ecosystem Assessment, 2011. ¹

The development of the concept of Ecosystems Services has broadened the thinking as to how we value biodiversities contribution to our existence. Conserving and enhancing biodiversity is fundamental to our wellbeing. It contributes to our health, education and our economic prosperity. It provides us with a range of benefits such as food, water, materials, flood defences and carbon sequestration. It allows us to adapt to the threat of climate change and other pressures on our land. Importantly it offers quality green spaces for people to enjoy in their free time.

The built environment is now seen as an important urban habitat and an opportunity to enhance biodiversity, rather than an obstacle to wildlife. Creation of biodiverse green roofs, living walls and Sustainable Urban Drainage has been integrated into new developments for some years. Ensuring that the built environment includes urban wildlife habitat and the policies of the London plan will allow developments to achieve the highest ratings under the BREEAM, or Code for Sustainable Homes (CfSH), schemes. This also helps urban cooling and offsetting the impacts of climate change.

The Southwark Biodiversity Action Plan is a partnership document that identifies the priorities for biodiversity in Southwark and sets out a programme of action to improve biodiversity value across the borough. The plan draws together a series of actions under 5 central themes that will ensure that best practice, policy and legislation are followed, and Southwark's residents are provided with opportunities to experience the natural environment.

The plan has been produced in collaboration with the Southwark Biodiversity Partnership (SBP). It outlines how the public, private and voluntary sectors will work together to deliver quantifiable results for biodiversity and the environment. The focus and content of the BAP have been determined through ongoing consultation with SBP and builds on the first BAP 'Work for Wildlife'. As a result the Southwark BAP will focus on the following 5 themes:

- The Natural Environment and Ecosystems Services
- The Urban Forest
- The Built Environment
- Climate Change and Sustainability
- Connecting with Nature

A report on the achievements of the first BAP is available from the following link.

http://www.southwark.gov.uk/downloads/download/287/working for southwarks wild life

¹ In Nagoya 2010 the Convention on biological diversity 2010 produced 20 headline targets know as the Aichi Targets which were integrated into the UK Biodiversity Strategy.

1.1 What is biodiversity?

Biodiversity is the variety of all living things on Earth, from micro-organisms to mammals. It includes all fungi, plants, animals, the genetic information they contain, the ecosystems they form and the habitats in which they live.

In Southwark we refer to biodiversity as 'wildlife': this includes mammals, plants, lichens, and fungi. The places where wildlife lives, such as woods, rivers, lakes, parks and buildings, are what we refer to as 'habitats'. The quantity of biodiversity is referred to as 'Biomass'.

1.2 Why a Biodiversity Action Plan for Southwark

This Biodiversity Action Plan is a tool kit providing guidance on the protection, enhancement and promotion of the natural environment. Biodiversity Action Plans are material documents in development management for making planning decisions. It underpins policies in the Core Strategy and Council Plan. This plan helps meet legal commitments and contributes to targets set in national and regional plans for conserving biodiversity. The plan provides strategic direction for the departments responsible for the management of parks and open spaces, the public realm and the Southwark Biodiversity Partnership. The Council performance plan has a specific target for improving biodiversity shown in the table below.

2010 Baseline	2011/2012 Target	2012/13 Target	2013/2014 Target
72.88%	76.27%	81.35%	83.30%

Table 1 Biodiversity management target for SINC sites 2012 - 2014

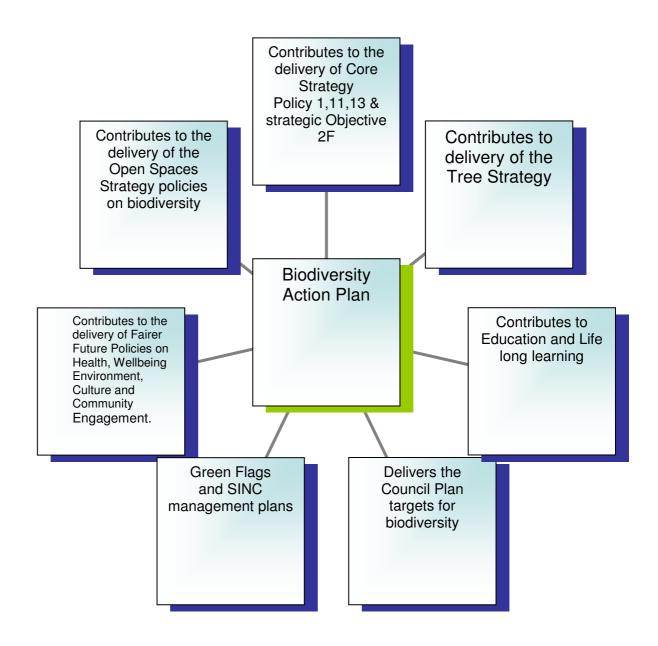
Local BAP actions are reported nationally through the Biodiversity Action Reporting System.

BAP backgrou	ind & hierarchy
UK BAP	The UK BAP 'Working with the grain of Nature' 2002 was developed by the Government in response to the 1992 Convention on Biological Diversity. The UK BAP identifies priority habitats and species for conservation across the UK.
London BAP	The London BAP 'Connecting with London's Nature' 2002, was coordinated by the London Biodiversity Partnership. The plan focuses on national priority habitats and species and includes regional priorities.
Southwark BAP	The Southwark BAP focuses 5 themes and includes actions for national and regional habitats and species present in the Borough. The Southwark BAP is a tool kit to help deliver a program of actions to improve biodiversity in Southwark.
Other BAP's	BAP's of Neighbouring boroughs are also important.

Table 2 BAP background and hierarchy

1.3 What this plan contributes to in Southwark.

This BAP delivers biodiversity targets in accordance to national, regional and local policies and strategies. The diagram below illustrates the plans contribution to service delivery in the following areas:



This plan will produce tangible results and deliver the following benefits for Southwark:

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Improved open space and safer parks

- Increased educational opportunities through events and training
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- Improved environmental management
- Increased awareness of wildlife and conservation
- Increased populations of endangered species
- Increased sustainability of the built environment through green roofs and SUDs schemes

The BAP will guide and support the following elements of ecological management provided by Southwark Council.

- Support Development Management through assessment of planning applications and advise on appropriate mitigation and ecological enhancement as required.
- Maintain a database of species and habitats in Southwark
- Contribute to continuous improvement of council service delivery.
- Provide performance scrutiny through the National Biodiversity Action Reporting System and through annual review of the BAP
- Improve management through production of management plans for all our SINC sites.
- Support planning policy in protecting and enhancing nature sites



Black redstart

Section 2

2. Biodiversity Policy and Legislation

Southwark Council like all Local Authorities has a number of statutory obligations in relation to biodiversity policy and legislation. As a public body, Southwark Council is required to comply with the 'Biodiversity Duty' as set out in the Natural Environment and Rural Communities Act 2006, (NERC). For local authorities this means that biodiversity must be considered in all aspects of how the organisation functions.

The Biodiversity Duty

Every public body must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.

Table 3 the biodiversity duty

There are a number of acts, regulations, policies and strategies ranging from international to local that are material considerations for the Southwark BAP.

Responsibilities and contributions

Under the lead Member for Transport, Environment and Recycling the following departments or sections contribute to this plan.

