Appendix A

London Borough of Sutton

Parks and Open Spaces Strategy
Incorporating the Tree Strategy and Biodiversity Strategy

2020-2025

DRAFT

Draft Final version V4

Appendix A

FOREWORD BY LEAD MEMBER

I am proud and excited to introduce Sutton's Parks and Open Spaces Strategy, setting out plans for the next five years. Proud because I know how much Sutton's parks mean to residents of all ages and how much they add to people's lives, and excited because there is so much more that we plan to do to make your visits to parks even more enjoyable.

Sutton's parks are already well used and loved and they add to the green and leafy character of this part of London, something you tell us is important to you and that helps draw new businesses to the area too. The consultations that helped inform this strategy had a great response so I know that local people care about their parks. You told us you enjoy the community events held across the borough, from Easter egg hunts, May fairs and summer film screenings, to food festivals, firework displays and Christmas wreath making. You also told us how you use parks for sport and exercise and what facilities you need to keep fit and active. This strategy sets out plans for events and activities and outlines how we will provide new facilities for organised team sports and informal exercise, to encourage more residents to take up the outdoor life and improve their health.

But it is not just the parks, playgrounds, cafes and sports areas that residents enjoy, there is huge support for trees and tree planting and many park visitors told us how they love to see nature, wildlife and plants when they visit parks. So that parks, trees and wildlife are all provided for, this strategy takes on board your comments, presenting for the first time an integrated plan for managing all our open spaces, trees and biodiversity.

This is a plan that also celebrates and draws on the participation of the volunteers, recognising the important contribution our friends groups and conservation volunteers have made in shaping local parks and caring for the habitats that support birds, creatures and plants. Your continuing input helps to ensure the right decisions are made about parks improvements and that parks meet the needs of the community. Your support also maintains a rich and diverse range of sites including woodlands, chalk grasslands and wetlands that are home to some of Sutton's rarest inhabitants. Thank you for sharing your ideas, time, experience and enthusiasm, I hope we can continue working together over the coming years.

This strategy follows the Environment Strategy published earlier this year and gives more detail on the Council's ambitions to improve the health of residents, tackle climate change, enhance habitats and maintain the green appearance of our borough. This is the start of a challenging and exciting new chapter; let's get out there together and make the most of our parks and open spaces!

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Section A - Introduction

Welcome to the first combined open spaces and parks, trees, and biodiversity strategy, which brings together the Council's plans for green, open space throughout the borough. Almost 90% of residents say they visit parks during the year with 44% visiting every week and parks, open spaces and trees add to the green appearance of the Borough impacting on everyone's daily lives. They offer space for exercise with 6 in every 10 residents telling us they exercise in parks, making parks vital to residents wellbeing. Families and children benefit especially with 41 % of households saying they visit playgrounds, taking kids away from screens and getting them moving.

This strategy provides a vision and clear objectives the Council will use to effectively manage, maintain and enhance the open spaces in the Borough. It will help residents understand what the Council intends to do over the next five years to keep parks relevant to the community's needs and expectations, how they can be involved and influence changes, and the volunteering opportunities available.

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When fully implemented, residents will be able to enjoy many more sports, activities and a well managed events programme. There will be organised volunteering for those who want to be hands on and enjoy an outdoor, active life, while gaining satisfaction from helping the community and the environment. The strategy explains the commitment to caring for wildlife and the planet by creating new local habitat and by encouraging tree planting, so that Sutton remains a green and pleasant place to live and work.

The London Borough of Sutton has more than 464 hectares of parks and open space, including formal parks, wildlife areas, lakes and waterways, and sports grounds and in addition there are allotment sites, cemeteries, highway verges and greens that add to the green appearance of the borough. Satisfaction with parks remains high and 90% of residents say they visit parks, but with residents' lifestyles changing and the population increasing significantly, it is important that the borough's parks and open spaces continue to be relevant to residents needs and expectations.

There is a renewed appreciation of the health benefits of visiting green spaces and parks can improve people's physical and mental health and wellbeing and encourage people to have active lifestyles. There are volunteering opportunities in parks and biodiversity sites, which can help people get to their know their neighbours, strengthening a sense of community and giving all residents scope to learn or improve their skills. Parks are a thriving part of the local economy, hosting small business such as children's nurseries, training facilities and parks cafes. They provide venues for events such as funfairs, community festivals, food fairs and organised sports. But for those seeking peace and quiet, time to relax with friends or just walk the dog, there are numerous open spaces each with their own character to explore and enjoy.

Trees and woodlands are an important part of Sutton's parks and urban landscape and it is recognised as a "leafy place", mainly because of the number of street trees. It has a proud tree heritage, ranging from Victorian & Edwardian planted avenues of Plane, Lime and Beech, to many veteran trees dating back over 300 years. Trees improve the air we breathe and community wellbeing, by creating a green and calming environment for residents and visitors, while providing a wide range of habitats for wildlife. This strategy commits the Council to tree planting and the creation of 1 hectare of new woodland.

The final component of this strategy is the Biodiversity Strategy; a plan of action for protecting, conserving and enhancing Sutton's wildlife at a local level, using measurable targets. It includes plans for managing habitats including chalk grassland, rivers and wetlands, parks and green spaces, woodland and scrub and it is right that all life is considered and accommodated across all the land the Council manages. The overarching aim is to ensure the conservation, protection, and enhancement of biodiversity in the borough, for current and future generations.

Sitting under the Council's Environmental Strategy, The Parks and Open Spaces Strategy, including the Tree Strategy and Biodiversity Strategy sets out how the Council will continue to provide high quality open space, tree cover and habitats to meet the needs of local people and wildlife and how with careful management the Council's ambitious corporate objectives can be achieved. The strategy replaces the Open Spaces Strategy published February

2007 and the Tree Strategy agreed Feb 2009, and updates the Biodiversity Action Plans 2010 - 2015, and replaces the Habitat Action Plans.

Section B - Setting the scene

B.1 What is an open space?

Open spaces include ornamental parks, recreation grounds used for sport, biodiversity sites and river corridors where wildlife flourishes, cemeteries and churchyards, allotment gardens, verges and planted areas landscaped to add character and improve the appearance of streets. These spaces are freely accessible during the day to the borough's residents.

B.2 How does this strategy support the Council's Corporate Plan?

The Council's published Corporate Plan 'Ambitious for Sutton 2018-2023' gives the four priorities of the Council:

- being active citizens
- making informed choices
- living well independently
- keeping people safe

Parks and open spaces provision relates most closely to the Being Active Citizens priority. This strategy supports the outcome that "The physical environment is maintained and improved for all residents". This will be achieved through the following actions:

- Review and develop a Parks and Open Spaces Strategy
- Work with partner organisations, Friends Groups and Local Committees to increase external funding contributions to deliver improvements to parks
- Deliver one of the largest parkland areas in London through quality landfill restoration in Beddington
- Maintain parks policing and commitment to supporting Friends Groups, organised activities and keeping parks safe and free of anti-social behaviour

The Corporate Plan also commits the Council to support community tree-planting schemes with the aim of achieving over 2,000 new trees across the borough through:

- Sponsorship of new trees;
- Seeking funding for planting trees through planning and other funding opportunities.

The Council's Environment Strategy sets out a number of targets and actions relating to creating 'A Greener Borough'. This Parks and Open Spaces Strategy provides greater detail on how these areas of work will be taken forward and sets out the Council's vision, objectives, targets and action plans in relation to open spaces management.

B.3 Protecting parks and open spaces through planning legislation

Planning legislation and policy protects the Borough's parks and open spaces. Planning policy for open space has three tiers; national, regional, and local. In Sutton this primarily consists of:

- The Government's National Planning Policy Framework (NPPF), which sets out the need to assess the quality and quantity of open space;
- The Mayor's London Plan, which outlines the need to assess all forms of open space; and
- Sutton's Local Plan, which identifies and safeguards open space in the borough.

The NPPF (2018) advises that councils should conduct up-to-date assessment of the need for open space and opportunities for new provision; whilst working towards the protection and enhancement of networks of biodiversity and green space. The NPPF is supported by National Planning Practice Guidance (NPPG), which advises local authorities to prepare local strategies and requires them to take account of biodiversity.

The Mayor of London's London Plan (2016) aims to protect and promote London's open spaces and green infrastructure. Key relevant policies in this plan include the requirement for planning authorities to audit, manage and protect existing green spaces and infrastructure and develop priorities for addressing deficiencies. Also included are dedicated policies relating to play and recreation space, urban greening, sustainable drainage and biodiversity. The Supplementary Planning Guidance document on the All London Green Grid, published in 2012, added extra emphasis in respect of connecting and integrating London's green infrastructure network.

The Sutton Local Plan (2018) reflects national and regional policy and designates a number of different types of open space in the borough, including green belt and metropolitan open land, public open space, urban green space and allotments. The Local Plan contains policies that seek to retain the existing level of open space in the borough and to support the improvement, enhancement and management to existing open spaces in Sutton. This includes open space managed by other bodies including Beddington Farmlands (part of the Wandle Valley Regional Park) and Mayflower Park in Worcester Park. The Council will continue to work with other bodies and agencies to secure open space for the benefit of residents.

More detail on the planning policy context is provided in Appendix 1. Appendices 2- 7 from the Sutton Local Plan show access to open space across the borough.

Section C - Research findings from resident and service user surveys

To assist in developing this strategy two consultations have been carried out: a user survey was completed in summer 2018 and in Summer 2019 consultation was completed on the draft strategy. In addition the Council carries out a residents survey every two years and a consultation was completed while developing the Sustainability Strategy in early 2019. This section analyses and explores the findings of recent resident and service user surveys to help understand how the borough's open spaces are used and the expectations of visitors. Information about parks visitors helps the Council plan for their needs, prioritise spending and identify where improvements should be made.

C.1 Use of parks

The Resident's Survey undertaken by MORI on behalf of the Council every two years and in 2017 found that for parks and open spaces:

- 89% of residents say they use parks and open spaces.

- Open spaces were most likely to be used by households with 2+ adults with children: 94% of households in this group say they visit parks

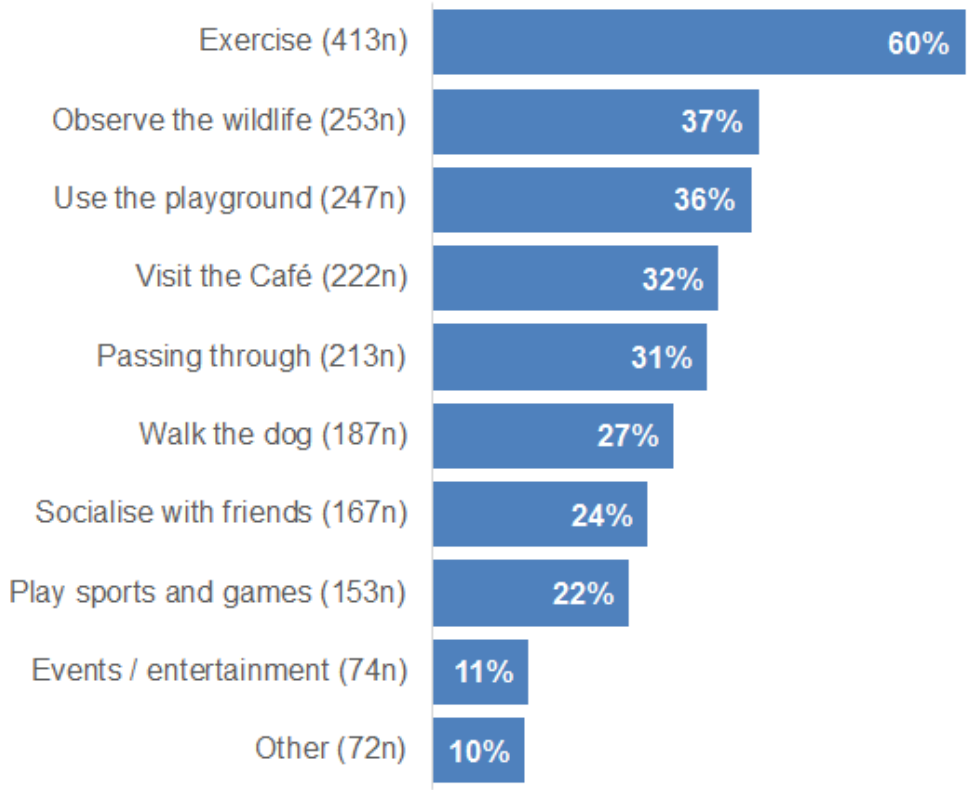
The survey found that for playgrounds:

- 41% of people living in the borough use playgrounds.
- This rose to 72% of households with a stay at home parent and 65% of black and ethnic minority households.

The Parks and Open Spaces Visitors Survey 2018 was an online survey on the Council's website, completed by 690 residents who reported their use of open spaces, their satisfaction, if they felt safe during their visits and whether they had volunteered or wanted to volunteer in parks. It found that:

- 44% of residents used the park less than everyday, but more than once a week.
- On average 46% used the park for 30 minutes to one hour per visit.
- More than half (57%) used the park with their family with 28% visiting alone.
- 6 out of 10 (60%) used the park for exercise.
- 32% (218 people) said they would be interested in attending organised activities and events such as walks and talks.

Visitors were asked what they used the park for. The most popular use was for exercise (60%) and of those 61% are female and 32% are male (7% did not disclose their gender). Half of visitors exercising in the park said that this was their main way of exercising. This suggests that parks are already an important venue for exercise , especially for women.



Observation Surveys were carried out in thirteen parks by council officers during Autumn 2018 who observed and recorded visitor numbers present and the activities they were

engaged in. The thirteen parks surveyed were chosen to be a diverse selection, including small and large sites, traditional parks and simple open spaces. Data from the Observation Surveys 2018 can be used to calculate an annual number of visitors at each park. Of the parks surveyed the top three for annual visitors are likely to be:

1. Manor Park (742, 638 visitors)
2. Beddington Park (628,957 visitors)
3. The Grove (608,382 visitors)

However even the three least visited parks in the survey would be expected to have a considerable number of annual visits:

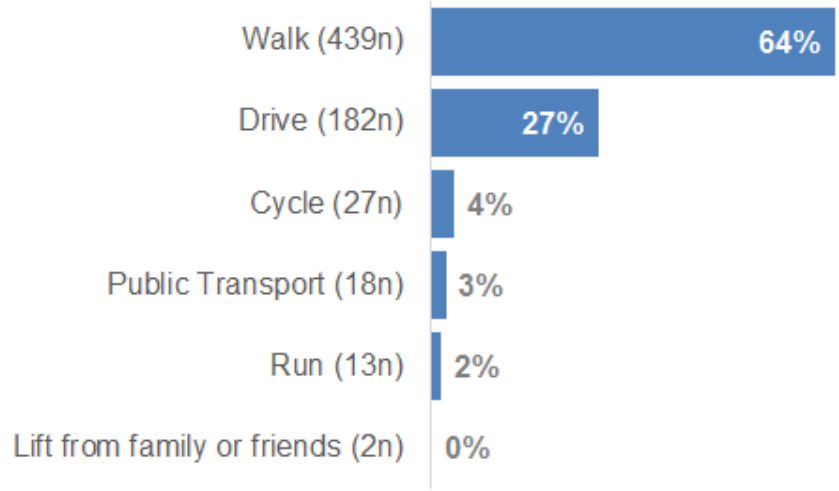
1. Corrigan Avenue Rec (15,374 visitors)
2. Belmont Park (24,835 visitors)
3. Poulter Park/RevesbyWood/Middleton Open Space (linked open spaces) (80,417 visitors)

It was noted that the type of visitor varied considerably between the parks surveyed, for example:

- Overton Park has an estimated 47% teenage visitors and Rosehill East and West 32% teenage visitors; considerably more than any other parks observed, with the next highest Manor Park having just 13%.
- Corrigan Avenue Recreation Ground has an estimated 77% of visitors with a dog; Oaks Park has 76% of visitors with a dog, with Cuddington Recreation Ground the next highest having just 31%.
- At Oaks Park only 5% and at Corrigan Avenue only 8% of visitors are estimated to be children, while all the other parks observed have around 20-30% of visitors that are children.

C.2 Travelling to parks

To understand the distance from home that residents are prepared to travel and the implications their journeys have for local roads and air quality, the Parks and open spaces visitors survey 2018 asked visitors ‘How do you normally get to the park?’ and ‘Approximately how long does your normal journey to the park take?’. The results are shown below.



Most respondents (64%) walk to the park, while around a quarter (27%) drive to the park. For 39% of respondents their normal journey to the park takes between 5 and 10 minutes and less than 2% have a journey to the park which takes more than 30 minutes. This shows the importance of an extensive network of open spaces so that residents can quickly access open space and so that they can use parks as safe walking and cycling routes.

C.3 Satisfaction with parks

The Resident's Survey found that for parks and open spaces:

- Residents satisfaction with parks increased by 6% from 82% to 88% between 2015 and 2017.
- Satisfaction was highest in Beddington & Wallington (91%) compared with St Helier, The Wrythe and Wandle Valley (84%) and Cheam North and Worcester Park (85%).
- Among service users satisfaction increased by 1% from 88% to 89%

The survey found that for playgrounds:

- Residents satisfaction with playgrounds increased by 3% from 71% to 74% between 2015 and 2017.
- Amongst people using playgrounds, satisfaction increased by 4% from 80% to 84%.

The Parks and open spaces visitors survey confirmed that satisfaction was high with 83% of residents saying they were either very or fairly satisfied with their park and 91% either strongly agreed or agreed that their use of the park enhanced their quality of life.

C.4 Barriers to use and parks safety

The parks and open spaces visitors survey 2018 found that 94% of residents felt either very or fairly safe alone in the park during the daytime, although this fell to 23% after dark. The survey also asked if anything prevented visits to the park or limited their enjoyment of the space. There were 358 responses to this question. Antisocial behaviour was the fourth most selected reason given as a barrier to visiting parks more often.

From the top ten responses shown below, the issue that prevented most people from visiting the park or limited their enjoyment of the space was dogs. This has significant implications for parks management as dog walkers make up about a third of all parks visitors and in the winter months may be an even larger proportion of visitors as, dogs need walking all year round. Creating some segregation of dog walkers from other users may be necessary in some parks especially at busy times of the year. Maintenance and facilities issues also need to be recognised and appropriate management measures taken to address concerns.

Theme	Number of first responses	Number of second responses	Number of third responses	Total*
Dogs	58	14	1	73
Maintenance	52	9	4	65
Facilities	43	8	1	52

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Anti Social Behaviour	25	12	2	39
Travellers	32	6	0	38
Litter	25	5	1	31
Toilets	15	5	3	23
BBQs	10	7	1	18
Parking	11	4	1	16
Café	9	3	1	13

*The responses have been coded to identify the most prominent themes. Where comments included more than one theme, these have been included in the table below as the first, second and third responses. The total number of times a theme was mentioned is recorded in the total column. The themes have been ordered by the total number of times mentioned.

C.5 Volunteering

In terms of volunteering, the Residents Survey identified that only 10% of residents regularly volunteer in any capacity in the Borough, a significant fall since 2015 when 19% regularly volunteered. No figures are available for volunteering specifically in open spaces.

The Parks and open spaces visitors survey 2018 identified that a small proportion (less than 10%) said that they had taken part in volunteering activities such as litter picking, tree planting, running events, but a third of those surveyed said they would be interested in the future and 169 residents provided their contact details. This suggests that there is considerable potential to involve more volunteers in activities that could benefit parks and support other visitors.

C.6 Greening the borough

This section draws on the new Environment Strategy 2019 -2025 and the findings from the public consultation undertaken in Summer 2018. The Council consulted with 293 residents about how to ensure the borough becomes a more sustainable place to live, work and visit. This was supplemented by focus groups run by Community Action Sutton. The responses to the greening the borough theme are relevant here. Respondents were provided with a vision statement for the greening chapter of the strategy and asked to what extent they agreed/disagreed with it. Respondents predominantly strongly agree or agree with the vision for greening and a very small minority (2.73%) either disagree or strongly disagree with this.

When respondents were provided with the targets that Sutton and partner organisations would work towards to make Sutton a greener borough, they were overwhelmingly in favour of measures to limit loss of green space, increase tree canopy and maintain the biodiversity of the Borough. The table below provides the findings from this question.

Target	Strongly Agree	Agree	Neither Agree/ Disagree	Disagree	Strongly Disagree	Don't Know	No answer

No net loss in green space and by 2050,half of Sutton will be green	44.37%	34.81%	10.24%	5.12%	3.07%	1.71%	0.68%
By 2050, tree canopy cover will increase by 10%	43.34%	31.74%	11.26%	6.48%	3.07%	2.05%	2.05%
Maintain and enhance the biodiversity value of the borough	46.76%	37.20%	8.87%	2.05%	2.39%	1.71%	1.02%

The comments relating to these targets suggested that respondents were keen to see an increase in tree canopy cover with many suggesting a 10% target was not ambitious enough. Related to this 9.8% of participants said the maintenance of trees needs to improve. When respondents were asked if there were any further actions which could be taken to make the borough greener, the most popular answer was that the tree canopy target should be higher (20.8%). Maintenance of trees and green spaces was favoured by 5.7% of respondents with the same percentage advocating community garden spaces.

The targets were updated following the consultation. The final set of targets included in the Greener Borough chapter within the Environment Strategy are:

- No overall reduction of green space in the borough.
- Plant 2,000 trees between 2018 and 2022.
- Maintain and enhance the biodiversity value of the borough.

These responses show the support for provision of open space, trees and maintaining the boroughs biodiversity which will be taken forward through appropriate management, policies and actions (please see the next section).

C.7 Consultation on draft strategy testing attitudes and priorities

During Summer 2019 the draft text for the strategy was made available through Citizen Space and via friends groups as part of a consultation testing views on the vision and objectives, in particular where policies and actions are designed to lead to new outcomes. In total 343 residents responded to give their views either on-line or by completing a form distributed through the Local Committees. In addition some participants wrote to the service on specific points of concern within the draft text.

More than half of respondents were between the ages of 34 and 55; only 11% under 35 and more than three times as many women responded as men. 10% of respondents said they had a long term health problem or disability.

The key findings help to show attitudes and priorities of the community.

- Wildlife and plants - 97% say that wildlife and plants add to their enjoyment of visiting parks and 84% support setting more land in parks aside for wildlife.
- Trees - strong support for more tree planting in parks (77%)

- Parks cafes - 65% say they are an important part of their visit and 67% support landscaping improvements around the cafes.
- Environmental enforcement - 91% say they support enforcement (including fines) to tackle litter, unlawful barbecues and dog fouling
- Pesticides - 67.5% would like pesticide use in parks to stop even if that means more weeds on paths
- Events - 85% are happy for events to take place in parks
- Activities - a quarter couldn't find any activities for them.
- 59% would be willing to pay to take part in activities and events

The full results of the survey will be provided on the Council's website when the strategy is published.

Section D - Vision, Objectives and Policies

The following vision statement and objectives have been developed to assist in delivering the Council's Corporate Plan and the planning requirements set out in the Local Plan. The research summarised above was considered and used to inform preparation of the vision, objectives and policies.

D.1 Vision

The borough's parks and open spaces and trees will be well-maintained; support good public health, local culture, social activities and biodiversity and where possible opportunities will be taken to improve access to open spaces, facilities and activities.

D.2 Parks and open space objectives:

1. Manage parks and open spaces in line with best practice and take opportunities to improve their appearance, enhancing local character through landscaping improvements as funding allows.
2. Improve access to open space throughout the borough by removing barriers to access, providing enhanced facilities and where possible creating new open space.
3. Support residents to be physically active by promoting the use of parks, offering social prescribing and by providing a range of sports, leisure and social activities, in partnership with sports bodies and clubs.
4. Maintain parks policing and enforcement activities to keep parks safe and free of anti-social behaviour
5. Work with friends groups, the voluntary sector, sports bodies and the wider community to develop volunteering and fundraising opportunities.
6. Manage park's assets to generate revenue to support the service and the local economy and charities, including through leasing, events and developing paid for community facilities and licensing businesses to deliver services.

7. Enhance the appearance and character of the Borough by maintaining a safe, healthy, diverse and resilient tree population and encouraging tree planting.
8. Care for plants, animals and ecosystems and help them to thrive, by promoting an understanding of nature, through the delivery of the Biodiversity Strategy.

D.3 Delivering the parks and open spaces vision and objectives

This section details a number of open space management themes and under each of the objectives above sets out the general approach and policies the Council will implement in partnership with friends groups, residents groups, sports bodies, external funding bodies, businesses and contractors. The findings from the research section have been used to inform the development of the policies and actions set out here. The Action Plan later in this document provides more detail on how the policies will be implemented.

Objective 1: Manage parks and open spaces in line with best practice and take opportunities to improve their appearance, enhancing local character through landscaping improvements as funding allows.

1.1 Parks management plans and inspections

Parks management plans help with effetive day to day management of large and busy parks and ensure a continuity of approach, that issues can be dealt with and that opportunities for improvement are taken. They also help stakeholders understand the priorities for the site and what can be achieved within the resources available. Stakeholders will be consulted during the development of the plan and suitable objectives. The management plan will assist with decision making and explain how performance will be managed and benchmarking will be used to set appropriate standards for maintenance.

Management plans will include costed action plans and provide a timeline for delivery. They will be reviewed at least every five years and the action plans updated every two years. The plans will be used as the basis for Green Flag and London in Bloom applications and will include information on Sites of Importance for Nature Conservation and ensure that nature within parks is considered as part of the overall site management.

It was noted in the research section that one of the most visited areas of land is the river Wandle corridor and it is proposed to create a management plan for the river walkway to ensure it is managed cohesively in the future. Research also showed that while there is sufficient quantity of open space in the St Helier and Wandle Valley wards, there is generally lower usage and satisfaction with the parks in these wards. This also needs to be addressed through the comprehensive management plans dedicated to this group of open spaces. Similarly the open spaces surrounding Roundshaw, would benefit from a cohesive plan to ensure the community maximises the benefit of this local resource.

To support the management plans a programme of site condition inspections will be carried out to ensure that parks and openspaces infrastructure is maintained in a safe and suitable

condition to use. This will include inspection of play and sports equipment, paths and roads and buildings. Records will be maintained of all inspections.

Policy P1
Parks Management Plans will be prepared or updated for open spaces giving priority to the large and most visited parks. The management plans will include action plans that will be updated regularly.

Policy P2
An inspection programme of facilities will be carried out at an appropriate frequency to ensure compliance with best practice and legislation.

1.2 Weed Management

Weeds are plants growing where they are not wanted and there are many possible ways to control them. In the past this has been mostly through hand weeding and hoeing, or by using herbicides. As more has become known about the harm some herbicides can cause to the environment, the emphasis has been on finding alternative methods of weed control and it is now common to see synthetic membranes, dense planting and mulches used to suppress weed growth. While herbicides may still be useful to deal with persistent weeds such as *Japanese knotweed* and bindweed, in many cases weeds can be designed out, perhaps by grassing down infested ground and mowing, or by sealing surfaces. In Sutton's parks the Council will adopt an integrated weed management approach using all the techniques available to tackle weeds and only using herbicides as a last resort, to ensure only the absolute minimum of chemical is used.

Policy P3
The Council will adopt an integrated weed management approach to weed control and reduce dependence on chemicals by evaluating requirements at each location, designing out weeds, and selecting alternative control methods where appropriate.

1.3 Highway verges

Highway verges add to Sutton's green appearance, help absorb rainfall running off surrounding hard surfaces and in summer assist in keeping air temperatures cooler. Verges in more rural parts of Borough also provide useful habitat for wildflowers and the creatures that depend on them. While most verges are maintained by the Council, verges on Red Routes are maintained by Transport for London and the standard of maintenance and programme of work is different.

Policy P4
The Council will maintain verges to enhance the appearance of suburban streets and where appropriate in more rural places and on wider verges and greens encourage wildlife through a more relaxed regime that encourages wild flowers and provides habitat for wildlife.

1.4 Cemeteries and churchyards

Sutton has two active cemeteries; Sutton Cemetery in Stonecot and Bandon Hill Cemetery in Beddington which is run jointly with Croydon Council. The Council will continue to maintain these to a high standard that respects the deceased and meets the expectations of families. At Sutton Cemetery there is sufficient space to offer new graves for the next 20-30 years at current levels of burial. At Bandon Hill Cemetery only reclaimed graves (graves where further burials are possible without disturbing existing buried remains) are offered. This provision will be able to continue for up to 30 years at current burial levels.

While Sutton has made provision for burial the "Audit of London Burial Provision" undertaken by the Cemetery Research Group, University of York in March 2011 revealed that many boroughs will have no new grave space within the next ten years. Across London the potential land held in reserve for burial, not all of which has planning consent, might meet one fifth of the projected demand. Where boroughs are unable to meet demand this may be displaced to adjacent boroughs such as Sutton. However legislation permits Councils to use new processes to reuse graves space and this may provide additional grave space in future.

Both Sutton's cemeteries operate within the Institute of Cemetery and Crematorium Management's Charter for the Bereaved standards.

Caring for the community - Cemeteries shall be managed with competence and efficiency, to ensure that the entire bereavement experience occurs without error or insensitivity, and meets the religious, secular, ethnic and cultural needs of the bereaved. The service shall comply with all statutory and Health and Safety requirements.

Service sensitivity - Cemeteries shall be managed to create and maintain an atmosphere of solace and respect throughout the entire proceedings. This sensitivity shall extend to all staff and contractors working there, through the application of bereavement sensitive specifications. Staff will respond sympathetically to individual funeral needs and shall give a justifiable reason for refusing any specific request.

Staff - All staff should possess qualifications and undergo recognised training specific to their duties. The appointment of all staff must emphasise the need for proper conduct and demeanour, as well as technical expertise. Staff must act and speak in a manner that recognises the sensitivity of bereavement, both during and outside working hours, and should not accept gratuities.

Environmental issues - The Council shall minimise the impact of bereavement upon the environment, by encouraging greater use of earth friendly materials and environmentally friendly practices.

Cemeteries are paid for services and the fees are agreed by committee each year and published on the Council's website. Fees are lower for parishioners of the Borough than for those living outside the Borough. The parishioner fee will also be applied if the deceased was resident in the Borough within 12 months of their death, or if they were placed in a care home outside the Borough by the Council. Proof of parishioner status must be provided when arranging services.

Appendix A

Policy 5
The cemeteries will be managed within the Institute of Cemetery and Crematorium Management's Charter for the Bereaved standards to provide the deceased and their families with respect and dignity.

Objective 2: Improve access to open space throughout the borough by removing barriers to access, providing enhanced facilities and where possible creating new open space.

2.1 Wandle Valley Regional Park and Beddington Farmlands
The Wandle Valley Regional Park incorporates numerous Council open spaces and privately managed landscapes along the river Wandle, from Croydon and Sutton in the south, through Merton and Wandsworth, to the Thames in the north. As Sutton becomes more built up and the population increases, the pressure on the network of open spaces grows. It is essential to use all available land for the benefit of residents and wildlife and as part of the Council's Ambitious for Sutton pledge, Beddington Farmlands, a privately owned area of land managed by Viridor, will be partially opened up, to form the 'jewel in the crown' of the Wandle Valley Regional Park. This is a once in a lifetime opportunity to provide public access to a large scale nature reserve in south London, emulating the highly successful RSPB Rainham Marshes near Dartford and the London Wetland Centre at Barnes.

Beddington Farmlands will have free public access to parts of the site for bird and nature watching, environmental education and volunteering opportunities. It will be the largest nature reserve within Sutton and with Beddington Park to the south and Mitcham Common to the north, will be part of a significant open landscape for residents to enjoy.

The Council has set ambitious requirements for the restoration of Beddington Farmlands, through the 2016 Restoration Management Plan, which must be delivered as a condition of the planning permission for the Energy Recovery Facility. The Council's Biodiversity and Planning Enforcement Teams will continue to contribute to the restoration of the site through the Conservation Science Group (CSG) and the Conservation Access Management Committee (CAMC). The CSG provides technical advice to the CAMC and they, in turn, provide scrutiny and direction to Viridor, to ensure that restoration remains on course for completion by 2023.

In addition, the Council will support creating links from Beddington Farmlands into Beddington Park and from Beddington Farmlands to Beddington Lane, to improve access and ensure the Farmlands are integrated with neighbouring land.

2.2 Repurposing Council land
Most Council owned land is already used for parks and open spaces, allotments, sports grounds, offices and car parks. However there are some smaller areas that are currently not being used to their full potential. The Council intends to identify and document these areas and where appropriate bring them into maintenance for community use, or as habitat. For example by managing land close to the river Wandle as part of the existing riverside habitat and for tree planting.

2.3 Nonsuch Park
Nonsuch Park to the west of the Borough shares a boundary with Cheam Park and lies just

outside the Borough boundary. With Epsom and Ewell Borough Council, Sutton Council leases Nonsuch Park from Surrey Councty Council and jointly manages it for the benefit of the community. The park is extensive, providing a countryside escape for all on the edge of London. The Council will continue to contribute to the management of Nonsuch Park, working with colleagues from Epsom and Ewell Borough Council to support the Nonsuch Park Joint Management Committee and ensure the land remains free for all to enjoy.

Policy 6
The Council will work with partners to increase access to public open space for the whole community.

Objective 3: Support residents to be physically active by promoting the use of parks, offering social prescribing and by providing a range of sports, leisure and social activities, in partnership with sports bodies and clubs.

3.1 The potential for open spaces and parks activities and sports to improve public health
Research shows that people who visit parks and green space, improve their physical, mental and social wellbeing and have better health outcomes. Income related health inequality is less pronounced where people have access to green space.[1] Environmental benefits from open spaces can also make a significant impact on our general health by improving air and water quality, decreasing the risk of flooding and providing access to tranquility.[2]

3.2 Physical and mental well-being
Inactivity is recognised as contributing to obesity, coronary heart disease and type 2 diabetes. The table below shows how Sutton fares compared with the nation as a whole when assessing physical health.

	Nationally	Sutton Residents
Percentage of adults (18+) classified as obese or overweight in 2016/17	57.3%	55.2%
Percentage of adults doing 150 minutes of physical activity a week, as recommended by the Chief Medical Officer	59.5%	64.6%
Percentage of physically inactive adults - taking less than 30 minutes of moderate activity a week	28.1%	22.9%
Percentage of people with type 2 diabetes aged 40 to	46%	42.8%

[1] Mitchell R, Popham F. Effect of exposure to natural environment on health inequalities: an observational population study. Lancet. 2008;372(9650):1655-60.

[2]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643239/PHE_and_National_Parks_England_accord.pdf

Appendix A

64 (national Diabetes Audit)		
Percentage of people with type 2 diabetes aged 65 to 70 (national Diabetes Audit)	35.6%	38%

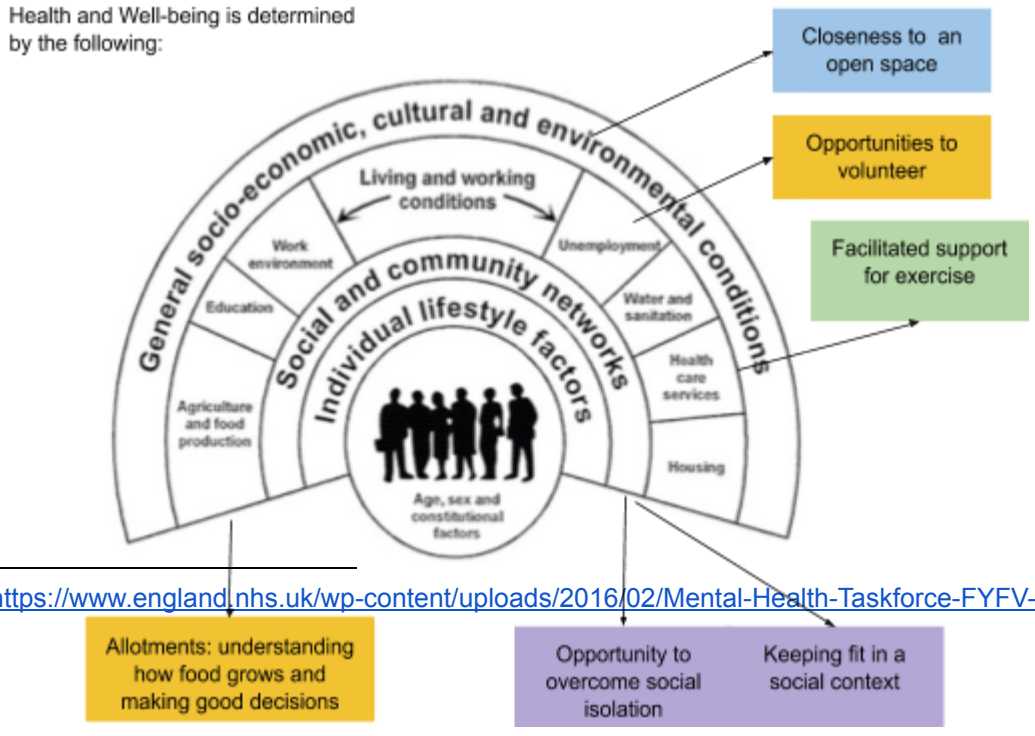
The World Health Organisation defines health as: “a state of complete physical, and social well-being, and not merely the absence of disease”. Physical activity is essential for physical wellbeing and parks provide the venue and opportunity for physical activity, providing opportunities for exercising, through walking, cycling, organised and informal sport, childrens play, gardening and through volunteering activities. Research shows that being in natural, green surroundings such as parks reduces stress, anxiety, aggression and lowers blood pressure.

In additional to physical health issues, one in four adults experiences at least one diagnosable mental health problem in any given year, with a cost to the economy estimated at £105 billion a year[3]. While visiting open spaces cannot cure every problem, physical activity is now recognised as being as effective in the treatment of depression as psychotherapy or medication and can help people reduce the symptoms associated with anxiety disorder, phobias, panic attacks and stress disorders.

3.3 Social wellbeing

Parks can be used to build a nurturing community spirit, through events, social gatherings, sports and involvement in volunteering, that bring together different kinds of people (gender, ethnicity, social class, etc) in a space where everyone feels safe and can mix.

The diagram below shows how our health and wellbeing is influenced by our surroundings and circumstances and the ways that open spaces can be used to help individuals with their health and life choices.



