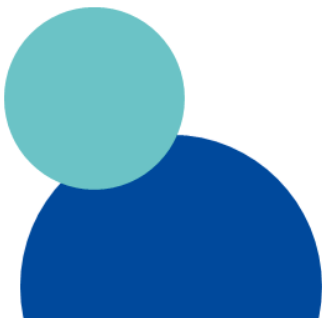




Waverley Borough Council

Tree and Woodland Policy & Action Plan

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Information & Governance

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[Please advise the Corporate Policy Team of any Strategies, Policies and Procedures which need to be added to the Corporate Documents Review Register.]

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3. Introduction

3.1 Context

It has been 17 years since Waverley adopted its own Tree Risk Management Guide (TRMG). The TRMG is reviewed and updated every two years. Since this guide's main focus was on risk management, the need for a more comprehensive approach to tree and woodland management, including planting, has been made more urgent by the Council's declaration of a Climate Emergency in 2019 and the subsequent production of a Climate Change Action Plan. The Tree and Woodland Policy is intended to be a "living" and adaptable document that will be reviewed and updated on a regular basis or when there is a requirement to do so.

Although not a Planning document, it is important that this Tree and Woodland Policy feeds into or compliments other Strategies, Policies and guidelines across the Council and vice versa, such as:

- Local Plan Part 1; Policies NE 1 & 2, Local Plan Part 2; policies DM 1 and 11 and the Planning Tree Guidelines (2018).
- Biodiversity Policy and Action Plan (draft)
- Climate Emergency Action Plan
- Pesticide Policy
- Woodland management plans
- Tree Risk Management Framework (was TRMG)
- Green Spaces Strategy (yet to be developed)

3.2 Trees in the borough

The benefits of trees and hedgerows are many. Environmental benefits include absorbing carbon dioxide, improving air quality, reducing flooding and noise levels, providing shade, shelter and also wildlife habitats and corridors. Aesthetic benefits that make our environment more enjoyable, as trees contribute to local character, making up an important part of the historic environment, enhancing privacy and adding greenery and colour. These factors all help to contribute to better mental and physical health.

Trees have historically been an intrinsic part of the Waverley area, both individual trees in Parks and other public open spaces as well as private gardens and woods and copses and in the form of hedgerows. The Borough of Waverley has one of the highest percentages of tree canopy cover in England, with an estimated 34% compared with a national average of around 16%.

The Council itself owns and manages in the region of 2000 Hectares of land that contains a significant number of trees and woodlands and also manages approximately 4500 social housing properties many of which have trees in gardens. Although the Policy is a document to guide the Council's own approach to tree

preservation, planting and management, it is anticipated that the Policy will present the Council as 'leading by example'. In this respect, the Council is also part of a wider network of other landowners and organisations where ideas and best practice are shared. As well as sharing its practice, the Council will develop ways of influencing others across the community in Waverley to preserve and plant trees and manage woodland effectively, consistent with our recognition of the climate emergency and the aim of a net-zero carbon Waverley.

4. Benefits of Trees and Woodlands

4.1 General benefits

The benefits of trees are well documented. They contribute to many social, environmental, economic and health benefits. They also produce oxygen and "capture" up carbon dioxide. Ensuring appropriate retention, maintenance and planting of trees within the Borough is vital to continue to provide these benefits, helping the climate change "proofing" of the Borough, to meet the Council's environmental aims and to ensure the Borough remains a desirable area to live and work in.

4.2 Climate change benefits

Climate change is one of the greatest challenges mankind faces and the Council's climate emergency declaration in 2019 committed it to work towards the Council's functions being carbon neutral by 2030. Tree retention and planting as well as active woodland management can help to some extent to meet that challenge. In recent decades, acceptance of the importance of tree retention and planting, for the multiple benefits they provide, has increased, particularly because of the extremes of weather that climate change brings and the continued loss of biodiversity.

4.3 Specific benefits

- Absorbing carbon dioxide, the major climate change (greenhouse) gas, reducing levels of this gas in the atmosphere
- With their canopies they intercept rain, delaying rainfall onto hard surfaces and into the mains drainage systems, this also helps reducing soil erosion and surface water runoff and flooding caused by heavy rain
- Providing shelter and shading from wind, rain and sun and reduce temperatures, especially in urban areas as well as the temperatures of watercourses
- Improving air quality by, most importantly, producing oxygen but also by removing air pollutants, such as ozone and nitrous oxides, and particulate matter such as soot and smoke

- Reducing noise levels, particularly noise from traffic
- Providing habitat for wildlife and being a vital component of the Borough's green infrastructure
- They are a significant feature of the character of many built-up areas, reinforcing their scale and proportion and enhancing their attractiveness
- In built-up areas, an established tree stock can result in higher property prices
- Screening undesirable features, enhance privacy and add greenery and colour
- Reducing anti-social behaviour in certain circumstances

All these factors combined help promote the health and well-being of residents, positively impacting on people's lives and on the borough's biodiversity.

5. Tree & Woodland Policy Vision, Aims and Objectives

5.1 Vision Statement

To protect, conserve, manage and increase Tree and Woodland cover on Council managed land in the Borough, for the benefit and safe enjoyment of residents whilst helping to mitigate the impact of climate change and providing and improving habitats for wildlife which rely on trees and woodland.

5.2 Aims & Objectives

The Council as landowner, is formalising its approach to the management of its existing trees/woods and hedgerows in this new Policy, updating its approach to Tree Risk Management and incorporating that of planting and establishment of new trees, either through natural re-generation or actual planting of copses, in woodlands, hedgerows and, where appropriate, the establishment of community orchards.

We aim to replace trees lost for a variety of reasons in formal features such as Avenues and Parks, to ensure continuation of these landscape assets and to establish new trees in amenity areas in (new) Council housing developments.

In respect of planting trees, Waverley Borough Council aims to combine suitable land availability, planting stock availability, resource availability, community support and sensible timescales, to achieve as much as is reasonably possible within those constraints, to increase even further its already extensive tree canopy cover.

The Policy has the following main aims and objectives as set out (Appendix 1; Action Plan):

1. Canopy cover – Using external expertise and in co-operation with Surrey County Council and other Surrey Boroughs and Districts, identify more accurately the extent of the Council's tree stock in terms of canopy cover and its current and potential capacity as a carbon sink
2. Council trees and woodlands – protect, retain and manage trees and woodlands in a safe condition to ensure a continuation of canopy cover of healthy trees resistant to pest & diseases and climate change and to reduce air pollution whilst preventing death, injury or unacceptable damage caused by trees (Appendix 2). Resist demands for pruning or felling of Council owned trees for reasons of non-actionable nuisance (perceived or otherwise) from Tenants or adjacent landowners (Appendix 3)

3. Climate adaptation – increase the age and species diversity of the tree stock to provide resistance to the effects of climate change; maintain and keep trees healthy, as much as is within our control, in order that they can achieve their full potential thus ensuring that the trees in Waverley are resilient to the impacts of climate change and provide the maximum role in mitigating its effects
4. Improve biodiversity across the Borough; - by protecting and the appropriate management of existing (ancient) woodlands and ancient/veteran trees; - by selecting trees for new planting which have wildlife value, particularly in semi-natural areas and by ensuring that tree planting does not compromise or adversely affect other priority habitats
5. Tree planting – identify sites owned by the Council which are suitable for planting individual trees, hedgerows, orchards and copses/woods, avoiding locations with constraints such as high levels of existing biodiversity or demands such as the need for the provision of social Housing. Where mature trees cannot be accommodated or improvements for wildlife connectivity are required, the planting or improvement of hedgerows should be considered.
6. Identify the kinds of planting and trees that might be suitable, including species choice which considers the level of carbon sequestration potential, impact of climate/temperature change over the life of the chosen species, resilience against current and the anticipated arrival of pests and diseases (Appendix 4)
7. WBC will engage with; partners, public and landowners to raise awareness of the Policy objectives and of good arboricultural and silvicultural management practices
8. Funding – Identification of funding that might be available from the Council's own budget as well as Government grants through the Forestry Commission and S106, CIL and/or SANGS money. In addition, consideration to be given to crowd funding opportunities, site adoption by local communities of orchards or forest gardens and otherwise linking with community initiatives such as Roots for the Future and COPSE
9. Monitor progress – record and report net tree gain on an annual basis and reassess canopy cover every ten years from 2031

6. Summary of policy statements supporting the Tree & Woodland Policy

6.1 Table 1. Summary of policy statements

Policy Statement No.	Policy Statement
<i>Policy Statement 1</i>	The Council will ensure that its tree and woodland populations are appropriately managed in a sustainable manner and in accordance with the objectives and guidance set out in Woodland Management Plans as approved by the Forestry Commission.
<i>Policy Statement 2</i>	The Council will maintain its trees and woodlands in accordance with its obligations, with particular attention for the sequestration of carbon in addition to the safety of people and property.
<i>Policy Statement 3</i>	The pruning or removal of trees, woodlands and hedgerows shall be resisted (Appendix 3), unless there are sound Biodiversity, Arboricultural or Silvicultural reasons and in accordance with approved management plans.
<i>Policy Statement 4</i>	The Council will, in combination with SCC, make an assessment of extent and condition of canopy cover in Waverley and will endeavour to extend this.
<i>Policy Statement 5</i>	The Council when managing its existing tree stock, aims to increase the age and species diversity, to provide resistance to climate change; to maintain and keep trees healthy, as much as is within our control, in order that they can achieve their full potential and increase the likelihood that they are resilient and able to mitigate the effects as much as possible.
<i>Policy Statement 6</i>	The Council will continue to manage Pests and Diseases using a risk-based approach consistent with Waverley's Pesticides Policy and monitor new pathogens in liaison with DEFRA, FERA and the Forestry Commission.
<i>Policy Statement 7</i>	When purchasing tree planting stock, the Council will ensure that this is from certified UK sources and the Council's contractors are contract bound to apply current biosecurity measures to limit spread of P&D.

Policy Statement No.	Policy Statement
<i>Policy Statement 8</i>	The Council will conserve and improve biodiversity across the Borough; by protecting and undertaking the appropriate management of existing (ancient) woodlands and ancient/veteran trees; by selecting trees for new planting which have wildlife value and not compromise or adversely affect other priority habitats.
<i>Policy Statement 9</i>	The Council aims to expand its tree and woodland populations by planting new and replacement trees, woodlands and hedgerows, or by positively encouraging natural regeneration, and focusing on appropriate tree species compatible with the conservation of other important habitats by developing site specific tree planting plans.
<i>Policy Statement 10</i>	The Council will encourage and enable greater awareness and better understanding of tree and woodland management and the benefits of trees in general, so that residents and communities are engaged and can support Council activities.
<i>Policy Statement 11</i>	The Council will explore the valuation of its tree and woodland populations to try to quantify their value as natural capital and ensure the management and maintenance of tree stock is done using the most environmentally positive and economically viable methods and in accordance with best practice.
<i>Policy Statement 12</i>	The Council will use whatever mechanisms are available to it, to ensure that third parties maintaining council owned land, comply with the council's policy. Where the council maintains land on behalf of a third party, will ensure that, as far as possible, the principles of this policy are delivered.

7. Trees in Waverley

7.1 Tree coverage

The Council is responsible for roughly 8% of the land area within the Waverley Borough area through both freehold and leasehold arrangements.

On that land, the Council is responsible for a significant number of trees and woodlands growing in a wide range of locations e.g., in parks, recreation grounds, sports facilities, Housing areas, cemeteries & churchyards, nature reserves, Sites of Specific Scientific Interest, (SSSI), Special Protection Areas (SPA), common land and woodlands.

Waverley contains numerous parks and other open spaces. These areas provide the opportunity for people to experience trees of various forms, types and ages in locally relatively dense urban environments.

There are extensive networks of woodlands and groups of trees across the Borough in both private and public ownership. These are remnants of what are likely to have been larger wooded areas. They form significant and distinctive landscape features and help to define the landscape character of Waverley.

Although not the responsibility of WBC, Street trees have an important role in helping to define the character of many urban areas, enhancing the street scene and softening the hard urban environment as well as providing a barrier to noise and pollution and we will do all within our power to support Surrey County Council as the Highway Authority, to promote and appropriately manage street trees.

7.2 Historical tree and woodland management

Traditionally, woodlands were managed in the main because they produced materials for building, fencing, tools, firewood/charcoal, animal fodder and a host of other purposes. They were also the habitat for deer and other wildlife which, to a greater or lesser extent, were also “harvested”. As a result, woods became locally very diverse both in tree and plant species, age range and density and consequently, also very diverse in the biodiversity they supported.

