

Royal Borough of Kingston upon Thames

Tree Strategy 2015-2021



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1. Introduction

A tree...

Visualise
a 100 year old beech, almost 20 metres high and with a treetop diameter of 12 metres. It's got 600,000 leaves which convert its base of 120 square metres into some 1,200 square metres of leaf-surface. Due to the physical structure of the leaves themselves, this amounts to a total surface area of 14,000 square metres for gaseous exchange, which equals the area of two football pitches. On a sunny day, this tree converts 9,400 litres, i.e. 18 kilogrammes, of carbon dioxide. With a carbon dioxide concentration of 0.03% in the air, almost 36,000 cubic metres of air have to flow through these leaves. The leaves also filter out many airborne particles like bacteria, fungal spores, dust and other harmful substances. At the same time the tree evaporates almost 400 litres of water per day and in doing so it humidifies the air. Furthermore, through photosynthesis, the tree produces 13 kilograms of oxygen, which equals the needs of 10 people. Moreover, the tree produces 12 kilograms of sugar on a single day, from which it develops all its organic substances. Some of these substances are accumulated as starch, others are used to build up the tree's new wood. If the tree is chopped down, because it must give way for a new road or someone has complained about the shade from the tree or just because the space is needed for a new shed, one would have to plant some 2,000 new trees, each with a tree top volume of one cubic metre in order to compensate fully for the loss of the tree. The cost of this would amount to roughly £150,000.

Trees are a significant feature of Kingston, a unique component of the urban landscape and as living organisms are vulnerable to pest and disease, vandalism, accidents and development. Many trees are long lived, offering enjoyment and a diversity of benefits to residents today and for future generations. To ensure their continuing contribution to the urban landscape it is essential that their needs and requirements are understood and planned for.

This Tree Strategy will provide a framework for the maintenance and enhancement of the trees in the Borough and define the management approach for the safe and useful life expectancy for Council owned tree stock. It presents the public with a clear strategic aim and reasons why decisions and actions are taken through the 28 policies as laid down in this strategy. Furthermore, it provides a vision for the enhancement of the tree stock that ensures the Borough will maintain a healthy tree cover within the considerations of Council's medium term financial planning in *Destination Kingston 2013-2017*.

2. The amenity and environmental value of trees in the urban context.

1. The value of trees in the urban context falls into two categories, biological and non-biological.

Biological

2. All plants 'fix' carbon in producing carbohydrates. Trees create shade from the leaves which cool the heat absorbing highway surfaces. The leaves also filter some airborne pollution and particulates. Trees provide important habitat for urban wildlife such as birds, invertebrates and some mammals.
3. A tree lined street signifies the changing seasons in an often otherwise season-less environment.

Non-biological

4. The presence of trees makes the harsh "concrete jungle" of the urban environment more acceptable. They create green corridors along the highway and provide a more aesthetically pleasing environment.
5. Trees are an integral and historic component of the urban landscape. They contribute to the local character and define a sense of place.

The sum of all these benefits define the amenity value of trees.

3. Need for a Strategy

6. The Council owns an estimated 12,000 street trees and many more within parks, open spaces, school grounds and council housing estates. Setting out how the Council will manage its tree stock is both a practical and helpful guide to residents as well as an aid to good service management by the Council. It is some years since the Council had a published Tree Strategy. This strategy is also a response to guidance from the Department of Communities and Local Government, Trees Health Management Plan (April 2014) which promotes good practice for local government.
7. There are responsibilities associated with the ownership of trees. Some of these are legal duties as in the case of Tree Preservation Orders which are generally for trees within private ownership, others are in the interests of good husbandry and Health and Safety.
8. The Council has a duty of care on the trees that it owns and hence seeks to be a responsible manager and maintain trees reasonably within the wide range of pressures and demands it faces.
9. A tree strategy will ensure that the management of trees within Kingston Borough will be dealt with in a coordinated and accountable manner. Subsequently the overall standard of tree care should improve resulting in a healthier, more sustainable tree stock. The plans and policies laid down in the strategy will increase environmental, economic and social benefits and encourage community involvement.

Strategic Aim

To preserve, improve and secure no 'net loss' of the Council's trees for the current and future generations.

Objectives

10. To manage the tree stock in accordance with good arboricultural practice.
11. To maintain the street trees on a regular cyclical basis using current best practice to reduce the amount of responsive works required.
12. To increase the stock of trees in aesthetically necessary and sustainable locations by taking advantage of different funding methods to include, specifically, private sponsorship.
13. To reduce the number of inappropriately planted trees by their phased replacement.
14. To maintain a general presumption against the removal of trees, allowing felling only in accordance with good arboriculture and streetscape practice.
15. To inform and educate residents and businesses about the value of trees, exploring ways for their greater involvement and consultation and encouraging an attitude of protection from residents and businesses.
16. To promote and secure high quality tree planting and landscaping within new developments in order to maintain and enhance the Borough's local landscapes.