[3] https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf

3.4 Social Prescribing

Social prescribing is a way GP's, nurses and other primary care professionals can refer patients to a range of local, non-clinical treatments such as increased physical activity, or greater participation is social activities. Sutton does not formally have a social prescribing model, but the Council has commissioned the NHS Health Check programme which is designed to spot early signs of stroke, kidney disease, heart disease, type 2 diabetes or dementia for adults aged 40 to 74. At the end of the check the patient will receive their cardiovascular risk (% risk of developing or having a cardiovascular incident). The consultation carried out by a health care assistant will provide support and advice to help them change their behaviour and may recommend that they become more active. Part of the role of public health is to encourage, facilitate and coordinate the ability for patients to take part in physical activity post a health check. Parks and open spaces can provide for many of these needs through organised and informal sport and other volunteering and recreational activities.

Policy P7

The Council will develop a menu of activities to offer to residents through GPs for social prescription.

3.5 Parks based provision of outdoor sports facilities

Parks are important venues for team sports including football, rugby and baseball, but trends in sport are changing and parks need to continue to deliver a relevant sports offer. There is demand for new sports in parks such as netball and organised outdoor keep fit sessions and interest in reintroducing cricket. The Council is committed to working with sports bodies, including the England and Wales Cricket Board, the Football Association, Bowls England, Sport England and the Lawn Tennis Association that have sports development programmes to assist local authorities to improve facilities. Improvement programmes may require a financial contribution from the Council and priority will be given to investing in activities that deliver the "being active citizens" corporate objective.

Where there is reduced demand, for example for adult football in parks, because players prefer to play in smaller sided teams and on artificial surfaces with floodlighting that allow play all year round, facilities will be repurposed. Youth football remains strong and facilities are being adapted to meet their demand for smaller sided pitches. While bowling has been in decline nationally for many years, Sutton has adapted one green for use by a thriving croquet club that has 90 members and a waiting list to join.

The Council will also work with its grounds maintenance contractor to introduce a licenced personal trainer scheme, promote the use of existing sports facilities and prepare a business plan to inform provision to meet demand for new sports and activities.

Policy P8
The Council will work with sports bodies and commercial partners to provide for a range of sports and activities in open spaces that meet community needs and generate income to offset the cost of parks maintenance and improvements.

3.6 Playing pitch strategy
To inform decision making about sports investment the Council will produce a new playing pitch strategy to include details on football, mini league, rugby, cricket, tennis, and netball. The Playing Pitch Strategy will assess the amount of land available for sport, the likely demand for pitches and the quality of pitches provided. The Council will work with sports bodies to plan for current and future needs, agreeing how to provide the quantity and quality of pitches and facilities needed to encourage participation in outdoor sports and deliver the corporate public health objectives. The strategy is essential to support funding bids for investment in facilities by sports bodies.

3.7 Other sports provision
In addition to traditional pitch based sports, parks provide venues for other outdoor sports including bowling, croquet, baseball, table tennis, running, nordic walking, rambling, fitness training and golf. Some of these sports are provided by other organisations or businesses that use the parks as venues and there is scope for further sports to be provided for in this way. Sharing facilities such as bowling pavilions and ball courts may assist with affordability of sports and it is recognised that providing a range of activities is essential to ensure that all ages, abilities, sexes and interests can be accommodated. Many of the sports have social activities to keep players engaged and provision of club facilities supports the social aspects and assists with recruitment and retention of participants.

Policy P9
The Council will ensure there is sufficient capacity for organised outdoor sports to meet community needs and promote facility sharing and new ways of delivering activities that benefit clubs and increase participation.

3.8 Informal recreation
Parks and open spaces provide residents with opportunities for informal activities including playgrounds, ball courts, outdoor gyms, trim trails, geocaching, walking and rambling. These activities can be just as beneficial for health as participation in organised sport and are free to use and open to all. To ensure facilities continue to meet the community's needs the Council will prepare an action plan setting out how it will maintain and improve playgrounds, ballcourts, toilets and other facilities. The action plan will include costs and sources of funding and timescales for action. The Council will produce information about walking and

cycle routes to encourage exercise and promote free access to free drinking water and refills at park cafes.

Policy P10
The Council will maintain a network of playgrounds to ensure children can access safe playspace close to their homes and provide facilities that promote active lifestyles for all residents.

3.9 Allotments
Allotment gardening is a good way to keep active, meet other gardeners in the allotment community and grow a wide range of fresh vegetables. Gardeners can enjoy growing flowers or use their plot as a personal retreat where they can enjoy the outdoors. Greening and food growing are recognised as priority areas in Sutton's Environment Strategy 2019 - 2025 and allotment gardening helps to deliver this objective.

*"Growing food locally and buying locally grown food helps reduce emissions from agriculture. (*Sutton's Environment Strategy 2019 - 2025)

The Council has thirty six allotment sites with over 2,500 plots of varying sizes. The sites are protected from development for other purposes in legislation and by the Sutton Local Plan, the boroughs planning policy document. Charges for allotment plots are based on the size of the plot in question and also include a payment towards the costs of providing water. Each plot holder has a legal agreement with the council to maintain their plots and this is supported by a set of allotment guidelines (London Borough of Sutton & Idverde Allotment Gardeners Guidelines Version 6 - 2018) that all plot holders are expected to abide by.

The Council encourages all allotment gardeners to help look after and improve their sites and to elect a site representative. Representatives meet to discuss issues, share experience and agree how to improve the service. Site representatives may choose to work with other gardeners on site to improve the allotments, by clearing overgrown plots and working towards full occupation, or by seeking external funding for larger improvement projects. A full list of allotment sites is shown at Appendix 8.

Policy P11
The Council will encourage allotment gardening, by providing a network of sites and basic services such as security, grass mowing on main paths, water supply and by maintaining records of plot lettings, vacancies and invoicing rent. Allotment gardeners are encouraged to participate in managing and maintaining their site, as individuals and through allotment groups or societies.

Policy P12
All allotment plot holders are expected to maintain their plots as set out in their allotment agreement and follow the guidelines as set out in the 'London Borough of Sutton Allotment Gardeners Guidelines'.

Appendix A

To address air quality concerns and so that allotment gardeners and neighbours can enjoy the fresh air and being outdoors, the Council has restricted the use of open bonfires on allotment sites to get rid of rubbish. Most waste material can be disposed in other ways such as by composting and this is the recommended method of disposal. The Reuse and Recycling Centre will accept other materials, but if burning materials on site, an incinerator must be used and it should be remembered that the Environmental Protection Act 1990 makes it an offence to emit smoke, fumes or gases which are a nuisance.

New allotment gardeners may be offered up to two years rent free to give them help with bringing overgrown plots back into use and to clear away rubbish.

Policy P13
From 1st January 2020 open bonfires are not allowed on the council's allotment sites except for Guy Fawkes night celebrations, on allotment sites for 5 nights before and five nights after 5th November each year. However waste material that cannot be disposed of by composting or other means may be burned in an incinerator or clean oil drum during the period 1st October to 15th March. Fires should not be lit more than 2 hours before dusk and are not permitted on Bank Holidays during this period. Material that is damp or green must not be burnt until it dries out fully. See the allotment Gardeners Guidelines for more information on how to dispose of material without burning and never burn materials such as plastics that may cause pollution.

Note that by law you could be fined if you light a fire and allow the smoke to drift across the road and become a danger to traffic.
If you cause a nuisance by frequently having fires or allowing smoke to drift into neighbouring properties the Council can issue an 'abatement notice' and you can be fined up to £5,000 if you do not comply with the notice. In addition, failure to abide by this policy will result in termination of the allotment agreement.

This Policy supersedes the guidance in Version 6 - 2018 of the Allotment Gardeners Guidelines.

Policy P14
A rent free period on a newly tenanted plot may be allowed for a period of up to two years at the discretion of the Allotment Officer if the plot is particularly overgrown or if it has large amounts of rubbish or green waste deposited on it.

Objective 4: Maintain parks policing and enforcement activities to keep parks safe and free of anti-social behaviour

4.1 Parks and open spaces security
The results of the parks user survey highlight the importance of safety and security to park visitors. Sutton has very low levels of crime compared with other London Boroughs and the

Council aims to keep open spaces safe for use, to minimise antisocial behaviour and to encourage visitors to be mindful of their impact on others and the environment. This includes carefully disposing of litter, keeping dogs under control and treating others with respect. The Council will keep parks open for use for as many hours as possible while acknowledging that in some cases locking is required to address the needs of neighbours and to avoid inappropriate uses. In addition measures are in place to minimise unlawful encampments.

Security covers issues such as locking arrangements, anti-social behaviour, graffiti and vandalism, unlawful movement of vehicles, encampments, alcohol and drug use, fire setting and wildlife protection. The Council and the Metropolitan Police have primary responsibility and work closely to maintain the safety and security of the Borough's parks and open spaces. The Safer Parks Team, who are Metropolitan Police officers, patrol the open spaces and are supported by Council officers delivering improvements and maintenance and environmental enforcement. External companies are also used to deliver specific enforcement activities.

4.2 Locking arrangements

The Council aims to make parks available for visitors to enjoy for as much of each day as possible. As a result the majority of the Borough's parks and open spaces are not locked at any time. This also brings enormous value through passive security, with parks visitors acting as a deterrent to misuse; a well used park is generally a safer park. In addition, dog walkers and those looking for shortcuts away from busy roads, like to be able to access parks throughout the day. The default position is therefore to leave parks open, unless there is a documented reason for locking, such as disturbance of neighbours, regular anti-social behaviour, safety concerns or facilities that need special protection. For these reasons, a limited number of parks are locked overnight to exclude the public and a further small number remain open to pedestrian access, but are secured to prevent vehicular access.

Policy P15

When it is agreed by the Council and the Safer Sutton Partnership that locking is required, locking will be provided as follows:

- Only locking for a short period to establish if the problem is temporary
- Only locking at times the issues occur e.g weekends only, summer only
- Reviewing arrangements regularly to establish if issues remain or if locking can be withdrawn

4.3 Byelaws, Public Spaces Protection Orders (PSPO), and other measures

The Council and its partners use byelaws, PSPO and other measures to make the public spaces within Sutton more welcoming to the public and to stop individuals or groups from committing or engaging in anti-social behaviour. There are byelaws for parks and open spaces and byelaws related to dogs in parks and they are displayed on the back of parks welcome signs and on the Borough's website. In addition to combat instances of anti-social behaviour associated with the consumption of alcohol and nuisance, the Council, in

partnership with the Metropolitan Police has put in place Public Spaces Protection Orders (PSPOs).

Information about the areas covered by a PSPO can be found in the PSPO Notice, available on the Council website (see link here).

4.4 Anti-social behaviour

Anti-social behaviour (ASB) is described as - 'Acting in a manner which causes harassment, alarm or distress to other people'

Some acts of ASB are clearly criminal, e.g. vandalism, graffiti and racial abuse. Other behaviour like shouting in the street or gathering in large groups may be considered anti-social behaviour rather than criminal behaviour. Because of the range of what constitutes ASB, Police actions can be very different too. For example, police may decide that having a word with individuals or groups is sufficient. On the other hand, more serious incidents could involve police dispersing groups of people or making an arrest, which may lead to a charge and prosecution in court.

4,5 Police action on anti-social behaviour

In order to tackle residents' concerns on ASB, Police will:

- Target problem individuals and areas with extra patrols to deter repeat incidents
- Work with partners to physically improve areas
- Request people who have gathered to leave an area
- Issue fixed penalty notices for disorder (currently £80)
- Send letters home to parents detailing the behaviour of their sons and daughters
- Pursue Acceptable Behaviour Contracts (ABCs) - a voluntary agreement between those responsible for the behaviour, the local Police and Sutton Council and/or registered social landlord
- Apply to the courts for Criminal Behaviour Orders (CBO) - a compulsory order made by a court for adults for minimum 2 years to no maximum timeframe and for under 18s 12 months to 3 years to protect the public from ASB by restricting the movement and monitoring the behaviour of the person committing anti-social acts. CBOs can only be given to those aged ten or more. A breach is a criminal offence and can result in arrest
- Make arrests
- Support the prosecution of offenders by other agencies

For more detail on how the police can deal with anti-social behaviour see appendix 10 - Police measures to minimise anti-social behaviour

4.6 Responsible parks visits with dogs

Dog walkers are an important user group, particularly in the winter months when other use may reduce and the Council encourages dog owners to take full advantage of open spaces and parks and to enjoy the active lifestyle that owning a dog brings.

However, the Council requires all dog walkers to take full responsibility for their pet, keeping it under control (either training it to respond reliably to command or keeping it on a lead) and to clean up after them. For the safety and enjoyment of all visitors, the byelaws require dogs to be kept under control and set out where dogs can be exercised. Note some parks have dog free areas and dogs are excluded from all children's playgrounds.

Dog mess can cause serious health issues including *Toxocara canis*, which can cause seizures and blindness. Since September 2002, all public land, which includes pavements, grass verges, parks and open spaces, is covered by the Dogs (Fouling of Land) Act 1996. An offence is committed if a person in charge of a dog fails to clean up after it if it fouls on public land. The offence carries a maximum fine of £1,000. Claiming to be unaware of the fouling or not having the means to clean up is not an acceptable excuse and Environmental Enforcement Officers who see people allowing their dogs to foul our public spaces, and do not clean up after them, will issue fixed penalty notices.

The majority of dog owners using parks and open spaces act responsibly and clean up after their dog by using a bag or a poop scoop to remove their dog's mess and dispose of it safely. Dog mess bins are provided in many locations and dog mess can also be placed in any Council litter bin. If there are no bins nearby, then it is the owners responsibility to take their dog's mess home to dispose.

Council officers and the Police will continue to work with the community to promote responsible dog ownership, keep the byelaws up to date and display them widely and use the powers available to enforce against dog owners who do not control their pets and clean up after them.

4.7 Community support

The Council and Police need the support of communities in gathering information about ASB. To report an incident of ASB:

- In an emergency call 999.
- In a non-emergency situation, but requiring police attention, call Sutton Borough Police on 0300 123 1212 (ask for Sutton).
- Contact your local Safer Neighbourhoods Team or Safer Parks Team.
- Alternatively, you can call Crimestoppers anonymously, on 0800 555 111

4.8 Parking issues in parks

Limited parking is provided within some parks and open spaces. To preserve the character and peace of parks the Council does not wish to increase provision of parking. Residents are encouraged to use other more sustainable ways to visit parks including walking, cycling, public transport and when a car journey is needed to consider car sharing. As parking is limited it is important that visitors:

- Drive and park safely within the park
- Park only within the designated bays, where marked bays are provided
- Park carefully to avoid causing an obstruction (especially where bays are not marked
- Never park on access roads or in passing places

- Keep to the 5 miles per speed limit (cyclists and motorists)
- Give priority to pedestrians

4.9 Litter

The Council provides numerous litter bins in parks and all visitors are encouraged to use them. If a bin is full, visitors should find an alternative nearby or take the litter home for disposal. Visitors must not leave litter anywhere on Council land and the law allows the Council to give on the spot fines (currently £80) to anyone seen dropping litter. If fines are not paid, the Council may prosecute and the court may increase the fine up to a maximum of £2,500.

Policy P16

The Council will ensure that the byelaws remain fit for purpose and are promoted widely. Enforcement through Public Space Protection Orders are in use and the Council may introduce other measures as required to ensure parks and open spaces remain safe for all visitors to enjoy.

4.10 Unlawful Encampments

Unlawful encampments, where vehicles including caravans and campervans are brought onto parkland for overnight stays, causes damage to property, deprives the community of the use of the land and often leads to issues with waste disposal, flytipping and other anti-social behaviour. The Council has invested in improved security measures to prevent unlawful entry to open spaces and in addition on 7 November 2018 the High Court granted a full injunction order lasting 3 years forbidding “Persons Unknown” from occupying land or depositing waste on Council owned land in the Borough including all of the Council's parks and open spaces, housing land, car parks, office car parks and associated land and various highway locations. Notices explaining this injunction are posted at all sites and the injunction can be viewed in full on the Council’s website.

Policy P17

The Council will work with partners including the Metropolitan Police to ensure that parks and open spaces remain free from encampments and flytipping that might otherwise detract from visitors enjoyment.

Objective 5: Work with friends groups, the voluntary sector, sports bodies and the wider community to develop volunteering and fundraising opportunities.

5.1 Friends Groups

The Council supports friends of parks groups and recognises the benefits they have for open spaces. Experience in Sutton confirms the benefits the Parks Alliance research identified, that where strong, active friends groups existed in parks, budget reductions were better overcome. Sutton’s active friends groups have over the years benefited their parks by:

- Bidding for external funding such as grants for projects e.g to pay to rebuild St Marys Field and Orchard Avenue playgrounds and plant trees in Oaks Park;

- Being a sounding board for improvement ideas, including this strategy;
- Organising events in the park, such as Quarry Park Friends annual tea party and annual bulb planting days in many parks;
- Acting as ‘eyes and ears’ reporting damage/incidents in the park to either the police or parks officers as appropriate, such as the Queen Mary’s friends group’s monitoring of the contractor maintaining the park;
- Bringing a parks visitors’ perspective to discussions on standards and how maintenance work is carried out, for example Sutton Common Park friends’ Green Flag style park inspections with officers;
- Helping to promote the park by passing on information by word of mouth, helping to produce leaflets or keeping a noticeboard up to date, such as the Sutton and Cheam Tree Walk and Carshalton Heritage Trail leaflets;
- Taking part in improvement activities as a working party and to run projects in the park, such as Beddington Park friends group’s assistance with the £3.6 million Heritage Lottery Fund project to restore the park.

Friends groups' comments on proposals are often helpful and the groups are invaluable in helping to gather comments from a range of users and identifying key issues. Although they may not be fully representative of the wider community they will usually be the Council’s first point of contact when a user perspective is needed. Not every decision can involve consultation with friends groups as the Service has limited capacity, and in some cases decisions are taken by councillors, or officers must follow pre-agreed policies, such as the tree removal policy. Appendix 8 shows the support the Council may provide for friends groups.

So that friends groups can be represented at Council meetings and to ensure that they are representative of the park community and represent their members views fairly, the Council encourages friends groups to be properly constituted, with an elected committee comprising of a Chairperson and Secretary,where appropriate a Treasurer, and to adopt a constitution. There should be regular meetings during the year. The Council can provide draft constitution documents that friends groups can adapt as appropriate.

Many friends groups wish to hold events and activities in their park to promote the groups activities and projects or to fundraise. These events are generally free for the public to attend and provide an opportunity to gain new members and for the public to meet existing members and learn more about the group. The Council supports these activities and will not make a charge for friends groups to hold their events.

Policy P18
The Council will support the formation of new parks friends groups and facilitate a good working relationship with groups, involving them as much as is practicable in decision making about their park.

Policy P19

Friends groups will not be charged for events they organise provided they are free to enter or take part in, raise funds only for the friends group and the parks and do not include commercial organisations or businesses.

5.2 Parks, biodiversity and tree volunteers

The Council wants to encourage volunteering and recognises that support by the Council is critical to maintaining the momentum of volunteers. Evidence shows that greater facilitation helps overcome inequalities that may exist within volunteer participation. Where volunteers are expected to operate independently, sections of the community that are better equipped with skills, confidence and resources, operate more successfully than more deprived groups who may not feel they have the capacity to volunteer without assistance.[4]

For these reasons the Council is considering funding a parks Volunteer Coordinator for a trial period to evidence the impact the additional support can bring to volunteering in parks and open spaces. The Volunteer Coordinator would assist in overcoming challenges of operating in open spaces such as the number of sites, a need for tools and equipment, the lack of support staff on site and dual working with contractors. With dedicated staff to coordinate and manage volunteers, and integrated working with the contractors, hopefully these issues can be overcome.

Volunteering not only benefits parks and open spaces, it benefits the volunteers themselves and the wider community. It provides opportunities for social inclusion and evidence has shown volunteering benefits both mental and physical health, helping prevent depression and to lower blood pressure. Volunteering in parks has the added physical and mental health benefits of being outdoors and physically active and provides an opportunity to gain new skills to support future employment and self-development.

In Sutton volunteers have contributed to green spaces by:

- Supporting maintenance through tasks such as gardening, pruning and clean-ups.
- Carrying out additional projects that improve the parks' landscape, habitat and biodiversity.
- Monitoring and surveying.
- Coordinating and delivering activities, training and events.
- Promoting the park.
- Securing external funding for new projects and events.

Volunteering has been successful in Beddington Park, where during the 2017-19 period it has been supported through Heritage Lottery funding and the employment of a Volunteer Coordinator. Over 4,700 volunteer hours were carried out between January 2017 and December 2018 covering clean-ups, tree planting, gardening, pruning, biodiversity and habitat enhancement, clearance of invasive species and activities significantly enhanced the park.

[4] https://publications.parliament.uk/pa/cm201617/cmselect/cmcomloc/45/45.pdf

The Biodiversity Team has worked with Sutton Nature Conservation Volunteers[5] for over 30 years to entirely care for more than twenty conservation sites, successfully enhancing biodiversity. Volunteers also help to deliver the education programme at the Ecology Centre and support events such as the Frost Fair in Carshalton, as well as work experience students and graduate trainees / interns.

In all, over 1,000 volunteer days (6,000+ hours) are donated each year, worth more than £50,000 in-kind contributions for managing habitats and green spaces. The time donated is the equivalent of the Council needing to fund 4 additional staff, each year, to manage conservation sites.

On average, for every day of staff time, four volunteer days are contributed, demonstrating the value and cost efficiency of having well trained staff to lead and motivate volunteers. This is in addition to the benefits volunteers bring for increasing partnership working and opportunities for funding.

Policy P20
The Council will develop a broad volunteering programme of opportunities to ensure that local people can contribute to the development and maintenance of open spaces, including parks, sports facilities and conservation land.

5.3 Fundraising
Sutton's friends groups and volunteers have been very successful in bidding for external funding, such as grants and running events to raise money. This has paid for new playgrounds, tree planting, ball courts and environmental improvements such as wetland creation. Working with partners the Councils has maintained a high satisfaction with parks, but with this additional funding helps to make really significant improvements that make a huge difference to the visitor's experience and provide those involved with a sense of achievement.

The Council will continue to work with volunteers and community groups to bid for external grants and raise funds for projects and look for creative ways to fundraise with our partners. Working with Friends Group and volunteers the Council will help identify suitable projects for fundraising and seek ways to make donating to parks easier.

Policy P21
The Council will work with partners to identify projects and fund raise for open space improvements, projects and maintenance

Policy P22
The Council offer support to volunteers through staff time, inductions and training.

[5] https://www.sncv.org.uk/

Appendix A

Objective 6: Manage park's assets to generate revenue to support the service and the local economy, including through leasing, events and developing paid for community facilities and licensing businesses to deliver services.

6.1 Parks buildings as cafes and other landlord activities

The Council wishes to encourage cafes to open in suitable locations and to support existing cafes through offering commercially viable leases and ensuring that other activities in the parks support and do not undermine cafes.

Parks cafes are a valuable asset to any park and act as a focal point, resting area and provide toilets to enable longer stays in the larger parks. The consultation on the draft strategy found that the majority of visitors think cafes are an integral part of any visit to the park and want to see high quality landscaping around them. In addition to the community offer, cafes are small businesses and local employers, offer passive security for the park and a friendly welcome for parks visitors.

Other former service buildings, depots, houses and pavilions no longer needed for their original purpose will be repurposed to provide a home for sports groups, park cafes, local businesses or to provide homes. The Council will include parks buildings in the asset management strategy and continue to put these assets to good use for the community, to generate income and to support investment.

Policy P23

The Council will seek opportunities to increase the number of cafes by utilising existing buildings and locations for kiosks as planning policy allows and offering market rents to ensure the cafes are viable. In addition cafe operators will be supported by ensuring that activities in parks benefit or do not undermine their business and wherever possible facilities and landscaping will be developed and maintained to make the cafes attractive community spaces and meeting points.

Policy P24

The Council will identify opportunities to repurpose buildings within open spaces. Priority will be given to economically viable leisure or parks related activities, but if such an activity cannot be identified alternative commercial uses should be sought and planning permission sought for change of use.

6.2 Events and activities

The results of the parks user survey and the consultation on the draft strategy show strong support for more events that bring the community together and the Council recognises that hosting events in open spaces has a number of benefits for the community including:

- Providing opportunities for young people through activities and employment;
- Making entertainment and culture more accessible and boosting the cultural offer to the local community;
- Assisting in developing a strong community identity and strengthening cross community relations;
- Having an economic impact, directly and indirectly, by creating and supporting employment and business opportunities both at and surrounding events;
- Providing a source of income for local projects through fundraising;
- Enhancing the reputation of the borough;

- Providing income for parks and open spaces.

The Council aims to host and promote a sustainable and varied programme of outdoor events for visitors while minimising negative impacts on neighbours, the wider community and the fabric of parks. There are several well established events including the Ecolocal Environmental Fair, the Round Table Fireworks display in Carshalton Park, May Bank Holiday events organised by the Rotary Club and several friends groups events and the Council will continue to work with these groups and ensure their events continue to thrive. Events are also a significant source of income that helps to fund the maintenance of parks and open spaces and therefore for most events the Council will make a charge.

There are a number of types of events suitable for parks and open spaces.

6.3 Community, civic and charity events

The Council welcomes community events, organised by the community or voluntary groups for the benefit of the borough or local residents and usually offered with no entrance fees to the public. Community events will not provide significant advertising or other commercial benefit to a profit-making business or organisation. The organiser will be asked to provide proof that they are not profiting from allowing third party contractors, e.g. commercial stallholders to attend their event. Fees, where levied for community and third sector stallholders, will be set at an affordable and accessible level.

The Council welcomes charity events of a non-commercial nature that benefit a registered charity by raising funds and /or promoting the aims of that charity. The Council recognises the benefits charities bring to the local community and is keen to ensure that local charities continue to have use of parks as venues for events.

The Council will charge a reasonable hire fee for all these events taking place in parks and open spaces, but note that community groups and charities charities may be eligible to apply for a Neighbourhood Grant through the local Committees towards to costs of their activities and events. The only exception is that the Council will not charge parks Friends Groups for their events. See section 5.1 for more details about Friends Groups.

6.4 Commercial, marketing, corporate events and private hire

The Council welcomes proposals from commercial operators for events such as trade fairs, commercial music and theatre shows and festivals and for private hire for weddings, private parties, awaydays, conferences, coach or vehicle parking and other similar events. Events may include the erection of temporary structures. Events will be assessed on a case-by-case basis and the Council will charge a hire fee for such events.

Policy P25

Income generated from events in parks and open spaces will be used in the first instance to cover the costs of managing events and meet the budget requirements. Any surplus income will be used to maintain parks including making improvements for regular events.

Policy P26

The Council's fees and charges will be benchmarked against prices charged by other similar London Boroughs to ensure both market competitiveness and to maximise potential income

to Council. The applicable fees and charges will be advertised on the Council's website.

Flexibility will be retained to permit Council officers to negotiate fees if an event is considered to be particularly advantageous for the borough. In addition, the Council reserves the right to vary the charge for major events where the proposed entrance fees are considered to be high.

6.5 Criteria for approving events bookings

To ensure that events are appropriate for the venue, the following policies and criteria have been adopted by the Council.

Policy P27

Bookings will be taken for the sites listed below provided the event organisers can demonstrate that they can meet the pre-agreed criteria. The list of sites should be reviewed and amended at least every three years. Events must meet the following criteria:

1. There must be appropriate arrangements for visitor access including clear sustainable transport arrangements such as public transport promotion, cycle routes and parking arrangements, car parking, public transport, gates and paths.
2. Public protection arrangements to meet legal duties with regard to health, safety and welfare must be detailed.
3. Community safety and security must not be compromised by the event and suitable risk assessments and insurance must be provided.
4. Welfare arrangements must be appropriate for the type of event planned, including adequate toilet provision, food safety, noise control and waste disposal.
5. Licencing permissions must be addressed and it should be noted that while music and live entertainment may not be the main activity at the event a licence may still be required.
6. Any site specific requirement or limits need to be met, for example the size of event must be able to be accommodated on the site and it must be an appropriate type of event for the park.

This arrangement applies to the following sites:

Site	Funfairs	Smaller events -up to 2,000 people	Medium events up to 20,000 people	Large 50,000 people	Music and theatre events	Boot fairs - Up to 6 a year per site
Beddington Park	yes	yes	no	no	yes	yes
Carshalton Park	Yes (currently as part of	yes	No (except for fireworks	no	Daytime only	no

	Carshalton Carnival)		display, Environmental Fair and Carshalton Carnival which take place annually)			
Cheam Park/ Recreation Ground	yes	yes	no	no	Daytime only	no
Grove Park	no	yes	no	no	Daytime only	no
Manor Park	no	yes	no	no	Daytime only	no
Mellows Park	Yes -only smaller specialist types	yes	no	no	Daytime only	yes
Oaks Park	no	yes	no	no	yes	No
Overton Park	no	Yes- depending on the type of event	no	no	Daytime only	no
Poulter Park	no	yes	no	no	Daytime only	no
Rosehill Park West	yes	yes	no	no	Daytime only	no
Roundshaw Playing Fields	yes	yes	no	yes	yes	yes
St Helier Open Space	Yes -only smaller	yes	no	no	Daytime only	yes

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When events requested meet the agreed criteria, ward councillors will be informed of the request but will not be asked to approve the booking. Events outside these criteria may still be permitted but ward councillors will be consulted about the request and/or Committee approval may be sought before the booking is accepted. In addition the Corporate event booking process is used for all events to ensure that organisers have appropriate risk assessments and insurance in place and that plans are in place to manage the number of people attending.

For other parks and open spaces Ward Councillors will be consulted on proposed new events in their ward and only where the majority are in favour will the booking be accepted.

Objective 7: Enhance the appearance and character of the Borough by maintaining a safe, healthy, diverse and resilient tree population and encouraging tree planting.

7.1 Tree Strategy Introduction

Sutton is known as green and pleasant place at least in part because of the number and rich diversity of trees in the Borough. Not only do they soften the appearance of and add character to Sutton's suburban streets, they play an important role in increasing biodiversity, providing plants and animals with safe habitat, food and protection.

They help mitigate climate change, by cooling the air in summer by 2 - 8 degrees Celsius, reducing the urban "heat island" effect and by absorbing carbon dioxide. Trees not only lock away carbon dioxide, they can be used to reduce carbon emissions by helping to conserve energy. Planting trees around buildings to provide shade can reduce the need for expensive air conditioning (by up to 30 percent), and reduce heating bills by slowing wind around buildings so that less heat is drawn away.

Trees make excellent filters removing urban pollutants such as carbon monoxide, nitrogen oxides, ozone and sulphurous compounds and fine particulates such as dust and smoke by trapping them on leaves and bark. Mature trees help to prevent flooding by slowing rainfall reaching the ground and absorbing ground water.

Additionally research shows that living close to trees and green spaces provides physical and mental health benefits and can increase property values as many people prefer to live in a green environment.

The Council is responsible for more than 140,000 trees including 111,000 estimated to be growing in woodlands. Most notable of these are the Sweet Chestnuts in Carshalton Park, one of which has been awarded Great Trees of London Status, and the large London Plane in Honeywood Walk, Carshalton, once recorded as the largest Plane tree in England.

The strategy covers trees growing on land managed by Sutton Council and sets out the policies and procedures that officers will follow in managing council trees. The following sections explain each aspect of tree management including information, policies and actions

required to meet the policy aims.

7.2 Valuing Urban Trees
Trees provide many benefits especially to those living in suburban areas like Sutton and while some benefits are obvious,others can be more difficult to quantify. The Council employs Capital Asset Valuation of Amenity Trees (CAVAT) as a system for calculating the value of trees as public assets rather than liabilities. It is designed not only to aid decision-making in relation to the trees, but also where the value of a single tree needs to be expressed in monetary terms.

A dilemma often occurs when the tree makes an important contribution to the local environment but also causes inconvenience to those living nearby. Residents living in close proximity to trees, may experience some inconvenience due to overhanging branches, leaf and fruit fall, obstruction and physical damage. Many issues can be dealt with by regular maintenance of the trees and appropriate maintenance of adjacent property and the Council's approach to addressing issues is through inspections and maintenance as set out below.

7.3 Tree Inspection and Maintenance
The aim of tree management in Sutton is to maximise the benefits of trees, while taking a balanced and proportionate approach to tree safety and minimising problems for residents.

7.4 Why trees are inspected
Trees are living organisms affected by age, disease and stress due to position, pollution, and external forces and impact their health and condition. Council trees, especially those in highway areas, are often subject to higher stresses and so have to be managed accordingly. Trees cannot be considered entirely free from risk. as they are exposed to extreme weather that can compromise their safety, although the risk they present is generally low and acceptable (National Tree Safety Council "Common sense approach to tree management").

The Council has a duty of care to proactively inspect and maintain the trees it is responsible for and to achieve this employs appropriately qualified tree officers and undertakes inspections in line with relevant legislation and case law.

The majority of the Council's trees grow in areas of public access or near structures and would have the potential to cause harm if they were to fail.

7.5 Planned inspection of trees
The council's inspection and management system requires all of its trees to be surveyed and their condition details recorded, at least every four years on a cyclical programme. Some trees are inspected more regularly, such as those around education sites (surveyed annually) and large mature trees in areas of high usage such as busy main roads, that are surveyed in line with their risk assessment. As part of the inspection regime, other problems such as obstructive growth, excessive overhang to properties and their potential to be involved in damage to property will be addressed.

When a tree is inspected, the officer will look at its condition and safety, identifying any obvious defects and recommending prioritised remedial works, if required. The inspection will cover the trees' biological and structural condition, using a recognised Visual Tree Assessment (VTA) methodology.

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Inspections details are recorded on a database for legal, and health & safety reasons. The Council also analyses the data collected to assess which trees pose a greater risk due to their age, size and position and then plans a prioritised inspection regime based on the findings.

As part of the inspection process, works will be recommended to remove or minimise the potential for trees to cause harm to people and or property, and also (within budget limitations) to reduce other nuisance factors such as shading, overhang to properties etc .

7.6 Issues the Council will address through pruning:

- Potentially hazardous trees – where the tree poses a significant threat to people or property, it will be felled or, at least, have remedial works conducted to reduce the threat to an acceptable level.

- Trees affecting public access or highway safety – where there is a risk to the public from overhanging branches the council will cut back branches.

- Basal growth – the Council has an annual programme (from May to September) to cut back growth at the base of trees that restrict lines of sight or encroach across pavements or into roads.

- A tree that has been implicated in damage to property, including -
    1. Direct damage to walls and drives
    2. Subsidence
    3. Direct damage from tree failure

7.7 Issues the Council will not address through pruning:

- Trees/branches blocking light including to solar panels – there is no legal right to light.

- Tree debris (falling leaves, fruit or cones) – this is not a ‘legal nuisance’ and is regarded as a natural process.

- Branches touching telephone wires – this is the responsibility of British Telecom (BT) so should be reported to http://www.openreach.co.uk/orpg/home/contactus/contactus.do

- Honeydew – this is a sticky substance produced by insects feeding on leaves which then can drop onto the ground or on property and cars. There is no practical treatment to prevent this. Affected residents should consider measures which they can take to protect their property – for instance, getting covers for or regular washing of cars/property.

- Bird fouling – even when trees are pruned they are still inhabited by wildlife so there are no practical measures or treatment for this.

- Improving signal to satellite dishes or TV aerials. Affected residents should consider relocating aerials/dishes to another part of the roof or using signal ‘boosters’.

- Pollens and allergens – as all vegetation produces pollen as part of a natural process, this does not constitute a ‘legal nuisance’.

All recommended tree works will be in accordance with British Standard BS3998 (2010) and other best practice guidelines.

Ward councillors are notified prior to tree works being carried out, so that they can raise queries with the Tree Officers. This is not a consultation process and the overriding responsibility for safety will be with the Tree Officers. Work orders will not be sent to individual members of the public. Tree Officers work with the Biodiversity Team to ensure that inspections and operations are carried out in line with wildlife and protected species legislation and guidance.

7.8 Other inspections

Trees may also be inspected following events such as a severe storm or impact damage and maintenance works may be recommended on a priority basis, if necessary.

Where a defect has been identified on a tree during a visual inspection and further investigation is necessary, the Tree Officers may use more invasive equipment to establish the extent and severity of the problem.

Policy T1

To ensure that trees on council land are inspected and managed in line with good practice and records kept for the work completed, so that they do not pose an unreasonable threat to people and/or property, and to promote good tree health.

Policy T2

The Council will ensure the Tree Officers carrying out inspections are qualified to minimum level 2 NVQ and be experienced.

7.9 Tree removal Guidelines

This section sets out the circumstances under which a decision is made to remove trees on council land. Tree Officers are authorised to remove trees in the following circumstances, and will use the following criteria in making decisions on tree removal. Officers will inform Ward Councillors where practicable when a tree is to be removed.

- Trees that are, in the opinion of a qualified Tree Officer, dead, dying or dangerous, due to their poor structural or biological condition and that may pose a risk to people or property, providing that there is no other recourse available, such as remedial pruning, to remove or minimise the risks.

- Trees that are causing an obstruction or where alternative safe access cannot be provided to the public highway, public right of way or access to property or footway and have become a safety issue. This criterion also includes where the main trunk and buttress roots of a tree have narrowed the width of the footway to under 1.2 meters and the obstruction could not be safely negotiated. Every case will be assessed individually and the site usage and alternative access will be taken into account e.g. a pavement on the other side of the road may provide a suitable alternative.

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- Trees that are causing a legal nuisance to an adjoining property and where pruning would not address the problem (a “legal nuisance” is one that is actionable in law; a tree cannot be a “legal nuisance” to its owner). Examples might include soil subsidence as a result of tree root growth, physical damage to another owner's property or a severe and unreasonable degree of noise, disturbance or loss of enjoyment of the adjoining dwelling or garden. These cases may arise when a tree is physically very close to, or in contact with, an adjoining property. Felling is acceptable only when the nuisance is severe and it is not possible to remove or minimise the problem by any other means including pruning. This subject is looked at in more detail in section 6.4 Insurance.

- Trees preventing essential repairs to property where it is not possible to overcome the problem by any other means than removal.

- Trees that can be used to gain criminal access or may be obstructing essential police or Council-monitored CCTV surveillance and it is not possible to remove or minimise the problem by any other means such as removing or repositioning the camera or by pruning.

- Thinning out young and developing trees. This work is usually essential during the establishment period to reduce the number of young trees in a plantation or group. This is often carried out gradually as the trees grow bigger, allowing the best trees to flourish and encouraging healthy growth and development. Sometimes tree removal from mature groups may be necessary for the same reason.

- Removal for wildlife habitat improvement. Occasionally it may be necessary to fell, thin or coppice trees to promote habitat benefits, for example, to prevent loss of meadowland, to encourage native tree species or ground flora or to restore structural diversity and functioning. This action will only be undertaken in liaison with the Biodiversity Team.

