



RURAL CITY OF
WANGARATTA

Tree Management Plan

2018-2022

Rural City of Wangaratta

This Tree Management Plan was endorsed at the Council Meeting on 20th February 2018 for public exhibition, with the following Resolution:

That Council:

1. *Endorses the draft Tree Management Plan for public exhibition, and places a notice to this effect in the local newspaper;*
2. *Places the draft TMP on public display for a period of 28 days, during which time public submissions are invited;*
3. *If submissions are received:*
 - a) *reviews a further report at the conclusion of the public display period, detailing the submissions received, and recommended changes to the TMP;*
 - b) *Reviews and considers adopting the Draft Tree Management Plan at the Ordinary Council Meeting on 17 April 2018, taking into consideration all submissions made.*
4. *If no submissions are received, adopts the draft Tree Management Plan without further resolution of Council.*
(Moved: Councillor D Fuller/Councillor H Benton)

Submissions closed 23rd March 2018. No public submissions were received.

Tree Management Plan 2018-2022

Contents

Executive Summary.....	4
Introduction	5
Benefits of trees.....	5
Purpose of this TMP.....	6
Scope.....	6
Background	8
Current Tree Population	8
Investment	8
Stakeholders	9
Relevant Legislation	10
Demarcation and Responsibility Areas.....	11
Consent to Undertake Works on Council Trees.....	12
Tree Risk Management	13
Tree Risk Management procedures.....	13
Proactive Inspection Types	14
Reactive Inspection Types.....	15
Emergency works/immediate hazard	17
Tree Removal	18
Guidelines for removals	18
Tree Removal Procedures	20
Costs of tree removal.....	20
Notification of removals	21
Tree Valuation.....	23
Tree replacement costs.....	23
Tree Planting	24
Tree selection.....	24
Tree diversity	24
Planting Programs.....	25
Tree Pruning.....	28
Purpose of pruning.....	28
Pruning Clearances.....	29
Notification of Pruning.....	29
Tree Root Management.....	30

Tree root issue mitigation.....	30
Pest, disease and weed management	31
Tree Protection	32
Guidelines for protection.....	32
Damage to trees from construction.....	32
Compensation	32
Management of Significant and Veteran trees.....	33
Identification and Protection of Significant and Veteran trees	33
Nomination for a Significant Tree	34
Reinstatement of avenues	34
Community Engagement	35
Council Employees and Appointed Contractors	36
Tree Management Plan Review	37
Tree Data Management	37
Reporting.....	37
Tree Management budget review	37
Exceptional Circumstances	37
Process for Suspension and Reactivation of the TMP	38
Amendment of the TMP	38
Consultation Process.....	38

Executive Summary

The many large and beautiful street and park trees that grace both Wangaratta and its surrounding townships contribute towards the Rural City of Wangaratta's vision as *'the ultimate in liveability'*. In order to provide a greener future for the community both now, and for generations to come, it is important to have a plan in place to preserve and enhance these streetscapes and to minimise risk.

Development of this Tree Management Plan was identified as a required action in the *2016-2020 Tree Management Strategy*. This plan sets out the guiding principles to best achieve the objectives of the Strategy.

These objectives are to:

- Protect:** Existing urban trees, parks, gardens and reserves, and significant heritage trees identified for cultural and historical reasons;
- Maintain:** Existing trees, their visual amenity and qualities;
- Enhance:** Tree quality for new subdivisions, streets and parks, and the benefits provided by trees for the community; and
- Minimise:** Damage and risk associated with Council owned trees, site specific conflicts, and the spread of pests and disease.

The Tree Management Plan achieves these objectives by identifying and clearly defining:

- Trees that Council are and are not responsible for;
- Proactive and reactive inspection schedules;
- Reactive response times;
- The recognition and management of Council's Significant Trees;
- Expectations for tree protection, and compensation for damage and unauthorised works;
- Guidelines for tree removal, planting, pruning and root management.

By implementing the procedures and guidelines in this Tree Management Plan, it is anticipated that the plan will provide positive direction for further development of Councils tree management practices.



Introduction

Trees have come to be an integral and important part of the urban environment. As more research is conducted in the fields of urban forestry and arboriculture, the benefits of trees to the people living in built-up areas, and to the general environment is gaining wider recognition. With these benefits, some risks and conflicts with growing trees in such close proximity to people and infrastructure need to be acknowledged and managed. With the development of this Tree Management Plan, Council aims to minimise those risks while maximising the positive aspects of a green city.

Benefits of trees

It is often understood that trees within urban areas offer many aesthetic rewards such as shade, canopy, fruit, flowers and a sense of place. Whilst these are excellent reasons for maintaining trees in towns, the real benefits extend far beyond aesthetics. Trees offer many environmental, social and economic benefits to a community for little comparative investment.