Department/Section	Responsibility	Contribution to the BAP
Public Realm	Management of parks and open space, trees, highways, docks &	Plans and delivers habitat management and enhancement ensuring
	marinas in the borough.	protection of species and promotion of biodiversity.
Planning Policy	Production of spatial planning documents and supporting evidence base	Development of biodiversity policy in planning documents
Development management	Management of development through planning applications	Scrutiny of planning applications and conditioning of mitigation or ecological enhancement
Housing	Management of the housing	Delivers habitat management on housing land
Sustainable services	Management of waste, cleaning and environmental protection	Delivers plans for air quality and flood management. Promotes sustainable services such as recycling
Property management	Delivers strategic regeneration projects	Protects natural habitats and seeks ecological enhancement through delivery of regeneration projects.

Biodiversity legislation and p	olicies relevant to Southwark				
European	The Conservation (Natural Habitats, &c.),				
'	Regulations 1994				
	Natural Environment and Rural Communities Act				
	2006				
	National Planning Policy Framework 2011				
	ODPM Circular 06/2005 Biodiversity and				
	Geological Conservation - Obligations and their				
National	Impact within the Planning System				
INALIONAL	Wildlife and Countryside Act 1981 (as amended)				
	Countryside and Rights of Way Act 2000				
	The Natural Environment White Paper 2011				
	England's Wildlife and Ecosystems Services				
	Strategy 2011				
	Working with the grain of nature, The UK BAP				
	The London Plan Policies				
	2.18 Green infrastructure				
	5.3 Sustainable design and construction				
	5.10 Urban greening				
	5.11 Green roofs and development site environs				
	5.13 Sustainable drainage				
	7.18 Protecting local natural space and addressing				
Regional	local deficiency				
riogional	7.19 Biodiversity and access to nature				
	7.21 Trees and woodlands				
	7.22 Land for Food				
	7.28 Restoration of the Blue Ribbon Network				
	The All London Green Grid, Draft Supplementary				
	Planning Guidance (SPG)				
	Connecting with London's nature: The Mayor's				
	Biodiversity Strategy 2002				
	The Core Strategy Policies Strategic policies:1,11,				
	13, & Strategic Objective 2F				
	Saved Southwark Plan policy 3.28 Biodiversity				
	The Community Strategy 2016				
	The Council Plan				
	Supplementary Planning Document, Sustainable				
Southwark Policies	Design and Construction SPD 15 2008				
	Sustainable Community Strategy				
	Climate Change Strategy 2010				
	Parks Light Pollution Policy 2010				
	Southwark Open Spaces Strategy 2013				
	Tree Strategy 2013				
	Food Strategy 2011				
	NHS Southwark strategic plan 2010 - 2015				

Table 4 Biodiversity legislation and policies relevant to Southwark



Entrance to the railway tunnel in Sydenham Hill Wood LNR (Now a registered bat roost).

2.1 Biodiversity in Southwark.

Southwark has a rich ecological resource with over 130 parks and open spaces. Of those sites 59 are designated Sites of Importance for Nature Conservation (SINC) including 5 Local Nature Reserves (LNR's). We also have a strong heritage in urban ecological conservation. In 1976 The William Curtis Ecological Park, Britain's first urban ecological park was created by the Thames. The City Hall building now stands on the site. Stave Hill Ecological Park was created in Rotherhithe to replace the original site. The Trust for Urban Ecology was formed to manage this site and now manage 2 other sites. The London Wildlife Trust manages Sydenham Hill Wood, our largest area of ancient woodland and the unique Centre for Wildlife Gardening in Peckham.

Southwark is home to important populations of nationally and internationally scarce habitats and species. Ancient woodland, reedbed, stag beetles, and bats are all found in Southwark. All these coexist within this inner city and densely populated environment.

2.2 The Southwark Biodiversity Partnership

The Southwark Biodiversity Partnership was set up in 2004. The partnership developed the 1st Southwark BAP 'work for wildlife' and contributed to delivery of many of the actions in that plan.

Partners in the Southwark Biodiversity Partnership are:

- The Conservation Volunteers, formally the Trust for Urban Ecology
- The London Wildlife Trust
- Groundwork London
- The Bankside Open Spaces Trust

Southwark Council Departments:

- Planning Policy
- Planning Development Management
- Environment & Leisure
- Education
- Highways
- Housing
- Regeneration

The Southwark Biodiversity Partnership has been working to protect, enhance, and promote biodiversity since 2004. The partnership has successfully raised the profile of biodiversity in Southwark and has delivered many conservation projects, all the while engaging with the people of Southwark. There have been numerous contributions by volunteers, societies and friends groups. This highlights the regard with which the community views biodiversity in Southwark.



Illustration of view from One Tree Hill Local Nature Reserve.

2.3 Local Nature Reserves

In Town and Country Planning, a non statutory but important indicator of access to natural space is a local authority target to provide 1 ha of Local Nature Reserve (LNR) per 1,000 residents. Using this formula Southwark would have to provide 269.2 ha of LNR to meet the 2006 population needs. This would be a significant challenge in Southwark. The Approach of this plan is to seek to develop Local Nature Reserves.

Lavender Pond Local Nature Reserve, 2007.

LNR's declared before 2003:

- Sydenham Hill Wood
- Nunhead Cemetery

The LNR's that have been declared since 2003:

- Lavender Pond
- Dulwich Upper Wood
- One Tree Hill

2.4 Sites of Importance for Nature Conservation in Southwark

The Sites of Importance for Nature Conservation (SINC's) are open spaces considered important for nature conservation due to their wildlife and biodiversity value. They provide opportunities for people to access and experience nature as well as help protect important plants and animals. The London Plan policy 3D.14 requires boroughs to protect sites of nature conservation value including those of Metropolitan, Borough or Local importance. There are 72 SINC sites in Southwark, 5 are of Metropolitan Importance, 17 are of Borough Grade 1 importance, 22 are of Borough Grade II importance and 28 are of Local Importance. UDP policy 3.28 protects SINC sites from inappropriate development and seeks enhancements for these sites. The list of 72 SINC sites and a map of the open space provision in Southwark is found in the supporting Evidence Base.

2.5 Habitats

A number of national or regional priority habitats are present in Southwark. Baseline data on the types and amounts of these habitats is found in table 6.

The tables below provide a breakdown of habitats in Southwark.

Habitat	Area ha
Woodland inc wet woodland	54
Orchard	0.50
Hedgerows	0.83
Meadows/grassland inc Acid grassland	6.77
Reedbeds	2.58
Rivers	11.15
Ponds	7
Parks and open spaces	363
Green Corridors	125.62
Standing water	62

Table 5, baseline habitat data 2012.

2.6 Key habitats of ecological importance for Southwark

- Woodland (Ancient and Secondary).
- Meadows
- Parks and Urban Greenspace, including Churchyards and Cemeteries.
- Reedbeds
- Standing Water, including Ponds, Lakes, & Docks.
- Rivers & streams
- Built environment
- Brownfield
- Private gardens
- Wildlife corridors
- Scrubland
- Deadwood

2.7 National or regional BAP species recorded in Southwark

A number of species present in Southwark are important national indicator species. These include bats, birds, reptiles, amphibians, and insects. These are listed below.