- A tree or trees need to be removed to allow development on Council owned property and the development is in the best interest of the community as a whole. The decision on whether to approve removal of the tree or trees will be referred to the Director of Environment Housing and Regeneration, in consultation with the Chair of Environment and Neighbourhood Committee. The Head of Service responsible for the specific area of Council land to be developed will need to provide compelling evidence that the removal of the tree/s is essential to allow the scheme to proceed. It would be required as part of this process to provide new planting or landscaping to mitigate the loss of the existing tree/s either within the development site or preferably in the local area. This may require more than one new tree to compensate for the loss of a mature tree.

- Notification of tree removal. When a tree has been identified for removal as part of a cyclical survey and is non urgent, the officer will send a notification to those residents that will be immediately affected by the decision (this will include the actual property and the two adjacent properties). This does not apply where the tree is deemed to be an immediate hazard.

- Trees will not be removed for the following reasons: (please note: this list is not exhaustive, but is to be used as a guide)
  - Trees shading properties

- Overhang to properties
- Honey dew problems (sap)
- Bird droppings
- Perceived risk
- Leaf fall
- Fruit falling onto ground
- Size of tree
- Allergies
- Not Council-owned
- Residents perception is that a tree is too large
- TV or satellite reception

7.10 Tree removal and vehicle crossovers

Situations where it would be considered appropriate to remove a healthy tree for a vehicle crossover:

- Under the Council's Equality and Diversity Policy, it is recognised that some residents with disabilities may have special requirements, for mobility for example, and may require better access or to their property. This would be taken into account when considering a request to remove a tree to facilitate a drop kerb. Evidence would be required and a case would be presented by the Tree Officer to the local ward Councillors for a decision. The cost of the tree removal and replacement would have to be met by the applicant.

- Removal to allow access to an authorised development or redevelopment. This would have to be agreed by Development Control Committee, when deciding approval of developments.

- Tree stem diameter is less than 60mm in diameter at 1.5 meters from ground level.

7.11 Tree removal appeals procedure

If a resident or any other stakeholder disagrees with the Council officer's decision not to remove a tree, the following process will be followed:

1. The resident will be asked for evidence to support their request.

2. The Tree Officer will write a report about the tree and the circumstances surrounding the appeal and send it to the three local ward Councillors.

3. There will then be a 28 day period for ward Councillors to comment. Following the 28 days the replies will be taken into account in the decision making process.

4. If two or more Councillors support the residents appeal for the tree to be removed, the report will be sent to the Strategic Director of Environment, Housing and Regeneration who has delegated authority to make a final decision in consultation with the Chair of the E&N Committee.

5. If two or more Councillors do not support the residents appeal the tree will not be removed and the resident/stakeholder making the request will be informed. Ward members not responding will be regarded as not supporting the appeal.

Policy T3

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The Council will manage all Council's trees to maximise their lifespan.

Policy T4
The Council will adhere to the guidance and procedures on tree removal as set out in section 7.9 of the Strategy and Action Plan for Council Owned Trees

7.12 Tree Planting
The Council has committed to tree planting as part of the corporate plan and officers follow the principle of planting the right tree in the right place.

There are a number of ways that sites for new trees can be identified:

- Requests from residents
- Sites identified during cyclical inspections, either where space is identified or where the existing tree has to be removed
- As part of an individual site's management plan
- Replacement of failed trees from planting schemes from the past two seasons
- Friends groups or other partners identifying suitable areas in parks, open spaces or highway areas managed by the Council - the tree officers would work closely with these groups to facilitate any scheme that is viable

When purchasing and planting new trees, officers will consider the recommendations of British Standard - BS8545 Trees: from nursery to independence and where possible trees will be planted between November and February dependent on weather and a programme of maintenance will begin soon after. Requests need to be with officers before 1st September each year to ensure that stock can be ordered . Requests after 1st September will be added to the following year's list.

Young trees will be watered for two seasons after planting, the frequency of which will depend on the weather conditions and any restrictions that apply, such as hosepipe bans.

Letters will be sent to any adjacent residents encouraging them to help care for the newly planted trees, including watering, especially during hot weather.

7.13 Tree planting Guidelines
If a resident or group has requested that a new tree or trees are planted adjacent to their property, or within a public area, stakeholders who may be affected by such plantings will be consulted. Where this is a highways tree, generally the two properties immediately affected would be consulted.

Officers will decide on the correct selection of species based on the criteria below.

- Consider existing habitats and landscape value and that tree planting would have a positive impact
- Trees should not be located where they will experience inappropriate growing conditions e.g. in the shadow of tall buildings
- Where appropriate, take opportunities to plant large species of trees with a long lifespan
- Consider existing and future infrastructure requirements
- Consider the statutory safety requirements to maintain a clear route along roads (heights of buses, HGVs, cars, cycles and horses)

- Consideration should be given to obstruction of views from junctions and driveways when positioning new tree/s
- Consider the type of trees when planting in clay soils. Avoid planting high water demanding trees in clay soil areas and ensure tree species are appropriate to local soil type
- Consider if dropped kerb requests are likely – trees will be planted on the boundary between properties to keep the frontages open to use for access
- Consider underground and overhead services
- Consider if planting a given species in the position will cause issues due to bearing large fruit e.g. some species of Pear or fruit known to be harmful to humans or animals if taken in quantities.

If a suitable space for a new tree has been identified by the tree officer and not requested by a resident, or other stakeholder, officers will still consult with the owners/occupiers of the properties likely to be affected by the new planting. If the resident is not available, a card will be left with details and a contact number of the officer involved. If no contact is made from the resident within 28 days, it will be presumed that there are no objections and tree planting will commence. If there are objections to the planting proposal an alternative location will be considered to try to reach agreement.

7.14 Funding

The Council does not have a dedicated budget for tree planting and the main sources are:

- Local committees
- Mayor for London grants
- Woodland Trust community support
- Private sponsorship
- Development projects, with possible impacts from Biodiversity Accounting
- Section 106 funding

7.15 Sponsored or Donated Trees

Before the Council considers accepting sponsorship of a tree from a member of the public the Tree Officers will:

- Arrange a site meeting if requested at the proposed planting site
- Agree the final position and species, ensuring they are suitable for the location
- When site and species have been agreed, the person sponsoring the tree will be asked for payment of the appropriate amount
- The tree will then be ordered and will be purchased and planted with all other highways and parks trees at the appropriate time of year (November to February)

In parks and open spaces it is preferable to plant within existing woodlands or groups of trees, and only plant trees in formal lawns, or open areas, where a specimen tree is beneficial to the appearance of the park. If a suitable location cannot be found or suitable tree species agreed, the sponsorship will be declined. The priority is to plant trees that enhance the park.

The cost of planting a tree depends on the type and size of the tree, and includes:

- The purchase and delivery of the tree
- Planting, staking and provision of any top soil or soil conditioners required
- Regular watering of the tree in the first growing season as and when required - watering is mainly conducted throughout the summer months to ensure successful establishment. Sponsors are encouraged to supplement this during the summer

period to give the tree as good a chance as possible

Although the Council tries to ensure the successful establishment of every tree planted, due to the vulnerable nature of young trees there may be failures. If the tree should fail during the first season, it will only be replaced free of charge if a problem has occurred that means the nursery will replace it. Once the tree has been planted it then becomes the property of the London Borough of Sutton.

Policy T5
The Council will replace tree losses wherever practicable, and affordable and choose trees to enhance the character and appearance of the borough with reference to biodiversity, location, potential environmental factors, using the right tree right place checklist. Newly planted trees will be maintained so that they have the best chance of establishment.

Policy T6
The Council will seek to involve the community and stakeholders in raising funds for, planting and maintaining trees in the borough, including encouraging residents to use waste water to help new trees establish and continue to provide a sponsored tree scheme

Policy T7
Plaques on trees are not allowed as they detract from the look of the park. They are also vulnerable to damage, which can be upsetting for the family. Commemorative trees with plaques can only be planted within cemeteries. Planting of bulbs or bedding around sponsored trees is only allowed when agreed by the parks management. Floral tributes or other items attached to trees will be removed, again these items detract from the overall look of the park.

Policy T8
The Council will not allow human remains to be placed under, around, or near trees or anywhere on Council land other than by agreement in a cemetery or churchyard.

7.16 Insurance Issues
Trees may cause damage to property either when root or branches come in physical contact with structures (direct damage) or by removing moisture from soils that may cause subsidence (indirect damage).

7.17 Direct Damage
Damage to the footways, kerbs, garden walls, and drives can occur as a result of pressure exerted by the growth of roots and damage most commonly occurs close to the base of trees. Root growth can only exert a certain amount of pressure and therefore roots will usually distort around any significant obstructions. It is difficult to predict which trees will cause damage, or when, due to the unique nature of individual trees and sites. This type of damage can occur on any soil type.

7.18 Roots and Drains
It is recognised throughout the arboricultural and construction industries that physical damage to intact pipes by roots is rare. It is not uncommon for roots from trees and shrubs to invade pipes where there is an existing defect. Many older pipes are made of brick or

salt-glazed clay and the joints are prone to cracking. As roots follow the water supply and the line of least resistance, these cracks are easily invaded. Roots will then proliferate inside the pipe causing blockages. The best solution is to replace the older constructed existing pipe with a modern alternative. Newer pipes have longer runs and fewer joints, and are generally flexible and watertight. This significantly reduces the occurrence of root encroachment. The flow of water within modern plastic pipes is also improved as there is less friction.

7.19 Indirect damage -subsidence related damage

This type of damage is associated with shrinkable clay soils. Damage can occur to properties from seasonal shrinking and swelling of the subsoil under parts of buildings. This in turn can cause differential movement, which can lead to structural damage. Trees and other significant vegetation are frequently viewed as exacerbating the drying process by extracting moisture through the rooting system.

7.20 Guidelines for dealing with damage issues

Highways direct damage

Areas of footway or highway may be damaged by tree roots. This may be due to the direct action of an adjacent tree root and the problem may not be overcome by ramping the tarmac over the surface of the footway to make it safe. The Highways officers will arrange to expose the area of damage, and a tree officer will visit and recommend removal of surface roots where appropriate so that reinstatement can take place based upon the following:

- Tree roots under 25mm in diameter may be removed without any further action to the tree
- If roots over 25mm in diameter have to be removed, remedial pruning on the tree's upper canopy will be recommended
- If the tree root is so large that it would be unacceptable to remove without seriously affecting the stability of the tree, the tree officer will arrange tree removal as per the guidelines in the Tree removal section. If this is the only option, the local Ward Councillors will be informed.

Third party claims

Discussions or correspondence will not be entered into with a third party claimant. The claimant will be asked to write to the Council's insurance team to initiate a claim.

Third party claims for direct damage

In instances where a third party is making a claim of direct damage (due to the actions of a tree root from a Council-owned tree) it will be dealt with it in accordance with the following procedure:

- A site visit will be made within two weeks of the formal claim being received to assess the claim.
- Site details will be taken, and a report will be submitted to the Insurance Team. The report will include comments and recommended actions.
- The Insurance Service will deal with any compensation element of the claim in accordance with their procedures.

Third party claims for Indirect Damage

When dealing with claims, the Council officers from both the Insurance and the Tree Teams will assess whether or not the insurer has followed the Joint Mitigation Protocol. If not, a robust approach will be adopted when repudiating unwarranted claims by basing the arguments on any evidence (or lack of) presented. The Council Officer will normally be the designated claims handler in the Insurance Section with technical support from the Tree

Officer.

The Council will scrutinise all evidence presented with claims. The level of evidence required will be based on the value estimated using the Capital Asset Valuation for Amenity Trees (CAVAT).

Within two weeks of a claim tree officers will produce an initial report for consideration by the Council's Insurance Team.

Where inadequacies or discrepancies occur in the technical reports presented on behalf of the claimant, these will be brought to the attention of the Insurers and the claim challenged. If the evidence presented is inconclusive or lacking particular relevant tests or reports, the Insurance Team will ask for further specific test results to assist in determining the actual cause of movement, and whether a Council owned tree is involved. Where the evidence clearly indicates another cause for movement, the claim will be repudiated and the insurer informed of the Council's position.

Policy T9
To work within the legal and technical framework in relation to insurance issues and reduce the costs of existing, and new claims for damages against the Council.

Policy T10
The Council will follow the London Tree Officers Association's Risk Limitation Strategy for Tree Root Claims (3rd edition May 2007) and the Joint Mitigation Protocol with regard to claim investigation procedure

Both of these documents can be found at http://www.ltoa.org.uk/ or copies can be obtained from the Tree Team at 24 Denmark road, Carshalton, SM5 2JG)

7.21 Tree enquiry Guidelines
The Council receives on average 2,000 enquiries per year about trees on its land, which range from general questions about pruning and planting to reporting trees in a dangerous condition. Following any enquiry, officers will determine the level of response required following the guidelines below.

Level 1 - (within 24 hours)

- Where a tree or part of a tree is deemed to be an immediate threat to public safety, for example a tree that has died and become brittle and there is a high risk of tree failure
- Where a tree or part of a tree has failed and is causing a hazard, this could be due to adverse weather, extreme decay or an act of vandalism
- Where a tree or part of a tree is causing an extreme obstruction to a road, footpath or major right of way

Level 2 - (within 8 weeks)

- Where a tree or part of a tree is deemed by a qualified officer to be a possible threat to public safety, but it has not yet become a high risk
- A tree's upper canopy is physically touching a property
- Where a tree or part of a tree is impeding safe passage on a footway/highway
- Where it is necessary to carry out pruning to improve access or increase light infiltration where a resident is disabled or partially sighted

- Where required to prune or remove a tree that has been shown to be a major contributor to soil shrinkage and the cause of serious structural damage to buildings. Structural problems must always be carefully investigated particularly where there is the possibility of a potential claim against the Council. This subject is looked at in more detail in insurance issues section 6.4
- Where necessary to prune or fell a tree that may be preventing essential repairs to property and it is not possible to overcome the problem by any other means than removal
- Where necessary to prune or remove a tree that can be used to gain criminal access or may be obstructing essential police or Council-monitored CCTV surveillance and it is not possible to remove or minimise the problem by any other means such as removing or repositioning the camera/target
- Where necessary to conduct root pruning to improve safety on the footway and carriageway. This may also require compensatory crown pruning following as well

Level 3 (Council trees on a minimum of a four yearly cyclical programme and education site trees offered an annual inspection)

- Crown lifting to provide the legal clearance on public footway and carriageway
- Crown thinning to minimise general nuisance problems such as honeydew, shading, overhang to properties
- Hanging branches in a park or open space if in a low use area
- Pruning trees away from street furniture such as telephone lines and streetlights
- Tree stump removal

7.22 Impacts of climate change, pests and diseases

Trees can help us to adapt to a changing climate by providing shade, reducing wind speed by filtering the air, provide natural cooling by releasing moisture into the air through their leaves and alleviating flooding by filtering rainfall and taking up water from the soil. However the conditions for our urban trees are changing due to climate change and we need to plan ahead to help them adapt and ensure a sustainable canopy cover for now and the future.

One important role of trees in the urban environment is to influence people's behaviour, by making it more appealing to walk or cycle for short journeys. This in turn reduces the contribution to greenhouse gas emissions and improves local air quality. It is not just Council trees that provide these benefits and encouraging people to plant more trees in their gardens and developers to include trees in their proposals is vital to ensuring Sutton has sufficient tree cover.

The Forestry Commission report - Trees and Climate change states that climate change is likely to bring:

- Increased carbon dioxide
- Reduced summer rainfall
- Increased winter rainfall
- Increased storm frequency
- Possible nutrient imbalances.

Trees have already been adversely affected by a changing climate and an additional concern is that the changes will cause a proliferation of both native or introduced pests and diseases. The negative effects include:

- If drought conditions become more severe and frequent – some tree species will no longer be suitable for commercial forestry.
- Stress caused by drought will make trees more susceptible to pests and diseases
- Tree mortality will increase – particularly street trees
- Increased mortality of fine roots could, In turn, worsen the effects of summer drought
- Infection by soil–borne diseases will be increased by fluctuating water tables
- Stability will be reduced causing more wind throw and greater damage during storms
- Leaves will appear earlier due to warmer temperatures which could leave trees vulnerable to frost damage
- Pests will be able to survive through winter increasing the potential for exotic pests to spread to the UK
- Species that rely on the timing of each other's life cycles could become out of synchronisation with each other – e.g. flowers and their pollinators
- Hotter summers will have an effect on soil drying on shrinkable clay soils, leading to an increase in claims for indirect damage
- Pests and diseases
    - Oak Processionary Moth
    - *Hymenoscyphus fraxineus* (Ash dieback)
    - Asian longhorn beetle
    - *Splanchnonema platani* - Massaria disease of Plane
    - Acute Oak decline
    - *Xylella fastidiosa* – Bacterial leaf scorch
    - Horse chestnut leaf miner
    - Horse Chestnut Bacterial canker
    - Horse Chestnut Leaf blotch
    - Dutch Elm Disease
    - Brown tail moth

The Council will follow the guidance documents produced by the London Tree Officers Association and the Forestry Commission and respond appropriately to issues involving pests and diseases.

Policy T11
The Council will work towards mitigating the effects of identified pests and diseases on its trees and continue to liaise with the Forestry Commission on issues affecting trees such as Oak Processionary Moth.

7.23 Unsafe Trees on Private Property
Trees on privately owned land make up the majority of the urban tree population. The owners have the same responsibilities as the Council with regard to tree management and safety (see section 4).

Where privately owned trees pose a risk to persons (or their property) using the highway, local authorities (under the Highways Act 1980 Section 154) have powers to:

- Request that the person(s) responsible for the tree(s) take reasonable steps to reduce the risk with a 14 day date from notification or
- Local Authorities may take steps to satisfy themselves that the risk has been reduced to an acceptable level post 14 days and recover all costs reasonably incurred in doing so from the person(s) responsible for the tree

Local Authorities also have powers to deal with dangerous trees under the Local Government (Miscellaneous Provisions) Act 1976 Section 23 whereby the Local Authority has the discretionary power to intervene (following a 28 day notice) where:

- A tree(s) is likely to cause immediate harm to persons or property other than on the highway, i.e. neighbouring property

and

- When requested to do so by the property likely to be affected

and

- The person(s) responsible for the tree(s) is unable or unwilling to take steps to reduce the risks themselves
- In case of emergency where there is insufficient time to find or request that the person(s) responsible for the tree(s) the Council will intervene immediately to make the tree(s) safe.

In these cases, Council officers have powers of entry, and those responsible for tree(s) have rights of appeal to the County Court.

Guidelines

When it is reported to the Council that there is a dangerous tree(s) situated on private property, the Council's tree officers will take the following steps:

- Make a site visit to assess the situation and determine the level of risk, and complete a standardised risk assessment form
- If works required to make the tree(s) safe are deemed to be an emergency, the officers will instruct a contractor to make the tree(s) safe within 24 hours
- If works required to reduce the risk to an acceptable level are deemed to be urgent, rather than emergency, the Council will send a formal notification to the landowner allowing 14 days (under the Highways Act 1980 Section 154) or 28 days (under the Local Government (Miscellaneous Provisions) Act 1976 Section 23) to make the tree safe (see appendix)
- If no action is taken by the person(s) responsible for the tree(s) within the time scale set by the formal notice, further notification will be sent to the person(s) responsible for the tree(s) stating a time and date when the Council will enter the land to make the tree(s) safe
- The Council may act (without notice when required) within 24hrs to reduce any risk posed by tree(s) to an acceptable level. This may include removal of the tree(s)
- The formal notifications will inform the person(s) responsible for the tree(s) of their rights of appeal to the County Court

An immediate threat is considered as being:

- Where a tree or part of a tree has died, become brittle or there is a high risk of failure
- Where a tree or part of a tree has failed and is causing a hazard, this could be due to adverse weather, extreme decay or an act of vandalism
- Where a tree or part of a tree is causing an obstruction to a road, footpath or right of way

Policy T12

The Council will ensure that, privately owned tree(s) likely to cause an immediate danger to persons or property using the highway, will be dealt with in a reasonable manner as set out in Section 23 of the Local Government (Miscellaneous Provisions) Act 1976. The Council's powers under the Act are discretionary and the Council will only will only use these powers

as a last resort.

7.24 Damage to Council Owned Trees

On occasion, residents take it upon themselves to prune or fell Council owned trees without consent. Often this work is carried out without any regard to British Standard 3998, the safety of other residents and highway users and the amenity value of the tree.

The law regards this type of unauthorised action as criminal damage and the Council may take appropriate steps to prosecute offenders and recover compensation for the damage through court action. It is an offence to destroy or damage any property belonging to another without lawful excuse, either deliberately or recklessly under the Criminal Damage Act 1971. It is also an offence under Section 132 of the Highways Act 1980 to affix any poster or sign to a highways tree without the permission of the Local Authority.

The Authorised Council officer can approach any person(s) committing an offence involving damage to Council trees and gather information under the Police and Criminal Evidence (PACE) Act 1984.

Guidelines

Upon receipt of information that an offence as occurred, the Tree Officer will make a site visit to assess the situation and obtain evidence. A judgment will be made on whether a criminal offence has taken place.

Offenders may be questioned under caution either on site or at the Council offices at a later date.

Following damage to a Council owned tree, the Tree Officer may instruct the term contractor to carry out any remedial works required to make the tree safe or issue any works required to restore the amenity value of the damaged tree.

Prosecution of offences takes place in a magistrate's court, most likely leading to a fine. Conviction of an offence depends on the circumstances, but can carry a maximum custodial sentence of 10 years.

The Council will seek reasonable compensation for any expenses incurred and/or for the loss and replacement of any tree that has to be felled due to damage.

7.25 Utility Companies working near Council trees

Tree Officers will liaise with the Highway and Street Works sections and, if possible, identify areas in advance where utility companies will be working in close proximity to Council owned trees. It is expected that any work within the vicinity of a Council owned tree is in accordance with the national joint utilities guidelines currently volume 4 (NJUG guidelines for the planning, installations and maintenance of utility apparatus in proximity to trees) a copy of this document can be found at ww.njug.org.uk or copies can be obtained from the Council.

Policy T13

The Council may seek to prosecute any person(s) (under Section 1 of the Criminal Damage Act 1971 and Section 132 of the Highways Act 1980) carrying out unauthorized work or causing damage to a Council owned tree(s). The Council will also seek to reclaim any such

costs as the courts may award.

Policy T14
The Council will remove any sign or poster attached to a Council owned tree that has been attached without the permission of the Council.

Appendix A

Objective 8: Care for plants, animals and ecosystems and help them to thrive, by promoting an understanding of nature, through the delivery of the Biodiversity Strategy.

8.1 Biodiversity Strategy Introduction

More than 98% of visitors to Sutton's parks say that wildlife and plants add to their enjoyment of visits and over 90% would be happy for more land to be set aside for wildlife, including 65% agreeing that rural verges should be mowed less frequently to encourage wildlife, bees and flowers. When asked about herbicide use 68% say they would like all pesticide use stopped, a measure known to assist wildlife. Of course, David Attenborough's television programmes have raised awareness of the plight of the planet and climate change features regularly on the news, so it is no surprise that Sutton's residents want to do their bit for the environment. Sutton's Biodiversity Strategy is a plan of action to ensure that plants, animals and ecosystems are conserved, protected and enhanced and that progress is tracked, using measurable targets.

The strategy is composed of four plans for high priority habitats and a plan for green infrastructure and Biodiversity Net Gain that set out in detail the actions the Council will take and can be found in the appendices B1 to B5 as follows:

- Chalk grassland (Appendix B1)
- Woodland and Scrub (Appendix B2)
- Rivers and Wetlands (Appendix B3)
- Parks and Green Spaces (Appendix B4)
- Green Infrastructure and Biodiversity Net Gain (Appendix B5)

The selection of priority habitats and species for action is based upon robust ecological principles and baseline information derived from national and regional guidance; such as habitats for which the UK has international obligations, habitats at risk and areas important for key species.

The strategy introduces a process called Biodiversity Net Gain, a process designed to ensure that every new development improves Sutton's environment for plants, animals and ecosystems, by either delivering those improvements on the development site, or by paying for improvements elsewhere within the borough. The process has been nationally mandated for all Local Planning Authorities, but Sutton is the first London Borough to adopt this way to evaluate biodiversity during the planning process.

Ahead of the national scheme roll out, Sutton has developed a 'biodiversity tariff', for when developments impact negatively on biodiversity but are unable to deliver Biodiversity Net Gain within the development site. This tariff value is currently set at £96,000 per 'biodiversity unit' per hectare.

Sutton also applies an 'uplift' of 20% or 2 'biodiversity units' per hectare of land developed, whichever is greater, to ensure Net Gain is delivered. As a leader in this work, Sutton is providing support and advice to Natural England and DEFRA on the roll out of the national scheme.

The strategy is a working document that can adapt to changes in the national scene, such as the recent publication of the Environment Bill (2019) and any exit from the EU. It shows how the Council intends to deliver locally on the Government's "A Green Future: our 25 year plan

to improve the environment" (25YEP), how Sutton Council will encourage restoration of nature in all its forms, and documents how priorities may change through time to deliver environmental protection and gains.

8.2 What is biodiversity and why is it so important?

Biodiversity is the term used to describe all life on Earth, encompassing the diversity of organisms, the genetic variability within populations and the habitats, ecosystems and environments in which they live and interact.

A richly biodiverse environment is essential for supporting human life and there are now many documented examples of economic and environmental benefits to humans from working with nature. For example, biodiversity ensures soils are healthy and fertile so that harvests are reliable and sustainable and crops are pollinated. Healthy ecosystems provide natural flood defenses and pure drinking water and when functioning properly can provide food from agricultural produce, fish and other aquatic creatures, and provide for the decomposition of wastes. These are known as Ecosystem Services.

Globally, human activities such as unsustainable forms of agriculture, industry, recreation and international commerce are the main threats to biodiversity, exacerbating climate change and flooding and leading to the rapid loss and fragmentation of habitats, and elevated extinction rates of species and local populations.

Habitat fragmentation leads to local extinctions and reduced genetic diversity, making populations less resilient and further local extinctions more likely. Since the 1970's, species in the UK have dramatically reduced[6]. People get used to not seeing or hearing birds, walking in a woodland, seeing butterflies in a flower rich meadow and otherwise being part of the natural world. Many people, perhaps unthinkingly, let biodiversity loss pass by unnoticed, but left unchecked, the planet will become unable to support human life.

Halting biodiversity loss has an economic benefit in preventing the loss of potential food sources, medicines and treatments, new industrial products and enhances tourism opportunities. A healthy natural environment contributes to climate change mitigation, flood relief, water purification and soil fertility. Biodiversity enriches our lives through physical, educational and social interaction and aesthetic appreciation.

If biodiversity is lost, human life is lost.

8.3 Sutton's biodiversity

For a borough on the edge of London, Sutton contains a surprising array of wildlife. Nationally declining or rare species such as the small blue butterfly, the flowering plant greater yellow rattle, invertebrates such as the stag beetles and birds such as the skylark, all live in Sutton. However, it is not just the rare or uncommon that we should protect. Common or familiar species such as blackbirds, robins and foxes, are all integral to UK biodiversity.

Sutton's natural character is influenced by its geology. In the southern half of the Borough, the underlying geology is chalk. Chalky soils are always alkaline and very free-draining, which restricts the type of plants that can grow on them.

[6] State of Nature 2019

In the north east, river terrace gravels predominate. These gravels are important in the building industry and their extraction has had a huge impact on the landscape. Current actions include the restoration of the 92 ha Viridor Landfill site, which covers a significant proportion of the river terrace gravels as a Site of Metropolitan Importance for Nature Conservation (SMI) by 2023, as part of a wider Wandle Valley Regional Park.

The north west of the Borough is dominated by London clay, a heavy, neutral soil that holds a lot of water and is again colonised by characteristic plants.

The chalk spring fed river Wandle, the Beverley Brook and Pyl Brook all support a rich diversity of invertebrate life and fish species. Chalk Rivers are national priority habitats, because of their characteristic plants and animals and threats to their vitality.

The maps in Appendix B6 show the geology of Sutton and Sites of Importance for Nature Conservation, as set out in the Council's Local Plan 2016-2031.

8.4 Strategic planning and development

Habitats and species listed as priorities in this strategy are a material consideration in the preparation of local development documents and the making of planning decisions.

Protected species (currently under the Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended)) are also material considerations within the planning process.

The Sutton Local Plan 2016 - 2031 contains Policy 26 on biodiversity, and broadly states:
1) the Council will undertake Biodiversity Net Gain and,
2) the Council will support the creation of '*Various habitat enhancements identified through the Council's Biodiversity Action Plan [this Strategy] and the Catchment Plans for the River Wandle and Beverley Brook*' (clause b).

The actions identified through this Biodiversity Strategy aim to fulfil the Council's aspirations through the Local Plan to deliver Biodiversity Net Gain on development sites and deliver wider environmental benefit (i.e. river restoration). Appendix B5 on Green Infrastructure and Biodiversity Net Gain provides more detail.

8.5 Biodiversity Strategy Policies

To ensure that Sutton cares for its plants, animals and ecosystems and delivers on existing commitments to improve land for biodiversity and continues to provide education about biodiversity, the six policies below have been adopted. These policies aim to ensure that the Council:

- Restores the natural functioning and habitats of the River Wandle, Pyl Brook and Beverley and associated wetland habitats
- Maintains, enhances and creates new wildflower meadows and grasslands
- Maintains, enhances and creates new woodland and scrub areas
- Undertakes specific actions to enhance populations of Priority Species of plant and animal
- Continues to offer education through the Ecology Centre, guided walks and talks and volunteering opportunities through the Conservation Volunteer programme.

Policy Bd1

The Council, through this Biodiversity Strategy, will fulfil all agri-environmental scheme

targets.

Policy Bd2
The Council will deliver Planning Policy 26 on Biodiversity to maintain, protect and hold up-to-date information for designated sites.

Policy Bd3
The Council will deliver Biodiversity Net Gain and seek defined compensation costs towards aspirational habitat restoration, as set out in Appendix B5.

Policy Bd4
The Council will engage and enthuse people of all ages in valuing wildlife and nature, through education and active participation.

Policy Bd5
The Council will protect, maintain and enhance habitat important for biodiversity by delivering the plans for high priority habitats and species, as set out in Appendices B1, B2, B3 and B4.

Policy Bd6
The Council will proactively work with the GLA to fulfil regional targets (see **Table 1**) and national organisations (such as Natural England and DEFRA) in the delivery of landscape scale work, such as the Nature Recovery Network and mandated Biodiversity Net Gain (BNG)

Table 1 - London Environment Strategy Targets

Habitat	By 2025	By 2050
Species-rich woodland (new)	20 ha	200 ha
Flower-rich grassland (new)	50 ha	250 ha
River and stream (restored)	10 km	40 km
Reedbeds (new)	5 ha	30 ha

This Biodiversity Strategy seeks to ensure the ecosystem functions well in Sutton. For instance, using grazing animals to maintain and enhance special chalk grassland habitats for wildflowers, grasses and associated fauna is vital, as part of the UK's commitment to fulfilling our international duty for this rare habitat. Light (extensive) grazing, as undertaken in Sutton, increases the soils capacity to store carbon dioxide, compared to mowing[7]. Once animals are on site, the grass is removed and converted into animal protein. The size of the animals, particularly with cattle, creates localised bare areas, vital for seed dispersal and seed set. Their dung provides ready made compost for wildflowers and fungi, as well as food resources for numerous invertebrates, that in turn are food for birds and bats and larger insects. They break it down and recycle it into the soil, promoting soil health and productivity.

Grazing, therefore, delivers a wide variety of ecosystem services, compared to the mowing of meadows, including reduced annual costs.

[7] Mowing and grazing

Grazing would, ideally, be used on all wildflower meadows but there are areas of the borough where grazing can't be used, due to issues around livestock safety and public perception. Initial setup costs (fencing, water troughs and water supply, etc.) can also be prohibitive. Biodiversity Net Gain will seek to address some of the costs associated with more and better habitat creation and management.

8.6 Setting and monitoring targets for the Biodiversity Strategy

To ensure it is delivered successfully, the Biodiversity Strategy has measurable targets with clear timescales and there will be regular reviews of progress. The Council remains committed to deliver the work programme funded through the Higher Level Stewardship, which also has a clear set of deliverable targets to be achieved by 2023. The Parks and Open Spaces Strategy Action Plan shows the actions to be taken under Objective 8 to deliver the Biodiversity Strategy. In addition, the appendices to the Biodiversity Strategy (B1 to B5) provide more detail on the work to be delivered. Where aspects of the Biodiversity Strategy rely on additional funding, this may or may not be made available through Biodiversity Net Gain and other external sources. The Council acknowledges that delivery of these more aspirational elements cannot be guaranteed, but that opportunities should be taken to bid for funding as and when it is available.

Note, this Biodiversity Strategy updates and replaces the old Biodiversity Action Plans (2005-2010 & 2010-2015). The Biodiversity Action Plans previously had a separate Species Action Plan (SAP) for bats, but this has been removed from this strategy, not due to a change in importance or significant improvements in bat populations, but because maintaining and creating high quality habitats is more important for all species, including bats, than the previous targets.

The Council has chosen to deliver these aims through this strategy, rather than a new Biodiversity Action Plan (BAP), due to the lack of regional and national Biodiversity Action Plans.

The Habitat Action Plan (HAP) for gardens has also been removed, although issues around the loss of gardens have not abated but gardens and their possible loss through development is now covered under Green Infrastructure and Biodiversity Net Gain.

Section E - Monitoring and Review of the Parks and Open Spaces Strategy

A detailed Action Plan sets out how the objectives will be achieved, including stating the action, the outcome expected, the resources required, the timescale and the team responsible.

Each action is provided with a 'RAG' rating, to highlight costs or deliverability:

GREEN actions are those that can and will be delivered within current resources (staff and budget) of the Council teams and partners or are currently on track to be completed to time.

AMBER actions are those that require some additional funding or staff resources, over and above those currently available. It is likely that some pooling of any money from various sources such as revenue and capital budgets, Section 106 agreements and other external funding from bids and through Biodiversity Net Gain Compensation can deliver these

actions. Amber actions may also be less likely to be delivered to time, due to the need to gather funding and resources.

RED actions are those that require significant additional funding or staff resources to deliver. These are highly aspirational actions of which ~~that~~ many ~~will~~ require significant partnership working. The timeframes to deliver red actions could also be significantly longer as they may be dependant on new external funding sources becoming available and the ability of partners to integrate their work and agree appropriate timescales.

In accordance with best practice guidance the Council proposes to carry out annual reviews of the Parks and Open Spaces Action Plan to measure progress and reflect changes in strategic priorities. The Council will also monitor overall performance in meeting the Vision and Objectives.

Appendix A

Section F - Appendices

Appendix 1 - Planning Policy Context of new Open Space Strategy

National Planning Policy

National Planning Policy Framework

1.1 The revised National Planning Policy Framework (2019) (NPPF) defines open space as all open space "*of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity*". It identifies access to open space as a key component in achieving sustainable development.

1.2 The NPPF sets out the requirements for local plans with regard to open space, stating that planning policies should be based on robust and up-to-date assessment of the need for open space, sport and recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision. Assessments should then be used to determine what open space provision is needed, which local plans should then seek to accommodate.

1.3 Section 8 of the NPPF "Promoting healthy and safe communities" (paragraphs 96 and 97) deals with how councils should address open space and sport and recreation provision in their local plans and how applications involving the potential loss of open space should be dealt with.

1.4 The NPPF states at paragraph 96 that: "*Access to a network of high quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities. Planning policies should be based on robust and up-to-date assessments of the need for open space, sports & recreation facilities (including quantitative or qualitative deficits or surpluses) and opportunities for new provision*". Further, paragraph 96 continues: "*Information gained from the assessments should be used to determine what open space, sports and recreational provision is needed, which plans should then seek to accommodate*". Paragraph 97 sets out criteria for councils to consider which applications involving the loss of open space might be acceptable.

1.5 With regards to nature conservation and promotion, paragraph 171 states that "*Plans should...allocate land with the least environmental or amenity value... take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries*".

1.6 The NPPF states plans should '*identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity;*

wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation' (para 171a); and,

1.7 Paragraph 174b states plans should '*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*'

1.8 Finally, paragraph 175 notes that local planning authorities should apply the principle that '*if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;(175a)*' and that '*opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*'(175d)

National Planning Policy Guidance

1.9 The National Planning Practice Guidance (NPPG), originally published in March 2014, is a live web-based resource which brings together planning guidance on various topics. The NPPG has replaced the PPG17 Companion Guide "Assessing Needs and Opportunities" (September 2002).

1.10 The relevant section of the NPPG is entitled: "Open space, sports and recreation facilities, public rights of way and local green space". Section 1 "Open space, sports and recreation facilities" states that "*open space should be taken into account in planning for new development...It is for local planning authorities to assess the need for open space and opportunities for new provision in their areas*." In addition this section signposts authorities and developers to Sport England Guidance.

Regional Planning Policy

The London Plan

1.11 The London Plan (March 2016) contains a number of planning policies that are relevant to open space.

1.12 Policy 2.18 "Green Infrastructure: the multi-functional network of green and open spaces" seeks to protect, promote, expand and manage the extent and quality of, and access to, London's network of green infrastructure. With regard to local plan preparation, the policy states that local authorities should produce green infrastructure strategies, identifying priorities for addressing deficiencies and measures for the management of open space.

1.13 Policies 7.16 to 7.23 provide a detailed strategic framework to protect London's open and natural environment. This includes Policy 7.16 "Green Belt"; Policy 7.17 "Metropolitan Open Land" and Policy 7.18 "Protecting open space and addressing deficiency".

1.14 Policy 7.18 sets out the requirements for local authority plan preparation, stating that when assessing local open space needs local plans should:

- Include appropriate designations and policies for the protection of open space to address deficiencies;
- Identify areas of open space deficiency, using the London Plan open space categorisation as a benchmark for all the different types of open space;
- Ensure that future publicly accessible open space needs are planned for in areas with the potential for substantial change such as opportunity areas, regeneration areas, intensification areas and other local areas;
- Ensure open space needs are planned in accordance with green infrastructure strategies to deliver multiple benefits.