4. Street Trees

17. The Council is considered in law to be the owner of street trees that grow within the adopted highway and in consequence is responsible for them. It is empowered by the Highways Act 1980 to plant and maintain street trees.
18. Trees that are planted along the highways are an integral and historic component of the urban landscape and its architecture. They contribute to the local character and define a sense of place. They add aesthetic value by improving the overall appearance of the street scene and help filter traffic pollution, providing shade for car parking and habitat for urban wildlife.
19. The character of the street tree population varies considerably across the Borough primarily due to changing tastes and fashion. The older parts of the Borough were planted in the early 1900's and tend to be dominated by large London Plane and Lime. Roads such as Maple Road, Balaclava Road, Palace Road, Albany Park Road and Langley Avenue are examples of this period. Newer areas such as New Malden, and Chessington have smaller properties and a less imposing street scene tending to be populated by smaller ornamental species such as Pear and Cherry.

5. Street Trees and Highway Management

20. There can be a very real conflict between the need to manage the Council's highway infrastructure and the need to manage the Council's trees. From time to time maintenance works undertaken by statutory undertakers (gas, electricity, water etc) or pavement repair by one of the Council's partner contractors is necessary. This construction work is symptomatic of progress, both economical and social and therefore accepted.
21. When works are planned the Tree Officer will provide advice and information on the best way to minimise damage to street trees and to work in co-operation with those involved in construction. Where the needs of the street trees are patently disregarded the council will undertake appropriate action to ensure their protection.

6. Cyclical Maintenance Programme

22. The existing tree population is a valuable and desirable resource. Tree management encompasses the coordination of all maintenance operations to existing trees as well as new tree planting. The Council must balance the need to take a, long term view of the future management of the tree stock, as well as addressing short term issues.

23. Street trees are inspected and pruned on a three year cyclical programme. All inspections are carried out by a qualified Tree Officer employed by the Council. During inspections information such as species, size, condition and suitable works are programmed into a tree inventory data base (Arbortrak). The information contained in the database is used to keep management and topic records for each individual tree. This information can be used to plot the history of the tree for ongoing management, complaint, insurance queries, Asset Management and Whole Life Costing exercises.
24. Tree pruning will be undertaken by qualified tree surgeons on a programmed ward-by-ward basis (Schedule Annex 1). Proactive, rotational management gives a fair and equitable approach as well as enabling ward members and residents advanced information of tree maintenance works.
25. Trees will not be pruned outside of the three-year cyclical pruning programme unless there is a real risk of a health and safety issue or threat of legal action. This ensures a sound approach to management both financially and contractually.
26. In the case of newly planted trees, the maintenance and management of the tree continues for 2 years after planting. This includes regular watering during the summer months and regular inspection of the stakes and ties. These inspections are undertaken outside of the cyclical maintenance survey. Once two years has passed the tree is passed to the 3 year inspection regime.

Policy 1

To ensure street trees are inspected by a suitably qualified person on a three-yearly basis and maintenance works commissioned as necessary.

7. Contract Management

27. The tree management contract was let to Advanced Tree Services Ltd (ATS) in 2006. The contract was extended in 2010, and will be extended for the final 5 year term in 2016.
28. ATS is the sole contractor for all tree work on council-owned land except schools. Schools have devolved budgets and so can choose their own contractor.
29. This strategy will underpin the Tree Service with our partners Advanced Tree Services Ltd (ATS). The RBK Tree Officer will be responsible for the day to day running of the contract and will ensure current best practice is being followed in partnership with ATS.

8. Tree Removal

30. The Council receives a great many requests to remove trees. For example: installation of vehicle cross-overs, road traffic improvements, subsidence claims and specific removal of some species which may be considered problematic. However, often it is only once a tree is removed that its value becomes apparent and even after replanting, the amenity lost can rarely be replaced.
31. The highway environment is a finite space for which there is intense competition from other services gas, water, electricity etc. Planting opportunities after a tree is removed are becoming increasingly difficult as a new tree pit not only has to contend with the underground pipes and cables but also has aerial competition from street lamps, traffic signs, vehicle sight lines etc.
32. There will be a resistance to the removal of trees unless there is a sound arboriculture or risk related reason. This may include dead, dying or diseased trees, or those that have suffered structural damage. It is also possible that the Council may deem a tree to be inappropriate for its location and may choose to remove these when there are resources available to replant with a more suitable species. Trees in a hazardous condition will be considered as an emergency and removed without notification in order to safeguard both public and property.

Policy 2

Requests for tree removal will be refused unless the tree is deemed to be in a hazardous condition subject to inspection by a Council Tree Officer.

9. Vehicle Crossovers

33. It is now usual for households to have one or more cars, and with this an expectation for the cars to be parked near to the house. For this reason, requests for a vehicle crossover are commonplace. In some instances installation of the crossover is impossible given the presence of a street tree therefore the Council is requested to remove the tree.
34. In line with Policy 2, trees will not normally be removed to accommodate new vehicular access unless there is good arboriculture reason to do so. In any case where crossover works are approved by the Council including the removal and replacement of street trees, the full cost of all such tree works will be borne by the applicant.
35. The size of the tree removed will dictate the number of replacement trees required. i.e. Young (1-3 years old) = 1 tree, Small = 2 trees, medium = 3 trees, large = 4 trees.
36. The construction of the crossover will be carried out as per NJUG Volume 4 Guidelines. No roots above 25mm to be cut, any roots below 25mm that require cutting must be done so with an appropriate sharp saw leaving a smooth clean end and back-filled with sharp sand before Type 2 aggregate is applied.

