



Tree Strategy

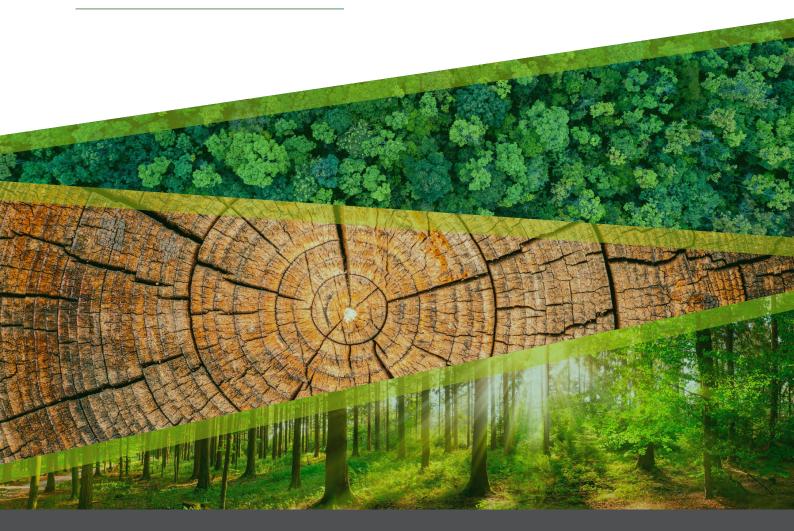






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WDVTA stands for the Wokingham District Veteran Tree Association



1. INTRODUCTION

Main principle

Right Tree, Right Place, Right Reason

Tree strategies are a plan for the management of trees in a specific area, this includes tree planting and felling. This strategy provides Wokingham Borough Council with a set of standards and goals to ensure it continues to care for the trees of the borough. It takes the risks and benefits into account, setting out the Council's aspirations for increasing tree numbers and canopy cover, whilst continuing to protect existing trees for the benefit of future generations.

Purpose:

The Council recognises the positive impact trees have on the environment and the lives of people who live in and visit the borough. Trees provide multiple benefits, which include improvements in human health and well-being, biodiversity and carbon capture.

When the term 'tree' is used in this strategy, it refers to all forms of trees, including saplings, mature trees, veterans, hedgerows, orchards and woodlands.

This document will provide a useful resource to anyone interested in conserving and enhancing the trees of our borough. It seeks to provide additional guidance and detail to

support policies in the Council's decision-making process to ensure that Climate Emergency Plan goals are achieved.

The strategy is designed to cover the next 10 years and includes short-, medium- and long-term goals, including achieving the required standards to gain recognition as a Tree City of the World.

Aims:

- To promote awareness of the value of trees in our environment.
- To interpret the policy framework on trees at international, national and regional levels to help define the Council's responsibilities.
- To set out Council policies to enable us to conserve and enhance the Wokingham Borough treescape.

Objectives:

The Tree Strategy will provide the Council with a framework to help manage its tree assets and to achieve the following objectives:

- Conserve and enhance the tree resource in terms of quality and numbers.
- Promote public safety through appropriately resourced tree inspection and maintenance programmes.
- Fulfil the Council's legal obligations as a tree owner by addressing safety and major nuisance issues.

- Help inform residents of our legal obligations relating to trees and manage enquiries and expectations appropriately.
- Help establish sustainable management programmes for Council woodland utilising external funding from central government agencies.
- Promote and increase the current level of tree-planting on public and private land to address the recent decline of individual trees.
- To contribute to the 2030 carbonneutral target and to mitigate the potential effects of ash dieback and other potentially harmful diseases.
- Help improve air quality, mitigate climate change, increase biodiversity, improve residents' health and well-being, and provide the socio-economic benefits that trees provide.
- Provide guidance to developers on how the Council expects treeplanting to be integrated into the design and construction of development proposals.
- Encourage and support individuals and local voluntary environmental organisations to contribute to the maintenance and enhancement of the treescape.

The success and effective implementation of the goals and ambitions of the strategy are subject to adequate financial and staffing resources being made available, along with full support from Councillors and Senior Management.





2. SUMMARY

As part of the development of the Council's emerging Tree Strategy, consultations have been held with the following internal and external stakeholders:

Internal stakeholders:

- **Wokingham Borough Operational** Tree Officers
- · Wokingham Borough Trees and Landscape Team
- Planning Policy Team
- **Planning Regulation Team**
- **Development Management Team**
- **Estates**
- Green and Blue Infrastructure
- Countryside Services
- Cleaner and Greener
- **Highways**
- Flood & Drainage

External stakeholders:

- **Woodland Trust**
- Wokingham District Veteran Tree Association (WDVTA)

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3. LEGAL FRAMEWORK

There are many laws which protect the environment and govern or guide the way some parts of the landscape are managed. These laws help ensure the country is an attractive place to live, work and visit. There is now an increasing focus on law to help protect biodiversity (wildlife) and ensure sustainable uses of the land.

Many of these laws have been in place for decades, including the Town and Country Planning Act (1947 + 1990) (link), the Occupiers' Liability Act (1957 + 1984) (link), the Forestry Act (1967) (link), the Local Government (Miscellaneous Provisions) Act (1976) (link), the Highways Act (1980) (link), the Natural Environment and Rural Communities Act (2006), Agriculture Act (2020) (link), the Local Nature Recovery Strategies (LNRS) (link), and more recently the Environment Act (2021) (link).

Whilst legislation to help protect the environment has been in place for many years, the government has more recently acknowledged that our way of living is having a significant impact on the environment. These impacts are not only on local environments within the UK but also



on a global scale. The single greatest impact on the environment is that of humans, and as such the government has sought solutions to address changes in the climate caused by use of fossil fuels in every sector of human activity, from transport and development to farming and fashion.

In January 2018, the government released 'A Green Future', a 25-year plan setting the goal to improve the environment so that the next generation inherits an environment that is of better quality than that which we have today.

The approach is underpinned by a commitment to increasing natural capital, the stock of natural environment assets that deliver a range of benefits for people and wildlife. Section 6 of the Strategy expands on The Value of Trees.

Trees and woodland feature prominently in the Plan, including increasing woodland in England in line with the government aspiration of attaining 12% cover by 2060, and focusing on woodland to maximise its many benefits.

To facilitate the government's goals, several documents have been produced which this strategy takes into consideration. These include:

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

This Act came into force in October 2006. Section 41 (S41) of the Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The UK Biodiversity Action Plan (BAP) list has been drawn up by the Joint Nature Conservation Committee as required by the Act. **Section 40** of the NERC Act places a duty on public authorities in England, in exercising their functions, to have regard to the purposes of conserving. The act does not limit the requirement to have regard to conserving biodiversity to any specific functions so then such functions would include waste management. highways works and maintenance, planning decision making and policy making. Paragraph 40(iii) states that 'Conserving biodiversity includes, in relation to a living organism or type of habitat, restoring or enhancing a population or habitat'. Of course, trees, particularly native species, must be considered to be both wildlife and wildlife habitat for the purposes of the Act. Follow this link to view NERC Act 2006.







b) The Localism Act 2011

This Act has placed a greater emphasis on the sub-national, local and neighbourhood levels' roles in planning and in the decisions about designations of local green spaces, including woodland, for community use. Importantly the duties to conserve, restore or enhance biodiversity (including trees and woodland) under the NERC Act (2006), (see above), apply to parish councils as well as to the borough council. A consequence of this is that, although there is no duty under the Localism Act for parish councils to produce a Strategy like The London **Environment Strategy required by** paragraph 225 of this Act; it is a duty of the parish council to consider 'restoring or enhancing a population or habitat' under Section 40(3) of the NERC Act. This includes trees and woodland. Follow this link to view the Localism Act 2011.

c) Agriculture Act 2020

The update of the Agriculture Act has provided a mechanism where financial assistance for farmers must provide 'Public Goods', the Commons Library briefing from December 2020 (follow this link for the

Agriculture Act 2020 briefing paper) provides within chapter 3.1 (clauses 1-6) an example in table 1 of the envisaged benefits that the Act will provide through the Public Goods. Clause 1(a) suggests the act will incentivise tree planting to capture

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ammonia emissions and to protect sensitive habitats from agricultural nitrogen deposition which can damage them. Follow this <u>link</u> to view the Agriculture Act 2020.

d) National Planning Policy Framework and guidance

The National Planning Policy Framework (NPPF) sets out the government's planning policies for England and how these should be applied and reinforces the importance of sustainable development. The Framework demonstrates its contribution not only to the environment, but to economic and social agendas health. It states that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused by the Local Planning Authority, unless there are wholly exceptional reasons and a suitable compensation strategy exists. In addition, the NPPF states that an approved Community Forest Plan may be a material consideration in preparing development plans and in deciding planning applications.

Further detail is set out in the government's planning practice guidance (PPG). Follow this <u>link</u> for NPPF guidance. The PPG provides an online resource of detailed policy guidance that sits alongside the Framework.

In addition, the National Design Guide illustrates how well-designed places can be made more beautiful, healthier, greener and more enduring. The guide complements the PPG and covers thematic areas. Consideration is given to trees and landscape within several areas such as public spaces, nature, homes and buildings, and movement. Follow this <u>link</u> for the National Design Guide.

e) Defra Forest Policy

Defra published its latest Forestry and Woodlands Policy Statement in March 2013. This also incorporated its response to the Independent Panel on Forestry. It affirms the government's commitment to protecting trees, woods and forests. Follow this <u>link</u> to view the Defra Forest Policy.

f) Natural Environment White Paper

The Natural Choice: securing the value of nature, published in 2011, recognises that a healthy, properly functioning natural environment is the foundation of sustained economic growth, prospering communities and personal well-being. It makes the case for the economic valuation of the services natural systems provide to our society, and for these values to be properly accounted for in economic decision making across all government departments. Follow this link to view the paper.



g) Biodiversity 2020: A strategy for England's wildlife and ecosystem services

Biodiversity 2020: A strategy for England's wildlife and ecosystem services, published in 2011, has as its mission to halt overall biodiversity loss; support healthy, well-functioning ecosystems; and establish coherent ecological networks, by providing better habitat for nature for the benefit of wildlife and people.

In line with the UK Forest Standard Guidelines, conservation of biodiversity is an essential part of Wokingham Borough Council's Tree Strategy. Biodiverse woodlands and urban forests are not only more resilient to a range of external factors such as pests, diseases and climate change but provide a wider range of green infrastructure benefits. Follow this link to view the Biodiversity 2020: A strategy for England's wildlife and ecosystem.

h) Circular 36/78 Trees and forestrv

This document issued by the DOE in 1978 consolidates advice on trees and forestry and the preservation of trees and woodlands.

- It enshrines Local Authority powers to plant and protect trees and a duty to make provision for them when granting planning permissions.
- It advises on the treatment of trees and forestry in plans and on staffing for, and public involvement in, proposals relating to trees.
- It describes the purpose and scope of Tree Preservation Orders. Follow this link for link for the Councils guidance on protected trees.

This publication has now been rescinded and is superseded by a number of further documents; the detail contained however is still relevant with much of the information enshrined in law.



i) UK Forestry Standard

The UK Forestry Standard sets out the criteria and standards for the sustainable management of all forests and woodlands in the UK. The Forestry Commission employs the Standard in the management of its own forests, and private forests receiving grant aid must be managed in accordance with the Standard. Follow this <u>link</u> for the UK Forestry Standard.

Eight areas of activity are covered by the Standard:

- General forest practice
- Biodiversity
- Climate change
- Historic environment
- Landscape
- People
- Soil
- Water

j) Local plans

Local plans are prepared by the local planning authority (LPA), usually the Council or the national park authority for the area. LPA's have a statutory duty to prepare and review Local Plans for their area. The NPPF states that the planning system should be genuinely plan-led. Succinct and up-to-date plans should provide a positive vision for the future of each area and a framework for addressing housing needs and other economic, social and environmental priorities. Wokingham Borough Council has produced a development plan which comprises several documents. including the Core Strategy and Managing Development Delivery Local Plan. Wokingham Borough Council are in the process of producing a Local Plan Update (LPU) which is expected to go to Public Inquiry in 2023. This will replace the current Local Plan which comprises the Core Strategy and Managing Development Delivery (MDD) Local Plans. See Section 4 of the strategy for further detail on the Local Plan. This link will take you to the Wokingham Borough Council Local Plan Update webpage.







k) Neighbourhood plans

Neighbourhood planning gives communities the opportunity to prepare a vision for their neighbourhood and help shape the development and growth of their local area. Neighbourhood planning provides a powerful set of tools for local people to plan for the types of development to meet their community's needs and where the ambition of the neighbourhood is aligned with the strategic needs and priorities of the wider local area. This includes opportunities to prepare polices that help protect valued areas of green space and influence the design and type of new development.