1.15 The London Plan provides the following policies to protect and enhance biodiversity, including the use of green infrastructure:

1.16 Policy 5.10 Urban Greening – C: Planning Decisions states that "*Development proposals should integrate green infrastructure from the beginning of the design process to contribute to urban greening, including the public realm. Elements that can contribute to this include tree planting, green roofs and walls, and soft landscaping*"

1.17 Policy 5.11 Green Roofs and Development Site Environs states that:
A: Planning Decisions: *"Major development proposals should be designed to include roof, wall and site planting, especially green roofs and walls where feasible, to deliver as many of the following objectives as possible*:

a) adaptation to climate change (i.e. aiding cooling)
b) sustainable urban drainage
c) mitigation of climate change (i.e. aiding energy efficiency)
d) enhancement of biodiversity
e) accessible roof space
f) improvements to appearance and resilience of the building
g) growing food"

B: LDF's; *Within LDFs boroughs may wish to develop more detailed policies and proposals to support the development of green roofs and the greening of development sites. Boroughs should also promote the use of green roofs in smaller developments, renovations and extensions where feasible.*"

1.18 Policy 7.19 Biodiversity and Access to Nature – part 'C' states that Development Proposals should:
"*a) wherever possible, make a positive contribution to the protection, enhancement, creation and management of biodiversity,*
b) prioritise assisting in achieving targets in biodiversity action plans (BAPs) set out in Table 7.3 and/or improve access to nature in areas deficient in accessible wildlife sites.
c) not adversely affect the integrity of European sites and be resisted where they have significant adverse impact on European or nationally designated sites or on the population or conservation status of a protected species or a priority species or habitat identified in a UK, London or appropriate regional BAP or borough BAP."

1.19 Furthermore, the **Mayor's Biodiversity Strategy** (GLA. 2005) states that

a) '*The Mayor will and boroughs should ensure that new development capitalises on opportunities to create, manage and enhance wildlife habitat...*' (pg.46)

b) '*4.29: Wherever appropriate, new development should include new or enhanced habitat, or design (e.g. green roofs) and landscaping which promotes biodiversity, and provision for their management.*' and
c) '*4.30 Enhancements are most appropriate in places with little or no present wildlife value, as it is in such places that a gain can readily be assured. Even here, there are important principles that need to be followed to avoid inadvertent harm to existing wildlife or its habitat*.' (both pg. 48)

Green Infrastructure and Open Environments: The All London Green Grid (March 2012)

1.20 The All London Green Grid, linked to Policy 2.18 of the London Plan (2016) takes an integrated approach to managing, enhancing and extending London's green infrastructure. The Mayor considers that the Green Grid should be looked at as an asset, valued for the whole range of social, health, environmental, economic and educational benefits it brings to London. The Supplementary Planning Guidance (SPG) states that the Green Grid requires the same kind of protection, investment and innovation as other types of infrastructure.

1.21 The SPG identifies eleven Green Grid Areas and provides the basic framework from which policies and projects can be developed and delivered. The two areas that are covered by Sutton are GGA7 "London's Downloads" and GGA8 "Wandle Valley".

Open Space Strategies: Best Practice Guidance: A Joint Consultation between the Mayor of London and CABE (Campaign for the Built Environment)

1.22 This guidance document aims to provide clear, practical guidance on how to create an open space strategy. The guidance outlines a six stage process which should take between 12 and 18 months to complete:

- Stage 1 Prepare Brief/Scoping Study;
- Stage 2 Context Review
- Stage 3 Understand Supply
- Stage 4 Understand Demands/Needs
- Stage 5 Analyse and identify issues and objectives
- Stage 6 Prepare Strategy and action plan

Local Planning Policy

The Sutton Local Plan (2018)

1.23 The Sutton Local Plan, adopted in February 2018, sets out a spatial planning framework for the long-term development of the borough up to 2031. It provides the broad strategy for the scale and distribution of development and the provision of supporting infrastructure, including green infrastructure. In addition it sets out the detailed planning policies that are used to determine planning applications and allocates sites that will be brought forward for all types of development.

1.24 Local Plan Policy 25 "Open Spaces" states that the council will seek to retain the existing level of open space in the borough and sets out the criteria the council will use when assessing proposals for development on open space. It states that the council will refuse development of all open space and play space in the borough unless it can be: (a) demonstrated that such development would preserve or enhance its open character, its function as a sport, leisure or recreational resource, and its contribution to visual amenity; or (b) the loss resulting from the proposed development would be

replaced by equivalent or better provision in terms of quantity and quality in the local area.

1.25 Policy 25 also sets out other requirements, including; seeking on-site provision of public open space; support improvements and enhancements to the quality and access of existing open spaces; supporting new high quality outdoor sports facilities; supporting proposals for new children's play space; and resisting development on allotments.

1.26 Other relevant Local Plan policies relating to open space include:

- Policy 24 “Green Belt and Metropolitan Open Land”, which deals with how applications affecting the Green Belt and MOL are dealt with
- Policy 26 “Biodiversity”, which sets out the council's commitment to protecting and enhancing the borough’s biodiversity and includes criteria for how to deal with applications that affect sites of importance for nature conservation (for more information, see Appendix B5 2.1.2).
- Policy 27 “Agricultural Land and Diversity”, which sets out how the council will deal with applications that involve the loss of agricultural land and new agricultural/residential buildings on agricultural land.
- Policy 33 “Climate Change Adaptation”, which emphasises the importance of green space networks in minimising the urban heat island effect and urban cooling.

Sutton Open Space Study (2016)

1.27 The Open Space Study Update, published in 2016, was prepared alongside the Sutton Local Plan to ensure that the level of open space provision and improvements was provided were consistent with the projected level of growth over the Plan period up to 2031.

Other Council Strategies and Plans

1.28 The council has a number of other key documents and plans that are relevant to open spaces in the borough:

- This Biodiversity Strategy (2020-2025)
- Borough Climate Change Adaptation Action Plan (2011)
- Green Belt and MOL Review (2015)
- Green Belt and MOL Review Update (2016)
- Sites of Importance for Nature Conservation Review (2016)
- Draft Sustainability Strategy (2018)

Appendix A

Appendix 2 (taken from the Sutton Local Plan 2016-2031)

SCHEDULE 5.I: OPEN SPACE ACCESS BY WARD

Table	Open Space By Ward
5.1	Open Space By Ward

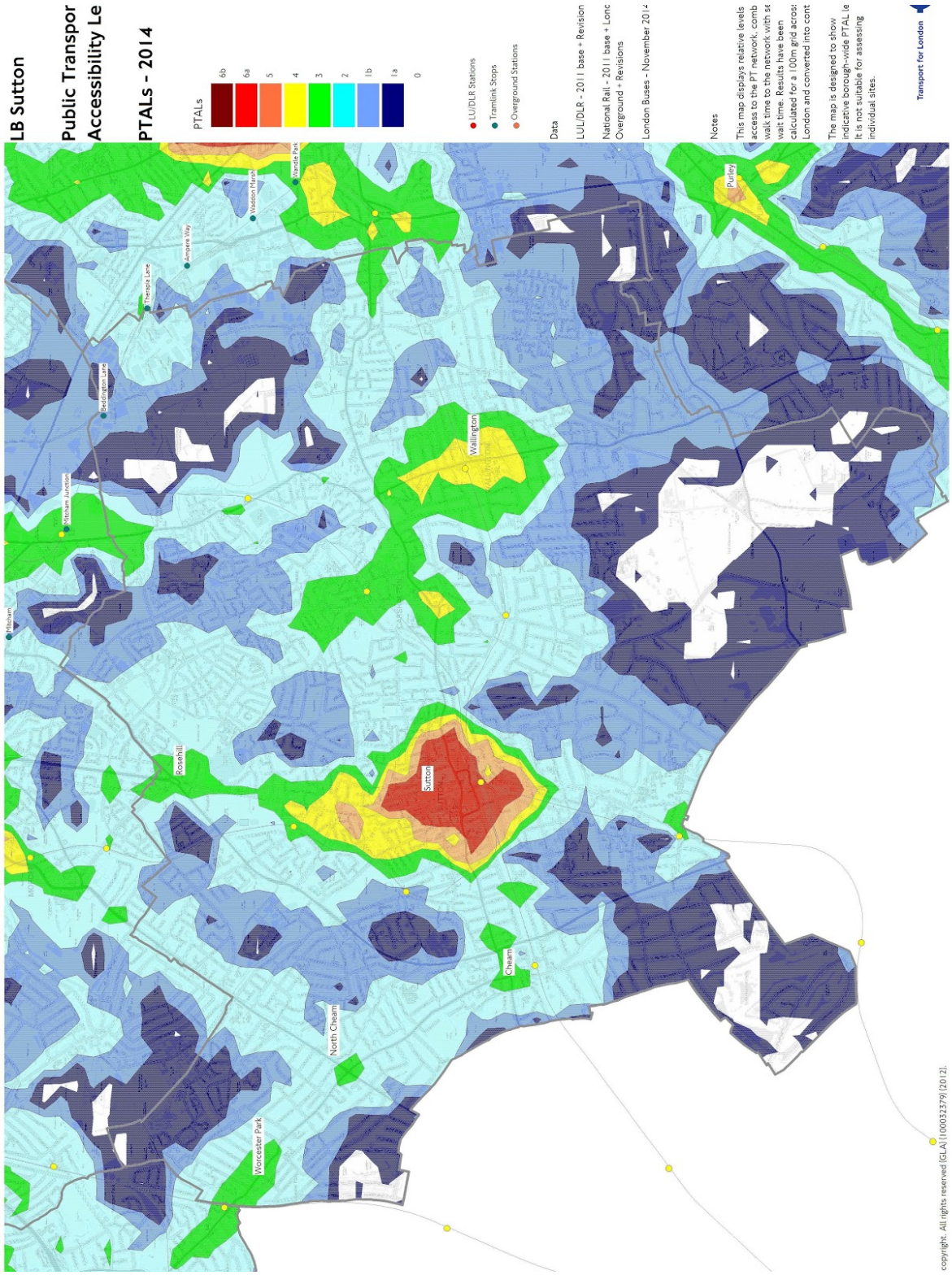
TABLE 5.1: OPEN SPACE ACCESS BY WARD

(As of February 2016)

Ward or Committee Area	Area of Unrestricted Open Space (ha)	Population (2011 Census)	Amount of Open Space per 1000 population	Amount of Open Space Above or Below Borough Average
Cheam North and Worcester Park Local Committee Total Area of Unrestricted Open Space: 63.2ha				
Worcester Park	17.84	11,655	1.53	**-1.20**
Stonecot	28.93	10,712	2.70	**-0.03**
Nonsuch	16.43	10,641	1.54	**-1.19**
Sutton South, Cheam and Belmont Local Committee Total Area of Unrestricted Open Space: 43.25ha				
Sutton South	1.55	9,599	0.16	**-2.57**
Cheam	27.59	10,285	2.68	**-0.05**
Belmont	14.11	10,048	1.40	**-1.33**
Sutton Local Committee Total Area of Unrestricted Open Space: 59ha				
Sutton North	31.54	10,355	3.05	**+0.32**
Sutton Central	8.97	10,993	0.82	**-1.91**
Sutton West	18.49	10,536	1.75	**-0.98**
St Helier, The Wrythe and Wandle Valley Local Committee Total Area of Unrestricted Open Space: 85.05ha				
St Helier	22.37	11,949	1.87	**-0.86**
The Wrythe	19.83	10,163	1.95	**-0.78**
Wandle Valley	42.85	11,630	3.68	**+0.95**
Carshalton and Clockhouse Local Committee Total Area of Unrestricted Open Space: 109.13ha				
Carshalton Central	28.96	10,039	2.88	**+0.15**
Carshalton South and Clockhouse	80.17	9,715	8.25	**+5.52**
Beddington and Wallington Local Committee Total Area of Unrestricted Open Space: 159.82ha				
Beddington North	80.53	10,309	7.81	**+5.08**
Beddington South	74.89	10,667	7.02	**+4.29**
Wallington North	3.07	10,650	0.29	**-2.44**
Wallington South	1.33	10,200	0.13	**-2.60**
Borough Total	**519.45**	**190,146**	**2.73**	

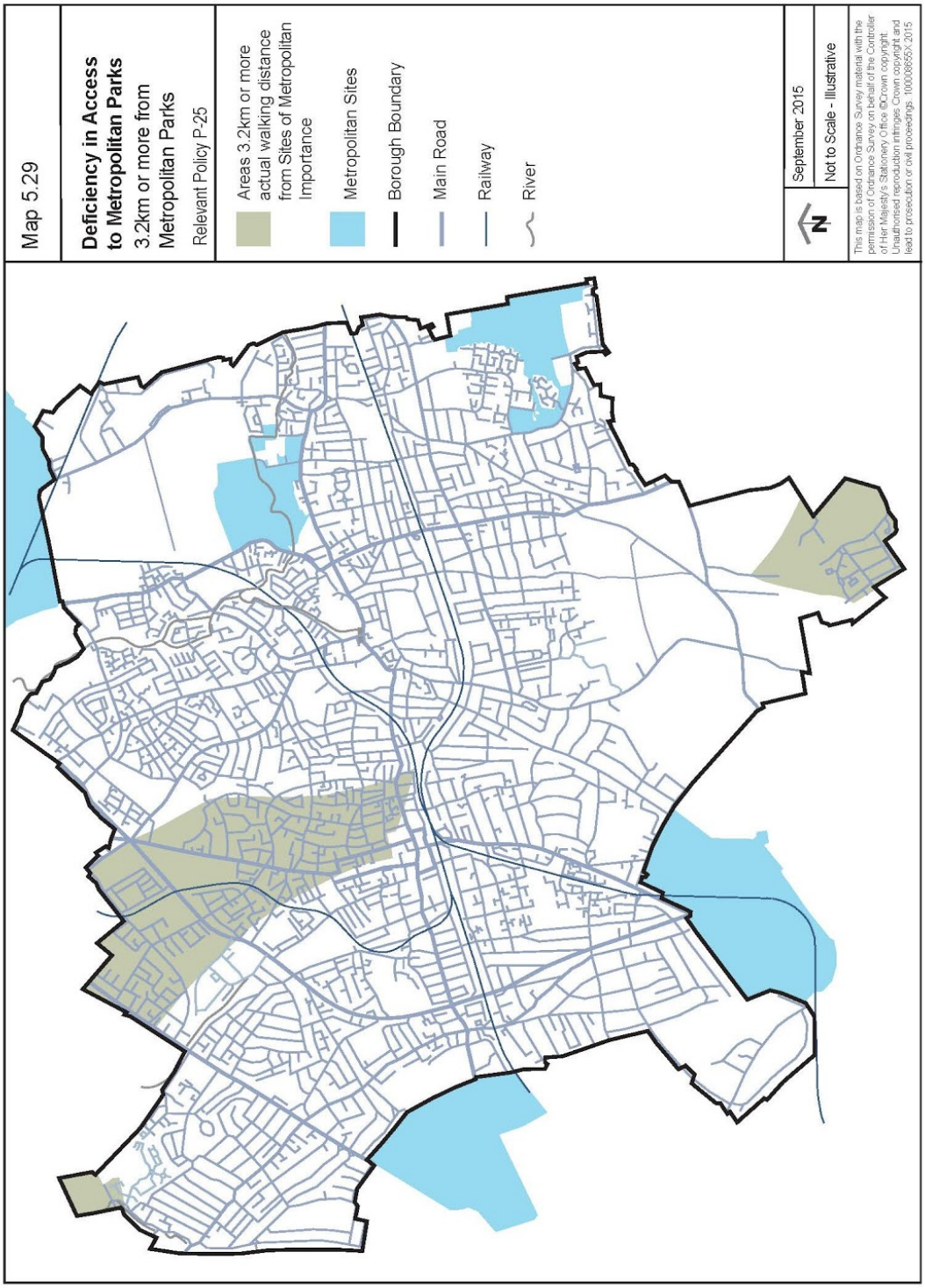
Appendix A

Appendix 3 (taken from the Sutton Local Plan 2016-2031)



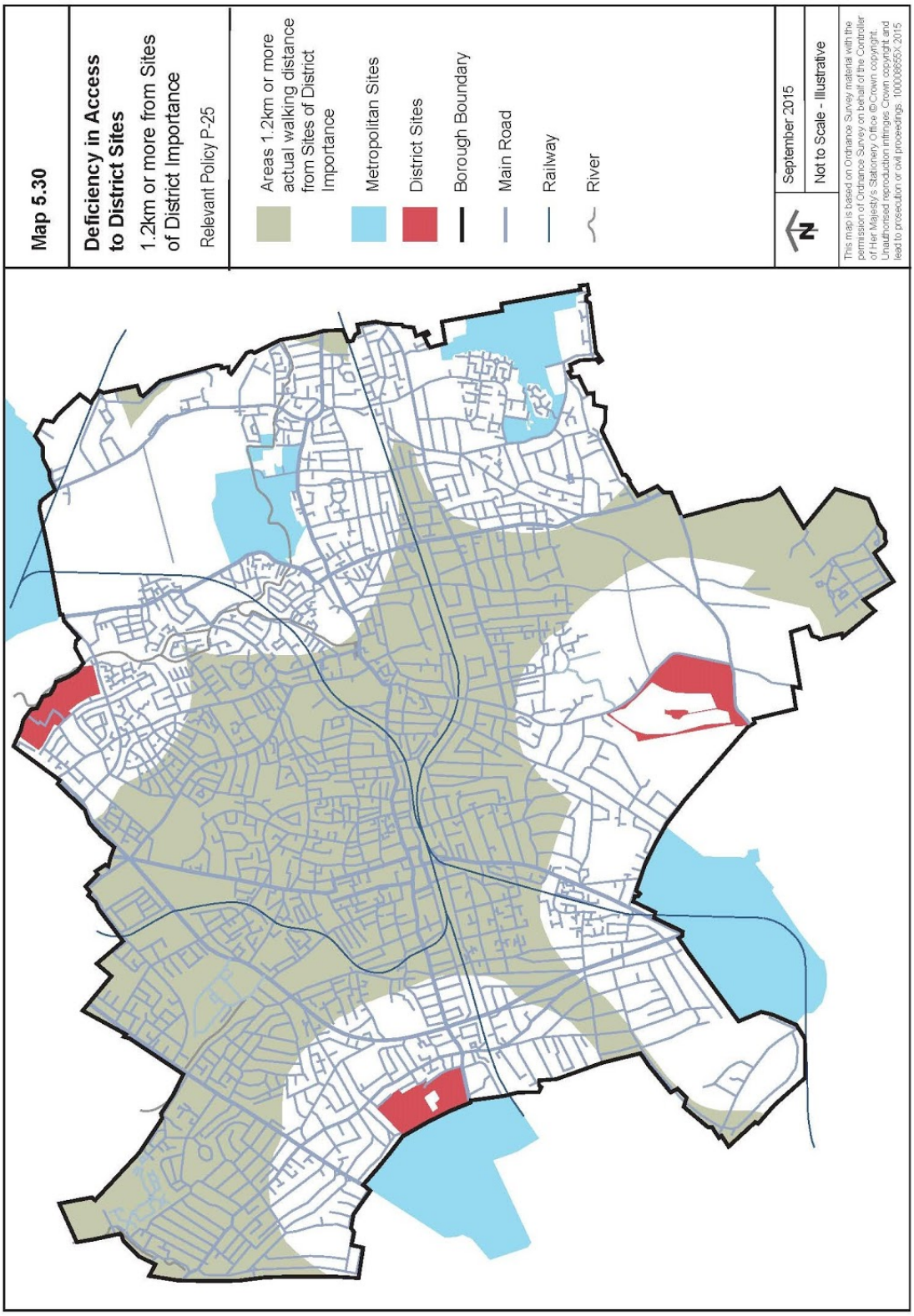
Appendix A

Appendix 4 (taken from the Sutton Local Plan 2016-2031)



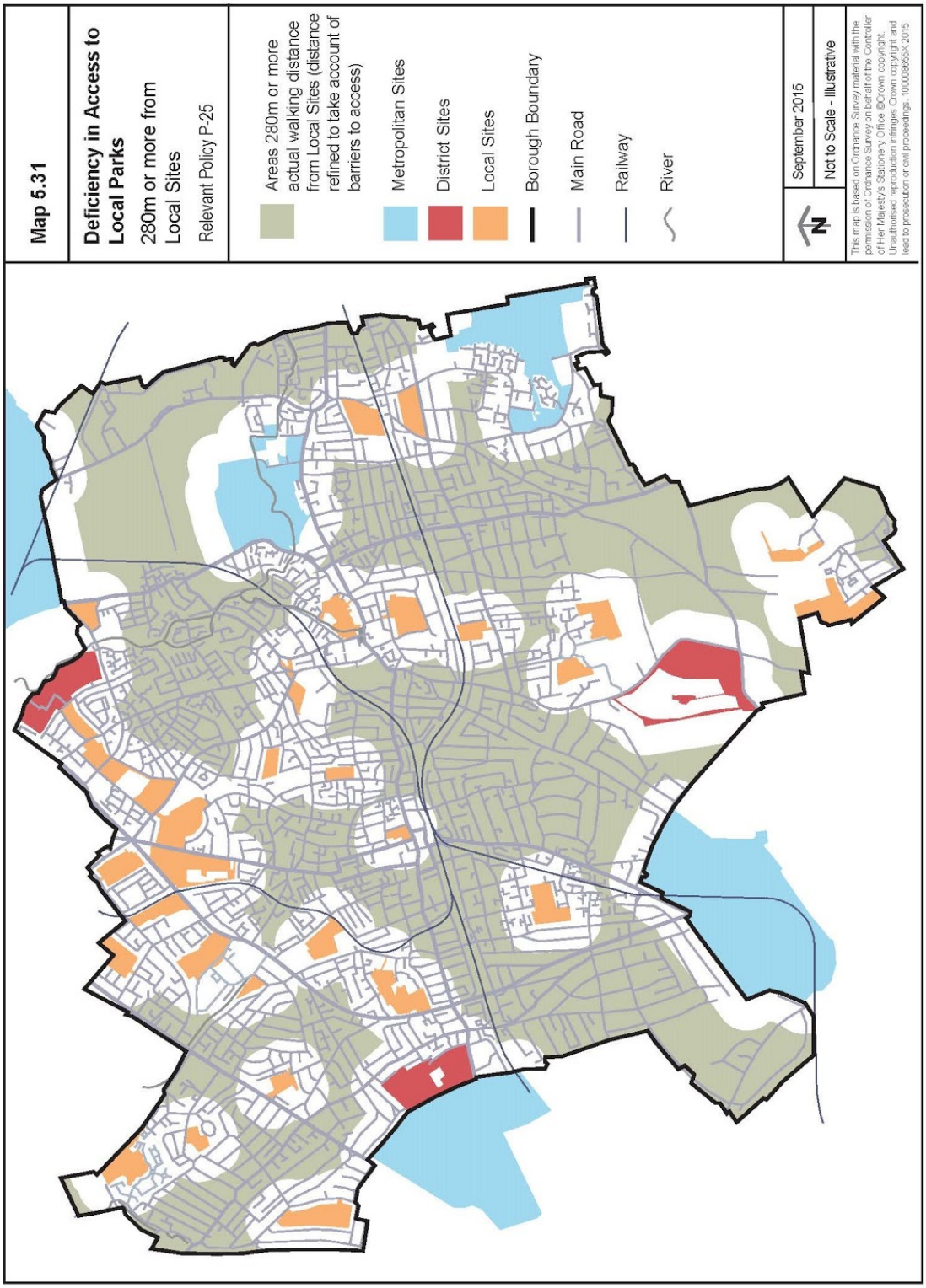
Appendix A

Appendix 5 (taken from the Sutton Local Plan 2016-2031)



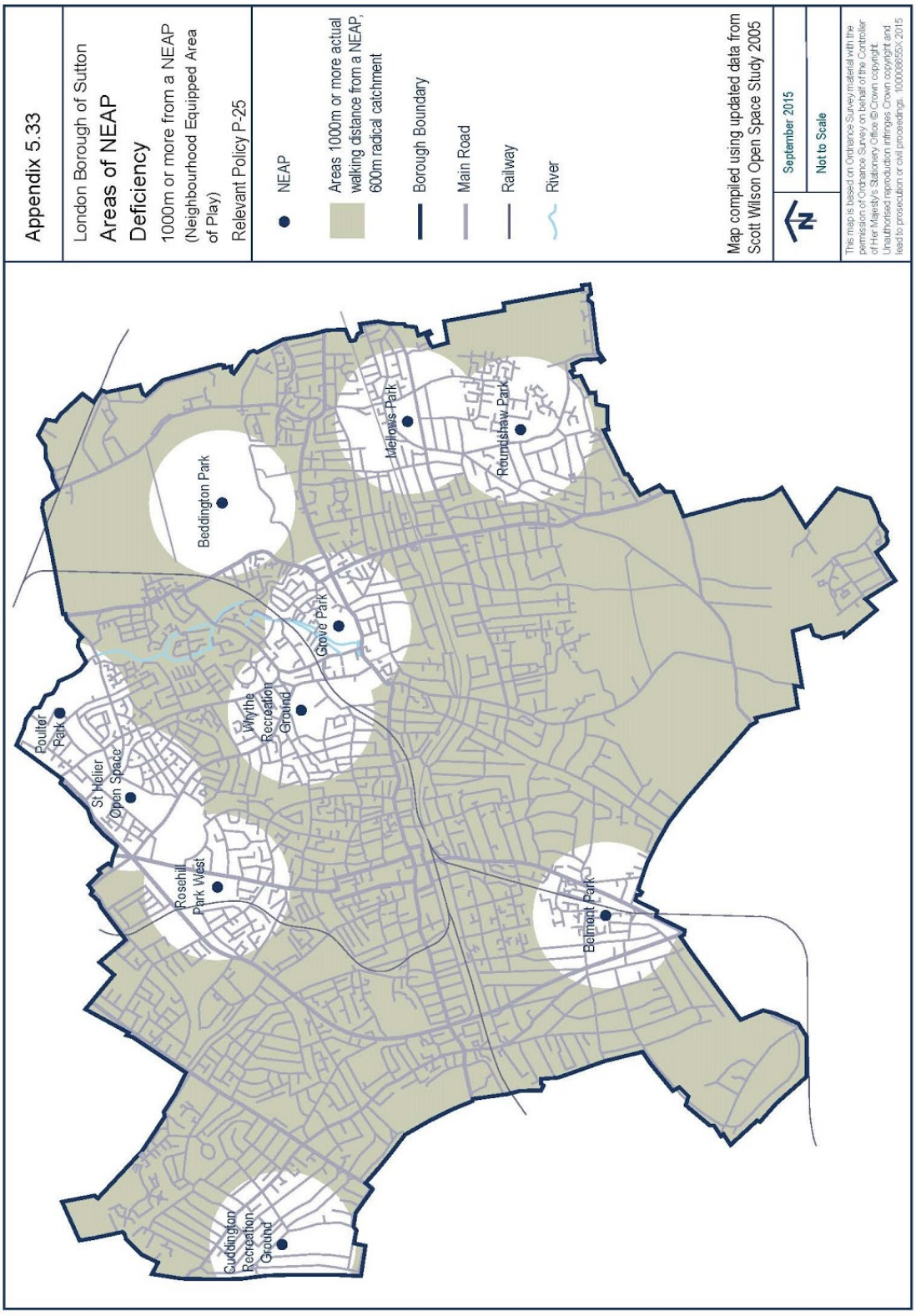
Appendix A

Appendix 6 (taken from the Sutton Local Plan 2016-2031)



Appendix A

Appendix 7 (taken from the Sutton Local Plan 2016-2031)



Appendix 8 - **Support for friends groups**

1. Each friends group will be designated a member of the Parks Team as a contact point. The officer will attend at least one meeting for each friends group during the year, at the request of the group's Chair. Other officers may also attend to discuss their specialism, e.g. trees.

Officers will only attend if notice is given well in advance, an agenda is provided before the meeting, and the reason they are asked to attend is made clear.

2. The Parks Team will copy promotional flyers for friends groups. Up to 100 copies of flyers or leaflets will be produced on up to two occasions each year. Flyers / leaflets for copying must be delivered and collected from the Parks Team office. We cannot post items for groups, but items can be posted to us at 24 Denmark Road, Carshalton, Surrey SM5 2JG using the Council's internal mail system from libraries and Civic Offices.

3. The Parks Team request a copy of each friends groups constitution and ask each group to keep them up to date with changes in the group's personnel and contact points.

Groups are advised that if they want to be considered as full partners, their constitutions should reflect the Council's Core Values and aim to represent all sections of the community.

4. The Parks Team will organise occasional meetings for all the friends groups to meet together when there are issues of common interest and the groups request a meeting.

5. The Parks Team will provide materials, bulbs, trees and plants to support friends group's projects in parks, within the limits of the budget.

6. The Parks Team will support friends groups in applying for funding with external bodies, by searching for suitable funding sources, providing information and quotations for work and will where possible assist with completing forms.

7. The Parks Team will work with friends groups to promote membership. Details of friends groups will be published on the Council's website and provide links to friends group's websites on request.

8. Friends Groups are encouraged to apply for grants through the Local Committees if they need funding to pay for room bookings, promotion of the group and administration. Public realm funding is also available through Local Committees for park improvements and projects.

Appendix A

Appendix 9 - Allotment site list

No.	Allotment Site	Area (ha)	Committee area
1	Beddington Park	0.2	Beddington and Wallington
2	Belmont	2.1	Sutton South, Cheam and Belmont
3	Benhill	2.4	Sutton
4	Buckland Way	1.4	Cheam North and Worcester Park
5	Bushey Meadow	0.5	Sutton
6	Bute Road	1.6	Beddington and Walington
7	Central Road	0.3	Cheam North and Worcester Park
8	Cheam Court (includes Forge Lane)	0.3	Sutton South, Cheam and Belmont
9	Cheam Park Nursery	1.2	Sutton South, Cheam and Belmont
10	Cheam Park Paddock	0.3	Sutton South, Cheam and Belmont
11	Chaucer Road	0.6	Sutton
12	Clensham Lane	0.2	Sutton
13	Culvers Avenue	0.4	St Helier, Wrythe and wandle Valley
14	Demesne Road	4.1	Beddington and Wallington
15	Duke Street	0.3	Sutton
16	Fryston Avenue	0.3	Carshalton and Clockhouse
17	Gander Green Lane	3.6	Sutton
18	Goose Green	1.1	Beddington and Wallington
19	Green Wrythe Lane	1.9	St Helier, Wrythe and wandle Valley
20	Greenshaw Farm	1.4	Cheam North and Worcester Park
21	Lavender Road	0.3	Beddington and Wallington

22	Mill Green	0.5	St Helier, Wrythe and wandle Valley
23	Orchard Allotments -Bute Road	1.1	Beddington and Wallington
24	Perrets Field	0.9	Sutton
25	Priory Crescent	0.1	Cheam North and Worcester Park
26	Pylbrook Triangle	0.03	Sutton
27	Ridge Road	0.9	Cheam North and Worcester Park
28	Roundshaw	1.9	Beddington and Wallington
29	Spencer Road	1.0	St Helier, Wrythe and wandle Valley
30	Stanley Road	3.9	Carshalton and Clockhouse
31	Wandle Road	0.6	Beddington and Wallington
32	Wandle Side	0.2	Beddington and Wallington
33	The Warren	0.2	Carshalton and Clockhouse
34	Watson Avenue	0.4	Cheam North and Worcester Park
35	Westmead Road	3.6	Carshalton and Clockhouse
36	Wrights Row	0.2	Beddington and Wallington

Appendix 10 - Police measures to minimise anti-social behaviour

Criminal Behaviour Orders (CBOs)
When a member of the community fails to stop their unacceptable behaviour, then enforcement, by way of a CBO is considered. A CBO is issued when a person is convicted of a criminal offence where the individual is involved in persistent anti-social behaviour. The CBO need not have a direct link to the offence an individual appears in court for.

The Sutton ASB unit is responsible for liaising with the local Safer Neighbourhoods Teams including the safer Parks Team, collating evidence, preparing files, consulting with the Crown Prosecution Service to consider prohibitive conditions and finally attending court for the hearing. When a CBO has been imposed; the individuals subject to the CBO are monitored to ensure and any breaches are dealt with appropriately.

Appendix A

It is an offence to breach the terms of a CBO and if found guilty of a breach, this would result in a further conviction. A court could impose a maximum sentence of up to five years imprisonment or a fine, or both for an adult.

Sutton's approach to the prevention of Anti-Social Behaviour

If a young person (under the age of 18) is stopped for anti-social behaviour, a letter will be sent home to their parent or carer advising them of the young person's unacceptable behaviour and where to seek advice and support. If the young person continues to be responsible for anti-social behaviour, then an Acceptable Behaviour Contract (ABC) will be considered.

Acceptable Behaviour Contracts

In the case of persistent offenders an ABC contract can be considered. This is a set of acceptable behaviour guidelines that is agreed and signed up to by the young person and the police with agreed support from the young person's family. If this does not work then an application to the courts for an Anti Social Behaviour Order will be considered.

Appendix B1:
Chalk Grasslands

Habitat Action Plan 2019 – 2024

Sussex cattle at Roundshaw Downs LNR, set against the backdrop of Croydon

Appendix A

1. Aims

- To maintain the 2018 baseline for chalk grassland with SINC protection
- To enhance the condition of the chalk grassland entered into Higher Level Stewardship
- To create 2ha of new chalk grassland
- To increase public appreciation of the flora and fauna of chalk grasslands

2. Introduction

High quality chalk grasslands are important because they are amongst the UKs most diverse habitats often with 40 to 50 different species of plant within a few square metres. In contrast, the same sized area of amenity grassland may only hold 4-5 species. This is because chalk grasslands are often low in nutrients, have a high pH of 6.5-8.5, low water content and are often on steep, south facing slopes. They do not suit the usual grass species that dominate amenity grasslands, instead allowing more delicate and specialist species to thrive. In turn, these specialist species support invertebrate creatures adapted to exploit the plants and physical conditions of chalk grasslands.

Chalk grasslands are likely to have existed since the retreat of the last glaciation c.12,000 years before present (BP). Large expanses were probably rare but patches of grassland would have been maintained by the action of large herbivores or been retained where natural succession to scrub or forest was prevented by factors such as high salt levels on the coast, high wind speeds etc..

Around 6000 years ago, during the Neolithic period, the population of the UK started to farm the land, felling primordial ‘wildwood’ for fuel and building material, with the land turned over to grazing of domesticated animals, rather than being left to return to woodland. In those areas with chalk outcrops (North and South Downs, Chilterns, Yorkshire Wolds etc.), the soils are thin and water quickly percolates through the porous chalk, reducing its ability to be utilised for arable farming. The physical nature of most chalk grassland i.e. raised ground, often with steep slopes, means ploughing is often impossible, even today. The lack of soil nutrients means it doesn’t produce enough grass for high intensity dairy farming either and instead it was used for low intensity grazing and became ‘chalk downlands’ essentially mimicking the natural grazing of wild herbivores, allowing specialist, delicate, species to expand in distribution as more land was converted to grasslands.

Over several millennia, these chalk downland species were enabled to carry on building their distinctive communities of plants and animals, leading to a highly complex and diverse landscape.

Changes to low intensity grazing, in the last 70 years or so, has resulted in a rapid decline in the total area of chalk grassland and its distribution has become more fragmented.

Where high quality chalk grasslands have been retained or restored through targeted conservation, we can see an echo of the wonders that these special places provide, from singing skylarks to teeming butterflies, the chirrups of grasshoppers and bush-crickets to the myriad of pinks, purples and yellows provided by the suite of delicate flowers. Summer on a chalk downland is a truly magical experience (**Figure 1**).

Figure 1 - Cuddington Meadows LNR

3. Current Status

3.1 Area & Distribution

Sutton supports approximately 42ha[8] of chalk grassland, although there is significantly more grassland on chalk, such as golf courses, that is likely degraded, at around 196ha in total. In London, chalk grassland is restricted to the southern edge, across the boroughs of Sutton, Croydon and Bromley on the North Downs, and to the extreme northwest, in the Borough of Hillingdon, where outliers of the Chiltern Hills just reach the capital. Around 390ha[7] are classified as chalk grassland in London, with about 9% of that in Sutton.

The Sutton baseline of *actual* chalk grasslands is taken to be the GiGL data of 42.41ha, *managed* 'chalk grassland' through the Higher Level Stewardship Agreement as 45.96ha and *grassland on chalk* having protection through the Local Plan, including golf courses, as c.196ha.

Within Sutton, the underlying geology to the southern half of the borough is Upper Chalk / Clay with Flints. The vast majority of what would have been chalk downland in Sutton has been heavily modified, either through development or conversion to golf courses. There is an argument that the golf courses have provided some protection from more intensive development for chalk grassland species and features, particularly in the rougher areas. The Borough's substantial golf courses include Woodcote Park Golf Course (55 ha), Oaks

[8] GiGL, 2006

Park and Golf Course (96 ha) and Cuddington Golf Course and Cuddington Hospital (62 ha) and may still have some remnant chalk grassland flora. In particular, c.4ha of Oaks Park is treated as meadow, undergoing an annual cut and haymaking, whilst 1ha of the old Cuddington Hospital (within the wider Cuddington Golf Course and Cuddington Hospital SINC) is managed as chalk grassland, through a combination of haymaking and grazing.

The largest extent of 'chalk grassland' under the direct influence of the Council managed for biodiversity is Roundshaw Downs Local Nature Reserve. At 38 ha, around 28ha is 'chalk grassland' (a mosaic of chalk and species rich neutral grasslands) and is managed through annual haymaking (c.20ha) and grazing by cattle (8ha). Close to Oaks Park is Carshalton Road Pastures, around 6.6ha of chalk grassland, scrub and woodland edge, where the 'chalk grassland' (c.4.5ha) is managed through annual haymaking by the Biodiversity Team.

The remaining sites in Sutton that are managed for nature conservation are small and highly fragmented. The Warren (0.53ha) is part of the wider Warren Park, Devonshire Avenue Nature Area (0.3ha) is adjacent to a school and the Queen Mary's Woodland, Wellfield Plantation and Grasslands SINC contains four small (0.5ha, 0.38ha, 0.22ha & 0.12ha, respectively) chalk grassland areas. Apart from those areas at Wellfield Grasslands that exclude public access, all sites containing chalk grassland within Sutton are open access and have considerable pressures from informal recreation and amenity use.

Sutton's chalk grasslands support a number of rare, scarce or restricted species, including the nationally rare and legally protected greater yellow rattle, in addition to other species scarce around London, such as knapweed broomrape and common centaury. Orchids, including man orchid, bee orchid and pyramidal orchid have occasionally appeared but at very low rates. It is unclear why Sutton grasslands are generally bereft of orchid species. Characteristic indicator species, such as kidney-vetch, marjoram, lady's bedstraw, quaking grass, cowslips and greater knapweed are all fairly frequently encountered on Sutton sites.