Over the past century, mainly because of the availability of other materials and loss of manual labour, many woods have become under-managed or even unmanaged and biodiversity has dropped significantly.

Nowadays, the general public often sees management in the form of thinning or felling, even when this is done in a sustainable way, as negative. This is partly because our largely urban populations are not used to such activities and many people feel that it is unnatural to manage woods and feel they need to be left to their own devices.

Unfortunately, this is not a sensible approach and even though we may not need the woodland products in the same way we used to, not managing our relatively small areas of woodland will only cause deterioration, poor carbon sequestration capacity and poor habitat outcomes.

An element of public engagement and education will be required when planning to carry out more extensive management works, specific to the locality of a particular site but also in general via the Council's website.

Management of individual trees in Waverley has been and will be largely confined to safety related work or where significant nuisance is an issue, including the impact trees can have in causing damage to buildings and structures.

7.3 Current general management.

With the application of best practice and sensible pro-active management of tree populations, especially woodlands, there is less need to carry out frequent safety inspections. Conversely, if there is little or no routine management this will not only negatively affect biodiversity, but tree safety inspections won't necessarily protect the Council from claims of negligence in the case of tree failure.

Routine tree/woodland management and tree safety should be inextricably linked. If there is no routine management, it may be impossible to achieve adequate levels of safety.

By way of example, in a dense, "natural" woodland adjacent to a road, the individual trees may technically be healthy, but it is not satisfactory to leave tall, closely spaced trees to sort themselves out, as there is a higher-than-average risk of such trees falling regardless. When carrying out tree safety inspections in these circumstances, it is almost impossible to decide which trees are safe and which are not.

There are at present (2021) still many examples of such situations on Waverley land. Similarly, even-aged groups of trees or Avenues often contain several trees of poor form or structure which can only be retained in relative safety by carrying out potentially extensive (and expensive!) pruning works which are likely to need repeating on a regular basis. In these circumstances, although potentially controversial, gradual removal and replacement is often likely to be the more sensible approach.

Practical management will therefore almost always involve the removal of some trees from time to time and this should not be prevented by public attitude/reluctance, insufficient funding or inertia. All tree populations are dynamic rather than static and removal of trees, as necessary, is an essential part of management. Failure to manage trees in this way will not only shift the cost from routine management to tree risk management, in the long term it will also result in increased costs (larger trees in unsuitable locations and/or of poor form having to be dealt with instead of when they

were still small). In addition, such approach will increase the risks associated with trees, increase bad publicity and also result in lower amenity values in the long term.

Staff responsible for management of Waverley land which include its tree populations (whether individual trees or woodlands) should in the first instance concentrate on general tree management principles. This should take account of the main purpose and priorities of those sites and managers should develop a purpose statement for those populations which needs to include proposals for routine management. Such proposals or principles will then form the basis of work specifications and planning which in turn, will assist those Officers in bidding for- or planning of -budgets.

Tree safety inspections (and resultant works) will be done in tandem with routine management but will, over time, become more straightforward, less time consuming and likely to cost less.

Details of how the Council manages the risk potential of trees are set out in the Tree Risk Management Framework (Appendix 2)

7.4 Woodland Management

It is not clear how trees and woodlands in England will respond to climate change, but this should not be used as a reason for inactivity. While mature woodland represents a large carbon store and carrying out some management (i.e., felling a proportion of the trees) is likely to result in net carbon emissions over the short term, there are longer term benefits through such action beyond the financial benefits to the woodland owner, local employment opportunities and community engagement.

As previously indicated, the consequences of not carrying such work, results in dense stands of trees where individual specimen do not achieve their natural size and potential and they also tend to die at a much earlier age. This is all apart from the fact that they are much less resilient to high winds and suffer from uprooting or stem breakage. By thinning out such woods, better shaped trees as well as older/veteran type trees, will be able to survive and thrive considerably longer and also be able to store much more carbon than several trees within the same surface area can.

Management is also required to bring light to the woodland floor to allow high quality habitat to develop, while it also promotes natural regeneration and allows adaptation to the changing climate. In woodland of limited species diversity, management also provides the opportunity to introduce species appropriate to the woodland that will enhance its resilience to climate change and pest and disease outbreaks. So, as well as a wide range of species and resilient genetic make-up within those species in our planted woodland, we sometimes need to manipulate the tree stock in our natural and managed woodlands to make them more resilient to the climate of the future.

Making choices about how we manage our woodland with a view to a climate that will be quite different to the one we currently have, is essential for their future resilience and continued biodiversity.

The Council, in conjunction with the Forestry Commission, is in the process of having management plans written for all wooded sites under its control and this project should be completed by the middle of 2022.

Key factors in appropriate woodland management are to:

- Complete the process of establishing management plans for its woodland areas and keep those plans up to date
- Manage the woodlands on a sustainable basis
- Maintain continuous tree cover where appropriate
- Identify potential new sites for woodlands and encourage their creation adjoining existing woodlands and where appropriate making full use of natural regeneration
- Maintain and expand decaying woodland habitats, especially standing deadwood, where safe to do so, essential for the functioning of woodland ecosystems

Policy Statement 1

The Council will ensure that its tree and woodland populations are appropriately managed in a sustainable manner and in accordance with the objectives and guidance set out in Woodland Management Plans as approved by the Forestry Commission

7.5 Trees and nuisance

Whilst it is recognized that trees have many benefits, it is inevitable that in some cases their presence, directly or indirectly, cause concerns or nuisance to individual residents. Often such concerns, when viewed in a wider context, do not warrant the Council to either prune or fell trees as this would not be required by law or even considered reasonable especially considering similar situations elsewhere in the Waverley area or indeed nationally.

There is a reasonable expectation that residents, when deciding to buy a property adjacent to any land with either individual trees or woodland situated on it, take account of this presence and its potential implications, as a material consideration.

This is not dissimilar to the way one would consider the location in relation to nearby amenities, schools, transport infrastructure or indeed nuisance factors such as noisy neighbours or traffic and smelly industries.

This is important since trees, if not fully mature, will continue to grow and the Council as landowner, is unlikely to be able or willing to address loss of (sun) light, a loss of view or other nuisance factors (perceived or otherwise), because of those trees. Indeed, the Council has declared a climate emergency and needs trees to grow to their full potential to assist in capturing carbon dioxide.

Policy Statement 2

The Council will maintain its trees and woodlands in accordance with its obligations, with particular attention for the sequestration of carbon in addition to the safety of people and property (Appendix 2).

Policy Statement 3

The pruning or removal of trees and woodlands shall be resisted (Appendix 3), unless there are sound Biodiversity, Arboricultural or Silvicultural reasons and in accordance with approved management plans.

8. Canopy Cover

8.1 What is Canopy Cover

Canopy cover is a useful measure of the proportion of an area which is covered by the canopy of a tree. In terms of the climate change agenda, as well as for other matters such as air quality, it is a more meaningful measure than absolute numbers of trees.

8.2 Assessing Canopy Cover

The Council will assess the Borough's tree canopy cover (TCC) in greater detail, for the benefits they provide by using tools such as I-Tree Eco and I-Tree Canopy (budgets permitting) and subsequently re-measure whenever appropriate. I-Tree Eco is currently designed to provide estimates of:

- (Urban) woodland structure; species composition, number of trees, tree density, tree health
- Pollution reduction; hourly amount of pollution removed by the urban forest in particular, and associated percent air quality improvement throughout a year. Pollution removal is calculated for ozone, Sulphur dioxide, nitrogen dioxide, carbon monoxide and particulate matter 2.5 (<2.5 microns)
- Public health impacts; health incidence reduction and economic benefit based on the effect of trees on air quality improvement (figures for the US only)
- Carbon; total carbon stored and net carbon annually sequestered by trees
- Energy Effects; effects of trees on building energy use and consequent effects on carbon dioxide emissions from power plants
- Avoided runoff; yearly avoided runoff attributed to trees summarised by tree species or strata
- Forecasting; models tree and forest growth over time; considers factors like mortality rates, tree planting inputs, pest and disease impacts and storm effects. Some ecosystem services including carbon and pollution benefits are also forecasted
- Bio-emissions; hourly urban forest volatile organic compound emissions and the relative impact of tree species on net ozone and carbon monoxide formation throughout the year

- Values; compensatory value of the forest, as well as the estimated economic value of ecosystem services
- Potential pest impacts; based on host susceptibility, pest/disease range and tree structural value

Policy Statement 4

The Council will, in combination with SCC, make an assessment of extent and condition of canopy cover in Waverley and will endeavour to extend this.

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9. Climate change; impact on trees

9.1 Climate Change

The Tree and Woodland Policy is important in how it can work in collaboration with the Climate Emergency Action Plan. Trees absorb carbon dioxide and can therefore help in sequestering the Council's unavoidable emissions.

However, estimating the contribution that a tree will make to reducing carbon emissions is difficult, and can depend on its species, size and maturity. A rule of thumb often used is that a tree will absorb one tonne of carbon over an assumed lifespan of 100 years. This is only an approximate measure. Clearly, tree and woodland management and new planting can only be part of a much wider response to reducing carbon emissions.

It is becoming increasingly important for trees to form an integral part of any area for the multiple benefits they provide. In order to climate proof our urban areas in particular, we need to assess the species make-up of our tree stock and work towards a greater diversity of tree species as the effects of climate change are not clear in terms of species survival.

9.2 Likely impacts of climate change on England's existing trees and woodlands

There is considerable uncertainty about how trees and woodlands in England will respond to climate change, but this is not a reason not to act now, since research and experience is informing us that the following impacts are likely.

- The current range of broadleaf species, assuming appropriate species and origin/provenance are or have been used, will most likely remain suitable for woodlands across much of England. Towards the end of the century, southern and eastern England are likely to be the exception
- Existing conifer stands are likely to reach maturity before serious direct impact of climate change, although this does not account, for instance, for new pests and diseases
- Where water is not a limiting factor, tree growth rates for most species are predicted to increase as a result of longer growing seasons, increased temperature, and the rising level of CO₂
- The impacts of climate change are likely to be first seen with declining tree health in some species and increasingly difficult new tree establishment and increased mortality. As climate change progresses, some mature trees are very likely to die because of both direct and indirect impacts

- Even where the composition of the tree canopy of woodlands remains unchanged, the composition, structure and character of the ground flora may change significantly. It is very likely that climate change will have serious impacts on drought sensitive tree species on shallow free-draining soils, particularly in southern and eastern England
- Extreme rainfall is likely to cause flooding and the current woodland access and drainage network may be inadequate
- A higher frequency of winter gales leading to increased levels of damage and wind blow
- Wildfires are almost certain to become an increasing factor affecting the condition and longevity of some woods, especially those adjacent to heathland and similar areas
- Tree pests and diseases, both those present in the UK and those that may be introduced, are likely to remain a greater threat to woodlands in the immediate future than the direct effects of climate change, (source: Forestry Commission (FC)).

Policy Statement 5

The Council when managing its existing tree stock, aims to increase the age and species diversity, to provide resistance to climate change; to maintain and keep trees healthy, as much as is within our control, in order that they can achieve their full potential and increase the likelihood that they are resilient and able to mitigate the effects as much as possible.

10. Pests, diseases and animals; impact on trees

10.1 Tree Pests & Diseases in the UK

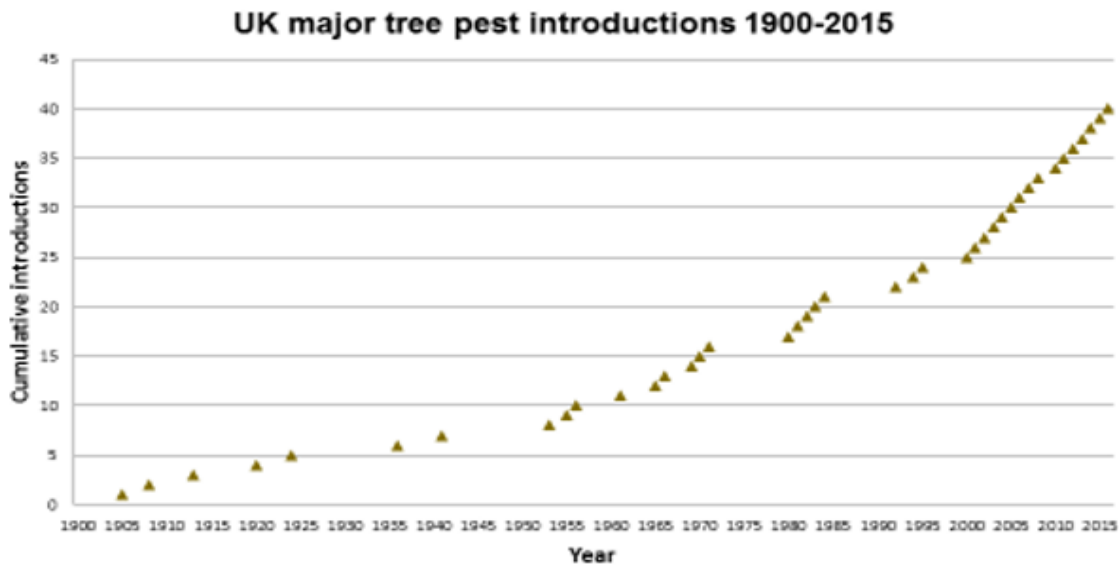
Tree pests and diseases, both those present in the UK and especially those that may be introduced, are likely to remain a greater threat to woodlands in the immediate future than the direct effects of climate change.