Wokingham Borough currently has two adopted neighbourhood plans: Shinfield, and Arborfield & Barkham, which include planning policies and guidance relating to localised matters in their area, such as trees and hedgerows.

Policies within a neighbourhood plan provide additional detail to strategic policies covered in the local plan.

Follow this link to view Wokingham **Borough Council Neighbourhood** Plans.

I) Climate Emergency Action Plan

The UK was one of the first countries to ratify the Paris Agreement on limiting greenhouse gas emissions to levels that prevent global temperatures from increasing to more

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than 2ĐC above the temperature benchmark.

Following a report by the Intergovernmental Panel on Climate Change, advice was given stating the 2ĐC target was too high and a lower target of 1.5ĐC should be the limit. The publication of the report triggered several councils across the world to declare a climate emergency.

Wokingham Borough Council declared a climate emergency on 18 July 2019. The declaration set out the commitment to play as full a role as possible, leading by example as well as by exhortation, in achieving a carbon-neutral Wokingham Borough by 2030. The motion committed Wokingham Borough Council to produce a Climate Emergency Action Plan (CEAP) within six months, to report the actions that the Council will take to achieve its target and to set up a cross-party working group to monitor progress. With the publication of this CEAP, all these commitments are now in place.

The Council's CEAP can be found using the following <u>link</u>.

m) Environmental Land Management schemes

The agricultural transition period in England means a shift in agrienvironmental policy, away from EU Common Agricultural Policy and towards English future focused Environmental Land Management (ELM). There are 3 new schemes that will reward environmental land management:

- Sustainable Farming Incentive
- Local Nature Recovery
- Landscape Recovery

These schemes are intended to support the rural economy while achieving the goals of the 25 Year Environment Plan and a commitment to net zero emissions by 2050. Through these schemes, farmers and other land managers may enter into agreements to be paid for delivering the following:

- clean and plentiful water
- clean air
- thriving plants and wildlife
- protection from environmental hazards
- reduction of and adaptation to climate change
- beauty, heritage and engagement with the environment

Further details on Environmental Land Management Schemes can be found on Gov.uk



4. LOCAL PLAN

Local Plans are statutory documents prepared by an LPA in consultation with its community and other stakeholders. The document sets out a long-term vision and a policy framework to guide how future development is managed in the area, including the location, amount and type of new development, and supporting infrastructure. Once in place, local plans become part of the statutory development plan.

The development plan for Wokingham Borough includes the Core Strategy (adopted 2010) and the MDD (adopted 2014) which govern how development will occur in the borough until 2026. Work is underway on a new Local Plan Update (LPU) that will guide the longterm development of the borough. Once adopted, the LPU will replace the Core Strategy and MDD.

The Council's local plan must continue to consider changes to national planning policy and guidance.

This includes the current standard approach for calculating the number of homes each local authority must plan for.

The Core Strategy sets out a list of goals which includes a desire to protect the character of the borough by maintaining/improving the built/ natural environment while mitigating the effect of new development on the environment.

Policy CP1 on Sustainable development seeks to maintain or enhance the high quality of the environment and to provide attractive, functional, accessible, safe, secure and adaptable schemes.

Policy CP3 sets out the general principle of development, including ensuring proposals:

- Are of an appropriate scale of activity, mass, layout, built form, height, materials and character to the area together with a high quality of design without detriment to the amenities of adjoining land users including open spaces or occupiers and their quality of life; have no detrimental impact upon important ecological, heritage, landscape (including river valleys) or geological features or watercourses.
- contribute to a sense of place in the buildings and spaces themselves and in the way they integrate with their surroundings (especially existing dwellings) including the use of appropriate landscaping.

By following this link, further detail can be found on the Councils Managing Development Delivery Local Plan.

This document provides further detail to the policies contained within the Core Strategy which ensure the borough's unique ecology, landscape, heritage and environment will be protected and, where possible,

¹ Right Homes, Right Places – Draft Local Plan Public Consultation (February 2020 – March 2020)

enhanced so that Wokingham Borough's strength of character prevails in these times of change.

The MDD contains Policy CCO3 on Green Infrastructure, Trees and Landscaping requires that, which includes the following detail:

- Development proposals should demonstrate how they have considered and achieve the following criteria within scheme proposals:
- Provide new or protect and enhance the Borough's Green Infrastructure networks, including the need to mitigate potential impacts of new development,
- Promote the integration of the scheme with any adjoining public open space or countryside.
- Protect and retain existing trees, Landscaping, tree-planting, hedges and other landscape features,
- Incorporate high quality, ideally, native planting and landscaping as an integral part of the scheme.
- Policy TB21 on Landscape Character requires that:
- Proposals must demonstrate how they have addressed the requirements of the Council's Landscape Character Assessment, Including the landscape quality; landscape strategy; landscape sensitivity and key issues.
- Proposals shall retain or enhance the condition, character and features that contribute to the landscape.





The Council recognises the value that existing and new trees add to any development. To help ensure that important assets such as trees are retained in development, the Council has put forward several policies within the draft LPU. The draft LPU was subject to public consultation in February 2020¹, and included the following:

Policy NE3: Trees, Woodland and Hedgerows

- 1. Trees, woodland and hedgerows are important visual and ecological assets in towns, villages and the countryside. To retain and provide local character and distinctiveness in the landscape, trees (including ancient or veteran trees), woodland, ancient woodland and hedgerows are of particular significance. Development proposals should:
- a) Ensure existing trees, hedgerows and other landscape features are protected, and where possible enhanced, as an integral part of the development,
- b) Retain the existing pattern of fields, hedgerows, woodlands, trees, watercourses, water bodies, underlying topography and other landscape features,

- c) Provide appropriate buffer zones around woodlands, including semi-natural ancient woodlands, planted ancient woodland sites, orchards, hedgerows and individual trees.
- 2. The loss, threat or damage to any tree, woodland or hedgerow of visual, heritage or nature conservation value will only be acceptable where:
- a) Development proposals have sought to avoid, reduce or minimise impact,
- 3. b) Mitigation measures, such as structural tree planting are incorporated as part of the development proposals providing equivalent scale, canopy cover, habitat connectivity and character. Development proposals that would result in the loss or deterioration of woodland, ancient woodland and ancient or veteran trees will only be permitted if there are wholly exceptional reasons and a suitable compensation strategy exists.

Policy NE4: Development and Existing Trees, Woodland and Hedgerows

- Development proposals that may affect a tree, woodland or hedgerow should:
- a) Assess the health of all trees, woodland and hedgerows affected, including describing and assessing their value and the potential impact of the development on them as part of an Arboricultural Impact Assessment
- b) Incorporate existing woodland, trees and hedgerows and ensure integration into the public realm within a suitable landscape setting,
- c) Ensure the layout of new developments provide sufficient space to enable trees to grow and thrive, including maintaining adequate root protection areas and limiting excessive shading to residential properties.
- d) Ensure appropriate tree protection measures are in place prior to development commencing on site as part of an Arboricultural Method Statement, including a Tree Constraints Plan and Tree Protection Plan and actively monitor tree protection throughout the construction process.

Valued Landscape Topic Paper

This paper provides background evidence and justification for Wokingham Borough Council's designation of valued landscapes as per Policy NE6 of the Draft Local Plan. The paper, a draft version of the paper can be viewed by following this link, sets out the relevant legislation, policy guidance, appeals and case law and details the methodology used for discovering and defining valued landscapes across the Borough. It is intended that this paper will inform the development of the LPU and will demonstrate how the Council's LPU process and policies will seek to conserve and enhance the borough's valued landscapes in accordance with the National Planning Policy Framework 2021.

Once finalised the Topic
Paper will assist the Council's
Development Management and
Planning Enforcement teams in
the assessment, prioritisation,
determination and defence of
planning decisions.

Work on discovering and defining the borough's Valued Landscapes combined with the Council's most recent Landscape Character
Assessment (LCA) (2019), and the Wokingham Landscape Character
Assessment (2004) offers an objective assessment and description of the borough's landscapes.
The strategic Valued Landscape assessment and the Landscape Character Assessment provide an evidence base to help formulate



policies for the LPU and will help guide decision-making around development and the management of future change. They are designed to be used both as a positive tool to guide new development or land uses in a way that understands and responds to local variations in landscape character and to protect and enhance the special qualities and local distinctiveness of Wokingham's landscapes. Taking into consideration the main strategy principle of 'Right Tree, Right Place, Right Reason', using the LCAs, Wokingham Borough Council's tree and landscape and ecology officers will develop a 'tree palette' which will provide a useful tool to support developers, residents, community groups and landowners in making informed decisions on which trees would be most suitable for the borough landscape characteristics. Work is already underway to develop the tree palette and completion of it has been included as a short-term goal on the strategy action plan.

The emerging Local Plan Update also contains several other linked policies including NE1 and NE3-NE7 which consist of policies relating to NE1: Biodiversity and Nature Conservation, NE3: Trees, woodland and hedgerows, NE4: Development and existing trees, woodland and hedgerows, NE5: Landscape and Design, NE6: Landscape Character, Value and Green Routes and NE7: Sites of Urban Landscape Value.

The LPU will guide where and how growth will take place in the borough. The Council must plan for more

housing, which is always a complex and controversial subject. They will also plan for new employment, schools, roads, parks, shops and community facilities necessary to create places people want to live, work and do business.

The LPU will interact with themes to include the aforementioned natural environment policies, to ensure that any development should optimise unit density, while also consistently achieving quality design which provides sufficient space to allow the integration or juxtaposition of trees and woodland within development in a sustainable manner. The integration of existing trees and good landscape planning for enhanced contributions will reinforce or even sometimes create the sense of place and local distinctiveness.

Additional information on the emerging LPU can be found by following this link.

Further to the above aims of the local plan and Core Strategy, MDD and emerging LPU, this strategy seeks to provide additional detail to support policies within the local plan and provides further weight and guidance in the Council's decision-making process to ensure that Climate Emergency Plan goals are achieved.

5. WOKINGHAM ENVIRONMENT

Borough Design Guide

Adopted in 2012, the Borough
Design Guide, is a Supplementary
Planning Document (SPD) which
augments planning policies in the
Development Plan Document (DPD),
in this case, the Wokingham Borough
Core Spatial Strategy (January
2010) (Core Strategy). The Borough
Design Guide is an important material
consideration in the determining
of planning applications and
elaborates on policies in the Core
Strategy, explaining how they will be
interpreted and applied to common
topics and forms of development.

The Borough Design Guide has been prepared to help deliver the vision and objectives of the borough. The overall aim of the guide is to enhance the quality of development and make sure proposals are of the highest quality of design. That means inclusive, safe, harmonious, welcoming, sustainable places that are well related to the surroundings.

The Borough Design Guide can be viewed by following this link.







Biodiversity Action Plan (BAP)

The current Wokingham Borough BAP covers the period 2012-2024, and aims to build on the achievements and successes of the previous BAP.

The overall aims of the Wokingham Borough BAP are to:

- raise awareness of the issues impacting on local biodiversity.
- outline targets and actions which will enhance biodiversity in the borough.
- encourage and support community engagement; enabling local action to deliver targets.
- encourage management practices sympathetic to wildlife, promoting "good practice" and providing guidance.
- ensure policies are in place for the protection, management and enhancement of the local wildlife resource.

The BAP aims to contribute to and build on biodiversity delivery at a county level. This includes progressing actions in the following **Biodiversity Opportunity Areas** (BOAs): Blackwater Valley; Chilterns Escarpment; Thames Basin Heaths; Loddon Valley South; Loddon Valley Gravel Pits; Waltham Woodlands and Parkland; Ashley and Bowsey Hills.

The Wokingham Borough Biodiversity Action Plan can be found by following this link.