- Stag beetle
- Common lizard
- Slow-worm
- Hedgehog
- Common frog
- Common toad
- Smooth newt
- Red eyed damselfly
- European eel
- Black poplar
- Mistletoe
- Cornflower
- White letter Hairstreak
- Bats

2.8 Bat species

There are 8 species of bat recorded in Southwark. 3 of the species have been added to the records since 2004. Bats are a national priority species and protected under the European Habitats Directive.

Bats are considered a good indicator of the health of the natural environment because they are sensitive to environmental change and because of their reliance on flora and fauna.

- Common pipistrelle Pipistrellus Pipistrellus
- Soprano pipistrelle *Pipistrellus pygmaeus*
- Nathusius pipistrelle Pipistrellus nathusii
- Daubenton's bat Myotis daubentonii
- Noctule Nyctalus noctula
- Brown long eared bat Plecotus auritus
- Leislers bat Nyctalus leisleri
- Natterer's bat Myotis nattereri

2.9 Birds of conservation concern in Southwark

The table below lists all the birds of conservation concern recorded in Southwark. The Red List species are birds that have suffered severe decline in breeding population or are globally threatened.

The Amber List are birds that have suffered moderate decline or are of European concern. A link to the BTO report on the conservation status of birds is attached . http://www.rspb.org.uk/Images/BoCC tcm9-217852.pdf

Red and Amber list bird species recorded in Southwark			
Red List	Tufted duck		
Bullfinch UKBAP Greylag goose			
Herring gull UKBAP	Green woodpecker		

House Sparrow UKBAP	Nightingale
Lesser spotted woodpecker UKBAP	Black redstart UKBAP
Linnet UKBAP	Whitethroat
Fieldfare	Stock dove
Spotted flycatcher UKBAP	Peregrine falcon
Starling UKBAP	Kingfisher
Song thrush UKBAP	Little grebe
Lesser redpoll UKBAP	Black headed gull
Amber List	Swift
Common Tern	Kestrel
Goldcrest	Cormorant
Mallard	House martin
Mistle Thrush	Woodcock
Mute swan	Firecrest
Redwing	Teal
Shoveler	Pochard
Stonechat	Grey wagtail
Swallow	Dunnock UKBAP

Table 6, important bird species recorded in Southwark.

Red list = species of high conservation concern Amber list = species of medium conservation concern

2.10 Trees Pests and Diseases

Britain's trees are facing unprecedented threats to the nation's tree stock and Southwark will be affected in some way. Pests and diseases can enter the country through the importing of contaminated nursery stock and can also be wind blown from Europe or Africa. Recent research from the Forestry Commission also indicates that climate change will create the conditions for even more pest and disease activity.

Where there is a known threat to the tree stock of Southwark, the Tree Section will implement targeted inspections of the species or tree affected to identify trees containing the disease. Southwark will mitigate for the affects of the pest or disease as soon as possible in line with Forestry Commission recommendations. In addition to targeted inspections for pests and diseases,



Countisbury House lawns with the rare corky fruited water dropwort in flower

Section 3

3. The Action Plan

The Action Plan will run from 2013 to 2018. The 5 themes cross a broad range of topics and disciplines.

The 5 Themes of the BAP are:

- Theme 1: Wildlife and Ecosystem services
- Theme 2:The Urban Forest
- Theme 3: The Built Environment
- Theme 4: Climate change and sustainability
- Theme 5: Connecting with nature

Actions in the BAP are classified as 3 types

- Operational actions which address current management of flora and fauna.
- Planning actions which support spatial policies or address development management.

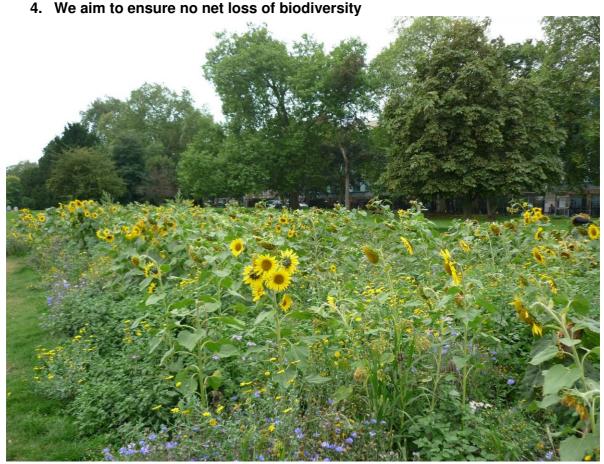
 Resources actions which set actions for increasing habitats and species in Southwark. These include aspirational targets for long term increase of natural habitat and species in line with national and regional targets.

3.1 Theme 1: Wildlife and Ecosystems Services

Theme 1, Wildlife and Ecosystems Services identifies actions for the conservation and enhancement of wildlife. Following the objectives is an introduction to the concept of an ecological network and ecosystem services. As an Inner London borough the natural environment is an important resource. These theme actions replace the individual habitats and species actions plans that have traditionally been produced by public bodies. Ecosystem services are goods and services provided for free by the natural environment such as cleaning the water and air of pollutants, decomposition of waste materials and pollinating food crops by insects.

Theme 1 Wildlife & Ecosystems Objectives

- 1. We will contribute to the core objectives of England's Wildlife and Ecosystem Strategy
- 2. We will produce management plans for all SINC and Green Flag parks and open spaces in Southwark's management by 2016
- 3. We will maintain a baseline of ecological data annually



Wildlife seed mix meadow Peckham Rye Park 2010.

3.2 What we mean by a coherent and resilient ecological network

The Wildlife and Ecosystems Services Strategy defines a **coherent** ecological network as one that has multiple elements necessary to achieve its overall objectives. Complementary and mutually reinforcing components ensure that the value of the whole network is greater than the sum of its parts. ^{xii}

Southwark has a good coherent and resilient ecological network with over 130 parks and open spaces, 72 SINC sites and 5 Local Nature Reserves. This is linked through green corridors such as railway sidings and the Thames.

A resilient ecological network is one that can absorb, resist or recover from disturbances and damage caused by the urban environment (including climate change). This network should still be able to support biodiversity and provide ecosystems services.

Core areas of high nature conservation value These contain rare or important habitats and species, or ecosystem services. They include protected wildlife sites and other semi-natural areas of high ecological quality. In Southwark these are our major parks which are all designated Sites of Importance for Nature Conservation and our 5 Local Nature Reserves.

- Corridors and 'stepping stones' Enable species to move between core areas. These can be made up of a number of small sites acting as 'stepping stones' or a mosaic of habitats that allows species to move and supports ecosystem functions In Southwark this means our smaller parks, railway corridors, highways and gardens.
- Restoration areas Opportunities for restoration areas are limited within Southwark. Some of our SINC sites are under pressure from intensive use and management or have been neglected so that the nature value has declined. We aim to restore some of these sites to provide and improved ecological network.
- **Buffer zones** to protect core areas, restoration areas, and provide 'stepping stones' from adverse impacts in the wider environment. In Southwark parks and open spaces, gardens and rail sides will perform this role.
- Sustainable use areas These are areas of surrounding land that are managed in a sustainable and wildlife friendly way. In Southwark this means our built environment such as Schools, Housing Estates and buildings.