Policy 3

On application for a vehicle cross-over the Tree Officer will be consulted for their view on amenity. If the tree is of high amenity value the application will normally be refused. The appeal process for crossovers is handled by the Street Services Team.

10. Phased replacement of inappropriate street trees

37. In some situations maintenance and associated problems of a tree are so great that removal and replacement can not only improve the environment for residents, but also avoid substantial financial liabilities for the Council.
38. Thoughtful planned removal of trees reaching the end of their safe useful life expectancy and replanting with appropriate replacements will promote a tree population age structure that is sustainable. This long term approach to street tree management will produce long term improvements to the environment, reduce maintenance costs and release funding to improve the street tree resource as a whole.

39. Short and long term benefits to the local community and the Council can be gained through phased removal. Sometimes it will be appropriate to replace over mature street trees requiring frequent expensive maintenance with either younger trees of the same species or more suitable species.
40. Identification of trees for phased removal and replacement will be carried out with due consideration for all factors, including proximity to buildings, choice of species for replanting and the amenity value trees provide. The phased removal and replanting process will be evaluated objectively.

11. Tree planting, Species Selection and Sponsorship

41. There are cases where a tree has been planted which is out of keeping with the main species on the rest of the street. If the opportunity arises the tree may be removed and replaced with the principle species. Replacement of forest type trees with small ornamental species, where appropriate, reduces future maintenance costs and complaints, but there must be a consideration to the contribution that large trees make to the character of the environment.
42. Nurseries are developing specialised trees for planting within the street scene. As a result the list of species available for planting in urban areas is growing. The variety of foliage, colour, form and flower is far more extensive than it has ever been. The Council is committed to increasing the number of street trees whilst utilising new species and implementing imaginative planting projects.
43. There is a general presumption by the public that when the Council removes a tree it will replant with a new tree soon afterwards. But, the Council has not had a dedicated planting budget for many years. Consequently it has been unusual for a new tree to be planted following the removal of a tree in recent years. Any planting that is carried out in the street is paid for by one of four methods; private sponsorship; Neighbourhood Committee discretionary budget, fixed annually; traffic schemes or; BCIL and Section 106 payments through the planning system. As per the medium term financial plans of the Council as outlined in *Destination Kingston 2013-2017*
44. This financial situation is unlikely to change for the foreseeable future. However, long-term future planning should consider the budgetary implication to ensure the percentage of tree cover within Kingston is not only maintained but increased.

45. Records show that over the last five years an average of approximately 200 trees have been removed each year due to being dead, diseased or dying, approaching the end of their lives or due to subsidence claims. In each of these years new plantings have been static at around 100 trees per annum. These figures represent a shortfall of some 500 trees over the period, which have yet to be replaced. The tree section has planted trees over the last few years, exact numbers and locations have been recorded and survival rates are around 90%.
46. A much more ambitious planting target of 300 trees per annum needs to be maintained for at least the next five years, to recover this position. This would replace the recent shortfall and would take into account the deficit from earlier years.
47. It is therefore important to maintain an ongoing replacement and replanting programme and to identify new sites for street trees in order to counter the inevitable losses caused by old age or disease and to ensure that a stock of maturing trees is available to take the place of those trees, that through necessity, must be felled.

Policy 4

Promote public awareness of how trees are managed.

Policy 5

Aim to plant new street trees in appropriate locations; vacant tree pits will take priority.

Policy 6

Priority will be placed on the replacement of over mature tree stock, planting large growing species where appropriate.

Policy 7

Identify a dedicated tree planting budget when the opportunity arises.

Policy 8

Encourage sponsored planting through the Neighbourhood Committee Policy Statements.

Policy 9

An ongoing replacement/replanting programme will be maintained, to identify new sites for street trees and counter the inevitable losses. This will be necessary in order to replenish the street tree stock and maintain planting at a constant level. It is vital that more trees are planted per year than those lost, as per Government guidance.

12. Tree Issues

48. People often live in close proximity to trees, particularly in urban areas. Trees can cause inconvenience to residents when they grow near dwellings. A dilemma often occurs when the tree makes an important contribution to the local environment but also causes inconvenience to those living nearby.
49. With any population of trees there are a number of common sources of complaint including overhanging branches, shade, leaf/fruit fall, obstruction and physical damage etc. Many of these problems can be dealt with through the Council's cyclical pruning programme.
50. Tree roots disrupting the footway to a small degree is a common problem associated with the urban environment. Many trees are removed each year for various reasons including drought and pollution stress. It is for this reason that the Council is reluctant to remove healthy trees due to footway disturbance. A more appropriate response is to allow Street Services Inspectors to monitor the footways and action repair as necessary.

Policy 10

There will be a presumption against the removal or pruning of trees which are healthy but are subject to complaint (e.g. branch and root trespass, loss of TV/satellite signals, photovoltaic cells on roofs, alleviation of bird mess, honey dew, leaf or fruit fall, loss of light etc.), unless the basis of the complaint is considered by the Tree Officer to be an overriding justification and no alternative management practice can be implemented.