Tree stock

Between May-July 2022, an assessment of the Borough trees was carried out to ascertain the numbers, condition and benefits of trees across the Borough using a variety of data systems and in person site surveys.

Data was initially collected though a desk- based survey using the BlueSky's National Tree Map™ (NTM™), a detailed dataset derived from high quality aerial imagery providing the location of all trees across the borough along with a derived canopy and approximate tree height.

The dataset for Wokingham Borough was analysed to provide the following information:

- The number of trees identified on the NTM as being within WBC including both council and privately-owned trees.
- The number of trees from NTM within the ownership of WBC.
- Number of trees within each parish including both WBC and privatelyowned trees.

 Number of trees from NTM within each parish under WBC ownership.

Analysis of the NTM dataset identified that WBC are responsible for approximately 91,000 trees with a further 540,000 being within private ownership. The total number of trees within the borough is indicated to be over 630,000.

By using the NTM data as a basis; a series of sample plots were created across the borough where an on-site survey was carried out. The sample plots were targeted to capture sites within the Council's ownership containing the largest number of trees. The survey consisted of 102 survey plots (50m x 50m) located across the Councils ownership with 6 plots in each of the 17 parishes. Understanding the makeup of the tree asset is important in terms of identifying risk and ensuring that any new tree planting is designed to be resilient.

The data that was captured through the desktop BlueSky's National Tree Map™ (NTM™) and sample site surveys can be found within Appendix A².



² Tree Report - Appendix A

Canopy Cover

Between May-July 2022, an assessment was also conducted of the borough's trees using the i-Tree Canopy model. This internationally renowned and peer reviewed system again uses high quality aerial imagery and requires an operator to assess the vegetation within several sample plots; this may simply be grass, trees and shrubs, water, or impervious surfacing e.g., a road. The data gathered through this survey indicates that approximately 22% of the borough landmass is under tree or shrub canopy. The average tree canopy cover is 16% in England³, it is therefore clear that Wokingham borough has an above average tree canopy. The results of the i-Tree Canopy survey indicate that the borough's trees currently provide annual carbon sequestration of over 12 kilo tons of carbon (1 ton of CO2 is the equivalent driving 2482 miles in a family car)4.

The cost of attenuating this amount of CO2 would be in the region of £3 million3 annually. In total the current tree asset stores over 305 Kilo tons of Carbon with a value of over £77 million. Further benefits indicated that the tree canopy intercepts and prevents the over 985 mega litres (million litres) of rainwater run off; an Olympic swimming pool holds approximately 2.5 mega litres of water. Wokingham's trees therefore intercept the equivalent of 394 Olympic swimming pools per year. This has a value in terms of savings to water companies of over £1.5 million per annum.

The full results of the canopy survey can be found at Appendix A⁵.

The data collected through the Tree Survey and Canopy Cover Survey will be used by Officers to identify areas with low canopy cover that would benefit from new planting within WBC land.

³ https://www.forestresearch.gov.uk/tools-and-resources/fthr/tree-canopy-cover-leaflet/

⁴ https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

⁵ Tree Report - Appendix A

6. VALUE OF TREES

Environmental

Trees benefit our environment in the following ways:

Improving air quality

Trees are effective agents in enhancing air quality by producing oxygen (via the process of photosynthesis), and through the capture of urban pollutants e.g., sulphur dioxide, nitrogen oxides, ozone, particulate matter, carbon monoxide and lead and other heavy metals. Some air pollutants such as dust, ash, pollen and smoke are absorbed by leaves and bark or are temporarily intercepted from the air and washed into the ground or collected by drainage system filters.

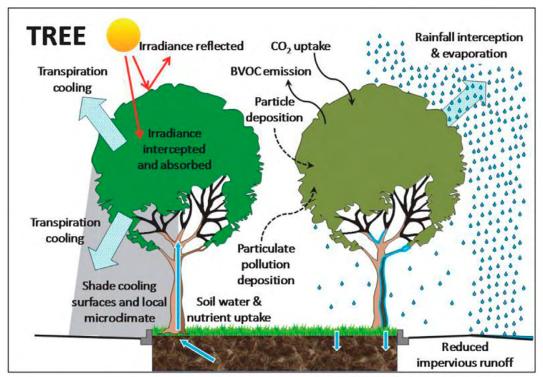
Urban cooling

As summer temperatures increase through climate change, the importance of trees and other vegetation in reducing the 'urban heat island effect' through shading and evapotranspiration during the day and cooling the built environment at night-time has become ever more apparent. In the winter, trees lower wind speeds, reducing heat loss from buildings and offering shelter to pedestrians and cyclists. This is true of deciduous trees as well as evergreens. Deciduous trees also have the advantage of allowing more light into dwellings and gardens in winter.

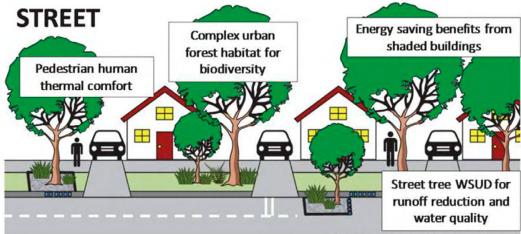
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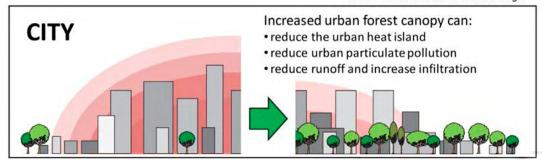




BVOC = Biological volatile organic compounds



WSUD = Water Sensitive Urban Design



Livesley, S. J. et al., 2016. The Urban Forest and Ecosystem Services: Impacts on Urban Water, Heat, and Pollution Cycles at the Tree, Street, and City Scale. Journal of Environmental Quality, Volume 45. https://acsess.onlinelibrary.wiley.com/

The solar heating of impervious surfaces with high heat capacity and thermal conductivity (such as concrete) absorb and re-emit the sun's heat more than natural landscapes. Trees have demonstrated the capacity to increase urban albedo (the measure of the reflectivity of a material) when compared to dark tarmac meaning they decrease atmospheric temperature; vegetated surfaces also have lower radiative temperatures when compared with impervious surfaces with the same albedo. Extensive tree coverage in a city can deliver significant benefits to outdoor human thermal comfort and result in lower heat stress.6

Climate change mitigation

Trees play a crucial role in mitigating climate change⁷. Over a year, a mature tree can remove approximately 22kg of carbon dioxide from the atmosphere, whilst the soil in the tree's root protection area can also provide durable carbon stores⁸.

Reducing noise and calming traffic

Trees can help reduce noise pollution through the absorption of sound waves muting noises from building façades, mitigating the impacts of, poorly designed, canyonised street configurations. There is evidence that roadside trees significantly increase a driver's perception of spatial edge⁹. The evidence for a positive impact on driver behaviour is so compelling that the Department for Transport (DfT) has reported several schemes aimed at using tree-planting to lower speeds and thereby reduce the number and severity of road accidents¹⁰.

https://www.eea.europa.eu/articles/forests-health-and-climate-change/key-facts/



⁶ Salmond, J. A. et al., 2016. Health and climate related ecosystem, services provided by street trees in the urban environment. Environmental Health, Volume 15. <u>link</u>

⁷ Oke, T.R. (1989). The micrometeorology of the urban forest. Philosophical Transactions of the Royal Society of London B 324: 335–349.

⁸ European Environment Agency:

⁹ Rosenblatt, J., Kweon BS. and Maghelal, P. (2008) The street tree effect and driver safety. ITE Journal on the Web, 69-73.

¹⁰ Clark, J. and Matheny, N. (2009). The Benefits of Trees. Arborist News 18(3), 12-18.



The document 'Psychological' traffic calming by Kennedy et al., (2005)¹¹ produced for the DfT provides details of scheme on the C419 at Latton in Wiltshire. This scheme re-engineered a former trunk road through the village, incorporating buildouts with the planting of an avenue of trees. Traffic surveys both before and after having indicated a substantial decrease in the proportion of drivers exceeding 40mph; while in part this is attributable to the reduction in speed limit, it is not considered that this alone would result in more than a 3mph reduction in speed. It is envisaged that as the trees mature and the parking bays utilised more frequently, this will result in further speed reductions as the traffic flow is constrained by the perception of a narrowing of the road.

Sustainable urban drainage and bioremediation

Sustainable drainage systems (SuDS) are designed to manage stormwater locally (as close to its source as possible), to mimic natural drainage and encourage its infiltration, attenuation, and passive treatment. There is an expectation on developers to design and instal suitable systems for managing storm water.

SuDS are designed to both manage the flood and pollution risks resulting from urban runoff and to contribute

¹¹ ISBN 0968-4107 Author J Kennedy, R Gorell, L Crinson, A Wheeler and M El Pages 40 Reference TRL641. https://www.trl.co.uk/publications/trl641

wherever possible to environmental enhancement and place making. The multi-functionality and multiple benefits of SuDS should always be considered. Developers shall design SuDS to incorporate natural solutions where possible; landscape tree planting and habitat creation is expected to be incorporated in such solutions.

Trees play a vital role in reducing the rainwater runoff from hard surfaces that is associated with flash flooding. They slow down the quantity and rate of runoff by intercepting rainwater with their foliage and by the active process of evapotranspiration, taking water from the soil in drier periods and improving its ability to absorb more during times of spate. In addition, their roots help stabilise soils and improve soil porosity.

Fine tree roots also reduce runoff by aiding the infiltration of rainwater into soil and rock strata.

It is understood that several tree species have the ability to ameliorate soil and water conditions by absorbing, processing, or neutralising a wide range of pollutants in a process known as bioremediation.

Biodiversity

Urban trees and woodlands are intrinsic to biodiversity through their contribution to creating green corridors, enhancing the ecological permeability of the built environment. Trees provide habitat and a food source for a wide variety of flora and fauna species, both in densely builtup areas as well as urban woodlands. Some trees are more important than others in providing habitat, food and shelter to other wildlife dependent on their species, age, location and other circumstances. For example, a single mature oak tree can support up to 500 different species of flora and fauna¹².

Woodlands in the borough provide some of the most important habitats in Wokingham. All woodlands are subject to a measure of protection under the Forestry Act 1967 (as amended). The Forestry Act 1967 provides mechanisms that control tree removal through the use of felling licences, further detail can be found by following this <u>link</u>. Many of the borough's woodlands are also protected by Tree Preservation Orders.

https://doi.org/10.5285/22b3d41e-7c35-4c51-9e55-0f47bb845202



¹² Mitchell, R.J.; Bellamy, P.E.; Ellis, C.J.; Hewison, R.L.; Hodgetts, N.G.; Iason, G.R.; Littlewood, N.A.; Newey, S.; Stockan, J.A.; Taylor, A.F.S. (2019). Oak-associated biodiversity in the UK (OakEcol). NERC Environmental Information Data Centre. (Dataset).

The ancient woodlands of the borough are irreplaceable habitats and are subject to strong protection when considering development proposals under the government's NPPF (2021). On behalf of the government Natural England and the Forestry Commission have produced guidance on how planning should approach ancient trees and woodlands The 'ancient woodland, ancient trees and veteran trees: advice for making planning decisions' guidance can be found by following this link.

Health and well-being

Urban trees can help build stronger community cohesion and enhance how safe and healthy people feel. Most people prefer to live and work amongst greenery, recognising the value of their own local treescape and greenspaces, particularly in built-up and densely populated areas. Within green spaces, trees provide inviting areas for exercise, providing shade, reducing the risk of skin cancer and heat-related health problems. A rich and diverse treescape has also been shown to help reduce stress and contribute to other health benefits as well as reducing the recovery times of patients in hospital¹³.

Socio-economic

As the awareness of the benefits of trees increases, social demand for trees has never been greater. Trees help to create welcoming areas within our town centres.

encouraging people to visit and stay for prolonged periods, using shops and restaurants, whilst workers who have views of trees feel happier, aiding increased performance. Trees also help to provide a sense of place and community and provide an educational resource through community orchards and the Forest Schools programme.

The presence of well-managed trees encourages shoppers to spend more time in a business district, and research has shown¹⁴ they will travel a greater distance to visit that centre, ultimately stimulating the local economy.