Key animals include the nationally scarce small blue butterfly (NERC 2006 Section 41 Priority Species) and birds such as the skylark ('Red List' species of 'Birds of Conservation Concern' and NERC 2006 Section 41 Priority Species).

3.2 Trends

Chalk grassland (in line with other lowland grasslands and meadows) has suffered dramatic declines nationally over the last 70 years. This is a product of a combination of factors such as:

- 'agricultural improvement' by the addition of hydrocarbon fertilisers and re-seeding with high yield fodder grasses (rye grasses etc.) for intensive pasturing for sheep and dairy or beef farming
- conversion to arable land through nutrient enrichment
- conversion to housing as agricultural land lost its value relative to the need for housing a growing post-war population
- conversion to amenity spaces (golf courses, parks etc.)
- declines in widespread pasturing across the landscape as grazing became the province of fewer and fewer people as more and more people moved to cities
- myxomatosis in the mid-1950s heavily impacted on supplementary 'natural' grazing by rabbits and led to 'scrubbing up', as tree and shrub shoots and saplings were not eaten, leading to conversion of grassland to scrub and eventually light woodland

- lack of appropriate management, either through insufficient resources or lack of technical expertise for landholders.

Successful chalk grassland management for conservation is still an emerging ‘art’, due to the vagaries of individual sites and species and their responses to intervention, but broad themes are generally applicable:

- create structural diversity - often through extensive grazing by hardy native breed livestock
- increase species diversity - either through ‘green haying’ or seeding from local provenance species-rich grasslands to increase niche availability
- reduce nutrient levels - mainly through mowing and grazing to reduce grass growth but atmospheric enrichment is almost impossible to reduce
- appropriate retention and management of scrub - scrub increases structural diversity and niche availability but can’t be allowed to dominate the grassland

Because most of Sutton’s sites are small, scrub on them is usually confined to hedges and boundaries, rather than scattered across open grassland. However, some thorny saplings are allowed to persist, as these provide small tussocks of grass where the thorny nature of the shrub resists grazing by sheep. These protected tussocks are then home to overwintering beetles and insect cocoons / pupae etc.

It is assumed, that insufficient management, particularly grazing, have been exerted on Sutton’s ‘chalk grasslands’ over many decades, leading to a decline in this priority habitat. The aim of this Habitat Action Plan is to modify the MG1 grasslands back towards a CG3 community.

An increase in conservation grazing is a particularly important aspect in trying to achieve this goal.

4. Specific Factors Affecting the Habitat Action Plan

4.1 Major factors

- Cessation / lack of extensive grazing by cattle and sheep, leading to change in grassland community or ‘scrubbing up’
- Delivery of Biodiversity Net Gain
- Fragmentation and isolation of sites
- Over-mowing in amenity areas, preventing growth and flowering of indicator species
- Under-mowing of other areas, leading to changes in the grassland community or ‘scrubbing up’
- Pressure for development / amenity space
- Increasing management costs

4.2 Supplementary factors

- Reduction in landscape scale genetics through habitat fragmentation
- Atmospheric pollution and nutrient enrichment
- Climatic changes
- Recreational pressures from people trampling areas (creating muddy paths and squashed vegetation), disturbance of species (in particular, ground nesting birds) and nutrient enrichment from dog faeces.
- Application of fertilisers / re-seeding

- Tree planting
- Inappropriate pesticide use
- Illegal incursion / activities i.e. Travellers, quad bikes / motocross, flytipping etc.
- Invasive non-native species, especially *Buddleja davidii* and Canadian goldenrod.

It is clear that many of the major and supplementary factors affecting chalk grasslands do not occur in isolation; fragmentation and isolation of sites, pressure for development and reduction in landscape scale genetics are all intimately linked, for instance.

5. Current Action

5.1 Legal Status

Chalk grasslands are of international importance for their biodiversity. Chalk grasslands are considered a priority habitat under the NERC Act S41 (see Introduction, 3.2). Numerous species strongly or solely associated with lowland calcareous grasslands are also Section 41 Priority Species and some even have legal protection through the Wildlife and Countryside Act (WCA) (1981, as amended) and the The Conservation of Habitats and Species Regulations 2010 (as amended).

Around 46ha of 'chalk grassland' are under Council ownership. All are managed primarily for nature conservation.

Three chalk grassland sites have been declared as Local Nature Reserves (Roundshaw Downs, Cuddington Meadows and Devonshire Avenue Nature Area) whilst a further site on chalk but not displaying chalky tendencies is also declared (Belmont Pastures). Local Nature Reserve is a statutory designation for protection of sites.

All chalk grassland sites or parcels of land owned and managed by the London Borough of Sutton have non-statutory protection through the planning system. This takes a tiered approach based on assessment of each site and relation to other sites at a local (borough) and regional (metropolitan) level, as outlined within the SINC Selection Advice Note 2013[9].

The highest tier of non-statutory protection is a Site of Metropolitan Importance (SMI). Sutton has two chalk grassland SMIs: Roundshaw Downs and Woodcote Park Golf Course. SMIs are those sites '*which contain the best examples of London's chalk habitats, sites which contain rare species, rare assemblages of species, important populations of species, or which are of particular importance within large areas of otherwise heavily built up London.*'[11] Woodcote Park Golf Course has not been surveyed since 2006; it is therefore not clear whether the SMI designation for this site is still warranted.

The next tier of protection is that of sites of value at the Borough scale. These are Sites of Borough Importance, which are subdivided, based on quality, into Grade I or Grade II. Borough Grade I sites in Sutton include Carshalton Road Pastures, The Oaks Park and Golf Course, Cuddington Golf Course and Cuddington Hospital (Cuddington Meadows)

The remaining sites are classified as Borough Grade II and are, again, protected under the Local Plan.

Within Sutton, two chalk grassland specialists are legally protected under the Wildlife and Countryside Act: greater yellow-rattle and the small blue butterfly. Greater yellow-rattle is a

[9] SINC Selection Advice Note 2013

nationally rare (Red Data Book) plant given legal protection against picking, uprooting, destruction and sale (Schedule 8 species of the WCA 1981). It's national stronghold is the chalk downlands of Sutton and Croydon.
The small blue butterfly is protected from trade actions (selling, offering for sale, etc.) under Schedule 5, Section 9 (5).

5.2 Mechanisms affecting the Habitat Action Plan

5.2.1 Historical Management

The London Borough of Sutton, in partnership with organisations such as the Downlands Partnership (DP) and Sutton Nature Conservation Volunteers (SNCV), currently manages ten of Sutton's chalk grassland sites. As noted previously, most management work centres on haymaking and scrub control undertaken by staff and volunteers, with low intensity grazing implemented where it can be. Hardy native breed sheep, provided through a Service Level Agreement (SLA) with the Downlands Partnership, enables Sutton to graze Wellfield North, South, East and West and the wood pasture within Queen Mary's Woodland, whilst around 1/3rd of Roundshaw Downs and all of Cuddington Meadows is grazed by Sussex cattle bullocks.

Over the last two iterations of Sutton's chalk grassland HAP, works have concentrated on removal of substantial areas of scrub and implementing grazing on Roundshaw Downs. We are now at a stage where we need to move from restoration of grassland *per se* to restoration of a *chalk* grassland community (i.e aiming towards CG3 communities).

5.2.2 Higher Level Stewardship

In December 2013, the London Borough of Sutton agreed a 10 year agri-environment scheme (Higher Level Stewardship - HLS) with Natural England. The bulk of the agreement relates to 10 'chalk grassland' land parcels, where the target for each parcel is to improve the quality of the grassland such that a specified number of 'indicator species' are present at specified abundances (see **7.1.2** below). Some sites also have targets in relation to kidney vetch, the sole larval host plant for the caterpillars of the small blue butterfly. The targets set by HLS are therefore of utmost importance for the London Borough of Sutton and strongly influence the aims and objectives of this HAP.

During summer 2014, each chalk grassland parcel was subject to a full suite of botanical surveys, specifically, a NVC survey to determine baseline plant communities, against which management successes can be judged most accurately. The NVC is also complemented by Chalk Grassland Rapid Assessment surveys, which have been undertaken annually since 2007 on some sites and the introduction of Natural England's G04 rapid assessment surveys. These latter two surveys will continue to be undertaken annually, whereas NVC surveys are undertaken every four years, as they are more resource heavy, except on the paddocks of Roundshaw Downs, where these are undertaken every other year.

5.2.3 Environment Strategy

The previous One Planet Sutton (OPS) targets are now superseded by Sutton's Environment Strategy, with the previous OPS targets being transposed to this HAP (**7.1.1** below).

5.2.4 Resource Availability

Appendix A

The delivery of this Biodiversity Strategy Action Plan requires a suitably qualified and experienced team to direct and implement, in partnership with other organisations. Fortunately, external funding, such as the HLS scheme, is able to provide financial support.

Although the HLS scheme runs until 2023 and the Government has promised to maintain all agri-environmental payments post-exit of the EU, there is no guarantee that HLS or a new scheme will provide the necessary monies to continue to manage these sites.

One of the aspirations of this Biodiversity Strategy is to utilise compensation monies delivered through Biodiversity Accounting to deliver the creation and enhancement of chalk grasslands within Sutton but this is at an early stage and requires further resource input.

6. Priority Species

These species are indicators of higher quality environments and, often, are highly distinctive and recognisable, for even the untrained.

Common Name	Latin	Brief Description
Skylark	*Alauda arvensis*	A species in rapid decline nationally. It is generally found in open grassland habitats with little public disturbance.
Small blue butterfly	*Cupido minimus*	Kidney vetch, a plant restricted to bare chalk, is the only larval host plant of this nationally scarce and declining butterfly
Eybrights	*Euphrasia* species	Delicate and beautiful hemiparasites of short and warm downland
Marbled white	*Melanargia galathea*	An easily identified and attractive butterfly, often seen in large numbers in high summer.
Marjoram	*Origanum vulgare*	An aromatic late flowering herb, marjoram is a fantastic nectar resource for butterflies, moths and bees.
Common blue butterfly	*Polyommatus icarus*	The larval host plant, common bird's-foot trefoil, thrives on good quality chalk downlands

7. Objectives and Actions

This action plan aims:

- To maintain the 2018 baseline for chalk grassland with SINC protection (Local Plan 2016-2031)
- To enhance the condition of the chalk grassland entered into the Higher Level Stewardship agreement
- To create 2ha of new chalk grassland
- To increase public appreciation of the flora and fauna of chalk grasslands

7.1 Habitat Targets

7.1.1 Long Term Target

- Enhance the quality of 45.96ha chalk grassland habitat and create an additional 12 ha by 2050. (Baseline is 45.96[10] ha existing 'chalk' grassland habitats in 2014)

7.1.2 HLS Targets

HK7 Species rich grassland restoration to be undertaken at: Avenue Primary School nature area, Carshalton Road Pastures, Cuddington Meadows, Oaks Park meadow, Roundshaw Downs, The Warren, Wellfield 'C3', Wellfield East, Wellfield North, Wellfield South and Wellfield West. Total size: 45.96ha

- Year 5: have 2 indicator species with frequent & 2 indicator species occasional abundance at each site (as judged through G04 surveys)
- Year 5: have kidney vetch frequent at Cuddington Meadows, Roundshaw Downs, Wellfield East & West (as judged through G04 surveys)
- Year 10: have 4 indicator species with frequent abundance at each parcel (as judged through G04 surveys)

7.2 Habitat Action Plan Targets:

7.2.1 Targets:

CG1 To maintain the current extent of 'chalk grassland' in Sutton covered under the Local Plan. Baseline c.196ha, including golf courses.

CG2 To enhance the quality of calcareous grassland areas through participation within the Higher Level Stewardship scheme.

CG3 To create 2ha of chalk grassland

CG4 To promote the importance of chalk grasslands for biodiversity in the Borough

7.2.1 Actions

Code	Action	Lead
CG1	**To maintain the current extent of 'chalk grassland' in Sutton covered under the Local Plan. Baseline c.196ha, including golf courses.**	
CG 1.1	To implement Local Plan Policy 26 on protecting and enhancing sites, through the delivery of the Biodiversity Strategy and assessment of planning applications that may impact on designated sites.	Senior Biodiversity Officer
CG 1.2	To survey sites not managed by the Biodiversity Team, to appraise their suitability for retention within the SINC designations for the next LP review **Target**: 3 sites by 2025[11].	Senior Biodiversity Officer

[10] The GiGL data from 2006 states 42.41ha due to the survey protocol undertaken at that time. This HAP utilises the sites under HLS to restore to chalk grassland per se.
[11] cuddington Golf Course; Oaks Park Golf Course; Woodcote Golf Course

Appendix A

CG2	To enhance the quality of calcareous grassland areas through participation within the Higher Level Stewardship scheme. Target: 45.96ha fulfilling HLS targets	
CG 2.1	Manage and enhance those sites within the HLS scheme under designation HK7 to achieve HLS targets. **Target**: 10[12] sites with up-to-date management plans reflecting HLS targets and prescriptions and 4no. indicator species frequent across each site by 2023.	Senior Biodiversity Officer
CG 2.2	Undertake Chalk Grassland Rapid Assessment and G04 indicator species assessment surveys on chalk grassland sites under HLS. Record all data on Recorder database and share with GIGL. **Goal**: 10 sites per annum until 2023 (as per CG 2.1)	Senior Biodiversity Officer
CG 2.3	Undertake NVC botanical assessment surveys on all sites under HLS HK7 designation under the specification within each site's management plan. **Target**: Roundshaw grazing paddocks to be surveyed biennially from 2016 to 2023. All other sites to be surveyed at least 3 times before 2023, as per their management plans (sites as CG 2.1).	Senior Biodiversity Officer
CG 2.4	Create conditions suitable for small blue butterfly in accord with HLS targets for Cuddington Meadows, Roundshaw Downs and Wellfield East, South and West. Increase the number of, or, create new scrapes specifically for kidney vetch at Cuddington Meadows, Roundshaw Downs, Carshalton Road Pastures and the Wellfield Complex. **Target**: Kidney vetch frequent at Cuddington Meadows, Roundshaw Downs and Wellfield East, South and West by 2023. **Target**: At least 1 scrape to be added to each of the sites noted above by 2020	Senior Biodiversity Officer
CG 2.5	Increase kidney vetch in Oaks Park meadow through scrape creation **Target:** 5 scrapes in Oaks Park meadow by 2024	Senior Biodiversity Officer / Friends of Oaks Park
CG3	**To create 2ha of new chalk grassland**	
CG 3.1	Identify possible areas within the borough for chalk grassland creation **Target**: 2ha mapped by 2021	Senior Biodiversity Officer
CG 3.2	Cost out habitat creation **Target**: 2ha costed by 2022	Senior

[12] Avenue Primary School; Carshalton Road Pastures; Cuddington Meadows; Oaks Park meadow; Roundshaw Downs; The Warren; Wellfield East, West, South & North

		Biodiversity Officer
CG4	**To promote the importance of chalk grasslands for biodiversity in the Borough**	
CG 4.1	Engage volunteers and members of the public in chalk grassland flora and fauna through survey events, guided walks, training days etc. **Target**: 10 site surveys per annum until 2023 and 10 walks / training days for the public by 2024.	Senior Biodiversity Officer

Appendix A

Appendix B2: Woodland and Scrub

Habitat Action Plan 2019 – 2024

Native bluebell at Ruffett & Bigwood LNR

"*It is not so much for its beauty that the forest makes a claim upon men's hearts, as for that subtle something, that quality of air, that emanation from old trees, that so wonderfully changes and renews a weary spirit.*" ~Robert Louis Stevenson, from "Forest Notes" (1875-1876)

Appendix A

1. Aims

- To maintain and improve the current areas of semi-natural woodland and scrub under Biodiversity Team management
- To increase the total extent of woodland and scrub from 96.3ha[34] to over 106ha within the Borough, through restoration of Beddington Farmlands and creation of new woodland
- To promote the importance of these habitats for biodiversity in the Borough and for citizens to contribute to data on veteran trees and woodland blocks

2. Introduction

The UK Woodland Assurance scheme definition of small woodland is an area 'up to 100 hectares (250 acres)'. However, it is accepted that woodlands can be considerably smaller; for example Little Woodcote Wood in Sutton is only 1.9 ha. Scrub includes scattered bushes, regenerating saplings and closed canopy vegetation and although there is no technical definition for scrub, it is generally accepted that it is an area dominated by locally native shrubs and tree saplings, usually less than 5m tall, occasionally with a few scattered trees. It is the dominance of woody species that distinguishes woodland and scrub from grasslands and other communities (although these can hold significant amounts of scrub).

Trees are tall, outcompeting most other species and become dominant as woodlands in the landscape. How tall they are and how dominant they become, depends on numerous variables, including the aspect of the land, nutrients, bedrock & soil characteristics, latitude and altitude. Suffice to say, woodlands are extremely variable. However, we are able to broadly group woodlands into the amount of 'interference' they have had over the millennia.

2.1 Natural Woodlands

Natural woodlands are. those that have never been subject to human interference. In the UK there may be some areas, particularly in remote corners of Scotland within the native Caledonian Pine Forest, that remain untouched by man, but there is no evidence that this is the case.

2.2 Semi-natural woodlands - c.855,000ha

The second group, is *semi-natural woodlands, i.e. w*oodlands that have been modified by man, often through long-term timber harvesting and rotational cutting. They have provided fuel, timber, game and medicines to humans for over 10,000 years, but most change has occurred as humans adopted a pastoral lifestyle. Impacts included relatively large scale deforestation to provide timber for permanent structures (houses, villages and proto-towns) and engineering projects (construction of barrows and Stonehenge, for example), as well as more systematic harvesting of materials, such as coppice, for fuel, animal pens etc.

Such intervention, over several thousand years created a wide range of structural and age variety for the native tree species, with corresponding responses by plants and animals. Semi-natural woodlands are divided into three further categories:

2.2.1 Ancient woodland.

Ancient woodland covers around 326,000hain the Uk and is predominantly native species with intact canopies, which have not been replanted. Most ancient woodland is composed of broad-leaved species but around 18,000ha is composed of native Caledonian Pine Forest in the Highlands of Scotland. Broadleaved ancient woodland is most heavily concentrated in the south of England (around 62%), with some counties with high proportions of their

woodland being ancient in origin. Around 77% of the woodland in Kent, for example, is either ancient or PAWS (see **2.2.2**) .

Ancient woodlands have been heavily worked for many centuries and the type and intensity of the work creates shifting patterns of species in response to the exploitation of the woodland. Ancient woodlands are the most biodiverse terrestrial habitats because they have a number of habitats; open areas such as glades, meadows, and rides (wide paths); rivers, streams and ponds; high canopy; windthrows (trees blown over by strong winds); scrub edges and managed areas, like coppicing.

Ancient woodlands are those that have been in continuous existence and first mapped from in the UK from 1600AD onwards.

2.2.2 Plantations on Ancient Woodland Sites
Plantations on Ancient Woodland Sites (PAWS) are areas where the original canopy was felled and often replaced with more commercial timber species, sometimes broad-leaved species but often quick growing pine or spruce species. PAWS cover around 224,000ha of Britain. Although many woodlands lost their main, native tree species, many of the associated species and soils remained relatively intact, allowing some natural regeneration of broad-leaved species and associated plants such as bluebells, wood anemone, dog's mercury etc..

2.2.3 Recent woodlands
Around 305,000ha in the UK are composed of 'recent semi-natural' woodlands, where management was abandoned and woodland has regenerated. Previously open areas, like pasture, meadows and heaths, were used by landowners for taking a hay cut for winter feed, cropping young trees for fuel or feed, grazing etc. and this prevented natural regeneration. When these activities ceased as they became less economically viable, scrub and eventually woodland moved in. On the older 'recent sites', woodlands can be several hundred years old and contain a high proportion of the characteristics of ancient woodland.

In the last 70 years, post World War II, as the agricultural landscape changed, many areas have undergone an amount of self-seeding, particularly of species like ash and the non-native sycamore. These semi-natural but very young woodlands often have few features in common with ancient woodlands but can sometimes 'import' a couple of ancient woodland species, which have managed to survive in any nearby, old hedgerows.

2.3 Plantation woodlands - c. 1,876,000ha
The vast majority of Britain's wooded landscape is composed of recent plantations of large blocks of conifers. Around 29% of woodland in Great Britain is composed of a monoculture of Sitka spruce, naturally found on the NW coast of North America. This is more than than the coverage of all native broadleaf species. Scots pine makes up around 10% coverage, much of that not within its 'native' range of Scotland and lodgepole pine (another species of western North America) around 6%. Most of this planting occurred after the First World War as part of the 1919 Forestry Act.

Many sites for conifer afforestation were on cleared ancient woodland or other sites now deemed to be of high conservation value, such as lowland heath (Thetford Forest) and upland moor / blanket bog (Kielder Forest, for instance).

3. Current Status

3.1 Area & Distribution
In comparison with other European Countries, the UK has one of the lowest land areas

covered by woodland, with all types of woodland contributing to around 13%[13] of the land surface and of this only around 12% of this is actually semi-natural ancient woodland (c.326,000ha), whilst around 69% (1,876,000ha) is covered by recent plantation.

Our most comparable neighbours on the continent, France and Germany, have significantly higher coverage, around 27% land surface coverage for France and around 32% for Germany. Sweden and Finland have vastly more.

With such a massive decline from 80% to 13% of Britain's native woodland, it is no wonder than many species that depend on woodland have also been reduced in numbers and distribution.

3.2 Sutton's woodlands

Sutton's woodlands are composed mostly of lapsed plantations and areas of natural regeneration. Sutton is one of the least wooded of the London Boroughs, with only an estimated 1.5% cover of the land surface, but in contrast, has a high density of street and garden trees of over 40 trees per hectare[14]compared to other London boroughs.

Where woodland is present, it exists as small discrete blocks with low connectivity. This is a product of clearance of forest in medieval times for pasture in the south of the Borough, and for arable crops and parklands in the north.

The main remaining woodlands are to the south of the borough, which is more rural, urban fringe

Ruffett and Bigwood is the largest block of woodland in the borough at 7.01ha. It is a Local Nature Reserve and part of the Green Belt and is owned by the Woodland Trust. It is composed of two rectangular woods, joined at a corner:

Bigwood is 4.5ha and is predominantly high canopy sycamore from the 1950s, with the remaining broadleaf species from the 1900s. These include Norway maple, ash, pedunculate oak and beech as canopy trees, with an understorey of elder, hawthorn and holly, with some hazel. Ancient woodland indicator ground flora includes some areas of bluebells, goldilocks buttercup, a couple of isolated patches of wood anemone and good numbers of dog's mercury. This site may lay claim to being the only native site for Martagon lily in Britain.

Ruffett Wood is just over 2.5ha and is predominantly high canopy sycamore, with some mature sycamore from the 1900s on the western boundary, as well as some mature oak and beech, some showing signs of 'veteranisation'. Ruffett Wood has more substantial stands of hazel, particularly bordering the circular path and these have been subject to rotational coppicing from the Biodiversity Team and Sutton Nature Conservation Volunteers (SNCV) for over a decade.

Roundshaw Woods is part of the wider Roundshaw Downs Site of Metropolitan Importance for Nature Conservation (SMI) and occupies around 4.5ha of predominantly self-seeded pedunculate oak. There are a number of mature grey poplars as canopy trees, whilst the understorey is predominantly hawthorn, field maple and holly. Native bluebells are an uncommon ancient woodland indicator in the ground flora, whilst hybrid bluebells are quite

[13] 3.17mha; England coverage is 10%, 15% in Wales, 19% coverage in Scotland and 8% in Northern Ireland

[14] https://www.forestry.gov.uk/pdf/ltwf_full.pdf/$FILE/ltwf_full.pdf

numerous and reflect the proximity to houses and gardens. Stinking iris is another ancient woodland indicator species present in these woods, albeit at low numbers.

The ‘shaw’ along Plough Lane at Roundshaw Downs is reputed to be the only possible area of ancient woodland within the borough. Ordnance Survey map 127 (1804) shows a line of woodland to the east of Plough Lane; the shaw along Plough Lane would be the remnants of this longer tract of woodland. It has some mature ash, with some hazel and a dense blackthorn thicket on the eastern edge. Wild cherry is also present but the site is heavily trampled and there is little to no evidence for the ancient woodland indicators noted in the early 1990s (moschatel, wood sedge and goldilocks buttercup).

Queen Mary’s Woodland was transferred (2012) to the Council from Queen Mary’s Hospital and Orchard Hill Hospital and is around 5ha. It forms a contiguous woodland habitat with Wellfield Plantation. By 1868, a rectangular plantation of mostly conifers is shown on the Ordnance Survey map, roughly where Wellfield Plantation is now. Wellfield Plantation predates Queen Mary’s Woodland by around 40 years, as the woodland within the hospital seems to have been, at least partially, planted around 1910. A number of exotic species, such as cherry-laurel, cedar, larch and pine species denote the formal planted nature of the hospital woodland, as well as, for the latter three species, remnants of the commercial plantations. Structurally, both Queen Mary’s Woodland and Wellfield Plantation are similar, with a preponderance of canopy sycamore, with some mature ash. These two are the primary regeneration species. Both woodlands have some mature hawthorn but are heavily shaded; ivy blankets large areas of the ground and cloaks many of the trees. As such, there is little in the way of ground flora, particularly within Wellfield Plantation. Around the circular path within Queen Mary’s Woodland are some patches of common and early dog-violet, with the ancient woodland indicator spurge laurel present in two places.

Work undertaken by the Biodiversity Team and Sutton Nature Conservation Volunteers has opened up and replanted around the circular path in Queen Mary’s Woodland, removed cherry laurel to create wood pasture and created sunny flower rich meadows.

Greenshaw Wood is about 5.6ha in size and has been in continuous existence from at least 1866. It is likely that this woodland is a partial replacement plantation of oak on a previously felled larger woodland. The ground flora is very sparse, dominated by brambles and the canopy is very full, meaning there is little structural and light variability. A tarmac path runs through the middle of the wood and other areas are heavily worn from public access.

The Oaks Park has some relatively substantial areas of secondary woodland, mainly the perimeter plantation and two linear plantations running north, totalling around 16ha. A footpath and bridleway run around the eastern edge of the park and down the centre, adjacent to the golf course. Numerous trees (including mature beech) were lost in the storm of 1987, leaving remnant fallen and standing deadwood. The canopy has regenerated with quick growing species like ash and sycamore, as well as a replanting scheme composed of beech, wild cherry and birch. Ground flora of interest includes one patch of sanicle, one patch of wood anemone and several small patches of spurge laurel, as identified through a botanical survey undertaken by the Biodiversity Team in 2017.

Little Woodcote Wood is a small (1.9ha) area of sycamore with a few horse chestnuts and ash regeneration. Like most undermanaged woodlands in Sutton, the ground is blanketed in ivy, with only a few tenacious ruderal species able to survive, including nettles and brambles along the pathways. The Downlands Partnership has a management plan for the site and

undertakes an amount of work, thinning sycamore, which is encouraging species such as sweet violet.

Beddington Farmlands is currently a working landfill site. The site is due to finish all landfill operation by the start of 2020. The site leaseholders, Viridor, are obligated to restore the site by 2023[15]. Part of the restoration works will include substantial woodland planting (c.5.71ha broad-leaved woodland, a fragment of wet woodland and c.4.5ha of scrub). This represents the best opportunity within the borough to increase total woodland cover, as many other available spaces for such substantial planting are either restricted for amenity use, in private ownership or, provide valuable habitats in their own right (such as chalk downland).

3.3 Scrub

Scrub is a complex habitat of a variety of low, bushy shrubs and on the North Downs, the cessation / heavy reduction of extensive pasturing / grazing has led, over the last 70 years or so, to a marked increase in scrub colonisation of chalk downland.

The majority of scrub within Sutton is predominantly hawthorn and blackthorn with bramble often constrained by management practices such as mowing or grazing prevents expansion. Other species, mainly associated with scrub on chalk, include purging buckthorn, wild privet, spindle, and wayfaring tree, all of which provide additional edge and 'in field' structure.

Scrub is an extremely important habitat in its own right but is often undervalued, due to the perception of it occupying 'unused' or 'abandoned' areas. Whilst there may be an argument for this when scrub may impinge upon other priority habitats (such as chalk grassland or neutral meadows etc.), if treated carefully, scrub provides significant gains for biodiversity on many sites.

Well managed scrub provides dense cover for breeding / nesting birds, escape from predators, as well as predation opportunities, nectar & pollen, berries & nuts and, perhaps most importantly, structural diversity.

In Sutton, the focus is on creating scrub fringing our chalk grasslands. The scrub is cut on a rotational basis, with around 50% retained as mature or overmature scrub and the rest cut before it becomes mature. The creation of a variety of age ranges and physical sizes within scrub mirrors woodlands grazed by large animals.. Cutting and removing scrub from 'scallops' (usually semi-circular areas of around 20-30m^2) to create bare ground or leaves low vegetation (depending on what scrub has been removed). This creates thermal variation, as bare ground or low vegetation warms more quickly than taller vegetation, reduces humidity and increases 'edge effects' - the transitional habitats from bare ground / low vegetation through taller grass & flowers, tall ruderal species (nettles, rosebay willowherb etc.), through bramble and regenerating scrub species and any tree saplings that may have taken an opportunity to grow, ending with the mature and overmature canopy shrubs.

In addition, a number of species, particularly invertebrates, require specific age ranges of limited species of host food plant. Blackthorn of 2-3 years old is the almost exclusive foodplant for the caterpillars of the brown hairstreak butterfly. This species has suffered significant declines in its range across the UK, primarily driven by the wholesale loss of hedgerows and a reduction in traditional management techniques, which promote growth of

[15] Restoration Management Plan

the correct age through rotational cutting. Brown hairstreak is a target species for scrub within Sutton under the Higher Level Stewardship agreement HC16 (see **5.2.3** below).

Scrub also dominates railway line sites, although this is often composed of non-native species or is undermanaged for many years, before being severely cut back.

3.4 Trends

From 1919, the UK has seen a substantial increase in woodland cover, from an estimated 5% in 1901, to about 13% today. The 7% increase is mainly attributable to commercial forestry with the planting of quick growing non-native conifers for timber.

A significant reduction in traditional management for the exploitation of woodland products, particularly in native woodlands, has led to widespread and alarming declines in range and populations of numerous animal and plant species.

The loss of butterflies, such as the pearl-bordered fritillary from the south-east and the massive contraction in range of heath fritillary nationally are causally linked to the decline in coppicing, a traditional management technique for harvesting material for charcoal and building materials. The single-stemmed tree is cut to just above ground level but will (depending on the species and age of individual) send up multiple new shoots. These are then harvested on a 10-15 year cyclical. The cyclical cutting creates niche habitat for a diverse range of species. Freshly coppiced areas are necessary for creating warm areas with plenty of violets for pearl-bordered fritillary caterpillars, or cow wheat for heath fritillary caterpillars(where these species now persist), whilst dense thickets of older coppice were used by nightingales and dormice. Without this intervention, woodlands become more shaded and humid.

Traditional woodland management techniques are being utilised more often, as evidence of the benefits for species dependent on cyclical intervention becomes more understood However, this is primarily being undertaken by conservation charities

Some woodland species have not only weathered the lack of traditional management but have even improved in population or have expanded their range. The silver-washed fritillary is a large, graceful butterfly that likes shady woodlands and has increased its range over the last 40 years (**Figure 2**). This is likely to be a combination of increased availability of violets growing in dappled sunlight conditions (rather than the open conditions resulting from coppicing) and climate change. However, this butterfly also needs sunny and warm woodland rides (wide paths) with plentiful nectar sources (sunny bramble thickets are ideal), so some management is necessary to keep these rides open.

The great storm of 1987, caused the loss of hundreds of thousands of trees. The Oaks Park is thought to have lost in the region of 15,000 trees alone. Although replanting efforts were undertaken, the composition of the woodland has changed markedly, from mainly beech to sycamore and ash. These two species characterise many undermanaged secondary woodlands in Sutton that tend to be botanically poor.

The absence of significant grazing, as well as disturbance through felling and dragging timber, has favoured species such as holly and ivy. The evergreen nature and vigour of these species often leads other species struggling to compete for light. Whilst both are of high value for nature, providing cover, nectar and berry resources, they can be too prevalent. Coupled with issues from Invasive Non-Native Species (INNS), such as snowberry at the Spinney and Roundshaw Woods or cherry laurel shading out the native flora, our woodlands are far from being in peak condition.

Figure 2 - Male silver-washed fritillary nectaring on marjoram

‘Tidying’ and concerns about health and safety have led to dramatic declines in fallen and standing deadwood. An oak may spend over 300 years or more rotting down after dying and at every stage over those centuries plays host to a changing variety of different invertebrates and fungi. There is an increasing acceptance amongst land managers of retaining deadwood for biodiversity, as long as it is away from paths and buildings. Cutting standing dead trees into ‘totem poles’ or ‘monoliths’ can make them safe and provide valuable habitat.

The overuse of woodlands, particularly in heavily populated urban areas, can result in negative effects, such as soil compaction, disturbance to animals and plants (particularly ground-nesting birds), vandalism and even the perception that they are unsafe. These factors can result in unsympathetic vegetation clearance to improve sightlines, an impoverished ground flora and lack of structural diversity.

Climate change is likely to cause a further shift in species composition. There may be an overall increase in average temperatures and an overall decrease in total rainfall over the coming decades, if the models are correct. Adding to the challenges are an increasing number of pests and pathogens. Ash dieback *Hymenoscyphus fraxineus*, several virulent *Phytophthora* fungal-like infections and pests like oak processionary moth are now here to stay.

Planning tree replacement for the next 100 years plus, to ensure we have appropriate age ranges of tree cover, is extremely difficult, as climate change and pest species and pathogens may limit the suitable tree species.

4. Specific Factors Affecting the Habitats

4.1 Major factors

- Afforestation of commercial tree species replacing native species
- Delivery of Biodiversity Net Gain
- Inappropriate management or neglect of ancient woodland, scrub and hedgerows, often due to a lack of money & resources to manage these habitats
- Fragmentation and isolation of sites
- Selling off woodland for development
- Climatic changes
- Loss of deadwood habitats
- Pests and pathogens

4.2 Supplementary factors

- Recreational pressures from people trampling areas (creating muddy paths and squashed vegetation), disturbance of species (in particular, ground nesting birds), dumping, vandalism and nutrient enrichment from dog faeces.
- Reinstatement of traditional management techniques (e.g. coppicing)
- Increases in deer browsing, reducing seedling growth / coppice regrowth
- Reduction of low intensity grazing creating more mosaic habitats
- Reduction in landscape scale genetics through habitat fragmentation
- Atmospheric pollution and nutrient enrichment
- Establishing woodland on other valuable habitat (e.g. grasslands)
- Successional processes (both positive and negative)
- Desire for new planting
- Health and safety requirements of unsafe trees
- Invasion of aggressive non-native species
- Recreational overuse
- Opportunities for complementary recreational use

It is clear that many of the major and supplementary factors affecting woodlands do not occur in isolation; fragmentation and isolation of sites, pressure for development and reduction in landscape scale genetics are all intimately linked, for instance.

5. Current Action

5.1 Legal Status

Lowland mixed deciduous woodlands are a Priority Habitat under the NERC Act 2006. Numerous species strongly or solely associated with lowland mixed deciduous woodlands are also Section 41 Priority Species and some have legal protection through the Wildlife and Countryside Act (WCA) (1981, as amended) and the The Conservation of Habitats and Species Regulations 2017. Protected species associated with woodlands include the stag beetle, badger and all bat species. That considerable numbers of breeding birds and bats use trees to nest or roost in effectively means that those trees are protected from felling during the bird breeding season (mid-February to September) and the bat roosting season (ostensibly, April through to October but can vary depending on temperature).

There are a number of statutory designated Local Nature Reserves (LNRs) and non-statutory designated Sites of Importance for Nature Conservation (SINCs) within Sutton, which have a woodland or scrub component.

Many trees and hedgerows are protected by Tree Preservation Orders and are within Conservation Areas.

5.2 Mechanisms affecting the Habitat Action Plan

5.2.1 Policies

Agreed in 2005, the Mayor of London, the Greater London Authority and the Forestry Commission are committed to maintaining and enhancing London's trees and woodlands through the London Tree & Woodland Framework, to meet the goal of no overall loss of habitat for wildlife and access to quality 'natural' space. The Framework provides guidance on the right place for the right tree, to help ensure that London remains green in the face of pressure from a growing population and economy. Unfortunately, no current Woodland Habitat Action Plan for London currently exists.

The Mayor of London's Biodiversity Strategy (2005) is currently being updated to reflect national policies such as the National Planning and Policy Framework (NPPF) (2012), the Natural Environment White Paper (2011) and Biodiversity 2020 (2011), amongst others. The Mayor's Biodiversity Strategy aims to set out what *the strategy has achieved to date, and where the leadership and support of the Greater London Authority needs to focus in the future in order to support the collective endeavour of those organisations working to protect and manage London's natural environment.*'[16]

5.2.2 Historical Management

Within the Borough, practical woodland management is carried out at a number of sites, including Roundshaw Woods, Queen Mary's Woodland and Ruffett and Big Wood by the Biodiversity Team, with strong assistance from Sutton Nature Conservation Volunteers (SNCV) and funding of works at Ruffett & Bigwood by the Woodland Trust. Other tracts of woodland within the borough receive little management, other than litter picking and tree health and safety assessments.

Scrub management is undertaken on a number of sites and aims to restrict scrub movement into other habitat types of value (wetlands, grasslands, etc.) and to create a diverse structural composition of value to a wide range of animal and plant species.

5.2.3 Higher Level Stewardship

Three chalk grassland sites also contain actions in regards successional scrub (code HC16), in addition to two sites having an agreement for the management of a hedgerow (both sides - code HB11).

HC16 successional scrub actions are undertaken at Carshalton Road Pastures, Cuddington Meadows and Roundshaw Downs to provide suitable habitat for stag beetle and brown hairstreak butterfly (see **3.3** above), whilst hedgerows of very high environmental value (HB11) are managed at Roundshaw Downs and Anton Crescent Wetland.

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16 http://www.london.gov.uk/LLDC/documents/s44476/05a%20Biodiversity%20Strategy%20Update%20-%20Appendix%201%20-%20Working%20Draft%20Document.pdf (pg.5 draft copy).

Continued management of these two agreements is necessary to ensure continued funding from the Higher Level Stewardship scheme.

5.2.4 Environmental Strategy

The Environmental Strategy seeks to plant 2,000 trees by 2022.

5.2.5 Resource Availability

One of the aspirations of this Biodiversity Strategy is to utilise compensation monies delivered through Biodiversity Accounting to deliver the creation and enhancement of woodlands and scrub within Sutton but this is at an early stage and requires further resource input.