Benefits include;

Environmental

- Trees reduce air temperature by blocking sunlight. Further cooling occurs through the process of evapotranspiration (the evaporation of water from the leaves surface);
- The shading of hard surfaces, such as paths, driveways and roads reduces heat glare and the resulting urban heat island effect. It may also extend the useable life of the surface;
- Trees in leaf can decrease wind speed, reducing the impact of wind on buildings, and the loss of internal heating and cooling;
- Well placed trees can absorb noise, act as a sound barrier, and can screen undesired views;
- The foliage of trees can trap airborne dust and particles, essentially acting as an air filter;
- Trees contribute to the local ecosystem, providing food and habitat for wildlife;
- Trees absorb carbon dioxide and other harmful gasses and generate oxygen for release;
- Trees minimise soil erosion by slowing surface water runoff, reducing the accumulation of sediment in creeks and rivers.

Social

- Trees encourage relaxation and a sense of wellbeing;
- Trees can define a space and provide privacy and security;
- Long lived trees provide a link between generations, and can be considered living memorials;
- Greener neighbourhoods tend to have less incidence of violence and vandalism than treeless areas;
- Hospital patients have been shown to recover more quickly from surgery when their room has a view of trees. They also have fewer complaints, require less painkillers, and leave hospital sooner;
- Documented studies have shown that exposure to nature can result in slowed heartbeats, lower blood pressure and more relaxed brain wave patterns;
- Tree lined parks and paths encourage outdoor activities, making outdoor areas more liveable, and improving the likelihood of regular exercise by residents.

Economic

- Strategically placed trees can cut energy costs for cooling, due to the shade they provide;
- Tree lined streets can increase business traffic in retail precincts and encourage customers to spend more time shopping;
- Green, tree filled suburbs can raise the value of real estate by up to 15% when comparing the sale price of an identical property in a non-tree lined neighbourhood; Properties also sell faster;
- Trees reduce the need for additional infrastructure to filter air, water, pollution and noise;
- Trees themselves increase in value as they grow.

Purpose of this TMP

The purpose of this Tree Management Plan is to:

- Establish a maintenance management system for tree assets;
- Outline responsibilities and demarcation in regards to tree management;
- Identify priority risk inspection areas;
- Establish frequency of proactive inspections;
- Establish reactive response timeframes; and
- Identify acceptable mitigation actions.

The Tree Management Plan provides a link between Councils strategic objectives and on-the-ground operational activities. Guidance is provided for tree planting, protection and maintenance.

It must be recognised that trees are living organisms that grow and change. Individual trees can respond differently to their growing environment, and this must be taken into consideration when determining the appropriate management requirements for each issue as it arises. This management plan aims to provide initial guidance and consistency when making these decisions.

Scope

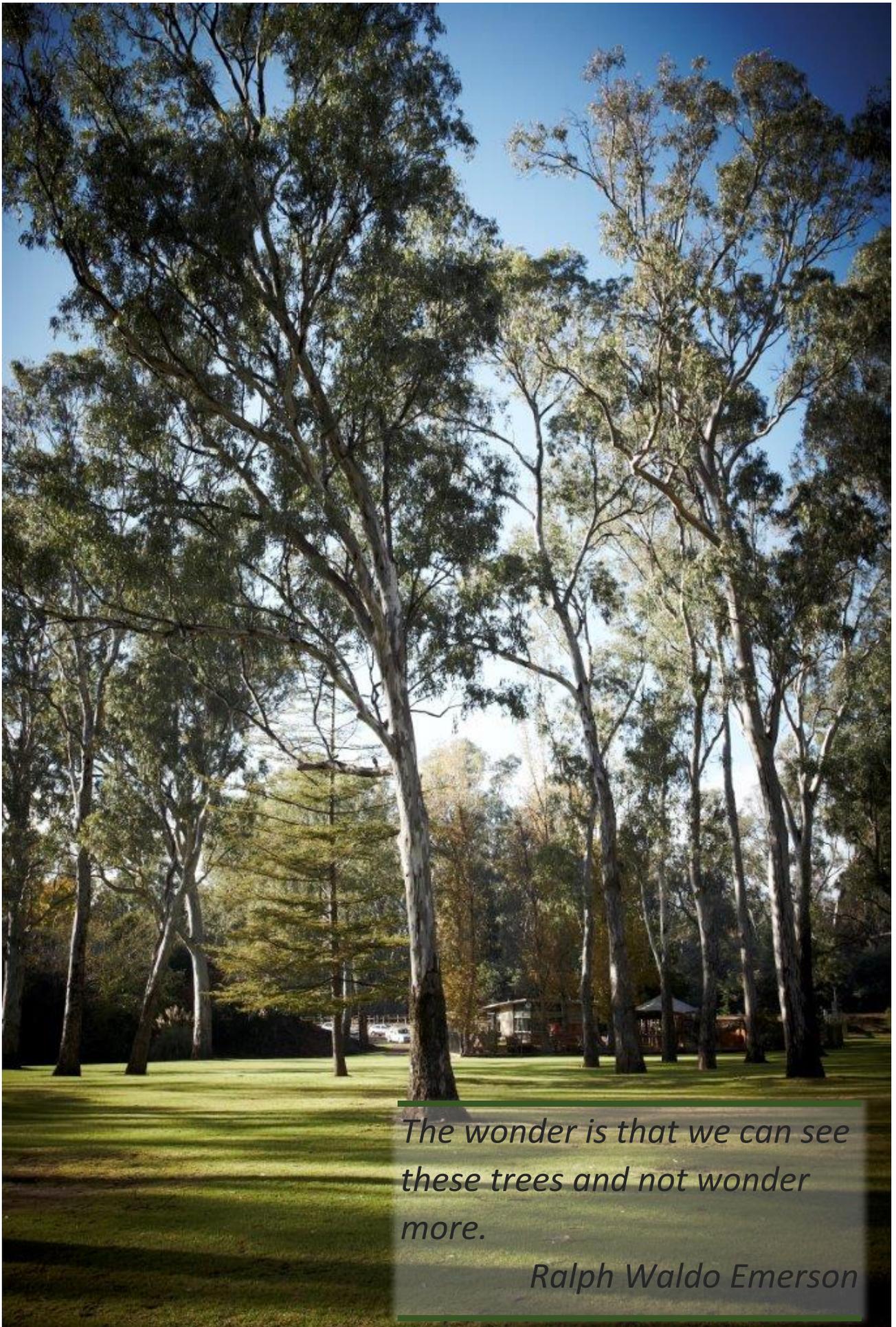
This Management Plan applies to all street and park trees in urban areas of the municipality of the Rural City of Wangaratta. 'Urban trees' is a broad term that covers trees growing within the boundary of a town or city. The Rural City of Wangaratta has many locations in which trees would be considered 'urban', although some situations are managed differently, depending on context.

