Trees in the City

**Trees and Woodlands
Action Plan – January 2014**

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YOUR COUNCIL – YOUR ENVIRONMENT

Trees in the City

Trees & Woodlands Action Plan

Objectives and scope of this document

This document has the following general objectives:

1. To set out clearly policies that will inform how the Council manages trees and woodlands in its own ownership;

2. Provide guidance to inform the public on tree-related matters and on their rights and responsibilities;

3. To set out the Council's action plan in response to the Forestry Commission Scotland's Edinburgh & Lothians Forestry and Woodland Strategy 2012-17 (ELFWS), which was approved by Planning Committee on 4 October 2012;

4. Present recent research evidence of the financial benefits that trees provide (the i-Tree study).

Scope of the document:

The document does not attempt to create policies on trees in relation to planning or development control. These policies and guidelines are set out elsewhere. Whilst the laws governing trees in Conservation Areas and those covered by Tree Preservation Orders are a part of Planning legislation, the content about them has been included in this document to help inform the reader.

The High Hedges Act is not addressed here because at the time of writing it has not yet become law in Scotland. Guidelines for the application of this Act are still in development by the Scottish Government. A report to Council on the implications of the High Hedges legislation will be brought forward in due course.

Glossary of terms referred to in the text

BS 3998:2010 'Tree work – Recommendations' – the latest British Standard applying to work carried out on trees.

BS 5837:2012 'Trees in relation to design, demolition and construction. Recommendations' – the latest British Standard applying to tree protection in relation to works carried out close to trees

CAVAT – Capital Asset Value for Amenity Trees is a method for valuing trees as public assets, taking in cultural, social and environmental factors as well as visual amenity contribution.

Conservation Area – a planning designation applied to parts of the city which confers a measure of protection over the trees located within it.

Ecosystem services – a wide range of processes and resources delivered by ecosystems that are of benefit to people, such as removal of atmospheric pollution, storm water storage etc.

ELFWS – The Edinburgh & Lothians Forest & Woodland Strategy. A document produced by Forestry Commission Scotland to guide development of forests and woodlands in the Lothians, with counterpart strategies covering other local authority areas.

Extra-heavy standard – a tree grown in a nursery usually 16-18 cm girth or more and generally supplied with a rootball if specified.

FCS – Forestry Commission Scotland, the government's forestry regulation body & manager.

Helliwell valuation method – an aid to practical planning and management of woodlands and urban trees by evaluating their relative contribution to the visual quality of the landscape.

i-Tree eco valuation – a model developed by the US Forest Service to quantify a selection of ecosystem services delivered by trees at the city scale.

LFGNP – Lothians & Fife Green Network Partnership – made up of councils and governmental agencies to promote green network development

Millennium woodlands – In the document this means woodlands which were planted in Edinburgh in the period 1997-2001 as a part of the Millennium Forest project.

PM10 – Particulate matter of very small size (<10 μm [micrometers]). The principal source of airborne PM10 matter is road traffic emissions, particularly from diesel vehicles.

Transplant – a young tree 2 or 3 years old grown in a nursery usually 30 – 45 cm tall.

TPO – Tree Preservation Order, A designation made under planning legislation to protect trees either individually or in groups.

Tree Protection Charter – a Council document which sets out the process for protecting trees, and the levels of service which members of the public and others can expect from the Council regarding tree protection and works to protected trees.

UFS – the Urban Forestry Strategy 1991 and approved by the former City of Edinburgh District Council. This provided guidance on the development and management of trees and woodlands in the city.

VTA – Visual Tree Assessment. This is a methodology for systematic assessment of tree condition developed by Claus Mattheck.

Whip – a young tree, 3 years old or more, usually 60 – 120 cm tall.

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1   The benefits of trees in the city

1.1   Introduction

Trees make a vital contribution to quality of life in Edinburgh, both as street trees and as a component of parks, gardens and woodlands. They provide sensory stimulation, visual relief and aesthetic pleasure that changes with the seasons, help to provide the setting for buildings and screen unwanted views, and reduce the impact of noise.

They act as reservoirs for biodiversity, and for many citizens are the most obvious and readily available form of contact with nature. Surveys indicate that Edinburgh citizens value daily contact with nature very highly.

Trees remove pollution from the atmosphere, and perform a service in removing particulates known as PM10s thereby improving air quality. Tree roots may help to store storm water thereby alleviating localised flooding. Trees provide shade in summer and shelter in winter. As trees grow they convert atmospheric CO_2 into wood-storing carbon, lessening the rate of climate change.

The benefits of trees may be summarised as follows:

- Improving biodiversity

- Storing CO_2 from the atmosphere

- Providing shelter in winter and shade on hot days

- Health benefits – including removing harmful particulates form the air

- Relieving localised flooding

- A range of other benefits

1.2 Which tree is most valuable?

As trees increase in age and size, their benefits increase exponentially.
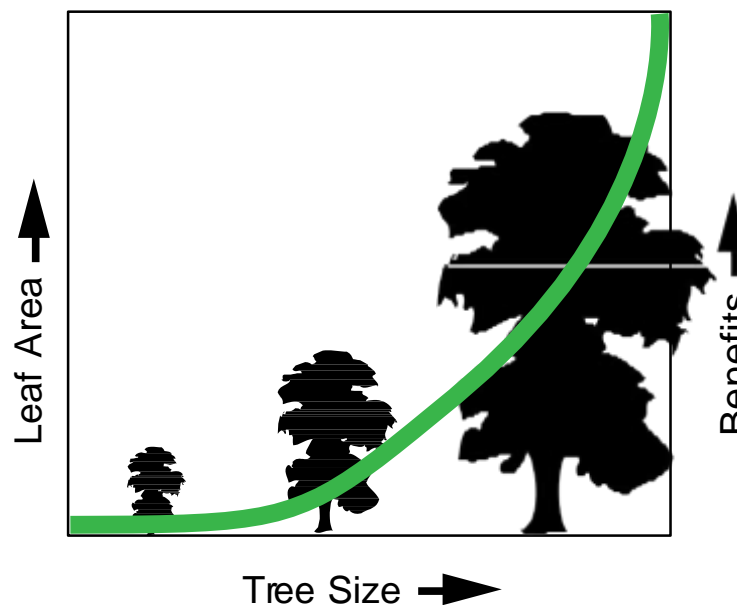
This means that it is of key importance to conserve and maintain existing trees, especially where they are old and large. Replacing old trees with newly planted ones is of course essential, but for new trees to replicate the benefits provided by older larger trees they would need to be replaced at a rate of 40 to 1, or alternatively wait for 30 – 50 years for their value to increase naturally. Older and larger trees in the City are currently under-valued and should not be removed unless there are compelling reasons to do so.

1.3 Benefits of trees

Contribution to landscape quality, screening eyesores and enhancing buildings

Most people enjoy seeing and being amongst trees. The inclusion of trees in developments can transform the appearance of sites for the better and create a more diverse and pleasing environment. The positive impact of broadleaved woodland on property prices is well documented, with increases in property values ranging from 5% – 18%. The larger the trees are, then the greater is their proportional value.

Industrial areas and employment sites with access to natural greenspace can have more productive and satisfied employees. Retail areas with trees perform better than shopping centres without them. The tourist attraction of wooded areas is widely acknowledged, with many local economies benefiting significantly. As a consequence of all of these contributions, commercial and urban areas with good tree cover tend to attract higher levels of inward investment.

Countering climate change

"Trees are a key part of our armoury to combat climate change"

Trees naturally absorb CO_2, a key greenhouse gas, through the process of photosynthesis. Thus trees help to create a significant carbon sink, sequestering carbon to benefit everyone through a natural process. The UK's forests and woodlands contain around 150 million tonnes of carbon and act as an on-going carbon sink by removing a further 4 million tonnes of it from the atmosphere every year. It has been calculated that a 33% increase in UK woodland cover would deliver an emissions abatement equivalent to 10% of greenhouse gas emissions by the 2050s.

The adoption of low-carbon options, such as timber in construction, is also beneficial. Every cubic metre of wood that is used as a substitute for other building materials saves around 2 tonnes of CO_2. More extensive use of timber in this way could store 10 million tonnes of UK carbon (equivalent to 37 million tonnes of CO_2) by 2020.

The increasing use of trees as a source of renewable energy (woodfuel) has a further substantial contribution to make. By replacing fossil fuels, sustainably produced woodfuel could reduce CO_2 emissions by as much as 7 million tonnes per year within 5 years. Not surprisingly therefore, the Forestry Commission actively encourages tree planting in both urban and rural areas to support the fight against climate change.

Tempering the effects of severe weather

The capacity of trees to attenuate water flow reduces the impact of heavy rain and floods and can improve the effectiveness of Sustainable Urban Drainage Systems. By moderating temperatures through a combination of reflecting sunlight, providing shade, and evaporating water through transpiration, trees serve to limit the 'urban heat island' effect. Trees moderate local microclimates – urban areas with trees are cooler in summer and warmer in winter and can help to alleviate fuel poverty. Well-positioned trees also improve the environmental performance of buildings by acting as a buffer or 'overcoat', reducing thermal gain in summer.

Improving air quality

Local air quality is improved as trees cut the level of airborne particulates and absorb nitrogen dioxide, sulphur dioxide and ozone.

Monitoring for PM10 is carried out at eight automatic Air Quality Monitoring Stations (AQMS) strategically located across the city. Data from monitoring in 2009 and 2010 is reported, respectively, in the 2010 and 2011 (draft) Air Quality Progress Reports for City of Edinburgh Council.

Whilst monitoring data demonstrates that the UK/EU Standard for PM10 (40 µg/m3) is not being exceeded and PM10 levels across the city are well below this standard, the Scottish Government has specified a more stringent Air Quality Standard for PM10 (18 µg/m3) in Scotland. Monitoring data suggests that the majority of heavily-trafficked routes within the city centre area are likely to exceed the Scottish Government's

annual objective for PM10. Therefore, the Council must continue working towards containing and reducing levels of PM10, wherever practicable. The evidence is that appropriately sited and designed tree planting will assist in reducing PM10 and other pollutants.

Biodiversity

Trees host up to 5,000 different species of invertebrate that, in turn, form crucial links in a healthy food chain that benefits birds and mammals. Lines of trees can form the basis for biodiversity networks, or links between habitats; and woodlands provide pockets of wildlife that become more biodiverse over time, as well as providing opportunities for people to be closer to nature.

Reducing Greenspace management costs

Greenspace with good levels of tree cover may be less costly to maintain than grassed areas. Cutting grass by gang mower is amongst the cheapest form of active maintenance, with annual costs of around £1600 per hectare. However, gang mowing is only possible on larger areas. Woodland is cheaper to maintain, ranging from £250 per hectare per year to £1450 per hectare per year for the more complex type of woodland planting. It is the diversity and other benefits described elsewhere in this section that tip the balance towards tree planting. This is not a recipe for the wholesale blanketing of parks and green spaces with woodland, rather an indication that modest increases in tree cover of the sort advocated in the Edinburgh Living Landscape project will bring some cost savings whilst at the same time creating additional benefits.

Health benefits

The presence of trees often encourages people to exercise, thereby reducing the incidence of heart attacks and Type 2 Diabetes. Trees absorb considerable quantities of airborne pollutants and the resulting cleaner air cuts asthma levels.

Wooded environments are known to calm people, relieve stress and provide a spiritual value that supports improved mental health and wellbeing. When they can see trees from their beds, patients' recovery times are faster as well.

The general health dividend provided by trees has been scientifically proven – Dutch research shows neighbourhoods with good tree cover are, statistically speaking, significantly healthier than less green urban areas. The positive benefits of trees do not stop there. Because they provide increased shade, the risk of skin cancer in tree-covered areas should be lower.

Food Growing

The growing of fruit trees in urban areas is increasingly popular, in line with the greater interest in local food production. Apples, pears, plums and other fruiting species can all be grown successfully in Edinburgh, and whilst they do require management, they do not require particularly specialised conditions or care. Fruit trees can be an important part of community gardens and allotments.

Providing useful by-products

Urban trees provide a range of different by-products – from small amounts of timber, to mulch and as mentioned above, fruit. Woodfuel is of growing importance, even in urban areas.