3.3 Ecosystem Services

In 2011 The UK National Ecosystem Assessment was published. This assessed the Natural Environment and Ecosystem services in the UK. Ecosystems services are divided into 3 main areas of service. Underpinning all of these is the supporting services. The ecosystems services in urban areas are shown in Table 6.xiii

Ecosystems Services					
Service	Provision	Relevance to Southwark			
Provisioning	Genetic resources *	Important in maintaining populations of species.			
Regulating	Air & water quality regulation † Noise regulation † Local climate regulation † Flood regulation † Pollination †	Important in cooling the city and filtering air pollution.			
Cultural Services	Recreation & Tourism * Aesthetic values * Cultural heritage * Spiritual values * Education * Sense of place * Health benefits *	Parks play a large part in cultural services parks visitor counting in 2008/09 showed that Large parks received 800,000 to over 1,000,000 visits per annum, smaller parks between 250,000 and 270,000 visits per annum. Social cohesion. Volunteering Community food growing			

Table 6, Urban ecosystem Services for Southwark.

t = Services * = Goods

3.4 Resources

In large part the actions in the BAP can be met from existing revenue and capital budget of the Council. Where the need for additional funding has been identified this will be sought from external sources identified in the funding strategy and applied for by the external members of the Southwark Biodiversity Partnership. The funding will be sought from the funders identified in section 3.21 and any other funders that become available during the term of this action plan. These actions would require approximately £96,000 of capital monies to deliver.

If funding is not secured for the actions identified as reliant on external monies Southwark Council will not deliver these actions. The capital costs identified in the BAP do not constitute a financial commitment from Southwark Council to fund and deliver these actions. If funding does become available for these actions then we will deliver them before the life of this plan.

3.5 Actions for Wildlife and Ecosystems Services

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why			
	Operational Actions								
SOWES1	Produce biodiversity management plans for all parks and green spaces declared as Sites of Importance for Nature Conservation (NB there will be some cross over with the action above), excluding sites outside Southwark's ownership. *The SINC sites table in the Evidence base document identifies the status of management plans for this action. Produce and implement biodiversity chapters for all Green Flag park management plans, indentifying the current biodiversity value and recommended management.	2016	Parks	SBP	Staff time	Meets objective 2 of Theme 1. Contributes to objectives of the Core Strategy and Open Spaces Strategy			
SOWES2	Aim to increase biodiverse grassland in social housing areas by creating meadow/wildflower or leaving areas of long grass where appropriate.	2015	Housing	LBS, ICC	Staff time	Meets objective 4 of Theme 1. Meets objectives of the Open Spaces Strategy and Regional target			
SOWES3	Maintain Countisbury House lawns for corky fruited water dropwort.	Ongoing	Housing	Parks	Staff time + maintenance costs	Meets objective 4 of Theme 1. Protects Rare Species			
SOWES4	Achieve a target for 5% of grassland in parks to be managed for biodiversity through management plans = target of 65,000 M2.	2015	Parks	CSM	Staff time	Meets objective 4 of Theme 1. Meets objectives of the Open Spaces Strategy and Regional Target			
SOWES5	Develop procedure for monitoring bats in Sydenham Hill and Paxton railway tunnels.	2013	Parks	LWT Highways	Staff time	Meets objective 1 of Theme 1. Contributes to Regional and National BAP through monitoring of key species			
SOWES6	Monitor invasive species in line with	Annually	Parks	SBP CSM	Costs arise as	Meets objective 1 and4 of			

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why
	London's Invasive Species Initiative and manage accordingly.*			Public realm Housing	species are indentified and treated.	Theme 1. Addresses Increasing issues with non native species and their impact on native species. Contributes to London Invasive species initiative
SOWES7	Retain dead wood and retain standing dead wood in situ in parks and green spaces wherever appropriate in parks and public realm. Link to GF and SINC biodiversity management plans. Install new invertebrate loggeries across parks and public realm. Link to GF and SINC biodiversity management plans.	Annually	CSM	Trees	Staff time	Meets objective 4 of Theme 1. Contributes to targets in National + Regional BAP by helping the stag beetle and woodland birds
SOWES8	Introduce common lizards to Stave Hill Ecological Park.	2016	TCV	LBS	Staff time	Meets objective 1 of Theme 1. Contributes to the protection of Regional and national BAP species
		Plannii	ng Actions			
SOWES9	Identify and map potential new green corridors, link to ALGG SPD and open spaces strategy. Investigate viable size/distances between wildlife sites and produce feasibility study.	2015	Planning Policy	SBP	Staff time	Meets objective 3 of Theme 1. Meets objectives of the Core Strategy, Open Spaces Strategy and ALGG SPD
SOWES10	Declare Stave Hill Ecological Park and Russia Dock Woodland a Local Nature Reserve.*	2016	Parks	TCV, Friends of Russia Dock Woodland	TBC	Meets objective 1 of Theme 1. Meets objectives of the London Plan
SOWES11	Review baseline of current biodiversity value of wildlife habitats including: - area of woodland - area of reedbed	2013	Parks	SBP GIGL CSM Planning Policy team	Staff time GiGL SLA	Meets objective 3 of Theme 1. Meets objectives of the Core Strategy Open Spaces Strategy

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why
	- area of rivers & streams- area of standing water- area of meadow- area of wildlife corridors					
	- area of green roof - area of open mosaic on previously developed land (UK BAP habitat). Maintain SLA with GIGL.					
SOWES12	Maintain the extent of wildlife habitat from the 2012 baseline with aim of no net loss of biodiversity.	Ongoing	SBP	GiGL	Staff time	Meets objective 4 of Theme 1. Meets objectives of the Core Strategy Open Spaces Strategy
SOWES13	Review Local SINC designations through the Local Plan in line with London Local Sites partnership and Southwark Open Spaces Strategy.	2015	Parks	Planning Policy Team	Staff Time Cost of surveys if skilled volunteers are not available*	Meets objectives 1 and 4 of Theme 1. Contributes to London Plan + Open Spaces Strategy, AAP's and London Local Sites Partnership
SOWES14	Ensure all developments adjacent to LNR's provide a suitable buffer zone to protect the natural integrity of the LNR.	2013	Parks	LWT TCV Development Management	Staff time	Meets objective 4 of Theme 1. Meets objectives in Core Strategy + NNPF
SOWES15	Establish and implement a process to ensure that capital or improvement projects in Southwark's parks and green spaces result in overall biodiversity enhancement/gain (whether delivered in house or through contractors). NB This includes ensuring lighting schemes do not impact on Biodiversity (including protected species such as bats) in line with policy and legislation. Funding to be sought through	2014	Public realm	Planning Parks projects team	Staff time	Meets objective 4 of Theme 1. Meets objectives of the Core Strategy Open Spaces Strategy

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why
	S106 or Community Infrastructure Levy.					
		Resour	ce Actions			
SOWES16	Create 1 ha of new reedbed.**	2018	SBP	TCV, LWT, CSM	£20 – £30,000	Meets objective 1 of Theme 1. Contributes to the Regional and National BAP targets = 6.35% of London Target
SOWES17	Install bat boxes or tubes in the public realm and built environment.	Ongoing	CSM	Parks CSM	Materials and installation costs	Meets objective 1 of Theme 1. Contributes to the protection of Regional and national BAP species
SOWES18	Create 1 ha new wildflower meadow. Species mix to be selected to provide biodiversity habitat and visual interest.**	2016	Parks	SBP RSPB CSM	£20,000	Meets objective 1 of Theme 1. Contributes to the Regional and National BAP targets = 5% of London Target
SOWES19	Bee forage. Plant nectar, and pollen rich plants in borders and beds in the public realm and parks and open spaces. Target 30% of new planting to meet these criteria. Target.	2015	Public Realm	CSM	Staff time	Meets objective 1 of Theme 1. Contributes to Capital Bee project and increases pollinators habitat
SOWES20	Restore Benhill Rd Nature Garden local SINC.**	2015	Major Projects team	Elmington Residents group. Froglife Groundwork	>£50,000 Secured from Housing Regeneration	Meets objective 4 of Theme 1. Contributes to Core Strategy + OSS
SOWES21	Install 4 new clay lined ponds across the borough. **	2016	Parks	SBP	£TBC, Average cost of installation for a medium sized fenced pond is £8000. A large pond would	Meets objective 1 of Theme 1. Contributes to the protection of Regional and national BAP Habitats and species

