

Taking Root A Tree and Woodland Strategy for Calderdale 2017-2027

Notes on the draft:

- a) The appendices listed are not attached to this document. They will be attached to the completed version
- b) The Action Plan referred to will be collated once feedback is received on this draft and then attached to the final document

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Contents

Executive Summary/Introduction

- 1. Background/ Why a Tree and Woodland Strategy?
- 2. Who and what is the Tree and Woodland Strategy for?
- 3. How often will the Tree & Woodland Strategy be reviewed?
- 4. Vision
 - 4.1Aims
 - 4.1.1. Grow the Economy
 - 4.1.2. Reduce inequalities
 - 4.1.3. Build a sustainable future

5. The Resource

6. Lack of data

7. Policy and legislative context

- 7.1. Statutory protection/legislation
- 7.1.1 Tree risk management
- 7.1.2. High Hedges
- 7.1.3. Biodiversity
- 7.2. Policy and Strategy
- 7.2.1. National
- 7.2.2. Regional
- 7.2.2. (a) Leeds City Region Strategic Economic Plan
- 7.2.2. (b) Leeds City Region Green Infrastructure Strategy
- 7.2.2. (c) National Character Areas
- 7.2.2. (d) Yorkshire Water Biodiversity Action Plan (BAP)
- 7.2.3 Local
- 7.2.3. (a) Replacement Unitary Development Plan 2006
- 7.2.3. (b) Calderdale BAP
- 7.2.3. (c) Calderdale Flood Action Plan
- 7.2.3. (d) Local Neighbourhood Plans
- 7.2.3. (e)Calderdale Energy Future Strategy
- 7.2.3. (f) Other

8. The Benefits of Trees

- 8.1. Financial and structural value of trees
- 8.1.1. Other economic values
- 8.2. Other values of trees
- 8.2.1. Health and wellbeing
- 8.2.2. Environmental

9. Problems with trees

10. Threats to trees

- 10.1. Climate Change
- 10.2. Recreational pressure
- 10.3. Trees on development sites

- 10.4. Lack of management and maintenance of aging stock
- 11. Protection through advice
- 12. Hedgerow protection
- 13. Council owned trees and their management
 - 13.1. Tree inspection regime
 - 13.1.1. Council tree inspection regime
 - 13.2.1. Types/methods of tree works
 - 13.2.2. When can/should trees be felled?
 - 13.2.3. When can /should trees be pruned?
 - 13.2.4. Acceptable types of pruning
 - 13.2.4. (a)Crown thinning
 - 13.2.4. (b)Crown lifting
 - 13.2.4. (c)Crown reduction
 - 13.2.5 (a) Root pruning
 - 13.2.5. (b)Pollarding
 - 13.2.6. Timing
 - 13.3. Street trees
 - 13.4. Parks and Open spaces
 - 13.5. Churchyards and cemeteries
 - 13.6. Schools
 - 13.7. Allotments
 - 13.8. Memorial trees on council land
 - 13.9. Trees on private land

14. Woodlands

- 14.1. Council owned woodlands
- 14.2. Woodlands general
- 14.3. Working woodlands
- 15. Ancient/ Veteran Trees
- 16. Community involvement/Partnership working
- 17. Education
- 18. Access and recreation
- 19. Culture and Heritage
- 20. Natural Flood Management (NFM)
- 21. Woodland creation and Tree planting
 - 21.1. Street/urban tree planting
 - 21.1.2. Key principles for CMBC urban/street tree planting
 - 21.2. Woodland creation/planting
- 22. Local Business
- 23. Recycling/composting
- 24. Action Plan
- 25. Monitoring/ review progress
- 26. Recommendations
- 27. Conclusions

Executive Summary

The tree and woodland resource of our borough assists in making Calderdale an attractive place to visit, work or live and provide a backdrop for investment, tourism and recreation. This asset not only provides us with something beautiful to look at but provide essential ecosystem functions within our environment. It can reduce the risk of flooding, encourage people to get more active, provide shelter and give a home to a broad range of biodiversity and assist in reducing air pollution. It can help mitigate our greenhouse gas emissions storing carbon and the production if biomass can contribute to a low carbon economy if properly managed as well as create an attractive setting that helps encourage economic investment and increases property values.

More recently the role of tree planting and woodland management in natural flood management has been recognised nationally and given the terrible events of Boxing Day 2015 and this area is addressed in this strategy.

With the above in mind we can be rightly proud of our tree heritage, but the Council and its partners cannot ignore their responsibilities to manage their trees and woodlands sustainably for future generations, but we also need to recognise that we are in a time of reduced funding for local authorities and the impacts of Brexit on land management grant schemes has yet to be decided. Clearly this means that the delivery of the strategy will not be easy, and we may not be able to do everything.

Partnership approaches will be crucial and new and different models of management will be needed.

It is hoped that this tree and woodland strategy will act as a framework document that takes the longer view for all landowners, defining the boroughs approach to the maintenance, management and enhancement of trees and woodlands which local partnerships can take forward to help deliver so that trees and woodlands in Calderdale can flourish in years to come for future generations.

1.Background/ Why a Tree and Woodland Strategy ?

In view of the benefits that we receive from trees and the Council's responsibility for tree management and protection it is fitting for the Council to set out its approach to these issues

The purpose of this strategy is to address fundamental issues by laying down the basis of management practices to ensure all those involved are working to the same basic principles. It will provide the public with a clear understanding of the council's aims and the reasons why decisions and actions are taken and will detail the Council's approach to management of it's own tree and woodland asset as single document point of reference for local residents.

Calderdale Metropolitan Borough Council is committed to a Tree and Woodland Strategy which will be:

" A plan for the overall management of all the trees and woodlands in Calderdale, both on public and private land, within Calderdale's responsibility, and for giving guidance to the management practices which lie outside the responsibility of Calderdale Metropolitan Borough Council, both now and in the future".

And will:

"Initiate and review action to ensure that the Borough's trees and woodlands are adequately protected and cared for so that their extent, quality, biological diversity and contribution to the character, value and appearance of the borough can be sustained and enriched for the benefit and enjoyment of the residents and visitors to Calderdale".

It will build on the previous CMBC Tree and Woodland policy agreed in January 2009, which laid out the authorities policies and principals to the management of its own trees and woodlands. These have not changed since 2009 and they are embedded in this draft document.

It is also hoped that the strategy will be the key document for all tree and woodland owners in the borough, setting out a framework for the planning and management of these assets no matter who owns them.

To help ensure that the Tree and Woodland strategy document reflects the priorities of people who live, work and visit Calderdale and help Calderdale Council fulfil part of its Biodiversity Duty, the actions have been gathered through a stakeholder workshop held 1st February 2017 attended by over 40 representatives from national and local organisations and community groups. The event utilised an 'open space' approach which allowed everyone who attended a chance to have their say. A previous session took place in January 2011, and findings from that have been incorporated into this document.

A list of attendees of both events and comments made at each session can be found in appendix XXX

2. Who and what is the Tree and Woodland Strategy for?

The strategy lays out how Calderdale is going to manage this resource over the next 10 years and the aspirations it has to develop and enhance the trees and woodland of the borough. It also seeks to establish a point of reference for the public, councillors, landowners, community groups, officers and professionally interested people to enable informed discussion and aims to establish a clearer, more structured and consistent approach to the management of, and issues affecting trees and woodlands in the area.

Due to the long-term approach required for our trees and woodlands, it is essential that action is co-ordinated within a shared responsibility for the wellbeing of all of Calderdale's trees whether they be privately or publicly owned.

Calderdale MBC hope the policies and guidance will also be of interest to private tree owners and contractors as we seek to encourage others to follow the councils policy on trees and to work in partnership and collaboration to ensure good management and safeguard Calderdale's trees and woodlands for future generations.

It must be recognised that the strategy has been written with the background of reducing government support for local authorities with new models of management being considered for delivery of services across councils and many other organisations. Although our aspirations for good healthy tree and woodland management remain how we carry out management will change. We recognise that funding will have to be sought and that we will have to look at new and collaborative ways and opportunities of managing our resources.

Many of the actions necessary to implement the tree and woodland strategy will require a range of individuals and organisations to become actively involved in the care of Calderdale's trees. By building and strengthening links between people and trees and by fostering more positive public attitudes towards trees, it will be possible to provide opportunities for education, consultation and participation.

The tree and woodland strategy is an on-going process to protect, care for, manage, maintain and plant trees. It is hoped that local people and businesses will continue to help this process by participating as partners in future tree related initiatives.

3. How often will the Tree & Woodland Strategy be reviewed?

This strategy is a 'living document' and it is intended that the strategy will be reviewed every 5 years and it is hoped that the action plan will be reported on / reviewed annually. The mechanism for delivery of the Action Plan has yet to be agreed.

All relevant sections have related key actions – which are taken forward into an action plan for this strategy which is at the end of the document. This will form a work plan for delivery.

Although the LA can take a lead it needs to be recognised that the aims and actions of the strategy cannot be delivered by the LA alone a partnership approach is vital. There may be a need for a woodland partnership for Calderdale – utilising already established groups e.g. The Source, The South Pennines Facilitation Fund, Pennine Prospects, Sustainable Land Management Group, NFM Operational Group etc

All members of any partnership would need to be committed to the strategy delivery and want the action plan to be available to everyone, setting out a clear vision to inspire and encourage communities and organisations to work together to protect and manage the tree and woodland asset for Calderdale.

4. Vision

Calderdale Council's 10 year vision for the tree and woodland resource is: To work with partners to protect, manage and improve a sustainable tree and woodland asset which is of maximum benefit to the economy, communities and the environment of Calderdale.

4.1. Aims

These have been aligned with the aims associated with the Council ambition to be the best borough in the North

4.1.1. Grow the economy

- Recognise and promote the role of trees and woodlands as a backdrop to economic investment
- Maximise the commercial and economic opportunities from the tree and woodland asset
- Increase woodland in active management
- Ensure new developments enhance the tree and woodland asset
- Embed green infrastructure (and the role of trees within that) into future economic growth

4.1.2. Reduce inequalities

- Provide opportunities for people to access our trees and woodlands
- Raise awareness of the benefits of this asset
- Provide educational opportunities both formal and informal related to trees and woodlands
- Promote the value of trees and woodlands to increase health and wellbeing
- Increase the numbers of trees in densely urbanised areas to improve quality of life and the environment

4.1.3. Build a sustainable future

- Manage, protect and enhance the tree and woodland asset in a sustainable way that maintains the resource for the benefit of future generations
- Manage, protect and enhance the tree and woodland asset to the maximum benefit for biodiversity
- Enhance the tree and woodland asset to ensure its sustainability and provision of ecosystem services for future generations
- Identify and manage threats to the tree asset from diseases and pests (biosecurity)
- Maximise opportunities for creation and management of trees and woodlands for natural flood management
- Through greater knowledge and mapping look to set % cover targets for the Borough

Where possible themes running through this strategy have aimed to align or deliver on these corporate priorities to contribute to the delivery of the mission.

5. The Resource

Trees and woodlands are an essential part of the character and identity of Calderdale.

CMBC manage over 30,000 trees not in woodlands.

- 12,000 park trees
- 6,000 highway (street) trees
- 12,000 other trees (allotments, housing, social services, economy and environment)
- 3,500 individual trees in school grounds.

