



# Tree Risk Management Framework 2020 - 2025



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## 1. FOREWORD

Barnsley has a strong and rich culture and heritage. The borough has a unique blend of urban centres and rural countryside, spread across some of the most picturesque landscape the region, and indeed the country has to offer.

The council, its partners and local residents are approaching an exciting time over the next five to ten years and our countryside will play a significant role in our economic development and prosperity, and the wellbeing of our residents and communities.

Barnsley has around 1.2 million trees. Trees are a fundamental part of our natural landscape and form an integral part of our local amenities including: parks, woodlands, countryside and the highways network. They help to offset carbon generated from our daily activity and support rich and diverse ecosystems of flora and fauna across the borough. A healthy and sustainable tree population plays a crucial part in helping us to create an attractive and vibrant landscape where people want to live, work and visit.

The council's risk-based approach to managing its trees will encompass all aspects of tree growth. It is widely accepted that trees can and do fail, but it is important to balance the benefits of having trees with the precautions needed to keep the risks they pose within acceptable limits.

This Risk Management Framework describes how we will manage, inspect and maintain our tree population to ensure this valuable resource can be enjoyed by future generations.

We are therefore pleased to announce this framework and look forward to working together to ensure our tree population continues to thrive, remains healthy and safe for all to enjoy.



**Paul Castle**  
Service Director  
Environment & Transport



**Councillor Chris Lamb**  
Lead Cabinet Member  
Environment & Transport

## 1. EXECUTIVE SUMMARY

The borough has an estimated 1.2m trees over 2 metres in height with the council being responsible for some 215,000 which reside on public land. The council owns many trees and recognises and values the benefits that they bring to our town. Trees do pose a risk to safety but generally the risk they pose is very low and this risk needs to be considered in balance with the benefits that they provide.

The council will undertake routine inspections of their trees on a risk-based approach. Trees that are in the busiest locations (e.g. those next to roads, busy parks and play areas) will be inspected more regularly than those in less used places. Trees on council land will be inspected according to their priority in relation to public safety.

This framework supports a proactive risk-based approach to the management of the council's trees and safety management will be prioritised within the available resources of the Tree Team in order to ensure we continue to provide a clean, green and safe place to live, work and visit.

## 2. INTRODUCTION

### 2.1 Purpose of the Framework

Trees are a significant and essential part of Barnsley's natural landscape and form an integral part of local amenities including our parks, woodlands, countryside and highways network. A healthy and sustainable tree population plays a crucial part in helping us to create an attractive and vibrant landscape where people want to live, work and visit.

The council's risk-based approach to managing its trees will encompass all aspects of tree growth. It is widely accepted that trees can and do fail, but it is important to balance the benefits of having trees with the precautions needed to keep the risks they pose to people and property within acceptable limits. The Health and Safety Executive concludes that the risk of being struck and killed by a falling tree is 'extremely low' (HSE, 2019).

This Risk Management Framework outlines how we will manage, inspect and maintain our tree population on public land or affecting public land. The primary purpose of our approach is to ensure that our processes of tree inspection and maintenance are proportionate to the potential risk, in order to ensure our communities, gain maximum benefits from the local tree population and that risks of harm and damage are effectively minimised.

## 2.2 Vision & Priorities

Our vision for the tree population in Barnsley is:

***'To have a sustainable, growing and healthy tree population for the benefit of our residents and communities'***

A number of priorities have been identified over the next five years to deliver against our vision. Our focus over 2020/21 will be to:

- Establish the baseline position across the borough to identify high-risk zones and systematically target inspections and proportionate risk-based maintenance;
- Appoint a qualified Tree Inspector to undertake both proactive and reactive risk-based inspections;
- All relevant staff to undertake Quantified Tree Risk Assessment (QTRA) training;
- Establish appropriate systems and processes using digital technology to document tree inspections and risk-based maintenance; and
- Appoint additional qualified Arborists to respond to the demand generated as a result of the risk-based programme.