It is recognized that, in the natural environment, “healthy” soils and many fungi and mycorrhizae are not just beneficial but are actually essential to trees and their survival.

However, the damage to trees, woods and forests from some insect pests and organisms such as bacteria and fungi can be significant. The rapid increase in movements of goods and people between countries has increased the risk of spreading pests and diseases. They can travel hidden in plants, plant products, packaging, wood, vehicles and holidaymakers’ luggage - even in the soil carried on shoes. Some of these pests and diseases do little harm in their native environments, where predators, environmental factors and co-development with their host plants keep them in check. However, they can cause significant damage to trees and plants in other countries where those limiting factors are not present. Some single species of insect, fungus or bacterium can damage or kill many different plant species, including trees. As well as causing economic losses for the forestry, timber and plant-based industries, they can disrupt other sectors, such as tourism, and threaten woodland biodiversity, ecosystems, native species and, by implication, the potential for carbon sequestration.

The threat to the UK’s plants and trees is real and increasing, 10.2 Chart 1. below shows the trend over the past 115 years, (source: FC).

10.2 Chart 1. UK tree pest introductions



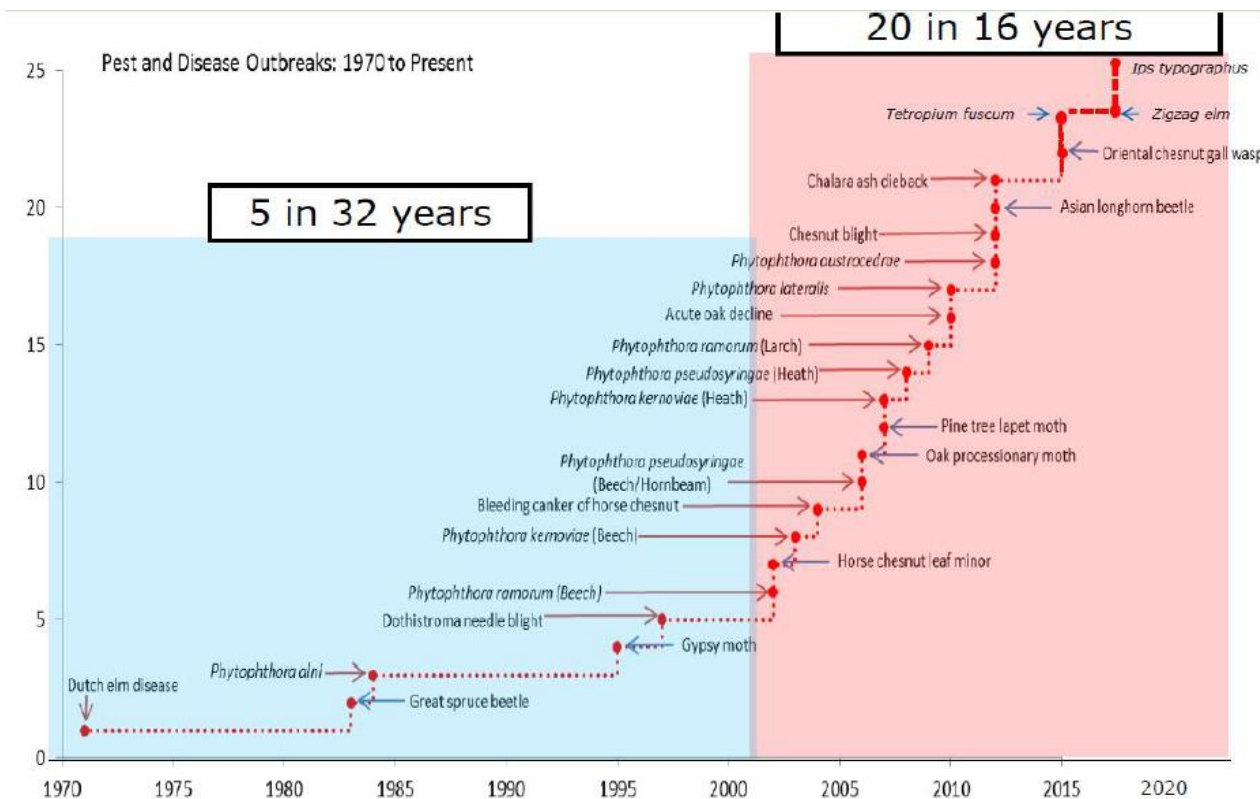
With globalisation in trade and travel, we have seen an increased volume and diversity of plants and plant products entering the UK. Since 1999 UK imports of live plants and plant material has increased by 71% (source Forest Research).

Pests and disease introductions because of global movement of goods have resulted in a significant detrimental impact on a number of species within the UK (see also Appendix 4). An appropriate diversity of tree species will therefore also help to ensure that canopy cover is better protected should a pest or disease affect a particular genus or species

10.3 Main current pest and disease threats in the Borough

As shown below 10.4 Chart 2, the trend of new pests and diseases emerging, is rapidly increasing, (source FC). These carry with them varying associated impacts. Oak Processionary Moth (OPM) and Ash Dieback (ADB) are the main pests and diseases at present which the Council has and will be required to respond to. OPM and ADB have been in the Country for some years and despite Government attempts to eradicate or control, they have continued to spread and are now spreading exponentially across the Country.

10.4 Chart 2. Pest and Disease Outbreaks



10.4.1 Oak Processionary Moth

OPM caterpillars are a pest and they can defoliate Oak trees, if this happens year on year, the trees can decline and die as a result. More significant though are the health impacts of the urticating/toxic hairs shed by the caterpillars which can cause significant skin irritations in people and animals, as well as respiratory problems and tongue necrosis in dogs and grazing animals such as horses and cattle. The hairs/skins of these caterpillars take many years to disintegrate and, when removing nests from trees, all material is treated as hazardous waste similar to asbestos.

At the moment the pest is subject to a Government Plant Health Notice which means that any land/tree owner where OPM is found is legally obliged to eradicate the pest from any tree on their landholding, even in remote areas.

The Forestry Commission (FC) have extended their programme of moth trapping (purely for purposes of monitoring the spread) around a much wider area around London, now including the Northern parts of Waverley and have found moths in traps within the Borough and it is clear that OPM is spreading year on year. Officers have been pro-actively monitoring the progress of OPM in conjunction with the Forestry Commission through the use of Pheromone trapping and visual surveys since 2016.

Officers are working together with the Forestry Commission (FC) and DEFRA and with colleagues in other Surrey Boroughs and Districts to decide upon the best ways of tackling the pest and work is being carried in-house on a risk based approach of monitoring and control by identifying sites where any OPM infestation is likely to have significant impact such as Oak trees in or over children's play areas, in or over residents' gardens and School grounds etc. Since 2019 all pheromone traps have been located in these High Risk areas/sites to allow us to target survey work and possible treatment most economically. Since 2020, OPM (nests) have been found on several sites within the Borough but, so far, have only found two Council trees affected.

DEFRA and the FC are currently going through a process of consulting with stakeholders including Public Health England to obtain more factual information on the impact on human and animal health and to develop best practice advice for managing this pest.

10.4.2 Ash Dieback

ADB is a disease of ash trees caused by a fungus which causes leaf loss, crown dieback and bark lesions in affected trees. Once a tree is infected the disease is usually fatal; either directly or indirectly by weakening the tree to the point where it succumbs more readily to attacks by other pests or pathogens. In addition, the timber of trees affected by the disease but not yet killed, is altered in such a way that it becomes very brittle which affects the potential timber value but more concerning is the significant safety risks posed to the public and those working on trees if removal is left too late.

The progress of the disease nationally is alarming. The disease was visible in Waverley for the first time during summer 2016 in young trees and saplings. A year later it was apparent that even older trees were affected in a variety of places right throughout the Borough. The borough area contains locally high numbers of Ash trees and high numbers of trees in the Borough have been affected and this trend is escalating. Based on experience on the Continent the prognosis is that between 80-90% of all Ash trees will succumb within a relatively short time span (between 5 and 15 years).

Every year the Tree Team put together a priority listing of the worst affected Ash trees or stands of trees in need of removal that winter. This disease has the potential to have significant landscape impact and as trees decline and die, will have to be removed in areas with public access.

In a similar approach to dealing with OPM, officers have been in communication and co-operating with other interested organisations and Officers from other Councils to develop the best approach to dealing with ADB. In the recent past the Forestry Commission and Forest Industry Organisations advocate the pre-emptive removal of Ash trees both to reduce risks to operators and the public and also to possibly still have the benefit of

some timber value. Other organisations are urging caution insomuch that they feel that there may be strains of Ash that are resistant to the disease and that not all trees should be felled pre-emptively in an attempt to preserve the species.

At present Council officers are trying to take a balanced approach between the two extremes but further work is being done to develop a comprehensive management approach/action plan for dealing with the impact of this disease.

10.4.3 Other Pests & Diseases

The impact of further Pests and Diseases (P&D) such as:

- Chronic and Acute Oak Decline
- Sweet Chestnut blight
- Phytophthora on Larch and other species

are more limited at present and will be monitored.

Further significant pests on the horizon are: Plane wilt, Spruce Bark Beetle, Pine Processionary Moth, Emerald Ash Borer, Asian Longhorn Beetle and Xylella.

10.5 Damage caused by animals

Deer, Grey Squirrels and other mammals (including mice and rabbits), cause damage at every stage of tree growth due to browsing or bark stripping. Deer, grey squirrels and rabbits especially are a serious threat to trees, they prevent trees and woodlands establishing and realising their full potential.

10.5.1 Grey squirrels

Grey squirrels can cause major damage to our trees by stripping the bark which reduces tree vigour, causes disfigurement, structural weakness and often, death. The damage caused by grey squirrels can also cause wounds through which pests and diseases may gain entry. This is a serious problem at a time when we are working to increase tree and woodland cover for the many essential benefits trees provide.

To address this, government and partners have signed the Squirrel Accord which brings together leading woodland, timber industry and conservation organisations in the UK. Through the Accord these organisations are working on a coordinated approach to protect red squirrels and woodlands in the UK, and to managing the impacts of the introduced grey squirrel.

Unlike deer and rabbits, squirrels cannot be kept at bay by fencing or tree guards and therefore the damage caused by them requires a different approach i.e., keeping their numbers in check. Controlling squirrel numbers

needs to be a concerted effort over a wide area. If neighboring landowners fail to take action, the influx of squirrels onto adjacent land is significant. As and when humane forms of controlling squirrels become available, the Council will consider using these, after careful assessment of the likely positive and negative impacts.

10.5.2 Deer

All six deer species established in the UK have been increasing in number and range over the last forty years. Deer are more abundant and widespread now than at any time in the past 1,000 years. Deer have been identified as being a substantial problem for the establishment of trees and new woods and for the management and biodiversity interests of existing woods, particularly by reducing or preventing natural regeneration of trees.

The issue of deer population is being addressed by the Deer Initiative, which is a broad partnership of statutory (including Forestry Commission and Natural England), voluntary and private sector interests dedicated to “ensuring the delivery of a sustainable wild deer population in England and Wales”.

In Waverley, the main deer populations causing problems are Roe deer and Muntjac, the latter being an introduced species. However, despite the damage caused, it is very difficult to control populations on Council land and the best we can do is to protect new plantings through fencing or individual “shelters”.

10.5.3 Tree health and public safety

Bark stripping by any animal, weakens trees and creates open wounds that can result in irreversible damage and infection by pathogens. This destructive activity can also lead to girdling, cutting off the tree’s nutrient supply from its roots, which causes tree fatalities. Apart from this, squirrels often strip bark from the upper side of large horizontal limbs and do this year on year. These defects are very difficult to spot even during detailed inspections and, as a result, incipient decay in these areas will eventually result in breakage which causes large limbs to break and fall without much warning and this is a particular concern where this happens to large mature Beech trees over roads and other public access.