Key species are:

- Tillia (Lime), Acers (Maple sp.), planted in the 1950,s and 60,s, and Prunus sp. (Cherries), Sorbus sp.(Whitebeam, Rowan etc.) planted in the 1980/90,s.
- Tree database is in-house system and uses a HP Ipaq handheld device tree location/number/species/condition etc.is recorded

Whilst much of Calderdale appears heavily wooded – due to the woodlands being predominantly on the steep scarp slopes of the river valleys - the woodland cover figure of 3.8%, (1400 ha)compares poorly with the England average of 10%. The Calderdale figure is highly influence by the presence of other habitats such as open moorland, grassland and agricultural land. This must be considered in looking at setting any targets on woodland cover.

The majority of woodlands fall into NVC classes W10 & W16 – low land mixed deciduous woodland, a national priority habitat. Wet woodland and upland oak woodland are rare. The woodlands which are a combination of seminatural woods and plantations, many under managed with even aged stands. The most important woodlands are listed on the inventory of Ancient Woodlands, (660 ha). Data available at:

https://data.gov.uk/dataset/ancient-woodlands-england2

https://data.gov.uk/dataset/national-forest-inventory-woodland-england-2015and

The council owns and manages over 430ha of woodland under the Countryside and Woodlands team.

- 11 sites are designated as Ancient Semi Natural Woodland(over 146ha)
- 8 Planted Ancient Woodland Sites (PAWS) (over 226ha)
- 15 sites designated as Local Wildlife Sites
- 8 as Local Nature Reserves.

Priority habitats include wet woodland, upper oak woodland with a variety of priority species including bats, badgers, woodland birds species and ground flora.

6. Lack of data

The Council has data on its' own tree and woodland asset for management purposes, but data is not available on the current structure and distribution of this asset. There are also many trees and woodlands in private ownership – and we need to improve our knowledge of the whole resource to assist in setting targets for future management and planning

Data that measured the canopy cover and structure of the asset across Calderdale – (physical attributes, species composition, tree density, tree health, leaf area and biomass), could then be used both to:

- calculate and value the functions (monetary benefits or ecosystem services) of this resource
- detail the level of tree canopy cover in specific areas thus enabling efficient targeting of resources e.g. poor air quality, areas of deprivation, poor health, catchment management
- allow better analysis of tree planting costs and the benefits to be undertaken
- strengthen the case for the role of trees within green infrastructure and sustainability
- be used to assess changes over time to the asset (and related green infrastructure)

Currently the White Rose Forest Partnership is looking a bid for the Leeds City Region area to collate such data for the region. Support for this initiative will be key to delivery of the above for Calderdale.

Other local authorities have used the i-Tree Eco software approach as used for the London example described in section 8. This may be an option Calderdale would consider but funding and officer time would need to be allocated to deliver this.

Mapping of priority areas for woodland creation, and of ancient and veteran trees is also needed – see sections 21 & 15.

Initial assessment of the Councils own woodland asset by Stobarts Forestry is due in 2017, with a view to management of the asset for biomass for energy - other landowners may also take part in this scheme.

Delivery of Stobarts initial woodland	Support regional bids and projects to
assessment 2017	increase knowledge and data of the
	resource
Review current data and mapping	Investigate the use of iTree Eco to
	improve gather more detailed data
	and information on the resource
Use mapping and available data to	Support the White Rose Forest
look to set a target for woodland	Project to obtain tree canopy data for
creation for Calderdale	Leeds City Region

6.Kev Actions

7. Policy and Legislative Context

There are numerous national, regional and local policies and strategies as well as legislation and statutory duties that relate to trees and woodlands, all of which are relevant to the writing of this tree and woodland strategy.

This strategy has been written to act as a stand alone document that defines actions and priorities as regards the management of the tree and woodland asset for Calderdale, but also as a means to link into various other strategies, policies, and documents across the council to deliver on wider council and regional priorities such as green infrastructure, natural flood management, biodiversity and health and well-being.

7.1. Statutory Protection/Legislation

7.1.1. Tree Risk Management

The Council has a "duty of care" to protect people and property from harm caused by trees owned and managed by the local authority. The duty is set out in the Occupiers Liability Act 1957 &1984, the Highways Act 1974 (particularly section 130) and the Health & Safety at Work Act 1974 (for bystanders section 3(1).

The council is also responsible for:

- The administration and enforcement of Tree Preservation Orders
- The regulation of trees in Conservation areas and trees protected by planning conditions that may be on private land.

Other bodies responsible for the maintenance of trees and hedges in Calderdale include: The National Trust, The Canal and Rivers Trust, Pennine Housing, private landowners, Yorkshire Water etc

Whether through statute laws; legal protection; professional advice and educational teaching/training; guidance; negotiation and or legislation, Calderdale M.B.C. will attempt to adequately protect some of its most important resources.

The two primary sets of statutory legislation that protect trees are:

- Tree Preservation Orders (TPOs)
- Conservation Areas.

These are designated under The Town and Country Planning Acts.

Substantial fines up to a current maximum £20,000 and prison sentences can be imposed by the courts for contravention of these regulations.

The Forestry Act 1967 also protects trees by restricting the number of trees that may be felled in any one calendar quarter. These regulations are administered and enforced by the Forestry Commission.

7.1.2. High Hedges

Part 8 of The Anti-Social Behaviour Act 2003 gives local authorities powers to deal with complaints regarding high hedges.

Calderdale M.B.C. currently through the Planning Services Directorate can offer assistance with such complaints but only if the persons in dispute have attempted to do everything reasonably expected to settle the dispute. <u>http://www.calderdale.gov.uk/environment/planning/developmentplan/index.ht</u> <u>ml</u>

The Hedgerow Regulations 1997 prevent the removal of or inappropriate treatment to hedges.

7.1.3. Biodiversity

In addition to the above legislation there are nature conservation and wildlife protection regulations which have some bearing on the management of trees and woodlands and the species that use them. The primary pieces of legislation being:

- The Wildlife and Countryside Act (as amended) 1981
- Conservation of Habitats and Species Regulations 2010 which puts in place an EU Directive that protects European protected species and habitats such as bats.
- The NERC Act 2006 places a duty on public authorities to have regard to conserving biodiversity when exercising their functions

Wild Bird Duty: Local authorities must provide and protect habitat for wild birds. For more information see

https://www.gov.uk/guidance/providing-and-protecting-habitat-for-wild-birds

7.2. Policy and Strategy

7.2.1.National

Currently the Government has an ambitious objective of:

" being the first generation to leave the natural environment of England in a better state than that in which we found it"

This is linked to the Natural Capital Committee and their advisory role in the production of a 25 year Environment Plan for England – and the linked opportunities that Brexit may offer – both of which will be relevant to the local level of Calderdale as this will impact on grant schemes for woodlands and other natural assets. It will also and provide a strategic framework for management of Calderdale's natural capital – of which trees and woodlands are a huge part.

The government also has a target to plant a million trees by 2020, and an ambitious target for England to have tree cover of 12% by 2060 (it currently stands at 10%).

https://www.publications.parliament.uk/pa/cm201617/cmselect/cmenvfru/619/ 61905.htm Other national documents that inform this strategy including:

 National Forestry Policy 2012, which underpins Govt. forestry policy, with priorities of protecting, improving and expanding the woodland asset.

England Forestry Strategy(1999)

- UK Forestry Standard (1998). These all inform grant funding programmes for woodland creation and management
- The Natural Environment White Paper 2011 committed to protection of the tree and woodland asset from a range and scale of threats
- Biodiversity Strategy for England Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services.
- The Convention on Biological Diversity (CBD) has a commitment to new biodiversity goals and targets 'the Aichi Targets' agreed in 2010 and sets out a Strategic Plan for Biodiversity 2011–20206.
- UK Climate Change Programme reduction of emissions and increased use of renewable energy.

7.2.2. Regional

(a)Leeds City Region Strategic Economic Plan (SEP) 2016 .A regional strategy with links to priorities for the region enabling applications for funding through the Local Economic Partnership (LEP)

Priority 3: Clean energy and environmental resilience

Point 7: Make climate change adaptation and high quality green infrastructure integral to improving the city region economy and its spatial priority areas.

Priority 4: Infrastructure for growth

Point 10: Develop and integrated flood risk reduction programme incorporating flood defences, green infrastructure and resilient development.

It also identifies key assets for improving performance including: "Natural capital in urban and rural areas, including wildlife, **woodlands** and a beautiful natural environment which attracts businesses, investment, skilled employees and tourism"

Key area of actions to deliver this improvement include:

- Plan and deliver whole catchment area investments that mitigate flood risk and improve the resilience of the City Region economy
- Refresh and deliver the Leeds City Region Green Infrastructure Strategy (see below)

Evidence of outcome for these areas in the SEP of actions include: "Increase in the quality and extent of green infrastructure, including climate and carbon sequestration benefits related to **tree cover**".

(b)Leeds City Region Green Infrastructure Strategy

This strategy lays out how the aims of how the SEP (as detailed above) will achieve its green blue infrastructure outcomes. There are specific targets relating to increasing tree cover for the White Rose Forest areas.

Details of this are in appendix xxxxx

Other relevant regional strategies include:

- West Yorkshire Low Emissions Strategy 2016-2020
- West Yorkshire Local Transport Plan 2011 2026 which is being reviewed by WYCA to create a Transport Strategy for West Yorkshire <u>http://www.calderdalenextchapter.co.uk/vision/west-yorkshire-plus-</u> transport-fund

(c)National Character Areas(NCA) – as defined by Natural England, which provide data for local decision making. Calderdale sits within 2 areas: NCA 36 South Pennines

http://publications.naturalengland.org.uk/publication/511867?category=58713

NCA 37 Yorkshire Southern Pennine Fringe http://publications.naturalengland.org.uk/publication/5459581769613312?cate gory=587130

There are 2 Local Nature Partnerships(LNP) associated with the above NCAs which cover Calderdale -South Pennines LNP and Yorkshire West LNP. The partnerships work strategically to help their local area manage their natural environment. There is a direct link between the LNP's and the Local Enterprise Partnerships (LEP) who are tasked to develop the Strategic Economic Plan (SEP). The main LEP relevant to this strategy is that of Leeds City Region.

(d)Yorkshire Water has Biodiversity Action Plan – a large land owner within Calderdale with several woodland estates. <u>https://www.yorkshirewater.com/about-us/what-we-do/investment-</u>environment/biodiversity#

7.2.3.Local

Calderdale Council currently has the following adopted policies within the

(a) Replacement Unitary Development Plan (RPUDP) 2006 full details at: http://www.calderdale.gov.uk/environment/planning/developmentplan/index.ht ml.

These are contained in the Natural Environment and Countryside section of the plan,

Additional guidance relating to Trees on or Adjacent to Development Sites is provided in the RCUDP at:

https://www.calderdale.gov.uk/environment/planning/developmentplan/udp/ch apter_47.html

Whilst the current local planning policy has not changed but must be read in conjunction with the National Planning Policy Framework (NPPF), which provides protection for ancient woodland and veteran trees.

https://www.gov.uk/guidance/national-planning-policy-framework/11conserving-and-enhancing-the-natural-environment

The new Local Plan is still at draft stage and has no weight in the decisionmaking process. New policy in the Local Plan will be likely to build upon the context that the NPPF and RCUDP has put in place. A consultation draft will be released during spring 2017, with the formal Publication version anticipated by the end of 2017.

Guidance on Tree Preservation Orders is provided by the Government at: <u>http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders-general/</u>)

RCUDP 2006 : Policy extracts relating to Trees and Woodland are listed in Appendix 1.