## 2.3 Our Local Tree Population

Barnsley has approximately 1.2 million trees of various types, ages and sizes in the borough. The tree population is not only confined to rural areas as there are wonderful examples of trees in our urban centres and along our arterial routes into and out of the town. There are also thousands of trees in open residential areas and within the boundaries of private land of various uses, not to mention our many parks, open green spaces and historic sites.

Tree canopy coverage in the borough covers 16% of all the land in Barnsley and in some electoral wards this extends to nearly a 1/3<sup>rd</sup>. There are four trees to every one resident in Barnsley meaning a significant population to manage. Our experience to-date identifies that the overwhelming majority of the local tree population are strong, healthy and have been at the heart of our communities for decades.

## 3. POLICY CONTEXT

### 3.1 Our Legal Responsibilities

The council, in common with other land owners has a legal 'duty of care' as outlined in the Occupiers Liability Act 1984 to take reasonable steps to ensure users and neighbours of its land are safe.

The council must also comply with the Health and Safety at Work Act 1974 by ensuring that so far as is reasonably practicable employees and members of the public are not placed at risk. This means that practical and reasonable precautions must be taken to reduce the risk to our employees and members of the public from our property including our tree population.

### 3.2 National Context

Nationally the management of trees is governed by legislation designed to assign duty of care to the owner or keepers of trees and to prevent risks based on the guidance and instructions of the HSE, and other bodies such as the Forestry Commission and Department for Environment, Food and Rural Affairs (DEFRA). Best practice guidance recommends a tree risk management strategy governed by a balanced, risk-based and proportionate approach to assessment and tree maintenance.

The 'Common Sense Risk Management of Trees' authored by the National Tree Safety Group (NTSG) advocates that landowners should safely maintain the tree population whilst protecting its existence for future generations.

The HSE sector information document 'Managing the risk from falling trees' requires that a reasonably practicable approach is taken which is proportionate to the risk. It also highlights that the inspection of individual trees can be disproportionate to the risk they pose.

The key guidance from these documents underpins this Tree Risk Management Framework.

### 3.3 Supporting our Local Priorities

#### 3.3.1 Corporate Plan (2017 -2020)

Our Corporate Plan (2017 – 2020) sets out the priorities for change, improvement and growth to achieve our vision of 'Working together for a brighter future, a better Barnsley'. The Tree Risk Management Framework supports our Strong and Resilient Communities priority through its contributions to protecting our borough for future generations.

### **3.3.2 Zero Carbon**

The council declared a climate emergency in September 2019 due to the increasing effects of climate change on our environment. Trees play a pivotal role in helping to recapture CO<sub>2</sub> in the atmosphere and providing a natural defence to flooding. In line with our vision to become net carbon zero by 2040 and the wider borough to become net carbon zero by 2045, the protection of existing trees and planting of new trees in the town is vitally important to achieving long-term goals.

### **3.3.3 Health and Wellbeing Strategy**

Trees provide clear and lasting positive effects to overall wellbeing, supporting our corporate and partnership strategies through shaping our natural environment and helping to provide picturesque surrounding for local residents, communities and visitors to enjoy.

### **3.3.4 Green Space Strategy**

The Green Space Strategy for the borough sets out our overall strategy for green space and the quality standards the borough. Green Spaces are green open areas which are valuable for amenity, recreation, wildlife or biodiversity and include types such as village greens, local open spaces, country parks, formal gardens, cemeteries, allotments, woodlands, recreation grounds, sports pitches and parks. The Tree Risk Management Framework will compliment this strategy through ensuring a robust and proportionate approach to tree inspection and maintenance ensuring our green spaces remain an enjoyable amenity for our local residents, visitors and communities to enjoy.