Longer term funding options are restricted. There is a possibility that woodland grants through Countryside Stewardship: woodland support[17] may provide some assistance in sympathetic management and dealing with diseased trees through felling and restocking.

6. Priority Species

These species are indicators of higher quality environments and, often, are highly distinctive and recognisable, for even the untrained.

Common Name	Latin	Brief Description
Silver-washed fritillary	*Argynnis paphia*	Majestic swooping butterfly of wide, sunny rides within woodlands, males have distinctive androconial (sex) brands on the upper wing
English bluebell	*Hyacinthoides non-scripta*	A classic species of woodland that has undergone some form of management, like coppicing, where bluebells thrive in the new bare areas. The English species is suffering from hybridisation with the imported Spanish bluebell
Stag beetle	*Lucanus cervus*	Adult males are the UK's largest terrestrial beetle, with massive 'antlers' used for wrestling other males for prime deadwood habitats to entice females to lay eggs into. The larvae spend up to 7 years underground feeding on rotten wood. South London is a hotspot for this species.
White-letter hairstreak	*Satyrium w-album*	Hugely impacted by the death of elms due to Dutch Elm Disease, this species is recovering through switching host plant to wych elms and other resistant elm species
Purple hairstreak	*Neozephyrus quercus*	An elusive canopy dweller, usually only glimpsed through a flash of silvery underwings on a summer evening. Caterpillars have oaks as their larval host plants, whilst adults

[17] Countryside Stewardship: woodland support

		feed on honeydew (aphid excreta) at the top of sunny oaks.
Brown hairstreak	*Thecula betulae*	A butterfly of blackthorn scrub, this species has declined significantly. It naturally lives at a low population density and seeks out 'master' trees to engage in courtship.
Violets	*Viola reichenbachiana* & *V. riviniana*	Larval host plants for a variety of woodland butterfly species, including silver-washed fritillary, as well as species lost from the south east, such as pearl-bordered fritillary

7.0 Objectives and Actions

This action plan aims:

- To maintain and enhance the current areas of semi-natural woodland, scrub and trees which are under the management of the Biodiversity Team to maximise biodiversity
- To maintain and protect those trees granted protection through the planning system
- To enhance the condition of the successional scrub entered into the Higher Level Stewardship agreement
- To create new woodland
- To increase public appreciation of the flora and fauna of woodlands and scrub

Rationale:

There are 13 SINCs in Sutton that are primarily composed of woodland and scrub. 2 woodlands have been declared Local Nature Reserves. In addition, 395 individual trees are protected by Tree Protection Orders, and 3 trees with provisional orders.

7.1 Habitat Targets

7.1.1 Long Term Target

- To create 8ha new woodland, hedgerows and / or orchard areas and improve 7 ha of existing woodland areas for biodiversity by 2050.

7.1.2 HLS Targets

HB11 Species rich hedges (both sides) - Roundshaw Downs (410m), Anton Crescent Wetland (140m)

Indicators of success

- By year 5, hedges should be at least 2m in height and 0.75m in width (measured from the centre of the hedge), unless they have been laid or coppiced.
- Each year, there should be some uncut hedgerows on the holding

HC16 Successional scrub - Roundshaw Downs (2.8ha), Carshalton Road Pastures (0.7ha) and Cuddington Meadows (0.15ha)

Indicators of success

Appendix A

- Brown Hairstreak & Stag Beetle should be present or have a suitable habitat provided throughout the HLS agreement
- By year 5, cover of shrub species Juniper / Box / Hawthorn / Blackthorn etc should be between 50% and 85% of the area. The vegetation within 2m of the edge of the scrub should be taller than 30cm
- By year 5, shrub species should have a diverse age and height structure. No more than 50% of the scrub area should be mature, or over-mature
- By year 5, tree species (native species) should be present at irregular spacings, with an overall canopy of between 5 - 10% of the area
- By year 5, grasses and wildflowers including those found in the surrounding BAP habitat should be between 5cm and 15cm tall on 10% to 30% of the area cut into the scrub in “scallops” and in small open areas
- By year 3, the following undesirable species Ragwort / Creeping Thistle / Dock should be no more than occasional
- Archaeological /historic Airfield in 8189 (Roundshaw) has suffered no further degradation

7.2 Habitat Action Plan Targets:

7.2.1 Targets:

WS1 To increase upon the current extent of woodland and scrub within LB Sutton. Baseline 65.6ha (GIGL data 2006). Target 76ha

WS2 To enhance the quality of woodland and scrub areas through the Higher Level Stewardship scheme and any external funding programmes

WS3 To create 1ha of new woodland

WS4 To protect the current and future extent of woodland from development and to protect and maintain veteran trees through the planning process

WS5 To promote the importance of woodland and scrub for biodiversity in the Borough

7.2.1 Actions

Code	Action	Lead
WS1	**To increase upon the current extent of woodland and scrub within LB Sutton. Baseline 65.6ha (GIGL data 2006). Target 76ha**	
WS 1.1	To monitor and advise that proposed scrub and woodland planting at Beddington Farmlands, as part of agreed upon restoration, is undertaken to best practice, as laid out in RMP v9.1. **Target:** create 0.21ha wet woodland; 5.71ha broadleaf woodland; 4.58ha scrub & 4453m of hedgerow by 2023 (10.5ha total + hedges)	CAMC / Senior Biodiversity Officer

Appendix A

WS2	**To enhance the quality of woodland and scrub areas through the Higher Level Stewardship scheme and any external funding programmes.**	
WS 2.1	Manage and enhance those sites within the HLS scheme under designation HC16 to achieve HLS targets. **Target**: 3 sites[18] with up-to-date management plans reflecting HLS targets and prescriptions and with indicators of success achieved by 2023.	Senior Biodiversity Officer
WS 2.2	Manage and enhance those sites within the HLS scheme under designation HB11 to achieve HLS targets. **Target**: 2 sites[19] with up-to-date management plans reflecting HLS targets and prescriptions and with indicators of success achieved by 2023.	Senior Biodiversity Officer
WS 2.3	Undertake annual Phase 1 and woodland condition surveys on woodland sites under Biodiversity Team management. Record all data on recorder and share with GIGL. **Target**: 2 sites[20] per annum until 2025.	Senior Biodiversity Officer
WS 2.4	Investigate and apply for, if applicable, Countryside Stewardship for woodlands managed by the Biodiversity Team. **Target**: Queen Mary's Woodland & Roundshaw Woods under CS woodland management grants by 2020 (if applicable).	Senior Biodiversity Officer
WS 2.5	Consult on and, if applicable, undertake appropriate enhancement works to Queen Mary's Woodland and Roundshaw Woods to maximise biodiversity, including selective thinning, underplanting / restocking and wildflower promotion. Funding from net Gain would be required to undertake the enhancements. **Target**: 4ha improved by 2025	Senior Biodiversity Officer
WS3	**Create 1ha new woodland**	
WS 3.1	Identify possible areas within the borough for woodland creation **Target**: 1ha mapped by 2021	Senior Biodiversity Officer
WS 3.2	Cost out habitat creation **Target**: 1ha costed by 2022	Senior Biodiversity Officer / Asset Management

[18] Carshalton Road Pastures; Cuddington Meadows ; Roundshaw Downs
[19] Anton Crescent Wetland; Roundshaw Downs
[20] Queen Mary's Woodland & Roundshaw Woods

Appendix A

WS4	**To protect the current and future extent of woodland from development and to protect and maintain veteran trees through the planning process**	
WS 4.1	To implement Local Plan Policy 26 on protecting and enhancing sites, through the delivery of the Biodiversity Strategy and assessment of planning applications that may impact on designated sites.	Senior Biodiversity Officer / Principal Tree Officer
WS 4.2	To survey designated woodland sites not managed by the Biodiversity Team to appraise their suitability for retention within the current SINC designations. **Target**: 4 sites[21] by 2020.	Senior Biodiversity Officer
WS 4.3	To identify veteran trees across all Council sites, recording details onto the dedicated tree database, including description. To routinely conduct recorded inspections, frequency of inspections dependant on site usage. Work recommendations to be based on safety issues and minimal intervention work only. **Target**: All veteran trees identified and details recorded onto database by 2022	Senior Arboriculture Officer
WS5	**To promote the importance of woodland and scrub for biodiversity in the Borough**	
WS 5.1	Engage volunteers and members of the public in woodland flora and fauna through survey events, guided walks, training days, etc. **Target**: Annual Phase 1 survey with volunteers of Queen Mary's Woodland and Roundshaw Woods until 2023 and 10 walks / training days / events for the public on any designated woodland SINC by 2024.	Senior Biodiversity Officer / SNCV

[21] Revesby Wood; Greenshaw Wood; Oaks Park woodland; Woodmansterne Road edge woodland

Appendix B3:
Rivers & Wetlands

Habitat Action Plan 2019 – 2024

Male banded demoiselle damselfly on the River Wandle

Appendix A

1. Aims

- To maintain and enhance rivers and streams for biodiversity throughout the Borough, through implementing the Catchment Plans for the River Wandle and Beverley Brook, to naturalise river channels and processes
- To maintain and enhance existing areas of wetlands for biodiversity through implementing good practice and completing Higher Level Stewardship targets
- To monitor rivers and wetlands to evaluate their ecological status
- To promote the importance of rivers and wetlands for biodiversity and low impact recreation and relaxation
- To implement and increase the number of functional SuDS schemes

2. Introduction

Geologically, Sutton is a borough of two halves: the southern half is elevated as the most northerly aspect of the North Downs chalk ridge, whilst the northern half of the borough is, predominantly, lowland floodplain from the River Wandle, which emerges from a spring line where the chalk ends, running east to west through Carshalton village.

The lower, flatter north of the borough is composed of alluvial sands and gravels, as well as London clay. These geological beds provide suitable substrate for the formation of wetlands adjacent to the Wandle. The historical quality of Wandle water and the suitability of water retentive substrate provided ideal conditions for wetland areas, both natural and manmade, such as extensive watercress beds and calico fields.

This Habitat Action Plan considers a broad range of riverine and wetland habitats, including flowing water in rivers and streams, ponds and lakes, reedbeds, swamps and marshes, as well as associated wet grassland. Many of these habitats interdigitate to form complex habitat mosaics of significant value to wildlife. All have a supply of water, be it through capture and storage of rain, a high groundwater level, spring fed or as flood attenuation areas or a combination of all four.

2.1 Rivers and Streams

The permeable chalk to the south of the borough captures and filters rain falling on the North Downs. This, over time, percolates through the rock until it hits an impermeable layer, which forces the water out of the ground and into a river or stream. The main body of water within the London Borough of Sutton is the River Wandle, one of the tributaries for the River Thames.

As a chalk stream, the Wandle is an extremely important biodiversity feature for the Borough, one of only 200 chalk rivers in the world! As the UK contains c.85% of chalk streams and rivers on the globe, we have an international responsibility to maintain and enhance these precious habitats. These include all of the components that make these rivers special, including the gravel bottom, riffles and pools, aquatic vegetation and what should be species rich banks.

The Wandle has two arms, one rising from springs in Wandle Park in Croydon, the other rising from a spring line in Carshalton around St. Philomena's school, Sutton Ecology Centre and The Grotto in Carshalton Park. Due to water abstraction over the years, the groundwater level has dropped, reducing and virtually eliminating flow from this spring line in all but the wettest periods. The Carshalton Arm of the Wandle is supplemented through

back-pumping water upstream from Watermead Lane to Carshalton Ponds by Honeywood Museum. During the winter of 2013/14, the groundwater rose and flowed from The Grotto (see **Figure 3** below) as it did from when it was first built in 1724 and periodically until 1976, as well as by Carshalton Ponds and St. Philomena's school.

Figure 3 - Water flowing from the Grotto in Carshalton Park (Feb 2014)

The Wandle was extremely well regarded for trout fishing, as well as historically being very industrious, with watercress beds and calico works, as well as a large number of mills along its length. The Wandle has quite a marked drop from source to mouth and coupled with a relatively short length (some 9 miles, 14km), made it ideal for running water mills.

Over time, the industrial usage of the Wandle led to its wildlife habitats being deleteriously impacted, though pollution from the various gunpowder, paper and dye mills, raw sewage from housing, runoff from farming on the banks and general despoiling. With a reduction in water quality, the trout and most other creatures left, leaving a fairly sterile river. The creation of Beddington Sewage Works in 1902 and improvements in household sanitation helped reduce the amount of raw sewage entering the river but this was replaced with other problems, compounded in the early and mid 20th Century through canalisation and straightening of the river, reduction in remaining riverside habitats and trees, surface water runoff from roads adding pollutants and heavy metals, increased nitrogen and phosphorous from farm runoff (although this is likely to be relatively small) and point pollution from misconnections to waste pipes.

Two other smaller running water bodies are within Sutton: the Pyl Brook and the Beverley Brook. The Beverley Brook rises near Nonsuch Park and is culverted underground for the

first part of its life, emerging in Cuddington Recreation Ground and running for a short length through the Rec, before being culverted underground through Worcester Park, emerging again at Green Lane, before being culverted underground out of the borough just past the old Worcester Park Sewage Works (now The Hamptons and Mayflower Park).

The main channel of the Pyl Brook rises above ground just to the east of Anton Crescent Wetland, just to the northwest of Sutton town centre and runs roughly west, flowing past Anton Crescent Wetland (which is used as a Flood Storage Wash for the Pyl), under the A217, out again behind Tesco's and then past Hamilton Recreation Ground, where a meander and backwater were created in 2009. From there, the brook is heavily canalised, running past Kimpton Balancing Pond (which discharges into the brook) and under the A24 out of the borough to eventually join up with the Beverley Brook.

The east channel of the Pyl Brook emerges above ground near Sutton Common railway station and flows north past Rosehill Recreation Ground before turning west at the borough boundary just north of Rutland Drive, near Sutton Common and then out of the borough under the A24 and through Morden Park, where it rejoins the main channel in the sports ground north of North East Surrey Crematorium.

A variety of legislation has been passed, most notably the Rivers (Prevention of Pollution) Act 1961, the Water Resources Act of 1991 and the Water Framework Directive 2000, all seeking to improve the quality of water in rivers, reduce pollution and latterly, restore, as far as is practicable in many cases, the natural flow and processes of the river.

Water quality has improved markedly due to the above (and other) legislation, allowing the partial return of brown trout and the invertebrates this species, and others, require.

2.2 Standing Water

Standing water ranges from small garden ponds to large lakes and is predominantly still or very slow flowing. The edges are often highly modified, particularly in parks, gardens and other open spaces, whereas standing water areas within nature reserves have a much more naturalistic edge and are often heavily vegetated with common reedmace (also known as bulrush), great willowherb and sometimes, a thin fringe of common reed. Denser stands of reed are classified as reed bed (see **2.3**) below.

Standing water provides a wide range of conditions for various aquatic plants, which in turn create varied structural diversity within the water column, as well as above water and around the fringes. The pond bottom supports a variety of 'submerged aquatics', such as rigid hornwort, mare's-tail and water milfoil species. In shallower waters, all of these species can produce an aerial flowering spike. There are numerous species which have at least part of the plant sat on the surface of the water. These are 'floating aquatics', including the familiar white and yellow water lilies, various species of water-crowfoot, starworts and pondweeds. Moving into shallower water, we find emergents, including species such as flowering rush, various sedge and rush species, reedmace and common reed, as well as reed-like grasses, such as sweet-grass. In the driest parts of the pond, are the marginals, which include purple-loosestrife, flag iris and marsh marigold.

In general, more species are adapted or able to utilise standing water in comparison to running water but this depends enormously on the range of conditions found within standing versus running water, nutrient levels and niche availability.

Familiar species, such as frogs, toads and newts are integral parts of urban standing water sites, for at least part of their lifecycle, as are some common and widespread invertebrates,

including dragon- and damselflies (Odonata), pond skaters and the less desirable, including midges (sub-order Nematocera) and mosquitoes.

2.3 Reedbeds

Common reed dominates reedbeds, making this an unusual habitat, in that it is usually the case that the greater the botanical species diversity within an area, the greater the chances for increased animal and fungal species diversity. However, having a 'monoculture' of reed can provide very high animal diversity, although a limited botanical diversity. In particular, a number of bird and insect species (primarily beetles, flies and moths) are reed bed specialists.

Bird species strongly associated or dependent on reedbeds include reed warbler, sedge warbler, reed bunting, bearded reedlings and bittern. Invertebrates strongly associated with reedbeds include Fenn's wainscot moth, reed leopard moth, the spider *Clubiona phragmitis*, the fly *Parochthiphila spectabilis* and a large variety of other species. Recent invertebrate surveys have confirmed some 40 UK species are dependent on reedbeds, whilst over 600 species are wetland specialists.

Most reedbeds are being managed primarily for conservation, with the cutting of reedbed compartments undertaken on rotation to provide structural diversity, from fresh new growth to old growth and litter layers, with a small amount of scrub.

2.4 Wet grassland

Wet grassland is a scarce UK habitat, heavily reduced in area and quality since the introduction of hydrocarbon fertilisers, improved drainage and intensive agriculture. The vast majority of seasonally damp or inundated grasslands, including water meadows, have disappeared and with them, the wide range of flora and fauna they supported.

Numerous bird species are strongly associated with wet grasslands, including breeding lapwing, snipe, redshank and yellow wagtail, whilst flowers in decline include greater bird's-foot trefoil, sneezewort, snake's-head fritillary, devil's-bit scabious and various orchids, such as southern marsh orchid.

2.5 Sustainable Urban Drainage Systems

Sustainable Urban Drainage Systems or Sustainable Drainage Systems (both shorted to SuDS) are an approach to manage drainage in or around developments in a more natural way, linking water capture (attenuation), transport (conveyance), water quality and biodiversity.

SuDS can utilise balancing ponds, water tanks, soakaways, green roofs, filter strips, bioswales and permeable paving to reduce the amount of water entering surface run-off drains, helping to reduce downstream flooding. The SuDS hierarchy[22] should always be utilised.

This Biodiversity Strategy aims to increase the number of SuDS schemes providing benefits for local wildlife.

3. Current Status

3.1 Area & Distribution

[22] Policy 13 SuDS Hierarchy

3.1.1 Rivers & streams

As noted above, the main river in Sutton is the River Wandle, a groundwater fed chalk stream. Of its total 9 miles (14 km) length, a little less than 4 miles (5.9km) comprises the Sutton extent. Recent works on the river within Sutton, led by the Wandle Trust (part of the South East Rivers Trust SERT) have improved inriver and marginal habitats, by removing toe-boarding and concrete banks, reducing channel width, increasing flow rates and natural scouring, creating slack water areas and reducing tree shading. Key examples of improvements are shown at Hackbridge and along Mill Lane / Butter Hill in Carshalton (**Figure 4**).

Figure 4 - Restoration works at Butter Hill (©South East Rivers Trust)

3.1.2 Standing Water

Lakes are generally defined as areas of water greater than 2 ha. There are a number of artificial lakes and ponds of varying sizes throughout the Borough. The larger lakes are a result of gravel extraction.

Artificial lakes have been created at Worcester Park and Beddington Farmlands. The lakes and islands at Beddington Farmlands have been created to benefit key bird species, such as little ringed plover and redshank, although their current use for breeding pairs of these species is severely constrained, due, in part, to the amount of gull activity on the working landfill site. With the recent reduction in landfill and full cessation of landfill in late 2019, gull numbers should reduce substantially, thereby improving breeding chances for wading birds using bare ground / light cover.

There is no accepted definition of a pond but these are generally recognised as small water bodies, less than 2ha. Ornamental ponds can be found at Beddington Park and Carshalton

Ponds, providing roosting and nesting habitat for familiar species of waterfowl, such as tufted duck, Canada geese, mute swans, mallard, coot and moorhen.

Ponds that are actively being managed for nature conservation can be found at Sutton Ecology Centre and Anton Crescent Wetland. Thousands of school children visit the Ecology Centre every year, and carry out pond-dipping to discover smooth newts, common frogs and toads, and invertebrates such as dragonflies and damselflies.

Works by the Environment Agency in early 2017 at Anton Crescent Wetland have significantly altered the wetland aspects of the site, through removal of reed bed and willow carr and the de-silting and reprofiling the pond area. Through these works and extensive replanting of native, local species, the site will be enhanced for flora and fauna.

3.1.3 Reedbeds

Reedbeds in Sutton are all less than 1 ha in size but can provide important habitat for breeding birds. Spencer Road Wetlands is a naturally occurring reedbed of about 0.75ha, whilst artificially planted reed beds exist at a number of sites; c.0.1 ha at Anton Crescent Wetland (it is planned to expand this through re-stocking), a tiny area at Sutton Ecology Centre and a developing reedbed at Beddington Farmlands. Once the creation of this habitat is complete, there should be around 2ha of reedbed in the southern lake, whilst reeds fringing the lakes, channels and ditches within the wet grassland may increase this, up to 4ha or more in total.

3.1.4 Wet grassland

Wet grassland within Sutton is very rare, existing mainly of 0.5ha in Beddington Park. This small area contains a number of borough and London scarcities, including southern marsh orchid, great burnet, water pepper and marsh arrowgrass.

A tiny area of wet grassland occurs at Kimpton Balancing pond, containing species such as sneezewort, greater bird’s-foot trefoil, meadowsweet and the grass marsh foxtail.

Sutton Common Paddock is a seasonally damp, poorly draining area of about 1.66ha. Recent attempts have been made to improve the site for wildflowers, specifically lowland wet grassland species but have not had much impact, in the main, likely due to the dominance of the vigorous grass species creeping bent. Further attempts are being made to reduce the dominance of creeping bent, to fulfil the Higher Level Stewardship targets.

As part of the restoration of Beddington Farmlands, over 14ha of wet grassland will be created, primarily for breeding waders such as snipe and lapwing.

3.1.5 Sustainable Urban Drainage Systems

There are numerous examples of SuDS in usage but few with specific biodiversity gains. Kimpton Balancing Pond and Caraway Place Pond are both examples of larger SuDS for developments that provide opportunities for local wildlife but more can be done to provide wildlife and aesthetic gains at more sites, whilst dealing with flooding issues.

3.2 Trends

3.2.1 Rivers and streams

Sutton is fortunate in having a substantial stretch of one of the very few chalk rivers in the

capital. The Carshalton Arm has recently been awarded the status of 'Good Ecological Potential' under the classification used by the Water Framework Directive (WFD). This is the highest award that can be given to water bodies that have been heavily degraded and for which significant changes (due to water abstraction and public pressure), are unlikely to be achieved, particularly in a very urban environment. The award is heavily based on improvement works undertaken by the Wandle Trust.

There is a substantial amount still to do in improving the Carshalton Arm, including dealing with point pollution (misconnected pipes etc.), undertaking more improvement works including removing barriers to fish migration, improving flow conditions and dealing with nutrient levels, some of which is highly likely to be linked to the huge amount of bread put into Carshalton Ponds to 'feed the ducks'. Future challenges will also include dealing with low flow conditions from continued and increased demands on water supply which, when combined with the predicted climate change of drier summers, will almost certainly increase pressure on the River.

The Croydon arm of the Wandle has not had a great deal of improvement so far but this is set to change, at least in part, over the next few years. The lake in Beddington Park has been de-silted and will be planted with a number of aquatic plants but a fish pass was not installed through the HLF project, due to prohibitive costs.

The Stock Pond has also been de-silted, regraded and replanted. Some willow and alder felling has taken place, whilst water levels can be controlled through provision of a groundwater tapping borehole, which will provide clean water to the pond, as and when required.

Improvements like these and those along the Carshalton arm will go some way to restoring some of the productivity of the river, in being able to support a variety of flora and fauna. Spring fed chalk rivers, such as the Wandle, are categorised as among the most biologically rich and productive of all habitats. This is a product of clear water, moderate nutrient levels and a gravel substrate, providing ideal conditions for a diverse community of submerged and waterside plants to become established. This in turn supports a rich and diverse range of invertebrates and fish species. Watercress, fool's watercress and lesser water parsnip can be found forming extensive beds, whilst stream water crowfoot *Ranunculus pencillatus* ssp. *pseudofluitans* is apparently increasing in distribution.

Recent releases of captive bred brown (river) trout and salmon by the Environment Agency and the Wandle Trust have been undertaken, to augment the existing fish population. Trout appear to be breeding in numbers within the river.

Until recently, urban development right up to the waterside, had altered the structure of the natural course of rivers and streams. This decrease in the amount of available floodplain, reduced floodplain connectivity and increased canalisation, has had detrimental impacts by removing valuable habitat for biodiversity. However, even in low flow rivers like the Wandle, the potential of flooding is leading to a significantly more cautious approach being applied, with re-naturalised water courses being significant contributors to reducing flooding.

Insensitive in-channel management, 'tidying' the river banks and vandalism to the river, including dumping of rubbish, all contribute to continuing problems along the river, reducing the ability of species to move freely between high quality habitats.

Over the last 2 decades or so, invasive non-native species (INNS), such as floating pennywort *Hydrocotyle ranunculoides* and parrot's feather *Myroiphyllum aquaticum* cause problems in-channel and bankside species such as Himalayan balsam *Impatiens grandiflora* and Japanese knotweed *Fallopia japonica* have all contributed towards a degraded system. The Wandle Trust / South East Rivers Trust has recently started tackling all of the above species in a systematic manner.

On a more positive note, both biological and chemical water quality continues to improve. Better sewage treatment and better quality discharges, particularly relevant in Sutton from sites such as Beddington Farmlands, has led to a reduction in the amount of pollutants, such as phosphorus, entering rivers causing negative impacts from eutrophication.

Indicators of a cleaner Wandle are the established breeding populations of declining bird species, such as kingfisher and grey wagtail, a species in moderate decline. Damselfly species associated with rivers of this type, including banded demoiselle and beautiful demoiselle appear to be expanding their ranges up- and down-stream, possibly connected to climate change but most likely due to improved river conditions, in terms of water quality, flow and bankside vegetation.

For all of the improvements to the Wandle, these still occupy a small amount of its total length and the river requires substantial input to restore it to its former glories.

The Pyl Brook and Beverley Brook are heavily degraded and canalised, with little practical work so far to change stretches of the river. The Beverley Brook catchment plan will attempt to deal with some of these issues and, out of borough improvements have already started, such as at Richmond Park and near Tolworth.

3.2.2 Lakes and ponds

There are a number of permanent and ephemeral water bodies located throughout the Borough.

Problems experienced by lakes and ponds have not significantly changed over the last 70 years or so, with poor water quality (including increased nutrient loads of nitrogen and phosphorous), under-management for habitats and over-management in regards 'tidying', INNS and a loss of ponds in general, all reduced the variety and suitability of ponds and lakes for wildlife, with commensurate declines in diversity and abundance of flora and fauna.

In 2016, a new pond (c.160m^2) was created at Queen Mary's Woodland, whilst the ponds at Mayflower Park have matured and provide habitat for breeding reed warbler and reed bunting.

3.2.3 Reedbed

As noted above, new reedbed is being created as part of the restoration of Beddington Farmlands. Once established, this will be the largest block within Sutton and will require specialist management to create the structural diversity required to provide habitats for specialist invertebrates, reedbed birds and possibly, over-wintering bittern.

The reedbed at Anton Crescent Wetland expanded within 2016, due to the removal of willow carr from the site, although in 2017, the reedbed was also removed, as the Environment Agency desilted the pond, to improve storage capacity in flood conditions. The desilted area was reprofiled in areas to try to create 'splashy' areas to be used by overwintering waders like snipe and green sandpiper and the reedbed will be allowed to grow back but will require

replanting. This will create, in the longer run, a wetter reedbed, which will, hopefully, improve the chances of species like reed warbler breeding on site.

3.2.4 Wet grassland

As noted in **2.4** above, wet grassland has undergone significant declines over the years, with commensurate losses in flora and fauna associated with this habitat type.

The wet grassland at Beddington Park will continue to be managed sensitively, hopefully utilising heavy horses and ambitions to expand or create new wet grassland at Beddington Park will be pursued.

Works are ongoing at Kimpton Balancing Pond to increase species richness and restoration of Back Green by the Beverley Brook will also be pursued.

Works at Sutton Common Paddock will involve the eradication of around 1ha of the grass species creeping bent and seeding with wildflowers and fine grasses.

The first stage in wet grassland creation at Beddington Farmlands is due to be completed in 2019, aiming to create about 3ha of suitable topography (seasonally wet grassland with numerous ditches, providing habitat and protection for ground nesting birds from foxes), which will then be seeded with fine grasses and wildflowers suitable for the conditions. Later tranches of wet grassland creation will be undertaken over the next few years, to the north of the pylons (which define the northern boundary of the initial area) and around the Energy Reclamation Facility (ERF) to the east of the site, all to be completed by the end of 2023.

3.2.5 SuDS

The use of SuDS has increased over the last few years but many of these use attenuation tanks under the development, which do not provide any biodiversity value. No large (>0.1ha) SuDS schemes have been undertaken since Kimpton Balancing Pond in 2006.

However, small scale SuDS, utilising rain gardens and planters, are being delivered through the SuDS in Sutton's Schools project[23], which included a demonstration rain garden at the LBS offices in Carshalton[24].

4. Specific Factors Affecting the Habitat Action Plan

4.1 Major factors

- Abstraction, leading to low flow levels / lower groundwater levels
- Delivery of Biodiversity Net Gain through river restoration
- Invasive species, leading to loss of native species and habitats
- Pollution
- Damage to riparian species and habitats by weed-cutting and bank clearance
- Impact of pressure of development leading to habitat loss, including desires to have paths along both banks
- Historical modification of the river course leading to reduction in diversity of physical habitat features of value to wildlife
- Removal of in-channel debris, reducing channel 'roughness' and leading to more rapid through flow of water, leading to increased chances of flooding
- Flood control measures
- Urbanisation and associated increase in hard surfaces leading to high runoff rates, flashy flows and influxes of associated pollutants.

[23] https://www.southeastriverstrust.org/suds-installed-in-sutton-schools/
[24] https://www.southeastriverstrust.org/first-rain-garden-complete/

4.2 Supplementary factors

- Increased sediment build up as overland flow strips soil (more of an issue in rural areas where good soil management is not undertaken)
- Loss of current-loving species and equally, lack of slack water for fish spawning
- Disturbance of species
- Rubbish deposition and accumulation
- Development within the floodplain
- Successional processes

It is clear that many of the major and supplementary factors affecting rivers, streams and wetlands do not occur in isolation; fragmentation and isolation of sites, pressure for development and reduction in landscape scale genetics are all intimately linked, for instance.

5. Current Action

5.1 Legal Status

The overarching driver for river restoration is what is known as the Water Framework Directive (WFD)[25] (technically: Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy). This aims to provide, in summation, an integrated river basin management system for Europe, crossing, if necessary, national boundaries. Key objectives for the WFD include ecological protection, specific protection of unique and valuable habitats, protection of drinking water resources, and protection of bathing water. Not all objectives will apply to all water bodies but ecological protection is mandatory: '*the central requirement of the Treaty is that the environment be protected to a high level in its entirety*.'[26]. The UK government therefore has a responsibility, under the Directive, to achieve the targets set.

There are numerous river and wetlands habitat action plans, statements and many species action plans relevant to wetland habitats, which used to be contained within the UK Biodiversity Action Plan. The UK BAP was effectively succeeded by the 'Post 2010 Biodiversity Framework'[27], with the individual HAP and SAPs (Species Action Plans) being effectively 'mothballed'. They '*remain, however, important and valuable reference sources. Notably, they have been used to help draw up statutory lists of priority species and habitats*'[28], as required under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

In this guise, rivers and some wetland habitats (ponds, reedbeds, coastal and floodplain grazing marsh etc.) are termed Priority Habitats. Numerous species strongly or solely associated with rivers and wetlands are also Section 41 Priority Species and some have legal protection through the Wildlife and Countryside Act (WCA) (1981, as amended) and The Conservation of Habitats and Species Regulations 2010 (as amended).

[25] http://ec.europa.eu/environment/water/water-framework/index_en.html
[26] http://ec.europa.eu/environment/water/water-framework/info/intro_en.htm
[27] http://jncc.defra.gov.uk/pdf/UK_Post2010_Bio-Fwork.pdf
[28] http://jncc.defra.gov.uk/page-5705

Protected and priority species include bats (all species), great crested newt, common toad, yellow wagtail, bittern and lapwing.

There are a number of statutory designated Local Nature Reserves (LNRs) and non-statutory designated Sites of Importance for Nature Conservation (SINCs) within Sutton, which have a river or wetland component. Statutory protection has been applied at five Local Nature Reserves with wetland elements within the Borough: at Wandle Valley Wetland, Sutton Ecology Centre, Spencer Road Wetland, Anton Crescent Wetland and Wilderness Island.

In addition, Sutton has afforded strong protection to rivers and wetlands against the adverse effects of built development, through non-statutory nature conservation designations, including Sites of Metropolitan Importance (the River Wandle) and Borough Importance (Anton Crescent Wetland, Caraway Place pond, Beddington Park etc.) through the Local Plan.

Sutton has secured further protection and significant enhancement of sites for wetland conservation, through formal management agreements at key sites, such as the former Worcester Park Sewage Treatment works, Beddington Farmlands and Anton Crescent Wetland.

The Environment Agency exercises a pollution control function over watercourses in the UK.

5.2 Mechanisms targeting the Habitat Action Plan

5.2.1 Catchment Management Plans

Future implications for water resources require a holistic approach to catchment management, with land use practices that reduce rapid runoff and peak flood flows, enhance aquifer recharge and restore the natural function and connectivity of rivers and their floodplains. The Water Framework Directive required all inland and coastal waters to reach "good status" by 2015. The UK fell short of this target.

Catchment plans for the River Wandle[29] has been created and is being actioned, whilst a catchment plan for the Beverley Brook will be produced in the life of this Strategy.

5.2.2 Historical and Current Management

A considerable amount of management is carried out by individuals, committed voluntary and non-statutory organisations, often in partnership with Sutton Council. This enhancement work, including regular litter clearances along the Wandle, reed cutting, removal of vegetation to maintain areas of open water, silt removal and re-profiling of banks, has contributed greatly to the maintenance and enhancement of these natural habitats. Within the Borough, practical river and wetland management is carried out at a number of sites, including Anton Crescent Wetland, Caraway Place Pond, Kimpton Balancing Pond, Sutton Ecology Centre and Wandle Valley Wetland by the Biodiversity Team and the SNCV, whilst Wilderness Island and Spencer Road Wetland are managed by the London Wildlife Trust (under lease agreement and under licence, respectively).

The wetlands at Mayflower Park are under a management agreement with the site's contractors, whilst Beddington Farmlands has planning conditions to fulfil to create and enhance the river and wetland habitats on site or to be created as part of the restoration.

[29] Wandle Catchment Plan

The Wandle Trust / South East Rivers Trust undertake river clean up events, removing dumped materials, as well as restoration and management on the Wandle, Beverley Brook and Pyl Brook.

5.2.3 Higher Level Stewardship

HLS includes targets for open water (HQ2) and reedbed management (HQ3). Both of these are based at Anton Crescent Wetland

5.2.4 Environment Strategy

One Planet Sutton (OPS) is now superseded by Sutton's Environment Strategy, with the previous OPS targets being transposed to this HAP (**7.1.1** below).

The Environment Strategy[30] contains actions on reducing water usage and SuDS.

5.2.5 Resource Availability

Although the HLS scheme runs until 2023 and the Government has promised to maintain all agri-environmental payments post-exit of the EU, there is no guarantee that HLS or a new scheme will provide the necessary monies to continue to manage these sites.

One of the aspirations of this Biodiversity Strategy is to utilise compensation monies delivered through Biodiversity Accounting to deliver the restoration, creation and enhancement of rivers and wetlands within Sutton but this is at an early stage and requires further resource input.

6. Priority Species

These species are indicators of higher quality environments and, often, highly distinctive and recognisable, for even the untrained.

Common Name	Latin	Brief Description
Brown trout	*Salmo trutta*	A distinctive light brown fish with silvery sides and pronounced black spots on the back. An indicator species of the unpolluted nature of the River Wandle.
Grey wagtail	*Motacilla cinerea*	Often seen along the Wandle and more colourful than its name suggests, with a distinctive yellow breast and under-tail
Water-cress	*Nasturtium aquaticum*	A native species, watercress was grown commercially alongside the Wandle well into the last century. It provides substantial habitat along the river edge for invertebrates and young fish
Kingfisher	*Alcedo athis*	Historical population declines seriously affected kingfishers throughout urban areas but populations are now recovering. Any impact on water quality which affects fish numbers, as well as removing soft earth banks negatively impacts this iconic species.

[30] Environment Strategy

Water vole	*Arvicola amphibius*	The water vole is unlikely to be present anywhere on the River Wandle or other streams or wetlands within Sutton. A long-standing ambition for several organisations seeks to reintroduce this charismatic mammal to selected restored sites.
Stream water-crowfoot	*Ranunculus penicillatus* ssp. *pseudofluitans*	An important and characteristic in-channel species, providing oxygen, submerged habitat and, in flower, nectar and pollen sources
Demoiselles	*Calopteryx splendens* & *C. virgo*	Iridescent bluey greeny males and green females, these large damselflies are characteristic of quick flowing streams with plenty of bankside vegetation. Numbers appear to be increasing.

7.0 Objectives and Actions

The London Borough Sutton contains the River Wandle, Pyl Brook and Beverley Brook, as well as other wetland habitats.

This Action plan aims:

- To maintain and enhance rivers and streams for biodiversity throughout the Borough, through implementing the Catchment Plans for the River Wandle and Beverley Brook, to naturalise river channels and processes
- To maintain and enhance existing areas of wetlands for biodiversity through implementing good practice and completing Higher Level Stewardship targets
- To monitor rivers and wetlands to evaluate their ecological status
- To promote the importance of rivers and wetlands for biodiversity and low impact recreation and relaxation
- To implement and increase the number of functional SUDs schemes

Rationale:

The River Wandle, Beverley Brook and Pyk Brook are three of only 200 worldwide chalk streams and the Wandle is, arguably, the main chalk stream in London. Sutton has a duty of care to manage and enhance this scarce and threatened habitat.

Within Sutton, the Wandle is a Site of Metropolitan Importance (SMI) along its length. There are numerous restrictions to fish passage, natural processes and appropriate natural habitat, whilst pollution, misconnections and surface run-off add to the issues affecting the Wandle (and other waterways). Along the Wandle within Sutton, three sites are designated Local Nature Reserves (Wilderness Island, Wandle Valley Wetland and Spencer Road Wetland) and the Wandle runs through Beddington Park (Borough Grade II SINC and Beddington Farmlands SMI).