Cultural heritage trees in the borough

Trees are mentioned as boundary markers in various Anglo-Saxon charters. It is not known whether any such trees survive in Wokingham although this is unlikely, if they do, they would be confined to the longerliving species such as yew and oak.

The borough is the setting for several trees that, when their age is assessed, would appear to have first grown in the early modern or Tudor period. However, the earliest documented trees are part of woodlands that appear on the 1607 Description of the Honor of Windsor, a series of maps, plans and illustrations showing the Royal Forest. These detailed early maps show woodlands, such as Hazelden's copse (now Hazleton's

copse ancient woodland in Arborfield), that are still recognisable in the modern landscape. The copse was protected by a woodland TPO in 1971 and again in 2019, this time including all species of trees.

Parkland trees appear in many locations throughout the borough, even where the parkland itself no longer exists or has been subject to development and landscape changes over the years. Such trees can be large in girth, and therefore old, and may date from the late medieval or early modern period. Examples of such trees are oaks and chestnuts and oaks at Ravenswood Park, and oaks now standing in open countryside north of Barkham Manor.

In later centuries, trees were planted for ornamental or aesthetic reasons or grew up along new boundary features as the Royal Forest was enclosed. A good example of this category are the numerous trees lining the historic straight rides built for Queen Anne (regnant 1702-1714) and later for King George III (regnant 1760-1820). The rides centre around Finchampstead and Crowthorne and many of these trees (mostly oaks) appear to be contemporary with the rides. Also, in Finchampstead is the iconic Wellingtonia Avenue. Here, 111 Sequoiadendron giganteum trees form an avenue along over a kilometre of straight ride (with 88 TPO trees and a further 23 trees in the care of the

National Trust). The ride was laid out by John Walter III of Bearwood Manor in memory of the Duke of Wellington, the hero of Waterloo. Whilst this avenue is probably the finest such avenue in the land, there is a far more prominent wellingtonia avenue at Spencers Wood. This avenue marks the entrance to the former Wellington Court House, now replaced by more modern housing. Sitting on the high clay ridge that marked the western extent of the medieval Forest of Windsor, this significant avenue is a substantial landmark visible from half of Berkshire. A more bucolic setting for a wellingtonia avenue is in the greenbelt east of Wargrave, where stately wellingtonias line the driveway of Yeldall Manor. An example of an institutional avenue is the planting of wellingtonias which flank the main entrance of Bearwood Manor. This large imposing building was for generations the home of the Walter family, proprietors of the London Times, but is now a private school -Reddam House.

Commemorative trees have been planted in the borough since at least the reign of Queen Victoria. A sycamore was planted in honour of Queen Victoria's Diamond Jubilee in the grounds of St Sebastian's Primary School on Nine Mile Ride. Sadly, the tree, planted in 1897, was removed on health and safety grounds around the time of Queen Elizabeth II's Diamond Jubilee in 2012.

¹⁴ Wolf, K.L 2014 City Trees and Consumer Response in Retail Business Districts (pp. 152-172)



¹³ Ewert A, Chang Y. Levels of Nature and Stress Response. Behav Sci (Basel). 2018 May 17;8(5):49



Another example of a royal commemorative planting is an English oak, brought from Windsor Great Park, and planted in 1937 at the King George V playing field in Farley Hill to commemorate the coronation of King George VI.

Although, like the commemorative sycamore at St Sebastian's, the lives of all trees are finite, there is always a good reason for planting trees. So, unlike Percy Shelley's memorial to Ozymandias, the 'lone and level sands' of the south of the district, the clay band in the centre and the chalk of the north are not empty; they are generously clothed in silvan plantings to replace those commemorative trees that have been lost.

At the time Queen Victoria's sycamore was felled in St Sebastian's, 60 oaks were planted across the borough for the Diamond Jubilee of Queen Elizabeth II. This was a joint project between WBC and WDVTA and details of the plantings can be found by following this link. All 60 trees were subject to a 5 year maintenance plan and a 10 year review carried out by WDVTA concluded that 55 of these trees are doing well, 4 have been replaced and just one is giving concern and will be monitored. One of these graces a garden in the grounds of the Council offices at Shute End. The Queen's Platinum Jubilee celebrations have provided further opportunities for royal commemorative planting. Which, in line with The Queen's Green Canopy (QGC) initiative, will continue during the planting season and up until the end of the Jubilee year.

7. ANCIENT AND VETERAN TREES

Definition of veteran and ancient trees

An ancient tree is one that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species.

It will have all or most of the following characteristics:

- a) Biological, aesthetic or cultural interest, because of its great age.
- A growth stage that is described as ancient or postmature.
- A chronological age that is old relative to others of the same species.

The term 'veteran tree' describes a tree that has survived the 'rigours of life' and, irrespective of chronological age, shows signs of ancientness. To qualify as a veteran, the tree should show sufficient signs of ancientness, for example: crown retrenchment and signs of decay in the trunk, branches or roots, exposed dead wood and fungal fruit bodies, etc. According to the current distinction, a tree can be a veteran without necessarily being very old. Thus, if a tree has the physical characteristics of an ancient tree but is not ancient in years compared with others of the same species, it is classed as veteran but not ancient.

In this document 'veteran' is used throughout to describe all trees that have sufficient markedly ancient characteristics, irrespective of chronological age. The term 'ancient' is applied specifically to trees that are ancient in years.

It is important to note that there are many definitions of the terms 'ancient tree' and 'veteran tree' including a planning definition which can be found in the current (2021), NPPF, see Section 3. The definition in the NPPF has changed with subsequent updates of that document; so, where Town and Country Planning is involved (and this includes local plans, development management, enforcement and the making and enforcing of TPOs), the most recent definition of the terms will be used.



Natural England and the Forestry Commission on behalf of the government have produced the standing advice - Ancient woodland, ancient trees and veteran trees: advice for making planning decisions which can be found following this link. The standing advice refers to the Woodland Trust's Ancient Tree Inventory (ATI) as the starting point for investigating possible impacts on ancient trees from planning decisions. The Standing advice also refers decision makers to Natural England's Ancient Woodland Inventory and to Natural England's wood pasture and parkland inventory on their Magic map system. These are all the best starting points when assessing impacts of development or even wildlife conservation works on ancient and veteran trees, ancient woodland and wood pasture and parkland respectively.

Ancient and veteran trees are a valuable natural asset important for:

- biodiversity value as a result of significant wood decay, and the habitat created from the ageing process is valuable for rare and threatened wildlife.
- carbon capture and storage.
- contributing to the seed bank
- cultural and historical value
- landscape and aesthetic value.

Over 180,000 trees have been recorded by the Woodland Trust on their Ancient Tree Inventory, many of which can be found in Wokingham, the data base can be viewed following this link.

By using the ATI data and alongside Wokingham District Veteran Tree Association (WDVTA), the Council will encourage the proper management of ancient and veteran trees as well as succession planting in line with current best practice and guidance.

© WDVTA



WDVTA have carried out surveys on and recorded most of Wokingham boroughs finest trees, including many notable, ancient and veteran trees. The WDVTA database can be found by following this link. No inventory is ever complete - absence from this database should not be taken as evidence that any tree is not of value or is not ancient or veteran. Similarly, presence on this database should not be taken as proof that a tree is ancient or veteran. Each tree should be assessed on its merits in light of the characteristics associated with it at the time of the decision-making process.

The management of ancient and veteran trees is a specialised and evolving discipline within the field of arboriculture. Making management plans for such trees requires significant knowledge and experience and is usually beyond the capabilities of more junior staff. Given this, and should adequate expertise and resourcing be available, the Council will record, map and produce management prescriptions for all Council-owned notable, ancient and veteran trees. Data from the ATI and WDVTA records will be used as well as data from regular inspections by officers.

Useful links:

- English Heritage
- Wokingham District Veteran Tree Association (link)
- Woodland Trust
- Ancient Tree Forum







8. MANAGEMENT AND MAINTENANCE OF TREES ON COUNCIL-OWNED LAND

Woodlands, SANGS, nature reserves and country parks

The Countryside Service team currently manage approximately 549.35 hectares of Council owned land in Wokingham. These consist of the following categories of open spaces:

- SANGS (Suitable Alternative Natural Green Space) - 144.24 hectares
- Nature Reserves 181.51 hectares
- Dinton Pastures Country Park -182.6 hectares
- California Country Park 41 hectares

Within these, Countryside Service manage approximately 100 hectares of woodland across the following sites:

- **Aldermoors**
- Heathlake
- Highwood
- **Pearmans Copse**
- Keephatch
- Millennium Arboretum
- The Moors
- Warren Wood
- The Grove
- **Rooks Nest Wood**
- Nores Hill Wood

Council-owned woodlands and country parks each have a management plan or statement in place to ensure the sites are managed effectively and appropriately to achieve their overall purpose. The plans differ site to site - specific information can be sought on relevant management plans by contacting the Countryside Service team via email at countryside@wokingham.gov.uk.

More information on Council-owned woodlands, country parks, nature reserves and SANGS managed by Countryside Service can be found by following this <u>link</u>.

Landowners are encouraged to develop woodland management plans for privately owned woodlands and those owned by other community or public bodies. The Council also supports positive conservation management measures for woodlands which are identified as local wildlife sites and encourages private landowners to develop their own woodland management plans. If you wish to discuss this further or seek advice regarding woodland conservation management measures, contact the Council's ecology officers at ecology@wokingham.gov.uk.

Public open spaces

Other public open spaces owned by Wokingham Borough Council such as parks, recreation grounds and verges are managed by the Cleaner and Greener team.

Specific information or queries relating to how these areas are managed can be sought by contacting the team via email at cleanerandgreener@wokingham.gov.uk.

Highways and Street Trees

The Council will prune trees for the following reasons only: where there is a risk to public safety; to abate an actionable nuisance; to mitigate the risk of building subsidence; routine maintenance, and in accordance with good arboricultural practice.

The Council will aim to respond to urgent reports of trees obstructing the public highway within two hours.

Requests for management of dangerous trees can be registered by using this link.

If you are reporting an urgent issue that requires immediate attention, call 0118 974 6000 and select the 'Highways' option.

An urgent issue is defined as something that is very likely to present an imminent threat to life or serious injury or serious damage to property



Operational Tree Management Team

The Council has a dedicated Operational Tree Management Team that carries out inspections and arranges required maintenance on Council-owned trees, including those in public open spaces, verges and along the adopted highway to maintain public safety or the health of the tree. While an inspection framework procedure is followed to minimise the risk that trees pose to people and infrastructure, it may occasionally be necessary for residents to report non-urgent tree enquiries.

Non-urgent tree enquires should be reported via the interactive map by using this link: Non-urgent Tree Enquires Interactive Map and with the following supporting information:

- The exact location of the tree please select the nearest road and use the location information box to direct us to the tree(s).
- The nature of the problem.
- Photo(s) showing the problem (if possible) and the location of the tree).

The Council aims to respond to nonurgent tree enquires within 28 days.

A map which indicates the roads and verges maintained by Wokingham Borough Council can be found by following this link.

Tree inspections

Appropriate and effective tree inspection procedures should ensure that changes in tree condition are noted and, where necessary, addressed before any tree becomes hazardous and death or injury to persons or damage to property occurs. The Council's tree inspection procedures consider a range of criteria, including species, age, size, health and condition, location, site usage, hazard risk and landscape and ecological value.

The tree inspection programme aims to balance the management of trees for public safety with the ecological and landscape value of trees. Both management objectives are important, but the nature and use of each site normally dictates which one should take precedence. Different management prescriptions may therefore be applied depending on the tree's location.

When managing trees for public safety reasons, only the minimum work required to remove the danger shall be undertaken. This will ensure that the multiple benefits of trees are retained.

Trees are best inspected from midsummer through to autumn. However, the scale of the Council's tree resource dictates that inspections should continue throughout the year.

Procedures

The Council employs tree inspection procedures that provide information to minimise risk to the public and property. Such procedures are considered reasonable, proportionate to the level of risk at a particular location, recognise the benefits of the trees and are acceptable in legal terms, meaning they follow industry recommendations and codes of practice and take account of case law involving tree failures and subsequent injury and death.

Informal observations about trees which are put forward by members of the public, site officers and other organisations will be acted upon. Informal Observation are when a member of the public passes by a tree whilst going about their day-to-day routines and observe a condition or feature which requires further action. An example of this would be a split in the stem, a hanging broken branch or perhaps a new or intensified fungal infection.