### **3.3.5 Local Plan**

The Adopted Local Plan sets out how the Council will manage physical development of the borough on behalf of residents and businesses. This includes providing sufficient land in the right places to attract more businesses into the borough and to allow existing businesses to grow. The aim of this is to create more and better jobs to improve earnings and increase opportunities for local residents. It also aims to provide improved housing to meet existing need and the needs of future generations whilst at the same time protecting what is special about the borough. The Tree Risk Management Framework will compliment the Local Plan by supporting biodiversity and geological preservation wherever possible in line with biodiversity duty to 'have regards to biodiversity when making their decisions' (Natural Environment & Rural Communities Act 2006).

### **3.3.6 Barnsley Tree Project**

The council is currently developing a tree planting initiative which will see considerably more trees planted over the next few years. Our vision is by working together with partner organisations and groups to plant a minimum of 10,000 trees across the borough.

In order to realise the potential and ambition of woodland creation and tree planting in Barnsley the project will:

- Co-ordinate mapping and tree data information across the Borough.
- Accelerate woodland creation and tree planting in Barnsley in response to the climate emergency.
- Identify and bring forward new woodland creation and tree planting opportunities through the use of co-ordinated mapping and identification of appropriate sites.
- Develop and deliver a public engagement plan to increase the profile of tree planting and woodland creation in Barnsley and seek ways to increase capacity for public involvement across partners.

The Tree Risk Management Framework will compliment this project by supporting woodland creation, protecting existing woodland by a regime of inspection and early identification of disease and hazards which will lead to lower tree loss across the Borough.

### **3.3.7 Biodiversity Action Plan (BAP)**

The Barnsley Biodiversity Action Plan (BAP) is produced by Barnsley Biodiversity Trust. The BAP lists the key species and habitats targeted for specific conservation action in the borough. The list draws from nationally-approved BAP targets but also includes certain species and habitats which the Trusts' partners feel to be locally important. The Tree Risk Management Framework will take into account biodiversity in both the approach to inspection and maintenance regimes. The Tree Teams will proactively liaise with the Biodiversity Officer in order to preserve and protect local environments wherever this can be safely achieved.

## **4. APPROACH TO RISK MANAGEMENT**

### **4.1 National Guidance on Tree Risk Management**

The council's Tree Risk Management Framework follows the guidance of the National Tree Strategy Group (NTSG) as set out in the 'Common Sense Risk Management of Trees' guidance document published in 2011.

The NTSG's guidance states that tree owners should take a balanced and proportionate approach to tree management covering three essential aspects:

- **Zoning:** appreciating tree stock in relation to people or property;
- **Tree inspection:** assessing obvious tree defects; and, assigning a level of risk to the public that these defects could pose; and,
- **Managing risk at an acceptable level:** identifying, prioritising and undertaking safety work according to level of risk.

The NTSG's guidance also requires that areas of land are defined according to levels of use, prioritising the most used areas. High use zones are areas used by many people every day, such as busy roads, other well-used routes, parks and children's playgrounds. Trees in areas of high public use require a more frequent inspection regime whereas those in areas with low public use require less frequent inspection.

#### **4.2 Guiding Principles to Managing Risk**

The council's approach to managing risk is defined as reducing the risk to the public to a level as low as reasonably practicable (ALARP). In order to ensure this methodology effectively governs the risk posed by trees in the borough, we will take the following steps:

- **Identify** – trees which have obvious defects and those which have the potential to pose risk to people and property on a stratified basis;
- **Prioritise** - set clear parameters in relation to which trees pose the most risk, to the most people, using a number of key indicators such as: locations relative to people and property, severity of defects which could cause it to fall and the effect of a fall on people and any council or privately-owned land;
- **Inspect** – Undertake a programme of tree inspections based on the risk prioritisation category; and,
- **Maintain** – Undertake safety work which can range from minor pruning to full tree removal in line within remedial timescales informed by the severity of the risk (see section 6).

## **5. TREE INSPECTION**

### **5.1 Inspection Zones and Timescales**

Zoning is a practice whereby areas will be defined according to levels of use and risk posed to people and property. This approach prioritises the areas deemed higher-risk and supports the cost-effective deployment of both tree inspection and maintenance teams focusing limited resources where most needed.