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why
					cost considerably more.	
SOWES22	Install bat tubes to create a bat hibernacula in Paxton tunnel.**	2015	Parks	LWT Highways	£200	Meets objective 1 of Theme 1. Contributes to the protection of Regional and national BAP species
SOWES23	Identify 10 sites and undertake non intrusive stag beetle larvae survey using Radiello cartridges.**	2016	Parks	PTES LWT	£7,000	Meets objectives 1 and 4 of Theme 1. Contributes to the protection of Regional and national BAP species
SOWES24	Create 1km of native hedgerow in parks and green spaces. Including the replacement of existing low value biodiversity hedges where appropriate.**	2016	Public realm	CSM VCS	£8,000	Meets objectives 1 and 4 of Theme 1. Contributes to the Regional and National BAP targets = 0.8 % of National target
SOWES25	Build boardwalk for lake in Sunray Gardens.**	2016	Parks	VCS	£TBC	Meets objective 1 of Theme 1. Action in the ALGG
SOWES26	Undertake reptile survey for Stave Hill. **	2013	TCV	TCV	£TBC	Meets objective 1 of Theme 1. Contributes to the protection of Regional and national BAP species
SOWES27	Build 1 reptile refuge for common Lizard on all sites where lizards or slowworms are recorded.	2016	TCV	Honor oak Allotments VCS	Staff time + Labour costs	Meets objectives 1 and 4 of Theme 1. Contributes to the protection of Regional and national BAP species
SOWES28	Restore Dulwich Mill Pond Borough SINC to favourable ecological condition.**	2014	Dulwich Estate	Froglife	Froglife have bid for £50,000 from SITA Funding in partnership with Dulwich Estate.	Meets objectives 1 and 4 of Theme 1. Contributes to the protection of Regional and national BAP habitat

3.6 Theme 2: The Urban Forest

Theme 2 the Urban Forest objectives

- 1. We aim to protect the current tree stock
- 2. We will maintain the existing tree stock in line with London and local targets
- 3. We will manage and enhance our woodlands for wildlife

The Urban Forest is defined as the trees, woodland and hedges in Southwark. The network of these habitats plays an important role in maintaining the ecological network, not only in Southwark but across London. Trees play a vital role in sustainability of the urban environment.

The Southwark Tree Management Strategy 2013 sets out the policy framework for the trees owned, managed and protected by Southwark Council. Details of the tree management strategy are found in the supporting evidence base document.

The trees in Southwark Council's ownership are primarily managed on the basis of dead, dying and dangerous. Additional management of trees includes pollarding and crown reduction. This management is undertaken to ensure the trees are suitable for setting and to ensure longevity and reduce failure of trees. Some species are facing increased threats from foreign peats and diseases such as ash dieback or the horse chestnut leaf miner.

How the BAP links	How the BAP links to the Southwark Tree Strategy									
Action	BAP	Southwark Tree Strategy								
Collation of baseline data for trees and woodlands:	Data held by GiGL and available to council on Smart map system.	Trees records held on Confirm and MapInfo.								
Maintaining the tree stock:	Target to replace trees in parks and open spaces with 50% native species	Target to replace trees in parks and open spaces with 50% native species.								
Preserve dead wood habitat:	Woodland management includes creation of loggeries for stag beetles and using scrub and tree cuttings in dead hedges.	Dead wood preserved and retained in parks and open spaces. Dead trees are left as standing monoliths and stumps are left to provide habitat for stag beetles. Large tree trunks are sited in parks for habitat and natural play.								
Survey woodlands: Woodland habitat is recorded and held by GiGL. Species composition of woodlands is recorded. Individual trees are not surveyed.		All trees in the public realm are surveyed for condition on rotation every 3 to 5 years.								
Protect birds and bats:	Coppicing of woodland creates nesting habitat, ivy is retained on trees where applicable. Bird	Trees are surveyed for nesting birds and bat roosts before undertaking								

How the BAP links	How the BAP links to the Southwark Tree Strategy									
Action	BAP	Southwark Tree Strategy								
	and bat boxes installed on trees.	maintenance work.								
Employ the 'Right tree Right place' tool:	Applies to parks and determines the appropriate species for planting	Applies to public realm and determines the appropriate species for planting.								
Climate change and ecosystems services:	Trees promoted as key ingredient of urban environment. Ability of mature trees to provide urban cooling, air pollution regulation and reduce run off recognised throughout BAP.	Tree strategy supports value of mature trees and has produced a caveat for retention and replacement of mature trees.								
Volunteering	Promotes development of community and business volunteering and partnership working with conservation organisations.	Volunteering recognised as contributing to tree planting and informal monitoring and maintenance of woodlands.								

Table 7 BAP and Tree Strategy comparisons.

3.7 Benefits of trees

There are many benefits from trees, woodland and hedgerows. Some are identified below:

Environmental

- They provide 'breathing spaces' in an otherwise urban environment. In the north of Southwark, parks and open spaces are often the only publicly accessible green space. Trees provide both structure and shade in these open spaces.
- Trees play a crucial role in mitigating climate change. Over a year a mature tree removes about 22kg of carbon dioxide from the atmosphere.
- Trees are essential for improving air quality. Leaves absorb air pollutants such as ozone, carbon monoxide, and sulphur dioxide. Dust and other particulates are collected by leaves and washed to the ground by rain, rather than remaining in the air
- Their role in reducing runoff during flash floods (providing an alternative to engineering solutions) is also being recognised⁽⁹⁾. Vegetation also intercepts more rain thereby reducing the likelihood of flash flooding. The numerous leaves of plants and trees provide a greater area for water to evaporate from than flat surfaces

Biodiversity

- Trees are an important urban wildlife habitat, they provide nesting, foraging opportunities, and cover for birds from predators. Trees provide roosts, commuting routes and foraging opportunities for bats, they also support many insects.
- Lines of trees are important as they act as links between green spaces allowing wildlife to travel between sites.
- Ivy on trees is a key factor in the diversity of bird, insect and bat species and should be retained where applicable.

• Woodlands provide unique habitat within green spaces and is very valuable ecologically for the wildlife of urban areas.