10.6 Biosecurity

Biosecurity refers to a set of precautions that aim to prevent the introduction and spread of harmful organisms. These include non-native tree pests, such as insects, and disease-causing organisms, called pathogens, such as some bacteria and fungi. For further details of this area of concern see Appendix 4.

There has been a significant increase in the number of non-native tree pests and diseases being introduced to the United Kingdom since the early 2000s. This

demonstrates the need for us all to take action to provide our trees, woods and forests with greater protection. By implementing appropriate biosecurity measures, we can significantly reduce the risk of introducing and spreading tree pests and diseases.

Policy Statement 6

The Council will continue to deal with Pests and Diseases (P&D) such as Oak Processionary moth and Ash Dieback using a risk-based approach consistent with Waverley's Pesticides Policy and monitor new pathogens in liaison with DEFRA, FERA and the Forestry Commission..

Policy Statement 7

When purchasing tree planting stock, the Council will ensure that this is from certified UK sources and the Council's contractors are contract bound to apply current biosecurity measures to limit spread of P&D.

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11. Biodiversity

11.1 Trees and woodlands

Trees and woodland provide a significant habitat proportion within the borough with an estimated tree canopy cover of up to 34%. Therefore, trees, woodlands and hedgerows contribute greatly to the biodiversity within the borough and should be managed in such a way to protect the species that inhabit and rely on them.

11.2 Biodiversity Improvements

Improvements to biodiversity across the Borough can be achieved by protecting and appropriately managing existing (ancient) woodlands and ancient/veteran trees. Furthermore, improvements can also be achieved by selecting trees for new planting which have wildlife value, particularly in semi-natural areas and by ensuring that tree planting does not compromise or adversely affect other priority habitats.

In addition, as is already the case, the Council has a strong focus on allowing natural re-generation to take place in specific circumstances as this is often the most successful way of establishing trees which are suited to a particular locality. Separately, the retention of standing dead wood/monoliths, where appropriate, is another important way of improving wildlife habitat and is being actively pursued by site managers.

Site specific aspects of biodiversity in Council owned wooded areas are addressed in individual woodland management plans which are being developed for all those sites.

The Council's Biodiversity Policy provides further details on matters relating to Biodiversity in general.

Policy Statement 8

The Council will conserve and improve biodiversity across the Borough; by protecting and undertaking the appropriate management of existing (ancient) woodlands and ancient/veteran trees; by selecting trees for new planting or by allowing natural re-generation to take place of species which have wildlife value and which do not compromise or adversely affect other priority habitats.

12. Identifying Tree Planting Locations and Species selection

12.1 Assessing sites and specifying species

In parallel with the assessment of current Tree Canopy Cover (TCC) in Waverley, ideally separating Council “owned” TCC from other TCC within the Borough, the Council will actively identify land under its ownership/control which is suitable for additional planting and determine the most appropriate species and type of planting for those sites as follows:

- identify sites owned by Waverley Borough Council which would benefit from planting and where there are no other constraints due to for instance high levels of existing biodiversity or demands such as the need for the provision of social Housing
- identify sites where trees may need to be replaced either by planting or through natural re-generation, in Parks and Avenues or where for instance Ash Dieback has caused tree loss
- identify the kinds of planting and trees that might be suitable, including species choice which considers the level of carbon sequestration potential, impact of climate/temperature change over the life of the chosen species, resilience against current and the anticipated arrival of pests and diseases and the support of biodiversity
- set out the best practices for success including a full life approach incorporating aftercare, also bearing in mind the Council’s desire not to use pesticides

12.2 ‘Right tree, right place’ principle

As mentioned above, the Council is proactively identifying locations for tree planting to have a bank of locations ready for each planting season (budget permitting). When determining the right species to plant in any location, the Council will have due regard to the ‘Right tree, right place’ principle.

The potential negative aspects of trees are acknowledged, such as shading solar panels and interrupting television signals, ‘nuisance’ from natural trees debris (e.g., leaves, branches, fruit, twigs, honeydew), consequences of roosting birds, roots blocking drains, direct and indirect damage to buildings and structures (walls, hard surfacing). Tree debris is a natural consequence of having trees and cannot be eliminated, only managed appropriately to minimise hazards. New tree planting under the ‘right tree, right place principle aims to address the other issues to avoid future conflict as much as possible and thereby ensuring trees can achieve their optimum size and lifespan without the need for detrimental pruning or removal.

12.3 New plantings

When considering tree and woodland plantings in the borough to either ensure continuation of existing planted areas or to expand on populations the Council will use the following principles:

- Develop site-based tree-planting plans to ensure the continuation of tree cover, with particular emphasis on ongoing replacement of trees in terminal decline or with a poor structure which can't be improved through arboricultural techniques
- Expand the urban tree and woodland population, particularly where new planting will help to improve value for people and wildlife
- All plantings on Council land must have an appropriate maintenance and watering regime identified from the outset, to ensure survival of new plantings as best as possible

12.4 Community plantings

With the climate emergency, more (community) groups have come forward wishing to undertake “mass whip plantings” and this desire is expected to grow in the future. Whilst whip planting can produce canopy for the future, the chance of survival, unless properly tended to, can be minimal. Groups or individuals wishing to plant on Council owned land, are encouraged to come to the Council with their suggestions and ideas in order to end up with suitable sites and successful and sustainable planting initiatives.

12.5 Ensuring survival of new plantings

An appropriate portion of an annual tree planting budget will need to be used for establishment and maintenance. The need for regular watering to ensure survival of new trees has been highlighted in recent years where drought and high temperatures have taken their toll on new planting. The Council has an approximately 80% survival rate for new planting due to regular manual watering throughout the growing season, but this figure needs to be better.

Throughout the establishment period (usually around 3 to 4 years for larger trees), where new trees have failed, they will be replaced unless it has been determined that soil conditions will prevent establishment. In view of the higher temperatures and reduced rainfall we are already experiencing, and which is likely to continue, we will explore introducing alternative methods of watering and moisture retention, which may also need to include greater community involvement. There will also be a need for control of weeds and grass around the base of new trees to reduce competition and, especially if this involves strimming, extreme care needs to be taken in doing so.

Appropriate measures need to be considered with all new plantings to ensure the protection from competition, pests & disease, animal damage, mower and strimmer damage and also vandalism. These measures will vary from site to site, and depending on specific circumstances, are likely to include solutions such as:

- Mulch mats
- Rabbit, Vole and Deer guards
- Strimmer guards
- Wooden stakes and posts
- Wooden or metal cages
- Deer, rabbit or sheep netting

It is the Council's intention to use as much biodegradable materials as possible for the stated purposes above. As with all protection measures, they will need inspecting to ensure they are intact and functioning as they should and to determine the appropriate time when the plantings will no longer need this protection and support, once they are fully established, growing well and of sufficient size. Often tree protection measures are left in place for too long, which can lead to malformed growth habits, damage and defects in the tree stock which undermines the long-term viability and sustainability of the plantings.

Policy Statement 9

The Council aims to expand its tree and woodland populations by planting new and replacement trees, woodlands and hedgerows, or by positively encouraging natural regeneration, and focusing on appropriate tree species compatible with the conservation of other important habitats by developing site specific tree planting plans.

13. Community Engagement and Involvement

13.1 Community Understanding

Many Waverley Borough residents are engaged with the need for climate change action and for tree planting. There is possibly less engagement or understanding for the need for active tree and woodland management and it is therefore key that the Council ensures that consistent communication is developed to articulate this and maintain and enhance a positive engagement.

13.2 Communications

By preparing a communication strategy, similar to what is set out in the biodiversity policy, Waverley Borough Council will embed the following principles for effective communication on climate change, tree and woodland management, tree planting and carbon sequestration:

- Being sensitive to public opinion without being stifled by it
- Relating information to areas that matter to residents, such as health and well-being
- Outline clear objectives for new initiatives and report on the outcome so that residents can see the achievements within their local area
- Collating and sharing positive stories across the community

By applying the above principles, the Council will be able to:

- Develop a practical consultation protocol, supported by sufficient resources to ensure successful implementation of sensitive projects
- Develop a protocol for communicating work need and to be a good neighbour, ensuring planting or management work is undertaken in a sensitive manner
- Encourage public appreciation, recreational use and enjoyment, and community involvement in tree and woodland management and planting
- Direct community planting initiatives on Council land, in accordance with our own plans and the wider policy

Policy Statement 10

The Council will encourage and enable greater awareness and better understanding of tree and woodland management and the benefits of trees in general, so that residents and communities are engaged and can support Council activities.

14. Financial value, producing income and funding

14.1 Financial value (Natural Capital) of trees and woodlands

To express the value of the Council's tree and woodland asset in monetary terms is difficult and more so due to its rural nature. Valuation systems such as CAVAT are mainly focused on urban tree values but as and when methodologies develop, the Council will use these to be better able to assess the financial values.

14.2 Funding general

Meeting the objectives of increasing woodland management and tree planting on Council land, as well as canopy cover overall, can only be achieved if these are adequately resourced. An increase in present management and planting will require an increase in current funding but initially officers will focus on other/external sources such as:

14.3 Section 106/CIL funding

Following on from the previous point, for the purpose of both the funding of tree and woodland management **and** new tree planting, the Council will continue to proactively seek grant funding and other funding streams, to either spend already accumulated monies or secure further funding through CIL/Section 106 agreements to help finance these activities.

14.4 Government funding

Defra and the Forestry Commission have recently been developing funds for tree planting and management amongst other aspects of landscape and biodiversity improvement and officers have been successful in combination with Surrey County Council and some of the other Surrey Boroughs and Districts, to secure funding for tree planting for 2022 and further bids will be made as and when funding becomes available

14.5 Cost neutral works, maximizing income/value for money

In some instances, woodland management costs or indeed Heathland restoration costs, can be offset or at least reduced, by value of the timber which is removed. Given the nature of the Council's land ownership however, these instances will be limited

14.6 Community funding

Another source of funding are the regular requests for the planting of memorial trees. However, rather than ending up with unsuitable trees or species or unsuitable locations in a piecemeal fashion with plaques etc., we are instead proposing that

people who want to remember a loved one or celebrate an occasion or event, can contribute to planned plantings such as replacement trees in existing avenues or other important tree features without actually “owning” a specific tree.

Community groups accessing external grant funds e.g., ‘Roots for the future’, COPSE etc.

14.7 Other sources of funding

Depending on how successful the Council is in securing funding and site availability where it relates to planting trees, approaches such as crowd funding and funding through Towns and Parishes could also be considered.

Policy Statement 11

The Council will explore the valuation of its tree and woodland populations to try to quantify their value as natural capital and ensure the management and maintenance of tree stock is done using the most environmentally positive and economically viable methods and in accordance with best practice

15. Third party land

15.1 Council land managed by others

The Council's land and assets are in some cases leased to, or otherwise managed by third parties such as Parish and Town councils, Sports clubs or Leisure Centre operators and others. Management agreements exist with, for instance, Dunsfold Parish Council who manage the grassland and woodlands on Dunsfold Common and similar arrangements are being drawn up with others such as Womersley Parish Council.

15.2 Land owned by other landholders

Equally, the Council is responsible for some land and sites which it does not own but either leases in from others, such as Frensham and Blackheath Commons, or has a legislative duty to maintain e.g., Cemeteries and Churchyards.

The following policy seeks to influence appropriate management in both situations:

Policy Statement 12

The Council will use whatever mechanisms are available to it, to ensure that third parties maintaining council owned land, work in accordance with the council's Tree and Woodland Policy. Where the council maintains land on behalf of a third party, it will ensure that, as far as possible, the principles of this Policy are delivered.

Note: It is recognized that existing lease arrangements may be difficult and also financially costly to alter, in order to fully implement the council's Tree and Woodland Policy, in these cases; we would seek to educate and influence third parties in wherever way possible.

16. Monitoring Progress of Action Plan delivery

In order to be effective and efficient in the delivery of the Tree Policy action plan, the Council will need to ensure that the delivery is monitored regularly.

At a corporate level this will be achieved by the reporting required for the Corporate Strategy delivery and at the service level this will be achieved by the quarterly Head of services reporting to the Overview & Scrutiny Committees.

Throughout the year officers will record against the action plan the status of delivery of each of the action points listed and record and report net tree gain on an annual basis and reassess canopy cover every ten years from 2031.

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17. Glossary

Carbon storage: the amount of carbon bound up in the above-ground and below-ground parts of woody vegetation.

Carbon sequestration: the removal of carbon dioxide from the air by plants.