This management plan focuses on the management of trees in;

- Streets;
- Parks;
- Recreation reserves;
- Open spaces and other Council managed sites, such as the saleyards, sports grounds, arts complex, kindergartens and child care facilities.

The management of rural roadside trees and trees along rural and urban waterways are not addressed under this Tree Management Plan. For management of these areas, please refer to the following documents:

- *Rural Roadside Conservation Management Plan (2014);*
- *Wangaratta Urban Waterway Action Plan (2004).*



*The wonder is that we can see
these trees and not wonder
more.*

Ralph Waldo Emerson

Background

Despite the many benefits and advantages of growing trees in an urban environment, ensuring trees survive and continue to grow can be a challenge. The increase of urbanisation and the proliferation of impermeable surfaces decreases the number of potential planting spaces, and increases the environmental stresses placed on street trees. This can on occasion result in conflicts between roots and infrastructure, and requires trees to conform to space restrictions through regular pruning cycles. Council's responsibility to rectify these issues often requires innovation and creative thinking, resulting in the delivery of solutions that are favourable to the trees, infrastructure and the general community.

Current Tree Population

In May 2017, data for 13,925 public trees was collected in urban Wangaratta and used to update Council's current Asset Management System. Data collection did not include trees on private property, trees in rural towns and roadsides, or trees located along creeks and rivers or in natural conservations areas.

Currently there are over 357 different tree species and varieties planted in Wangaratta's parks and streets. The most common species over-all being River Red Gum (*Eucalyptus camaldulensis*) which is locally indigenous, Bottlebrush (*Callistemon viminalis*) and Queensland Brush-Box (*Lophostemon confertus*). Of the remaining species, over 55% are native to Australia.

Over 3,000 vacant planting locations were also identified during the May 2017 survey. This indicates that there is substantial opportunity to plant more trees, and continue to improve upon the potential benefits. This is particularly important for urban areas with a low proportion of young trees, such as residential areas south of Vincent Rd, and all industrial areas.

Investment

The long-term goal of urban tree management is sustainability; the maintenance of ecological, social and economic functions for the duration of a trees useful life. An estimated 82.9% of Council trees have a life expectancy of over 50 years. To allow these trees to mature and fully deliver on their possible benefits will require both financial and social commitment.

Maximum benefits are derived from healthy, structurally sound trees, planted in locations that support their development. By selecting long lived trees, planting them in the right place, and investing in continued maintenance, Council can maximise the benefits of tree planting while minimising the overall costs associated throughout the life span of an individual tree.



Stakeholders

Council consults with many different stakeholders and organisations when determining the appropriate level of management for trees within the municipality. The services provided in maintaining trees and managing their associated risks may be dependent on;

- tree species, size, age and/or location;
- the significance of the tree;
- community expectations;
- land owner or manager;
- agreements between agencies such as Department of Environment, Land, Water and Planning (DELWP) or VicRoads; and
- legislative requirements.