Health & Wellbeing

- Trees often provide the only greenery in otherwise heavily built-up urban environments. Most people prefer to live and work in green and leafy surroundings
- Trees are a valuable resource for communities living in dense areas such as Southwark. They are particularly valuable on housing estates as most Council properties are flats without private gardens
- They absorb, and therefore, reduce noise
- Their cooling effect is especially important during extreme summer heat.
 In England in summer 2006 there were an estimated 75 extra deaths per week for each degree of increase in temperature (NHS Heatwave Plan 2008)

Aesthetic

- Trees can help to form the identity of an area. They can be important local landmarks and give a sense of continuity and place. Specific species can become part of the atmosphere of a neighbourhood, for example London Plane and Lime trees, planted by the Victorians, make a significant contribution to the character of some Southwark neighbourhoods
- Trees can provide privacy; emphasise views; screen out objectionable views; reduce glare and reflection; direct pedestrian and vehicular traffic; and provide backgrounds to, soften, complement or enhance architecture



Geraldine Mary Harmsworth Park, 2011.

3.8 Actions for the Urban Forest

Number	Action	Target Date	Lead Partn	Other Partners	Cost	Why
				Operationa	Actions	
SOUF1	Collate baseline of the current biodiversity value of woodland in Southwark area of habitat - Species supported management regimes in place.	2013	Parks	Tree manager, CSM, public realm, Planning policy	Staff time	Meets objectives 1 and 2 of Theme 2. Meets objectives of the Core Strategy Open, Spaces Strategy and tree strategy
SOUF2	Continue Nest box project in Bankside area. Extend to London Bridge improvement district and Elephant & Castle area.	2014	51% architectur e Studio	BOST LBS Better Bankside London Bridge BID	Staff time	Meets objective 3 of Theme 2. Contributes to National BAP and Regional BAP
SOUF3	Produce schedule for phased ivy management of trees in the public realm. Retain ivy on trees in woodland.	2014	Parks	SBP	Staff time	Meets objective 3 of Theme 2. Links to National BAP species such as bats and tree strategy
	T	1		Planning A	Actions	
SOUF4	Produce definition for over mature and potential veteran trees in Southwark. Include in updated planning policy and tree strategy.	2013	Urban Forest Planning Officer	Tree Manager	Staff time	Meets objective 2 of Theme 2. Provides definition in line with National Planning Policy Framework

Number	Action	Target Date	Lead Partn	Other Partners	Cost	Why
SOUF5	ALL developments and regeneration projects within 50m of woodland must ensure they do not impact on the biodiversity of those habitats or associated species and should contribute to biodiversity enhancements and habitat management in line with core policy 11 and policy 3.28. Any development adjacent to ancient woodland must retain a minimum 15 buffer zone in line with best practice from Natural England.	Ongoing	Urban Forest Planning Officer	LBS Developme nt control	Staff time	Meets objective 3 of Theme 2. Meets saved policies of the Core Strategy and Standing advice from Natural England
SOUF6	Identify areas of woodland deficiency and assess the potential for woodland habitat creation.	2016	Parks	Planning Policy, LWT TCV CSM GiGL	Staff time	Meets objective 3 of Theme 2. Contributes to increase of National and Regional BAP habitat
SOUF7	Aim for 80 trees per linear km in the public realm.	2015	Urban Forest Planning Officer	LBS Tree Manager	Staff time	Meets objectives 1 and 2 of Theme 2. Meets Open Spaces Strategy recommendations
	T			Resource	•	
SOUF8	Where appropriate restock trees in parks and open spaces with	2015	Trees	CSM	If using tree services £500 per tree little or no	Meets objectives 1 and 3 of Theme 2. Meets objectives of London Plan, and tree Strategy

Number	Action	Target Date	Lead Partn	Other Partners	Cost	Why
	50% native species in line with right tree right place policy and tree strategy.** Restock selected woodland in parks with native climax species.				cost if using volunteers/friends groups	
SOUF9	Identify receptor sites for felled tree trunks. Reuse felled tree trunks where possible.	2013	Parks	SBP, CSM	Staff time+ Transport costs	Meets objective 3 of Theme 2. Provides habitat for national and regional BAP species

^{* =} Revenue funding ** = Capital funding required

3.9 Theme 3: The Built Environment

Theme 3 the Built Environment Objectives

1. We will enhance the built environment for biodiversity

The Built environment is far from an ecological desert. Green infrastructure and a green space linked to the built environment offers quality of life, environmental regulation and is a key habitat for many species of conservation concern. Bats, birds and invertebrates rely on this for shelter, roosting and foraging opportunities. In fact some of these animals such as the swift have become specialised to this environment. In the public realm the pressure of the multifunctional use of the green and open spaces has meant in some cases that their natural value has been forgotten or degraded at the expense of other goals.



House Sparrow nesting in a drain in Bankside area 2011. Source: Peter Thomas.

3.10 Actions for the Built Environment

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why					
	Planning Actions										
SOBE1	Collate baseline of the current biodiversity value of the built environment, including: - area of living roof - area of open mosaic habitat on previously developed land (UK BAP habitat) - number of street trees - other habitat within the built environment e.g. hedges.	2013	Ecology Officer	Development management, Tree Manager Planning Policy Team	Staff time	Meets objective 1 of Theme 3. Meets objectives of the Core Strategy					
SOBE2	Ensure protection and enhancement for biodiversity is integrated into Council Planning policies and strategies. Such as AAP's, SPD's, LP.	Ongoing	Planning policy	LBS	Staff time	Meets objective 1 of Theme 3. Meets objectives of the Core Strategy Open, Spaces Strategy and tree strategy					
SOBE3	All residential development should achieve a minimum of 50% of the Ecology Credits from the Code for Sustainable Homes. Major non-residential developments should achieve a minimum of 50% of the Ecology Credits under BREEAM or equivalent scheme.	Ongoing	Major projects team - Development control	Development Management - LBS - Planning Policy Team	Staff time	Meets objective 1 of Theme 3. Meets target for London Plan. In line with recommendations from Environment Agency					
SOBE4	ALL major and minor developments should incorporate nesting or roosting sites for relevant species of birds and bats. Preference should always be given to 'built-in' features such as roosting bricks, bat tubes and bat bricks. The priority species for bird nesting and	Ongoing	Planning policy -Development Management	Parks	Staff time	Meets objective 1 of Theme 3. Meets objectives of the Core Strategy Open, Spaces Strategy					

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why
	habitat features is swifts, black redstarts and house sparrows.					
SOBE5	Seek biodiverse roofs on new builds where appropriate through planning conditions. Link to SPD's and AAP's.	Ongoing	Planning policy - Development Management	Parks	Staff time	Meets objective 1 of Theme 3. In line with recommendations from Environment Agency
SOBE6	Seek native planting, Including trees in soft landscaping schemes of new developments where appropriate. In line with SPD on sustainable design and construction.	Ongoing	Development Management	Parks	Staff time	Meets objective 1 of Theme 3. Contributes to objectives of Core Strategy
SOBE7	Produce advice note for Biodiversity and the Built Environment.	2013	Ecology Officer	Development Management - Planning policy	Staff time	Meets objective 1 of Theme 3. Meets objectives of the Core Strategy, Open Spaces Strategy
SOBE8	Monitoring - record new habitat features commitments resulting from planning conditions. Collate data through post completion assessment.	Ongoing	Ecology Officer	Development Management – Developer	Staff time	Meets objective 1 of Theme 3. Contributes to London Plan and Core Strategy policies
SOBE9	Seek Green Infrastructure chapter in Design & Access statements for major planning applications.	Ongoing	Planning Policy	Development Management - developer	Staff time	Meets objective 1 of Theme 3. Contributes to objectives in NPPF
SOBE10	Produce set of model planning conditions to address biodiversity in planning applications.	2013	Ecology Officer	Development Management - Planning policy	Staff time	Meets objective 1 of Theme 3. Meets objectives of NPPF
			Resource Action	าร		
SOBE11	Work in partnership with Better Bankside Business Improvement District to deliver actions in the Green infrastructure audit.	2014	Better Bankside	LBS	£TBC	Meets objective 1 of Theme 3. Contributes to London Plan policy
SOBE12	Work in partnership with London Bridge Business Improvement District to deliver actions in the Green infrastructure audit.**	2014	London Bridge BID	LBS	£TBC	Meets objective 1 of Theme 3. Contributes to London Plan policy