(b) Calderdale Biodiversity Action Plan

This document contains priority habitats and species action plans relevant to this strategy.

https://www.calderdale.gov.uk/v2/residents/environment-planning-andbuilding/countryside-conservation/countryside-services

(c) Calderdale Flood Action Plan 2016 has clearly identified actions that relate to both a Tree and Woodland Strategy and natural flood management (of which tree planting and woodland management is a part). Details of the plan can be found here: <u>Calderdale flood action plan - GOV.UK</u>

(d) Local Neighbourhood Plans: These are currently in development for many areas including:

TodmordenSowerby BridgeRastrickPark WardRippondenHebden Royd and the Hill Top ParishesHebden Royd and the Hill Top ParishesGreetland Norland and West Valehttps://www.calderdale.gov.uk/environment/planning/planning-policy/local-plan/neighbourhood-development-plans.html

(e)Calderdale Energy Future Strategy: sets out how Calderdale Council and its partners intend to support a resilient low carbon economy, which will lead the Borough to achieve a 40% reduction in carbon emissions by 2020 from a 2005 baseline.

.http://www.bing.com/search?q=Calderdale+energy+future+strategy&src=IE-TopResult&FORM=IETR02&conversationid=

(f) Other relevant strategies that are either directly or indirectly linked/impact on trees and woodlands include:

- Calderdale Physical Activity Strategy <u>www.calderdale.gov.uk/v2/council/consultation-and-feedback/physical-activity-strategy-2017</u>
- Calderdale Local Flood Risk Management Strategy

www.calderdale.gov.uk/v2/residents/environment-planning-andbuilding/flooding/flood-risk-strategy

- Calderdale Cycling Strategy 2017
- The Rights of Way Improvement Plan

https://www.calderdale.gov.uk/council/consultations/engage/view.jsp?id=6675

8. The Benefits of trees and woodlands

8.1. Financial and structural value of trees

There is increasing public and political awareness of the multiple benefits provided by trees and woodlands, and this value cannot be overstated. However, we are not always aware of all the benefits that trees provide for us, or they are just taken for granted, we think that they will last forever.

The Natural Capital Committee 2016-2020 is currently working on the state of natural capital for England (and associated 25year Environment Plan for England). This recognises the value that the natural environment – and trees and woodlands as part of that – utilising the Natural Capital Accounting techniques. An example of NCA is Forest Enterprise England (land area of 254,000ha) showed that the value of services delivered were estimated to be over **£11.9billion**, and that over 95% of this value was as the result of the benefits trees and woodlands provided to society e.g. recreation, climate regulation, air quality etc

www.forestry.gov.uk/pdf/160715-FEE-Natural-Capital-Accountweb.pdf/\$FILE/160715-FEE-Natural-Capital-Account-web.pdf

This approach is clearly aligned with the UK's national ecosystem assessment approach that looks at the wider benefits to society and economic prosperity <u>http://uknea.unep-wcmc.org</u>

A new report on the London iTree project(highlighting the value of London's tree population) has identified that the tree population of inner and outer London (8.5million trees) holds nearly 2.4 million tonnes of carbon and is sequestering an additional 77,000 tonnes per annum. This is equivalent to the total amount of carbon generated by 26 billion vehicle miles. The project also reported:

- Pollution removal value of £126.1million per year
- Stormwater alleviation value of £2.8million per year
- Carbon storage (whole value) £146.9million
- Carbon sequestration value £4.79million per year
- Building energy savings £26,600.00 per year
- Amenity value (CAVAT) whole value £43.3 Billion
- Replacement cost (whole value) £6.12 Billion
- Total annual benefits £132.7million

Another key feature of this project was the use of over 300 volunteers to survey the trees and map the data plots an excellent example of the use of Citizen Science techniques and volunteers to show the value of the asset. It should also be noted that this only covered a proportion of the total benefits. The real value is likely to be much higher. http://www.treeconomics.co.uk/projects/londoni-tree

Although not on such a large scale, clearly the trees and woodland of Calderdale are delivering benefits which are proportionately of a similar scale of value. Carrying out such an assessment of the value of the tree and woodland asset for Calderdale in this way would be a fantastic tool to have for the borough in managing, planning targeting resources to maintain and enhance this resource in a sustainable way.

8.1.2 Other Economic values

- Trees and woodlands set the scene for growth around our towns. They have a role to play in attracting investment, providing a great place to live, work and visit.
- Have an influence on property values of an increase of between 7-15%
- Deliver tourism opportunities and associated economic benefits
- Deliver recreational opportunities
- Assist in the heating and shading of buildings and therefore in their economic performance and heating costs
- Improved health = reduced healthcare expenditure
- Provision of a timber resource renewable and long-term

In Calderdale, the potential economic viability of management for timber production has not yet been realised, however it is possible to manage woodland primarily for amenity, leisure, nature conservation and habitat creation while at the same time allowing for some timber production

Key Actions

Investigate use of local universities to	
carryout natural capital accounting	
assessment	
or Work with other partners and	
economic viability of timber production and owners to investigate ways to	
make timber production economically	
viable in Calderdale	

8.2.Other values of trees

8.2.1.Health and wellbeing

The Natural Environment White Paper (ref) recognised the value and potential of natural environments to people's health and well being.

www.parliament.uk/business/committees/committees-a-z/commonsselect/environment-food-and-rural-affairs-committee/inquiries/the-naturalenvironment-white-paper/

This is similarly referenced in the Public Health Outcomes Framework www.gov.uk/government/publications/healthy-lives-healthy-people-improvingoutcomes-and-supporting-transparency Trees contribute towards creating a less stressful environment leading to improvements in peoples overall health. They reduce everyday stress and research has shown that hospital patients recover more quickly when able to enjoy the view of trees. In Calderdale 86 deaths per year are attributed to exposure to fine particulate air pollution so the benefits that trees and woodlands can provide in reducing air pollution are critical.

- Create a sense of place and local identity
- In-still a sense of public pride in a place enforcing local character, distinctiveness and identity of an area
- Impacts on mental and physical health
- Provide amenity and aesthetic value. They make an important physical and valuable contribution to Calderdale's varied landscape character, they contribute immeasurably as part of our landscape or particularly in their own right in urban and rural settings contribute to people's quality of life and sense of well-being.
- Provision of opportunities for recreation, through parks, picnic sites, walks, cycle routes etc. with associated health benefits
- Opportunities for volunteering be it woodland management, tree planting etc.
- Mature trees can provide a direct link with the past, the history of the landscape revealed by their age and location.
- Provision of educational opportunities both formal and informal Forest School etc. Such educational resources support delivery of a wide range of National Curriculum subjects including Science, Geography, and Art, PE etc.

Key Actions

Rey Actions	
Targeting areas where trees can we	Promote the use of woodlands for
can have the greatest impact e.g.	recreation specifically with agencies
air quality, areas of poor health	working with chronic health conditions
outcomes/ chronic health	
conditions/playgrounds/schools,	
poor living environments, poor	
health indices etc	
Promote woodland walks with	Maintain the profile of trees and
Walks for Health	woodlands in current health initiatives
	such as Active Calderdale
Offer opportunities to take part in	Ensure access to and benefits of
active management of woodlands	woodlands is promoted within Active
through volunteer and community	Calderdale programme
projects.	
Map woodland resource against GP	Work closely with Public Health to
surgeries, air quality and areas of	ensure the value of trees and
deprivation – pilot scheme mental	woodlands are fully recognised
health access to countryside ??	

8.2.2.Environmental

- Assist in improved air quality
- Store and sequester carbon

- Improve the quality and perception of the environment particularly helping to soften urban areas
- Compliment historic buildings, provide landscape features such as avenues, vistas and focal points;
- Assist in rainfall interception reducing flash flooding
- Assist in stabilisation of ground and landslips
- Increase and enhance biodiversity provision of food and shelter
- Are valued habitats in themselves e.g. ancient woodlands, wet woodland, ancient trees, hedgerows
- Assist in reduction of wind speed
- Assist in flood alleviation as part of slow the flow/ NFM woodland planting
- Absorb and deflect traffic noise
- Provision of shade for buildings and streets
- Reduce temperatures in dense urban areas

Many of the above benefits have a more detailed section within this strategy with associated key actions

Key Actions

Promote the use of the FC Woodland	Target street tree planting in areas
Carbon Code on proposed tree	where there are the greatest impacts
planting projects	– air pollution , green infrastructure
	<mark>"gaps in links"</mark>
Protect trees that compliment historic	
buildings, provide landscape features	

9. Problems Associated With Trees

People are very conscious of the presence of trees and the impacts they have on their everyday lives.

People often live in close proximity to trees, particularly in urban areas. These trees stand within residential property, commercial/private premises or, quite commonly, on public land. Trees may cause inconvenience to residents when they grow near dwellings, and with severe storms occurring more frequently, people quite rightly voice concerns over safety.

The close proximity of trees and people inevitably leads to what is termed 'nuisance complaints'. Included in this description are things like reduction in natural light, blockage of sunlight, leaf and fruit fall, overhanging branches, honeydew and bird droppings, interference with cables; TV; sky reception and shading. These may appear individually as relatively insignificant problems but they are of real concerns to many in the community and therefore have to be taken seriously.

These quality of life concerns must be reflected in the way we manage the trees however it is not always possible to completely satisfy all complaints and therefore a compromise is required to balance the specific requests of residents with the general values to the area of the trees concerned.

Many of Calderdale's street trees are giving cause for concern with regards to existing damage to footways/kerb edgings through root/buttress strengthening, whilst many others potentially may cause similar damage. In such cases all options should be discussed before either removing the trees or repairing the damage, in relation to safety as well as costs.

Another concern is the potential for structural damage caused through soil moisture extraction by tree roots. This type of damage only occurs in areas where soil type is heavy, shrinkable clay, which is prone to fluctuations in volume caused by changing soil moisture levels. This is a relatively low risk throughout Calderdale due to the district having few areas with potential clay content. Heavy pruning or removal/replacement of trees would assist in reducing or removing such risks.

Calderdale's substantial tree stock therefore requires continual management to continue producing sustainable benefits and to balance the need to retain and enhance the tree-scape with the need to resolve or reduce the problems that can be associated with that tree-scape.

CMBC receives over 1000 queries per year related to trees. One of the Councils roles therefore is to educate and raise public awareness about the values of trees and find suitable ways to resolve problems satisfactorily Many of the above problems can be mitigated for by the "Right Tree, Right Place" principle for planting.

10. Threats to trees and woodlands

Trees are essential to life and their values cannot be overstated, they are valuable yet a vulnerable asset needing careful management. Some of the greatest threats to our trees are lack of interest, misconceptions and poor tree management practices.

10.1. Climate Change

Projects such as the London iTree assessment show the value of trees and woodlands can play in carbon storage, carbon sequestration, air pollution removal and storm-water runoff and flooding. Clearly they have a positive role to help deliver on climate change targets and assistance in flood alleviation both locally and nationally.

Conversely our tree and woodland asset is at threat from climate change and associated changed weather patterns with greater temperature fluctuations, drier summers, more heatwaves, more severe storms, increased risk of flooding in summer and winter flooding and increased pests and diseases. *Chalara* (ash dieback) *Phytophthora ramorum* are already present in Calderdale and woodland managers will need to be vigilant and monitor the spread and presence of diseases.