Tree cover/Woodland cover. These terms have caused confusion in the past and nowadays the most frequently used term is Tree canopy cover or simply canopy cover.

Tree canopy cover (TCC) is defined as; 'the layer of leaves, branches, and tree stems that cover the ground' (Treeconomics, 2017).

Continuous cover is an approach to Woodland management that seeks to create more diverse woods, both structurally, in age and in terms of species composition, by avoiding clear-felling of large areas. The development of more diverse forests is a sensible way to reduce the risks posed by future changes in the climate and biotic threats.

Natural Capital at its simplest, a natural capital approach is about thinking of nature as an asset, or set of assets, which benefit people. The ability of natural assets to provide goods and services is determined by their quality, quantity and location. These in turn can be affected by background pressures, management practices and drivers of demand.

Other terminology specific to the appendices can be found within those, where relevant.

18. References

DEFRA; England Trees Action Plan 2021 to 2024, 18 May 2021

Forestry Commission (FC); Tree cover outside woodland in Great Britain, April 2017

Forest Research: Valuing the mental health benefits of woodlands 2021

Surrey's New Tree Strategy 2020.

Helliwell, R. (2012) Management of tree populations. *Arboricultural Journal*, Vol. 34.
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Alonso et al, 2012, Natural England Research Report NERR043, Carbon storage by habitat: Review of the evidence of the impacts of management decisions and condition of carbon stores and sources.

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Nabuurs et al; 2013; First signs of carbon sink saturation in European Forest Biomass; published online at <https://www.nature.com/nclimate/>

FC; Understanding the role of urban tree management on ecosystem services, June 2019.

The National Tree Safety Group (NTSG 2011) Common sense risk management of trees, Ch 4, page 42.

Health & Safety Executive (Rev 2011) Management of the risk from falling trees, para 8.

19. Appendix 1. Action Plan

Cost impact Key

Low £0 - £5,000

Medium £5,000 - £50,000

High £50,000 - £250,000

Item	Proposal	Action	Timescale years	Resource Required	Cost impact PA	Proposal advantages	Delivery disadvantages
1. Canopy cover	Using external expertise and in co-operation with Surrey County Council (SCC) and other Surrey Boroughs and districts, identify more accurately the extent of the Council's tree stock in terms of canopy cover and its current and potential capacity as a carbon sink.	Approach SCC to assess progress. Depending on outcome, await further progress or get quote from relevant consultants or ourselves.	<ul style="list-style-type: none"> 0 -1 	<ul style="list-style-type: none"> Existing staff 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Being able to quantify contributions of existing stock and that of new plantings to the stated aims 	<ul style="list-style-type: none"> None
2. Council Trees & Woodland	Protect, retain and manage trees and woodlands in a safe condition to ensure a continuation of canopy cover of healthy trees resistant to pest and diseases and climate change Resist demands for pruning or felling of Council owned trees.	<ul style="list-style-type: none"> Only remove trees for sound management or health & safety reasons or when there is significant damage or damage potential to property. Manage trees and woods in line with good arboricultural and silvicultural practice: Update Tree Inspection Software 	<ul style="list-style-type: none"> ongoing 2021 	<ul style="list-style-type: none"> Existing staff but extra funding required for Woodland Management allocated 	<ul style="list-style-type: none"> Low Low 	<ul style="list-style-type: none"> Good tree and woodland stock and condition with acceptable safety parameters 	<ul style="list-style-type: none"> Negative perception by the public about necessary tree felling
3. Climate Adaptation	Increase the age and species diversity of the existing tree stock to provide resistance to climate change; maintain and keep trees healthy, as much as is within the Council's control, in order that they can achieve their full potential	<ul style="list-style-type: none"> Careful consideration of species selection Promote natural re-generation or planting of large canopy trees where feasible 	<ul style="list-style-type: none"> ongoing 	<ul style="list-style-type: none"> Existing staff but extra funding required 	<ul style="list-style-type: none"> Low at present 	<ul style="list-style-type: none"> Good and resilient tree and woodland stock, able to assist the reduction of climate change impact 	<ul style="list-style-type: none"> Negative perception by the public about necessary tree felling
4. Biodiversity	Improve biodiversity across the Borough; by protecting and the appropriate management of existing (ancient) woodlands and ancient/veteran trees; by selecting trees for new planting which have wildlife value, particularly in semi-natural areas and promote natural re-generation where possible.	<ul style="list-style-type: none"> Avoid planting trees on areas of high biodiversity value such as existing wildflower meadows, wetland areas and heathland. Ensure species selection on WBC land maximises biodiversity benefits 	<ul style="list-style-type: none"> ongoing 	<ul style="list-style-type: none"> Existing staff resources. 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Improved conditions for wildlife and biodiversity 	<ul style="list-style-type: none"> None
5. Tree planting locations	Identify sites owned by the Council which are suitable for planting trees.	<ul style="list-style-type: none"> Initial desktop exercise to identify suitable locations Once suitable and available locations have been agreed, consultation will take place with residents and site users. 	<ul style="list-style-type: none"> 0 -1 1-10 	<ul style="list-style-type: none"> Existing staff Existing staff with occasional consultant input. 	<ul style="list-style-type: none"> Low Low 	<ul style="list-style-type: none"> Sites identified Community involvement and buy-in 	<ul style="list-style-type: none"> None None

Item	Proposal	Action	Timescale years	Resource Required	Cost impact PA	Proposal advantages	Delivery disadvantages
6. Species & Planting types	Identify the types of planting which may be suitable for specific locations including species choice which takes into account the level of carbon sequestration potential, impact of climate/temperature change over the life of the chosen species and resilience against P&D	<ul style="list-style-type: none"> Continue planting on Council land to increase tree numbers/canopy cover and promote natural re-generation where this is possible. Appropriate maintenance of new trees to ensure establishment; maintain trees in line with good Arboricultural and Silvicultural practice 	<ul style="list-style-type: none"> 1-10 	<ul style="list-style-type: none"> Existing staff resources but extra funding required (see Action/ Objective 8). 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Ensure successful establishment of new trees 	<ul style="list-style-type: none"> None
7. Wider Engagement	WBC will engage with partners, public and landowners to raise awareness of the Tree and Woodland Policy objectives and of good Arboricultural, Silvicultural and biosecurity management practices	<ul style="list-style-type: none"> Improve advice on WBC website; Providing guidance to individuals and volunteer groups on tree and whip planting Continued involvement with relevant forums within Surrey. 	<ul style="list-style-type: none"> ongoing 	<ul style="list-style-type: none"> Existing staff resources. 	<ul style="list-style-type: none"> Low 	<ul style="list-style-type: none"> Ensure consistency of approach across Local Government and Community involvement 	<ul style="list-style-type: none"> None
8. Funding	Identification of funding that is available from Government grants through the Forestry Commission's Local Authority Treescape Fund (LATF), DEFRA's Farming in Protected Landscapes fund (FiPL) and S106, CIL and/or SANGS money.	<ul style="list-style-type: none"> Continue to identify sources and work with external bodies to secure funding for tree and woodland management and planting Explore site "adoption" by local communities otherwise linking with community initiatives. 	<ul style="list-style-type: none"> ongoing 	<ul style="list-style-type: none"> Existing WBC tree budget External funding Planning obligations; S106, CIL, SANGS 	<ul style="list-style-type: none"> Low in respect of Council budgets but possibly Medium if other sources fail. 	<ul style="list-style-type: none"> Limited impact on Council resources for time being 	<ul style="list-style-type: none"> Limited long term commitment from Government at present
9. Monitor	Record and report net tree gain on an annual basis and reassess canopy cover every ten years from 2031.	<ul style="list-style-type: none"> Produce an annual report on numbers of trees planted including information of sites and species. Engage external consultants every ten years to assess changes to canopy cover in the Waverley area. 	<ul style="list-style-type: none"> Annual 10 year cycle 	<ul style="list-style-type: none"> Existing staff Consultants 	<ul style="list-style-type: none"> n/a Low 	<ul style="list-style-type: none"> Being able to quantify contributions of existing stock and that of new plantings to the stated aims 	<ul style="list-style-type: none"> None

20. Appendix 2. Tree Risk Management Framework

20.1 Introduction

Waverley Borough Council has responsibility for land that is accessible to the public or which in many areas is adjacent to public rights of way. The Council manages parks and common land for recreation, amenity and conservation. It also manages land for Social Housing purposes and a range of other sites containing trees and woodlands. While trees have many values: social, environmental and economic, they may, if suffering from decay, disease or mechanical defects, represent a hazard in areas where people and property are present. It is therefore important for relevant site managers to be aware of tree-related hazards.

This Tree Risk Management Framework sets out the responsibilities of Sections and managers for identifying ownership of land with trees and zoning sites in respect of different levels of access and risk and also identifies those responsible for assessing the risk of hazards from trees. In addition, the guide explains the risk zoning methodology, the inspection and recording system and sets out an inspection frequency. The guide deals with risks associated with tree failure only and attempts to clarify to which land these responsibilities apply.

The approach set out follows the principle of the Council's established guidance on general risk assessment and management and takes account of the Health and Safety at Work etc Act 1974 – Management of Health and Safety at Work Regulations 1999 – Occupier Liability Acts (1957 and 1984) and relevant case law.

Further guidance for the original document was found in a range of publications and sources amongst which are:

- *English Nature 2000 : Veteran Trees, A Guide to Risk and Responsibility*
- *Lonsdale, D. 1999. Principles of Tree Hazard Assessment and Management (Research for Amenity Trees No. 7)*
- *Forestry Commission 2000 : Hazards from Trees, A General Guide*
- *Mynors, C. 2002 : The Law of Trees, Forests and Hedgerows*
- *National Trust 2001 : Inspection of Trees; Trees and Woodlands Instruction 1*
- *Advice from Treework Environmental Practice (Specialists in Tree Hazard Assessment) May 2004*

The current update also draws on the following sources of information.

- Department of Transport 2005 (updated 2012): *Well-maintained Highways: Code of Practice for Highway Maintenance Management*.
- Mynors, C.2011 (second edition); *The Law of Trees, Forests and Hedgerows*
- Health and Safety Executive 2007 (reviewed 2011): *Management of the Risk from falling trees (SIM)*
- National Tree Safety Group (NTSG) 2011; *Common sense risk management of trees*

20.2 Context

This document is mainly for internal purposes; for Members' information and endorsement, for officer guidance and execution and for tenants and lessees' information and clarification, as it may be for other interested parties.

In the unfortunate situation of a claim or case being made against the Council as a result of tree failure, this document, together with survey records, should assist in defending the Authority's position and approach in respect of management of hazards posed by its tree stock.

The feasibility and reasonableness of various aspects of this Tree Risk Management Framework and its workings will need review and adjustment as and when required. It is intended to carry out a biennial review for that purpose.

20.3 Background and Objectives

The Waverley landscape is highly valued and is characterised by extensive tree cover. Much of the land controlled by Waverley Borough Council (WBC) contains many trees in the form of more ornamental plantings in parks and other amenity areas, old wood-banks and copses, more extensive woodlands, both naturally generated over time and planted ones, semi-wooded heath areas, shelter-belts adjacent to sports grounds etc, often densely wooded roadside strips of common land and individual trees within grounds of properties including Social housing.

The nature of land use is such that access by people is locally high. The management of trees should therefore embrace a number of objectives which, for example, may relate to amenity, biodiversity and wildlife conservation, heathland restoration, shelter and the control of hazards. In the case of risk management, it is necessary to take steps to identify trees which represent a significant risk to people or property and to deal with them accordingly. This should, however, be done in a way which minimises the loss of value for people and wildlife.

To this end, a number of objectives relevant to risk management are listed as follows:

- to manage and minimise risks to people or property
- to avoid the unnecessary removal or disfigurement of amenity trees or of trees with high wildlife value
- to conserve habitats that are provided by trees, including those that are old and decaying

20.4 Principles of Tree Risk Assessment

20.4.1 Nothing is without risk

We are at risk every day in our own homes, travelling to work and in the workplace. We expect to take risks, and the law requires only that we should be guarded from risks that are unreasonable. Absolute safety or the eradication of all risk is not expected and arguably is neither possible nor desirable. In the context of tree management, such an approach could result in the loss of all tree-associated amenities. By controlling risks from tree hazards, owners are meeting natural and ethical duties for the safety of others. They are also meeting the requirements of insurers and of the law.

20.4.2 The importance of assessing risks

Whether trees are managed for landscape, habitat, commercial or multi-purpose objectives, the legal obligation to ensure the reasonable safety of others remains the same. The law recognises that there is a balance to be struck between the risks and benefits of trees.