Several intervention projects have recently been completed, including works at Hackbridge White Bridge, by Three-Arch Bridge and Mill Lane in Carshalton, naturalising the river banks, improving in-river processes and increasing biodiversity through appropriate planting. Further works at Durand Close, Corbet Close and Goat Bridge are imminent or underway but to fulfil the long term target (**7.1.1**) that all waterways in Sutton are passable for fish by

2050, significant further works need to be undertaken, removing weirs and creating appropriate habitat.

The provision of buffering effects through re-engineering the river channel and banks to affect flooding and water attenuation may have wider implications on mitigating some of the predicted effects of climate change and more extreme weather, through providing greater system resilience (Natural Flood Management) and / or habitat and niche availability.

The Water Framework Directive is a European integrated river basin management system, transposed into law, of which the UK has to comply. The UK had to meet environmental objectives by 2015, which, according to Environment Agency figures, had not been met[31].

7.1 Habitat Targets

7.1.1 Long Term Target

- All waterways in Sutton (5.1km) passable for fish by 2050.

7.1.2 HLS Targets

HQ2 Ponds (>100m^2) - Anton Crescent Wetland

Indicators of success

- There should be no obvious signs of pollution, such as a film of fuel oil, total cover with green algae or rubbish
- By year 3, undesirable species should cover less than 5%
- The combined cover of both submerged and floating aquatic plants, excluding undesirable species, should be between 25% and 75%
- Percentage cover of marginal vegetation (marginal and emergent species), should be between 25% and 100% in the period May to mid-September

HQ3 Reedbeds - Anton Crescent Wetland

Indicators of success

- The vegetation should include at least 60% Common Reed
- There should be at least 150 Common Reed stems per square metre within the area of dominant Reed
- Cover of scrub within the reedbed should be less than 10%.
- Cover of undesirable species non native invasives should be less than 5%
- The height of the Common Reed prior to cutting should be at least 100cm
- Between April and October, 50% to 95% of the reedbed should be covered by surface water, which should be between 10cm and 30cm deep. 5% and 10% of the area should be allowed to remain dry
- Between November and March, 50% to 95% of the reedbed should be covered by surface water, which should be between 10 and 30cm deep. 5% to 10% of the area should be allowed to remain dry
- Area of open water should be between 10% and 30% of the entire site

7.2 Habitat Action Plan Targets:

7.2.1 Targets:

[31] WFD figures

Appendix A

RW 1 For the River Wandle and Beverley Brook to Meet 'Good Ecological Potential' by 2025, as defined by the Water Framework Directive

RW 2 To improve the condition of rivers and wetlands for nature conservation.

RW 3 To promote the importance of rivers and wetlands in the Borough for biodiversity and the need for protection

RW 4 To promote habitat creation, restoration and water quality enhancement through the planning process as part of SUDS creation

7.2.2 Actions:

Code	Action	Lead
RW1	**For the River Wandle and Beverley Brook to Meet 'Good Ecological Potential' by 2025, as defined by the Water Framework Directive**	
RW 1.1	Implement the Catchment Plans for the River Wandle **Target**: Undertake scheduled works by 2025.	SERT
RW 1.2	Write Catchment Plan for Beverley Brook and Pyl Brook **Target**: Catchment Plan written and agreed by 2022	SERT
RW 1.3	Investigate restoration opportunities for the Beverley Brook and Pyl Brook within Sutton **Target**: List of potential projects created by 2023	SERT / SBO / Parks
RW 1.4	Implement the Wandle INNS Action Plan[32] **Target**: Agree a schedule of works with the WLBG	SERT / SBO / Parks / WLBG
RW 1.5	To implement Local Plan Policy 26 on protecting and enhancing sites, through the delivery of the Biodiversity Strategy and assessment of planning applications that may impact on designated sites.	Senior Biodiversity Officer
RW2	**To improve the condition of rivers and wetlands for nature conservation. Target: Maintain area and enhance the quality of all rivers and wetlands in the borough**	
RW 2.1	Ensure that river and wetland SINCs managed by the Biodiversity Team have up-to-date Management Plans in place by 2020. **Target**: 6 sites[33]	Senior Biodiversity Officer
RW 2.2	Undertake Phase 1 and condition assessment botanical surveys of river and wetland SINCs **Target**: 6 sites (as above for RW 2.1)	Senior Biodiversity Officer

[32] To include Himalayan Balsam, *Crassula helmsii*, Japanese Knotweed and floating pennywort at specific locations

[33] Anton Crescent Wetland; Caraway Place; Carew Manor Wetland; Kimpton Balancing Pond; Wandle Edge, Wandle Valley Wetland

RW 2.3	Undertake and fulfil, by 2023, Higher Level Stewardship targets and prescriptions at Anton Crescent Wetland. **Target**: reached targets as outlined in HLS agreement for the open water and reedbed	Senior Biodiversity Officer
RW 2.4	Contribute to the Implementation of the 'No Deterioration Plan' for the Carshalton Arm of the Wandle **Target:** Ensure the Carshalton Arm of the Wandle maintains Good Ecological Potential and does not deteriorate	Environment Agency / SERT / SES Water / Parks
RW 2.5	Maintain and enhance the lake and stock pond at Beddington Park **Targets**: 1) monitor and restock, as necessary, aquatic plants in the stock pond; 2) create valuable aquatic and riparian wildlife habitat in the lake through aquatic planting and floating 'bio-islands'.	Volunteer Coordinator Officer / Senior Biodiversity Officer
RW 2.6	Investigate and, if possible, undertake restoration and improvement works at Richmond Green and Wandle Bank by 2025. **Target**: secure fish passage, restore natural processes and create valuable aquatic and riparian wildlife habitat.	Wandle Trust / Senior Biodiversity Officer
RW 2.7	Cooperate with all necessary parties to investigate and, if possible, undertake restoration and improvement works at Shepley Mill by 2025. **Target**: secure fish passage,restore natural processes and create valuable aquatic and riparian wildlife habitat.	Wandle Trust / Developers / Senior Biodiversity Officer
RW 2.8	Monitor and advise on the fulfillment of restoration and improvement works at Durand Close by 2021. **Target**: restore natural processes and create valuable aquatic and riparian wildlife habitat.	Planning Enforcement / Senior Biodiversity Officer
RW 2.9	Monitor and advise on the fulfillment of restoration and improvement works at Corbet Close by 2021. **Target**: secure fish passage, restore natural processes and create valuable aquatic and riparian wildlife habitat.	Planning Enforcement / Senior Biodiversity Officer
RW 2.10	Contribute to undertaking restoration and improvement works at upstream of Goat Bridge by 2025. **Target**: secure fish passage, restore natural processes and create valuable aquatic and riparian wildlife habitat.	SERT / Environment Agency / Thames Water / Parks
RW 2.11	Investigate the possibility of increasing biodiversity around Carshalton Ponds, should desilting works be proposed. **Target**: Increase marginal vegetation by at least 200%, provide floating and aquatic species to the water column, install floating islands of native vegetation	Parks Team / Senior Biodiversity Officer

Appendix A

RW 2.12	Undertake works at Sutton Common Paddock to improve this area as lowland wet grassland and fulfil Higher Level Stewardship targets by 2023. **Target**: 1ha of amenity grassland restored to species rich grassland by 2023	Senior Biodiversity Officer
RW 2.13	Monitor and advise on the fulfillment of restoration and enhancement work at Wandle Trading Estate to recreate Mill Pond and provide enhancements to Mill Green Stream and the east bank of the Wandle, in line with submitted Condition details by 2020 **Target**: create valuable aquatic and riparian wildlife habitat.	Planning Enforcement / Senior Biodiversity Officer
RW 2.14	Monitor and advise on the habitat restoration and limited public access at Beddington Farmlands, such that it proceeds as per the RMP v9.1, including reedbed, lowland wet grassland and wet woodland. **Target**: Each habitat parcel within the RMP restored in full by 2023	CAMC / Senior Biodiversity Officer / Planning Enforcement
RW3	**To promote the importance of rivers and wetlands in the Borough for biodiversity and the need for protection**	
RW 3.1	Carry out monthly riverfly monitoring at 5 sites (Poulter Park, Beddington Park and 3-Arch Bridge, Restmor Way and Hackbridge). **Target**: 50 surveys per annum.	SERT/ Senior Biodiversity Officer
RW 3.2	Promote the value of rivers & wetlands for wildlife through talks, guided walks, practical volunteering opportunities, events and social media. **Target**: Run 30 events and promote 18 citizen science surveys to raise awareness of river and wetland habitats by 2025.	SERT / Senior Biodiversity Officer / Volunteer Coordinator Officer
RW4	**To promote habitat creation, restoration and water quality enhancement through the planning process as part of SUDS creation**	
RW 4.1	To promote habitat creation, restoration and water quality enhancement through the planning process by incorporating SuDS into design. **Target**: 10 functional SUDS by 2025.	LLFA Officer / SERT

Appendix B4:
Parks & Green Spaces

Habitat Action Plan 2019 – 2024

Lady’s smock at Beddington Park wet meadow

Appendix A

1. Aims

- To diversify and increase the extent and quality of wildlife habitats within Parks and Green Spaces, including churchyards and allotments
- To implement good conservation practice to enhance parks and green spaces for nature
- To raise awareness of the importance of Parks and Green Spaces in the conservation of Sutton's biodiversity.

2. Introduction

This is a 'catch-all' plan for those aspects of nature that might otherwise fall between the gaps of more strictly defined Habitat Action Plans, although there is, inevitably, some crossover in targets.

This habitat action plan covers varying habitats including grasslands, wetlands, scrub and amenity grasslands. They mostly have high levels of public usage as the plan covers parks, cemeteries and churchyards, local nature reserves and allotments; anywhere where the public is normally or permissively allowed to go to experience 'the outdoors'.

Most parkland has gone through a series of transformations over many centuries to establish what we know as a park today and they can offer a wide range of breeding, foraging and refuge opportunities for wildlife. Churchyards are a relatively minor resource in terms of land cover but within large cities, such as London, cemeteries can be of significant importance as links in green chains, providing relatively undisturbed areas for wildlife.

3. Current Status

3.1 Area & Distribution

Sutton currently has 518ha of open space, although GiGL data[34] states that 397.87ha are composed of amenity grassland, as part of the comprehensive survey of the borough. Compared with other habitats within this Biodiversity Strategy, (woodland & scrub, rivers and wetlands, chalk grassland etc.), amenity grassland covers more than 2.5 times the land areas of all of those other habitats, combined. Amenity grassland is very poor for biodiversity.

Sutton has over 90 parks and open spaces plus 37 allotment sites and 8 cemeteries and churchyards.

With regard to parks and green spaces with some consideration for nature conservation and ecology, 14 have been designated as a Site of Importance for Nature Conservation (SINC). In addition, 5 churchyards are designated (or included within a wider site designation) as SINCs.

A number of Sutton's parks have strong ecological components, such as the chalk grassland meadow and replanted woodland at Oaks Park or the chalk river, wet grassland, wetland and woodland features at Beddington Park, which provides an amount of high quality wildlife habitat, with some species scarce within London.

[34] GiGL, 2006

Parkland and green spaces are present throughout the Borough, although they vary markedly in ecological quality, as well as public accessibility and social interaction (i.e 'Friends of' groups). Most parks and green spaces often, as a bare minimum, provide some nectar, berries and pollen opportunities, as well as some nesting opportunities in dense shrubs and mature trees, even if these are not composed of native species.

3.2 Trends

Much of Sutton's parkland was formerly part of large aristocratic estates, traditionally managed for deer or other grazing, such as Beddington Park and Oaks Park. The areas of these estates has been reduced over the centuries, with some features becoming dilapidated or disappearing, whilst natural succession has occurred on some areas, altering the habitats / features markedly, sometimes detrimentally.

These days, typical parks are mainly composed of short-mown amenity grass and ornamental trees with shrub beds, such as The Grove and Manor Park. There has been a mild shift away from these high maintenance landscapes over the last 20+ years, which has created some additional opportunities for wildlife in parklands, as management input and maintenance costs for nature conservation are relatively low, although restoration costs can be moderate to high. When undertaken with sympathy and understanding, we can create, or allow to revert, areas within parkland that are much more suitable for local wildlife and natural processes.

There are four broad approaches that are applicable to parkland management for the benefit of wildlife. These are:

i) *Habitat Restoration*; trying to re-establish the species / habitats which might have occupied the site in the past

ii) *Habitat Creation*; creating new wildlife landscapes for species that are suited to the environmental conditions that exist on the site

iii) *Naturalistic vegetation*; in essence attempts to replicate the structure of natural plant communities, but does not have to use exclusively native species.

iv) *'Letting go'*; allowing natural succession to occur, which may then be controlled by some form of management such as grazing, mowing, felling etc. This very much depends on the starting conditions; much of modern parkland is so depauperate in species that what may form from 'letting go' is of little value and requires habitat restoration work.

The majority of vegetation in parks is comprised of non-native species in shrub beds with varying numbers of introduced tree species, species poor amenity grassland and often, some neglected areas around the 'back' or edges of the park that are species poor stands of ruderal species (brambles, docks, thistles, nettles etc.).

Formal landscaping can have *some* wildlife value. These are areas where the flora may be almost entirely non-native but may (depending on the species and structure) provide some shelter, breeding opportunities or foraging opportunities. Ornamental shrub beds may be visited by berry-feeding birds like blackbirds or other thrushes, whilst mature non-native trees can provide opportunities for woodpeckers and nuthatch. Football / sports pitches can

be useful, particularly over the winter months for gull species, like black-headed gull, herring gull and common gull and wintering thrushes, such as fieldfare, seeking grubs and other invertebrates in the soil, disturbed through football boots.

Parks often have a good number of old and sometimes, veteran(ised), trees and these are of high biodiversity value. Old(er) trees provide important opportunities for lichen and fungal species, as well as nesting or roosting opportunities for birds and bats. Some species of butterfly live in the canopy of mature trees, particularly native oaks and ash trees, feeding on the sugary 'honeydew' of aphids.

Edge habitats are often at a premium in parks and publicly accessible green spaces; the close mown amenity grassland is often right up to the woodland / scrub edge, reducing the availability of taller grasses and plants to grade into the shorter amenity grassland. These habitat transition areas (short growth into tall) are 'ecotones' and of high value, as they provide a wide variety of microclimatic and species diversity. Within these transitional areas, one would expect to find common amphibians, like frogs and toads and, maybe, reptiles such as slow worm or common lizard, small mammals like hedgehogs or woodmice and a whole variety of invertebrates. Leaving 'buffer strips' uncut is one of the easiest ways to increase whole site biodiversity (i.e. point iv 'Letting go' above).

Where there are water bodies, such as ponds and lakes, the usual assortment of wildfowl can be found, including Canada geese, mallards, moorhen and coot. Other species of 'more interest' may include little grebe, grey heron, kingfisher or tufted duck.

Where the water quality is reasonable to good in ponds, lakes and rivers **and** where marginal and submerged vegetation is allowed to grow, dragonflies and damselflies may be found, such as southern hawker, migrant hawker and blue-tailed damselfly. Various other invertebrates with aquatic larval stages may also proliferate, providing food for larger predatory invertebrates, fish, birds and bats.

Allotments may have areas left aside deliberately for wildlife, or may create them by accident, such as fallen fruit, compost piles, small ponds etc. Because each allotment owner may have very different ideas on what their allotment is for and the balance they take between wildlife and food cultivation, it is very difficult to make any overall assessment of how beneficial to wildlife allotments actually may be. The variation on a very small scale (between each allotment plot) can be huge.

Churchyards and cemeteries may have undisturbed areas that contain relict habitats (such as veteran trees, hedgerows and semi-improved grassland etc. **Figure 5**), as well as more formal and ornamental planting. Management intensity can vary enormously, from areas being left as non-intervention, to close cropped grass between graves, or from graves being overrun with vegetation to pristine headstones. The general lack of disturbance by visitors means that cemeteries and churchyards can provide havens for common species to breed and increase population numbers that are depleted at other sites, known as *population sinks*.

Population sinks are where the habitat is just suitable for a species to exist in that area but is not suitable enough for a self-sustaining population. The continued existence of the species in this area can only be maintained by a continued influx of new individuals from external donor populations but the overall trend is that of continuing loss to the wider population of

that species. Individuals from a stable donor population move to a ‘new’ area to start a new population but that population becomes extinct after X number of years. Sometime later, a new set of individuals from the same donor population may recolonise the site but again, become extinct. Rather than growing the wider population by finding new sites on which to thrive (i.e become donor populations in turn), the site may just continually act as a trap to individuals.

In more natural systems, these fluctuating populations are maintained by a number of healthy donor populations dotted about the landscape. With our highly modified landscapes, particularly in the urban and peri-urban setting, there may only be one site that can act as a donor population, all other sites acting as population sinks. The numbers of individuals of that species can, therefore, never increase beyond what the donor site can maintain.

In the urban landscape, we face a very real danger of having sites that are population sinks and detrimental to the overall population of many species. The only ways to combat this effect are to increase the quality of all spaces for nature and to increase the total area of habitat availability, through the restoration of meadows, wetlands and woodlands.

Figure 5 - meadow saxifrage in its only wild location in Sutton, Bandon Hill Cemetery

4. Specific Factors Affecting the Habitat Action Plan

4.1 Major Factors

- Negative public response of ‘untidy’ appearance of natural areas

- Delivery of Biodiversity Net Gain
- Financial constraints on parks / accessible area management
- Inappropriate management or neglect
- Conflicting recreational & social pressures
- Health & safety requirements of unsafe trees, water bodies etc.
- Loss of deadwood habitats
- Skills and desires of staff - often linked to constraints of contract specification or job role / wider policies

4.2 Supplementary Factors

- History of low intensity management in churchyards
- Increasing recognition of biodiversity value of parks
- Voluntary sector involvement, including 'Friends of' groups
- Damaging pesticide & herbicide usage
- Invasion of aggressive non-native species
- Disturbance to wildlife by dogs & enrichment by their faeces & urine
- Atmospheric nitrogen enrichment, particularly to water bodies
- Vandalism, illegal dumping & litter

Obviously, these are some, but not all, of the positive and negative factors that parks may face; some parks may have very few of these factors, others may be blighted or enhanced by issues not on this list.

5. Current Action

5.1 Legal Status

Many parks and green spaces are designated as SINCs; some have listed historic park protection, or Metropolitan Open Land and Greenbelt designations. They are thus protected by planning designations and policies contained in the Local Plan.

The caveat is that, although many of the sites in Sutton have planning designations as Sites of Importance for Nature Conservation, the management of the site is not always in line with why the site was designated. A wholesale reevaluation of the management of parks and green spaces would be required to manage each designated site in line with its citation, to provide greater biodiversity value, which is highly likely to be outside the scope and influence of this plan.

Certain trees and hedgerows within parks and green spaces are protected by Tree Preservation Orders but there are very few, if any, within parks.

Current statutory legislation provides protection to breeding birds, reptiles and amphibians (with varying levels of protection), stag beetle (deadwood habitats) and all bats species, including their roosts.

Although it does not confer legal status, Wood Pasture and Parkland were a priority habitat under the UK Biodiversity Habitat Action Plan and remains a Priority Habitat under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006.

5.2 Mechanisms targeting the habitat

5.2.1 Historical Management

Most management within Sutton Parks and Green Spaces has been amenity focussed, whether repeated cutting of amenity grassland or for health and safety or 'tidying' reasons.

Sutton Council maintains some semi-natural areas for nature conservation within parks, such as the chalk grassland meadow at Oaks Park. However, this area is effectively in a very slow decline or, at best, stable, as the management has not changed sufficiently to improve the state of this area. It is likely that a significant change in management is required to improve this area, to meet Higher Level Stewardship targets.

Natural plant communities probably survive within urban parks in Sutton to a greater extent than in boroughs in central London. These are, obviously, a priority for protection. In some cases this interest may be latent e.g. where wild flowers get mown before they have a chance to flower. This has been demonstrated by leaving a wildflower meadow to regenerate on former amenity grassland at Oaks Park. Releasing further amenity grassland from repeated mowing at the Oaks would provide more 'chalk grassland' but future management would be a key issue and grazing would be essential.

However, large areas of grassland within parks are cut for amenity use with little consideration for biodiversity. These areas are maintained using public money and are often under intense public scrutiny. If they are left to grow, they are likely to be a species poor habitat (as more delicate species have been lost and replaced with more tolerant, highly competitive species) and there is often the perception taller grass areas are unmanaged and of less value.

Some 'Friends of' groups actively manage, and lobby for, 'wildlife areas' in their parks, although these can sometimes be at odds with what may be of particular value i.e. pictorial meadows are now fairly regular features within many parks but of limited biodiversity value, whereas a more natural meadow or sunny bramble edge, for instance, may be of greater value but underappreciated or removed for something 'more acceptable'.

Some deadwood habitats are left to decay in many parks, where this does not conflict with health and safety requirements but the amount within woodlands in parks is still low.

Pollinating insects may move between wild and formal areas e.g. butterflies feeding on planted lavender beds. Creating meadow areas can therefore enhance the biodiversity contribution of ornamental areas. A holistic approach is therefore preferred, rather than seeing biodiversity as something only for, and contained within, 'wildlife areas'.

Future benefits for biodiversity in parks require an integrated approach to management, balancing natural or naturalistic plant communities with areas of more formal landscaping, whilst also catering for recreational and social requirements. It is important to recognise the contribution formal areas can make (particularly for birds) and look for ways to maximise this value that are compatible with their primary role, whilst also recognising that vast areas of parkland can often be very restricted in habitat and species diversity.

5.2.2 Higher Level Stewardship

In December 2013, the London Borough of Sutton agreed a 10 year agri-environment scheme (Higher Level Stewardship - HLS) with Natural England. Within this Habitat Action Plan, HLS agreements relate to two neutral meadows and the provision of a sacrificial crop

for birds (see **7.1.1** below). The targets set by HLS are therefore of utmost importance for the London Borough of Sutton and influence the aims and objectives of this HAP.

The sacrificial crop is reset annually after the 15th March each year with a specific seed mix of value to seed eating birds.

6. Priority Species

These species are indicators of higher quality environments and, often, highly distinctive and recognisable for even the untrained.

Common Name	Latin	Brief Description
Veteran(ised) trees	*Various species*	Provide important landscape and aesthetic values, as well as habitat. Includes the sweet chestnuts in Carshalton Park, hornbeams at Cuddington Rec. and the London Plane at Sutton Ecology Centre.
Corky-fruited water-dropwort	*Oenanthe pimpinelloides*	Only occurring in the meadow at Cuddington Rec., this species is an indicator of older meadows and grasslands on clay
Water pepper	*Polygonum hydropiper*	Extremely rare in the borough, restricted to one muddy puddle in Beddington Park. Has a very sharp, acrid taste to the leaves
Yellow rattle	*Rhinanthus minor*	A hemiparasite of grasses and clovers, this annual is also known as hay rattle and 'the meadow-maker', as it reduces grass vigour, allowing wildflowers to flourish at the expense of the grasses. Often integral to habitat restoration or creation projects and great for bumblebees!
Small copper	*Lycaena phlaeas*	This beautiful dark brown and amber butterfly can be found wherever species rich semi-natural grasslands occur that provide the larval host plants, common sorrel and sheep's sorrel
Spleenworts	*Aspleniaceae* spp.	Old buildings and walls support these small fern-like plants growing in crevices and joints between the stones.
Lichens	for example *Caloplaca decipiens*	Lichens are a combination of two organisms, a fungus and an alga, living together. Churches and Churchyards are important for lichen conservation, particularly where there are no natural exposed rock surfaces but many species also grow on trees. Lichens are important air quality indicators

7. Objectives and Actions

Rationale:
Sutton has over 90 parks and green spaces, many are publicly accessible but significant amounts of amenity grassland. Improvements to habitats within parks and green spaces,

including the removal of some amenity grassland, will be sought through Biodiversity Accounting.

The aim of this action plan is:

- To diversify and increase the extent and quality of wildlife habitats within Parks and Green Spaces
- To implement good conservation practice to enhance parks and green spaces for nature
- To raise awareness of the importance of parks and green spaces in the conservation of Sutton's biodiversity.
- To create new areas of wildlife habitat within Parks and Green Spaces

7.1 Habitat Targets

7.1.1 HLS Targets

HK16 Restoration of Grassland for Target Features: Belmont Pastures and Sutton Common Paddock. Total size: 2.25ha

- Year 5: have 2 indicator species with occasional abundance at each site (as judged through G06 surveys)
- Year 10: have 2 indicator species with frequent abundance at each parcel and 2 occasional (as judged through G04 surveys)

HF12NR Enhanced wild bird seed mix plots (non rotational): Beddington Park. Total size 0.5ha

- At full crop establishment, there should be between 75% and 100% cover of sown species
- At full crop establishment, cover of bare ground should be between 5% and 25% of the plot
- At full crop establishment, there should be no more than 5% cover of undesirable species
- The plots should provide sustained seed supply throughout the winter until 15 March
- The target bird species: Tree Sparrow should use the plots regularly

7.2 Habitat Action Plan Targets:

7.2.1 Targets:

PGS1	To maintain the extent & current management and implement enhancements to meadows and species rich grassland
PGS2	To promote the importance of Parks and Green Spaces for biodiversity in the borough
PGS3	To enhance and diversify the wildlife habitat in Parks and Green Spaces, in line with their SINC designations.
PGS4	To create new areas of wildlife habitat within Parks and Green Spaces

7.2.2 Actions:

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Code	Action	Lead
PGS1	**To maintain the extent, current management & implement enhancement to existing meadows and species rich grassland**	
PGS 1.1	To deliver the HLS HK16 target for Belmont Pasture **Target**: Site with up-to-date management plan, reflecting HLS targets and prescriptions and 2no. indicator species frequent and 2no. occasional by 2023.	Senior Biodiversity Officer
PGS 1.2	Existing wildflower meadows within Parks to have annual haycut to maintain extent and condition **Target:** 8 sites[35] annually	Idverde / Senior Biodiversity Officer
PGS 1.3	To instigate and maintain a low impact management regime to enhance damp grassland sites utilising heavy horses or light machinery for hay cutting and removal **Target**: 4 sites[36] annually	Senior Biodiversity Officer / Idverde
PGS 1.4	Implement suitable habitat management, in line with Parks management plans and the SINC citation **Target:** Provide biodiversity input to 2[37] site management plans by 2020 **Target:** Both sites with at least 25% of the grassland in flower at any one time between April and September annually from 2021	Idverde / Senior Biodiversity Officer / Parks Team
PGS 1.5	Undertake annual Phase 1 and condition surveys to ensure meadow quality is maintained and share data with GiGL **Target**: 4 sites annually (as per PGS 1.3)	Senior Biodiversity Officer
PGS 1.6	Undertake Phase 1 surveys every 5 years to ensure data relating to the SINC citation is up-to-date and share data with GiGL **Target**: 26 sites[38] by 2025	Senior Biodiversity Officer
PGS 1.7	To implement Local Plan Policy 26 on protecting and enhancing sites, through the delivery of the Biodiversity Strategy and assessment of planning applications that may impact on designated sites.	Senior Biodiversity Officer

[35] Beddington Park - 'tall grass area' & wet meadow; Cheam Rec, Cuddington Rec; Perrett's Field House Sparrow area; Queen Mary's Park, Rosehill Park East & Sutton Common Paddock
[36] Beddington Park - 'tall grass area' & wet meadow; Back Green & Sutton Common Paddock
[37] Bandon Hill Cemetery & Cuddington Cemetery
[38] All Saints Churchyard Benhill; Bandon Hill Cemetery; Beverley Brook; Buckland Way Rec; Caraway Place; Carshalton Park; Carshalton Ponds; Cheam Park; Cheam Rec; Cuddington Cemetery; Cuddington Rec; Dale Park; Greenshaw Woods & Rosehill Park East; Lambert's Copse; Little Woodcote Wood; London Road Edge; Mill Green; Perret's Field & Sutton Waterworks; Pine Walk; Poulter Park Riverside; Queen Mary's Park; Queen Elizabeth Walk; Revesby Road Woods; Radcliffe Gardens Woodland; St. Nicholas Churchyard; The Grove

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PGS2	To promote the importance of Parks and Green Spaces for biodiversity in the borough	
PGS 2.1	Run events (such as a guided walk, talk or practical event) in any Parks or Green Space **Target:** 10 events by 2025	Senior Biodiversity Officer / Volunteer Coordination Officer / SNCV
PGS 2.2	To engage and train active volunteer Tree Wardens for Beddington Park to help survey and monitor trees as well as lead planting and young tree maintenance sessions **Target:** 10 wardens engaged by 2025	Volunteer Coordination Officer / Tree Wardens
PGS 2.3	To run at least 2 community tree planting events a year to develop and restore woodland areas in Beddington Park. **Target**: 4 events by 2021	Volunteer Coordination Officer / Tree wardens
PGS 2.4	Volunteer events to develop and improve areas of Beddington Park – e.g scrub clearance, habitat development, invasive species clearance, waterway and pond enhancements. **Target:** 4 events by 2021	Volunteer Coordination Officer
PGS 2.5	Design, create and install new interpretation boards explaining wildlife and / or habitats at SINCs **Target:** 3[39] boards by 2025	Parks Team / Senior Biodiversity Officer
PGS3	**To maintain, enhance and diversify the wildlife habitat in Parks and Green Spaces, in line with their SINC designations**	
PGS 3.1	Improve the northern woodland area at Beddington Park through selective thinning, underplanting and coppicing (links to Woodland and Scrub HAP) **Target**: 0.3 ha enhanced by 2021	Technical Services Manager / Volunteer Coordination Officer / Idverde
PGS 3.2	Maintain the sacrificial crop at Beddington Park to fulfil HLS objectives **Target**: 0.5ha correctly managed each year until 2023	Senior Biodiversity Officer / Idverde
PGS 3.3	Survey blackthorn at Queen Mary's Park for brown hairstreak and undertake scalloping, if suitable, for promotion of brown hairstreak habitat. **Target**: survey by 2020	Senior Biodiversity Officer

[39] Cuddington Rec; Queen Mary's Park; Bandon Hill Cemetery

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	Target (if suitable): 50% growth under 10 years old by 2024	
PGS 3.4	Increase pollen and nectar resource availability through native spring bulb and wildflower planting in appropriate areas of Beddington Park **Target**: 0.3ha by 2021	Volunteer Coordination Officer
PGS 3.5	Manage and maintain the community orchard. **Target:** 0.3 hectares managed by 2021	Volunteer Coordination Officer
PGS 3.6	Subject to consultation, expand existing wildflower meadows[40] and hedgerows[41] in parks and green spaces	Senior Biodiversity Officer / Idverde / Parks Team
PGS 3.7	Subject to consultation, enhance existing 'meadows'[42] in parks and green spaces	Senior Biodiversity Officer / Idverde / Parks Team
PGS 3.8	Implement suitable habitat management, based on the site's management plan and SINC citation. **Target**: To ensure biodiversity inputs into the preparation of all Parks management plans (see Policy P1)	Senior Biodiversity Officer / Idverde / Parks Team
PGS4	**To create new areas of wildlife habitat within Parks and Green Spaces**	
PGS 4.1	Subject to consultation, create new wildflower meadows[43] and hedgerows[44] in parks and green spaces	Idverde / Senior Biodiversity Officer / Parks Team
PGS 4.2	Create new wet meadow in Beddington Park **Target**: 0.5ha by 2025	Senior Biodiversity Officer / Parks Team
PGS 4.3	Consult on new or extended grazing proposals.[45]	Senior Biodiversity Officer / Parks Team

[40] Cuddington Rec, Perrett's Field, Queen Mary's Park, Stock Pond in Beddington Park, Rosehill Park West
[41] The Grove
[42] Poulter Park, Corrigan Recreation Ground
[43] Beddington Park, The Grove, Carshalton Park
[44] Roundshaw Open Space, Beddington Park, Carshalton Park
[45] Oaks Park, Roundshaw Downs, Poulter Park, Kimpton Linear Park, Beddington Park

Appendix A

Appendix A

Appendix B5: Green Infrastructure & Biodiversity Net Gain

Habitat Action Plan 2019 – 2024

Eversheds, Wood Street - Hybrid sedum roof, with dead wood feature, looking to St. Paul's Cathedral

"*The greatest threat to our planet is the belief that someone else will save it.*" Robert Swan

Appendix A

1. Aims

- To promote the addition and management of Green Infrastructure within developments
- To provide a mechanism for the delivery of No Net Loss and Biodiversity Net Gain within Policy 26 - Biodiversity, of the Local Plan 2016-2031
- To quantify losses and gains of habitats through the planning process

2. Introduction

2.1. Biodiversity Net Gain

Biodiversity Net Gain (BNG) is a newly mandated approach to planning and development for all Local Planning Authorities, aiming to deliver quantifiable No Net Loss and Net Gain, preferably within each development but through, if necessary 'offsetting' in another location

2.1.1 Background

BNG utilises a metric based mechanism for attempting to quantify the 'biodiversity units' of a specified area of land. The UK metric was initially developed by DEFRA for the Biodiversity Offsetting Pilot in England[46], running from 2012 to 2014.

As part of the Biodiversity Offsetting Pilot in England, six regions were chosen to trial the UK's first national attempt at biodiversity offsetting. Of these areas, only the Warwickshire, Coventry and Solihull sub-region made biodiversity offsetting mandatory and they have further refined the process to make it more specific to their locale, through developing a Biodiversity Impact Calculator.

Biodiversity Offsetting proposed that if there would be a net loss to biodiversity from development of a specific area and the loss could not be mitigated in full on-site, then off-site compensation should be utilised to provide comparable biodiversity outcomes.

Biodiversity Offsetting requires a significant amount of set up, to map 'opportunity areas', where new habitat could go and result in an improvement in the extent or quality of the existing ecological network.

The DEFRA metric used in the 2012-2014 pilot is a multiple-attribute metric, utilising 'habitat distinctiveness' and 'habitat condition' multiplied by habitat type area, to provide a baseline of 'biodiversity units', which can be compared across habitats or compared against future usage.

Metrics are surrogates for complete measurements of total biodiversity found within a specific area and are a tool that can be used to provide greater consideration of the biodiversity value of a given area.

Metrics can never provide full consideration of the biodiversity in any given area but can provide an indication of equivalency.

Sutton has modified the DEFRA habitat distinctiveness values, to attempt to make them more relevant to the borough and adopted Building a Sustainable Sutton: Technical

[46] DEFRA Technical Paper

Guidance Note for Developers[47] in June 2018, which sets out how BNG within Sutton will be implemented.

Work is currently underway on the DEFRA 2.0 metric. The London Borough of Sutton is beta-testing DEFRA 2.0 and may incorporate it into, or as, the adopted metric, if it is likely to provide better outcomes for nature conservation and enhancement.

2.1.2 Delivery

One of the major aims for BNG within the London Borough of Sutton is to cement within planning 'No Net Loss' to biodiversity through development and move, as far as possible, to providing quantifiable net gains.

Biodiversity Net Gain provides a framework for considering impacts in a consistent and transparent way.

The London Borough of Sutton will utilise Biodiversity Net Gain to maximise on-site mitigation and enhancement for biodiversity, where this provides the best outcomes for nature, including the connectivity of habitats.

However, given the ambitious short and long-term targets outlined in this Biodiversity Strategy, it may be better, ecologically, to accept some Net Loss or lack of uplift, on some specific developments, to deliver wider improvements at the landscape scale.

The determination of each development will be on a case-by-case basis to decide on what the 'best ecological outcome' may be, which may be to deliver on site or, to fund a habitat creation or restoration project, as outlined within this Strategy.

Any Net Loss allowance will be based on robust consideration of the development and ecological connectivity by the Biodiversity Team. It is not 'a Licence to Trash' a site.

The deliberate and / or intentional degrading of a site, through vegetation clearance, neglect etc. to attempt to reduce the baseline units for a forthcoming planning application and circumvent the planning process, will necessitate the estimation of the baseline value of the site, prior to any degradation. This estimation will be based on the best available data.

Net Loss that cannot be accounted for on-site will invoke a compensation 'Tariff' (see **7.1**). The Tariff will be stored as a commuted sum and then utilised by the Council's Biodiversity Team to deliver that Net Loss elsewhere, through the restoration, creation or enhancement of biodiversity within the borough, to fulfil goals within Local Plan Policy 26 or within this Biodiversity Strategy (as outlined under the various Habitat Action Plans).

2.1.3 Policy Compliance

Not Net Loss and Net Gain are provided for through the National Planning Policy Framework (2018):

- '*encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve environmental net gains - such as development that would enable new habitat creation...*' (para. 118a)

[47] Building a Sustainable Sutton

- '*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*' (para. 170d, pg. 49)
- '*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity*' (para. 174b, pg. 50)
- '*development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvement in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity*' (para. 175d, pg. 51)

The London Borough of Sutton adopted its Local Plan 2016-2031 in February 2018. Policy 26 states:

(a) '*Major new development should result in no net loss in biodiversity value, as assessed against the DEFRA Biodiversity Offsetting Metric, Environment Bank Biodiversity Impact Calculator or any metric which the Council subsequently adopts formally. New development should incorporate opportunities to enhance biodiversity, wherever possible*'

(b) '*The council will grant permission for developments that create, conserve or enhance biodiversity and improve access to nature, subject to other policies in the plan. In particular, the council will support the creation of:*

(i) *1 hectare of new woodland.*
(ii) *2 hectares of new chalk grassland at suitable locations.*
(iii) *Various habitat enhancements identified through the council's Biodiversity Action Plan and the Catchment Plans for the River Wandle and Beverley Brook.*

(c) *The council will not grant planning permission within or adjacent to a SINC where there would be a damaging impact on the nature conservation value or integrity of the site, unless:*

(i) *the need for and the benefits of the development clearly outweigh the harm.*
(ii) *where there are no reasonable alternative sites that would result in less harm.*
(iii) *where development can demonstrate no net loss for biodiversity and, where possible, net gains for biodiversity by providing mitigation and/or compensation measures.*'

To determine and quantify the difference between mitigation for on-site development and what are actually enhancements to provide a net gain, the Biodiversity Accounting metric will be utilised for all developments that are judged by the Biodiversity Team to result in a net loss, or, could provide a quantifiable net gain.
This is further elaborated on in the Validation Checklist: Validation Information for Biodiversity[48].

2.1.4 National Compliance

Government policy on no net loss and net gains for biodiversity are laid out in The Natural Environment White Paper - *The Natural Choice: Securing the Value of Nature*[49], *Making*

[48] Add link to planning pages when up and running
[49] The Natural Choice: Securing the Value of Nature

Space for Nature: A Review of England's Wildlife Sites and Ecological Network[50] and the newly released *A Green Future: Our 25 Year Plan to Improve the Environment*[51].