Large mature trees established over the last 100 years or so naturally withstood average storms of 60/70 mph with just the rare severe storm of over 70 mph. However storms over 70 mph are now occurring more frequently all year round with annual severe storms up to 100 mph.

Even well established trees are not used to these more frequent severe storms and as such pose a higher risk of failure.

Whilst not embarking on unnecessary pre-emptive action we do need to ensure options are available to enable higher risks are targeted effectively. Detailed surveys can be carried out to identify the higher risk areas. Severe storms offer even greater risk if they occur whilst trees are in full leaf.

Many of the woodlands in Calderdale have a large percentage of even aged mature stands – often of beech or oak. Street tree populations may similarly be at risk – historic planting with even aged mature species. Such populations are vulnerable to any significant impact from a particular disease.

An objective for management, tree replacement and woodland creation should be to facilitate climate change resilience through increased population, age and structural diversity.

10.2. Recreational pressure

Woodlands offer fantastic opportunities for recreation and outdoor activities. With this comes increased pressure on the habitat and associated wildlife. Woodland paths may be damaged by heavy use and cycling. Dog mess has been reported as an increasing problem at some sites. Illegal felling and removing of cut timber has also taken place at a number of sites. All these can serve to denigrate and damage the habitat. Public education on the value of the sites needs to be highlighted as well as forums created for conversations to take place around some user groups e.g. walkers, cyclists. Site managers need to ensure good access that directs heavy usage from ecologically sensitive areas

Key Actions

Develop a Biosecurity Policy in line with current Forestry Commission advice and best practice to include sourcing of new trees, risk detection and management of spread, outbreaks	Promote participation in national monitoring schemes
Develop a diverse population in both age, species and structural diversity	Look at dog control orders for appropriate woodland sites
Deliver public education programme on the value of woodland sites. Promote on site through interpretation	Utilise Cycle Calderdale to promote value of the sites and responsible access
Utilise the LAF and other groups to have discussions with user groups such as cyclists, horse riders and walker	

10.3 Trees on Development Sites

One of the most common threats against trees is the proposed development of land upon which trees are growing and any development of a site, including construction of access routes, driveways and parking areas can result in substantial root severance. Trees form a key part of green infrastructure and Sustainable Urban Drainage (SUDS) and need to be integrated into developments and retained where possible.

Some developers are quick to assume that all trees on a site will have to be retained and consequently often view trees as a problem rather than an asset. Unfortunately this can result in trees being removed from sites before a planning application is submitted.

Whilst it is usual for a council to impose tree protection and or planning conditions as part of any planning permission, Calderdale Council currently has the following adopted policies within the Replacement Unitary

Development Plan (RPUDP) 2006 full details at:

http://www.calderdale.gov.uk/environment/planning/developmentplan/index.html

Policies on TPO's, Conservation Areas and High hedges may also be applied. <u>http://www.calderdale.gov.uk/environment/planning/developmentplan/index.ht</u><u>ml</u>

10.4. Lack of management and maintenance of aging stock

Whilst CMBC has responsibility for the management of its own trees and woodlands it must be recognised that much of the resource in Calderdale is privately owned. Management approaches may differ, and the geography of particularly the Upper valley can make woodland operations difficult to deliver.

Aging street tree stock - any works required identified by the tree inspections will be dealt with accordingly and replanting will take place where funding allows. The council currently has no street tree replacement planting budget The development of a a long term planting programme for council owned trees would address species and age diversity, which is important for a healthy population and can help in resilience to both climate change and threats from pests and diseases. Public and business funding along with community groups etc. is/has always been sought.

Many woodlands across Calderdale have been under or not managed. This has led to even aged stands of mature, often single species woodland with little regeneration or ground flora. Some are Council owned and many are private. Some funding for woodland management work and woodland creation is available through the Countryside Stewardship is currently available but the recent Parliamentary Select Committee report (March 2017) deemed that this grant scheme to be not fit for purpose

http://www.parliament.uk/business/committees/committees-a-z/commonsselect/environment-food-and-rural-affairs-committee/news-parliament-2015/forestry-report-published-16-17/

It will be interesting to see the impact of Brexit and the development of new grant programmes for woodland management and creation, as these are the main financial mechanism to support land owners to do such work More commercial models will need to be looked at and assessed as ways to deliver good management in the future. Current work is being done by Stobarts Forestry to assess the value of the Councils' woodland land holding, with a view to use of products for biomass for energy and management for conservation.

Key Actions

Develop a long term planting programme	Deliver Stobart Forestry
for council owned trees	assessment of councilwoodlands
Identify alternative funding schemes for	
tree planting (Trees not in woodlands)	

11. Protection through Advice

Advice on trees and or woodlands requires professional, experienced and qualified knowledge. Inaccurate advice may have serious consequences for the tree and its owner.

The tree industry is an established technical discipline where research has been updated and substantially changed during the last 30 years. Any person offering advice should ensure they keep up with existing and future changes through continuing professional development (CPD), membership of an appropriate professional body and or by subscription to appropriate research bodies.

Key actions

Refresh the Council web	Ensure good quality accessible information
information on trees	is available on CMBC website

12. Hedgerow Protection

Calderdale M.B.C. currently has a policy for protection of hedgerows of the adopted UDP and also a BAP habitat action plan for ancient and species rich hedgerows .Hedgerows and hedgerow trees are of ecological and biodiversity value and are important uncommon wildlife habitats.

Certain hedgerows can now be protected through the Hedgerow Regulations 1997 under section 97 of The Environmental Act 1995. These are ancient hedgerows i.e. in existence before the Enclosure Act and specifically before 1875. The qualifying criteria can be complex and are regularly reviewed; however Calderdale M.B.C. supports and implements measures to achieve protection, conservation and enhancement of hedgerows through its existing policies and action plans.

Key Actions

Continue assessment and mapping of hedgerows to determine the extent, quality and distribution of valuable/ancient hedgerows within the district	Encourage the planting and retention of native standard trees in hedgerows
Ensure Local Plan policies in place to protect ancient and species rich hedgerows Ensure the best examples of hedgerows are designated as Local Wildlife Sites (LWS)	Enforce Hedgerow Regulations 1997

Council owned trees and their management

The council is responsible for the management of trees and hedges on its own land as detailed in **Section 5(The Resource**) These all require inspection and where necessary remedial work, or in the case of diseased or dangerous trees, felling. Tree database is in-house system and uses an HP lpaq handheld device - tree location/number/species/condition etc.is recorded This is the prime responsibility of Calderdale's Forestry Unit and its qualified arboriculture team.

The head of Community Services will retain responsibility for monitoring performance in tree management to ensure that the council acts in accordance with its own policies and guidance and makes progress with the implementation of tree management programmes.

The Council's current and existing Tree Policy (2009) has adopted policies for the management of its own tree stock. These policies have been used to approach tree management work and to describe in broad terms, situations where Calderdale MBC is likely to consider any works such as pruning, felling, pollarding or other forms of management work on its own tree stock. This policy has been embedded into this strategy.

Key Objectives for Council managed trees and woodlands

Protection

- Retain, protect and enhance existing trees and tree groups including street trees.
- Retain, protect and enhance existing woodlands.
- Retain, protect and enhance existing hedgerows.
- Establishment of individual long-term management plans. These will identify the objectives of the management of trees in the stock record, such that trees may be tracked through the course of their life history.
- Calderdale will ensure that the tree population continues to be protected, developed and expanded where appropriate.
- Calderdale M.B.C. will support the process of natural regeneration on appropriate sites.
- Calderdale will aim to encourage and enable better understanding of the management of trees in order to promote greater community ownership and awareness.

Caring

- Care for trees, tree groups and street trees to promote healthy growth and development.
- Care for woodlands and hedgerows to promote healthy growth and development.

Planting

- Plant more trees, tree groups and street trees, in appropriate locations with suitable species.
- Plant more woodlands and hedgerows.

• To promote the importance of trees in the borough and ensure their sustainable management for the benefit of all residents and visitors.

The following are the current tree management policies utilised for the management of all council trees. (Approved 2009) and identify typical situations where the different types of work are applicable, though each tree will always be assessed on its own merits.

- We will ensure that the council acts in an even-handed manner in our dealings with private trees, whether protected by legislation or not, and in caring for our own trees.
- We will also ensure that the requirements of nature conservation policies and other legislation are met.
- Tree works are undertaken to fulfil the Council's 'duty of care' and, in accordance with, the management priorities of other services as deemed necessary. This includes maintenance operations to existing tree as well as new tree planting.
- The Council recognises that that management must also include taking a long term view of the tree resource to provide for the future as well as the present.
- Trees, especially in urban areas, require careful management and that management should include regular inspection and programmed tree works.
- These types of tree works will be normally accepted as good practice within the authority and will normally be carried out by Calderdale's own specialist arboricultural unit and will be in accordance with current UK and E.E.C. legislation, guidance, British Standards and codes of practice, where they apply.
- Trees will be assessed before pruning or felling to ensure that there are no breeding bats, birds or other wildlife likely to be harmed.
- We will retain records and monitor the nature and extent of tree work. By such monitoring, especially numbers of trees felled, replaced and included in management programmes, we will be able to demonstrate that the councils tree and biodiversity duties are being met.
- Calderdale MBC will set out such approaches to the management of all trees for which it is directly responsible, regardless of council department.
- Tree management encompasses the co-ordination of all maintenance operations to existing trees as well as new planting. The existing tree population is a valuable resource that requires more than just maintenance, if it is to continue to provide the range of benefits stated and expected. Management must include a long-term view of the boroughs tree resource, providing for the future as well as for the present.
- Calderdale will aim to maintain the highest possible standards of tree care and management in order to act as an example of best practice for others to follow.

In addition the council owns and manages over 430ha of woodland under the Countryside and Woodlands

Current policies to deliver the above from **agreed 2009 Tree Policy**:

SG1	The council will ensure that the tree population continues to be
	developed and expanded with new planting where appropriate. Any trees removed shall be replaced unless there are special
	circumstances preventing this.
<mark>SG2</mark>	The council will aim to provide a sustainable, high quality tree population. Where appropriate, native species will be planted to
	maximise habitats for wildlife.
SG3	The council will aim to encourage and enable better understanding of the management of trees in order to promote greater community
	ownership and awareness.
SG4	The council will aim to maintain the highest possible standard of tree
	care and management by:- 1) working to standards set within B.S.3998 (1981) and
	subsequent revisions
	2) Adopting best practice according to all relevant legislation and
SG5	research. The council will endeavour to fulfil their obligation to ensure the
	safety of people and property.
<mark>SG6</mark>	The council will endeavour to avoid any work to trees that results in the loss of valuable wildlife habitat.
SG7	The removal of trees will be resisted unless there are sound
	arboricultural or other reasons, e.g. Disease or structural damage or clearly identified threats.
SG8	The council will not carry out felling or potentially disfiguring forms of
	tree work in order to improve views, sunlight, and reception of
SC0	television reception, cables, and wires or for CCTV operation.
<mark>SG9</mark>	The council will support the process of natural regeneration on appropriate sites.
SG10	The council will aim to maximise the recycling of tree related waste
	created by the councils own tree management
SG11	The council will require more active protection of its own tree stock from avoidable damage caused by agencies responsible for works
	near trees such as highway maintenance contractors and utility
0040	companies.
SG12	The council will ensure that any ancient trees, for which it is responsible, are retained and protected as special historical, wildlife
	and landscape features, in line with the Ancient Trees Habitat Action
	Plan.
SG13	The council will give advanced notice to all interested parties of proposed major tree work programmes.