The Council as owner and occupier of land, is required to consider the level of risk associated with a tree and whether it is reasonable to protect against that risk. The duty is to identify apparent sources of danger and to make land safe, so far as is reasonably practicable.

Liability is determined on the basis of whether a danger posed by a tree could have been foreseen and whether reasonable remedies could have been undertaken to reduce the risk to an acceptable level.

To meet legal requirements, it is crucial that WBC manages risks and can be seen to do so and is able to provide evidence that this has been done. To manage risk effectively, the hazard must first be identified and ranked according to severity, then prioritised for action.

No tree is entirely safe, given the possibility that an exceptionally strong wind could damage or uproot even a healthy and mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or of the site.

The assessment of risk is based on the value of whatever is judged to be at risk, and the likelihood of it being harmed in the event of mechanical failure of a tree (or parts thereof), as estimated by:

- what is at risk – people, buildings, vehicles etc. (i.e. Target)
- the probability of impact, based on duration of occupation – for example, in relation to a permanent structure or a given number of people using a path during a given period of time, (these considerations are clearly linked to the location of the tree, which is a key factor in deciding whether inspection is required in the first place)
- target characteristics: e.g. high speed traffic – elderly or very young people frequently present etc
- the magnitude of the hazard, as estimated from the size (diameter) and height of the part of the tree most likely to fail
- the probability of failure, based on the type, position and severity of the defect concerned, the species or cultivar of tree and the nature of the site

A practical five-step procedure for risk assessment works as follows:

- Inspect.
- Decide who/what may be harmed and how.
- Evaluate risk and decide whether works are required – action recommendations and check completion.
- Record findings.
- Review assessment and revise if necessary.

20.5 Definitions

Hazard: The potential to cause harm to people or property.

Risk: The likelihood/probability that actual harm will be caused by a tree (whole or in part) and the severity thereof.

Harm: Refers to personal injury or damage to property.

Target: Is that which may be harmed.

Target Zone: Zone or area identified and classified according to target value and/or frequency of use to give a notional range of risk from high to low.

Tree risk assessment: Method to establish the probability that harm or damage might result from a particular tree hazard within a stated period. It considers the likelihood of tree failure occurring when a target is present within the falling distance of the tree. The assessment can be ranked as a level of likelihood and provides the means to prioritise action to manage risk.

Tree Survey: Ground level inspections of trees to allow assessment of risk posed and, where relevant, recommending works to address risk – recording information. Depending on circumstances, a single survey record could relate to a single tree or to a larger number of similar trees within a group/area.

Tree: For the purpose of WBC tree inspections, a tree is a large woody plant which has the potential to cause harm or damage.

Defect: Defects which justify recording a tree are those items or symptoms which result in that tree or its parts to pose a higher-than-average risk to cause harm or damage to people or property. Items that do not justify trees to be recorded are for example; pruning wounds without any active or significant decay – ordinary growth deformations not normally associated with defects likely to result in increased risk – small dead wood which is not related to apparent and significant overall decline – leaning or one sided trees without evidence of compromised (root) stability and minor defects which, due to their location, are very unlikely to cause harm or damage, such as a dead or broken branch in the crown area which is away from public access (i.e. over dense woodland), or smaller trees showing signs of sparseness or decline in areas of infrequent pedestrian access.

In addition, the assessment of any decay or defect needs to be put into the context of the tree species affected i.e.; a sparse Oak is less likely to suddenly die or become unstable whereas a Birch in the same condition is much more likely to be dead or falling over within a short period. In the same way, trees of modest size with tight forked branches or trunks, although strictly a potential defect, need not always be recorded if the limb or trunk is either very upright and unlikely to collapse or the suspected mode of failure would not affect areas with frequent public access nor immediately impact on the stability or the remaining tree.

Finally, if a relatively small tree has defects which warrant that tree's removal and the planned tree work in the inspection area is going to be carried out within a relatively short period (say three months) and the defect is unlikely to result in failure in the meantime, then simply marking the tree with spray paint for felling as part of the overall safety works, will be sufficient

20.6 Responsibilities, levels of expertise and lines of communication

The ongoing responsibility for Tree Risk Management in Waverley BC is a corporate one. For practical reasons, however, the Commercial Services section has been given the task to take the lead and supply a service to other landholding departments. The Tree and Woodlands Officer (TWO) is the lead

Officer who is directly assisted by two Tree Officers (TO) which together, form the Tree Team.

The approach set out in the original document was the subject of extensive consultation and was ratified by the Council in 2004.

All staff with responsibility for WBC owned property will be responsible for identifying their sites and with the help of the TWO which areas will or will not require formal tree inspections.

In view of the extent of tree cover on WBC land, it is not feasible for the TWO and his team to inspect all WBC trees on a regular basis. Other staff exist, in particular Countryside Rangers, who have sufficient knowledge, competence and training to carry out inspections on their own sites. The Tree Team will be able to concentrate on inspecting trees on all other sites which have no active management/manager at all. The TWO is also available to assist other staff in situations requiring a higher level of specialist input and can be asked for second opinions.

In order to promote modern tree hazard assessment practice and also to achieve a greater level of consistency between inspectors, all relevant officers have received training to Lantra standards (minimally one day basic tree inspection course topped up with three to four days from our regular Arboricultural training provider. The Officers in the Tree Team have the highest level of experience and training which is equal or above the level of the Lantra Professional Tree Inspection Certificate. Competence (a legal requirement under H & S legislation) and consistency are under constant review and the TWO carries out regular spot checks and organises refresher days, both on an individual basis as well as group training sessions.

Where the responsibility for land lies with other sections as in the case of Housing or Corporate Property, but management is taken care of under the Grounds Maintenance Contract, then the tree hazard management will be dealt with by the Tree Team. Other WBC sites which are not managed by Countryside Rangers and are not subject to the Grounds Maintenance Contract, will also be inspected by the Tree Team when made aware of these sites.

Notwithstanding the above, responsibilities will remain with all relevant site managers, including Housing through the Tenancy and Estates Manager, Home Ownership Officer and Corporate Property through the Property Management Officer to inform the TWO where circumstances have changed (or are about to change) through sales, leases or change in occupancy due to alteration of use or access. In addition, there is a need for assistance after severe weather events (see section on Timing of Tree Inspections) and awareness and vigilance in hazard prevention (see relevant section).

20.7 Which Trees to Inspect

Subject to specific exceptions, the Council will only take responsibility for trees on land where it has a strict occupier's liability. There are a few minor

exceptions to that approach, the details of which are set out in the 2004 Committee Report which introduced the original TRM guide.

The need for a particular tree or group of trees to be inspected depends on the usage of the area within their potential falling distance. Inspection is unquestionably necessary within areas where people, or high-value items of property, are continuously or frequently present, close to trees which are capable of being hazardous. Clearly, however, there are remote areas where tree failures are very unlikely to cause injury or damage, even though the risk of such an outcome cannot be entirely disregarded. Even at a more heavily used site, it could be that the risk is currently very low by virtue of the size and species of the trees present. There cannot, therefore, be a hard and fast distinction between sites or part of sites where inspection is essential and where it is entirely unnecessary. The key consideration is foreseeability; if it can be reasonably foreseen that anyone could be at risk, the occupier has a duty of care to reduce that risk within reason.

20.8 Zoning

Zoning helps to identify areas according to levels and intensity of occupancy and provides a notional range of risk from high to low. If a site has a significant number of trees and has differing levels of occupancy, the use of zoning can aid decisions on the nature and priority of inspections.

Zone classifications are not absolute values that can be compared from one site to another, but provide information to help determine the need for, and priority of, inspection relevant to a particular site. As the nature of site usage may change, it will be necessary to review these zones periodically. In line with guidance given in the H&SE SIM (reviewed 2011) and the NTSG document (2011), Waverley has divided all its landholding into two zones, one where there is frequent public access near trees and where all trees will be formally inspected and a second zone, where trees are not within falling distance of areas with frequent public access and where trees will only be inspected informally during routine site visits for general management purposes.

20.9 Frequency of Inspection

A general principle to be observed is that, in areas where people or property could be at risk from tree failure, formal inspections should be carried out frequently enough to detect any hazards that may have recently developed. Hazards from short lived species which also tend to have poor resistance to decay and disease, generally develop quite rapidly, for which reason an inspection is generally advisable where such trees occur on high-usage sites.

The same may apply to large old trees with substantial lateral limbs. Basic inspections, by way of a “drive by” or “walkover” exercise particularly in areas with high levels of occupancy, should also be made as soon as practicable after any exceptionally severe weather event that might have caused damage to trees (see 20.11 Timing of Inspections).

All Waverley trees in the “formal” zones need to be inspected in detail on a cycle of 3 to 5 years. It will be the responsibility of the relevant site manager (TWO in case of “managerless” sites) to decide, following inspection, whether the site or part of site ought to be inspected on a three, four or five year rotation and this decision will be recorded within the database for that entire location or zone.

Following the Court case: “Cavanagh v Witley Parish Council”, the Court of Appeal in 2018 decided that high risk trees in high risk zones ought to be inspected on a two year cycle and, apart from the details set out in the following paragraph, the Council discharges that “expectation” by checking all its risk zones minimally every two years by way of a “walk-by” inspection, in order to identify and deal with any obvious tree problems which have developed between formal inspections.

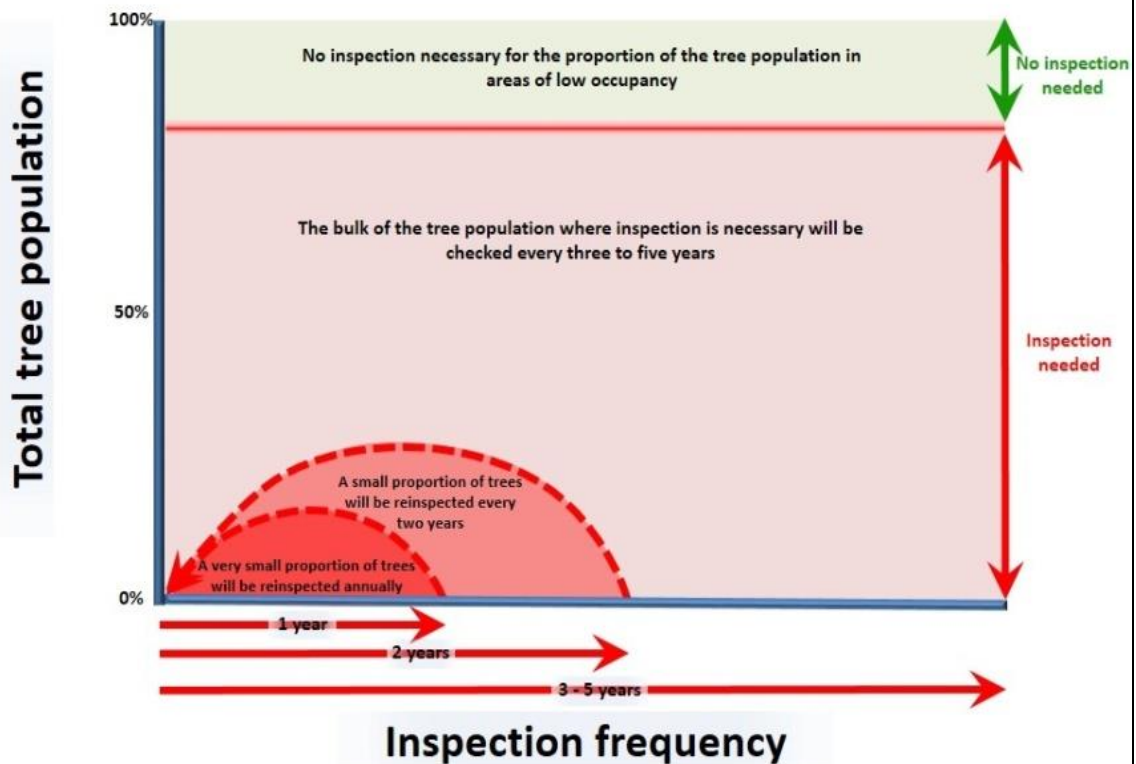
Only on those sites where occupancy rates are very high on or adjacent to the site and some significant trees (possibly with defects and retained) are within falling distance of vulnerable “targets”, there is the opportunity for the inspector to decide that a particular tree (or trees) require more frequent formal inspection e.g., possibly every (exceptional), or two years. This decision will be recorded on the database but will be against the individual tree. The database will in all circumstances alert the team in advance that a re-inspection is due.

All staff can and should refer to the TWO for advice or second opinions on tree defect issues which are beyond their level of training and experience. Similarly, decisions on frequency of inspection in certain areas or in respect of specific trees, which are out of the ordinary, should be approved by the TWO.