Key Stakeholders

Council's key stakeholders with respect to managing tree assets are summarised in the table below:

Table 1: Key Stakeholders

STAKEHOLDER	ROLE OF STAKEHOLDER
Rural City of Wangaratta	Custodians of the tree asset (as defined by this Plan)
Federal and State Government Agencies	Standards and regulation development and implementation
Council Members	Community representatives
Council Staff	Operational and administration providers
Government Authorities (DELWP, VicRoads)	Land owners or agreements for land maintenance and administration
Service Authorities	Owner of assets within the road reserve
Community	Road and path users (including drivers and passengers, motorcyclists, cyclists and pedestrians), residents and ratepayers of the Rural City of Wangaratta
Contractors	Those undertaking work on behalf of Council

Relevant Legislation

In regards to tree management and maintenance, Council is required to meet many legislative requirements including Australian and State legislation and State regulations.

Legislation which impacts on the management of tree assets is outlined in Table 2.

Table 2: Relevant Legislation

REGULATION	
Flora and Fauna Act 1988	Council's management of remnant trees must guarantee that Victoria's flora and fauna can survive in accordance with this legislation
Planning and Environment Act 1987	Council's management of environmental, heritage (section 21.10) and native vegetation (section 52.17) needs to abide by the Municipal Strategic Statement (MSS) as part of the Wangaratta Planning Scheme legislated under this act
Road Management Act 2004	Management of trees and vegetation near roads is undertaken in accordance with this legislation
Electrical Safety Act and the Electricity Safety Act (Electric Line Clearance) Regulations 2015	Council must ensure that the risk of vegetation interfering with urban electrical lines is minimised and must complete an annual Electric Line Clearance Management Plan to demonstrate compliance
Country Fire Authority Act 1958	Tree management activities must abide by this Act and activities which could ignite a fire must not be undertaken during adverse weather conditions.
Agricultural and Veterinary Chemicals (Control of Use) Act 1992	Use of chemicals must abide by this legislation
Occupational Health and Safety Act 2004	Provision of a safe workplace
Heritage Act 1995	Provides protection and conservation of places and objects of cultural heritage significance and their registration. This may include trees.
STANDARD	
Australian Standard for Pruning of Amenity Trees AS 4373-2007	Provides guidance for Council's pruning practices
Australian Standard for the Protection of Trees on Development Sites AS 4970-2009	Recommended guidance for protecting trees throughout the construction process
Australian Standard for Tree Stock for Landscape Use AS 2303-2015	Provides guidance for the selection of best quality tree stock

Demarcation and Responsibility Areas

Responsibility for the monitoring and maintenance of a tree on public land will be dependent upon the trees location and in some cases the species. Council, VicRoads, the Department of Environment, Land, Water and Planning (DELWP) and private land owners all have a duty of care to ensure that the trees under their management are adequately managed for risk.

Rural City of Wangaratta

Council is responsible for maintaining trees in roadsides and nature strips in urban areas. This is defined by the *Road Management Act 2004* as an area of road reserve where there is a speed limit of 60 kilometres per hour or less (not including temporary speed changes).

Street Trees

Trees actively planted by Council within nature-strip reserves or along urban roadsides are considered 'Street trees'. Currently, there are approximately 10,200 street trees recorded within the City of Wangaratta. It is generally expected that there should be *at least* one street tree per property frontage. Where possible, street trees are selected to best compliment and contribute to the area in which they are planted.

Park and Garden Trees

Wangaratta and the surrounding towns have many public open spaces that are used in a variety of ways. The primary use of each open space will assist in determining the planting and maintenance schedules for trees in that space. Trees in Council managed facilities, such as child care centres, will be managed in a similar way to trees in open spaces.

VicRoads

According to the *Road Management Act 2004* and *Operational Responsibility for Public Roads Code of Practice*, unless otherwise agreed, where VicRoads are responsible for a road outside the urban area, they are also responsible for managing trees in these road reserves.

DELWP

The Department of Environment, Land, Water and Planning (DELWP) plays a key role in the conservation, protection and management of native flora and fauna on both public and private land. Any applications for the removal, destruction or lopping of native trees must first be referred to DELWP, unless an exemption applies.

Private Trees

Council is not responsible for undertaking works on private trees within the municipality. It is strongly recommended that a qualified and experienced tree worker is engaged to undertake any pruning or removal of private trees.

Should trees on private property require pruning or removal, always contact Council prior to commencing work. There may be certain Council Overlays or State Regulations that apply to the vegetation on your property (see *Tree Removal*).

Where private trees are obstructing, interfering with, or compromising the safe and convenient use of a road or path, the responsible person will be requested by Council to remedy the issue. Should remedial work not occur, either a formal Caution or Notice to Comply may be issued, as per *Local Law (No. 1 of 2014, Community Amenity (Amendment))*.

Consent to Undertake Works on Council Trees

The removal or pruning of Council managed trees, or the planting of trees on Council managed land should not be undertaken without prior consent. Contact Council should any works be required.