The Council also provides the following two-tier approach to tree inspection:

Formal inspections - carried out periodically by Council staff who regularly frequent sites as part of their routine work. Basic tree inspection training is provided for such staff.

Detailed inspections - carried out by appropriately qualified and knowledgeable arboricultural specialists. Such inspections are carried out at regular intervals and dovetail with the programme of formal inspections. They are commissioned on the basis of being commensurate with the level of risk identified at a given location. Detailed inspections will consider the biological, pathological and biomechanical aspects of tree health and stability along with other considerations such as the effects of weather and site disturbance.

The nature and frequency of such inspections are programmed to respond to the criteria detailed above and the size and distribution of the Council's tree assets.

For further information, the Council's Tree Inspection Framework can be found here: Trees and pruning -Wokingham Borough Council.

Tree maintenance

The Council will prune trees for the following reasons only:

- Where there is a risk to public safety.
- Abate an actionable nuisance.
- Mitigate the risk of building subsidence.
- Routine maintenance, and.
- For accordance with good arboricultural practice.

Where possible, trees subject to pruning will retain their natural form. Where work is required, this will be limited to the removal of dead wood, lifting of the crown and sympathetic crown reduction to ensure the tree retains its natural branch structure.

Dead wood can continue to provide valuable habitat for wildlife. When pruning works are carried out by the Council to trees on public open spaces, country parks and verges (or where suitable space allows) wood will be retained in habitat piles to encourage saproxylic organisms and support biodiversity. Where it is safe to do so, it is beneficial for wildlife to retain as much as possible within the green space to decompose naturally.



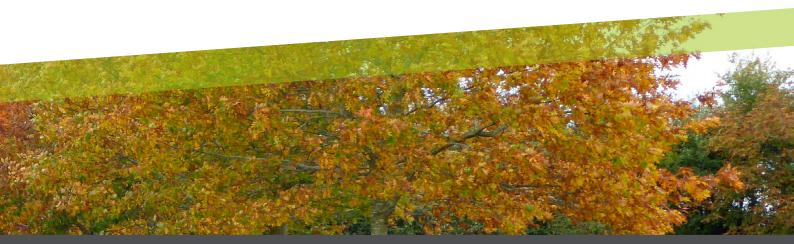
The Council has a programme of inspections from which necessary remedial works are generated and carried out. This is supported by an online facility for reporting dangerous trees. In addition, requests are periodically made by residents for tree-pruning, and these are managed by the Operational Tree Team, with non-urgent issues being investigated within 28 days. The Council applies strict criteria for when pruning is deemed necessary.

The relevant guidance to the process involved can be found here:
Tree pruning criteria.

To ensure an impartial and judicious service is provided to all its residents, the Council will only prune trees for the following reasons:

Abate an actionable nuisance: such as where trees come into conflict with buildings and light structures. In common law there is something termed a 'nuisance', which can be defined as a matter which is an unreasonable and substantial interference on the use and enjoyment of a person's property. We only act when a tree causes a legal nuisance to a property.

- Public safety: to ensure statutory clearance over the highway, footway, cycle lanes and public rights of way.
- For a matter to qualify and be actionable as a nuisance in law, it must be a serious matter.
- Mitigate the risk of building subsidence: where risk trees have been identified on shrinkable clay soil. Each case will be dealt with individually.
- Ensure the optimum functionality of street lighting and CCTV cameras (in accordance with pruning standards). Where remedial works are advantageous to the tree or tree stock and are in accordance with good arboricultural practice.
- To ensure clarity and manage customer expectations, the Council will highlight some of the reasons frequently used to justify pruning that are considered beyond its responsibility.





To help ensure an impartial, reasonable and transparent service the Council will not prune trees in request to allay or resolve the following issues:

- Branches overhanging properties: residents have the right to exercise their right under common law to prune back branches on their property boundary; all arisings must be disposed of at their own effort or expense; pruning must only be carried out following discussion with a Council arboriculturist and completed to the standard set out in BS3998 (2010) Tree Work Recommendations.
- Interference with satellite. television or other media reception: there is no legal right to television reception and the Council (or any tree owner) has no legal obligation to remove or prune trees to improve reception; when positioning a new satellite receiver, residents are recommended to carefully consider existing trees and their potential for growth to avoid problems in the future.

- Branches and/or limbs in physical contact with telephone wires: telephone wires are plastic coated - faults on the line are very rarely caused by contact with branches; residents will be encouraged to contact their service provider to address any faults or interference experienced with their phone line.
- Excessive leaf fall: this is a seasonal problem generally localised to a short period of the year. Residents are expected to clear any undesirable leaf litter falling on their properties themselves or at their expense; leaf litter on publicly owned footways and highways will be addressed by the borough's Street Cleansing contractors.
- Fruit fall: this is a seasonal problem generally localised to a short period of the year. Residents are expected to clear any undesirable fruit falling on their properties themselves or at their expense; fallen fruit on publicly owned footways and highways will be addressed by the borough's Street Cleansing contractors as notified.



- Problems associated with pollen.
- Excreta caused by insects or birds: honeydew (aphid excreta) and bird droppings are not recognised in law as a 'legal nuisance'; hazards on the footway can be addressed by contacting Street Cleansing to notify them of the problem; measures to address the problems associated with honeydew can be made by residents by regular car washing, covering or parking in an alternative location.
- Obstruction of view: there are no rights associated with maintaining trees in accordance with maintaining views in British law.

For further information, the Council's Policy for Ongoing Maintenance for Council-owned trees can be found here: Trees and pruning - Wokingham Borough Council.

Tree Removal

Trees will only be removed where there is a risk to public safety or significant damage to property or in line with good arboricultural practice (for example to reduce crowding and allow other, better trees to thrive). Publicly owned trees are a valuable resource for the people of Wokingham. Therefore, the removal of publicly owned trees will be to be resisted wherever possible.

The Council will not normally fell a healthy tree; however, there are some circumstances where this may be necessary where supported by evidence from suitably qualified and experienced professionals:

- · Address public safety concerns.
- Mitigate building subsidence.
- Abate an actionable nuisance, whereby a tree is interfering with land or property owned by a thirdparty.
- Reduce the risk of the spread of pests and disease.
- Where the highway and/or footway condition determine that retention is unsustainable.
- Where an approved planning application or essential development works requires tree removal.







These decisions are carefully considered by Wokingham Borough Council's Tree and Landscape and Operational Tree Management teams following consultation with residents and other stakeholders wherever possible.

In relation to the siting of telecommunication equipment, the Council will follow guidance laid out by the Association of Tree Officers in this <u>link</u> which covers current best practice for balancing the needs of tree retention, planting and pruning.

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9. TREE PRESERVATION ORDERS

Overview and aims of Tree Preservation Orders

A Tree Preservation Order (TPO) is made by an LPA (usually the borough, district or county council) to protect specific individual trees, a particular area or group of trees or to protect a woodland from deliberate or permissive damage and destruction.

The legislation is usually applied to those trees that are important for the amenity of the area although 'it may sometimes be appropriate to proactively make Orders as a precaution'¹⁵. A TPO makes the felling, lopping, topping, uprooting or otherwise wilful damage of protected trees without the permission of the LPA a criminal offence.

The legislation is a part of the Town and Country Planning Act 1990 and is administered following the Town and Country Planning (Tree Preservation) (England) Regulations 2012. Further information on the Act can be found following this link.

Tree officer's role in TPO process

The Council employs a specialist tree officer to administer Tree Works Applications for trees protected by TPO and Section 211 notifications for tree works in conservation areas. This officer is currently assisted, two days a week, by a consultant.

The specialist tree officer undertakes the relevant consultations and assesses the detail provided within the application. A site visit will be undertaken where necessary and a decision made.

Decision letters are signed off on authority delegated to the Trees and Landscape team manager under the Council's scheme of delegation.

Guidance notes for applying to the Council to protect a tree with a TPO

A TPO protects trees and woodlands. The term 'tree' is not defined within the Act, nor does the Act limit the application of TPOs to trees of a minimum size, species or type. Fruit trees, for example, may be included in a TPO provided it is in the interests of amenity to do so and they are not currently used for fruit production.

¹⁵ Tree Preservation Orders and trees in conservation areas Paragraph: 010 Reference ID: 36-010-20140306, Revision date: 06 03 2014



The dictionary defines a tree as a perennial plant with a self-supporting woody main stem, usually developing woody branches at some distance from the ground and growing to a considerable height and size. But for the purposes of the TPO legislation, the High Court has held that a 'tree' is anything which ordinarily one would call a tree. In woodland the High Court has concluded that saplings, seedlings and even 'a shoot emerging from an acorn' are trees and are therefore protected by a woodland TPO. The Act does not define the term 'woodland'. In the Secretary of State's view, trees which are planted or grow naturally within the woodland area after the TPO is made are also protected by the TPO. This is because the purpose of the TPO is to safeguard the woodland unit which depends on regeneration or new planting and, in woodland, this includes 'future trees' in the words of one High Court judge.

The Act does not define 'amenity', nor does it prescribe the circumstances in which it is in the interests of amenity to make a TPO. This is a matter of fact and judgement.

The Council will continue to use TPOs to protect selected trees and woodlands if their removal would have a significant impact on the local environment and its enjoyment by the public. In line with government guidance, the Council will continue, at times, to consider whether it appropriate to proactively make TPOs as a precaution¹⁶.

The Council will continue to ensure that a degree of public benefit before making or confirming TPOs. Trees,

or at least a significant part of them, should therefore normally be visible from a public place, for example, from a public road or footpath. However, in some circumstances, the inclusion of other trees may be justified. The public benefit afforded by the tree may be current or foreseeable as a future benefit because of a change of circumstances: for example, tree growth or land being opened up to the public through development allowing views of the tree that did not previously exist. Orders may also be served on trees where new evidence supports inclusion because of increased biodiversity benefits in the case of newly discovered bat roost for example. The Council will continue to consider such trees for protection by TPO.

The Council will continue to consider a range of characteristics when making and confirming TPOs¹⁷.

The Council will also continue to consider other factors, such as the importance of trees as a wildlife habitat or for their role in carbon capture attenuation as part of its decision-making process; however, these factors alone would not normally be sufficient to warrant a TPO unless a rare species for example was found to be using the tree as habitat¹⁸. The Council will not consider trees that are dead, or dangerous as suitable for a TPO unless work to trees can be carried out to make them safe and sustainable in the longer term.

The Council recognises the special circumstances regarding ancient and veteran trees, and - further details

can be found in Section 7 These are trees, often of significant age and often of substantial size that may have a range of defects, diseases or fungal infections that would otherwise preclude a tree from the protection of a TPO. However, however, their importance within the landscape, and for the great ecological benefits they offer in terms of habitat and as a seed source will be given weight when considering these categories of trees as candidates for TPO. Each case being assessed on its merits. Notable trees are often veteran or ancient trees in waiting and good examples of notable trees will be assessed in a similar way to ancient and veteran trees.

The Council has a power to consider any tree for protection by TPO¹⁹ and will continue to consider, each case on its merits. The process commences with submission of a standard TPO request form which is then initially assessed by the tree officer. The request will be considered as soon as possible and where resources allow. This information in conjunction with the tree officer's advice will progress through the TPO Prioritisation Committee (which includes all tree officers and any other officer with relevant local site

or specialist knowledge). Where the decision is made to make a TPO, this will be signed off (under the Council's scheme of delegation) by the Trees and Landscape Team Manager, or any other Team leader in planning or enforcement or senior managers in the T&L Manager's absence.

The Council will assess trees for the suitability of a TPO using criteria described in government guidance.

Process of applying for a TPO

A request for a TPO should be made to the Council on a TPO request form and should include the following details:

- a) A map clearly showing the area of trees or location of an individual tree that you wish to be considered for protection, if possible, include a photograph of the tree or trees.
- b) The reason(s) why you wish the tree(s) to be considered for protection.

A request for a TPO can be made by anyone, and you do not have to be the owner of the tree.

¹⁹ Town and Country Planning Act 1990 paragraph 198(1) Power to make tree preservation Orders



¹⁶ Tree Preservation Orders and trees in conservation areas Paragraph: 010 Reference ID: 36-010-20140306, Revision date: 06 03 2014.