Problems posed by trees in urban areas

From semi-maturity onwards, trees may present a number of problems, varying in severity from nuisance, such as unwanted shading and blocking views, to danger to life, limb and property due to defective limbs, roots, the effects of disease, or extreme weather. In most cases these issues can be effectively managed. There are variations between species and varieties in the probability and severity of problems occurring, and it is of key importance to select the right tree for the right place. However trees grow naturally from seed or by suckers and in some locations the growth of trees in unsuitable locations may lead to significant problems.

In order to manage tree-related problems, a comprehensive range of tree management policies have been drafted which are intended to provide a reliable and sensible framework for the management of the Council's tree stock.

These policies form section 4 of this document.

References to the above quoted research can be found in 'The Case for Trees', forestry Commission, 2010.

http://www.forestry.gov.uk/pdf/eng-casefortrees.pdf/$file/eng-casefortrees.pdf

2   The status of trees in Edinburgh

2.1 Overview

Recent survey work carried out by Forest Research estimates that there are 638,000 trees in Edinburgh. The Council owns a large amount of land in Edinburgh, the largest parts of which are woodlands, parks and open land, each of which has trees to a greater or lesser extent.

It is difficult to know reliably whether the total number of trees in the city is increasing or decreasing, as accurate population counts have never been carried out. Data does exist however – the Forestry Commission carries out survey work and estimates that 17% of Edinburgh's land area is covered by tree canopies. For comparison, Scotland as a whole currently has 17.6% tree cover. For cities and towns, the mean figure for England and Wales is 11.8%, which would suggest that Edinburgh is relatively well-treed. However, much of Edinburgh's tree canopy cover is concentrated in large woodlands, such as Corstorphine Hill (76 hectares) and the Hermitage of Braid (58 hectares). The number of trees in streets is relatively small (9,000 or 1.4% of the total). In London and the south-west, street trees comprise between 2 and 14% of canopy cover.

The contribution of privately owned trees to canopy cover in the city is significant. For example districts such as the Grange, which have virtually no public open space, are well-treed because there are many mature trees located in domestic gardens.

Survey work carried out in the 1990s indicated a street tree population of around 11,000 individuals. When street trees were resurveyed in 2007, this population had fallen to around 8,626. The current population of street trees is 8,550.

There are a number of reasons for the reduction in street trees, but essentially the problem is that they are not always replaced when they die or are felled. It can be expensive to excavate tree pits at the roadside, and

regulations affecting road occupation may have made it more difficult to carry out planting operations. There is increasingly a risk-averse culture which tends to reject the planting of trees near to utilities, and may also mean that tree pits on pavement which are not promptly replanted may be tarred over.

The reducing number of street trees is a matter for concern, for as will be discussed below, trees in streets are most effective in delivering the types of benefits we increasingly need to obtain from our tree population.

2.2 The valuation of trees

Over the past decades a number of systems to enable the value of trees to be estimated have been created. The Helliwell method, initially developed in 1967, is the oldest of the three best known systems reviewed. Its main goal is to aid practical planning and management (e.g. felling, pruning and planting) of woodlands and urban trees by evaluating their relative contribution to the visual quality of the landscape. The Helliwell system puts an emphasis on visual amenity and also produces the most variable valuation outcomes.

The CAVAT system was developed in London and is targeted at local authorities and primarily publicly owned trees, providing a method for managing trees as public assets rather than liabilities. CAVAT tries to encompass the social/cultural component of the value of street trees.

The i-Tree Eco method was developed by the United States Forest Service which recommends its use by communities of all sizes to strengthen their urban and community forest management efforts. It has been widely used in US cities, and an opportunity for Edinburgh to have its tree population valued by this method arose as part of a trial project carried out in partnership with Forestry Commission Scotland and Forest Research. i-Tree allows "Ecosystem Services" (the functions performed by trees,

such as carbon storage, trapping atmospheric pollutants etc) to be valued in monetary terms as well as the "Structural Value" of the trees themselves.

2.3 i-Tree Eco Valuation

This summary provides an overview of the results from a study which was undertaken using the i-Tree Eco model to estimate some of the major environmental benefits delivered by Edinburgh's trees. The i-Tree Eco model was developed by the US Forest Service to quantify a selection of ecosystem services at the town and city scale. It has been used successfully in towns and cities in over 60 countries throughout the world, but the Edinburgh project is the first known use of the system in Scotland. Where possible, Scottish and UK methods were used to quantify the ecosystem value of the tree population, and to assess the risks of existing and emerging tree pests and diseases.

Forest Research conducted a survey of 200 field plots located across Edinburgh in the summer of 2011. All trees which had a diameter above 7 cm (at 130 cm above ground level) were recorded within these plots. Data was collected for each tree and shrub, including a record of species, stem height and diameter, canopy structure and canopy condition. The data was then analysed using the i-Tree Eco model.

i-Tree uses these data to model the biomass and leaf area of each tree. The resulting data is then modelled to estimate the amount of carbon stored and that sequestered each year by each tree, as well as the amount of gaseous and particulate air pollutants removed by a tree. The distribution of species observed in the plots which were surveyed is assumed to be representative of Edinburgh's tree population as a whole. This assumption allows the model to derive the cumulative benefits that the whole tree population of Edinburgh provides, and can be further interpreted to the species specific level.

The results of the study suggest the urban forest of Edinburgh is made up of 638,000 trees, which provide a tree canopy cover of 17.0% of the total land area. The overall tree density in Edinburgh was estimated at 55.6 trees per hectare, which is slightly below the UK average of 58.4 trees per hectare. The structural value of Edinburgh's tree population is valued at £382 million.

It was estimated that 53% of Edinburgh's trees were native to Scotland. The ten most common tree species made up over 65% of the total population, and consisted of sycamore (12.1%), holly (11.1%), silver birch (7.6%), Leyland cypress (6.2%), ash (5.6%), beech (5.3%), rowan (4.7%), Scots pine (4.5%), Wych elm (4.5%) and cherry (3.7%). The high figure for holly is somewhat surprising, but it should be noted that it is present as a large shrub in the understorey of many woodlands even if it more rarely becomes a tree of any great stature.

iTree also calculates an Importance Value for each species, which gives an indication of the relative contribution to ecosystem services that each tree species population provides. Certain species have characteristics (e.g. their leaf area) which mean that they provide a relatively higher ecosystem service than other species. For example, cherry species make up only 3.7% of Edinburgh's tree population yet contribute over 12.3% of the total leaf area of Edinburgh's trees. Based on this assessment, the relative importance of the top-ten most prolific tree species in Edinburgh is sycamore, holly, cherry, silver birch, beech, ash, Leyland cypress, Wych elm, Scots pine and rowan respectively.

Surveyors also noted the condition of each tree assessed. Overall, 71% of Edinburgh's trees were assessed as being in an 'excellent' condition, with 24% in either 'good' or 'fair' condition, and 15% being in 'critical', 'dying' or 'dead' condition.

Climate change is an issue of global concern. Urban trees can help mitigate climate change by binding up carbon in above-ground and below-ground parts of woody vegetation (carbon storage), and removing CO_2 from the air through photosynthesis (carbon sequestration). Currently, Edinburgh's trees are estimated to store 145,611 metric tonnes of carbon within their tissues, at around 12.7 tonnes per hectare,

and are estimated to sequester 5,329 metric tonnes of gross carbon per year. However, caution should be taken when using the carbon sequestration data for predicting future value, as i-Tree only provides a single estimation of net incremental value. However, the i-Tree estimate of sequestered carbon gives a useful indication to assess how the value of the carbon changes with time.

Of the species sampled, sycamore is estimated to store and sequester the most carbon (approximately 33.9% of the total carbon stored and 22.5% of all sequestered carbon). Other species in the top 10 overall for carbon sequestration are birch, beech, holly, cherry, poplar, rowan, ash, Leyland cypress and oak.

Under the 'low' scenario the trees of Edinburgh were estimated to store carbon with a non-traded value of £14.9 million in 2011 and were providing £484,689 per annum of non-traded value through net carbon sequestration. Using the same scenario ('low') the total value of carbon stored in Edinburgh's trees would accrue to £35 million by 2050. Values based on the 'central' scenario are twice that of the low, whilst those under a 'high' scenario are three times that of the 'low'. The carbon stored in the trees of Edinburgh is equivalent to the annual emissions of 20,801 people.

Figures can also be compared to carbon emissions from cars expressed as average passenger car emissions of CO2 per kilometre travelled. The average car in Scotland emits an equivalent of 128g of CO2 per passenger per kilometer travelled. The total stored carbon in trees, expressed as distance travelled, is equivalent to almost 4.2 billion passenger kilometres by car, whilst the net carbon sequestered annually by Edinburgh's trees is equivalent to 135 million passenger kilometres by car.

The i-Tree Eco model estimated that Edinburgh's trees remove a total of 100 metric tonnes per year of ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO2), particulate matter of less than 10 microns (PM10) and sulphur dioxide (SO2). This represents an estimated value in 2011 of more than £2.3 million.

The full report "Estimating the Ecosystem Services Value of Edinburgh's Trees" is available here:
http://www.forestry.gov.uk/pdf/Edinburghi-treereport.pdf/$FILE/Edinburghi-treereport.pdf

2.4 Tree diseases and pests

Most people will be aware of the arrival in the UK of *Chalara,* a potentially disastrous disease affecting ash trees, which was first detected in 2012. The immediate future for *Chalara* and ash is simply not known at this stage, and Edinburgh will follow best advice in dealing with the threat.

Dutch elm disease, which arrived in Edinburgh in 1976, continues to be the most significant disease, with around 1000 trees infected and felled every year in the city. Edinburgh continues to rely on elms planted in Victorian times for a significant amount of its tree cover, and many of the larger and more valuable trees are therefore vulnerable to the disease. Whereas many cities abandoned disease control many years ago, Edinburgh's disease control campaign, running continuously since 1976, has limited the losses and ensured a greatly longer life for most elms.

Phytophthora lateralis affects Lawson's cypress (and its many cultivars) and has already been confirmed at a number of sites in the west of Scotland. It could yet become a significant cause of death in urban populations of this species as its distribution and prevalence is not yet fully known.

Currently the main threat to our native oaks in the UK is from Acute Oak Decline. In southern Britain the Oak Processionary Moth has also become a serious issue due to its potential impact on public health (caused by its highly irritant hairs). Neither have yet been found in Scotland.

Horse Chestnut is affected by Bleeding Canker (caused by *Pseudomonas syringae pv. aesculi*) and Horse Chestnut Leaf Miner, both of which have been highly significant in southern parts of the UK, but only Bleeding Canker is currently a significant issue in Scotland, where 50% of urban

horse chestnut trees were found to have been infected in 2007. There is no known cure.

Other insect pests, such as Emerald Ash Borer, Asian Longhorned Beetle and the Citrus Longhorned Beetle have not so far taken a hold in the UK, but in mainland Europe and North America these have caused the death of trees on a massive scale, which has had a significant economic impact. An outbreak of Asian Longhorned Beetle occurred in 2012 in southern England, and control measures designed to eradicate it were immediately put in place and are thought to have been successful.

3 Strategic context

3.1 Urban Forestry Strategy 1991

An Urban Forestry Strategy (UFS) was approved by the City of Edinburgh District Council in 1991. This provided guidance on the development and management of trees and woodlands in the city. The rationale behind many of the actions was different from now, both economically and environmentally. The 1991 UFS was the first cohesive attempt to survey and establish the extent and nature of the city's tree resource. Having established that the tree population was of relatively poor quality insofar as it was even aged and elderly, the objectives that followed were designed to improve the situation. There were also a series of wider objectives, covering education and community involvement.

The 1991 UFS had some notable successes:

- The creation of over 100 hectares of new community woodlands under the Millennium Woodlands initiative. Most of these woodlands are small and located in school grounds, parks and near to where people live and work. Most of these woodlands have survived and are now establishing as valuable environmental components. The largest of these woodlands was planted in Craigmillar Castle Park, which has gone on to become a Green Flag Award park.