13.1 Tree Inspection Regime

All tree owners have a legal responsibility and a duty of care to maintain and manage their tree stock in a reasonable and safe manner. Calderdale M.B.C. carries out its duty to have in place a programme of regular and competent inspection of its tree stock and fulfils its legal responsibilities and duty of care in making and managing in a reasonable manner and to protect its residents and visitors from harm, and retain its treescape of the borough for future generations to enjoy.

Inspection of trees should be in order of priority and those in high risk areas should be the subject of regular extensive inspection by fully qualified arboriculture staff. We have three priority levels for tree inspection:

Category	Inspection regime
High Priority	Annual and
Trees adjacent to major highways, adjacent to or within major parks and	after severe
woodlands and adjacent to access/egress and communal areas within woodlands/cemeteries. This is based on the greater proximity of members of the public in these areas and the greater presence of mature trees which are of a higher risk factor	storms
Medium Priority	Every 2
All remaining trees on minor highways, small parks/open spaces, cemeteries, woodlands and young trees These are deemed to be less risk to the public due to lower concentration of people on these sites on a day- to-day basis.	years
Low Priority	Every 4
All other trees	years

The Councils tree inspection programme is currently providing on going information on age, species, condition and numbers of Council owned trees and from this information it will be possible to estimate the decline of the tree population

The above all require inspection and where necessary remedial work, or in the case of diseased or dangerous trees, felling. This work is carried out by a qualified arboriculture team.

13.2.1. Types/Methods of tree works

All work will be carried out to existing/current UK and EEC Legislation, guidance, British Standards and codes of practice and any subsequent revisions etc.

The type of tree works will vary according to the individual tree, its species, age, condition, location, past works and the nature of the complaint associated with the tree.

Removal of trees will be restricted unless there are sound arboricultural or other reasons to indicate otherwise.

13.2.2. When can/should trees be felled?

Calderdale MBC will avoid felling trees unless it is absolutely necessary. Each case will be carefully judged on its own merits. Tree felling will not be permitted unless there is a very clear justification for the work. In the unfortunate case where a tree has to be felled a suitable replacement tree should be planted.

Trees normally accepted for removal:

- Dead, dying and or dangerous tree that poses a danger to public safety;
- Trees causing structural damage where pruning and or structural repair would not provide a solution;
- Trees as part of an agreed management programme;
- Trees as part of an agreed development programme in accordance with current planning guidance.

13.2.3. When can/should trees be pruned?

Pruning trees should not be carried out if not necessary as any cutting can allow decay organisms to enter exposed and vulnerable tissues and can also weaken the tree.

Pruning of a healthy tree will usually cause it to respond by producing vigorous new growth. Older trees do not tolerate pruning as well as younger ones and any substantial pruning can be very dangerous particularly in species which are not naturally tolerant of cutting.

- Tree pruning will not be permitted when the tree is of high value and there is no justification for the work.
- Work will also be resisted if the tree has been pruned during the previous three years, unless there are special circumstances agreed by an Arboricultural Officer.
- As with felling each case will be carefully judged on its own merits.

Trees normally accepted for pruning include;

- Trees with branches causing an obstruction to or growing low over a public highway, public right of way, footpath or access to property or open spaces where the public have access;
- Trees physically in contact with buildings and or roofs; trees obstructing highway signage;
- Trees obstructing sight lines at road junctions;
- Trees damaged by storms or vandalism;
- Trees obstructing street lighting equipment and other types of street furniture.

Pruning is usually found to be necessary to maintain health and stability of the tree or due to obstructions to users of highways and open spaces.

13.2.4. Acceptable types of pruning for trees.

Whichever type of pruning is agreed/decided upon there should be **no more** than 20% of the canopy of the tree removed at any one time.

13.2.4. (a) Crown Thinning

This reduces the density of the trees crown without changing the shape and form of the tree. Thinning reduces the amount of foliage and allows more light through the canopy of the tree.

13.2.4.(b) Crown Lifting

This essentially means pruning off lower branches to give clearer stem below the crown of the tree.

13.2.4(c) Crown Reduction

The crown of the tree is reduced by shortening branches and is useful for pruning away from buildings, roofs, highway signs and street lighting equipment. It is however essential to ensure such pruning does not greatly unbalance the crown of the tree.

13.2.5. Pruning operations for exceptional circumstances

13.2.5(a) Root pruning

Cutting tree roots is highly undesirable and can seriously affect the health and stability of a tree.

Root pruning is a very specialist operation that should only be undertaken with the support and supervision of an Arboricultural Officer.

At no time should buttress roots, major roots or roots over 25mm in diameter be pruned.

13.2.5. (b) Pollarding

For many centuries throughout Europe, trees were maintained at a certain height through regular pruning. Large tree species in urban areas were often planted because they were pollutant tolerant. They were then pollarded traditionally as a method of controlling the growth of a tree, restricting the size of its crown, when growing in a restricted or confined location.

Different species of trees respond to pollarding in different ways and therefore pollarding may not be suitable for some species such as e.g. Beech. Once begun it is essential that pollarding continues as the weight, structure and angles of new growth can lead to renewed weakness and visually pollarding is detrimental to the amenity value of a tree.

Pollarding seriously interferes with the ability of a trees leafy canopy to manufacture food. Trees can go into shock due to the instant severe changes in the trees natural growing systems. New growth is more rapid resulting in denser more unsafe crowns in a short period of time. Large pollarding wounds are an instant source for initiation of serious decay organisms entering the trees system and trees severely pollarded on a regular basis encourage spreading root growth. Pollarding is not generally considered cost effective by CMBC as it has to be repeated on a regular basis. Planting of more suitable trees is a preferred management option.

However taking into account the climatic changes and increased severity and occurrences of storms in some cases pollarding will be considered as a management option where appropriate e.g.:

- Assist in retaining mature species of trees prone to decay such as horse chestnut and trees prone to renowned shedding such as ash.
- Pollarding should be a considered option to enable safer retention of many of Calderdale's mature trees especially those in close proximity to persons and property.
- Pollarding of appropriate species will also be utilised in woodlands where it will bring biodiversity benefits
- Rare, ancient, veteran, historical and or highly valued trees which have been identified as desirable for retention may have to be considered for pollarding, this possibly being the only option available to keep them.

13.2.6. Timing

Pruning can be carried out at most times throughout the year but ideally leaf flushing and leaf fall should be avoided as well as flowering periods. Certain species have more specific times due to disease and the risk of bleeding.

- Responsive tree works will mainly be carried out in cases of emergency or high priority.
- All/any pruning should ensure the natural shape of the tree is maintained as far as is practically possible.

13.3.Street Trees

These will be chiefly trees planted in pavements or road verges throughout the borough. Such trees help to filter traffic pollution, provide shade for car parking and pedestrians, and improve the overall appearance of the street scene, thus helping to enhance property values.

The character of Calderdale's street tree population varies considerably in different parts of the borough from the tree lined avenue of mature trees along Broomfield Avenue, Halifax, the mixed planting of mature broadleaves in narrow grass verges along Oak Avenue, Todmorden, to the mixed age and species range of trees within Woodhouse Estate, Brighouse.

Many of Calderdale's older mature highway plantings originate from the selection of limited range of forest type species known to be pollutant tolerant, but today there is access to a wider range of small or medium species of trees for restricted sites.

• The older mature trees are more vulnerable to climatic variations, disease and damage and they tend to decline gradually. They should however, where possible, be retained and managed accordingly.

- The Council will seek to manage its street trees in a proper and sustainable manner and in doing so would be able to demonstrate reasonable precaution in the sense of public liability. However it is accepted that many of Calderdale's street trees are now too large for the space they are growing in and as they continue to grow they will continue to cause damage to footways, kerb edges and even boundary walls
- Every tree will be dealt with on its own merit and an agreed decision between the Arboricultural section and the Highways section will be taken as to whether to retain or remove the tree.
- Any tree agreed to be removed will be replaced by a more suitable species where funds allow, in a more suitable location (preferably new constructed pit), where practically possible. There may be opportunities to plant larger species on adjacent land.

Continual development of a tree population that has a wide diversity of species and a wide range of tree ages. These two points are fundamental in avoiding numerous tree losses through threats such as disease, climate extremes or the slow decline of the tree population due to over maturity.

Where funds allow Calderdale will replace those that have been lost due to decay or damage

We need to ensure that our urban trees are being chosen and managed correctly for their settings. In some areas trees that have been planted are too large for the place they are growing when mature. Often such trees have to be removed but we should also look at other options such as pollarding when appropriate to site and species. In urban situations any new planting should suit the area it is in terms of shape, size and species but, where there is the opportunity to do so larger trees should be planted to retain our urban landscape.

SG14	The council will seek to plant suitable new street trees in appropriate sites with priority given to sites where street trees are currently or have in the past been located where funds allow
<u>SG15</u>	The council will endeavour to protect street trees from threats such as loss of and damage to verges, the activities of statutory undertakers and other excavations, and damage from use of road de-icing salt bins or piles being placed around tree root areas. Correctly calibrated operating vehicles should not give any rise to concerns of salt being distributed adjacent to trees.
SG16	The council will not support the removal of trees for vehicle crossovers unless the tree can be relocated elsewhere or the tree is of limited life expectancy. All trees removed will be replaced with suitable specimens and all costs for removal and replacement will be borne by the person applying for the crossover.
SG17	The council will support measures that discourage verge parking by road vehicles, and damage to verges caused by other works.
SG18	Where minor damage to verges and footways is occurring the council will seek to remove the damage and repair accordingly.

SG 33		
	in streets and narrow verges:-	
	i) Do not plant in front of main aspect windows	
	ii) Do not plant fruiting varieties	
	iii) Do not plant trees that easily attract aphids	
	iv) Generally select trees with small crowns that grow vertically	
	and straight such as conical	
	 v) Select trees with non-aggressive root systems 	

Key Actions

Investigate public funding of highway street maintenance tree pruning works by residents of densely tree populated roads, under strict guidelines, particularly in the areas/streets/roads that have mature/over mature forest		
type trees growing in limited space where options such as crown lifting/thinning and reduction would retain the characteristic tree lined areas		
Investigate opportunities for planting of larger replacement trees for street trees on adjacent land – where larger tree species	Embed Green Streets green infrastructure principles into large capital transport schemes – WYT Fund schemes. Ensure tree planting is	
<mark>can grow</mark>	included within these schemes	

13.4. Parks and Open Spaces

Trees are fundamental to the structure of parks and open spaces and they are very important contributors to the overall environment of the area, and especially valuable for providing shade during hot weather. They are commonly the most significant trees in Calderdale and have a profound effect on its appearance and, consequently, upon the leisure experience of its users of the parks as well as visual amenity for its residents and visitors alike. They are a high value resource that requires active management if they are to survive for generations to come.

SG27	The council will seek to create a varied and sustainable tree
	population in its parks and open spaces
SG28	The council will seek to develop long term management plans for
	trees in parks and open spaces to identify risk areas to maximise
	safety.
SG29	The council will continue, where appropriate, to plant trees for both
	amenity and environmental reasons where funds allow.