3.11 Theme 4: Climate change and sustainability

Theme 4 Climate Change Objectives

- 1. We aim to deliver ecological solutions to offset the impacts of climate change
- 2. We aim to reduce the urban heat island effect and improve air and water quality
- 3. We will manage invasive species in Southwark

Climate change has been identified as a key challenge to London and Southwark. However there is little clear understanding of the direct impact this may have on the borough. Sustainability comes in many forms from composting garden waste to ensuring buildings meet energy efficiency targets.

3.12 Climate change and sustainability issues

It is accepted that it is getting warmer and we are experiencing short term seasonal fluctuations in the weather. Non native and invasive species are spreading across Europe and entering Britain; an example of this is the leaf miner that originated in Macedonia and has blighted the Horse chestnut trees across the country.

3.13 Invasive species

There are a number of invasive species present in Southwark. Some such as Japanese knotweed are a major problem, cause widespread damage and cost significant amounts of money to deal with. Others, such as Giant Hogweed, are hazardous to health. The list of invasive species on Schedule 9 of the Wildlife & Countryside Act is in the evidence base

3.14 Adaptation

Adaptation measures that can be adopted can also benefit biodiversity. The use of biodiverse brown roofs, Sustainable Urban Drainage, and living walls can insulate buildings, reduce runoff, and optimise the performance of Photo voltaic cells. Green infrastructure can help offset the impacts of climate change.

3.15 Sustainability

Sustainability can take many forms and is addressed in Southwark by the Sustainable Services department. Further details are covered in the Evidence base.

3.16 Actions for Climate Change and Sustainability

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why						
	Operational Actions											
SOCC1	Promote sourcing plants for parks and open spaces from local or UK provenance.	2013	Parks	Head gardeners CSM Public Realm Projects team	Staff time	Meets objective 1 of Theme 4. Meets objectives in the Integrated parks Grounds Maintenance Contract specifications						
SOCC2	Monitor Invasive Species, pests and diseases – continue program to eradicate Japanese & giant hogweed in parks and open spaces.*	Ongoing	Parks	SBP, Park managers	£2,000 per annum (estimated).	Meets objective 3 of Theme 4. Feeds into London Invasive species initiative						
SOCC3	Undertake Barley straw treatment for all lakes and water bodies as required .*	Annually	Parks, Harbour Master	CSM	£4,250 + per annum	Meets objective 1 of Theme 4. Contributes to Water Framework Directive policy						
SOCC4	Procure plants supplied in reduced or peat free soil and pesticide free.	Ongoing	CSM	Head Gardeners	Staff time	Meets objective 3 of Theme 4. In line with recommendations from Environment Agency + Integrated parks Grounds Maintenance Contract specifications						
			PI	anning Action	ons							
SOCC5	Promote and retain mature trees and green corridors in public realm and new developments	Ongoing	Developme nt control	Planning Policy, LBS	Staff time	Meets objectives 1 and 2 of Theme 4. Contributes to London Plan Open, spaces strategy and tree strategy						
			Re	source Acti	ons							
SOCC6	Explore the options for Installing bore holes to feed parks lakes where applicable.	2013	Parks	CSM	£TBC	Meets objective 2 of Theme 4. Contributes to Water Framework Directive						

^{* =} Revenue funding ** = Capital funding required

3.17 Theme 5: Connecting with Nature

Theme 5 Connecting with Nature Objectives

- 1. We aim to increase engagement with people through biodiversity
- 2. We aim to secure funding through the SBP from external or internal grants to deliver the BAP

This theme is all about community action; Events such as bat walks, planting, clean up days and dawn chorus events well attended in Southwark. Volunteers such as friends of groups, corporate volunteers and individuals play a significant role in managing and enhancing wildlife areas in our open spaces. Campaigns led by organisations such as LWT, RSPB and PTES help raise the profile of the nature found in the urban environment. The Centre for Wildlife Gardening based in Peckham is unique in England and has for many years raised the profile of gardening for nature. Food growing produces benefits for people and wildlife alike.



Children exploring the Tate Community Garden

3.18 Actions for Connecting with Nature

Number	Action	Target Date	Lead Partner	Other Partners	Cost	Why					
	Operational Actions										
SOCN1	Develop partnership connectivity themes and campaigns across parks and open spaces for priority habitats or species.	Ongoing	SBP	CSM, Coms	Staff time	Meets objective 1 of Theme 5. Contributes to National, regional and local campaigns as they arise					
SOCN2	Develop a series of events and publicity to encourage people to enhance biodiversity in their gardens.	2013	CWG SBP	LBS, Head Gardeners	TBC	Meets objective 1 of Theme 5. Links to protection of national and regional BAP species and habitats					
SOCN3	Hold 4 biodiversity events each year.	Ongoing	SBP	LBS, Coms	Staff time	Meets objective 1 of Theme 5. Meets partners contractual commitments					
SOCN4	Produce guidance on habitat creation for friends groups.	2013	Parks	SBP	Staff time	Meets objective 1 of Theme 5. Provides tool kit for friends and voluntary groups. contributes to Open Spaces Strategy					
SOCN5	Develop web portal for Ecological recording. Base portal on 'report it' tool.	2014	Parks	Coms	Staff time	Meets objective 1 of Theme 5. Provides public opportunity to contribute to biological monitoring					
SOCN6	Develop community & corporate volunteering opportunities in the public realm.	Ongoing	SBP	VCS, Parks, Friends groups	Staff time	Meets objective 1 of Theme 5. Contributes to Fairer Future commitments					
SOCN7	Develop funding strategy with the Southwark Biodiversity Partnership and other partners to secure external funding for all actions identified requiring external grants in all the Themes.	2013	SBP	Friends groups, Parks	Staff time	Meets objective 2 of Theme 5.					
	,	Re	esource Acti	ons							
SOCN8	Provide Improved public information on designated nature areas in Southwark. Install interpretive signs for 30% (20 Sites) of all SINC sites. **	2013	Parks	SBP	£10,000 - £30,000	Meets objective 1 of Theme 5. Contributes to London Plan and Core Strategy policies					

3.19 Recording and Monitoring

It is important to know what species and habitats are present in Southwark. This is one of the most challenging tasks to deal with because specialist skills in species identification are often required. This requires either skilled volunteer recorders or the financial resources to buy in the expertise required to maintain up to date biological records.

It is vital when developing and delivering ecological strategies and policies to know what natural resources we have. We need to know what to prioritise, what to protect, and to indentify positive or negative changes to species and habitats.