- Stimulated by the UFS, a woodland adoption policy was progressed by the District Council, which led to many privately owned woodlands becoming Council-owned. The benefits were that neglected woodlands were brought into management, public access could be encouraged, and they could be protected. A good example of this is Moredun Woods off Gilmerton Road, which was gifted to the Council under this policy, and is now a part of the Burdiehouse Burn Local Nature Reserve, another Green Flag Award park.

- Supported by external funding, a Tree Warden Scheme was set up, leading to identification of Heritage Trees and community planting

schemes. Although no longer operating, the Tree Warden scheme could usefully be re-energised.

- Establishment of the Forest School Education Initiative and the Forest School Project Officer. The pilot initiative ended successfully in 2011 when Children and Families adopted the Forest Schools project into their outdoor learning programme.

- The Tree Protection Charter was created, which is still in force (see below for details).

3.2 Edinburgh & Lothians Forest and Woodland Strategy 2012-2017

The publication of the Scottish Forestry Strategy in 2006 marked an important shift in the emphasis of forestry policy. Focusing on delivering sustainable development and conveying a range of social, economic and environmental benefits, the strategy sets an ambitious target of expanding national woodland cover from 17% to 25% by the second half of the century.

Following this, an Edinburgh and Lothians Forestry and Woodland Strategy (ELFWS) was created to help deliver the vision of the Scottish Forestry Strategy at regional level and allow the Lothian local authorities to produce locally-focused action plans.

The Scottish Forestry Strategy set the context for a number of policy documents and initiatives which expand upon the role of woodland and forestry in meeting a broad range of objectives. Scottish Government has produced an advice document 'The Right Tree in the Right Place - Planning for Forestry and Woodlands' which provides the detailed framework for the development of local strategies and action plans.

Trees and woodlands have significant interactions with the planning system. Scottish Planning Policy includes a presumption in favour of

protecting existing trees and woodland resources, and acknowledges the suite of benefits that they convey to people and the environment alike.

The National Planning Framework (NPF2) sets the spatial strategy for Scotland's development to 2030, and designates national developments of strategic importance to Scotland. As a national development, the Central Scotland Green Network (CSGN) represents a major opportunity to build high quality, multi-objective woodland management and expansion into the region's planning policy framework - as NPF must be taken into account in the relevant Strategic and Local Development Plans.

The ELFWS is designed to ensure that woodland expansion and management contributes to the CSGN by making the links between its high-level objectives, the Scotland Rural Development Programme (SRDP), and other funding opportunities and appropriate activities 'on the ground.' The Strategic Development Plan for Edinburgh and Southeast Scotland (SESPlan) clearly promotes 'increasing woodland planting to increase competitiveness, enhance biodiversity and create more attractive, healthy places to live' and includes explicit policy protection for trees and woodland. The plan includes a policy supporting the CSGN and highlights the role of Forestry and Woodland Strategies in contributing to delivery.

The Forestry Commission Scotland (FCS) 'Woods In and Around Towns' (WIAT) programme provides the focus for FCS work on improving quality of life in towns and cities. It creates major opportunities to bring neglected woodlands in urban areas into positive management, improving local environments, contributing to sustainable development and supporting people in using and enjoying their woods.

The ELFWS actions which relate to the City of Edinburgh Council Area are highlighted in the extracts below:

Existing woodlands

The City of Edinburgh is fortunate in possessing significant networks of established woodlands – much of which is high quality and makes a substantial contribution to biodiversity and townscape character. 40% is described as being ancient or long established.

Designed landscapes, wooded hills and the Water of Leith corridor are important features of Edinburgh's woodlands, along with parks, gardens, and street trees.

Managing these assets to secure public safety, safeguard character and contribute to the implementation of green network objectives will be the priority. However, this poses significant challenges for the local authority and private owners as the effects of climate change take hold, increasing uncertainty as to the impact of severe weather events, invasive pests and pathogens. Where assets are under-managed, sourcing material for biomass could provide a financial incentive to improve management regimes and deliver enhancement.

Sensitivities

The ELFWS designates a significant proportion of central Edinburgh within the 'sensitive' category due to the presence of multiple designations, including the Old and New Towns World Heritage Site, Conservation Areas and Inventory-listed gardens and designed landscapes.

While there is little potential for significant expansion within these sensitive areas, there will be opportunities to reinforce key assets and succession planning for feature trees.

Ancient and long-established woodlands are also included in this category, such as those lining the Water of Leith and the Almond. These woods provide important habitat linkages through the heart of the urban area, and woodland creation and enhancement in the vicinity could add significant value to connectivity.

Opportunities: Preferred

There is a relatively small area of 'preferred' land within the urban area, largely composed of vacant and derelict land. Although many of these sites may find alternative uses, an innovative – and potentially short to medium term approach – could be to plant short-rotation coppice or short-rotation forestry as biomass crops. Where ground conditions allow, these have the potential to provide an income stream for the land owner, as well as supporting the development of the wood fuel sector in the region – and contributing to Green Network objectives. This is a significant opportunity for forestry to contribute to regeneration and environmental improvement. It is also a development which enjoys strong support from the third sector and is being actively explored by local authorities in other metropolitan areas.

Opportunities: Potential

The majority of 'potential' areas are urban greenspaces where there may be a range of opportunities for appropriate planting to reinforce existing woodland networks, enhance character and, where management is an issue, a lower cost option than amenity grassland. Expanding urban woodland cover will also be an important component of delivering the Central Scotland Green Network, improving climate resilience and enhancing habitat networks. It is likely that expansion will be relatively limited as there may be competing management objectives and potentially local opposition to a perceived loss of open space. Local Authority open space / greenspace audits and strategies will be key in identifying potential for more woodland expansion in urban areas, albeit at a smaller scale.

Development proposals could also contribute to woodland expansion and creation of green networks where planting can be delivered in parallel with regeneration projects. Where development results in a loss of woodland, compensatory planting – as required by the Scottish Government Policy on the Control of Woodland Removal – should be directed towards preferred and potential areas in the vicinity.

Table 1 shows an extract of the aims, objectives and actions extracted from the ELFWS. These are the strands that are relevant to the Edinburgh Council Area. There are 20 workstreams contained within the 5 year priority column, which are designed to deliver the objectives set out in the ELFWS. These 20 priority areas have been carried forward to the Council's own draft Trees & Woodlands Action Plan, which is section 5 of this document.

Table 1: Relevant Aims, Objectives and Actions extracted from the 2012 Edinburgh & Lothian's Forestry & Woodlands Strategy (ELFWS)

Aim	Objective	Ref	5 Year priorities	Action by	Carried forward to the CEC tree & woodlands action plan
Expanding the region's woodland resource	Softwood forests Energy forests Mixed woodland Native woodland	EX 1-5	EX 1 Support the delivery of at least 180–250ha of new woodland across the region each year in line with the guidance provided in this Strategy	CEC Planning – planning conditions CEC P&G	Yes - need to define target for woodland creation in CEC authority area. Yes - need to define target for woodland creation on CEC land, by 2017.
Building a strong, sustainable economy	Supporting tourism	EC 21-24	EC 24 Develop and publicise opportunities for active outdoor recreation in woodlands and forests, including mountain-biking, walking and activities such as orienteering.	CEC	Yes
Promoting a high quality environment	Enhancing biodiversity and delivering green networks	ENV 1-4	ENV1 Promote the establishment of new native woodlands as part of integrated habitat networks.	Primarily FCS through grant aiding, CEC Planning and CEC P&G.	CEC Planning policies and guidance - Monitor through measuring net gain as EX4.
			ENV2 Where there are suitable opportunities, enhance ancient and semi-natural woodland.	LFGNP; FCS; CEC LBAP & EBP; Planning system - planning conditions	Yes - need to define target date to bring all CEC owned A&SNW under appropriate management. Yes Protect and seek enhancement of A&SNW through planning policies.
	Protecting and enhancing the water environment	ENV 5-9	ENV4 Increase the proportion of existing woodland brought into positive management.	CEC P&G CEC EBAP/EBP	Yes - need to set target for CEC estate.
			ENV6 Promote woodland management and creation as a key component of sustainable flood management initiatives	CEC Planning CEC Planning & P&G	CEC Planning – link to SUDS schemes and catchment flood schemes. CEC Bridges & Structures team. CEC P&G for flood proposals on CEC land
			ENV7 Identify locations where new planting or woodland management can help increase slope stability.	CEC	Yes - but need to define relevance to CEC land?

Aim	Objective	Ref	5 Year priorities	Action by	Carried forward to the CEC tree & woodlands action plan
	Enhancing air quality	ENV 10	ENV10 Where appropriate, prioritise planting of street trees in urban AQMAs, and woodland expansion along strategic road corridors and adjacent to industrial estates	CEC P&G CEC P&BS	Yes CEC street trees target set CEC Planning – through policy and consents Yes - Monitor number of street trees; woodland creation.
	Protecting and enhancing character	ENV 13-17	ENV17 Promote the importance of managing and increasing trees and woodlands in urban areas to conserve and enhance townscape character	CEC Planning CEC P&G	CEC Planning – achieve through use of policy and guidance, espec Design Guidance and Conservation Area Character Appraisals.
					Yes
	Protecting and enhancing the historic environment	ENV 18-19	ENV18 Promote positive management of historic gardens and designed landscapes and heritage trees to maintain their historic and cultural significance and increase resilience to climate change.	CEC Planning CEC P&G	Yes - CEC P&G deliver on CEC land. CEC Planning through guidance & policy.
			ENV19 Encourage forest restructuring to improve the setting of historic sites and landscapes.	CEC Planning CEC P&G (on own sites)	As above

Aim	Objective	Ref	5 Year priorities	Action by	Carried forward to the CEC tree & woodlands action plan
Securing resilience to climate change	Mitigating impacts on the climate	CC 1-3	CC 1 Expand woodland cover within Edinburgh and the Lothians as a means of increasing carbon sequestration and reducing net carbon emissions, following the guidance provided in Sections 3 and 5 of the ELFWS.	CEC Planning CEC P&G	As EX1
	Adapting to the effects of climate change	CC 4-7	CC 6 Promote positive and proactive management of key tree species and woodlands improve their resilience to climate change.	CEC EBAP	CEC Climate Change Adaptation Framework
			CC 7 Identify important individual historic trees and species that are vulnerable and begin succession planning to maintain contribution to character and significance.	CEC P&G	Yes - CEC P&G on CEC
Enhancing quality of life	Improving woodlands' contribution to wellbeing	QL 1-5	QL 1 Ensure that existing and new forests and woodlands are managed to create new opportunities for active travel, including walking, cycling and horse riding connecting settlements and the countryside.	CEC Planning CEC P&G	CEC Planning – implement Green Networks policy Yes
			QL 3 Promote the role of woodlands in providing a resource for physical activity, accessible to all parts of society close to where people live and work.	CEC P&G	Yes
	Improving community involvement and participation	QL 6-8	QL 6 Support community involvement in woodland projects, especially through mentoring and co-ordinating	CEC P&G	Yes – Tree Warden initiative and Parks Friends Groups.

3.3 Trees and woodlands on private land and in relation to development

Overview

Trees and woodland make an enormous contribution to the unique urban landscape of Edinburgh and play a major role in the international importance of its setting. In addition, trees and woodlands provide a wide range of environmental, social and economic benefits. In response to this, the Council aims to protect and enhance trees and woodlands through a range of statutory and policy measures. These measures relate to trees on private and public land, and trees which are affected by development.