Key Actions

Ney Addons	
Map any key ancient/veteran/notable trees	Investigate funding models trees inc. public donations for tree replacement in parks and recreation grounds.
Identify parks sites where woodland can be created/expanded to create woodland pasture areas in line with the remodelling of safer cleaner greener 2017/18	

13.5. Churchyards and Cemeteries

The council maintains 28 closed churchyards, and (12) cemeteries along with Park Wood Crematorium. Many of the churchyard and cemetery trees are probably among the oldest in the district along with the parks. They are fully accessible to the public and in some cases have public rights of way that provide connection between roads and residential areas.

The issues affecting tree management in these cases are similar to open spaces, but differ in that they have gravestones and memorials to consider. Trees make a valuable enhancement to the landscape in these areas, but can cause problems that include the obscuring of grave structures and disruption by tree roots and branches.Cemeteries in particular have to allocate new graves or add to existing graves, and this can have an impact upon trees already in situ and/or the scope for new planting.



Key Actions

Map any key ancient/veteran/notable	Investigate funding models trees inc.
trees	public donations for tree replacement
	in churchyards and cemeteries

13.6. Schools

Currently Calderdale M.B.C. offers advice to schools regarding tree care and management and annually informs the schools of their duty of care and responsibilities regarding trees, risks and safety of school users and visitors.

Key Actions

Map any key ancient/veteran/notable	Investigate funding models trees inc.
trees	public donations for tree replacement
	in schools

13.7. Allotments

Calderdale M.B.C. currently is responsible for some 36 allotment sites. The allotment holders sign an agreement that the land should not be cultivated for bushes or trees other than those bearing soft fruit. No timber or other trees upon the allotment shall be cut or pruned by the allotment holder.

SG32	Calderdale M.B.C. will regularly inspect existing trees on allotments
	and whilst considering removing any trees from the centre of the site
	the boundary trees will be generally retained

Key Actions

ap any key ancient/veteran/notable
S

13.8. Memorial Trees on council land

CMBC currently allows planting of memorial trees at selected sites – in line with the Right tree Right place principles. This may be in parks or countryside sites. There is currently no specific policy on this (and other memorials.) Other authorities have taken a more structured approach

http://www.clevedon.gov.uk/Memorial-Tree-Policy.aspx

http://www.rushcliffe.gov.uk/media/rushcliffe/media/documents/pdf/leisureand culture/Memorial-policy.pdf

Key Actions

Produce a Memorials policy to include tree planting models for memorial trees

13.9. Trees on Private Land

Private tree owners have a duty of care to ensure that their own trees are managed and maintained in a safe manner.

Calderdale M.B.C. will endeavour to advise private tree owners on their responsibilities and liabilities and will offer basic verbal advice but recommend that they have their trees regularly inspected by a suitable competent person.

Tree owners with tree preservation orders on their trees or trees within conservation areas have certain legislation criteria to meet if having tree works carried out as explained in section 10 of this strategy.

Calderdale M.B.C. has, like any other council, statutory powers to enforce any necessary tree works/removals etc. on trees that are a potential danger to the public or to public property.

However Calderdale M.B.C. will endeavour to initially discuss the concerns and advise on the course of action needed, but failure to carry out identified works to negate the danger will result in Calderdale M.B.C. using its statutory powers to implement essential works and recharge the costs to the owner.

14. Woodlands

The definition of woodland in United Kingdom forestry statistics is land under stands of trees with a canopy cover of at least 20% (or having the potential to achieve this), including integral open space, and including felled areas that are a-waiting restocking. There is no minimum height for trees to form a woodland at maturity, so the definition includes woodland scrub but not areas of gorse, Rhododendron, etc., outside woodland, and there is no minimum size for a woodland.

https://www.forestry.gov.uk/website/foreststats.nsf/byunique/sources.html

The Government target for England is to increase woodland cover from 10% to 12 % by 206 and in looking to set any targets for future woodland cover in Calderdale this needs to be taken account of.

The current figure for Calderdale of 3.8% can be used as a baseline but much work still needs to be done before a meaningful target for Calderdale can be set for this habitat.

New woodland planting needs to take account of the biodiversity value of other habitats and the setting of any local target similarly needs to take these habitats into account.

Many woodlands in Calderdale are in private ownership or other organisations such as The National Trust, Yorkshire Water, Network Rail etc.

In Calderdale the majority of woodlands fall into NVC classes W10 & W16 – low land mixed deciduous woodland, national priority habitat. Wet woodland and upland oak woodland are rare. The most important woodlands are listed on the inventory of Ancient Woodlands, (660 ha.) In Calderdale) data is available:

https://data.gov.uk/dataset/ancient-woodlands-england2

https://data.gov.uk/dataset/national-forest-inventory-woodland-england-2015and http://magic.defra.gov.uk/MagicMap.aspx

The National Forest Inventory 0.5ha and over- rolling programme designed to provide accurate information on forests and woodlands. <u>https://www.forestry.gov.uk/fr/beeh-a3gf9u#woodlandmap</u>

Whilst these sites should form priority areas for management, the objective for this strategy will also apply to woodlands not listed, as whilst they may not have the same ecological value they can be important habitats and of high value for public access and recreation.

Calderdale B.A.P. currently has a habitat action plan for native woodlands. Many of our woods have deteriorated directly through a lack of intervention allowing invasive species; same age range species; deer/rabbit damage etc to flourish and the future management needs to address the continual problems of neglect and also take into account the multi-purpose objectives which woodlands today fulfil.

There is a need to increase woodland cover, reducing habitat fragmentation, improving management and linking to the wider landscape to provide space for nature to thrive and increase resilience to climate change and disease. Wildlife corridors are important in helping to overcome habitat fragmentation and to ensure that species can reach the different resources they need, and that populations of species do not become isolated or die out due to inbreeding.

Also, as the climate changes, the range of species may shift northwards and upwards to higher altitudes as they seek new "climate spaces". Their ability to do this is affected by the fragmentation of existing habitats and the permeability of the landscape between habitats. This means creating and maintaining an age range of trees (including providing conditions for trees to reach veteran status), controlling invasive species; retaining dead wood, making sure that any new planting is in the right place and the right species and recognising that woodlands are not 'standard' habitats and can, for example, contain glades, wet areas and grassland.

14.1. Council owned woodlands

The council manages some 41 woodland sites covering over 430 hectares of woodland and there are also a number of parks and open spaces containing a proportion of woodland. These sites are manged by the Countryside and Woodlands Team.

The councils overall management objectives are:-

- Nature conservation
- Landscape enhancement
- Recreation
- Education

Other objectives such as timber production are limited but should be pursued where appropriate and when there is no conflict with the primary objectives. All of our woodlands are now managed with nature conservation objectives as a priority.

Council owned sites are documented in appendix xxxx MAP

Current CMBC policies from 2009 Tree Policy – still current

SG19	Calderdale M.B.C. will ensure its woodlands have up to date management plans in place and encourage the production of plans for
<mark>SG20</mark>	woods in the private sector, in particular those which are wildlife sites. Calderdale M.B.C. will ensure that its woodlands are managed as a long term sustainable resource for the public, for education and for
	nature conservation and biodiversity in line with local Biodiversity Action Plans and Woodland Habitat Action Plans.
SG21	Natural regeneration and coppicing will be supported on appropriate sites.
SG22	Where appropriate Calderdale M.B.C. will ensure dead and fallen wood is left on site and dead trees are left standing unless there are sound conservation and or safety reasons for its removal and will provide log piles from pruning and coppice to encourage the biodiversity of the site.
SG23	Calderdale M.B.C will encourage community involvement with woodland management
SG24	Calderdale M.B.C. will encourage expansion of the urban woodland in appropriate locations ensuring layout and selection of native species of local provenance to reflect the local woodland character.
SG25	Calderdale M.B.C. will manage woodlands to fulfil its obligation as owners to ensure safety of people and property whilst remembering that woodlands are natural places and the level of acceptable risk must reflect this.
SG26	Calderdale M.B.C. will seek to manage some of its woodlands for timber production and other woodland products to offset some of its costs incurred through woodland management.

14,2 Woodlands General

There is also a role for the Council in encouraging other woodland owners to actively manage sites especially those woodlands that are also Local Wildlife
Sites as well as supporting smaller voluntary and community groups to contribute to managing sites. The Council will maximise funding opportunities as well as working in partnership with organisations to manage woodland effectively.

Many of the beech woodlands of Calderdale are now coming to the end of their life – woodland management needs to address how this will be met for the future. Most are in an unfavourable condition consisting mainly of relatively dense even aged stands and in need of management

Invasive species also create huge problems in Calderdale woodlands. Himalayan balsam is a particular problem , as is rhododendron and Japanese knotweed to a lesser extent. Current research and trials are taking place through CABI to look at biological control of Himalayan balsam using a rust fungus in the upper valley.

http://www.invasive-species.org/research/

There is a large partnership working on tackling invasive species acrossYorkshire led by Yorkshire Wildlife Trust. (Calderdale is a partner)This also promotes recording of invasive species to map the extent.http://www.planttracker.org.uk/tags/inns

In order to manage our woodlands effectively, we also need to record and store ecological information.

Key Actions	
Take opportunities through the planning	Target ancient woodland sites with
system to restore or create woodlands	private landowners and local
	partnerships to ensure UKWAS
	management standards
Map out opportunities for linking,	Target tree planting and woodland
buffering, ancient woodland sites and	creation with partners based on the
habitat networks Knowing what we have	mapping and link with natural flood
 mapping and surveying Calderdale 	management woodland planting
woodlands	schemes
Right tree in the right place guidance to	Tackling invasive non-native
ensure the right size and species of tree	species in a strategic way -
is being used in specific situations.	Yorkshire INNS project
All council woodland to be in active	Promote plant tracker for residents
management	to record invasive species
Look at best practice for management	Investigate the development of a
<mark>of aging Beech woodlands – to foster</mark>	nursery for local provenance trees
regeneration and restocking for the	to be used in tree planting schemes
future of the wood	
Communicate the biodiversity value of	Improve communication to the
woodlands	public when carrying out works.
Utilise mapping to look at woodland	Look at other management options
creation schemes to link woodlands –	e.g. pollarding for large urban trees
biodiversity resilience	rather than removal
Map areas for woodland creation to	Revisit the Million Trees project
include wet woodland; flood alleviation,	sites to implement woodland

adding to existing Involving organisations and communities in woodland and tree management woodland area and creating 'buffer' zones, wildlife corridors / green infrastructure	management as sustainably managed woodlands for the future.
Create new woodland through natural regeneration where possible	Assess the use of broadleaf planting to buffer conifer plantations – identify key sites.
Work with the South Pennines Facilitation fund groups on woodlands management and promotion of good practice	Deliver the Stobarts assessment of CMBC woodland asset with a view to the production of biomass for energy 2017
Explore the possibility of long term management agreement of selected CMBC woodlands by community groups	Encourage local landowners to plant more trees where appropriate
Work with regional partners to assist in delivery of strategic targets where appropriate e.g. Woodland Trust, White Rose Forest, Forest of the North	Increase the diversity of groups utilising woodlands – work with appropriate community groups

14.2. Working Woodlands

Trees and woodlands were once a vital economic resource and if managed well they can still make a contribution to the economy. The council alone produces 150 tonnes of wood waste per year from urban trees which could be turned in to profit to in turn contribute to better management of our trees and woods. Within Calderdale there is the potential to use our wood for wood fuel and the craft market but this is not without problems. Access for extraction of timber is difficult and in some case we do not know the viability of our woodlands to produce timber. Producing sustainable timber products and biomass for energy – The areas woodlands contain tonnes of annual sustainable timber yield. In addition to timber products, there is an opportunity to increase the harvest for biomass to supply renewable energy.