Any person considering undertaking works in a road reserve must obtain consent from the Coordinating Road Authority (Council or VicRoads) unless they are exempt under the *Road Management (Works & Infrastructure) Regulations 2015*. This includes the planting of trees or any alteration to the nature-strip. Advice and application forms for consent to perform works in a municipal road reserve are available from the Rural City of Wangaratta Offices.



Tree Risk Management

Risk assessment is the overall process of identification, analysis and evaluation of risk. Through conducting routine tree inspections, it is anticipated that any risks presented by Council's urban trees can effectively be reduced to a tolerable level as defined under the Quantified Tree Risk Assessment (See *QTRA*) system.

To efficiently allocate budget and resources amongst Wangaratta's vast urban tree population, a system has been developed to identify and prioritise trees that present a higher level of risk to the public. While it is not reasonable to avoid all risk associated with trees, it is possible to have a proactive system that identifies and mitigates potential issues, rather than a reactive system that attends to incidents as they occur.

Tree Risk Management procedures

A tree can be considered hazardous if it meets two criteria;

- 1) A defect that will likely result in a failure; and
- 2) The existence of a target. The target being people or property that are likely to be harmed or damaged by a failed or collapsed tree, or branch.

The initial stage of developing an appropriate proactive tree inspection schedule is to determine the function and frequency of usage of each area. Usage frequency ranges from high use parks and public places to low use open areas with limited access. Each area is allocated a Hazard Zone Category, which defines the minimum inspection frequency and method for all Council trees in this area. There may be individual trees, or groups of trees in a Hazard Zone Category area that are inspected more often, due to the individual characteristics of the tree or the presence of a specific target in the area.

Should a tree with a defect of any type (*Appendix A- Tree Defects*) be identified during the scheduled inspections, in a location where a target exists, the assessor will calculate the individual trees 'Risk of Harm' using the QTRA methodology. The calculated 'Risk of Harm' rating will assist in determining the most appropriate tree management actions required to reduce the level of risk, and to prioritise any works required.

QTRA

Quantified Tree Risk Management (QTRA), applies established and accepted risk management principles to tree safety in accordance with ISO 31000:2009, *Risk management- Principles and guidelines*, published by national standards agencies. By quantifying the Risk of Harm as a probability, QTRA enables Council to manage the risk from tree failure to widely accepted risk thresholds.

Using the QTRA approach, the land-use (people and property) upon which trees could fail is assessed and quantified first. This enables Council to determine whether an inspection of the trees is required, and also the degree of rigour which should be applied to the inspection. Where necessary, the tree or branch is then considered in terms of both size (potential impact) and probability of failure. Values derived from the assessment of these three components are combined to calculate the risk of harm as a probability, which is then compared to advisory levels of risk acceptability.

By taking a QTRA approach to tree risk, Council intends to spend less resources on assessing and managing tree risk, whilst maximising the benefits the tree population provides to the community.

This QTRA Risk of Harm probability will be applied to any tree presenting a defect upon inspection.

Tree Risk assessment methodology

Council undertakes several types of inspections for specific purposes. Inspections are generally categorised as either proactive, of which there are several types, or reactive.

Proactive Inspections

Proactive inspections are routine inspections undertaken by qualified works personnel, resulting in the documentation of required actions. Tree inspections are undertaken to identify defects, provide early detection of potential defects, monitor the effectiveness of previous works, and to ensure trees comply with Councils road and electric line clearance responsibilities. Proactive inspections do not negate requests for works from the public.

Reactive Inspections

Reactive inspections can be initiated through internal Works Orders and Councils Customer Request Management System (CRMS). Tree issues identified from requests will be inspected and remedial works will be prioritised according to the calculated level of risk.

Proactive Inspection Types

Scheduled inspections

All proactive inspections are scheduled. The timeframe between each inspection is determined by the Hazard Category of the tree, or the purpose of the inspection.

Electric Line Clearance

As per the *Electricity Safety (Electric Line Clearance) Regulations 2015* and associated *Code of Practice for Electric Line Clearance*, the Rural City of Wangaratta prepares an annual Electric Line Clearance Management Plan. Under this Plan, Council has committed to inspecting trees in the vicinity of powerlines, and all 'hazard' trees identified near powerlines, within a declared area, twice yearly. This is to ensure our compliance with the *Electricity Safety Act 1998*. This plan is available to view on Council's website.

Shared paths

Council maintains approximately 50 km's of shared or recreational paths, including sections of the 'Murray to the Mountains' Rail Trail. Many of these paths are located in parklands along creeks and rivers, with a moderate density of natural tree cover. These areas are often important refuges for native fauna, and minimal tree pruning or removal is always the preferred option. For these reasons a drive-by inspection of the trees will be conducted along these paths every 24 months (2 years), in conjunction with the annual path inspections. The primary aim of these inspections will be to detect obvious tree defects over the path, such as hanging limbs or dead limbs, fallen trees and to maintain lines of sight and vegetation clearance over the paths.