The links below lead to the key planning documents and policies that concern trees. This document does not set out to create or review planning or development control policies, which have their legislative basis in planning acts and are subject to a separate consultation and approval process. Further information can be found in the Appendix and full details on these policy areas can be found by following these links:

Edinburgh City Local Plan:
http://www.edinburgh.gov.uk/info/178/local_and_strategic_development_plans/1005/edinburgh_city_local_plan

Rural West Edinburgh Local Plan:
http://www.edinburgh.gov.uk/info/178/local_and_strategic_development_plans/988/rural_west_edinburgh_local_plan

The Scottish Planning Policy (see paragraphs 146 to 148):
http://www.scotland.gov.uk/Publications/2010/02/03132605/0

Tree Protection Charter:
https://www.edinburgh.gov.uk/downloads/file/8550/revised_tree_protection_charter_committee_report

Tree protection in relation to development – design guide:
http://www.edinburgh.gov.uk/download/downloads/id/1048/tree_protection

Tree Preservation Orders: (see appendix 1 of the report):
http://www.edinburgh.gov.uk/downloads/file/8550/revised_tree_protection_charter_committee_report

Trees in Conservation Areas:
http://www.edinburgh.gov.uk/info/194/conservation_areas/692/conservation_areas

Woodland Habitat Action Plan:
http://www.edinburgh.gov.uk/downloads/file/3020/woodland_habitat_action_plan

3.4 Central Scotland Green Network

The Council is a partner in the delivery of the **Central Scotland Green Network.** This is a national development which aims to transform Scotland into a place where "the environment adds value to the economy and where people's lives are enriched by its quality". The CSGN will connect green and blue spaces in our towns and cities with the wider countryside and coast. Trees and woodlands are an essential part of this network. Opportunities to strengthen the woodland habitat network will be sought, through development gain and other mechanisms, such as woodland creation grant-aided by the Forestry Commission.

Section 4: Tree Management Policies

Contents

1. Introduction

This section sets out the Council's policies with respect to the management of its trees and woodlands. Edinburgh's residents, visitors and businesses benefit from the many economic, social and environmental functions and values that the city's trees and woodlands provide. It is therefore in the interests of all that trees and woodlands are managed to the highest standard to maximise their benefits, and minimise the risks and difficulties that they may present to the public.

This policy document is intended to cover the majority of tree-related concerns, and to provide guidance on how the Council will deal with these in relation to its own land holding. Whilst there are 43 policies, there may still be eventualities arising not covered by a policy. The Council does not have unlimited resources to respond to tree problems and work requests, and therefore has to prioritise which works are most important. The policies are intended to make the decision-making process around tree work more transparent.

2. Aims of Tree Policies

- To set out how the Council will manage, protect and enhance its tree stock;

- To set out the criteria for decisions taken by the City of Edinburgh Council in respect of the management of trees and woodlands, and how work will be prioritised;

- To set out how the Council intends to fulfil its duty of care in respect of public liability;

- To promote positive management of Edinburgh's trees through adoption of good practice;

- To highlight tree protection legislation in the form of Tree Preservation Orders & Conservation Areas;

- To support Edinburgh's Biodiversity Action Plan where appropriate.

3. Legal Obligations

The Council has a duty of care to maintain its trees in a safe condition where that is "reasonably practicable". Proactive management ensures that it is able to meet its Health & Safety liability relating to public trees, allowing people to safely enjoy the amenity, conservation and health benefits that Edinburgh's trees provide.

Duty of care is defined by several different Acts, including the Occupiers Liability (Scotland) Act 1960 and the Health & Safety at Work Act etc 1974, section 3 (1); Land Reform (Scotland) Act 2003; Roads (Scotland) Act 1984; Town and Country Planning (Scotland) Act 1997; Wildlife & Countryside Act 1981; and Nature Conservation (Scotland) Act 2004. The management of trees is informed by Health & Safety Executive guidance "Management of Risk from Falling Trees" (SIM 01/2007/05) 2007.

The above legislation, together with established case law, means that the City of Edinburgh Council must:-

- Survey its trees

- Have this done by a competent person

- Take reasonable action to ensure that they are reasonably safe

- Create individual tree reports, recording potentially serious structural faults posing a potentially serious risk to public safety, and show where a tree is to be retained.

The Council manages its own trees via the City of Edinburgh Council Forestry Service (within Parks & Greenspace), which utilises a specialised tree management database called Ezytreev. This allows the Council to keep accurate records of all the city's trees under active management and allows it to prioritise and programme tree work.

4. Contact Information

Trees on Council land

For enquiries regarding trees or woodlands in parks, streets, gardens, woodlands, cemeteries and walkway/cycleways, you should contact the Forestry Service.

Services for Communities - Forestry
Waverley Court, 4 East Market Street, Edinburgh, EH8 8BG
Tel: 0131 311 7074 Email: forestry.service@edinburgh.gov.uk

For enquiries regarding Trees in Council House Gardens you should contact your Neighbourhood Office Housing Officer – 0131 200 2000

For enquiries regarding trees in schools, **Children & Families centres / Health & Social Care** properties, you should contact Integrated Property Facilities Management Services – 0131 529 7878
E-mail: corporateproperty.helpdesk@edinburgh.gov.uk

For **out-of-hour emergencies** 0131 200 2000.

Trees on Private land

If you have an enquiry relating to trees and woodlands on private land you should contact the Arboricultural Officers in the Planning Service.

Services for Communities - Planning
Waverley Court, 4 East Market Street, Edinburgh, EH8 8BG
Tel: 0131 529 3919/3531
E-mail: planning@edinburgh.gov.uk

Information on the Council's management of trees and woodland can be found on the Council Website at the following location:

http://www.edinburgh.gov.uk/info/495/parks_gardens_and_open_spaces/767/trees_and_woodlands

Finding out why works are being or have been done

Clarification of why a tree is to be or was pruned/felled can be obtained by contacting the Forestry Service, which will endeavour to provide this information on demand, but failing that within 10 working days of receipt of the enquiry. (See Policy 9)

5. Common Law Right

5.1 General householder rights and responsibilities

Householders have a Common Law right to remove (abate) the nuisance associated with trees encroaching onto their property. The following advice is given in relation to the exercise of Common Law rights with respect to encroaching trees:

- You can only consider removing those parts of the tree from where they cross the boundary of your property. You have no legal right to cut or remove any part of a tree that does not overhang or is beneath your property (i.e. the roots).

- You must not carry out any tree works on branches or roots that foreseeably may result in the tree becoming unsafe or results in the decline or death of the tree. It is advised that you seek appropriate competent advice before carrying out any pruning, especially when severing tree roots.

- You do not necessarily have the right to enter on to land not belonging to you in order to carry out the removal of branches etc. You do have the right to carry out these works from your own land.

- For your own safety you are strongly advised to consult a professional tree surgeon for guidance on how best to prune back encroaching trees, unless the works are very minor, meaning you could do the works with hand secateurs, loppers or similar.

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- Before you consider doing any works to a tree/trees you should find out if they are protected by a Tree Preservation Order or are within a Conservation Area. If the trees are protected you will need to gain consent by making an application/giving notice to the Council. To find out if the trees are protected and guidance on how to apply for works if they are protected see contacts section.

- You are advised to discuss with your neighbour your intention to prune encroaching branches. Legally you do not own the encroaching branches and you should offer these to your neighbour. But in all likelihood, you should consider disposing of the arisings yourself. If the encroachment relates to a Council owned tree, any cuttings must be disposed of appropriately and not returned to Council land.

5.2 Trees & Subsidence

The subsidence of buildings in Edinburgh due to the presence of tree roots is very uncommon. Trees cause subsidence in some other parts of the UK when, in dry periods, the roots extract water from within the structure of shrinkable clay soil. It is the subsequent contraction of the clay which causes the settlement of buildings in these cases. Edinburgh has only very small localised pockets of this type of soil and due to typical weather conditions it is unlikely that trees will be associated with subsidence in the city.

If you have any concerns in relation to trees and subsidence within Edinburgh it is advisable to obtain professional advice from a competent consultant. Ground investigation and soil analysis will normally be required to establish if a tree is contributing to building subsidence before any remedial action can be carried out.

5.3 Council powers in relation to privately owned trees

The main powers Council has in relation specifically to privately owned trees are:

- Power to create Tree Preservation Orders: Town and Country Planning (Scotland) Act 1997 (as amended); Town and Country Planning (TPO and Trees in Conservation Areas) (Scotland) Regulations 2011.

- Power to designate Conservation Areas: The Planning (Listed Building and Conservation Areas) (Scotland) Act 1997.

- Power to enforce necessary works to trees in relation to roads and footpaths. The Roads (Scotland) Act 1984.

- Power to control the spread of Dutch elm disease: Dutch Elm Disease (Local Authorities) Order 1984, as amended 1988. The Council position on use of these powers is set out in the report "Dutch elm disease – legislative review", Council Executive 8 November 2005.

These powers are limited. The Council does not have the power to compel a private owner to remove a dangerous tree unless it threatens a public road or footpath, nor does it have powers to compel owners to carry out tree work on the basis of light deprivation, encroachment or damage to property. These are matters that need to resolved through negotiation or, failing that, by resort to civil legal action.

6. Tree Management and Policies

6.1 General approach to tree management

The approach to managing the Council's tree stock is based on good management practice, and in particular on the guidance produced for the owners and managers of trees by the Health & Safety Executive. Good management practice is not set out in any one text, but the Council will be guided in its approach to achieving the right balance between safety and the conservation of amenity by the document "Common sense risk management of trees", produced in 2012 by the National Tree Safety Group and endorsed by many bodies, including the Health & Safety Executive.

Trees are inspected periodically to check their condition and identify any works to make them reasonably safe, which may include pruning or, if required, removal of the whole tree. Following a tree survey, and where appropriate, trees in council ownership may be tagged with a

coloured plastic numbered tree tag to help identify the tree for future tree inspections or when responding to tree related enquiries. Visual tree inspections carried out on a 5 year cycle, or sooner if required, may suggest more detailed inspections or more regular monitoring of individual trees.

Policy 1: Trees in Council ownership will be inspected for safety, on a cycle between one and five years according to size, targets, condition and survey recommendation for each tree. This information will be recorded on the Council's data base.

It is of key importance that staff carrying out tree inspections are appropriately qualified and experienced. This is one of the key issues to emerge from recent case law involving public liability.

Policy 2: Tree inspections will only be undertaken by people who are qualified, experienced and competent to undertake the Visual Tree Assessment (VTA) method of survey.

The process of gathering the necessary data on each tree to allow informed management decisions to be made is resource intensive and is therefore a gradual one, in which the trees presenting the probable greatest hazard (i.e. streets etc) are surveyed first. Whilst the Council's database was set up in 2008 and is now extensive, it is not a complete record of all trees, and further efforts are required to ensure that the whole tree population is recorded.

Policy 3: The Council will take steps to bring all of its trees under active, appropriate and informed management.

6.2 Prioritisation of tree works

As set out above, the Council has a legal and moral duty to ensure that the public can go about their daily business with a reasonable expectation of safety in relation to trees. The Council has a limited amount of resources to carry out tree works, so they have to be prioritised in a rational and defensible way. This means that safety works – addressing

trees that present a known safety risk – will always take priority. High priority works are typically those required on trees displaying defects that unless remedied could foreseeably fail, resulting in injury to the public or damage to property.

The ranking of priorities is inevitably an imperfect business as trees are living organisms and failure rates cannot be predicted with the same accuracy as engineering structures. The availability of appropriately qualified and experienced staff to make judgements is therefore key.

Policy 4: The Council prioritises tree work according to the individual tree's health & safety risk, taking into account current available resources. Tree works will normally be completed in safety priority order.

The Council may therefore simply not have the resources to carry out certain types of work. Details and examples of the types of complaints that are regarded as amenity or nuisance requests are provided in part 8 Common Tree related issues.

It is recognised that members of the public may have a legitimate complaint regarding a tree in Council ownership, where works are required to alleviate the nuisance. An example of this is a tree standing on Council land which has grown to overhang a neighbouring garden. Currently the Council may well be unable to undertake the required works as resources are prioritised towards essential safety works as detailed above. However, in the circumstances previously detailed, a householder has Common Law rights to abate a nuisance caused by overhanging branches/roots.

Policy 5: The Council accepts the right of householders to remove overhanging branches, (subject to compliance with Tree Preservation Orders and/or Conservation Area status) and where required will assist householders to identify a suitable arboricultural contractor who can carry out works to the appropriate standard.

There are however cases in which Council-owned trees are causing a nuisance, for example by blocking light or views, but are not overhanging

the householder's property. Again, the Council may be unable to prioritise these works, leaving the householder currently with no remedy. In such cases the Council will consider agreeing to tree works to be carried out at the householder's expense, although each enquiry will have to be dealt with on its individual merits. If the works are agreed with a Trees and Woodlands Officer, an experienced arboricultural contractor will have to be appointed and a copy of their insurance certificate and qualifications provided to the Forestry Service before any work can be carried out. All tree works will have to be carried out to approved industry standards in accordance with BS 3998: 2010 'Tree work – Recommendations'.