13. Trees and Subsidence

51. A common concern for homeowners is potential foundation damage by tree roots. This type of damage only occurs in areas where the soil type is heavy, shrinkable clay which is prone to fluctuations in volume caused by changing soil moisture levels. There has been a lot of concern about tree roots and foundations in recent years. Much of this is unsubstantiated and the incidence of proven subsidence related claims against the Council remains low despite the level of tree cover and much of the area having clay soils.
52. Nevertheless, subsidence is a concern to householders and will remain at the forefront in the light of unpredictable and erratic weather patterns as a result of climate change. As such it presents a potential liability to the Council, with high financial consequences.
53. In order to reduce this risk the cyclical pruning schedule will take into consideration the management regime, which may result in selective removal of street tree stock in areas predisposed to building movement, where appropriate.
54. Alleged cases and claims of tree root damage are dealt with and co-ordinated by the Council's insurance department. The insurance department will seek advice from the Council's Tree Officer. This will usually involve a site inspection by the Tree Officer taking note of supporting documentation. A short report is passed back to the insurance department who will deal with any further communication between the agents. Any structural reports which are outside the expertise of the Tree Officer will be scrutinised by a Council Structural Engineer for comment to the Council's insurance department who will co-ordinate the Council's response on these matters.
55. Unwarranted claims based on poorly investigated or inaccurate evidence will be challenged.
56. Vegetation control is usually the first practical step that can be taken to alleviate homeowners concerns and there is increasing pressure to do so. The demands from insurance claims must be balanced with retaining the tree, denying liability and having to remove the tree to reduce the Council's liability and costs. For this reason there is an argument for a dedicated budget for vegetation control outside of the regular pruning schedule in subsidence related claims.

57. The Council will refer to the London Tree Officers 'A Risk Limitation Strategy for Tree Root Claims' – 3rd Edition Revised May 2008 (currently being updated) for authoritative advice when dealing with claims.

Policy 11

Respond to investigations for insurance claims within 4 working weeks.

Policy 12

To take appropriate action to remove the risk posed by a street tree as a result of proven subsidence.

4. Trees in Parks and Open Spaces

58. Trees are fundamental to the structure of parks and green spaces, not only for their importance to regular visitors, but also for their contribution to the overall environment of the area. Trees are a high value resource in parks that require proactive management in order to prosper and benefit the borough.
59. Populations of trees within different parks and green spaces are as variable as the character of the sites themselves. Management of park trees has to be planned on a site by site basis, promoting balance and character for each.
60. The inspection and maintenance of trees within parks and open spaces are the responsibility of the Council's partner contractors for the overall maintenance of all parks and open spaces: Quadron Services Ltd .
61. In addition to Health and Safety inspections and works that are generated as a result of such inspections, other issues often arise. For example crown overhang onto garden boundaries resulting in loss of light. These issues will be dealt with on a case by case basis, but as with street trees, will not necessarily result in any works being undertaken unless the Council consider there is a valid health and safety reason for doing so.
62. Consultation and notification of significant work to trees in parks will be by the use of notice boards, enabling residents advanced information.
63. Given the existing tree stock in most parks, there are limited opportunities for memorial planting within the Borough's parks. The structure and use of parks is important and appropriate management ensures minimal encroachment from planting beds on to open space. Within this structure, the Council will seek to find suitable sites for tree sponsorship in the form of informal nature conservation woodland.
64. Where appropriate the Council will promote the planting of fruit and nut trees within parks.

Policy 13

Seek to establish new areas of urban woodland that offer multiple benefits to residents, wildlife and the landscape.

Policy 14

Seek to create a varied and sustainable tree population in parks.

Policy 15

Seek to develop management plans for parks and open spaces to prevent tree population decline.

Policy 16

There will be a presumption against works being undertaken as a result of complaint unless there is an overriding health and safety reason.

Policy 17

Continue where appropriate to plant trees within parks depending on sufficient budget.

15. Trees on Housing Land

65. The Green Spaces Team is responsible for the provision of an effective tree management programme for trees on communal housing estate land via a Service Level Agreement (SLA). The SLA includes all relevant surveying, health & safety inspections, planned maintenance schedules, contract management, the processing of payments and the provision of emergency cover.
66. The SLA does not include trees located in front or rear gardens which are the responsibility of tenants and leaseholders. The handling of enquiries and complaints, as well as the management of access arrangements, is the direct responsibility of the Housing Estate Managers.
67. Housing land provides one of the most suitable locations for tree planting and allows for a greater choice of tree species to be used. Some sites offer scope for trees with a large size at maturity to be planted without the need for regular pruning.
68. Many estates contain significant tree populations, some with large specimens that have a long life expectancy and some with smaller ornamental and shorter lived species. However, on some sites there is a lack of either variety and as such, tree planting programmes will aim to address this issue.

Policy 18

Manage works to housing tree stock in accordance with existing Tree Strategy policies.

Policy 19

Seek to establish, create and improve existing areas of housing estate planting with a varied and sustainable tree population to the benefit of residents, wildlife and the landscape.