The inspection programme for council-owned trees is informed by various factors and will include the use of national tree mapping data alongside local assessment management data and service-based intelligence. In order to enable a risk-based approach to inspection of trees on council-owned land, three zone categories of high, medium and low will be adopted.

The criteria to define the risk-based zones, shown in Table 1 below are as follows:

- **Highway characteristics** – prioritised according to traffic volume, speed and emergency accessibility;
- **Occupancy** – public areas and buildings prioritised due to occupancy. High priorities will include council owned land around schools, shopping precincts, emergency and medical facilities where large diameter trees and those with key risk characteristics are present; and,
- **Tree population characteristics** – prioritised according to age and species. Discrete populations of trees that are mature to over mature or are known to be inherently prone to failure through their past management and species characteristics.

**Table 1: Inspection Risk Zones and Example Hazard Zones**

Risk Category	Example of Hazard Zone	Inspection Frequency
High	<ul style="list-style-type: none"> <li>• Areas close to A roads which act as primary arterial roads into the borough and busy B roads.</li> <li>• Areas around key buildings i.e. hospitals, fire, ambulance and police stations.</li> <li>• Areas containing large and mature trees and close to private dwellings, schools and high use car parks.</li> <li>• Areas close to or within high use parks, playgrounds, footpath, active travel routes and recreational facilities.</li> <li>• Shopping precincts.</li> </ul>	18 Months
Medium	<ul style="list-style-type: none"> <li>• Areas close to B &amp; C roads.</li> <li>• Areas close to or within moderate use parks, playgrounds, footpaths, active travel routes and recreational facilities.</li> <li>• Moderate/low usage car parks</li> <li>• Main footpaths within woodlands.</li> </ul>	3 Years
Low	<ul style="list-style-type: none"> <li>• Area with low volumes of traffic i.e. country lanes</li> <li>• Areas with low-likelihood of public access</li> <li>• Areas with high targets which contain small tree species.</li> </ul>	5 Years

Inspection frequencies will be kept under periodic review to test appropriateness and proportionality in line with local data and national best practice.

## 5.2 Inspection Approach

All formal inspections of trees detailed in the zones above will be carried out by suitably trained and qualified Tree Inspectors.

The council has adopted the principles of Quantified Tree Risk Assessment (QTRA) for managing the risk from trees on its sites. This approach assesses the target land where a tree could potentially fall and the associated impact. For example, a tree falling onto a main road could cause significant disruption when compared with a tree which falls in the middle of a rarely used open green space.

The QTRA system assesses risk in terms of:

**Targets** – Firstly people or property and their location in relation to the tree.

**Impact Potential** – Where necessary the tree or part thereof considered most likely to fail is then considered in terms of its size and potential to cause harm.

**Probability of Failure** – The assessment of the likelihood of the trees or branch failing based on technical knowledge and experience of the inspector.

Once the QTRA has attributed a level of risk to its surroundings, the tree inspection will follow the Visual Tree Assessment (VTA) approach and will be carried out by a range of methods including: drive by, walking, climbing and use of specialist monitoring equipment.

The tree inspection will usually include the following elements:

- Initially a visual inspection of the tree will be carried out for symptoms, defects and overall health. If there are no signs of any problems the assessment will be documented and concluded.
- If a defect is suspected on the basis of the symptoms, the presence or absence of that defect must be confirmed by thorough examination. Where the cause of a defect is suspected to be deliberate poisoning, the scene will be preserved and evidence will be gathered to pursue the prosecution of perpetrators in accordance with the Criminal Damage Act 1971.
- If the defect is confirmed, it will be quantified and the strength of the remaining part of the tree evaluated.

By following these steps, tree inspections are evidenced by a systematic, transparent and proportionate methodology. This will ensure that the council follows a consistent and robust approach to tree management across the borough.