There is currently no timber store to dry wood ready for sale although a previous action plan has proposed a tree station in the Upper Calder valley on a partnership basis. There are likely to be opportunities for partnership working in this area.

Calderdale Council would need to attain UK Woodland Assurance Scheme accreditation before it could sell wood fuel form its woods to the public – it would also require substantial 'upfront' investment in terms of infrastructure which is unlikely. However, there are opportunities not least in bringing in an invoice from woodlands; more woodland could be bought back in to good management. Opportunities exist for to develop a market for wood fuel and by products with other partners and local companies in our woods. Biomass sales should be investigated as options to manage woodlands .

The UK woodlands currently hold as much carbon as the UK emits in one year of fossil fuel burning. However, an enhanced woodland creation

programme involving planting xxx hectares could deliver an abatement of xxx CO2 per year. Better management of woodland for fuel and timber could also reduce carbon emissions: wood fuel is carbon neutral and timber can replace fossil fuel based products, such as building materials.

As part of the Forestry Commission response to the Read Review11 the Woodland Carbon Code has been developed. The Code sets out design and management requirements for voluntary UK based projects that aim to sequester carbon through woodland creation.

It does account for

- carbon sequestration and emissions for new woodland creation, within the woodland boundary
- woodland created by planting and natural regeneration (where some intervention is necessary to establish woodland)
- carbon sequestration and emissions under various management • regimes from frequent clear felling to minimum intervention woodland.
- emissions outside the woodland boundary as a result of the project going ahead

https://www.forestry.gov.uk/forestry/INFD-863ffl

Key Actions

	organisations and nities in woodland
	ement where possible
economic resource for wood fuel and	
coppicing products.	
Work in partnership with voluntary, Work to	wards and attain UKWAS/
community and private sector to FSC for	Calderdale woods. Possibly
develop a proposal for woodland look into	<mark>o SLIMF scheme as well</mark>
management and associated (Small &	& low intensity managed
products forests)	
Maximise funding opportunities Look at	utilisation of the Woodland
Carbon	code for woodland
creation	n/management where
appropr	i <mark>ate</mark>
Map woodland creation and tree Explore	opportunities with partners
planting schemes recorded and including	g the South Pennines
mapped to then link the Calder Facilitat	ion Fund for wood products as
Energy Future targets a fuel so	ource, consistent with other
objectiv	es for biodiversity and access
Investigate possible Edible Forests at Investig	ate appropriate sites for willow
appropriate sites for use I	by community groups/local
willow w	vorkers & companies

15. Ancient / Veteran Trees

Veteran trees and the wildlife they support are a part of our national heritage and ensuring appropriate and active management is established, is one of Calderdale's main objectives.

It is hard to be precise on the definition for these type of trees but some guiding principles are:

- Trees that are of interest biologically due to the age, size condition
- Trees in an ancient stage of their later life (this is different for different species of tree e.g. Birch trees could be considered ancient at 150years, whereas an oak might need to be 400year old
- Trees that look old relative to others of the same species

An important feature of ancient trees is that they are often hollow and contain rotting heartwood (hollowing of the trunk). This is a vital habitat for a diverse range of biodiversity. They may also have a low, fat and squat shape – because the crown has retrenched (reduced in size) through age and a wide trunk compared with others of the same species. Veteran trees are of exceptional value culturally, in the landscape, or for wildlife, due to their great age, size or location. Their overall description can also be termed as ancient as they have tended to survive longer in relation to others of the same species.

Veteran trees can be any age, but are trees that show ancient characteristics such as those above. These may not just be due to age, but could result from natural damage, management, or the tree's environment. Ancient trees are all veterans, but not all veterans are ancient.

Other categories for individual trees include a **heritage tree** which is history and culture, and can be connected with specific historic events or people, such as the Major Oak in Sherwood Forest or they may simply have particular appeal because of their appearance, landscape character and become loved as local landmarks. Some heritage trees may also have great botanical interest, for example as rare native trees or cultivars of historic interest.

Trees can also be classed as **notable tree** which is usually when a tree has local significance due to it being special or particularly large compared with the trees around it. Notable trees are usually mature, but not always

http://www.ancienttreeforum.co.uk/ancient-trees/what-are-ancient-veterantrees/ http://www.ancient-tree-hunt.org.uk/

http://magic.defra.gov.uk/MagicMap.aspx

Ancient and veteran trees are less likely to be actively managed than in the past. Pollarding and coppicing practices, which tend to prolong the life and allow trees to reach an old age, and now much less common. Dead and decaying trees are more likely to be felled, due to modern concerns re. health and safety.

Calderdale with less than 10% woodland, with much of that planted woodland rather than ancient/old growth tends to have fewer ancient/veteran a trees so there is a great need to preserve the ones we do have and manage/protect and foster potential future ancient / veterans. Many of these are not mapped and recorded across Calderdale.

Calderdale BAP has an ancient trees action plan

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Key Actions	
Maintain current numbers of ancient	Implement pollarding to create
trees	future ancient / veteran trees where
	appropriate
Encourage landowners to manage and	Survey, map and record the current
plant potential ancient trees	asset – a Register of Ancient Trees
	– facilitated by volunteers –
	potential "ancient trees" for the
	<mark>future – management</mark> _
	<mark>– maintain a database</mark>
Take opportunities through the	Consider existing and potential
planning system to restore or plant	ancient/veteran trees for TPO
future ancient trees including future	designation
management	
Encourage the future generation of	Identify trees that have potential to
ancient trees through propagation	become ancient trees of the future
using seeds of local provenance	
gathered from near existing ancient	
trees	
Identify and map	Implement appropriate management
ancient/veteran/heritage/notable trees	for relevant woodland trees
in parks	
Promote the importance of ancient/	Investigate volunteer opportunities
veteran trees and schemes that	associated with this work
engage the public e.g. Woodland Trust	
ancient tree hunt	

16. Community Involvement/ Partnership working

A number of organisations engage with communities in and about woodlands via informal and formal education opportunities, practical activities and provision of information. Calderdale Countryside Volunteers undertake some woodland management work in conjunction with the Council's Countryside Service, a number of 'Friends' Groups are also supported. There are also a number of community organisations within Calderdale who work independently of the Council to contribute to the creation of and management of woodland in the district. It should be recognised that involving communities in their woodlands can foster a greater sense of community spirit.

Many people use our woodlands as a recreational space be it for dog walking, bird watching, picnicking or cycling. We need to make sure that we give all people who use or appreciate our woods and trees, and those that currently don't access range of opportunities to get further involved. This involves recognising that sites that don't have a great economic or biodiversity value may have a great value within a community as a recreational space and that wood creation should also focus on areas that have limited accessibility to woodlands.

Some of our sites have interpretation boards, which need to have accurate and up to date information. Any work taking place in our woodlands should be seen as a chance to engage with people and explain how and why we manage woodlands. We know we need to improve communication about what we're doing and why by having up to date information on websites and on sites and holding woodland open days for communities. Local groups and users should also get an opportunity to contribute to and comment on site management plans

At present organisations that run 'education' events and opportunities rarely get together to support each other and share ideas and there could be benefits to the whole of Calderdale as well as the organisations if this happened

We recognise the importance that street trees have in our communities and we could do more to get people involved in managing the trees in their area, possibly by establishing a tree warden scheme. We know that people already feel ownership of trees on their streets and that we need to clearly communicate to residents if we are carrying out work on trees; in particular why we are doing work.

Calderdale M.B.C. has many partnership links encompassing schemes that help link people with their environment through sharing, exchanging and informing all interested parties.

Community involvement should encompass landowners, businesses, schools, youth groups and should cater for the needs of people of all ages. Giving local people, communities, landowners and businesses responsibility and a thought of ownership is an ideal way of getting them to value and engage with the environment.

Through volunteers and local members of the public Calderdale M.B.C. aim to create ambassadors for trees to have a sense of ownership in their local communities whereupon they will become extra 'eyes' for reporting tree problems etc. a Tree Warden Scheme could be an excellent way to achieve this - Tree Warden scheme – voluntary scheme affiliated to the Tree Council

http://www.treecouncil.org.uk/Take-Part/Tree-Wardens

Delivery of this will require co-ordination and support for the scheme. It is proposed to train up some volunteers in identifying basic tree hazards to enable them to assist the Forestry Unit in carrying out regular inspections as defined in The Calderdale Tree Inspection Strategy. Once initial training has been completed it is intended to place volunteers within their own local areas to monitor the trees, by gathering information, observing, and recording and also to act as a local liaison

Similar schemes have been set up nationwide but the principles are similar in that such schemes are a way for volunteers to play active roles in

championing their local treescape and becoming ambassadors for trees. Calderdale M.B.C. currently has over 200 volunteers taking part in various areas of activities throughout the borough.

Key Actions

Involve organisations and	Establish tree warden scheme in
communities in woodland	Calderdale
management where possible	
Review of site information - including	Annual woodland open day
use of web based information.	
Maximise funding opportunities	Update the current website
through partnership bids e.g White	information on trees and woodlands
Rose Forest, Great Northern Forest	for Calderdale
Encourage skills sharing between	Investigate the possibility of a
groups	"woodland hub" for info on woodland
	works, grant bids etc etc
Work closely with the South Pennine	Create Friends Groups for woodlands
Facilitation Fund on woodland	where appropriate
management and skill sharing	
Ensure participation in regional	Review of site information – including
partnerships schemes and funding	up to date and relevant web pages
bids	
Investigate Tree Warden Scheme	
through the CMBC Forestry Unit	
through the childer dreatly offic	

17. Education

It is crucial that we offer opportunities for connecting more people, particularly young people with nature, increasing volunteering and access to woodland. CMBC currently runs and education programme through the Countryside and Woodlands service. Other partners also run educational programmes in woodlands and there are a growing number of Forest school providers.

Key Actions

Create a map of forest school
sites for Calderdale
Look into demonstration woodland
site to highlight good woodland
management/benefits of the
resource/
Establishing Calderdale woodland
education network
Update CMBC website
information on woodlands

18. Access and Recreation

Calderdale's countryside, including woodlands, is used for a variety of recreational purposes by people who live in the borough and those that visit it. Tourism is of increasing economic importance to the borough and it's vital that we manage our woodlands to take advantage of this bit also to conserve and

protect what we have. However it is important that residents of Calderdale have good access to woodland areas; especially people who live in urban centres. Access to woodlands (and other green spaces) has an important part to play in improving the health of our district. Encouraging people to use our woodlands encourages them to get more physically active and improve their health and access routes to woodlands should be promoted especially in areas with poor health outcomes.

Public access to woodlands is to be encouraged and management of access highlighted in the site management plans. This doesn't just mean through public rights of way or permissive paths but all the other activities or uses that a site may be used for. There are sometime conflicts between uses of and priorities of a site; this means managing access rather than restricting and making the most of the flexibility of permissive access. Although Calderdale Council can only do this in their own woodlands they should encourage other woodland landowners to adopt the same approach.

The Council could also look at further using some sites for specific recreational activities, for example rock climbing, orienteering, mountain biking, drama or art.