Amended version 2015

Policy 20

There will be a presumption against works to trees on housing estate land being undertaken as a result of complaint, unless there is an overriding health and safety reason.

16. Trees on Education and Community Services Sites

69. Schools owned by the Royal Borough of Kingston are managed locally and operate with devolved budgets. Management responsibility for trees rests at a local school level. Managers may use the services of the Borough's Tree Officer, under a Service Level Agreement, should they so wish.
70. Any annual Health and Safety inspections of school grounds are undertaken during the summer commissioned by the individual schools. Inspections cover trees posing a threat to children and other users of the site. Schools are to be encouraged to use this service.
71. The Council has responsibility for trees on land associated with Social Service establishments and those surrounding homes managed by Tenant Management Organisation. The Tree Officer inspects the trees and advises on works required. The works will be supervised on behalf of Social Services. Social Services then pay for any works from their budgets.

17. Woodlands, Nature Conservation and Biodiversity

72. Many of the woods in the Kingston area are now managed with nature conservation as a priority. Future management of woodlands must address the problems of neglect, which have afflicted many types of woodland nationally over the past 75 years or more. It must also take into account the multi-purpose objectives which woodlands today must fulfil.
73. Woodlands are inspected to identify any Health and Safety issues in areas where there are paths and where the boundary abuts roads or property.
74. Woodland management is a specialised subject that requires particular knowledge and expertise, with emphasis on nature conservation and biodiversity. The Council works in partnership with the Lower Mole Countryside Management Project on woodland and nature conservation sites within the Mole Valley catchments. The Project has an appropriate pool of skills and expertise and has the added value of undertaking all work with the help of volunteers. The practice of rotational coppicing will be applied as a woodland management technique along with the small scale production of charcoal.

75. Trees and scrub on nature conservation sites have a special role for the integrity of the site, and hence are managed for nature conservation and biodiversity. The trees, which include dead wood, nest holes, refuge for birds and the leaf litter of deciduous species, provide an invaluable and intricate contribution to the ecology of the site.
76. The tidy and 'lollipop' image of a street tree is entirely inappropriate for sites that are managed for nature conservation as are the non native planting schemes that tend to be the preference during the design stage. Likewise, there are few native species that lend themselves to the myriad of constraints that are found along the highway.

Policy 21

Ensure woodlands are managed with nature conservation and biodiversity as part of their main objectives. Intervention will only happen when there is a valid Health and Safety or conservation reason for it.

Policy 22

Natural regeneration will be supported on appropriate sites.

Policy 23

Where appropriate the Council will ensure standing dead and fallen wood is left on site unless there are sound conservation and / or safety reasons for its removal. Habitat pile construction from pruning and coppice will be undertaken to encourage biodiversity of sites.

Policy 24

Encourage community involvement within woodland management.

Policy 25

Encourage expansion of the urban woodland in appropriate locations ensuring the selection of species reflects the local woodland character.

Policy 26

The Council will manage woodland to fulfil its obligation as owners and to ensure the safety of people and property whilst remembering that woodlands are natural places in which the level of acceptable risk must be reflected.

18. Privately owned trees

77. A majority of the Borough's tree stock is located within privately owned property, gardens and communal grounds. These trees form a critical part of the Borough's local landscape and make a significant contribution to visual public amenity. This Tree Strategy is not primarily concerned with privately owned trees. The Council's policies on these trees are part of its planning and development control policies. This section is included for completeness and gives an overview of how the Council supports the management of these trees.

Trees and Development

78. The Council seeks to achieve successful and satisfactory retention of trees within new development in the Borough. Trees can occupy a significant part of a development site and can have a major influence on the design and layout of a new development. Poorly designed schemes in relation to trees may be resented by future occupiers and will place pressure for trees to receive excessive work or removal. The Council aims therefore to promote the use of good practice and place the consideration of trees at the front of the design process.

79. The Council has powers to impose conditions upon the grant of planning permission for development, to ensure that existing trees worthy of retention are protected and not damaged during and/or after construction. The revision of British Standard 5837:2012 *Trees in relation to design, demolition and construction - Recommendations* has improved the processes for protecting trees on development sites. The Council aims to fully utilise new guidance documents when determining planning applications through the use of conditions attached to planning permissions for new development, in order to ensure successful tree retention within the Borough.

Tree Preservation Orders and Trees in Conservation Areas

80. The Council has a statutory duty to protect trees, which make a significant contribution to public amenity, and has powers under the Town and Country Planning Act 1990 to regulate works to trees and prevent unnecessary felling or inappropriate pruning through the introduction of Tree Preservation Orders (TPO), the processing of tree work applications for TPO trees, and tree work notifications for trees situated within a Conservation Area (TCA). The Council aims to deal with all applications for consent to carry out tree works within the statutory deadlines, 8 weeks for trees subject to a TPO and 6 weeks for trees situated within a conservation area.

Resurvey and Updating of Existing Tree Preservation Orders

81. Local Planning Authorities are advised by Central Government to keep their TPO's under review by making full use of its variation and revocation powers in order to ensure their TPO's are up to date. The reasons why it may become important to vary or revoke a TPO are, for example, if an order was made before the implementation of later changes to the model order. Some TPO's were made in the 1940's and 1950's with many trees either missing or no longer warranting protection. Central Government have also recommended that Local Planning Authorities put in place a programme for reviewing its old area orders. The Council is currently undertaking a project of superseding its area Tree Preservation Orders.