ZONE AND INSPECTION LEVEL CHART

<u>TARGET ZONE</u>	<u>COLOURING ON MAP/INFO</u>	<u>EXAMPLES OF TARGET AREA</u>	<u>LEVEL OF INSPECTION</u>	<u>FREQUENCY OF ASSESSMENT</u>
		Trees in or adjacent to:		
Negligible Risk (Zone2)	Unmarked	Remote or inaccessible areas with no or minimal public use and no high value targets	None	Occasional review of status /requirement
Low risk (Zone2)	Unmarked	Woodland: - Open parkland, heathland, fields, minor paths and desire lines with occasional use and no other high value or vulnerable targets	No formal inspection: observation and awareness of the general condition of trees during normal visits by site managers	During normal routine visits by site managers or tree team
Other (Zone1)	Green, Pink/Red and Blue	All other areas (Higher usage)	Formal	Every three, four and five years respectively (and informally after severe weather) and a biennial walk-over.

Strategic tree inspection framework



20.10 Inspection Type

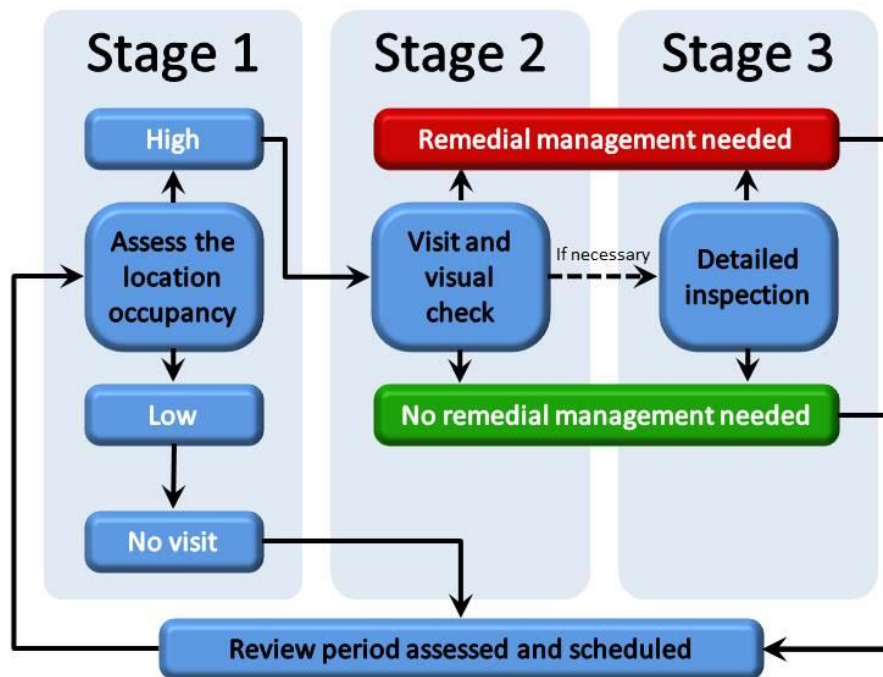
20.10.1 Informal Inspections

Record date, site and areas/trees inspected and works carried out. The same approach will be taken after severe weather events (see timing of inspections) and the biennial general inspection of those sites which receive formal inspections (at longer intervals)

20.10.2 Formal Inspections

Following the principle of “**negative inspections**”, inspecting all trees within falling distance of adjacent target zones, using the Councils standard digital system, **plot and/or tag and record only those trees with defects** (see definition) whether works are deemed necessary or not (with justification why not by way of allocating a risk level). Details of work instruction and date of works completed.

A decision-making framework for duty holders



20.11 Timing of Tree Inspections

The best time to find and identify fungal fruiting bodies which may affect trees is generally in early autumn. Summer inspections are considered better to assess leaf condition and density and winter is best to have a more unobstructed view of the higher trunk and branches and their connections.

It will be clear from this that, taking account of the numbers of trees requiring regular inspection on WBC land, it is impractical to carry out two or more inspections in a given year, nor is this common practice in similar situations elsewhere. It is therefore proposed to continue to carry out inspections on a year round basis and only, where an inspector is unsure about a tree's condition, to schedule only that tree for re-inspection in a particular season depending on the nature of concern.

If, between formal inspections, a "natural" event such as exceptionally severe weather (e.g. severe gales or heavy snow fall) or fire takes place with the potential to have caused trees to have become unsafe, then all relevant site managers, including Housing and others, will carry out a walk-over/drive-by inspection of affected sites, starting in the high-risk areas and working downwards. This should happen, within reason, as soon as practically possible and a record kept of date, site findings and actions. The TWO will determine whether an event was severe enough to justify such inspection(s) and alert relevant staff.

In the case of sites without direct manager involvement, such as several of the larger Housing woodland sites and the Corporate Property sites and most of the non-Countryside parks and amenity areas, this work will be shared between the TWO, the two TO's and any available Parks Officers.

For Social Housing properties in these circumstances, reliance will be on Tenants to report concerns which will initially be checked by Tenancy and Estate Officers and actioned or subsequently dealt with by the Tree Officers.

20.12 Recording and Marking

Using the Council's tree inspection GIS, records of formal inspections should include inspection dates, name of inspector, weather conditions and presence of factors obscuring potential defects (such as ivy growth). It is important to record inspections, even if only briefly, to be able to demonstrate that this element of duty of care has been fulfilled. Instructions to carry out work to trees, dates of completion, together with any amendments to tree inspectors' recommendations, should also be recorded.

Records provide the basis for safety management reviews and can, over time, build a valuable historical record of site-specific tree failure or non-failure patterns. Once hazards have been assessed or work completed, re-inspection times should be assigned or reviewed and then recorded.

The tree inspection database is maintained by the TWO and TO's but data input and ordering of necessary works are the responsibility of the relevant inspecting Officer/Ranger.

The plotting and/or tagging of trees should be sufficient to find the tree(s) again for re-inspection or for a contractor to carry out works. The information gathered about the tree(s) and recommendations for works (if any) should be basic but sufficient for the purpose of the exercise. Where lesser trees are identified for removal as part of the inspection exercise, they may simply be marked by spray paint and no details entered on the database but an indication of numbers of trees thus marked given on the relevant works order.

20.13 Reducing the Risk

The risk that a tree poses to people and property can sometimes be reduced by modifying the usage of the immediate surroundings, for example, by moving a path or car-parking spaces or altering a mowing regime. In other cases, the risk can be reduced by tree surgery. Branches weakened by decay or cracks may be pruned and trees with defective main stems or root systems may be made safer by crown reduction. Excessive movement in some types of weak structure can be restrained by bracing or propping. However, in severe cases on high-usage sites, felling may be the only sensible option.

In a woodland area, where the individual tree concerned is known to be of no special value for amenity or wildlife, felling will generally be regarded as a more realistic option instead of costly arboricultural procedures which are

suited mainly to sites where trees are managed on a more individual basis or where scarcity of trees increases their value/importance.

When inspections are carried out and defects found, recommendations for works (or re-inspections) shall always follow and should take account of the above and modern arboricultural practice. Each Inspector should ensure that recommended works are actually carried out without unreasonable delay.

20.14 Budget Implications

The budget set aside for Tree Risk Management is to be strictly used for just that and, in the main, should address the more immediate concerns. Tree work paid out of this budget will not cover works to address issues such as nuisance (leaf fall, overshadowing, pavement disruption, subsidence etc), clearance of sight-lines, crown-lifting for access, other pruning for amenity purposes or woodland management type operations. Such works should be paid for out of general revenue budgets.

Considering the extent of WBC tree cover, it will be important to make the budget go as far as possible by prioritising and pacing the survey work. However, it is equally important to ensure that Inspector output, in terms of identification of hazards, is matched by actual tree work to address those hazards. If identified hazards are not dealt with within a reasonable period due to the budget having run out, the Council would still be negligent if harm occurred as a consequence.

In the light of the above, it is crucial for the budget to be planned properly and monitored regularly as Tree Risk Management, particularly in the Waverley context, is very much analogous to “painting the Forth Bridge”.

20.15 Trees and Wildlife

It is widely appreciated that trees are vital for many forms of wildlife, although the importance of habitats which develop in dead and decaying wood has only recently begun to come to public attention. The wildlife value of trees can often be identified only with difficulty, so that specialist help may be required, especially with invertebrates, fungi, mosses and lichens.

It is important that trees, especially ‘veteran specimens’ should not be felled unnecessarily. This may happen if decisions are made on the basis only of initial observations, such as the presence of fungal fruit bodies, rather than a detailed risk assessment. If there is a need to carry out other kinds of remedial work on veteran trees or other individuals of acknowledged wildlife value, it should be done with great care.

However, there is a need to emphasize that the wildlife value of a tree does not lessen the need for safety inspections and for remedial action if such action is found to be necessary. The choice of appropriate remedial action, such as judicious pruning, altering the mowing regime around trees or diversion of

access routes can, however, often allow a tree to be retained with its associated habitats intact.

In the same way, the failure potential of deadwood varies according to the type of tree and fungal activity. For example, deadwood in oak may be less likely to break than end loaded live branches and can remain stable for decades. Deadwood in beech, however, is more likely to fail than in oak; knowledge of the attributes of specific species is therefore important. Where deadwood is found in a tree and considered hazardous, treatment options may be similar to that for live wood. Its significance needs informed assessment.

20.16 Tree Hazard Prevention

Tree loss can have detrimental impact on the environment in general and on landscape value and amenities. In addition, where trees have to be pruned or removed for safety reasons, there are financial costs.

These costs collectively can be very significant and it makes sense therefore that, where possible, damage inflicted on trees through people's actions, is avoided or kept to a minimum.

Poor pruning practices, using trees as supporting structures for sheds, fences, washing-lines, tree-houses etc, buttress and root damage due to bonfires or activities such as construction of buildings, accesses, car parking, patios and walls, drain and services installation, landscaping (soil level changes) and compaction, can all have significant immediate or long-term implications in respect of tree health and stability, particularly where they affect older, larger trees.

In case of below ground activities, within a relatively short time after the event, it will be very difficult for anyone inspecting trees to be able to tell that anything has taken place and even more difficult to assess the impact on the tree's health and stability.

Although the responsibility for tree inspections may rest with a limited number of Council staff, avoidance of damage and thus hazard prevention remains the responsibility of all staff involved with site/asset management, those responsible for design and construction of new schemes and responsible for contractor appointment and supervision. Responsibilities lie in the same way with Housing Tenants and Housing Management and Repair staff. Anyone responsible in this way should, where relevant, obtain specialist arboricultural advice. When time permits and, depending on circumstances, this may be sought from the Tree and Landscape Officer in the Planning Department or the Tree and Woodland Officer in Commercial Services.

In certain situations, it will only be possible to receive external advice and the officers mentioned above will be able to give relevant Consultant details but should still be informed of details of schemes where Council owned trees are involved.

21. Appendix 3. Statement on third party Tree Work Requests.

This appendix highlights several issues which some residents may want to see addressed in relation to Council owned trees and sets out how the Council will generally approach such matters. This is not an exhaustive list, and each case will be considered on its own merits and/or seriousness.

21.1 Safety

Where there is a clear and foreseeable threat to personal safety of residents, visitors or property, directly related to the condition or structure of a tree, action will be taken to minimise that risk. Risks that are an indirect consequence of the tree (e.g., slippery leaves on pavement in autumn) will only be dealt with in extraordinary circumstances and when other options are not available.

The Council inspects its trees on a regular basis in line with best practice and therefore, the unfounded fear of an otherwise sound tree will not result in action to prune or fell, simply because a tree may be within falling distance.

21.2 Obstructing the Highway, road signs and streetlights

Surrey County Council is responsible for the majority of trees on the highway verges and for ensuring private garden trees do not form an obstruction or danger to roads and paths. Where trees in parks and on other WBC land affect the highway we will ensure that adequate clearance is maintained, based upon the road classification and types of vehicle which regularly use it. Similarly the Council will endeavor to ensure its trees do not obscure road signs, signals and lighting. The purpose of street lighting is to illuminate the carriageway and paths. The Council will not normally take action to improve illumination of private property.