Further, the construction industry and developers are also driving No Net Loss outcomes, as laid out in *Biodiversity Net Gain: Good Practice Principles for Development*[52].

In the Government's Spring Statement[53] (March 2019) it decreed that Biodiversity Net Gain (BNG) will be mandated to all Local Planning Authorities. Sutton will continue to feed into the discussions on how BNG will be implemented nationwide with Natural England, DEFRA and the GLA, for the forthcoming London Plan.

2.2 Green Infrastructure

Green Infrastructure (GI) is a term now widely applied to include any area or process that will contribute to Ecosystems Services integrated into spatial planning. GI aims to enhance nature's ability to deliver multiple valuable ecosystem goods and services, potentially providing a wide range of environmental, social, climate change adaptation and mitigation, and biodiversity benefits.

3. Current Status

3.1 Area & Distribution

It is not possible to quantify the area or distribution of Green Infrastructure within Sutton at the time of writing, as no mechanism for recording it has been utilised by the borough. Biodiversity Net Gain and the related Green Space Factor[54] are the proposed mechanisms for recording the type, quality and area of Green Infrastructure / habitat created through developments.

3.2 Sutton's Green Infrastructure

Green Infrastructure in Sutton comprises a variety of modified habitat types. The four main types are 'living roofs', 'green walls', soft landscaping and SuDS:

3.2.1 Living Roofs

Living roofs are known by a number of epithets. They can be 'sky gardens', 'green', 'brown' or even 'blue' roofs, depending on the proposed function.

Living roofs, however they are known, are categorised by the depth of substrate utilised and the vegetation cover the substrate will support. In order of substrate depth, these are *extensive systems*, *semi-intensive systems* and *intensive systems*.

- **Extensive systems** = shallow substrate: Generally, substrate depths are between 60 and 200mm, with weights of 60-150kg/m^2. Extensive systems are those that generally provide a greater biodiversity value and are composed of several subdivisions:
    - *Sedum roofs* - the commonest 'off-the -shelf' solution and often the cheapest. Sedum roofs are lightweight, with very shallow substrate (50-70mm) depths.

[50] Making Space for Nature
[51] A Green Future
[52] https://www.cieem.net/data/files/Publications/Biodiversity_Net_Gain_Principles.pdf
[53] https://www.gov.uk/government/news/spring-statement-2019-what-you-need-to-know
[54] Building a Sustainable Sutton

Sedum species are wind and drought resistant and provide a 'green carpet' but provide very little value for local biodiversity.

- *Hybrid sedum* - utilising slightly deeper substrate that pure sedum roofs, hybrid sedum systems can incorporate a number of seeds or plug plants of wildflowers. These systems can provide an increase in nectar, pollen and larval host plants over pure sedum roofs, as well as increased structure through differing plant heights
- *'Green' / 'brown'* - These 'classic' roofs utilise a deeper substrate (usually, between 80-200mm across the roof) to create wildflower rich dry grassland or replicate 'open mosaic habitats' of brownfield sites. They utilise about 80% commercial crushed brick or other high quality reclaimed materials, with 20% organic matter mixed in. They can be left with substantial amount of bare ground for species such as black redstart ('brown roofs) or more heavily seeded and planted as dry meadows ('green roofs').
  These are now starting to be known as **Extensive Biodiverse Roofs** and are the preferred option for the London Borough of Sutton to create high quality habitat[55] within the urban environment.
- *'Biosolar'* - the combination of an extensive biodiverse roof with photovoltaic solar panels. The varying shade, water availability and humidity levels affect the species and vigour of vegetation, possibly creating increased niche availability for species, whilst the vegetation reduces temperature fluctuations, enabling the PV panels to operate with greater efficacy, through being stabilised at around 25^0C for longer periods. Biosolar roofs should be **Extensive Biodiverse Roofs**, unless there are significant justifications why other options should be considered.
- *'Blue' and 'blue/green'* - these roofs are now seeking to incorporate increased water retention on roofs, not just through slowing and reducing water by substrate and vegetation storage and evapotranspiration but through the creation of wetlands on roofs. Most of these, currently, are designed to be ephemeral but semi-intensive and intensive options are the next logical step. As with the creation of ponds at ground level, 'blue/green' options are likely to provide high quality habitat in a short space of time.

- **Semi-Intensive systems** = medium substrate: Substrate depths are between 120-250mm and weights are between 120-200kg/m^2. Most semi-intensive roofs replicate garden borders, with flower and shrub planting and are often used mainly for aesthetic purposes. However, increasing native species is highly likely to increase the biodiversity value of semi-intensive and intensive systems.
- **Intensive systems** = deep substrate: Substrate depths are usually between 150-400mm and weights are between 180-500kg/m^2. Intensive roofs form formal rooftop parks and gardens, with tree and shrub planting, although can also be utilised for urban agriculture.

3.2.2 'Green' Walls

'Green' or 'living' walls are vertical structures of vegetation.

The simplest and least expensive forms are *direct greening* solutions. These employ self attaching climbing plants growing directly up the building / vertical structures substrate, as ivy does, from ground level or a suspended suitable ledge or container with soil.

The next simplest form is *indirect greening*, which uses a support system of a trellis or wires to train climbers growing up the support system, leaving an air gap between the vegetation

[55] Biodiverse Roof Best Practice

and the building fabric. This can incorporate an increased variety of species, such as *Clematis*, *Jasminum*, *Rosa* etc. but is limited in the height able to be achieved, depending on the species.

Living wall systems (or 'facade bound') are engineered solutions that provide irrigated planting modules attached to a wider supporting frame. These systems can dramatically increase the species of plants available, as they do not need to be climbers but do require increased watering and maintenance.

Many *living wall systems* contain very few, if any, native species, concentrating more on continuous year round vegetation cover and, therefore, do not fulfil much in the way of increasing local biodiversity. However, species selection can be improved, to provide multi-functional benefits.

3.2.3. Soft landscaping

Soft landscaping is an integral part of many planning applications but often seeks to provide 'single benefits' to the development. These are often an aesthetic value with year round 'interest', coupled with low management requirements. The majority of soft landscaping schemes submitted through planning applications contain very low percentages of native species, if any. Most soft landscaping can be, usually, significantly improved.

Basic ecological principles can be employed to improve soft landscaping:

- **Physical structure** - providing a greater range of vegetation types increases niche availability. All soft landscaping should aim to have canopy trees, understory trees and / or shrubs, tall grass areas, field layers (up to about 2' high) and ground cover layers / short grass. Bare substrate is also often important, as are water sources. By creating structural heterogeneity, abiotic conditions are modified, including shelter areas, changing humidity levels, thermal inculcation levels etc. Each of these variables increases the opportunity for species to exploit the available resources. The BUGS 1 & 2 projects[56] suggest that mature trees and vegetation '*in urban gardens could be the best way of enhancing abundance in the widest possible range of taxa*'[57] . Density of planting is also of significant importance in encouraging species.
- **Native species** - Native vs. non-native species arguments have been raging for years between various parties. Most UK gardens contain in the region of 70% non-native species and it has been demonstrated[58], an 'average' UK garden can contain large numbers of species but this may not be the case for most gardens. Further work, including the recent RHS Plants for Bugs[59] project, recommends a preponderance of native species, with the ability to include a mix of northern hemisphere and southern hemisphere species, to increase niche availability and to increase resource opportunity times (particularly late flowering southern hemisphere species).
  Given that UK invertebrates are adapted to native UK plant species, particularly around larval host plants, the recommendation for a preponderance of native species should not come as a surprise but has not previously been fully quantified.

Many soft landscaping schemes presented as part of planning application propose the same restricted suite of plant species i.e. there appears to be a generic palette utilised by

[56] http://www.bugs.group.shef.ac.uk/BUGS1/bugs1-index.html
[57] http://www.bugs.group.shef.ac.uk/BUGS1/sources/bugs-reprint8.pdf
[58] http://www.wlgf.org/Jennifer%20Owens%20studies.pdf
[59] https://www.rhs.org.uk/science/conservation-biodiversity/plants-for-bugs

landscape architects, with little consideration for site specific conditions or multifunctional benefits.

As such, under this Habitat Action Plan, soft landscaping schemes within Sutton will be encouraged to plant a wide range of native plant species that provide multiple benefits for animal species (nuts, fruit, nectar, pollen, larval host plants etc.), to plant as much mature vegetation as possible and to use a preponderance of native species, with some exotics to broaden the resource opportunities.

At least **60%** by number of plant individuals and species variety to be planted will be native and local to the area, following the above principles of increasing species diversity and structure through providing canopy trees, an understory / shrub layer, field layer / tall grass and species rich grassland (including flowering lawn). Spring bulbs should be planted and ornamental species of value can be utilised to extend the flowering season. Whilst not definitive, ornamental species on the RHS 'Perfect for Pollinators' lists[60,61] should be utilised.

These principles are also to be applied to Green Infrastructure, particularly Extensive Biodiverse Roofs, where the creation of drought tolerant dry grassland or Open Mosaic Habitats and associated hardy species can provide significant benefits to invertebrates and birds, in particular.

3.2.4 Species requirements

Although high quality soft landscaping can provide for a wide range of species, additional efforts can make substantial impacts on helping local wildlife. The London Borough of Sutton promotes gardening for wildlife in private gardens and through developments.

Numerous wildlife gardening guides are freely available (often on websites from the main wildlife charities), as well as books that can be purchased. The basic principles of wildlife gardening are similar to the principles espoused above for soft landscaping (niche availability through species and habitat diversity) but the London Borough of Sutton wishes to add in the following specific recommendations:

- **Hedgehogs** - Have suffered significant declines over recent years[62,63] and one highlighted issue in urban areas is fragmentation of habitat[64].
  To assist in creating a permeable landscape for hedgehogs within Sutton, all developments **creating two or more gardens** (which may include splitting existing back-garden land) with a solid barrier (fence or wall) will provide hedgehog holes. New developments should also provide at least 1 hedgehog home[65], preferably through creating a log pile or other natural features but also through the use of a box, if few opportunities for natural features exist.
- **Swifts** - Swifts have undergone significant declines (57% between 1995 and 2016[66]) in recent decades and one factor in their decline is the lack of suitable nesting habitat, as modern houses or refurbishments remove or seal up gaps, particularly around the eaves, to increase heat efficiency in the home.
  As such, **all new build developments** with facades above 4m high should include at

[60] RHS Garden Plants
[61] RHS Plants of the World
[62] https://www.bto.org/our-science/monitoring/hedgehogs
[63] https://www.hedgehogstreet.org/about-hedgehogs/how-many-hedgehogs-are-left/
[64] https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/
[65] https://www.hedgehogstreet.org/help-hedgehogs/hedgehog-homes/
[66] Help swifts

least one multi-chamber swift box (external) or brick (incorporated into building fabric), such as the Genesis triple or Schwegler 17a or equivalent.
    - Small scale developments should include at least **1 multi-chamber** boxes or bricks per dwelling,
    - Medium scale developments should include at least **5 multi-chamber** boxes or brick across the estate buildings, and,
    - Major developments should incorporate at least **12 multi-chamber** bricks or boxes across the estate buildings[67]
- **House sparrows** - House sparrows have suffered significant declines in urban areas [68] and though the declines are not fully understood, creating feeding habit (through high quality soft landscaping) and increasing nest availability may help. Placement should be at least 10' (3m) above ground between north and east to avoid it getting too hot or wet. Avoid placing it in direct sunlight and don't put it over a doorway or well-used path. Placing adjacent to dense shrubbery (such as wild privet) would also be beneficial in providing access to cover:
    - Small scale developments should include at least **1 multi-chamber** 'terrace' box per dwelling,
    - Medium scale developments should include at least **5 multi-chambe**r 'terrace' boxes across the estate buildings and grounds, and,
    - Major developments should incorporate at least **12 multi-chamber** 'terrace' boxes across the estate buildings and grounds
- **Starlings** - Another 'common' urban bird (**Figure 6)** that has suffered significant declines over the last few decades (66% since the mid-1970s[69]). Like sparrows, the reasons for declines are multitudinous but increasing invertebrate numbers through soft landscaping and providing bird boxes could help[70]:
    - Small scale developments should include at least **1 box** per dwelling or at least 2 boxes per development,
    - Medium scale developments should include at least **5 boxes** across the estate buildings and grounds, and,
    - Major developments should incorporate at least **12 boxes** across the estate buildings and grounds
- **Bats** - Of the 18 UK species (17 breeding species), around 8 species are regularly detected in London, with another 3 species being occasional. Providing high quality invertebrate habitat and landscape connectivity are vital to stemming long-term declines, as well as protecting existing roosts. Creating new roosts on and in buildings or within groups of trees may also help.
  Bats are often highly communal (especially breeding females) and require a range of micro-variable conditions (such as temperature and humidity levels) and may, consequently, move around a range of roost sites in a short time period, to find their preferred conditions. Installing several boxes at different ordinations on a tree or building should assist in adjusting for their sensitive requirements:
    - Small scale developments should include at least **2 per dwelling** or on mature trees at different ordinations between southeast and southwest,
    - Medium scale developments should include at least **8 boxes or bricks** at different ordinations between southeast and southwest across the estate buildings and grounds, and,

[67] Swifts boxes
[68] Urban House Sparrows
[69] Starling population trends
[70] Starling homes

- Major developments should incorporate at least **12 boxes or bricks** at different ordinations between southeast and southwest across the estate buildings and grounds
- The use of 1 large maternity or winter roost box or brick counts as 2 boxes per development

Figure 6 - Starling

3.2.5 Sustainable Urban Drainage Systems (SuDS)

Are another form of GI that can provide biodiversity benefits and are mainly covered under the Rivers and Wetlands HAP.

3.2.6 Back Garden Land

Back garden land is a significant resource within Sutton and London as a whole, accounting for a significant proportion of London's green space. As with all private property, the value of each individual garden for wildlife varies significantly.

The vegetation levels and quality within each property are under the direct influence of the owner and can be modified as the owners wish, as long as no legislation is breached. Thus, the loss of each individual garden cannot be prevented, outside of a planning application, and may not actually have any demonstrable impact on local biodiversity.

On the other hand, the reduction in green space through increasing hardstanding and buildings may be 'death by a thousand cuts', with each individual loss being small but adding cumulatively to wider landscape losses

Therefore, as outlined under Policy 13b of the Local Plan, the Council will not grant planning permission on areas of back garden land '*either individually or as part of a larger street block*' that are '*considered to be of local ecological value by the council*'.

Data to determine whether private residences or collections of back gardens are of 'local ecological value' only usually becomes available if a planning application is submitted and there are only certain circumstances where an ecological survey should be submitted. For back garden land, surveys are generally only required if protected species are likely to be affected or over 500m^2 of vegetation is to be removed, individually or collectively, which will be assessed through Biodiversity Net Gain.

In the evaluation of loss of back garden land, three factors will be considered:

1) any requirement for an ecological assessment / Biodiversity Net Gain evaluation on the site(s) in the information contained therein,
2) the current amount of infilling within the local area and,
3) the amount of post-development back garden land remaining in the local area

3.3 Trends

Numerous policies and guidelines now exist around the use of GI. Internationally, the benefits of GI are being more and more quantified, with positive impacts on air quality, Urban Heat Island Effect (UHIE) & urban cooling, flood prevention, pollution control & reduction and urban biodiversity. As such, GI measures are being incorporated into more and more developments, following the provided guidelines and policies, although the London Borough of Sutton does not, as yet, have information on how many have actually been delivered.

However, there is still an amount of resistance on the part of some developers to fully embracing the benefits of GI. The main arguments tend to be around the cost of implementing GI and the space available for GI.

Given the possible impacts of Biodiversity Net Gain and the Green Space Factor on planning applications, on site mitigation, through GI, needs to be fully explored during the planning development process. Otherwise, offsetting is likely to apply and developments may incur a substantial financial impact.

4. Specific Factors Affecting the Habitat Action Plan

4.1 Major factors

- Type of GI installed
- Delivery of Biodiversity Net Gain
- Cost of delivery
- Ongoing maintenance / Access for maintenance / Monitoring
- Isolation of sites
- Climatic changes

4.2 Supplementary factors

- Atmospheric pollution and nutrient enrichment
- Health and safety requirements for management
- Invasion of aggressive non-native species
- Opportunities for complimentary recreational use

5. Current Action

5.1 Legal Status

'Open Mosaic Habitats on Previously Developed Land' (aka 'Brownfield Land') is a Priority Habitat under Section 41 (England) of the Natural Environment and Rural Communities (NERC) Act 2006. Therefore, creating replica Open Mosaic Habitats through the creation of extensive biodiverse roofs ('brown' roofs) can be considered as working towards the creation of a Priority Habitat.

Through Biodiversity Net Gain, extensive biodiverse roofs are weighted as 'moderate distinctiveness' (value of 4) to account for this replication of Priority Habitat, even though they are not remotely semi-natural habitats.

Some other types of Green Infrastructure, are, again, weighted higher than 'standard landscaping / amenity planting', to encourage the use of these items to address multifunctional issues, as outlined previously and in more detail it the Technical Guidance Note.

All breeding bird nests under construction or occupation are covered by the Wildlife and Countryside Act 1981 (as amended), whilst all bat roosts (even if not occupied) are currently covered under the Conservation of Species and Habitats Regulations 2017.

5.2 Mechanisms targeting the habitat

5.2.1 Policies

Through the NPPF, No Net Loss and Net Gain are already applicable for all developments and the Government has stated that Biodiversity Net Gain be mandated.

Given the time lag in delivering a national roll out of Biodiversity Net Gain, Sutton will continue to deliver on the Technical Guidance Note until such time as this is required to change, to comply with a national mandate.

5.2.2 Historical Management

No details are available as to work that has been undertaken in regards the creation and management of installed green infrastructure. One of the aims through this HAP is to create a database of what is currently in place (and will be created), so that checks can be made to ensure these not only fulfil the planning conditions / obligations but also are fit for purpose and deliver No Net Loss, Biodiversity Net ain and the Green Space Factor.

5.2.3 Resource Availability

Through the Building a Sustainable Sutton and Local Plan Policy 26, major developments and those likely to cause impact on local biodiversity will be subject to Biodiversity Net Gain and No Net Loss and be required, through s106 obligations to deliver No Net Loss and Biodiversity Net Gain for the life of the development / in perpetuity.
Therefore, the provision of habitats and ongoing management (a minimum of 30 years) will be resourced by the developer.

In regards assessment of planning applications and the requirement to cost up projects for delivery, should compensation monies be made available, these will sit within the Biodiversity Team but require further resourcing, particularly in regards the detailed costing

up of projects, Habitat Opportunity Mapping and post-completion checks of habitats. It is hoped that some compensation monies can be found to employ an officer specifically to deal with the delivery of Biodiversity Net Gain.

6. Priority Species

These species are indicators of higher quality environments and, often, are highly distinctive and recognisable, for even the untrained.

Common Name	Latin	Brief Description
Black redstart	*Phoenicurus ochruros*	A distinctive species of industrial urban landscapes and a target species for 'Open Mosaic Habitats' at both ground and roof level
Hedgehogs	*Erinaceus europaeus*	Familiar but declining snufflers, hedgehogs require surprisingly large territories and are negatively impacted in urban areas by solid boundaries
Swifts	*Apus apus*	Screaming sickle-winged masters of the air, swifts require specific nesting habitat in urban locations that mimics protected cliff edges
Starlings	*Sternus vulgaris*	A once common iridescent & speckled thrush-sized bird, this gregarious species can be encouraged through the use of simple nest boxes
House sparrow	*Passer domesticus*	Chirping and cheeping,the once-common house sparrow has suffered significant declines in urban areas
Bats (all species)	All members of the genus Chiroptera	Sophisticated and highly sensitive to environmental changes, provision of insect rich habitats across the landscape is vital for the world's only flying mammals
Peregrine falcon	*Falco peregrinus*	The world's fastest animal when 'stooping' after prey, peregrines are setting up home on man-made cliff replicas in the middle of towns and cities.
Thrift	*Armeria maritima*	A classic cliff-top coastal species that can thrive in the dry and windy conditions of biodiverse roofs. It is a cushion forming species with bright pink flowers, great for pollinators
Common rockrose	*Helianthemum nummularium*	A typical species of short turf chalk downland and the erstwhile main food plant for the brown argus butterfly, the bright yellow flowers of common rockrose provide nectar and pollen to invertebrates at roof level in replicated grassland or in rockeries at ground level

Bumblebees	*Bombus* spp.	Busy buzzing bundles of hair, even scarce bumblebee species have been recorded on flower rich extensive biodiverse roofs. Queen bumbles need lots of spring pollen and nectar to raise the next generation

7.0 Objectives and Actions

This action plan aims:

- To promote the addition and management of Green Infrastructure (including soft landscaping) within developments
- To provide a mechanism for the delivery of habitat creation within Policy 26 Biodiversity of the Local Plan 2016-2031
- To quantify losses and gains of habitats through the planning process

Rationale:

The urban fabric is dominated by 'grey infrastructure', which has a significant impact on the presence of semi-natural habitats, through urban expansion and the reuse of previously developed land, which may have had biodiversity value ('open mosaic habitats', also known as brownfield sites).

This plan seeks to increase the amount of GI associated with appropriate development sites to such an extent that all developments incorporate biodiversity and that Biodiversity Net Gain can be quantified and delivered, in situ, where this delivers the best ecological outcomes. In the circumstances where on site mitigation to deliver No Net Loss and the required uplift cannot be achieved, Sutton will seek compensation monies to enable offsite habitat creation and restoration within the borough, in accordance with actions outlined within this Strategy.

7.1 Offsetting / Compensation Costs - 'Biodiversity Tariff'

Offsetting / compensation costs are highly variable. Sutton has calculated the general costs of habitat creation (including the application of risk factors) across 6 habitat types, to determine a baseline cost, per hectare, of habitat to be created[71].

The approach taken is that of Full Cost Recovery. This differs from costs applied by Warwickshire County Council, in that they apply costs derived from agri-environment schemes (Higher Level Stewardship etc.). Agri-environment scheme costs are 'incentives' for farmers / land managers to undertake specific works.

Agri-environment schemes generally assume that farmers / land managers have access to the necessary machinery to undertake habitat management and creation work. If one has to contract work, as is often the case for an urban area or Local Authority, the prices are significantly higher.

For instance, the London Borough of Sutton receives £200 per hectare of land entered under "*HK7 Restoration of Species Rich Semi-natural Grassland*" through the Higher Level Stewardship (HLS) scheme. The actual cost to LBS to pay a contractor for undertaking one

[71] See Biodiversity Net Gain Costs [document location to be determined]

cut (the minimum prescribed action required) is about £350 per hectare. Haymaking, baling and scarifying increase that cost. Any additional work, such as herbicide treatment or slot seeding, adds substantially to the costs for general management .

The above example is an incentive for specific *management*. The same applies to habitat *creation*. HLS will provide £280 per hectare for "*HK8 Creation of Species Rich Semi-natural Grasslands*".
To purchase suitable, commercially available, seed to cover 1ha of prepared ground, suitable for a species rich grassland, is in the region of £1,800.
Ground preparation costs to ensure the seed will take correctly cost between £650 and £40,000 per hectare (depending on what is required to prepare the ground correctly). Soil evaluations to determine if the site is suitable for species rich grassland are about £200. If the site requires grazing, then fencing, water connections, troughs etc. all need installing.

In total, the *mean* cost for creation of 1ha of species rich grassland within Sutton, under full cost recovery, is calculated to be c.£25,000. Ongoing, in perpetuity, habitat management costs need adding to the creation costs, as does an 'insurance / contingency' fund and staff management costs to project manage or deliver offset schemes

Therefore, the London Borough of Sutton has to implement a Full Cost Recovery pricing policy, if delivery of Biodiversity Net Gain is to be achieved and the Borough is not subsidising development.

Compensation costs will be based on the habitats impacted. If none of the broad habitats which have had costs calculated are to be affected, a mean value per 'biodiversity unit' will be applied, to allow for flexibility in delivering habitat creation or restoration projects, as identified within this Strategy. The current *mean* cost of 1 biodiversity unit is **£93,570.93**

~~**7.2 Uplift**~~

~~Except for Sutton town centre, where affordable homes are most required (Local Plan Policies 3 & 8), all developments will be required to demonstrate an uplift of 20% on the baseline evaluation of the development or, 2 'units' per hectare, whichever is greater.~~

~~For instance, if development A is going to result in the loss of 10 units of biodiversity, through the development of 5ha of amenity grassland, 10 units must be delivered to achieve No Net Loss and an additional 2 units provided to deliver the Net Gain uplift, a total of 12 units.~~

~~Alternatively, development B occupies 0.5ha of carpark, with no biodiversity value. In a scenario such as this, 20% of 0 is 0, so the units per hectare uplift is applied. As there is no requirement for mitigation (no biodiversity loss), all green infrastructure or soft landscaping counts towards the uplift of 2 units per ha. In this case, as the site is 0.5ha, the uplift required is 1 unit.~~

~~As outlined above and within the Building a Sustainable Sutton Technical guidance Note, No Net Loss and Biodiversity Net Gain should be delivered on site wherever feasible, where this delivers the best outcome for biodiversity. Where it is demonstrated that NNL and / or BNG cannot be delivered on site, then the proportion of loss below that required to deliver the uplift will be subject to the Biodiversity Tariff, as outlined in **7.1**.~~

7.3 Habitat Action Plan Targets:

Appendix A

GI1 To implement No Net Loss and Net Gain within all developments subject to the Technical Guidance Note

GI2 To create, restore and enhance high quality habitats

GI 3 To consider the adoption of a greater suite of biodiversity protection and enhancement within the review of the Local Plan

7.3.1 Actions

Code	Action	Lead
GI1	**To implement Biodiversity Net Gain within all developments subject to the Technical Guidance Note**	
GI 1.1	To implement BNG and Policies 26 and 13 through the review of planning application that may impact on biodiversity or provide opportunities for Net Gain **Target:** All major applications and all developments within 100m of a SINC or where more than 500m^2 of vegetation is proposed for removal (including single or combined back garden land) reviewed and commented on; delivery of in situ biodiversity gains and habitat creation or enhancement undertaken off site	Senior Biodiversity Officer / Development Management
GI 1.2	To create a recording mechanism for all recommended GI within planning applications **Target:** 100% of planning recommendations captured per reporting year by 2020	Strategic Planning/ Senior Biodiversity Officer
GI 1.3	To undertake regular inspections to check for compliance with planning conditions **Target:** 10 green infrastructure planning conditions per annum until 2024	Planning Enforcement / Senior Biodiversity Officer
GI 1.4	To create a green infrastructure 'condition' assessment for rapid checking of green infrastructure performance and care **Target:** Condition assessment created by 2021	Senior Biodiversity Officer / Planning Enforcement
GI2	**To create new high quality habitats.**	

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GI 2.1	To utilise Habitat Opportunity Mapping to determine the best locations for new habitat (either as extensions to existing habitat or as corridors or stepping stones) to deliver the Habitat Action Plans. **Target: HOM for the borough completed by 2021**	GiGL / Strategic Planning / Senior Biodiversity Officer
~~GI 2.2~~	~~To evaluate and, if acceptable, incorporate increased biodiversity measures[72] within the Local Plan review~~	~~Strategic Planning / Senior Biodiversity Officer / Senior Arboricultural Officer~~
GI 3	**To consider the adoption of a greater suite of biodiversity protection and enhancement within the review of the Local Plan**	
GI 3.1	To evaluate, evidence and consult on the adoption of a 20% 'uplift' on all developments (with some exceptions) to deliver Biodiversity Net Gain within the Local Plan review, in line with mandated national guidance **Target**: Evaluate the regional and national evidence base for a minimum mandatory uplift for the Local Plan review in 2023	Strategic Planning / Senior Biodiversity Officer /
GI 3.2	To evaluate and, if acceptable, incorporate increased biodiversity measures[73] within the Local Plan review **Target**: Evaluate the suitability and success of the recommendations within this HAP as part of the evidence base for the Local Plan review in 2023	Strategic Planning / Senior Biodiversity Officer / Senior Arboricultural Officer

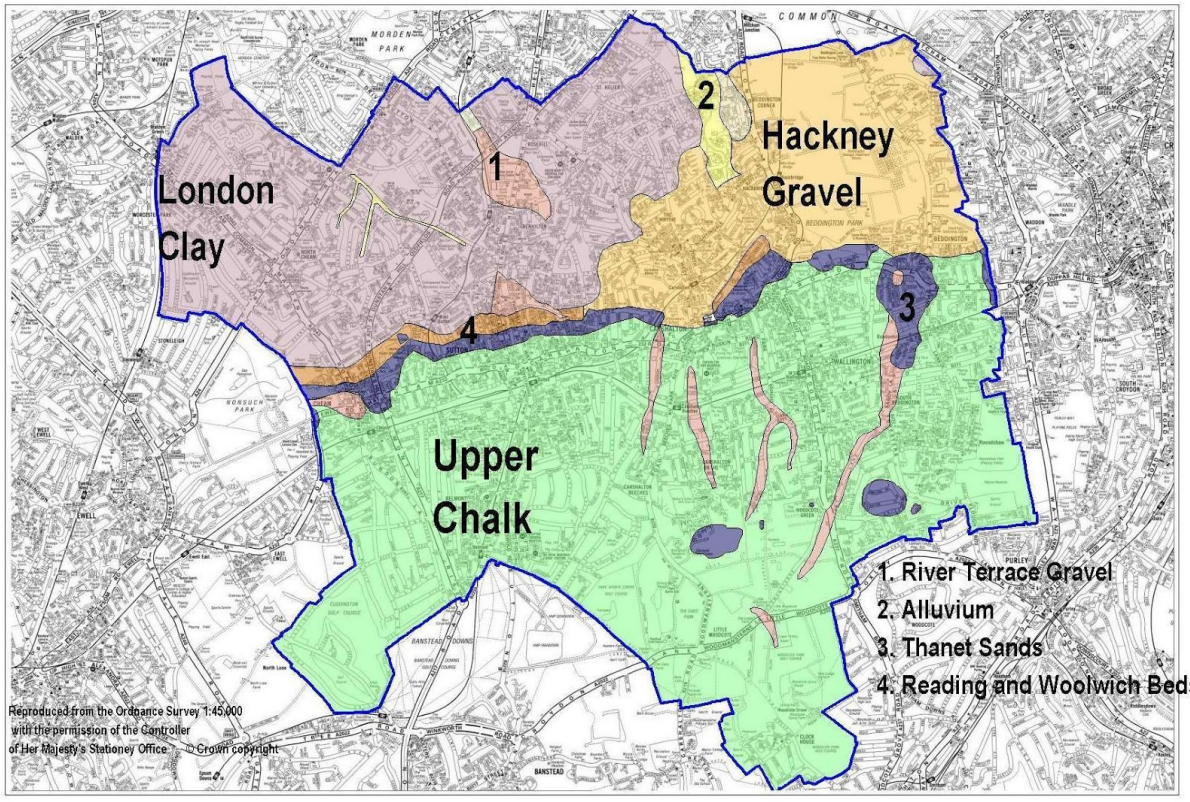
[72] ~~As per guidelines within this HAP for species and for all new build developments to provide information on wildlife gardening (either through a bespoke leaflet or provision of suitable literature)~~

[73] As per guidelines within this HAP for species and for all new build developments to provide information on wildlife gardening (either through a bespoke leaflet or provision of suitable literature)

Appendix B6: Geology of Sutton and Sites of Importance for Nature Conservation

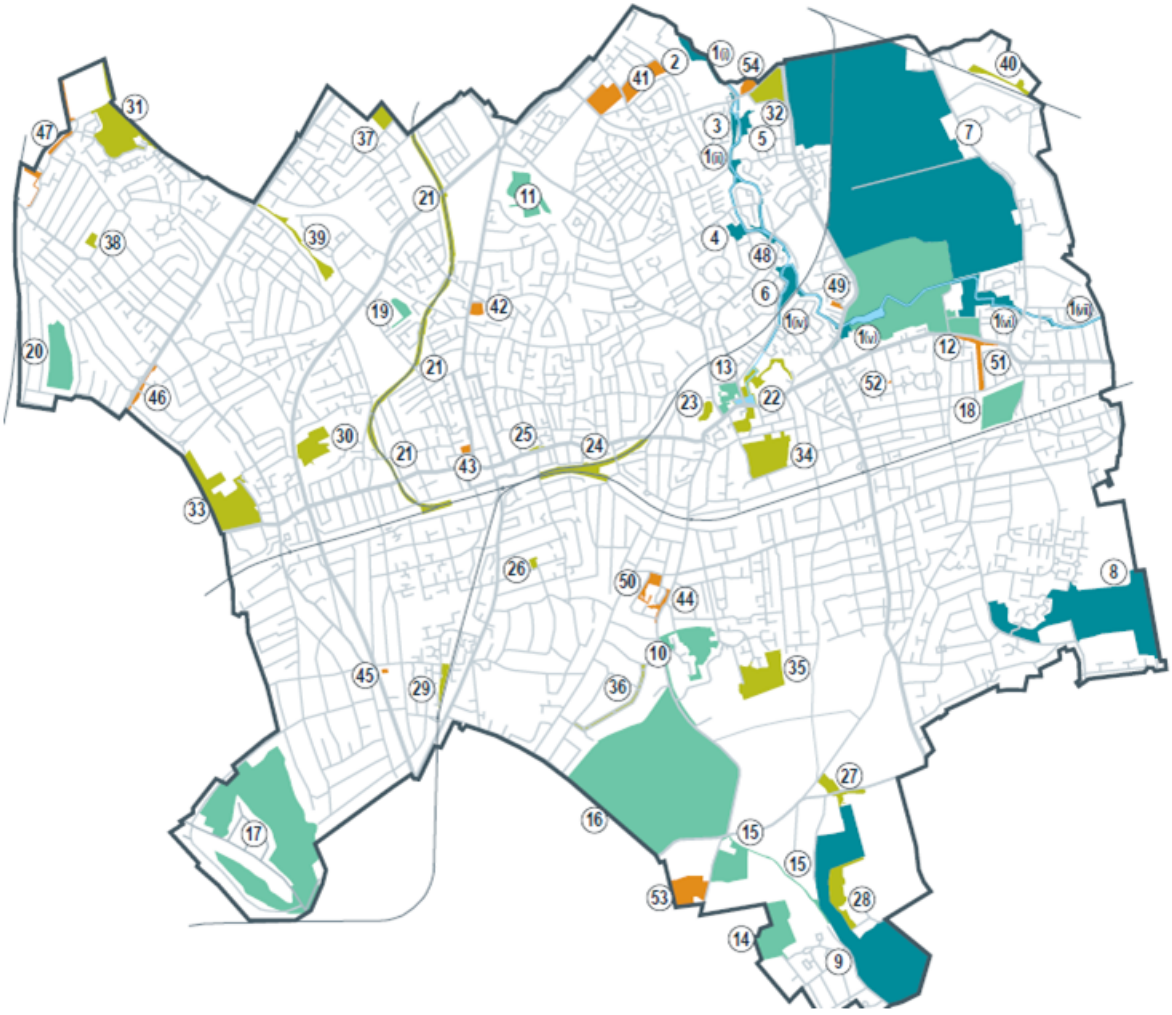
The maps below shows the geology of Sutton and Sites of Importance for Nature Conservation, as set out in the Council's Local Plan 2016-2031.

Map 1: Underlying geological strata in Sutton



Appendix A

Map 2: Sites of Importance for Nature Conservation (Local Plan 2016-2031)



Key to site numbers in Map 2.

SINC Number	Site Name	Grade
SINC 1 (i) - (vii)	The River Wandle	M
SINC 2	Poulter Park Riverside	M
SINC 3	Wandle Valley Wetland	M
SINC 4	Dale Park	M
SINC 5	Spencer Road Wetland	M
SINC 6	Wilderness Island	M
SINC 7	Beddington Farmlands	M
SINC 8	Roundshaw Downs	M
SINC 9	Woodcote Park Golf Course	M

SINC 10	Queen Mary's Woodland, Wellfield Plantation and Grasslands and Woodmansterne Road Woodland	B1
SINC 11	Greenshaw Wood and Rosehill Park East	B1
SINC 12	Beddington Park	B1
SINC 13	Sutton Ecology Centre	B1
SINC 14	Ruffett, Big Wood and adjacent Meadow	B1
SINC 15 (i-ii)	Carshalton Road Pastures and Grove Lane Hedge	B1
SINC 16	The Oaks Park and Golf Course	B1
SINC 17	Cuddington open Spaces and Golf Course	B1
SINC 18	Bandon Hill Cemetery	B1
SINC 19	Anton Crescent Wetland	B1
SINC 20	Cuddington Recreation Ground	B2
SINC 21 (i-iii)	Sutton to St. Helier Railway Line	B2
SINC 22	Carshalton Ponds, Grove Park and All Saints Churchyard	B2
SINC 23	St Philomena's Lake	B2
SINC 24	The Warren Railway Lands	B2
SINC 25	Water Gardens Bank	B2
SINC 26	Devonshire Avenue Nature Area	B2
SINC 27	Little Woodcote Wood	B2
SINC 28	Woodcote Grove Wood	B2
SINC 29	Belmont Pastures	B2
SINC 30	Perrett’s Fields and Sutton Water Works	B2
SINC 31	Mayflower Park	B2
SINC 32	Mill Green	B2
SINC 33	Cheam Park	B2
SINC 34	Carshalton Park	B2
SINC 35	Queen Mary's Park	B2
SINC 36	Pine Walk Roadside Island	B2
SINC 37	Sutton Common Paddock	B2

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SINC 38	Cuddington Cemetery	B2
SINC 39	Pyl Brook	B2
SINC 40	Therapia Lane Rough	B2
SINC 41	Revesby Road Wood	L
SINC 42	All Saints Churchyard, Benhilton	L
SINC 43	St. Nicholas Churchyard, Sutton	L
SINC 44	Radcliffe Gardens Woodland	L
SINC 45	The Avenue Primary School Nature Garden	L
SINC 46	London Road Edge	L
SINC 47	Beverley Brook	L
SINC 48	The Spinney	L
SINC 49	Caraway Place Pond	L
SINC 50	Barrow Hedges Primary School	L
SINC 51	Queen Elizabeth Walk	L
SINC 52	St. Mary's Courtyard Wildflower Area, Bute Road	L
SINC 53	Lambert's Copse	L
SINC 54	Land North of Goat Road	L

M = Sites of Metropolitan Importance
B1 = Sites of Borough Importance, Grade I
B2 = Sites of Borough Importance, Grade II
L = Sites of Local Importance

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