The Making of New Tree Preservation Orders

82. The Council aims to continue making full use of its powers to introduce new tree preservation orders. A large number of new TPO's are made as a result of planning applications for new development, but the Council also receive a number of requests from local residents to protect individual or groups of trees which are considered important to the locality. Trees nominated for Tree Preservation Orders will be assessed carefully and consistently using systems to determine their suitability and visual public amenity value, and will be prioritised in order of expediency.

Enforcement of Unauthorised Tree Works

83. It is an offence to cut down; top; lop; prune; uproot; wilfully damage; wilfully destroy, or cause or permit the carrying out of any of the aforementioned activities to any tree to which a Tree preservation Order (TPO) relates or that falls within a Conservation Area, except with the written consent of the Local Authority (Council) and, where such consent is given subject to conditions, in accordance with those conditions. Anyone who is in contravention of a Tree Preservation Order or Conservation Area regulation is guilty of an offence and the Council will use its relevant statutory powers to enforce and where appropriate prosecute the perpetrators of unauthorised pruning or removal of protected trees.

19. Climate Adaptation and Resilience

84. There is a general consensus amongst experts that temperatures will increase, there will be more dramatic variations in weather events such as floods, storms, warmer, drier summers and warmer, wetter winters. Estimates suggest that by 2050 temperatures across the British Isles will have increased by 1.5 degree centigrade. There will be changes in the hydrological regime leading to a greater risk of flood from sea, rivers and surface water drainage.

85. Urban areas warm more than rural ones because buildings absorb heat. The concentration of buildings and urban areas leads to the formation of 'urban heat islands'. This is where the night time temperatures are higher, a restriction in winds to disperse pollutants and increased run-off from roads, pavement, and hard standing for cars.

86. Trees in urban situations play a significant role in the adaptation of climatic change. They can counter poor air quality by effectively 'locking up' pollutants in the biomass. Trees can be used to shade and cool buildings, and absorb excess rain water.

87. When changes in soil moisture occur below the foundation level of buildings it can lead to subsidence. Tree roots are often blamed for subsidence and therefore removed. A clearer understanding of the mechanism of damage and how it can be prevented is needed particularly if trees are to be sited close to buildings in order to benefit from their shading and cooling functions.

88. Many of our most notable tree-lined streets have tree populations that are mature to overmature. Such trees are vulnerable to climatic variations such as drought, disease and damage. An over-mature population of street trees tends to erode gradually over a number of years as individual trees decline and have to be removed. New trees should be introduced between the mature trees to ensure that there will be continuous tree cover in future years.

20. Community Engagement

89. It is important to communicate to the local community why changes and decisions are made, and to provide an opportunity for those to have involvement if they wish to do so. This may be by sponsoring or adopting a tree in their street, or by residents developing a group that could get involved in enhancing their local neighbourhood such as a Tree Warden Scheme.

90. The Council gets many requests for either a new tree to be planted or to replace a dead specimen. 'Adopt a Tree' is a positive initiative to enable the expansion of tree stock within the financial constraint of not having a dedicated tree planting budget. This situation is unlikely to change in the foreseeable future.

91. However, there are practical and statutory reasons why residents cannot plant trees of their own accord along the highway. 'Adopt a Tree' offers the resident the opportunity to request a tree is planted at an appropriate location, which may or may not be outside their property. The initiative could take one of two options. Option One: the resident will pay for a tree (from a species list supplied by the Tree Officer) to be sourced, planted and cared for, for the required 2 year maintenance period by the Council. Option Two: the resident will pay for a tree (from a species list supplied by the Tree Officer) to be sourced and planted by the Council, the resident will then care for the tree for two years after that it will be maintained in the 3 year cyclical maintenance programme by the Council. In either case if the tree dies it will not be automatically replaced without charge, as the reason for the death could be a result of environmental pressure which is outside the Council's or the resident's control.

92. The cost of 'Adopt a Tree' is not fixed and will respond to any changing circumstances. The current costs and processes will be published each year on the Council's website.

Policy 27

Every effort will be made to encourage initiatives such as 'Adopt a Tree'.

21. Pests and Diseases

93. In recent years, there has been a significant increase in findings of new pests and diseases affecting many of our most common tree species such as Horse Chestnut, Oak, Ash and London Plane (annex 4). The loss of such large trees would have a devastating impact as they provide a great number of environmental, social and economical benefits and are often the most prominent features in the landscape.
94. The Council receives and monitors the latest advice and management recommendations from the Forestry Commission (the government department responsible for the protection of Britain's forests and woodlands) and the London Tree Officers Association (LTOA). The LTOA working groups and forums allow the Council to monitor and consult with neighbouring London boroughs on relevant issues.
95. Regular surveys are carried out to determine the existence and extent of any pests and diseases in the Borough, or within neighbouring Councils.