Policy 6 : The Council will consider applications from private owners to alleviate amenity reduction or nuisance problems on the basis that they will fund the works, that the works will be agreed with the Council beforehand, that a suitable arboricultural contractor is appointed, and that each case will be considered on its individual merits.

6.3 Response to tree enquiries

The Council is endeavouring to adopt a proactive approach to tree management. Work planned in advance can be implemented more efficiently so, as far as possible, it is the intention to generate work programmes from the results of systematic survey work and routine inspection programmes.

The Council receives many enquiries relating to trees, the majority of which are perfectly legitimate, and which require an inspection to be made.

Policy 7: For non-emergency tree-related safety issues a Trees & Woodlands Officer will aim to carry out a tree inspection within 10 working days of receipt of the enquiry and the customer notified thereafter within 5 working days of what action the Council intends to take.

From time to time damage may be caused to private property by trees. In the event that an owner considers that their property has been damaged

by a Council tree (for example a fallen tree or branch) they should contact the Council. It is advisable that they contact their insurance provider for advice. In addition, if they wish to make a formal claim for damages or to formally notify the Council with concerns about future damage, it should be done in writing, supplying full details of the circumstances.

Policy 8: Claims made in writing to the Council in relation to alleged damage caused by a Council owned tree will be acknowledged within 10 working days of receipt.

An appropriate Council Officer will write a report on the condition of the tree relating to the claim. This may require a site visit. This report will be passed to the Council's Insurance section who will process the claim for damages.

6.4 About the work we do to trees and in woodlands

The Council aims to carry out works to trees to the appropriate industry standards. In most cases the relevant standard is British Standard 3998: 2010 'Tree work - Recommendations'. Generally the Council's approach is only to carry out works where necessary, either for safety reasons, disease control, for the health of the tree/woodland or for amenity reasons. Occasionally trees may have to be removed to allow certain works to be carried out, such as road re-alignment or construction projects. Often these latter types of work are subject to Planning legislation, and there is an opportunity for public debate about proposals before they are approved.

Trees in Parks & Greenspace are managed to reflect the circumstances of the individual site and the type, age and condition of the current or historic trees. Trees in parks generally have more room to grow compared to street trees and typically achieve their full height and spread. Ongoing maintenance includes the removal of health & safety tree works and the removal of low branches from pathways only where they pose a risk to public safety.

Street trees in Edinburgh include a high number of large 'landscape' type trees growing in architecturally significant street spaces. Given this, street

trees need to be regularly monitored to keep them in a safe condition for residents and the public. Only trees that are deemed unsafe are removed/felled. It is the Council's intention to retain street trees in a safe condition as a public amenity. Replacing street trees is complicated by the nature of the tree locations. Many factors hinder the replacement of lost street trees such as underground utilities, space available for the tree to grow above or below ground and the increased costs associated with the establishment of street trees.

Woodlands require a slightly different approach to management, and are generally managed as a whole rather than as individual trees. In most woodlands the risk presented by defective trees is far less than if the tree was located next to a busy road, so the type of work done will reflect this. Thinning of young woodlands is often required to reduce density and to allow maturing trees room to grow. This involves the removal of a proportion of the trees and is a normal part of woodland management. If it is not done, trees within young woodland may become spindly and unstable, leading to the woodland becoming unviable in later years. Typically this would be carried out in woodland where the trees are between 10 and 30 years old.

Tree removal is regrettable, but under a number of circumstances necessary. The decision to remove a tree is not taken lightly and, apart from when a dangerous tree needs urgent attention, we will endeavour to inform local residents when and why we believe that tree felling is necessary.

Trees may be pruned for a variety of reasons, including the removal of damaged, poorly formed or crossing branches, to reduce the likelihood of failure by taking 'weight' out of the tree and generally to keep a tree in a healthy safe condition.

Policy 9: The Council will not carry out works to trees, or fell them, unless it is necessary to do so. When works are carried out, the reasons for the work will be documented and recorded.

When trees are pruned or felled, arisings (i.e. logs, branches leaves etc)

need to be dealt with appropriately. How arisings are disposed of will vary from site to site and according to practical constraints. Generally, all arisings from tree work in parks, gardens, streets and cemeteries will be removed from site. Normally branchwood is chipped, which creates a by-product that can be used for mulching or surfacing paths, and timber may be removed from site and sold by auction. Sometimes timber may be stacked until it can be collected by a suitable vehicle.

In woodlands it may be appropriate to leave chipped material on site to compost naturally, and it may also be useful to leave logs on site to rot down thereby providing habitat. Where logs are left on site it is imperative that they are left reasonably safe so that they do not roll down slopes where they could cause injury or damage to property.

When safe to do so, dead trees will be left standing in woodlands, although branches may need to be removed. The Council will adopt the Woodland Trust's guideline of 20 cubic metres of deadwood per hectare of woodland wherever practicable to help support biodiversity.

The public is not permitted to remove wood (or other parts of a tree) from Council owned or managed land without prior consent from the Council. Unauthorised persons are not allowed to use a chainsaw of any type on Council owned or managed sites.

Policy 10: Where practicable, all arisings (logs, branches etc) from tree works in high amenity areas will be removed and used in an environmentally sustainable manner. In woodland situations however, standing dead wood, logs and chippings may often be left on site, where this can be done safely, to enhance biodiversity and increase wildlife habitats.

In some areas, ivy growth on trees is common. Often it poses no risk in itself, and may provide a valuable wildlife habitat. However, in some circumstances in can threaten the stability of trees, either through an increased sail effect in high winds, or by increasing risk of failure because snow accumulates in it. This can be a hazard where there is public access

or property. Ivy can be associated with woodlands that are in decline, and although there are differing views on cause and effect, the control of ivy in declining woodlands can have a positive effect.

In severing or removing ivy, consideration must be given to the potential presence of bird nests and bat roosts. This factor alone should not negate ivy control but may delay the process until a full assessment has been carried out.

Policy 11: Management of ivy and trees. The Council will control ivy on trees where it is having a significantly negative effect.

6.5 Tree stumps

Normally when a tree is felled, a stump is left. It is usually not possible to remove the stump at the same time. Stumps in parks, gardens and streets may be unsightly and can be a trip hazard. They may take many years to decay naturally, and generally it is appropriate to remove them from parks, gardens and streets wherever practicable.

Stump removal requires the use of special equipment, usually a stump grinder, which reduces the above-ground parts of the stump into small chips. It is often possible to grind away the stump down to 300 – 450 mm below ground depending on the machine. This process is time-consuming and energy-intensive.

Removal of stumps from pavement and roadside locations can be difficult and complicated, there may be underground utilities present, and works may involve temporary road closures. For these reasons removal of stumps in pavements cannot always be achieved quickly.

In woodland sites it is usually appropriate to leave stumps to decay in situ.

Currently, the Council has a backlog of stumps that need to be removed and this is being dealt with on a prioritised basis as resources allow.

Policy 12: The Council will seek to remove stumps promptly where practicable and appropriate. In woodland locations, stumps will generally be left to decay in situ.

7. Day to day tree management issues

7.1 Roads - Sight line obstruction

Standards for visibility vary according to the class of the road and the speed limit in force. If a privately owned tree is causing an obstruction to the visibility at a road junction (sight line), powers exist under the Roads (Scotland) Act to make the owner of the tree remove the obstruction.

A site inspection will be undertaken within 10 working days of receipt of service request and the customer notified of what action is considered appropriate.

Policy 13: the Council will undertake work to a tree in its ownership to maintain clear sight lines (where reasonably feasible) at junctions and access points (associated with a street, road or highway).

7.2 Pavements - Trip hazard

In response to a reported tree trip hazard on a public pavement, a joint inspection will be carried out between a Tree and Woodlands Officer and Roads Officer to assess potential solutions.

If a privately owned tree is causing damage to the pavement leading to a trip-hazard, powers exist under the Roads (Scotland) Act to make the owner remove the obstruction. There are a number of ways the Council can repair a pavement damaged by tree roots. Simply, the pavement surface can be 'built-up', or isolated roots can be pruned (if these do not affect the stability of the tree) and the pavement surface repaired. In some circumstances it may be appropriate to consider the installation of a root barrier which can prevent problems re-occurring. Removal of the tree is usually the last resort (accepting that in some circumstances where the tree is low value or can be replaced, removal may be the most appropriate solution).

Policy 14: The Council will undertake measures to make safe an unacceptable trip hazard in streets, roads or the public highway caused by the growth of a Council owned tree.

7.3 Trees obstructing an adopted road

Where trees and large shrubs are interfering with the passage of vehicles or pedestrians along an adopted road or footway, the owner of the tree is responsible for their maintenance. The Council has the power under the Roads (Scotland) Act to order a landowner to carry out such clearance, and in some instances will carry out pruning work itself, reclaiming incurred costs from the owner of the tree in question.

Policy 15: The Council will undertake measures to make safe any unacceptable carriageway obstruction due to trees in street, affecting roads or the public highway caused by the growth of a Council owned tree.

A Trees and Woodlands Officer will carry out a site inspection and if required will create a work order to maintain a 5.5m minimum height clearance. If a privately owned tree is causing an obstruction to a road, powers exist under the Roads (Scotland) Act to make the owner of the tree remove the obstruction.

Policy 16: The Council will undertake work to a tree in Council ownership to maintain a minimum 5.5 metres height clearance over the carriageway - where reasonably feasible.

7.4 Danger to public highway (private tree)

If a tree in private ownership is shown to be a danger to the public highway it will be identified for work to make it reasonably safe. The landowner will be contacted and instructed to make the tree safe under the Roads (Scotland) Act. If it is necessary that the Council undertakes this work then the owner will be charged in full for the Council's costs.

Policy 17: The Council will undertake measures to make safe any unacceptable carriageway risk due to private trees in a dangerous condition, within falling distance of roads, or the public highway.

7.5 Pavement – obstruction by tree

Any works necessary to prevent an obstruction in the width of a footpath associated with the highway due to the presence of a Council owned tree would be considered on a case-by-case basis. If a privately owned tree is causing an obstruction to a footpath associated with the highway, powers exist under the Roads (Scotland) Act to make the owner of the tree remove the obstruction.

Policy 18: The Council will undertake work to a Council owned tree to maintain a minimum (where reasonably feasible) 2.5 metres height clearance over a footpath associated with a street, road or highway.

7.6 Street light – obstruction by tree

The Forestry Service will prune branches if they affect the zone of illumination. A Trees & Woodlands Officer will carry out a site visit and create a work order if appropriate. If a privately owned tree is causing an obstruction to a street light, powers exist under the Roads (Scotland) Act to remove the obstruction. If the owner does not, the Council will do the work and recharge the owner. When the Council puts in new street lighting or wishes to move a lighting column, consideration is made of the impact on existing trees. Similarly, when new trees are being planted, these are to be placed so they do not cause problems to existing streetlights.

Policy 19: The Council will undertake work to a tree in its ownership to ensure that it does not unduly obstruct the streetlight zone of illumination.

7.7 Protection of trees during construction

Trees in parks and streets and other areas may be in close proximity to sites for construction and development. Examples are the creation of footpaths, the installation of lighting in parks, or the erection of temporary structures. Trees may be affected by physical damage to branches and stems, the severing of structural or fine roots, or the compaction of soil, which reduces the amount or air and water available to the tree. It is of key importance that trees are protected. This policy simply brings the protection afforded the Council's own trees into line with the expectation placed on private owners in relation to development.

Policy 20: The Council will ensure that all construction and development, including temporary installations and placement of movable equipment, near to trees follows BS:5837 (2012) "Trees in relation to design, demolition and construction - Recommendations" and that the most recent National Joint Utilities Group "Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees" are followed where carrying out works in root protection areas cannot be avoided.

7.8 Traffic signal / street sign-obstruction by tree

The Council will undertake work to a tree in its ownership to maintain clear sight lines (where reasonably feasible) for traffic signals and street signs (associated with a street, road or highway). If a privately owned tree is causing an obstruction to a traffic signal or street sign, powers exist under the Roads (Scotland) Act to make the owner remove the obstruction.