(See Appendix A- Proactive Inspection Frequency)

Proactive Inspection Methodology

There are two main techniques for undertaking an initial proactive inspection;

Drive-by or windshield inspections involve trained staff visually examining trees for hazards whilst travelling at slow vehicle speeds. This method will be used on occasion as a supplemental inspection during 'off year' inspections for all trees, after storm or flood events, and for powerline audits. Any hazardous defects found in trees during a drive-by inspection will be followed up with a more in-depth walk-by inspection.

Walk by/ individual tree inspections are undertaken when scheduled for an individual tree. It involves conducting a 360 degree walk around each tree, assessing for defects. Walk-by inspections will involve a Visual Tree Assessment (VTA) from the ground.

Visual Tree Assessment – *Defect types*

Defects are considered the visible signs that a tree is failing, or has the potential for failure. In general, defects predispose a tree to fail at the location of the defect. There is a great variability of defects, and trees grow and adapt to compensate for issues in order to survive. This adaptation can often mask problems. Therefore, it is not possible to reasonably detect *all* defective trees. By conducting routine inspections, Council's aim is to detect a majority of defective trees, and to act on these within a timely manner.

A ground based visual inspection of each tree will include observations of visible roots, trunk and the canopy of each tree. Should defects or indicators of a potentially hazardous defect be detected, further investigation will be undertaken to determine the extent of the defect. A QTRA (See *QTRA*) rating will be provided for the tree to assist in the prioritisation of works, and a risk reduction strategy will be developed.

For a list of defects, see *Appendix A- Tree Defects*.

Reactive Inspection Types

Reactive inspections are primarily based on Council being notified of a potential issue by a member of the community. Members of the community who report a defect will be contacted within 2 working days to further clarify the extent of the issue. Depending on the information provided, the tree is to be assessed for action within 10 working days of notification. This inspection will be conducted by a suitably experienced Council staff member or contractor. Rectification of the defect will be prioritised based on the type of risk and the resultant QTRA rating (See *QTRA*).

Post Storm and Flood inspections

Drive-by inspections will be undertaken in areas affected by severe storm or flood. These inspections will occur prior to the opening to the public of any flood affected paths, parks or areas.

Reactive response times

Actions required as a result of proactive and reactive inspections will be completed within the following response times:

Table 3: Reactive response times

ACTION	HAZARD ZONE CATEGORIES				COMMENT	
	VERY HIGH	HIGH	MODERATE	LOW		
Initial contact following a customer request	2 working days				As per Council's "Our Community Promise"	
Initial inspection (reactive) following a customer request	2 working days		5 working days	10 working days		
Tree removal	Risk based					
Stump removal	Risk based		At the end of each month		Dependent upon contractor availability	
General pruning	Risk based					
Pruning for visual or other obstruction	Risk based	Link Road-1 month	Collector Road- 2 months	Access Road- 3 months;	As per Council's Road Management Plan <ul style="list-style-type: none"> - Limited Access Road- 4 months; - All paths- 6 months 	
Reactive powerline inspections	2 working days	5 working days	10 working days	Routine	Proactive inspections are twice a year	
Fallen tree/branch removal	2 working days		5 working days			
Tree root investigations	2 working days	5 working days	10 working days	20 working days		
Tree root mitigation works	Once it is determined that a Council tree is responsible for any alleged damage the nuisance will require rectification by Council				Within 3 months	
Pest and/or disease issues- Initial inspection	10 working days					
Stake/tie repair of new tree	10 working days				Alternatively, during routine watering/maintenance	
QTRA RISK CALCULATION	HAZARD ZONE CATEGORY				COMMENT	
	VERY HIGH	HIGH	MODERATE	LOW		
QTRA Risk of Harm	1/1- <1/1,000 -Emergency	As soon as possible				
	1/1,000- <1/10,000- High Risk	5 working days	10 working days	20 working days	30 working days	
	1/10,000- <1/500,000-	Action not required if risk is as low as reasonably practicable				

ACTION	HAZARD ZONE CATEGORIES				COMMENT
	VERY HIGH	HIGH	MODERATE	LOW	
Moderate Risk					
1/500,000- <1/1,000,000- Tolerable					<i>Action not required if risk is as low as reasonably practicable</i>
>1/1,000,000- Broadly acceptable					<i>Not action required</i>

In-depth investigations

In some instances further investigations may be required following the initial inspection. Further inspections may include:

- Aerial inspection of crown;
- Root investigations;
- Internal decay detection;
- Pest or disease identification; or
- Other specialised diagnostic tests.

This type of investigation will only be considered for large or Significant Trees, when a clear decision cannot be made using the available information, or where there may be objections to a Council management decision for the removal or retention of a tree.