Policy 28

An ongoing survey programme will be maintained, to identify and monitor threats and outbreaks of pests and diseases. Appropriate management of these pests and diseases will be within good arboricultural practice and taking into account the surrounding biodiversity.

Annex 1 - Cyclical pruning schedule

Ward	Financial year 2016-2017		Financial year 2017-2018		Financial year 2018-2019		Financial year 2019-2020		Financial year 2020-2021		Financial year 2021-2022	
	April - Aug	Sept - March	April - Aug	Sept - March	April - Aug	Sept - March	April - Aug	Sept - March	April - Aug	Sept - March	April - Aug	Sept - March
St James												
Chessington South												
Norbiton												
Berrylands												
Alexandra												
Coombe Vale												
Coombe Hill												
Canbury												
Surbiton Hill												
Beverley												
Tolworth & Hook Rise												
Old Malden												
Chessington North & Hook												
Grove												
St Marks												
Tudor												

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Annex 2 - Tree Strategy Policies

Policy 1

To ensure street trees are inspected by a suitably qualified person on a three-yearly basis and maintenance works commissioned as necessary

Policy 2

Requests for tree removal will be refused unless the tree is deemed to be in a hazardous condition subject to inspection by a Council Tree Officer.

Policy 3

On application for a vehicle cross-over the Tree Officer will be consulted for their view on amenity. If the tree is of high amenity value the application will normally be refused. Applicants have the right of appeal to their Neighbourhood Committee.

Policy 4

Promote public awareness of how trees are managed.

Policy 5

Aim to plant new street trees in appropriate locations; vacant tree pits taking priority.

Policy 6

Priority will be placed on the replacement of over mature tree stock, planting large growing species where appropriate.

Policy 7

Identify a dedicated tree planting budget when the opportunity arises.

Policy 8

Encourage sponsored planting through the Neighbourhood Committee Policy Statements.

Policy 9

An ongoing replacement/re-planting programme will be maintained, to identify new sites for street trees and counter the inevitable losses. This will be necessary in order to replenish the street tree stock and maintain planting at a constant level. It is vital that more trees are planted per year than those lost, as per government guidance.

Policy 10

There will be a presumption against the removal or pruning of trees which are healthy but subject to complaint (e.g. branch and root trespass, loss of TV/satellite signals, alleviation of bird mess, honey dew, leaf or fruit fall, loss

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of light etc) unless the basis of the complaint is considered by the Tree Officer to be an overriding justification and no alternative management practice can be implemented.

Policy 11

Respond to investigations for insurance claims within 4 working weeks.

Policy 12

To take appropriate action to remove the risk posed by a street tree as a result of proven subsidence.

Policy 13

Seek to establish new areas of urban woodland that offer multiple benefits to residents, wildlife and the landscape.

Policy 14

Seek to create a varied and sustainable tree population in parks.

Policy 15

Seek to develop management plans for parks and open spaces to prevent tree population decline.

Policy 16

There will be a presumption against works being undertaken as a result of complaint unless there is an overriding health and safety reason.

Policy 17

Continue where appropriate to plant trees within parks depending on sufficient budget.

Policy 18

Manage works to housing tree stock in accordance with existing Tree Strategy policies.

Policy 19

Seek to establish, create and improve existing areas of housing estate planting with a varied and sustainable tree population to the benefit of residents, wildlife and the landscape.

Policy 20

There will be a presumption against works to trees on housing estate land being undertaken as a result of complaint, unless there is an overriding health and safety reason.

Policy 21

Ensure woodlands are managed with nature conservation and biodiversity as part of the main objectives. Intervention will only happen when there is a valid Health and Safety or conservation reason for it.

Policy 22

Natural regeneration will be supported on appropriate sites.

Policy 23

Where appropriate the Council will ensure standing dead and fallen wood is left on site unless there are sound conservation and / or safety reasons for its removal. Habitat pile construction from pruning and coppice will be undertaken to encourage site biodiversity.

Policy 24

Encourage community involvement within woodland management.

Policy 25

Encourage expansion of the urban woodland in appropriate locations ensuring selection of species reflects the local woodland character.

Policy 26

The Council will manage woodland to fulfil its obligation as owners to ensure safety of people and property whilst remembering that woodlands are natural places in which the level of acceptable risk must be reflected.

Policy 27

Every effort will be made to encourage initiatives such as 'Adopt a Tree'.

Annex 3 – Highways tree losses

Neighbourhood	Ward	2010/11		2011/12		2012/13		2013/14		Vacant pits as of March 2014 (no pit construction required)
		Lost	Planted	Lost	Planted	Lost	Planted	Lost	Planted	
Kingston Town	Canbury	9	6	3	0	9	0	14	23	2
	Grove	3	9	7	0	4	0	26	10	0
	Norbiton	3	1	2	0	6	0	12	12	0
	Tudor	4	16	14	0	2	0	12	41	1
	TOTAL	19	32	26	0	21	0	64	86	3
Maldens and Coombe	Beverley	33	6	1	0	12	6	15	28	32
	Coombe Hill	15	0	8	0	9	6	19	14	116
	Coombe Vale	5	5	3	0	14	5	19	48	187
	Old Malden	4	3	35	0	5	9	39	51	384
	St James	2	2	2	0	12	6	23	14	158
TOTAL	59	16	49	0	52	32	115	155	877	
South of the Borough	Chessington North & Hook	2	0	14	7	3	16	9	7	178
	Chessington South	4	3	10	3	11	12	12	14	59
	Tolworth & Hook Rise	23	2	3	8	11	15	18	23	431
TOTAL	29	5	27	18	25	43	39	44	668	
Surbiton	Alexandra	3	0	4	0	20	0	18	27	458
	Berrylands	3	2	1	0	18	0	19	25	196
	St Marks	5	0	10	9	1	0	11	24	36
	Surbiton Hill	18	7	3	0	6	7	29	23	27
TOTAL	29	9	18	9	45	7	77	99	717	
TOTAL	136	62	120	27	143	82	295	384	2265	