The Brown Long Eared Bat *Plecotus auritus*, for example, was unrecorded in Southwark until the London Wildlife Trust commissioned a bat survey in Sydenham Hill Woods in 2004/5. From this information the LWT was able to develop a project to provide roosting opportunities in the railway tunnel and to successfully bid for funding to deliver this project. This bat has now been recorded hibernating in both the Sydenham Hill Tunnel and the Paxton Tunnel in 2010/11. This project also helped us to deliver part of the London target of creating major bat roosts in London.

In 2009 Southwark Council entered into a SLA contract with the London Biological Records Centre, Greenspace information for Greater London, (GiGL). Under this SLA GiGL has provided Southwark with all the mapped biological records for Southwark including species data and habitat data. This has been entered on to the Council Smart map system. This information is used to inform planning policy and development control and to help produce reports required by Central Government. The information exchange is a two-way street with Southwark Council and the SBP providing records from Southwark for GiGL.

Since 2004 biological recording has been developed through a small network of volunteer recorders, public observations and events such as bat and butterfly walks. These records are fed into the GIGL data base on a regular basis. Developers undertake ecological surveys as part of the planning application process. These ecological records are also provided to GiGL. We will continue to record and monitor habitat and species throughout the duration of this plan.

The BAP action delivery will be monitored annually and a report produced to show progress this may be produced on the BARS system.

3.20 Biodiversity Action Reporting System

The Biodiversity Action Reporting System is a database tool run by the Department Environment of Food and Rural Affairs (DEFRA), that records biodiversity action plans from the UK BAP down to local plans. The database is open to public viewing but without administration privileges. Southwark Council entered its first BAP on to the data base and logged all the SINC sites. Updates were provided annually and this feeds into the larger pool of BAP achievements across the UK. Link to BARS http://ukbars.defra.gov.uk/

3.21 Funding strategy

Actions in the plan marked with an * require funding to achieve. Funding will be sought to achieve these actions from the funders identified in section 5 and could be either internal or external. The Southwark Biodiversity partnership will develop strategies and apply for funding to achieve these actions. Future funders will be identified as they materialise.

There are a number of funds available to help deliver the BAP. Table 16 provide a list of the current grants available. The current list of grants is subject to change with some grants closing and new grants becoming available in the future. Also a funding guide is available from the Government, see link. We will seek to develop funding with the community to support the BAP and other environmental projects. The SBP will seek funding to help deliver this BAP.

Link to community funding in Southwark.

http://www.open4community.info/southwark/Default.aspx

Fu	nders of ca	pital grants for con	servation projects
Funder	Amount	What They Fund	Link
Awards for All	£300 to £10K	Aims to help improve local communities and the lives of people most in need. Fund projects around four outcomes including improved urban and rural environments.	http://www.awardsforall.org.uk/
Big Lottery Fund	Up to £500K over 5 years	Aims to encourage changes in communities through a range of activities including improved urban and rural environments.	http://www.biglotteryfund.org.uk/
City Bridge Trust	No set amount	Third sector organisations. Work to support the environmental education of Londoners and/or work to maintain and enhance London's biodiversity.	http://www.citybridgetrust.org.uk/cbt/
Esme Fairburn Foundation	No set amount, Average grant £50K	Environmental projects that meet at least one of six priorities such as addressing a significant gap in provision strengthen or develop good practice or set out to influence policy or change	http://www.esmeefairbairn.org.uk/

Funders of capital grants for conservation projects			
Funder	Amount	What They Fund	Link
		le e le evide vue	
Heritage Lottery Fund	Your Heritage grant £3K to £50K Apply any time Larger Grants available See website for deadlines	behaviour. Projects which focus on heritage, including: - natural and designed landscapes and gardens; - wildlife, including special habitats and species.	http://www.hlf.org.uk/HOWTOAPP LY/PROGRAMMES/Pages/progra mmes.aspx
Community Infrastructure Levy	Unspecified	Habitat Creation and improvement projects	NA
Southwark Cleaner Greener Safer	No Set Amount Apply annually	Internal fund split into community council areas. Will fund a variety of projects from art to environmental projects	www.southwark.gov.uk/cleanergreene rsafer
Landfill Trusts	Average grant £25K but up to maximum of £100K	Environmental fund for community groups. Will fund creation and restoration of wildlife gardens.	http://www.biffaward.org/ http://www.vLBSliatrust.org/ http://www.sitatrust.org.uk/apply- for-funding
London Tree & Woodland Grant Scheme	Community Grants between £500 and £5000	Grants to projects that deliver community benefits to schools, open spaces and woodlands in Greater London.	http://www.ltwgs.org/
SITA Trust Enriching Nature Fund	Smaller grants up to £25K large grants up to £120K	Projects which specifically benefit nature. Links to priority habitats and species through regional targets.	http://www.sitatrust.org.uk/nature-funding

3.22 References

i Southwark Joint Strategic Needs Assessment. 2011
ii The London Plan. 2011
iii All London Green Grid. 2011
iv Southwark Core Strategy. 2011
v The Southwark Plan. 2007.
vi Southwark draft Open Spaces Strategy. 2013
vii Natural England White Paper, 'The Natural Choice'. 2011

http://www.southwark.gov.uk/downloads/download/2396/southwark_compact

The Mayors Biodiversity Strategy 'Connecting with London's Nature'. 2002.

http://www.london.gov.uk/priorities/environment/urban-space/biodiversity

Glossary

All London Green Grid (ALGG)

Area Action Plan (AAP)

Areas of Deficiency (AoD)

Bankside Open Spaces Trust (BOST)

Biodiversity Action Plan (BAP)

Biodiversity Action Reporting System (BARS)

Building Research Establishment Environmental Assessment Method (BREEAM)

Business Improvement District (BID)

Cleaner Greener Safer (CGS)

Code for Sustainable Homes (CfSH)

Connecting London's Amphibian and Reptile Environments (CLARE)

Contract and Services Manager Parks (CSM)

Environment Agency (EA)

Green Flag (GF)

Green Space Information for Greater London (GiGL)

Hectare (ha), Integrated Cleaning Contract (ICC)

Local Plan (LP)

Local Nature Reserve (LNR)

London Borough Of Southwark (LBS)

London Wildlife Trust (LWT)

London Parks and Green Spaces Forum (LPGSF)

Natural Environment and Rural Communities Bill (NERC)

National Planning Policy Framework (NPPF)

Open Spaces Strategy (OSS)

Peoples Trust for Endangered Species (PTES)

Primary Care Trust (PCT)

Supplementary Planning Guidance (SPG)

Royal Society for the Protection of Birds (RSPB)

Service Level Agreement (SLA)

Southwark Biodiversity Partnership (SBP)

Supplementary Planning Documents (SPD)

Site of Importance for Nature Conservation (SINC)

Sustainable Urban Drainage Systems (SUDS)

The Conservation Volunteers (TCV))

The Centre for Wildlife Gardening (CWG)

Tree Preservation Order (TPO)

Volunteer Centre Southwark (VCS)

Walworth Garden Farm (WGF)

viii The Marmot Review "Fairer Society - Healthier Lives" . 2010

ix School Census 2011, Department of the Environment

^{*} Southwark Compact.2010

Biodiversity 2020, A strategy for England's wildlife and ecosystems services. 2011

xiii UK National Ecosystem Assessment. 2011

xiv Southwark Tree Strategy. 2010

^{xv} No Trees No Future, Tree & Design Action Group. 2012