Emergency works/immediate hazard

Trees reported as presenting an immediate risk of damage to people or property will be inspected by a Council Arborist as a priority. If a suitably qualified Council representative is unavailable, an external contractor will be engaged to undertake an assessment of the tree. The assessment will consider the target, tree species, health, height, defects, failure location, type of failure, and how the foreseeable local weather conditions may affect the current situation.

Should the tree be determined to pose an immediate hazard, Council will perform the necessary work to reduce the risk. Emergency work is exempt from regular notification guidelines (See *Notification of Removals*), although Council will make all efforts to notify affected persons prior to works occurring. A letter drop will be provided to residents in the immediate area to inform them of any tree removal, once the immediate hazard has been addressed.

In the case that the tree is considered to be Significant, the area directly affected by the risk will be isolated from access, where possible, to reduce the level of risk to potential targets. The area will remain as limited access until it is possible to determine the appropriate action to be taken.

Tree Removal

Trees are living organisms with finite lifespans, and eventual removal is inevitable. The additional stressors applied to trees growing in an urban environment can cause issues for both the tree and the surrounding area and can severely reduce the trees potential lifespan. These stressors include reduced growing area, repeated pruning or injury, restricted access to water, oxygen and nutrients, soil compaction due to the passage of vehicles and machinery, or pest and disease infestations. These issues often result in a reduction of tree health or vigour, stunted growth, damage to surrounding infrastructure and the loss of leaves, limbs and eventual tree death. In the interests of maintaining a consistent and healthy tree population for future generations, it is necessary to remove and replace trees that are reaching the end of their Useful Life Expectancy (ULE). Urban tree renewal may be facilitated by removing and replacing individual trees or all trees in a street. This is done to ensure the best long-term outcome for the community and overall streetscape.

Guidelines for removals

Tree removals will only be undertaken after other options for the safe and effective management of a tree (or tree related issue) have been considered and deemed impractical. Trees may require removal for a range of reasons.

General Removal Guidelines

To ensure consistency in tree management decision making, the following general guidelines are used to determine whether tree removal is warranted;

- The tree presents an unacceptable risk to people or property that cannot reasonably be minimised to a tolerable level;
- The tree is dead or close to death, is unlikely to recover, or has reached the end of its Useful Life Expectancy (ULE);
- Infrastructure works or repair required in the near vicinity of the tree would severely impact tree health or stability;
- The tree is recognised as a weed species;
- The tree is shown to be significantly contributing to damage of public or private infrastructure and there is no safe, viable, alternative remediation available;
- The tree is infected by a pest or disease, and the recommended treatment is removal;
- The tree is part of a replacement or renewal program;
- The tree is no longer suitable or appropriate for the location;
- The function of the tree is inappropriate for the location.

Requests for tree removal will be assessed by a suitably qualified person to determine if the above criteria are applicable. Any tree removed will be recorded and placed on a list for replacement as soon as funds are available, preferably within 2 years of removal.

Council will not undertake tree removals based purely on the following reasons;

- Falling leaves, bark, twigs, fruit, flowers or other natural debris;
- The presence of insects, including bees;
- Difficulty in establishing grass or gardens under the tree, or shading by the tree;
- Obstruction of vistas or solar panels;
- Perceived aesthetic concerns.

Allergies

In an instance when it is alleged that a tree may be the cause of an allergic reaction, medical testing will be required to determine if this is the case. It is unlikely that the removal of an individual tree would alleviate any allergy symptoms, nor the potential that a similar response may be caused by another plant species. Tree removal will only be considered if;

- Medical testing and a report from a specialist medical practitioner indicates that a particular tree species growing on Council managed land is the cause of the allergy and its removal will alleviate the issue; or
- Council’s Risk Management Officer determines an unacceptable risk; or
- The tree fulfils the criteria for the General Guidelines for Removal.

Infrastructure damage

Where it can be proven that a Council tree is contributing to infrastructure damage, both public and private, Council will endeavour to rectify the issue. Priority will be given to infrastructure modification, root pruning and root barrier installation. Where these methods will substantially compromise tree stability or the long-term health of the tree, removal may be considered. (See *Tree Root Management*)

Removals associated with improvements

On occasion, the works of Council, utility companies and other service provider companies or authorities will require the removal of street trees in nature strips to install or maintain existing infrastructure. Where an alternative route or technique cannot be utilised to retain the tree, or the works will compromise the health and stability of the tree, Council will endeavour to inform the residents in the immediate vicinity as per the *Notification of Removals*.

Unauthorised tree removal

Unauthorised removal of any Council owned and managed tree is not permitted. Trees on Council road reserves (nature-strips) are protected under the *Road Management (General) Regulations 2016* Part 5(16) 1f. Tree removals undertaken on Council land will only be completed by authorised people, with the appropriate qualifications, experience and insurances.

Compensation will be sought for trees removed, damaged, poisoned or destroyed without permission from Council. This includes trees removed for private works such as approved cross-overs or any type of unauthorised nature strip modification. This compensation will be calculated in accordance with Councils *Tree Valuation Method*.