Annex 4 – Tree pests and diseases

Oak Processionary Moth (*Thaumetopoea processionea*) – OPM

OPM was first identified in the UK in 2006 on trees at a housing estate in the London Borough of Richmond. Since then, the moth has been steadily breeding in Oak trees in several locations across five London Boroughs in the area. As of 2013, OPM has been found in the London Boroughs of Wandsworth, Merton, Kensington & Chelsea, Hammersmith & Fulham, Brent, Ealing, Hounslow, Kingston upon Thames, Croydon and Bromley. It is thought that the caterpillars found in Bromley/Croydon are likely to be a separate, new outbreak rather than an extension of the west London outbreak.

The caterpillars post two main threats. One to the oak trees themselves as large populations can strip whole oak trees bare of leaves, leaving them vulnerable to attack by other pests and diseases, and less able to withstand adverse environmental factors such as drought and flood. The other threat is the thousands of tiny hairs on each caterpillar that contain a substance called thaumetopoein which can cause irritation or allergic reaction to humans and animals.

The Forestry Commission announced in 2011 that it is no longer possible to eradicate the West and South-West London outbreak and the ongoing objective is to prevent or slow its spread to keep its population as low as possible. Surveys of the affected London Boroughs have been carried out each spring and summer since the outbreak was first discovered, and the larvae and nests found have been removed.

Ash dieback (*Chalara fraxinea*)

Chalara was first identified in the UK in February 2012 in a consignment of infected trees being sent from a nursery in the Netherlands to a nursery in Buckinghamshire. It is caused by a fungus called *Chalara fraxinea* and once Ash trees are infected, it results in the loss of leaves, crown dieback and usually leads to tree death.

Chalara is being treated as a quarantine pest under national emergency measures, banning the importing/exporting and movement of Ash trees around the country. As of March 2014, *Chalara* has been found on 639 sites in a variety of locations across Britain. Where infection is found in mature trees, the current advice is to leave them where they are as infection does not spread directly between trees, but only via the leaf litter.

The scientific advice is that it won't be possible to eradicate this disease now that we have discovered it in mature trees in Britain as a small number of cases of *Chalara* have been confirmed which did not appear to

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have any association with recently supplied nursery stock. There are currently no confirmed cases of the disease in the Kingston area, with Dorking being the nearest infected site.

Massaria Disease of Plane (*Splanchnonema platani*)

Massaria is a recent problem affecting Plane trees (specifically *Platanus X hispanica*), which causes infected branches to decline, die and fall. Apart from a few isolated reports of massaria on plane in the UK, massaria has only been recorded in central London since 2007. The fungus appears to take advantage of branches predisposed by drought stress.

The LTOA has developed a practical management guide for tree managers providing a balanced and proportionate response to the problem because the unnecessary pruning or felling of London Plane trees would be significantly detrimental to both the tree and human populations of London. Symptoms of the disease are not typically seen in trees that are subject to regular pruning, such as street tree pollards.

Horse chestnut bleeding canker (*Pseudomonas syringae* pv *aesculi*)

In recent years, the number of reports of Horse Chestnut trees with bleeding cankers has increased markedly; the Netherlands, Belgium, France and Germany are also experiencing a similar upsurge.

The cankers are caused by a pathogen called *Pseudomonas syringae* pv *aesculi*. Early symptoms tend to be scattered drops of rusty red/brown or almost black, liquid which ooze from patches of dying bark on the trunk or main branches of infected trees.

Trees of all ages have been affected by the disease, but the impact on the environment is particularly noticeable when large, mature trees are infected and disfigured by the disease. Younger trees (10-30 years old) are at greater risk and can succumb to the disease in just a few years as the smaller diameter of their trunks means that they can be girdled more quickly.

Horse chestnut leaf miner (*Cameraria ohridella*)

The Horse Chestnut leaf miner was first found established in Wimbledon in 2002. The moth has spread rapidly and is now found across most of south-central England, East Anglia and the Midlands.

Despite the poor appearance of Horse Chestnut trees infested with leaf miner, there is no evidence that damage by the moth leads to a decline in tree health, the development of dieback, or tree death. Trees survive repeated infestations and re-flush normally in the following year.

It appears that most of the damage caused by the moth occurs too late in the growing season to greatly affect tree performance. Consequently, there is no reason to fell and remove trees just because they are attacked by leaf miner.