Several popular woodlands have literature available highlighting self guided routes although there is scope to produce a lot more, particularly with regard to mountain bikes and wheelchair access. A recent consultation exercise with the Calderdale Council Talkback panel focussed on Rights of Way – some 37.6% of respondents said that they would like to see more information available about where to walk, ride or cycle. Information needs to be improved about accessibility of sites with regular consultation with Calderdale Disability Partnership. Consideration should be given to the provision of picnic areas, natural play areas and 'resting' points. There is a direct link here with the 2017 Calderdale Cycling Strategy.

Priority should be given to maintenance of promoted recreational routes such as the Calderdale Way, Brighouse Boundary Walk, Todmorden Centenary Way, Pennine Way, Pennine Bridleway and Mary Townely Loop, village walks and Walkers are Welcome routes where they access woodlands.

Access as integral part of
management plans.
Compile information on
accessibility to woodlands.
Look into the use of QR codes on
signage
Adopt access standards to
ensure everyone has reasonable
access to woodland – Nobody
should live more than 500 metres
from accessible

Key Actions

woodland of no less than 2 hectares. Furthermore, there should also be at least one area of
accessible
woodland of no less than 20
hectares within4 kilometres of
people's homes.
(The Woodland Trust)

19. Culture and Heritage

Calderdale has a rich cultural heritage and the landscape has inspired authors, artists, photographers and poets throughout the years. We want to make sure this continues in the future and our heritage is celebrated in the present. Where possible, interpretation of woodlands should reflect the importance of their work.

Calderdale woodlands are full of archaeology from charcoal burning platforms to relics of the industrial past. We know little about the archaeology of our woodlands and it is important that nothing is done that could be detrimental to the underlying archaeology or built remains without consultation with experts in the field who can give advice as to the best way to carry out work which could affect archaeological remains. Historical and archaeological features need to form part of site management plans and in some cases could provide the basis for funding applications.

Interpretation should also reflect the many traditional skills that are connected with local woods such as clog sole making, charcoal burning and coppicing. Training opportunities should be provided where possible to ensure the survival of these traditional skills.

Key Actions

Archaeology to form part of site	When undertaking work in woodlands
management plans and relevant	not cause knowing harm or damage
organisations are involved in plans.	to archaeological or historical sites
Include cultural and heritage as part	Continue to support and promote the
of the site interpretation and where	Pennine Prospects Woodland
appropriate maximise funding to	Heritage project
conserve the site.	
Review path networks to limit	Ensure woodland access is
disturbance and avoid felling of trees	included in the Rights of Way
that are of a high value	improvement plan review 2017

20. Natural Flood Management

The value of trees and woodlands in flood alleviation is now being recognised at a national level

https://www.gov.uk/government/publications/calderdale-flood-actionplan Natural flood management defined as the restoration, alteration, or use of landscape features can reduce flood risk. This may include "soft-engineering", i.e. using natural materials, such as soil. In 2007 the "Pitt Review" noted the potential of NFM recommending "greater working with natural processes". NFM can reduce erosion and benefit water quality, carbon storage & biodiversity. These multiple benefits are sometimes more valuable than the reduction in flood risk and often open up greater funding opportunities. Land-owners and communities collaboration will be key part of NFM. Long-term funding measures or incentives, and better use of local knowledge, will also be important

Another benefit of woodland is the ability to protect soil from disturbance and improve soil structure due to greater inputs of organic matter and the action of tree roots. These conditions enhance soil infiltration and water storage capacity thereby reducing surface run-off and delaying the passage of rainwater to streams and rivers. The benefit for flood mitigation is likely to be greatest where woodland replaces more damaging land uses on sensitive soils that are likely to promote rapid run-off due to soil sealing and compaction.

An analysis and modelling of where new woodland would be most effective at reducing surface run-off will need to be made based on an assessment of the hydrological properties of the soil, the topography, the connectivity between hill slopes and watercourses, and the impact of current land management on erosion.Various constraints mean that there is limited scope for planting sizeable areas of floodplain woodland in the catchments of the River Calder, but Clough woodland planting schemes should be investigated.

Ensure recognition of the value of
street trees to flood alleviation and
natural flood management
Ensure trees and woodlands are
recognised as a key part of blue
green infrastructure
Investigate Manchester City of Trees
approach to planting and the
associated benefit for SUDS

Key Actions

21.Woodland Creation and tree planting 21.1.Street/Urban Tree Planting

Tree planting is a very important integral element of the councils overall tree policy .Due to the long-term approach required for trees it is essential that action for tree planting whether replacement and or new, is co-ordinated within a shared responsibility for the well- being of all our trees in Calderdale whether they are publicly or privately owned. Street/Urban tree planting should compliment and reinforce other aspects of the overall tree policy and as such the following objectives should be implemented through the co-ordinated actions of a wide range of organisations, partners and with the

support of the general public. Key to this is where funding allows tree planting to take place.

Undertake a thorough site appraisal before carrying out tree planting	Replace where possible, all trees lost where funds allow.
Plant species appropriate to the conditions and character of the site – utilise Right Tree Right Place principles	Attempt to plant two trees for each tree lost to obtain a net increase in the boroughs tree population where funds allow
Plant a diverse range of species.	Monitor the success of newly planted trees.
Manage newly planted trees through best technical practices.	Encourage community involvement.
Provide or encourage the steady expansion of tree cover in Calderdale.	Increase awareness via The Tree Council's Seed Collecting Month and Trees Love Care campaigns.
Identify areas suitable for tree planting.	Endeavour to plant and maintain sufficient trees to sustain and, where possible, enhance the area concerned.
Identify and protect potential street tree planting sites for the future.	Make full use of roundabouts, embankments and wide grass verges adjacent to roads for planting.
Areas of tree cover or green space to be included in new developments as a matter of course	Identify more planting sites for larger trees.
Only select suitable trees for specific sites and only obtain good quality nursery stock and adhering to biosecurity practices	Use best practices and best techniques when handling trees.
Regularly inspect newly planted trees.	Maintain and water newly planted trees as appropriately required

21.1.2Key Principles for CMBC Urban/Street tree planting

Calderdale MBC will take into account the following when planting in streets and narrow verges:-

- i) Do not plant in front of main aspect windows
- ii) Do not plant fruiting varieties
- iii) Do not plant trees that easily attract aphids
- iv) Generally select trees with small crowns that grow vertically and straight such as conical
- v) Select trees with non-aggressive root systems

The above will be applied to CMBC tree planting on any Council owned land.

21.2.Woodland planting/creation

In recent years, Calderdale Council, with the Million Trees in the 1990s (over 130ha of woodland created over 84sites) and other organisations such as Treesponsibility <u>http://www.treesponsibility.com/</u> have planted areas of new

woodland throughout the borough to provide more woodland. These woodlands need to be actively managed if we are not to repeat the current problems of standard aged, shady woodlands.

Whilst much of Calderdale appears heavily wooded – due to the woodlands being predominantly on the steep scarp slopes of the river valleys - the woodland cover figure of 3.8%, (1400 ha)compares poorly with the England average of 10%.

The Calderdale figure is highly influence by the presence of other significant habitats such as open moorland and grassland, agricultural land, more dense urban areas in the east of the borough and this will need to be considered and conserved when looking to set any targets on woodland cover and in mapping any potential woodland creation areas

Priorities for new woodland creation in Calderdale should be stated and mapped utilising existing data from the Forestry Commission and a previous study carried out for Calderdale by the Institute of Terrestrial Ecology (Forestry in Calderdale 1986) as well as NFM modelling data, Clough woodland guiding principles, Woodlands for Water and UKWAS.

Focus for woodland creation in Calderdale should be wet woodland, flood alleviation, linking and extending ancient woodlands, creating 'buffer' zones, wildlife corridors / green infrastructure

Utilise current national targets for	Ensure good practice followed for
woodland and tree planting to look at	woodland creation and tree planting
target setting for Calderdale	in line with local and regional priorities
Utilise Clough woodlands guiding	Utilise the Woodlands for Water
principles and local assessment	opportunity mapping and localised
criteria for new woodland creation	priority mapping to identify key sites
schemes	for woodland planting
Target woodland creation in the	Map out opportunities for linking,
priority catchments and sub-	buffering, ancient woodland sites and
catchments as identified by the	habitat networks - Knowing what we
Environment Agency	have - mapping and surveying
	Calderdale woodlands
Work with the South Pennines	Investigate Manchester City of Trees
Facilitation fund on targeting	approach to planting and the
woodland creation with local	associated benefit for SUDS
landowners	

Key Actions

22. Local Businesses

Local businesses and private tree owners will be approached for sponsorship in return for receiving good publicity and free inspections carried out on their own tree stock.

Key Actions

Promote good woodland	Investigate funding models for trees inc.
management with local	business donations for tree replacement
businesses	

Raise awareness of private	Source revenue from private and public areas
tree owners with regards to	for annual tree planting
the value to the borough of	
their own trees	

23. Recycling/Composting

Tree waste from all Council arboricultural and forestry works is 100% recycled. All cord and branch wood up to 10" diameter is processed through the services own woodchippers and the woodchip has many uses including mulch for usable compost; weed suppressant for shrubs/borders; footpaths in woodlands and other schemes; allotments; horse riding schools; bowling green edges, etc.

All other timber over 10" is stored throughout Calderdale whereupon every four or five years a tub grinder (specialist industrial high tech machine) is hired in to grind the trees etc into mulch.

Whilst supplying free mulch/woodchip to community groups and charities we also offer it as a saleable commodity to the general public and businesses. Large trunks and cord wood are also offered for sale chiefly as fuel for wood burning stoves etc. Review the councils timber values and potential for utilisation of 'tree by-products' for energy production

24. Action Plan

An Action plan will be attached to the end of this document. This will collate the detailed key actions in specific sections.

The action plan aims to capture the key concerns of local residents and organisations that attended the sessions in Feb 2017 and comments received from this consultation. These are required to enable us to deliver the aims set out in section 4. From the action plan we can assess priorities, draw up programmes of action, monitor the implementation of the policy and keep abreast with current developments and national initiatives.

Many of the actions will only be fully achieved by a partnership approach, and it is recognised that some are aspirational in nature. Some of the actions are broad and it is recognised that many will necessitate further action plans underneath them to bring them to fruition. It should also be noted that this a working document so partners will be added to actions as appropriate.

This will hopefully demonstrate to elected members, cabinet and committees of the need to have adequate revenue budget funding for tree planting and services to deliver the strategy, to ensure the boroughs existing trees, woodlands and landscape infrastructure can be effectively maintained, protected, managed, renewed and expanded.

25. Monitor/Review Process

The Strategy should be monitored on an annual basis and reviewed every 5 years, with annual updates on progress to ensure the aims and objectives are being met.

The review process will include the following:-

- Performance monitoring of the action plans and policies once implemented.
- Feedback from internal and external sources
- Changes in legislation and or council policy
- Changes in the boroughs environment

26. Recommendations

Calderdale M.B.C. accept this document and the Tree management policies contained within it as a strategic approach to trees and woodlands, which will deliver its aims, objectives and visions

27. Conclusions

Calderdale M.B.C is firmly committed to maintaining and enhancing its trees and woodlands as a vital part of the boroughs environment and working in partnership across the borough to achieve to protect, manage and improve a sustainable tree and woodland asset which is of maximum benefit to the economy, communities and the environment of Calderdale.

There needs to be a consistent approach to trees and woodland management and Calderdale M.B.C. recognises that future decades are likely to be challenging for the effective maintenance and flexible management of its trees and woodlands and is therefore resolved to adapt flexible measures to meet any threats posed to its trees and woodlands.