¹⁷ Tree Preservation Orders and trees in conservation areas Paragraph: 008 Reference ID: 36-008-20140306

¹⁸ Although see the statutory duty to have regard to the purposes of biodiversity in the NERC Act (2006) for example.

Breach of a TPO

The Council will continue to take reports of TPO breaches seriously, all reports will be assessed and action taken where warranted.

A report of a possible TPO infringement may be received by the Council in whichever form the informers wish to make them but the more information that is volunteered by informers the better the Council are precluded by law²⁰ from requesting information such as photographs of suspects undertaking the work, but the public may provide such evidence if they want. Investigations are governed by the Council's Local Planning Enforcement Plan and the Police and Criminal Evidence Act (1984).

While the Council will accept anonymous reports, we prefer reports from members of the public with whom we can correspond with by email or talk to on the telephone. This is because eyewitness testimony through a qualifying call provides better details of location and what works have been carried out. The Council does not disclose the identity of informants as it considers this information exempt from Freedom of Information (FOI) requests. Reports are investigated in line with the Wokingham Local Planning Enforcement Plan (link).

Investigations are led by any suitable officer but in practice this means

a Planning Officer, a Planning Enforcement Officer, a Tree Officer or the Trees and Landscape team manager. This depends on the caseload and availability of officers and on the technical complexity of each case. Where enforcement cases are not led by a Tree Officer then a Tree Officer gives technical support to the case officer leading.

Additional technical support is provided by other officers and the Council's legal department as required.

The Council understands that there may be various circumstances where proceeding to a criminal prosecution may not be in the public interest. Criminal prosecutions are expensive, and there is not always a guarantee that costs will be awarded. It is also noted that the level of evidence required to secure conviction is high, the same as for any other criminal offence.

There will be occasions where the level of resource required to prove a case to the level required in a courtroom far outweighs the harm caused to the public amenity, for example, some minor pruning works undertaken without permission. In such circumstances, the Council may choose to follow alternative processes, including the use of Simple Cautions, warning letters, negotiated agreements for remedial works or replacement planting, or the use of tree replacement notices.

²⁰ Regulation of Investigatory Powers Act 2000

10. SUBSIDENCE

What is subsidence?

Subsidence, in simple terms, is the sinking of the ground. There are a variety of causes, both natural (changes in soil moisture) and manmade (mining etc.).

Subsidence usually occurs as a result of the shrinkage of clay soils due to changes in the level of moisture held within the soil matrix. This change is more pronounced during periods of prolonged dry weather.

Properties built on shrinkable clay soils are prone to the effects of soil shrinkage, and where the soil volume decreases to the extent that the property foundation is no longer able to support the weight of the property, damage will occur. Damage is often identified as diagonal cracking through walls and around windows and doors.

While the process of soil moisture loss is natural and is of a seasonal nature, it is often exacerbated by other factors. Trees, for example can have a significant effect. Trees create movement of water through the ground by drawing it up through their vascular systems. This flow of water helps transport the nutrients required for growth. All tree species move quantities of water daily. The movement of large volumes of water by trees can significantly exacerbate the effects changes in soil moisture levels have on surrounding structures.

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Trees can therefore have a significant impact in relation to subsidence.

The Council is clear that whilst trees can affect properties through the action of subsidence, their other qualities and attributes need to be considered when deciding how to manage each particular subsidence case and what remedial actions should be taken.

Before the Council will consider action in relation to trees within its ownership and protected trees, see Section 9. The Council will require evidence to be provided by the affected party or their insurers.

The Council will require the following evidential tests to be met:

- Were the buildings foundations adequate in the first place?
- Have drainage issues been ruled out?
- Has damage occurred that is consistent with subsidence damage?
- Have live roots from the tree encroached under the foundations that are damaged?
- Was the damage from the adjacent tree foreseeable?
- Is the tree subject to protection by a TPO?
- Are their alternatives to tree removal or management (underpinning for example)?

It is a common practise for insurers to carry out an investigation of the damage prior to a claim being made to a tree owner. The insurer will often undertake a variety of investigations which may include:

- Drainage survey: identifying defects that may result in rainwater or wastewater washing away soils supporting foundations.
- Ground level and crack monitoring over a period usually 3-6 months (but preferably 12 months) - to establish seasonal movements indicative of subsidence events.
- Soils plasticity: higher clay content soils are more plastic i.e., shrink more readily when they dry out. Soils with high levels of montmorillonite, smectite or vermiculite are particularly prone to shrink and swell as water content changes.
- Foundation type and depth: was the foundation constructed to the appropriate specification?
- Arboricultural report: what trees are present, and are they within the influencing zone of the damage?

Once this evidence has been collected, the affected party should contact the Council's Customer Services team who will allocate the case to the appropriate officer. The

Council will then investigate the case following the Joint Mitigation Protocol of the London Tree Officers Association. This protocol provides a detailed process with timelines in which to investigate and decide on the most appropriate solution for managing the trees and addressing the damage. Further reading on the Joint Mitigation Protocol²¹ can be found by following this link.

Where a tree implicated in subsidence is subject to a TPO or is of particular importance in terms of public amenity or historic or cultural value, the Council will undertake a Capital Asset Value for Amenity Trees (CAVAT)²² valuation to help inform the decision-making process. Greater detail on CAVAT can be found by following this link.

CAVAT assesses the tree against set criteria, including public amenity and other benefits and gives it a monetary value. The CAVAT valuation can then be used in decision-making, weighing a monetised public benefit against the cost of rectifying the damage. Particularly in cases where the proposed action includes tree removal, CAVAT can thereby be used to help agree suitable remediation and tree retention where the benefits equal or are greater than the costs.



²¹ https://www.ltoa.org.uk/resources/joint-mitigation-protocol

²² https://www.ltoa.org.uk/documents-1/capital-asset-value-for-amenity-trees-cavat

11. DEVELOPER RESPONSIBILITIES

Over the years a raft of policies and legislation has been created to achieve the government's objectives and to influence how citizens interact with trees, see Sections 3 and 4 of the Strategy. More recently the government has recognised the value of trees and their importance in helping address the climate emergency.

The importance of trees and the value they provide is recognised in various planning legislation, policy and guidance (see Sections 3, 4 and 6).

The Council has been given duties and powers to help ensure that development is undertaken in a manner which helps protect and enhance the local and natural environment.

The Council is clear that developers have a role to play in taking full responsibility for the land they control and their developments. The Council is clear that developers should in line with planning and arboricultural policy, guidance and best practice place trees at the forefront of the survey, assessment, design, construction and management process.

All development should consider existing trees at the earliest stage. The Council requires all development affecting trees (including offsite trees) to be supported by a tree survey that accords with BS5837 BS 5837:2012²³. Early engagement between developers and arboricultural specialists is key to informing the development process and ensuring the retention and protection of significant trees and woodlands, and those with potential to become significant as they grow (including category C trees) within the layout and detailed design of the development. This is in line with existing CS and LP policies and proposed new policies NE3, NE4 and NE5 of the draft.

Consideration must also be given to the existing and proposed location of all utilities and services within the development to ensure they do not conflict with any retained trees, or any proposed new trees as they grow. The Council will require that developers give trees the appropriate amount of available soil, moisture and space to thrive and ensure that they are located a suitable distance from properties. This will result in a robust and sustainable landscape. The revised NPPF 2021 advocates the inclusion of trees within new streets (paragraph 131) and a high-quality integral landscape scheme is required by MDD Local Plan Policy CC03.

Therefore, a scheme of landscape works, and management will be required for all significant developments, integrated into the overall development scheme design and will need to demonstrate how it incorporates structural tree-planting in the public realm and especially in the street scene.

Achieving a sustainable landscape is paramount to any development if government's objectives are to be met. The Council will continue to seek the protection of both existing and newly planted trees on development sites. This may include the use of TPOs, Article 4 Directions and removal of permitted development rights where appropriate, particularly for sites where the protection of notable, veteran or ancient trees, ancient woodland or wood pasture is an important consideration

Biodiversity net gain and the Green Bond

Current government planning policy for biodiversity and geological conservation interests is set out in the NPPF, -2021. For biodiversity offsetting, the most relevant principles and policies in the NPPF are: 'The planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.' (Para 174(d))

'When determining planning applications, ... if significant harm resulting from a development cannot be avoided (through locating on an alternate site with less harmful impacts), adequately mitigated or, as a last resort, compensated for, then planning permission should be refused.' (Para 180)

'... development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists' (Para 180[c])

The Defra biodiversity metric is a habitat-based approach used to assess an area's value to wildlife. The metric uses habitat features to calculate a biodiversity value.

²³ British Standard 5837 (2012) Trees in relation to design, demolition and construction - Recommendations



The biodiversity metric can be used by:

- ecologists or developers carrying out a biodiversity assessment.
- developers who have commissioned a biodiversity assessment.
- planning authorities who are interpreting metric outputs in a planning application.
- communities who want to understand the impacts of a local development.
- landowners or land managers who want to provide biodiversity units from their sites to others.

Wokingham Borough Council, as the, LPA will be applying the biodiversity net gain (BNG) assessment process to planning applications in line with current regulations and local plan policy.

The Council will use the Defra metric in making a BNG assessment and expect developers to provide the baseline record of all hedgerows, scrub and woodland - individual trees will be incorporated using the tree calculator tool.

Developers are expected to integrate trees and woodlands into their schemes and should understand that the calculator does not allow the

post-development scenario to trade between broad habitat categories, (e.g., baseline units of woodland to be compensated by post-development units of grassland), except in justified and exceptional circumstances.

Where an exceptional circumstance is thought to apply, the developer must justify the trade between broad habitat categories that results in a gain in woodland habitat/units with reference to the BAP and LNRS priorities/targets/objectives/aims. Further, the Council understands the benefits that tree-planting can bring and, as such, recommends that all tree-planting projects are assessed using a BNG calculator (regardless of whether they are part of development or not). The Council is committed to the environment and will assist landowners, where possible, in recognising and registering the BNG value of their tree-planting projects where these are in line with the Tree Strategy/BAP/LNRS and wider Landscape Character Assessment objectives.

The Environment Act contains a new BNG condition for planning permission. At present this is not mandatory but is expected to be made law in late 2023 through amendments to the Town and Country Planning Act.



Developers will need to measure the biodiversity gains using the associated metric to ascertain the existing wildlife value of the area prior to development.

This information will then be used to inform the development layout and the level of mitigation required. It is a requirement of the bill that all development must see an enhancement to biodiversity by a minimum of 10%, this can be either on-site or off-site.

The update to the Wokingham Borough Council LPU mirrors the 10% minimum increase in biodiversity for all development.

The Council will expect developers to take this requirement into consideration and ensure the development protects and enhances the habitats of a proposed site first and foremost and only offset any development when there is a suitable planning reason to do so.

Developers will be encouraged to finance their projects using the principles of the green bond. Green bonds (also known as climate bonds) are fixed-income financial instruments (bonds) which are used to fund projects that have positive environmental and/or climate benefits.

They follow the Green Bond Principles (GBP) stated by the International Capital Market Association (ICMA), and the proceeds from the issuance of which are to be used for the prespecified types of projects.

The GBP seek to support issuers in financing environmentally sound and sustainable projects that foster a net zero emissions economy and protect the environment.

Developer Replacement Planting-Developers: trigger for obligation & level of contribution

Wokingham Borough Council understands the importance of trees within all development but the Council understands that, in some circumstances, tree removal is justified. The Council is, however, committed to improving the environment for everyone and, as such, expects any development to provide replacement trees in line with local and national guidance.

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Wokingham Borough Council expects all developers to integrate important existing trees within their designs. Except in the case of wholly exceptional reasons and where a suitable compensation strategy exists, any development which would result in the loss of ancient woodland, ancient trees or veteran trees will not be permitted. While meeting the above requirements, developers are also reminded that replacement planting should meet the compensation and enhancement requirements of the proposed 10% minimum BNG, which is likely to come into force in late 2023. This requirement is mirrored within the Wokingham Borough Council LPU.