21.3 Television, Satellite, Radio and other similar equipment

A TV licence is a permit for an individual to operate a receiver but is not a guarantee of getting reception, let alone good reception. Providers of terrestrial and satellite equipment both broadcasting and receiving, cannot expect the Council to prune trees to improve or gain reception. In many cases it is possible to resolve issues of poor reception involving trees by finding an engineering solution. The Council will only consider requests to prune trees to improve reception where all the following criteria are met:

- Efforts to find an engineering solution to the problem have been exhausted and/or were unsuccessful
- The work required to improve service is minimal, consistent with good arboricultural practice and will, in the opinion of the Council's tree officer, not unduly affect the amenity or health of the tree
- The work required is paid for by the relevant operators or affected residents

21.4 Overhead wires

Power companies and BT Openreach have a tendency to string wires where it is convenient or most economic to them, in some cases through existing woodlands or canopies of mature trees. The Council cannot be expected to resolve issues with wiring in most of these situations and will expect these providers to resolve any connection or damage issues, either by re-routing wiring or carry out pruning to a specification agreed with Council officers using qualified and experienced Arboricultural contractors.

Private residents may have concerns about wiring and wish to have work carried out but may not be able to convince providers to action this. If in these circumstances the tree officer is of the opinion that the requested works are not going to detrimentally affect the tree(s) in question, any minor pruning can either be carried out whilst the Council has other works carried out to those trees as part of safety works or the resident can privately employ one of the Council's approved contractors, again working to an agreed specification (see also **21.13**)

21.5 Loss of Daylight or views

In law there is no such thing as either a right to light (as it relates to trees) or a right to a view. Where complaints are received due to loss of (sun)light, officers will assess each case on its merits and take account of size of property/ garden, aspect, size, proximity and amenity value of implicated trees and will compare these with similar situations elsewhere in the borough before deciding whether the issue is significant and/or unreasonable.

In respect of views, when planning new trees, as much care as possible will be taken to not unreasonable impact on views which nearby residents may have enjoyed. Also, where existing developing trees are growing to a size where views are alleged or feared to be lost, the Council will investigate as to the seriousness and validity of the concerns. However, residents have to accept that planting trees, especially for the reasons set out in this policy, needs to take place somewhere, albeit at a reasonable distance.

21.6 Petals, Leaves, Seeds, Twigs and Fruit

Seasonal change affects trees and with it they shed petals, leaves, seeds, twigs and fruit. These are often carried on the wind and are largely outside the control of the Council. Clearing of leaves from gutters and pathways and weeding of self- set seedlings are considered to be normal routine seasonal maintenance which property owners can reasonably be expected to carry out. It is sometimes possible to improve the situation through general maintenance or planned maintenance.

21.7 Birds and other Wildlife

Trees form a habitat for many animals as a source of food or by providing shelter to nest or for roosting. If bird-droppings are considered an issue by residents, pruning is generally not a solution, as the birds will continue to roost or sit on the remaining tree branches. Bird droppings are not considered an actionable

nuisance in law and each reported case will be considered on its merits but generally, the Council will not prune or remove otherwise good trees for nuisance (perceived or otherwise) caused by wildlife.

21.8 Honeydew

Honeydew or sticky deposits are the excretions of aphids and other plant sucking insects. It is a sugary solution, similar to the plant sap from which it is derived. As with leaves and wildlife, honeydew is not readily controllable by pruning and therefore cleaning of affected surfaces can be considered to be routine maintenance.

21.9 Root Damage and trip hazards

Cases of direct root damage will be considered on an individual basis. A balance will be struck between the nuisance experienced by individuals and the benefits offered by trees to the wider community. In certain circumstances, in discussion with the Council's Tree Team, limited root pruning may be acceptable.

21.10 Drain Blockage by Tree Roots

Trees do not have the capacity to break into a sound drain, but they will exploit any existing fault. The removal of one tree will not prevent another tree or other vegetation from exploiting the same opportunity. The appropriate way to deal with tree root blockage of drains is to ensure that the drains are watertight. Accordingly, the Council will not normally take action in response to complaints that Council managed trees are blocking drains unless the removal of the tree is necessary to affect a safe repair i.e. trenching so close to the tree will cause the tree to become unstable or liable to wind blow.

21.11 Subsidence

Tree related subsidence damage is a complex issue and each case will need to be considered on an individual basis, although such cases in this district are very rare due to the absence of shrinkable soils. Where damage has occurred, the Council will require that adequate assessment and monitoring of levels is undertaken over two seasons minimally, to demonstrate that the tree is involved and that such evidence be submitted in support of any request for action. Requests for action based on an un-quantified possibility of damage occurring at an unspecified point in the future will not be considered.

21.12 Solar Panels

The inclusion of solar panels on buildings is increasing within the Borough and across the UK as a whole. WBC recognises the importance of solar panels and the green energy that they supply. The design and installation of solar panels must take into account the location and growth potential of existing trees because WBC will not carry out works to reduce or remove established trees for the improvement of solar panel performance. The Council will ensure that all new planting areas are designed around existing solar panels to avoid future conflict.

21.13 Requests for work to Council owned trees.

As indicated above, the first step is for tree officers to decide whether, on balance and compared with situations elsewhere in the Borough, non-safety work could be justified. If the value of the tree or trees is high, the concern/nuisance not significant enough in the officer's opinion and/or the proposed works likely to be harmful, no works will be carried out or permitted.

If a tree is considered of value and the tree officer is of the opinion that the requested works are not going to detrimentally affect it, any minor pruning can be done whilst the Council has other works carried out to those trees as part of safety works following our formal inspection (see appendix 2). Alternatively, a resident can privately employ one of the Council's approved contractors, working to a specification agreed with the tree officer, in writing.

In those instances where a tree is causing an issue to an adjacent landowner, perceived or otherwise, and it is of poor quality or shape and inconsequential in terms of impact or benefit to an area, the Council can consider giving consent for its removal or other works (to be agreed in writing), to be carried out privately, but again, only by using one of the Council's approved contractors.

In respect of the above and to manage expectations, reducing the height of trees (topping) is not recommended or considered acceptable for any reason, except in exceptional circumstances. It is a destructive form of pruning which can seriously weaken the tree, as the cuts rarely fully close (they don't "heal"), this leaves the tree exposed to disease and decay, which in turn creates a hazard. New growth is weakly attached, and prone to breaking. So, far from eliminating a danger, the heavily pruned tree it is more likely to become one and to avoid this happening, once topped, a tree will continue to require cyclical work to retain it at a certain size which is extremely costly in the long term. Where trees which naturally grow to a certain maximum size, are very clearly unsuitably located, removal may be the better option rather than repeated topping.

22. Appendix 4. Biosecurity

Biosecurity refers to a set of precautions that aim to prevent the introduction and spread of harmful organisms. These include non-native tree pests, such as insects, and disease-causing organisms, called pathogens, such as some bacteria and fungi. Tree pests and diseases can be transported between or within countries via a number of pathways, including:

- live plant and tree products such as potted plants
- timber and wood packaging materials (WPM), such as shipping crates and pallets
- dirty tools, kit, machinery, and vehicles, such as chainsaws, boots and all-terrain vehicles
- soil and organic material, such as leaf litter
- natural means, such as wind and water

There has been a significant increase in the number of non-native tree pests and diseases being introduced to the United Kingdom since the early 2000s. This demonstrates the need for us all to take action to provide our trees, woods and forests with greater protection. By implementing appropriate biosecurity measures, we can significantly reduce the risk of introducing and spreading tree pests and diseases.

22.1 BEST PRACTICE

22.1.1 General Public

Tree pests and diseases can have a significant impact on our landscape, but there are some simple steps members of the public can take to help limit their spread:

- drive and park your vehicle only on hard-standing surfaces such as tarmac where possible when visiting outdoor areas such as woodlands, parks or gardens
- clean mud, organic material and water off your boots, bikes. Buggies and the dog before you leave, because fungi, bacteria and insects can live in these materials
- don't bring any plant or tree products back from trips abroad, because these might be carrying harmful non-native tree pests or pathogens

22.1.2 Industry professionals

People working in the arboriculture, forestry and landscaping industries are considered a particularly high-risk group for their potential to spread tree pests and diseases.

The Forestry Commission has worked closely with relevant organisations to develop industry-specific biosecurity guidance to reduce their members' risk of introducing or spreading pests and diseases:

By following the industry guidance, professionals can significantly reduce the increased risks to tree health associated with these sectors.

“Think kit”:

- make sure all equipment, including boots, clothing, ropes and saws, is free from soil and organic material before entering and leaving a site
- regularly clean ropes as per the manufacturer's guidance, or use dedicated ropes for particular sites
- clean and disinfect chainsaws, pruning saws and other cutting tools as part of routine maintenance, and before using them on a new site

Think transport:

- remove any build-up of soil and organic material on vehicles and machinery, including cabs, wheels and foot wells, before leaving each site
- use proper off-site wash-down facilities regularly

Think trees, plants, and materials’:

Responsibly source planting stock through nurseries or suppliers that adhere to national standards such as the Plant Health Management Standard, or that have their own biosecurity policy in place that you trust:

- source planting stock from pest and disease-free areas keep accurate, up-to-date records of all purchases and supplies to assist with tracing exercises in the event of an outbreak
- regularly monitor plant and tree stock for signs of ill-health, and report any suspect symptoms using the Forestry Commission's Tree Alert website
- source landscaping materials from pest-and-disease-free areas only
- be aware of any restrictions in place, or phytosanitary (plant health) measures and treatments required when importing certain materials or their packaging

- specify British-grown plants when sourcing planting stock, to reduce the risk of an accidental introduction of invasive non-native pests or diseases

When working on a site that is subject to a Statutory Plant Health Notice (see below), or where a pest or disease has been confirmed, you must follow any additional biosecurity guidance for that pest or disease in addition to the measures above.

If you must remove infected or infested material from such sites for safety reasons, you must ensure that:

- it's kept separate from other arisings
- it's not used for mulch or firewood
- it's disposed of at a licensed handling facility, or through deep burial or incineration on site
- obtain a movement licence if required

As a landowner or manager, it's particularly important to implement appropriate biosecurity measures to prevent the introduction and spread of tree pests and diseases. Not only can these organisms affect the economic value of our trees, but they can also have a wider negative impact on other species and habitats.

If a tree pest or disease is confirmed on anyone's land, there are some additional measures one needs to follow:

22.1.3 Statutory Plant Health Notices (SPHNs)

If the tree pest or disease is classified as notifiable, the FC may issue an SPHN. The Forestry Commission and other plant health authorities issue these notices requiring the owner or manager to take certain steps to eradicate or contain notifiable pests and diseases.

SPHNs requiring eradication may require measures to kill the infected or infested trees, such as by felling or ring barking. SPHNs ordering containment measures may allow the infected or infested trees to remain standing but require any susceptible material to remain on site.

22.1.4 Non-notifiable pests and diseases (P&D)

One is not required to take any action if the tree pest or disease found is not notifiable. The FC does, however, recommend that the following measures are taken to ensure people's and animals' safety, and to minimise any further spread of the P&D;

- continue to implement the biosecurity measures

- Inform users of the presence of P&D through information boards, posters at entry points, and by adding information and biosecurity guidance the website
- monitor the trees' safety as the infection or infestation progresses
- in low-density situations, such as in parks or gardens, slow the spread of pests and diseases by removing and disposing of infected trees and their fallen leaves and branches

23. Appendix 5; Site list for potential new planting

The list of sites below is indicative and subject to extensive internal and external consultation as to their suitability (or their requirement for other purposes):

CRANLEIGH AREA:

Queensway
Cranleigh Mead
Summerlands
Cranleigh Common; Windmill side
Elmbridge Road "tip"
Dunsfold Common
Ewhurst Green
Brockhurst Cottages

GODALMING AREA:

Middlefield (Witley)
Amberley Road (Milford)
Aarons Hill/Ockford Ridge
Lammas Land (Chalk Road triangle)
Farncombe various; Copse Side, Badgers Close area, Longbourne Green, Spring Grove, Canon Bowring, Combe Road Rec, Broadwater Park, Binscombe OS.
Crownpits
Riverside/Phillips Memorial Park
Holloway Hill Rec
Bramley OS, Run Common
Wonersh Common
Hascombe Rec
Pathfield (Chid)
Westbrook Green (Elst)

FARNHAM AREA:

Shepherds way (Tilford)
Runfold Rec
Badshot Lea Green and Orchard
Land east of Six Bells O
Weybourne Rec
Hale Reeds
Oast House Crescent
Trinity Hill, various
Sandy Hill Open Space
Old Park Close
Farnham Park
Weydown tip
Baldreys
Bardsley Drive
Middlefield
Thurbans

Greenhill Way
Beldhams
Wrecclesham Rec
Boundstone Play area
Langhams Rec
Peakfields

HASLEMERE AREA:

Greenhanger (Churt)
Sunvale Cemetery (land adjacent)
High Lane Estate, various
Haslemere War Memorial Recreation Ground
Grayswood Recreation Ground
Marley Hanger