Policy 21: The Council will undertake work to a tree in its ownership to ensure that not unduly obstruct traffic signals or street signs.

7.9 Crime and anti-social behaviour

The Forestry Service may remove trees considered to be exacerbating crime and/or anti-social behaviour, but generally will remove only lower branches to allow sight lines through the trees so people cannot use them for cover. Where a tree is associated with criminal activity and/or anti-social behaviour, steps to reduce the problem will typically require the coordination of a number of agencies, including the police. Just pruning or felling a tree is not always the answer to the problem. Some research shows that areas with lots of trees actually help to make places safer. But, neglected spaces with overgrown trees and untidy areas can encourage criminal activity and/or anti-social behaviour. The Council's tree and grounds maintenance programme seeks to improve these areas by making the local environment cleaner, greener and safer.

Policy 22: Where a Council owned tree or woodland is associated with criminal activity and/or anti-social behaviour, measures to alleviate the problem will be implemented on a site-by-site basis in consultation with the Police, communities and neighbourhood teams.

7.10 Vandalism

The Council generally plants large trees that are more difficult to vandalise, including metal guarding, which is removed once the tree has become established, usually three years after planting. We actively promote tree planting and encourage local residents, including young people, to take part and care for the trees in their neighbourhood. These combined measures have reduced problems of vandalism to generally low levels.

Policy 23: The Council will investigate reports of vandalism to a Council owned tree or woodland and try to correct any damage where appropriate and within available resources.

8   Common Tree related issues

8.1 Tree too big / too tall

A tree is not dangerous just because it may be considered too big for its surroundings. Other problems would need to be identified for the Council to consider it to be dangerous. Generally, a site inspection will not be required. Customers will be informed of Council policy within 10 working days of receipt of an enquiry. Customers can receive an immediate response by searching for the relevant stated policy on the Council's web site.

Policy 24: The Council will not prune or fell a Council owned tree simply because it is considered to be 'too big' or 'too tall'.

8.2 Leaves

The Council does not carry out a public leaf collection service. Although complaints are sometimes received about the problems caused by leaves falling from trees, the loss of leaves from trees in the autumn is part of the natural cycle and cannot be avoided by pruning. The maintenance of rhones and/or gutters is the responsibility of the landowner and the Council is not obliged to remove leaves that may have fallen from Council owned trees. Where rhones/gutters are regularly blocked by fallen leaves gutter guards may be fitted to provide a low maintenance solution.

For roads, streets and parks the Council carries out a leaf collection in the autumn to clear fallen leaves from certain sites. In parks and green spaces, paths or areas of hard standing are regularly cleared of fallen leaves, but leaves on grass/shrub beds are generally left until the majority of leaves have fallen before they are removed (unless leaving them would damage the grass in which case the accumulated leaves would be removed sooner). Collected leaves are usually sent for composting.

Policy 25: The Council will not prune or fell a Council owned tree to remove or reduce leaf fall or remove fallen leaves from private property.

8.3 Light

In law there is no general right to light, and there is no right to light in connection with open land, such as a garden. Owners can exercise their Common Law right to remove (abate) the nuisance associated with encroaching trees, see section 5 - Common Law Right.

Policy 26: The Council will generally not prune or remove trees in cases where they cause a reduced amount of light to fall on a property, other than in exceptional circumstances.

8.4   Bird droppings

Bird droppings may be a nuisance, but the problem is not considered a sufficient reason to prune or remove a tree. Nesting birds are protected under the Wildlife and Countryside Act 1981 (and other related wildlife law). Warm soapy water will usually be sufficient to remove the bird droppings.

Policy 27: The Council will not prune or fell a Council tree to remove or reduce bird droppings from trees, or remove bird droppings from private land.

8.5   Fruit / berries / nuts

Fruit trees such as apple, cherry and pear have the double benefit of spring blossom and autumn fruit. This makes fruit trees good for wildlife and a source of free food. But, there are some locations where fruit trees are less desirable, for example where soft fruit would make the pavement slippery or where anti-social behaviour could encourage fruit being thrown at houses or cars. When considering what tree to plant the Council takes account of the likelihood of such problems. Equally, where fruit trees are established but where there is a significant anti-social behaviour problem the Council will consider phased removal and replacement.

Policy 28: The Council will not prune or fell a Council owned tree to remove or reduce the nuisance of fruit/berries or nuts, or remove such fallen fruit from private land. However, where fallen fruit is leading to significant anti-social behaviour problems it will consider measures to reduce the problem, including whether a phased removal and replacement with alternative species is reasonable.

8.6 Sap / Honeydew

Honeydew is caused by greenfly (aphids) feeding on the tree, which excrete a sugary sap. Often the honeydew is colonised by a mould, which causes it to go black.

Unfortunately, there is little that can be done to remove the aphid which causes the problem and pruning the tree may only offer temporary relief. Any re-growth is often more likely to be colonised by greenfly thereby potentially increasing the problem. Some trees, such as limes, are more prone to attack by greenfly and in some years greenfly are more common, especially following a mild winter. Honeydew is a natural and seasonal problem. Where new trees are planted we try to choose trees that are less likely to cause this problem. Where honeydew affects cars, warm soapy water will remove the substance, particularly if you wash the car as soon as possible.

Policy 29: The Council will not prune or fell a Council owned tree to remove or reduce honeydew or other sticky residue from trees.

8.7 Pollen

Whilst some kinds of tree pollen are known to bring on in sufferers the symptoms of hay fever this is not considered justification for either the pruning of Council trees, or their removal.

Policy 30: The Council will not prune or fell a Council owned tree to remove or reduce the release of pollen.

8.8 Telephone wires

It is the telephone service providers' responsibility to maintain your service. Several options are available to the utility company that do not require pruning of a tree to maintain the service. Often pruning is a temporary solution and the problem may reoccur when branches grow back.

For example the cable can be sheathed at points of high friction; the line can also be redirected through the tree canopy. It may be that the telephone service provider is able to suggest an alternative solution to the problem of trees affecting telephone wires.

Policy 31: The Council will generally not prune or fell a Council owned tree to remove or reduce interference with telephone wires.

8.9 TV / Satellite Reception

It may be that a satellite or TV provider will be able to suggest an alternative solution to the problem, for example relocating the aerial/dish or means to boost the signal.

Policy 32: The Council will generally not prune or fell a Council owned tree to prevent perceived interference with TV/satellite installation/reception.

8.10 Wild animal / insect pest

Bees, some animals, and many birds are protected species and advice should be taken before considering their removal. Advice on dealing with animal pests such as wasps can be obtained from the Council by calling 0131 608 1100.

Policy 33: The Council will not prune or fell a Council owned tree to remove or reduce incidence of perceived pests such as bees, wasps, or wild animals.

8.11 Drains & invasive roots

Tree roots typically invade drains that are already broken or damaged. Trees themselves very rarely break or damage the drain in the first place. Tree roots found in a drain are usually symptomatic of an underlying problem requiring repair of the broken pipe.

Tree roots can cause damage to paving, lawns and the foundations of buildings or walls. Again, where a neighbour's tree is causing problems, an owner is within their rights to cut back roots to the boundary of their property, unless it is protected by a TPO or is within a Conservation Area. However, it is always worth remembering that undermining the future stability of the tree can lead to future liability for any future damage caused.

Policy 34: The Council will not prune, fell or cut the roots of a Council owned tree to prevent roots entering a drain that is already broken or damaged.

8.12 Tree touching building

In many cases the solution will be for the Council to prune the tree, but in exceptional circumstances it may be more appropriate to fell the tree. If pruning is appropriate we will endeavour to undertake works to stop the problem re-occurring within three years.

Policy 35: In the event that a Council tree is causing damage to property, a Trees & Woodlands Officer will aim to respond within 10 working days and, if appropriate, remedial works will be undertaken.

8.13 Tree overhanging property

Householders have the right to prune overhanging branches back to their boundary as long as the pruning does not result in the demise of the tree. For any works on trees protected by Tree Preservation Orders (TPOs) or that stand within Conservation Areas, permission must be granted by the Arboricultural Officers within the Council's Planning service. All works should be carried out in accordance with BS3998: (2010) 'Tree work –

Recommendations'. It is advised that this work is carried out by a fully insured and experienced arborist. Tree works should also be undertaken outside of the bird nesting season, which typically falls between the months of March and September.

Policy 36: The Council will generally not prune or fell a tree in Council ownership to alleviate the nuisance of overhanging branches.

8.14 Tree obstructing view

There is no legal right to a 'view'.and this issue is treated in much the same way as section 8.3 "Light".

Policy 37: The Council will generally not prune or fell a Council owned tree to improve the view from a private property.

9   Dangerous trees and tree-related emergencies

The Council operates an emergency call-out system in the event of dangerous trees, and a duty officer is on call 24 hours a day, 365 days a year. A stand-by squad of arborists is normally available should this be required, and the Council retains a number of private contractors who can stand by or attend in emergency situations.

If a Council owned tree is in such a condition that it poses a very high risk to people or property and is considered to be an emergency situation, instruction will be given to start the process of making the tree safe. An emergency is defined as a tree that is in immediate danger of collapse or a tree that is causing an obstruction requiring urgent attention. Emergency tree works are defined as the minimum amount of work that requires to be done in order to remove the immediate risk to life, limb and property.

The number of tree-related emergency incidents is usually small, but in severe weather events there may be a large number created in a very short space of time. For example the storm of January 3 2012 caused over 450 incidents which were reported as emergencies.

When the wind blows, trees move and may look as if they are going to fall over. Trees have evolved to move in the wind to limit breakage and the movement of stem and branches is not in itself a dangerous sign. It is however not possible to guarantee that any tree will not fail, as even the healthiest may succumb in the most extreme conditions.

Trees at the highest risk of complete failure are ones displaying movement at the base of the tree (e.g. roots lifting and/or cracks in the ground opening and closing). Other typical situations which will usually require immediate attention are:

- Tree snapped or blown over
- Tree rocking at its base – roots are likely to be damaged
- Uprooted but held up by another tree or building (hung-up)
- Large branch has broken off or is hanging off the tree

- Fallen tree or branches blocking a road, footpath, or access to property
- Tree or branches fallen on to a house or car

Policy 38: The Forestry Service will aim to attend emergency tree incidents within 1 hour of its report to assess the situation and start the process of making the site safe.

Dangerous trees not posing an imminent public danger

If not an emergency situation, a Trees & Woodlands Officer will aim to respond within 10 working days of receipt of the enquiry and the customer notified of what action is considered appropriate.

Signs to look out for which may mean that a tree is a risk to people or property but the risk does not require an emergency response include a tree which is:

- Dying - few leaves in summer or dieback in the crown
- Bark is loose and falling off
- Old splits and cracks in the trunk or large branches
- Smaller branches falling from the tree

Trees can be made safe by pruning or felling. Typically the Council would employ the most cost effective approach. For certain high value trees the Council will consider other options to reduce risk to an acceptable level including those that reduce the likelihood of the tree failing or the likelihood of persons being close to the tree if it did fail.

Policy 39: If a tree is reported as dangerous, but after inspection the risk to the public is assessed as not high then the tree will be made safe depending on the degree of risk identified at the time of inspection by a Trees & Woodlands Officer.

10   Tree Planting

10.1 Planting programmes

In order to maintain the number of trees in the city, it is necessary to plant trees. Trees naturally regenerate from seed and by suckering, and this is a significant factor in woodland sites, where no planting may be necessary to maintain long term woodland cover. But in parks, streets, gardens and cemeteries, planting is necessary to sustain tree cover.

When considering planting, there are a number of factors to take into account, including:

- What space will be available for the tree to grow into (both above and below ground)

- What stature or form of tree is best

- What species or variety to choose

- What type of tree stock and planting method to be used

The Council endeavours to follow a Right Tree, Right Place policy. The principle of this approach is to consider the constraints and opportunities of any proposed planting site and the desired features (or not) of proposed trees. This approach also takes into account the merits of both native and non-native tree species in order to support wildlife and safeguard against potential pests, diseases and the effects of climate change.

It is generally recognised that large trees in a city bring considerably more benefits than smaller trees. Finding room for large trees is a problem in many locations, especially streets. The Right Tree, Right Place approach is intended to allow any trees planted to reach full height and maturity and remove the requirement for regular pruning programmes, which are very resource intensive, and also to minimise any later nuisance impact.