Wokingham Borough Council understands that in some circumstances such replacement planting and enhancement may not be possible on the site itself. In such cases, the Council will require the developer to provide off-site treeplanting in compensation. Where the developer does not have suitable land for such planting, the Council may negotiate compensatory payments under S106 agreement to provide enhancements elsewhere.

Obligations in respect of trees will be required where either:

new planting is required on public land to mitigate the impact of a development; or,

 where trees covered by categories A, B and C of BS 5837 (Trees in relation to construction) are felled as part of a development, and replacement planting is required on public land.

Tree-planting will either take place on open ground or be integrated into areas of hard landscape such as pavements and car parking areas. Where planting can take place directly into open ground, the contribution will be significantly lower than where the planting is in areas of hard landscape. This is due to the need to plant trees located in areas of hard standing in a substantial engineered tree pit (or alternative) with drainage.

All tree-planting on public land, whether developer funded or not, will be undertaken by the Council to ensure a consistent approach and level of quality, and to reduce the likelihood of new tree stock failing to survive through lack of weed control or watering. See also Sections 12, 13 and 14 of the strategy.

Ensuring developers are held accountable for their commitments is reliant on sufficient financial and staffing resources being made available to the relevant departments, along with full member support for their execution.

12. REPLACEMENT TREE-PLANTING - COUNCIL LAND

Replacement tree-planting

Where it is necessary for the Council to fell trees, we will commit to providing a replacement tree as close to the location of the felled tree as practicable, and during the next planting season (November - March).

A sign will be placed in the original location of the felled tree detailing that the tree will be replaced, subject to resources.

Replacement ratio

Replacement stocking levels:

- Street trees 1:1
- Commemorative 1:1
- Parks and gardens 2:1
- Countryside sites 3:1
- Broadleaf/mixed woodland mainly aimed at biodiversity/amenity 1100 or 1600 stems per hectare (3m and 2.5m spacing, respectively) with 20% open ground for recreation and / or biodiversity depending on aims and objectives.
- Conifer plantations restocking at 2m spacings with 20% open ground depending on aims and objectives.

Natural regeneration

Natural regeneration is the process by which areas are restocked by trees that develop from seeds that fall, or are buried by animals or birds, and germinate in situ. This method provides trees that are well adapted to their environment, minimises soil disturbance, ensures that the seeds are all local provenance, and once fully matured, provides a more natural habitat. Natural regeneration will only be considered an acceptable approach if there is a programme of monitoring and, if necessary, recourse to protection or selective restocking based on the monitoring observations.



13. TREE-PLANTING

Right tree, right place, right reason

Evidence of the positive contribution that trees make to society is extensive and increasing the number and quality of trees we encounter can enrich our lives. Trees are directly associated with a range of benefits such as cooling, flood mitigation, aesthetic impact or as a wildlife habitat, see Section 6. Tree species selection can, therefore, have a profound impact on the delivery of benefits to the people of the borough because of issues such as potential size, longevity, suitability for wildlife, etc.

The Council will continue to select appropriate trees which are sustainable and will provide maximum benefits for biodiversity and aesthetics amongst other criteria. An important objective of species selection will be to improve the resilience of tree populations to both known and unknown threats. Consideration will be given to ensuring that the species selected are appropriate, sustainable, and that the locations and micro-climates chosen for planting will encourage the long-term survival of the trees planted so that they fulfil their growth potential. Choice of tree species will aim to maximise the contribution to ecosystem services, will allow for climate change, and will avoid problems associated with poor species choice.

The Council will favour the selection of native tree species that naturally have high benefit for wildlife and indigenous cultural resonances in poetry, art, music, literature, etc. In special circumstances and where non-native species are appropriate the Council will follow tree species selection guidance as set out in Tree Species Selection for Green Infrastructure by Trees and Design Action Group (TDAG). This has information for over 280 species of trees with detail on their potential size and crown characteristics, natural habitat, environmental tolerance, ornamental qualities, potential issues to be aware of, and notable varieties. It provides the Council with clear, robust information to enable appropriate species selection and will aid the diversification of the urban forest.

Planting a diverse range of tree species will allow resilience in the tree population. Where there is a monoculture of trees, the vulnerability of the tree population to a complete and rapid wipe-out by a pest or disease is greatly heightened. This risk can be reduced by paying greater attention to diversifying the gene pool of trees being planted by avoiding clonal propagation and in some instances, featuring both native and non-natives suitable to the different types of urban and rural settings.

Use this link to download the full document Tree Species Selection for Green Infrastructure - TDAG.

Tree-planting and the Council's Climate Emergency Action Plan (CEAP)

In order to address the Council's Climate Change Emergency status and in line with the Council's CEAP, the Council will undertake an ambitious program of new treeplanting and projects with the aim of increasing carbon sequestration and biodiversity across the borough, and thereby contributing to the goal of being carbon-neutral by 2030. Carbon sequestration is a process whereby the trees draw CO2 from the atmosphere and store it. Wokingham Borough Council's initial CEAP was approved by council in January 2020 and outlines the steps that will be taken to achieve net zero carbon by 2030. Within the action plan, a target was set to carry out an ambitious tree planting project to increase carbon sequestration by greening the borough. In July 2021, the Council was given executive approval to begin Phase 1, and the project commenced in September 2021. Central to this programme of new tree-planting is the Council's partnership with the Woodland Trust. Through the Emergency Tree Fund, its support of the project is central to its realisation. In addition, many officers across the Council are collaborating with the Green Infrastructure Special Project Manager to bring this project to fruition.





To reach the target and by using data produced through the tree report and canopy cover surveys, see Appendix A, council officers will work to identify potential planting sites across the borough. A collaborative approach is essential to reach the tree-planting ambitions, with assistance provided to the Council from councillors, community groups, volunteers, town and parish councils, schools, and private projects. WBC is supportive of local volunteer groups and will continue to work with groups who are interested in the planting, monitoring and maintenance of trees across the borough.

Informed by ecosystem services analysis and working with local stakeholder groups, Wokingham Borough Council will undertake treeplanting on suitable Council-owned sites, with a focus on the conversion of land into woodland, orchards and hedgerows. The Council will also encourage and support planting on school grounds, privately owned sites, town and parish council land and estates owned or managed by other public bodies in the borough. The planting programme will also deliver the socio-economic benefits

that trees provide in a peri-urban environment and benefit the environment through an increase in biodiversity, heat island cooling and softening of the landscape as well as helping strengthen community cohesion, see Section 6.

Tree-planting schemes implemented as part of this project will consist of bare-root UK- and Ireland -sourced and grown native seedlings, transplants and whips.

The planting project would not be achievable without the generous assistance from the Woodland Trust, whose Emergency Tree Fund has provided a £300,000 grant to help support tree purchase, tree protection, ground preparation and planting costs.

Tree-planting on the adopted highway and verges

When planting along the highway and verges, consideration will be given by the Council to the long-term suitability of each planting location. This will involve assessing the location of service runs, the proximity of the site to buildings and existing



infrastructure, visibility splays and ensuring adequate drainage, growing space and quantity and quality of the growing medium.

See Section 13: 'Residents' requests for planting on Council-owned land' for further information.

Along the adopted highway verges, new or replacement street trees will generally be nursery halfstandard (HS) or standard (Std) trees measuring approximately 1.5m-2m at the time of planting. Suitable trees will be selected for transport corridors, with tolerance to salt and air pollution.

Tree species prone to epicormic growth issues shall be avoided alongside the highway verge due to their potential to block visibility splays and obstruct footways and cycleways. Similarly, species with brittle failure characteristics, for example, poplar and willow, will be avoided except in exceptional circumstances or where already present.

What is most important when selecting the right tree for the right place is considering the size of the tree at maturity and the species appropriateness for the location. The tree must be able to grow freely

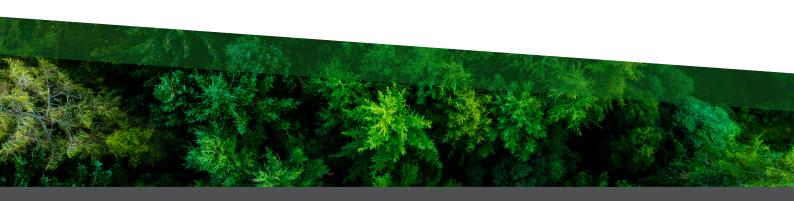
without affecting the integrity of the highway, highway infrastructures such as bus shelters, utility services, or buildings (including both above and below ground impacts).

Trees, planted on the highway verge, will require an area of mulch around the base of the tree, up to 1m in diameter and 50-75mm thick, to help suppress weeds and retain moisture.

Species selection for highways, new developments and open spaces

Choosing the right tree is essential, whether it's a replacement tree or a new tree to be planted on the highway, a new development or within an open space.

In all cases, all tree replacements should seek to improve BNG (see Sections 11, 12 and 13) with a greater emphasis on natives or native cultivars wherever possible. However, it is important to consider non-natives and exotic species in some scenarios to ensure that the tree population remains resilient to future biotic and abiotic threats or for other reasons for example as a result of aesthetic considerations.





Using guidance from the Tree Species Selection for Green Infrastructure -TDAG (see Section 13), council officers will work to produce a refined list of trees that are typically better suited to the difficult conditions found within urban areas and adjacent main streets.

Avoidance of invasive alien species

The Council will adhere to and follow guidance and best practice in avoiding the planting of invasive alien species.

Young tree maintenance of new or replacement street trees

Replacement or new street trees planted by the Council on Councilowned verges or alongside the adopted highway will be subject to a five year establishment period, where the Council will be responsible for watering at a frequency necessary to ensure the establishment and survival of all trees that form part of a planting scheme. The guidance in BS 8545:2014244 - Recommendations' will be followed where appropriate.

As part of the ongoing establishment of newly planted trees, where required over the early maintenance period, tree guards, stakes, and ties will be replaced, formative pruning will be carried out, the planting pit will be kept free of weeds and rubbish, and mulch will be replaced as necessary.

To help address sun scorch, additional watering is likely to be required during periods of abnormally hot or dry weather. Water, at a rate of 20 measured litres, will be applied to each tree, once a week, between March and October, for three years, minimum. In exceptionally dry, hot, or windy weather, this will increase to two to three times a week.

Further guidance on young tree establishment can be found at Arboricultural Association Young Tree Establishment Guide (link) and The Woodland Trust Guidance (link).

Residents' requests for planting on Council-owned land

The Council is committed to increasing the number of trees and, importantly, the amount of canopy cover provided by trees across the borough. Tree canopy cover provides many environmental and health benefits, for example: the greater the canopy coverage, the more CO2 is absorbed²⁵, rainfall intercepted²⁶, and shelter provided.

The Council has significant plans to increase tree cover but also understands that residents may wish to be involved. In recognition of this the Council will welcome suggestions for the planting of new trees within Council-owned open spaces and country parks.

Residents will need to provide the following:

- The location where the trees are to be planted.
- Tree species suggestion (for a list of suitable species, refer to Tree Species Selection for Green Infrastructure) (link).
- Number of trees to be planted.

Once a request is received, Wokingham Borough Council will undertake several checks to ensure the following

- The licensing process for undertaking tree-planting.
- The location of underground and aerial services.
- Public liability insurance.
- Selecting the right species and variety (right tree and right location).
- Suitability of the location suitability.

Any planting approved for Councilowned sites -will be carried out during the earliest opportunity and in the planting season, which runs from November to March each year.

Requests for street tree and verge planting are slightly more complex.

It is essential that trees planted next to roads offer minimal risk to the health and safety of the public and do not interfere with utilities such as water pipes, electricity supplies or telephone wires. The Council will be stringent on when and where new street trees may or may not be planted. Consideration for planting trees will only be given within verges where the following apply:

- The proposed location has a minimum of 8 cubic metres of accessible soil for the tree's root system to establish.
- The centre point of the proposed tree location must be a minimum of 2m from any utility services.
- The tree must be located a minimum of 3m from the carriageway edge and be of a species that is compact - other larger growing tree species can be considered in areas where they are able to grow unimpeded and without the requirement for excessive pruning to prevent carriageway encroachment.

If the suggested location is unsuitable, the Council will respond by explaining why a tree cannot be planted.

²⁶ Yang, B., Lee, D.K., Heo, H.K. et al. The effects of tree characteristics on rainfall interception in urban areas. Landscape Ecol Eng 15, 289-296 (2019).