## 6. INTERVENTION

### 6.1 Proportionate Response

Where an unacceptable risk is identified for a tree, or group of trees under council responsibility, the following actions will be organised by the inspector depending on the circumstances:

- **Immediate risk** - The public will be isolated from imminent hazards and remedial work carried out as an emergency;
- **High risk** - will be highlighted for remedial action at the earliest opportunity, with the order of work being carried out generally in descending order of risk, unless practical matters such as traffic control permissions mean this is not possible.
- **Lower-risk** - will be dealt with within the planned management programme for the site or road. A schedule of remedial work will be devised.

The following table shows the intervention timescales for mitigating unacceptable levels of risk. Wherever practicable, all tree work will be carried out in line with the arboriculture industries best practice methodology: British Standard 3998: 2010 – Tree work recommendations.

**Table 2: Prioritisation and Funding of Remedial Works**

Remedial Works Category	Category Detail	Target Response Timescale
<b>Emergency</b>	Response to trees that are perceived as imminently dangerous through reports received or site inspections. Works within standard working hours.	Onsite within 2 hours of receiving notification (or site made safe and cordoned off until resources available)
<b>Urgent</b>	Response to trees that are perceived as dangerous but where work needs to be undertaken at a safe time within standard working hours.	Works completed within 10 days (or site made safe and cordoned off until resources available)

<b>Planned</b>	Works to trees which have been identified through inspections and require further planning and organisation subject to resource availability. within standard working hours and budget availability.	Works to be prioritised and completed any time up to 1 year as determined by resource and budget availability.
<b>Desirable</b>	Improvement works to enhance street scene or public space undertaken within standard working hours.	Works to be completed within 5 years and/or when funds become available.
<b>Private Emergency</b>	Emergency response to deal with imminently dangerous private trees or those on leased council land blocking or threatening the public highway or a public/private asset.	Onsite within 2 hours of receiving notification (or site made safe and cordoned off until resources available)
<b>Private Urgent</b>	Response to private trees or those on leased council land that are perceived as dangerous but where work needs to be undertaken at a safe time.	Works completed within 10 days (or site made safe and cordoned off until resources available)
<b>Private Desirable</b>	Improvement works or projects for council partners.	In line with available resources.

## 6.2 Charging Policy

All remedial works following inspection will be recharged to the land owner whether that be private, a council department or partner organisation. The charging policy will be subject to review within 12 months of the mobilisation of the Tree Risk Management Framework.

### 6.3 Trees in Private Ownership

Trees on private land can also present a risk to the public. Under the Local Government Miscellaneous Provisions Act 1976, if a tree is considered to pose a danger, this may be dealt with accordingly at the discretion of the local authority pursuant of Section 23 of the Act.

No formal programmed inspection will be undertaken by the council on trees within private ownership. Only trees with obvious signs of poor health that can be seen from outside the property will be noted. A clear audit trail will be kept of all hazardous trees and any actions that have been taken to reduce the risk.

### 6.3 Major Incidents

When an incidence of adverse weather arises, the council will amend the emergency response to the following:

<b>Remedial Works Category</b>	<b>Category Detail</b>	<b>Target Response Timescale</b>
<b>Adverse Weather Event</b>	Where multiple tree issues arise due to an adverse weather event, we will utilise all available resources (specialist and non-specialist) to attend sites and assess each situation. Specialist personnel will determine the risk level of each issue.	All sites will be prioritised by severity of risk. High risk issues will be attended to by Arbor specialists as a priority, lower risk issues will be cordoned off until the Tree Teams can attend site.

## 7. MONITORING & REVIEW

The framework will be kept under constant review to ensure it remains fit for purpose and reflective of the national policy agenda and local strategic direction of the council and its partners.

The framework will be formally reviewed annually with the full and active engagement of key stakeholders and on a risk-basis following any adverse events.

A performance management framework will be developed and embedded to ensure the council is able to demonstrate its impact and the outcomes achieved for and on behalf of our local residents, visitors and communities.