Having a mix of native and non native tree varieties within Edinburgh is an important measure in order to safeguard against the increased risk of a devastating loss of one or more tree species due to a new pest or disease becoming established. Introducing appropriate native and non-native tree varieties within Edinburgh will also help maintain the city's historic tree cover in the face of environmental factors related to climate change. We can increase the resilience of the city's trees by keeping them as healthy, and hence as robust, as possible.

Clearly other factors should also be taken into account, such as site character and design considerations, especially as part of historic planting schemes, but there should be a presumption against single-tree, single-variety mixes that make trees vulnerable en masse to pests and diseases.

Planting native trees is generally preferred, especially if the intent is primarily to attract wildlife. But non-native trees such as sycamore make a major contribution to Edinburgh's greenspace, and in some locations the desirable variety of colour, texture, scent and form is only available by choosing non-native species and varieties. The large number of species and varieties that will grow successfully in Edinburgh can easily be observed on a visit to the Royal Botanic Garden Edinburgh.

Where native trees are selected we will endeavour to purchase trees that are of local provenance - this being especially important if replanting trees in long established or ancient woodland.

As climate change increasingly becomes a reality, planting and caring for trees in cities will become even more important. We will also need to consider which types of trees will themselves be able to cope with hotter, drier summers and warmer, wetter and windier winters. There is still uncertainty about the degree and timing of such climate changes, and therefore no clear recipe for which trees to plant or not to plant. However it is clear that reliance on single species or variety is risky and that planting a range instead is more desirable.

When the decision is taken to remove a Council owned tree, the Council will determine whether it is appropriate to replant a tree in the same place (for example a street tree) or very close by (for example in a park or green space). Any decision is made in consultation with the Roads Service and relevant Neighbourhood. Wherever possible the site will be considered as a whole, reflecting its history, character, available space, use and local interests.

Currently the Council plants on average around 300 root-balled extra-heavy standard trees (trees of 16-18 cm girth and 3 – 5 m in height) per year in parks and greenspace. This type of planting stock is relatively expensive but has proven to be much more resilient to vandalism and survival than when smaller, less robust stock has been used. Planting in woodlands and other more natural sites is more likely to use whips (trees 2 to 4 years old and ranging from 300mm to 900mm in height)

Policy 40: The Council will endeavour to maintain its tree stock and increase current tree numbers by planting. The Council will look to increase and improve its tree cover within available resources as part of an annual tree planting programme, paying particular attention to historic street tree and park planting.

10.2 Maintenance of newly planted trees

Newly planted trees require monitoring and usually a maintenance input to ensure that they successfully establish. On occasion, additional maintenance may be required which could include weeding (either by herbicide or by the use of mulches), watering or fertilising, according to conditions, and adjustment or removal of tree ties or guards. The Council generally specifies the use of extra-heavy standard trees for streets, parks and gardens, and smaller plants such as whips or transplants for woodland areas. Extra-heavy standards are guyed underground and protected from potential damage by a high welded mesh guard supported by three tall stakes. This guarding is left in-situ for as long as possible to provide bark protection and deter vandalism.

Trees (whips) planted as part of a woodland establishment programme are not usually watered, but may need protection from a tubular tree shelter. Extra-heavy standard trees generally need watered during the first spring or summer after planting, but the frequency and quality required varies depending on local conditions.

Newly-planted trees suffer in competition for moisture with grass, so control of weeds around the base of trees is crucially important. The preferred solution is to apply mulch (e.g. wood chips) at least 1 metre diameter around the base of the tree to a depth of 100mm. Mulch will need topped up from time to time.

Policy 41: The Council will endeavour to maintain newly planted trees appropriately to ensure they have the best chance of establishing.

11   Dutch Elm Disease

Dutch elm disease was first identified in Edinburgh in 1976, and spread rapidly until, by 1985, over 1500 elms per year were becoming infected. The disease, a fungus, is invariably fatal. The beetle which spreads the fungus from tree to tree breeds in dying or dead elms, so it is imperative to remove infected elms promptly. This approach to controlling the disease, which has been in place for 37 years, means that whilst elms have all but disappeared from most towns and cities, there are around 15,000 elm trees remaining in Edinburgh.

Any public trees showing signs of the disease are felled and removed by the Council. Owners of private trees showing signs of the disease are written to and advice on the safe removal and disposal of the infected tree is provided. Dutch elm disease work is given high priority because although trees dying of the disease may only become dangerous after a year or two, failure to remove affected trees promptly allows the disease to spread rapidly, thereby increasing the overall workload.

The Council's approach to Dutch elm disease is set out in Council Executive report, "Dutch Elm Disease – Legislative Review" 08/11/2005 Item Number 21 Report number E/259/05-06/C+L.

Policy 42: The Council will monitor the continued spread of Dutch elm disease by undertaking an annual survey of the city's elm trees, starting each June. The Council will carry out a sanitation felling programme designed to reduce the spread of the disease, and will advise private owners of what action need to be take by them.

12   Heritage and Veteran Trees

Heritage (or veteran) trees are important for both their historic and cultural value at the local level and conservation value in the creation of habitats for fungi and insects. Many trees have important cultural or historical significance, whereas others have been the source of traditions or folk tales.

The Council has compiled a list of heritage trees in Edinburgh. This involved a lengthy process of background research and public consultation, which provided a list of nearly 100 potential candidates. From this original list an inventory of 52 trees were identified as notable and exceptional due to great age, size or historical and cultural significance. An information leaflet has been published identifying their value and location. In general they are located in designed landscapes, former estates and parkland.

A list of interesting or important trees can be viewed online at the Council's Edinburgh Outdoors Website: http://www.edinburghoutdoors.org.uk/

Trees can be made safe by pruning or felling. Typically the Council will employ the most cost effective approach but, for certain high value trees will consider other options to reduce risk to an acceptable level, including those that reduce the likelihood of the tree failing or the likelihood of people being close to the tree if it did fail.

Policy 43: The Council will manage veteran trees sympathetically according to good arboricultural practice, striking a balance between public safety and biodiversity.

13. Summary of draft Policies contained within the Policy Document

Policy 1: Trees in Council ownership will be inspected for safety, on a cycle between one and five years according to size, targets, condition and survey recommendation for each tree. This information will be recorded on the Council's data base.

Policy 2: Tree inspections will only be undertaken by people who are qualified, experienced and competent to undertake the Visual Tree Assessment (VTA) method of survey.

Policy 3: The Council will take steps to bring all of its trees under active, appropriate and informed management.

Policy 4: The Council prioritises tree work according to the individual tree's health & safety risk, taking into account current available resources. Tree works will normally be completed in safety priority order.

Policy 5: The Council accepts the right of householders to remove overhanging branches, (subject to compliance with Tree Preservation Orders and/or Conservation Area status) and where required will assist householders to identify a suitable arboricultural contractor who can carry out works to the appropriate standard.

Policy 6: The Council will consider applications from private owners to alleviate amenity reduction or nuisance problems on the basis that they will fund the works, that the works will be agreed with the Council beforehand, that a suitable arboricultural contractor is appointed, and that each case will be considered on its individual merits.

Policy 7: For non-emergency tree-related safety issues a Trees & Woodlands Officer will aim to carry out a tree inspection within 10 working days of receipt of the enquiry and the customer notified thereafter within 5 working days of what action the Council intends to take.

Policy 8: Claims made in writing to the Council in relation to alleged damage caused by a Council owned tree will be acknowledged within 10 working days of receipt.

Policy 9: The Council will not carry out works to trees, or fell them, unless it is necessary to do so. When works are carried out, the reasons for the work will be documented and recorded.

Policy 10: Where practicable, all arisings (logs, branches etc) from tree works in high amenity areas will be removed and used in an environmentally sustainable manner. In woodland situations however standing dead wood, logs and chippings may often be left on site, where this can be done safely, to enhance biodiversity and increase wildlife habitats.

Policy 11: The Council will control ivy on trees where it is having a significantly negative effect.

Policy 12: The Council will seek to remove stumps promptly where practicable and appropriate. In woodland locations, stumps will generally be left to decay in situ.

Policy 13: The Council will undertake work to a tree in its ownership to maintain clear sight lines (where reasonably feasible) at junctions and access points (associated with a street, road or highway).

Policy 14: The Council will undertake measures to make safe an unacceptable trip hazard in streets, roads or the public highway caused by the growth of a Council owned tree.

Policy 15: The Council will undertake measures to make safe any unacceptable carriageway obstruction due to trees in streets affecting roads or the public highway caused by the growth of a Council owned trees.

Policy 16: The Council will undertake work to a tree in Council ownership to maintain a minimum 5.5 metres height clearance over the carriageway - where reasonably feasible.

Policy 17: The Council will undertake measures to make safe any unacceptable carriageway risk due to private trees in a dangerous condition, within falling distance of roads, or the public highway.

Policy 18: The Council will undertake work to a Council owned tree to maintain a minimum (where reasonably feasible) 2.5 metres height clearance over a footpath associated with a street, road or highway.

Policy 19: The Council will undertake work to a tree in is ownership to ensure that it does not unduly obstruct the streetlight zone of illumination.

Policy 20: The Council will ensure that all construction and development, including temporary installations and placement of movable equipment, near to trees follows BS:5837 (2012) "Trees in relation to design, demolition and construction - Recommendations" and that the most recent National Joint Utilities Group "Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees" are followed where carrying out works in root protection areas cannot be avoided.

Policy 21: The Council will undertake work to a tree in its ownership to ensure that trees it does not unduly obstruct traffic signals or street signs.

Policy 22: Where a Council owned tree or woodland is associated with criminal activity and/or anti -social behaviour, measures to alleviate the problem will be implemented on a site-by-site basis in consultation with the Police, communities and neighbourhood teams.

Policy 23: The Council will investigate reports of vandalism to a Council owned tree or woodland and try to correct any damage where appropriate and within available resources.

Policy 24: The Council will not prune or fell a Council owned tree simply because it is considered to be 'too big' or 'too tall'.

Policy 25: The Council will not prune or fell a Council owned tree to remove or reduce leaf fall or remove fallen leaves from private property.

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Policy 27: The Council will not prune or fell a Council tree to remove or reduce bird droppings from trees, or remove bird droppings from private land.

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Policy 29: The Council will not prune or fell a Council owned tree to remove or reduce honeydew or other sticky residue from trees.

Policy 30: The Council will not prune or fell a Council owned tree to remove or reduce the release of pollen.

Policy 31: The Council will generally not prune or fell a Council owned tree to remove or reduce interference with telephone wires.

Policy 32: The Council will generally not prune or fell a Council owned tree to prevent perceived interference with TV / satellite installation / reception.

Policy 33: The Council will not prune or fell a Council owned tree to remove or reduce incidence of perceived pests such as bees, wasps, or wild animals.

Policy 34: The Council will not prune, fell or cut the roots of a Council owned tree to prevent roots entering a drain that is already broken or damaged.

Policy 35: In the event that a Council tree is causing damage to property, a Trees & Woodlands Officer will aim to respond within 10 working days and, if appropriate, remedial works will be undertaken.

Policy 36: The Council will generally not prune or fell a tree in Council ownership to alleviate the nuisance of overhanging branches.

Policy 37: The Council will generally not prune or fell a Council owned tree to improve the view from a private property.

Policy 38: The Forestry Service will aim to attend emergency tree incidents within 1 hour of its report to assess the situation and start the process of making the site safe.

Policy 39: If a tree is reported as dangerous, but after inspection the risk to the public is assessed as not high then the tree will be made safe depending on the degree of risk identified at the time of inspection by a Trees & Woodlands Officer.

Policy 40: The Council will endeavour to maintain its tree stock and increase current tree numbers by planting. The Council will look to increase and improve its tree cover within available resources as part of an annual tree planting programme, paying particular attention to historic street tree and park planting.

Policy 41: The Council will endeavour to maintain newly planted trees appropriately to ensure they have the best chance of establishing.