²⁴ British Standard 8545 (2014) Trees: from nursery to independence in the landscape: Recommendations

²⁵ Nowak, D.J., and D.E. Crane. 2002. Carbon storage and sequestration by urban trees in the USA. Environmental Pollution 116(3):381–389.



Where a location is deemed appropriate, the Council will confirm the location has been added to the tree-planting list. Approved requests received before 30 September will normally be planted in the next available planting season. This is usually between November and March.

Please note that, currently, all treeplanting on Council land, including highways, will be carried out or supervised by the Council or its representatives. It is not practicable (for legal and insurance reasons) and therefore not permissible for residents to source and plant trees on Council land without Council approval. It is essential that trees are planted in appropriate locations and are sourced from approved suppliers as this ensures a consistent approach to tree quality and suitability.

The Council will develop a process to allow residents to make requests for new street tree and verge planting. The process will require cross organisation involvement however, once established, it will allow resident to put street and verge locations forward, with requests being reviewed within an agreed timeframe.

Guaranteeing delivery of all treeplanting targets, both on the Council's and residents' land, is reliant on appropriate financial and staffing resources being made available to the relevant departments, along with full member support for their implementation.

14. HEDGEROW AND HEDGE PLANTING

Wokingham Borough Council recognises that formal town and garden hedges and agricultural hedgerows have many benefits:

- Hedgerows are generally inexpensive to create and longlasting, providing significant wildlife and environmental benefits.
- Hedgerows can provide excellent dispersal, migration and foraging routes for wildlife including dispersal routes for woodland plants.
- A well-managed hedge can be a feature of great beauty and interest while offering privacy and security.
- The use of hedges can provide significant ecosystem benefits to residents in locations where a tree is impractical but where a hedge can offer a similar canopy volume and leaf area. For example, mitigation of road noise and aerial pollution.
- A hedge can provide a useful barrier: reducing the impact of weather, creating shade, deflecting and dissipating wind and intercepting rainfall, reducing surface runoff.
- A hedge can also provide health benefits, acting as a significant filter of harmful particulates and dust.

The Council also understands that many of the problems associated with hedges occur because fast-growing plants have been used for quick results, producing hedges that are difficult to maintain and have become too large for their location. It is therefore important to consider the species of hedge plants used and the purpose of the hedge.

The Council will expect hedges to be considered within all new developments as part of the wider landscape master plan, including use in public open spaces and, for property boundaries wherever possible.

In most circumstances, the Council will expect hedgerow planting to utilise native species. When hedgerows are located on public open spaces and adjacent to roads, hedgerow species will be chosen to be diverse and hardy as this will reduce the maintenance costs and allow the hedge to be retained for the long term once established.





Appendix D has been developed by the Councils Tree and Landscape officers to provide guidance on appropriate species for new hedge and hedgerow planting, with species selection being suitable to soil type and landscape character as well as providing structural habitat and fruit and nectar for native insects, bird and mammals. Written in 2017, it is a simple guide to planting hedges in Wokingham and provides assistance in the design and planting of new hedgerows in the Borough. However, in order to keep the guidance relevant, it is recognised that an update would be beneficial. A shortterm goal to update the guidance will be implemented as part of the strategy Action Plan.

Where appropriate, new hedgerows should be planted in two staggered rows 33cm apart (six plants per metre). Minor species can be planted in small, single species groups or randomly within larger blocks of hawthorn.

Where space allows, the Council welcomes hedge planting to be incorporated alongside trees due to the additional ecosystem services this can provide, for example wildlife corridors. Where trees are appropriate within a hedgerow scheme, some tree species should be left uncut to grow through the hedge at approximately 6m intervals to be allowed to mature, with new nursery standard trees incorporated into a new hedge wherever possible.

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15. RISKS AND BIOSECURITY

Pests and diseases

New pest and diseases that are critical to the national economy are often addressed by the government who may provide funding or control services to reduce any impact. However, the Council should also ensure adequate resources are available to control and contain outbreaks of known pests and diseases on Council-owned land. The Council should also continue to ensure proportionate resources are dedicated to addressing pest and disease that are affecting privately owned trees for example the Council may need to identify and deal with ADB affected ash trees that are at risk of falling onto the highway, resourcing notifications to landowners under powers bestowed by the Highways Act 1980.

Over the last few decades, the UK has experienced increasing threats to plant biosecurity as increased global trade acts as a pathway for the arrival of new organisms, with impacts potentially exacerbated by climate change. This has been highlighted by the increasing number of plant disease and pathogen outbreaks, most notably in relation to trees. Such examples include Ash Dieback (Hymenoscyphus fraxineus), Horse Chestnut Bleeding Canker (Pseudomonas syringae pv. aesculi),

Phytophthora ramorum and P. kernoviae affecting large populations of trees, Oak Processionary Moth (Thaumetopoea processionea), with its associated threat to human health; and in wider Europe the introduction and spread of Xylella (Xylella fastidiosa) and Canker Stain of Plane (Ceratocystis platani) are examples of recent high profile biosecurity failures.

The Council will prioritise adequate resources in a timely fashion to deal with such threats, especially when these are related to the health of the tree stock and may also present serious public health issues. The Council will continue to liaise closely with the Forestry Commission on issues of biosecurity and trees and inspections of Council owned trees known to be affected by pests and diseases will be carried out in accordance with the Councils Tree Inspection Frequency Framework. Further information on the Tree Inspection Framework can be found on page 38.

The cumulative impact of climate-induced stress and of any associated changes in the impact of pests on the trees is uncertain in the medium to long term, but new pests, diseases and pathogens are appearing. Currently the Trees and Landscape team maintains awareness of these and will, in partnership with other teams, update staff of any further developments.



Biosecurity

Biosecurity measures are not required to be onerous or over-complicated. They generally follow examples of horticultural and arboricultural best practice.

The Council will seek to adhere to the following biosecurity measures during its operations:

- Prevent the spread and transmission of pests and diseases by regularly disinfecting and cleaning tools following pruning works.
- Regularly monitor newly planted trees in the first three years following planting to ensure that latent pathogens, such as Xylella fastidiosa subsp. multiplex (a bacterial plant pathogen) are not present.
- Whilst respecting native habitats, increase the species and genetic diversity of the borough's tree stock and avoid planting monocultures, whilst ensuring that any new planting is suitable for current climatic conditions, and as far as reasonably practical, plant tree species that are resilient to climate change. The Council will only plant tree stock and plant material that has met the requirements of the European Union's and United Kingdom's plant passport systems, and, where possible, source UK-grown tree stock or tree stock and plant material that has been the subject of a quarantine period.

- Comply with the requirements of statutory plant health notices.
- Report any tree pests or pathogen of concern via Forestry Research's tree TreeAlert web-based reporting svstem.

Climate change

It is now recognised and accepted by reputable experts that climate change is happening, and that man-made emissions of carbon dioxide and other greenhouse gases are the main cause. It is predicted that temperatures could rise by as much as 3-5°C by the end of the century. The government now recognises climate change as 'the greatest long-term challenge facing the world today'.

The UK is projected to get warmer, more so in summer than in winter. Changes in projected summer mean temperatures are expected to be greatest in the south and southeast. Using climate modelling, the overall annual rainfall is not expected to change a great extent, but the overall trend will be for winter rainfall to increase and summer rainfall to decrease. Increased evapotranspiration in trees will be driven by the warmer temperatures in the summer months, a by-product being increased summer drought conditions. With the increase in the effects of climate change, due to higher global greenhouse gas emissions, the rate over time, these changes will increase, and the scale of these changes will be even greater.

Globally, woodland ecosystems play a key role in addressing climate change by absorbing carbon dioxide from the atmosphere, producing oxygen, retaining water and reducing atmospheric temperatures through transpiration. On a local level, trees and woodlands have an important role to play in mitigating climate change through the absorption and temporary storage of carbon dioxide, intercepting and reducing airborne particulates as well as reducing the effects of climate change by providing shade, cooling and soaking up water and helping to reduce the impacts of flooding. Trees also provide a source of wood, which is a low-energy construction material and a regenerative, short carboncycle, energy resource. It is therefore essential that the Council sustains and enhances this vital resource.

Native, naturalised and non-native trees

The Council currently plants a wide range of native, naturalised, and non-native species. Wherever possible, the Council will favour the use of native and non-invasive naturalised trees. However, it is accepted that the use of non-native tree species may, on occasion, be required.

A diverse range of tree species and the avoidance of monoculture planting will help to create a more resilient and robust tree stock, which is then better placed to withstand the predicted impact of climate change.

Planting provenance

In general, suppliers will be required to grow stock produced from Britishorigin seed sources. With adaptability to climate change in mind, and only where there is extremely robust scientific evidence supporting the introduction and guarding against the introduction of invasive and pest tree and other species, there may be a preference to select seeds from European continental provenance. In such cases, demonstrable biosecurity measures will have to be in place involving effective quarantine procedures and certification of imported material.



16. ACTION PLAN

SHORT-TERM GOALS (1-2 YEARS)		
GOAL	ACTION	
4,000 trees to be allocated to residents via the Garden Forest Scheme by 2023.	 Design and implement a process for residents to apply for and collect a free tree to plant in their garden. Round 1: Applications were received at the end of January 2022. Trees to be available for eligible applicants at the start of 2022 planting season. Round 2: Application window to open for the second round of the scheme in Autumn 2022, with the aim for eligible applicants to collect their tree before the end of the 2022/23 planting season. 	
 Deliver small-scale woodland, hedgerow and orchard planting on Council owned land in existing parks and opens spaces sites. 	 Identify sites for small-scale woodland, hedgerow and orchard planting on Council estate in existing parks and opens spaces. This small-scale planting can be deployed with shorter time scales than larger afforestation schemes. 	
• Develop a tree palette of suitable species.	 Using the TDAG guidance and taking into consideration the landscape characteristics of Wokingham, officers will develop a palette of tree species appropriate for planting along the adopted highway, verges and public open spaces as a basis to provide recommendations for the Council and public when carrying out tree planting schemes. 	

MEDIUM-TERM GOALS (3-5 YEARS)		
GOAL	ACTION	
 Create new woodland that will increase the number of trees in the borough to improve carbon capture, BNG and canopy cover. 	 Using the planting potential maps produced through the Tree Report and Canopy Cover Survey and by working with relevant WBC stakeholders, identify areas of Council-owned (greater than 5ha) that would be suitable for woodland planting, focussing on high carbon capture potential sites and opportunities for Biodiversity Net Gain schemes. 	
 Support residents wishing to plant trees on Council-owned land. 	 Internal departments to work together to design a process to support residents to request to either plant a tree or have a tree planted on Council-owned land, including along the adopted highway. To develop a criterion for applications to be considered and produce guidance on when applications will be reviewed. 	
 WBC Tree Inspections Framework to be updated and implemented. 	 Inspection zone maps to be produced, outlining the appropriate frequency of inspection. 	
 Achieve Tree City of the World status. 	 Actions to be carried out based on Tree City of the World requirements. 	
• Local Seed Collection programme.	 Design a programme to support and encourage local seed collection to supply to nurseries to encourage the growth of locally sourced species. 	



MEDIUM-TERM GOALS (3-5 YEARS)		
GOAL	ACTION	
• Tree Strategy interim review.	 A five year review of the Tree Strategy to take place to ensure strategy contents remain relevant and achievable in-line with current best practice. 	
 Review TPO process. 	 Review and update TPO process, subject to available tree officer resource and in line with current best practice. 	
 Improve collaborative working with local volunteer groups. 	 Design and implement a process for existing and potential community groups to collaborate in tree planting, maintenance, management and monitoring. WBC is supportive of the Tree Council's Tree Warden Scheme and will continue to support existing tree wardens and encourage further collaborative working with WDVTA to support enlisting of further Tree Warden volunteers across the Borough. 	

LONG-TERM GOALS		
GOAL	ACTION	
Increase canopy cover.	 Use the canopy cover data produced through the Tree Report and Canopy Cover Survey to identity areas that would benefit new tree-planting and implement planting schemes to achieve an increase in canopy cover. Undertake a ten-year canopy cover review. 	
 Tree Strategy Review and Update 	 A ten-year review of the Tree Strategy should take place to ensure the strategy remains relevant and achievable in line with current best practice. 	