Policy 42: The Council will monitor the continued spread of Dutch elm disease by undertaking an annual survey of the city's elm trees, starting each June. The Council will carry out a sanitation felling programme designed to reduce the spread of the disease, and will advise private owners of what action needs to be taken by them.

Policy 43: The Council will manage veteran trees sympathetically according to good arboricultural practice, striking a balance between public safety and biodiversity.

5. Trees in the City - 5 year action plan

	Trees and the sustainable City	Priority	Timescale	Lead body	Other Partners	Comment
1.1	Create a prioritised list of street tree locations and plant replacement trees.	High	13-14, ongoing	CEC P&G	CEC Roads	
1.2	Identify streets where new street tree planting can be introduced, and consult with others.	Med	14-15	CEC P&G	CEC Roads CEC Planning	
1.3	Consult with others and create a policy to guide tree planting by the Council, with the aim of increasing resilience in the light of climate change and disease threats.	High	13-14	CEC P&G	CEC Sustainability	
1.4	Adopt a tree valuation model, to be applied as policy to aid decision-making around tree removals.	Med	14-15	CEC P&G	FCS, ELGT	
1.5	Env 6 Promote woodland management and creation as a key component of sustainable flood management initiatives.	Med	13-14, ongoing	CEC P&G CEC Planning		ELFWS action
1.6	Env 7 Identify locations where new planting or woodland management can help increase slope stability.	Med	13-14, ongoing	CEC P&G CEC Bridges& Structures		ELFWS action
1.7	Env 10 Where appropriate, prioritise planting of street trees in urban AQMAs, and woodland expansion along strategic road corridors and adjacent to industrial estates.	High	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	ELFWS action
1.8	Env 17 Promote the importance of managing and increasing trees and woodlands in urban areas to conserve and enhance townscape character	Med	13-14, ongoing	CEC P&G CEC Planning		ELFWS action

	Trees and the sustainable City	Priority	Timescale	Lead body	Other Partners	Comment
1.9	Env 19 Promote positive management of historic gardens and designed landscapes and heritage trees to maintain their historic and cultural significance and increase resilience to climate change.	Med	13-14, ongoing	CEC P&G CEC Planning		ELFWS action
1.10	Env 19 Encourage forest restructuring to improve the setting of historic sites and landscapes.	Med	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	ELFWS action
1.11	CC1 Expand woodland cover within Edinburgh and the Lothians as a means of increasing carbon sequestration and reducing net carbon emissions, following the guidance provided in Sections 3 and 5 of the ELFWS.	High	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	CC1 Policy
1.12	CC6 Promote positive and proactive management of key tree species and woodlands improve their resilience to climate change.	High	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	ELFWS action
1.13	CC7 Identify important individual historic trees and species that are vulnerable and begin succession planning to maintain contribution to character and significance.	Med	13-14, ongoing	CEC P&G CEC Planning		ELFWS action

	Trees and communities	Priority	Timescale	Lead body	Other Partners	Comment
2.1	Provide better information through the web on tree operations and policies that concern trees and woodlands.	High	13-14, ongoing	CEC P&G		
2.2	Reorganise and relaunch the voluntary Tree Warden scheme in partnership with Friends of Parks, amenity groups and others.	Med	14-15	CEC Forestry	Friends groups, Tree Council	
2.3	EC 24 Develop and publicise opportunities for active outdoor recreation in woodlands and forests, including mountain-biking, walking and activities such as orienteering.	High	13-14, ongoing	CEC P&G CEC Planning CEC Transportation		ELFWS action
2.4	QL 1 Ensure that existing and new forests and woodlands are managed to create new opportunities for active travel, including walking, cycling and horse riding connecting settlements and the countryside.	High	13-14, ongoing	CEC P&G CEC Planning CEC Transportation	FCS, ELGT	ELFWS action
2.5	QL 3 Promote the role of woodlands in providing a resource for physical activity, accessible to all parts of society close to where people live and work.	High	13-14, ongoing	CEC P&G	FCS, ELGT	ELFWS action
2.6	QL 6 Support community involvement in woodland projects, especially through mentoring and co-ordinating delivery of activity on the ground. There should be a particular focus within WIAT Priority Areas.	High	13-14, ongoing	CEC P&G	FCS, ELGT	ELFWS action
2.7	QL 8 Support community woodland groups particularly in areas with high levels of multiple deprivation.	High	13-14, ongoing	CEC P&G, CEC	FCS, ELGT	ELFWS action
2.8	QL 9 Increase awareness of the role of woodlands as an outdoor learning resource and a resource for education, training and lifelong learning.	High	13-14, ongoing	CEC P&G, CEC Children & Families	FCS, ELGT	ELFWS action
2.9	QL 11 Promote the development of outdoor learning opportunities including in woodlands and forests.	High	13-14, ongoing	CEC P&G, CEC Children & Families	FCS, ELGT	ELFWS action

	Trees, woodlands and Green Networks	Priority	Timescale	Lead body	Other Partners	Comment
3.1	Identify sites where trees could be planted to enhance the linkages between green spaces, and to assist in the delivery of the Edinburgh Living Landscapes project.	Med	15-16	CEC Forestry	FCS, ELGT	
3.2	EX1 Support delivery of new woodland areas in the CEC authority area.	Med	13-14, ongoing	CEC Planning	FCS, ELGT	ELFWS action
3.3	EC24 Policy Create new woodland on the CEC estate.	Med	13-14, ongoing	CEC P&G	FCS, ELGT	ELFWS action
3.4	Env 1 Promote the establishment of new native woodlands as part of integrated habitat networks.	Med	13-14, ongoing	CEC Planning	FCS, ELGT	ELFWS action
3.5	Env 2 Where there are suitable opportunities, enhance ancient and semi-natural woodland.	Med	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	ELFWS action
3.6	Env 4 Increase the proportion of existing woodland brought into positive management.	High	13-14, ongoing	CEC P&G CEC Planning	FCS, ELGT	ELFWS action

	Effectively managed trees	Priority	Timescale	Lead body	Other Partners	Comment
4.1	Publish tree management policies after consultation.	High	13-14	CEC P&G		
4.2	Continue to extend the Ezytreev database to cover all trees in CEC ownership.	High	13-14, ongoing	CEC Forestry		
4.3	Publish tree work schedules in advance.	Med	13-14	CEC Forestry		
4.4	Continue to work in partnership with others, such as Edinburgh & Lothians Greenspace Trust to deliver woodland management work	Med	13-14-ongoing	CEC Forestry		ELGT
4.5	Work towards the elimination of any waste from tree operations and no woody waste to go to landfill.	Med	13-14	CEC Forestry		

Appendix

Summary of current planning policy framework relating to trees and woodlands

The adopted **Edinburgh City Local Plan** has a policy relating to trees, which states:

'Development will not be permitted if likely to have a damaging impact on a tree or trees protected by a TPO or other trees worthy of retention on or around a proposed development site, unless necessary for good arboricultural reasons. Where such consent is granted, replacement planting will be required to offset the loss to amenity.' (Policy Env 12 Trees)

The adopted **Rural West Edinburgh Local Plan** has two policies relating to trees. Policy E15 aims to prevent the loss of healthy mature trees on development sites and requires replacement planting for any lost woodland trees or hedgerows. Policy E16 promotes the use of TPOs and the protection of trees subject to loss from development. This policy also supports woodland planting, enhancement and encourages planting of native species.

A new Edinburgh Local Development Plan is in preparation, and once adopted will replace the existing two Local Development Plans.

Supplementary planning guidelines relating to trees and woodlands give more detailed information on the Council's requirements, and principles to be applied when considering trees in relation to development proposals. The planning guidelines require compliance with the British Standard (BS 5837:2012), to achieve a satisfactory relationship between trees and new development. The relevant planning guidelines are:

- Trees and Development
- Landscape and Development
- Biodiversity

Work is underway to consolidate these planning guidelines into one **Edinburgh Design Guidance** document. This is currently being finalised. The requirements for trees and woodlands in relation to development remain broadly the same:

Compliance with the approach and principles in the British Standard (BS 5837:2012).

Assessment of the existing trees and woodlands and their retention in the final layout where appropriate.

Contributions to an improved habitat network through woodland creation and tree planting.

Trees and development

The Scottish Planning Policy (paragraphs 146 to 148) outlines the protection which should be given by Planning Authorities to trees and woodlands in relation to development. In summary:

- Ancient and semi-natural woodland is an important and irreplaceable national resource that should be protected and enhanced, as should other native and long established woodlands with high nature conservation value.

- Other woodlands, hedgerows and individual trees, especially veteran trees, may also have significant biodiversity value and make a significant contribution to landscape character and quality so should be protected from adverse impacts resulting from development. If a development would result in the severing or impairment of connectivity between important woodland habitats, workable mitigation measures should be identified and implemented, potentially linked to the creation of green networks.

- Where appropriate, planning authorities should seek opportunities for new woodland creation and planting of native species in connection with development schemes.

- Tree Preservation Orders can be used to protect individual and groups of trees considered important for amenity or because of their cultural or historic interest.

The Forestry Commission Scotland Advice Note 'The right tree in the right place' also forms part of the national policy framework for local authorities.

Where trees are affected by development, the Council promotes the protection of existing trees and requires the planting of new trees as appropriate.

Through planning policies the Council aims to:

- Retain trees of landscape, biodiversity or amenity significance

- Encourage new tree planting wherever appropriate within new development to strengthen woodland habitat networks and help to deliver the CSGN

- Promote a substantial renewal of the city's woodland resource

- Effectively manage existing trees and woodlands.

Tree Protection Charter – Tree Preservation Orders and Conservation Areas

The Council is committed to the protection of trees and woodland within the City of Edinburgh. This is achieved by the making of Tree Preservation Orders (TPO) and by the protection of trees within Conservation Areas. Where trees are affected by development, the Council promotes the protection of existing trees and requires the planting of new trees as appropriate.

The Council's Tree Protection Charter sets out the process for protecting trees, and the levels of service which members of the public and others can expect from the Council regarding tree protection and works to protected trees.

TPOs are made by a Planning Authority under Section 160 of the Town and Country Planning (Scotland) Act 1997 (as amended) and within the procedures set out in the Town and Country Planning (TPO and Trees in Conservation Areas) (Scotland) Regulations 2011.

The process relating to **TPOs** is outlined below:

- Notice of a Tree Preservation Order is served on the owner and advertised by the Council's Planning service. Anyone may comment or object within 28 days. Acknowledgement and notification of decisions will be sent to all who submit comments. Anonymous comments will not be considered.

- Following the consultation period, and within six months, the Council Planning Committee will confirm, modify or not confirm a TPO, taking into account the comments received.

- If confirmed, the TPO is again served on the tree(s) owner(s). It is also recorded in the Register of Sasine and imposes a legal burden attached to the title of the land.

- Where a TPO is in place, prior consent in writing is required from the Council's Planning service to carry out any work on the trees. An owner wishing to carry out work must apply in writing. If consent is given the work must be carried out within two years.

- If the applicant objects to the decision or conditions imposed, an appeal can be made to Scottish Ministers within 28 days.

- Contravention of a TPO is an offence, liable to prosecution, subject to a fine of up to £20,000.

The process relating to **Conservation Areas** is:

- Before carrying out any tree work within a Conservation Area, the owner of the tree must give 42 days written notice to the Council, detailing the work and identifying the trees.

- An officer will then carry out a site inspection to assess the impact of the proposals on the local amenity. Advice and recommendations will be offered.

- If the trees are deemed to be of significant public amenity value and are considered to be at risk, a TPO may be served to prevent adverse work being carried out. This is the only way the Planning Authority can protect the trees; it cannot otherwise refuse consent.

- If, after 42 days, the Planning Authority has not responded and if a TPO has not been served, the specified work may proceed. The work must be carried out within two years of the notification.

- If work takes place without notification, similar penalties apply as for TPOs.

- Unauthorised work on protected trees will be investigated as a matter of urgency.

The Tree Protection Charter should be referred to for fuller information, and for information relating to emergency works.

Woodland Habitat Action Plan

Woodlands within the Edinburgh area represent a valuable resource for people and wildlife alike. The Woodland Habitat Action Plan, part of the Edinburgh Biodiversity Action Plan (2010-2015), details key objectives and actions to protect, enhance and expand woodlands in the city.