When it is suspected that a tree has been intentionally poisoned or vandalised, the tree will be made safe, and a sign requesting information on the incident will be displayed asking for public information or reporting of the incident.

Tree Removal Procedures

Requests

Residents wanting to have a Council tree removed can place a request through Council's Customer Service team. The request will be entered into the Customer Request Management System (CRMS) and allocated to the appropriate staff member. (See *Appendix B- CRMS Flow Chart*).

Approval

All trees requested for removal will be inspected by a Council arborist to determine if they meet the *general removal guidelines*.

Where tree removal is not appropriate, the resident who placed the request will be contacted and informed of the decision. Should the resident insist on pursuing the removal, they will be issued with a standard letter of refusal. If the requester disagrees with this decision, they may follow the appeal process.

Appeals

Should there be an objection by a resident or group of residents to a tree management decision, a written letter addressing the Director of Infrastructure should be submitted to Council. This letter should clearly;

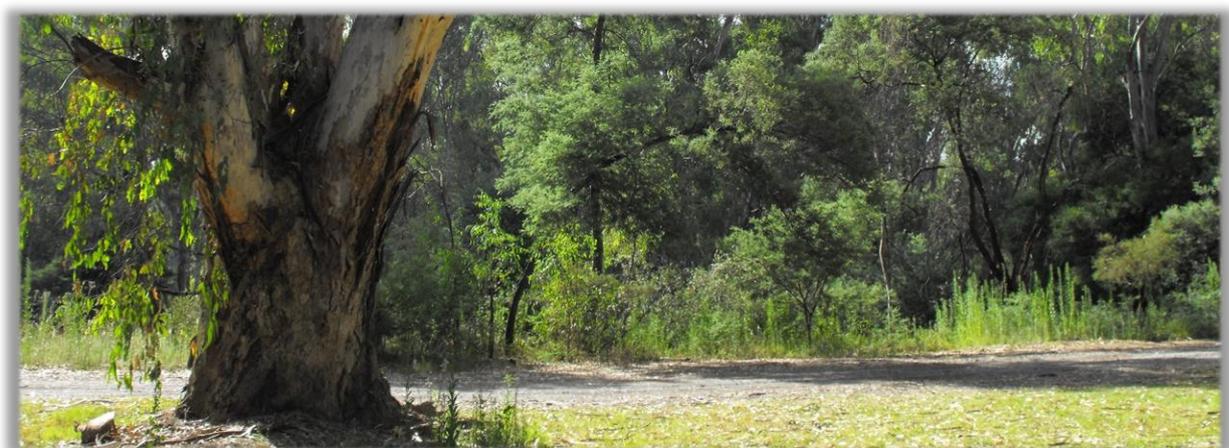
- Identify the tree or trees concerned;
- State the reason for the objection to the decision; and
- Detail who is making the objection and contact details.

(See *Appendix B-Tree Removal Flow-chart*)

Costs of tree removal

Costs for the removal of a tree that complies with the *General Guidelines* for removal will be borne by Council.

If through an appeals process, a healthy tree is to be removed for the benefit of a resident or developer (such as for the construction of a cross-over), all expenses will be charged to the resident. Expenses will be determined by Council, and will include the amenity cost of the tree to be removed, removal works, purchase of an advanced replacement tree, and maintenance of the replacement tree for an establishment period of two years (See *Tree Valuation*).



Notification of removals

Where the decision has been made to remove a tree, efforts to inform potentially affected community members will be undertaken. Written notification of removal is the preferred method of communication. If written communication is not possible, verbal notification may be made.

Non-Significant Trees- street and open space

A minimum of five (5) working days notification is required for nearby residents regarding proposed removal of trees over 2m in height.

- For single tree removals, a letter is sent to the residents located adjacent and opposite to the site of the tree or with a direct and clear line of sight to the tree;
- For removal of more than two trees in the same street block, or for removal of a single tree considered to be prominent in the surrounding area, the residents in the street extending one block either side of the tree will be informed;
- In the case of parkland trees, the appropriate ‘user groups’ will also be notified.

Notification is not required for residents in the following circumstances (unless the tree is otherwise determined as significant):

- If the tree is dead or dying (and is not considered to have habitat benefits);
- The tree is not more than 2 meters in height or spread; or
- Emergency works are required to make a site safe.

Significant trees

Further community consultation and notification will be required for the removal of trees listed on a Register or protected by an Overlay.

Notification will consist of;

- An announcement in the local paper no less than two weeks prior to the works being completed;
- The delivery of a letter to all near-by residents and to user-groups if the tree is located in a prominent location or a park;
- Where practical, notification will also be attached to the tree.

Any tree listed on a Register, including Wangaratta’s Significant Tree Register, will require an independent inspection and a written report to be provided by an external arborist prior to removal.

Notification of Significant tree removal will be undertaken by the Asset Officer- Arborist

Emergency works

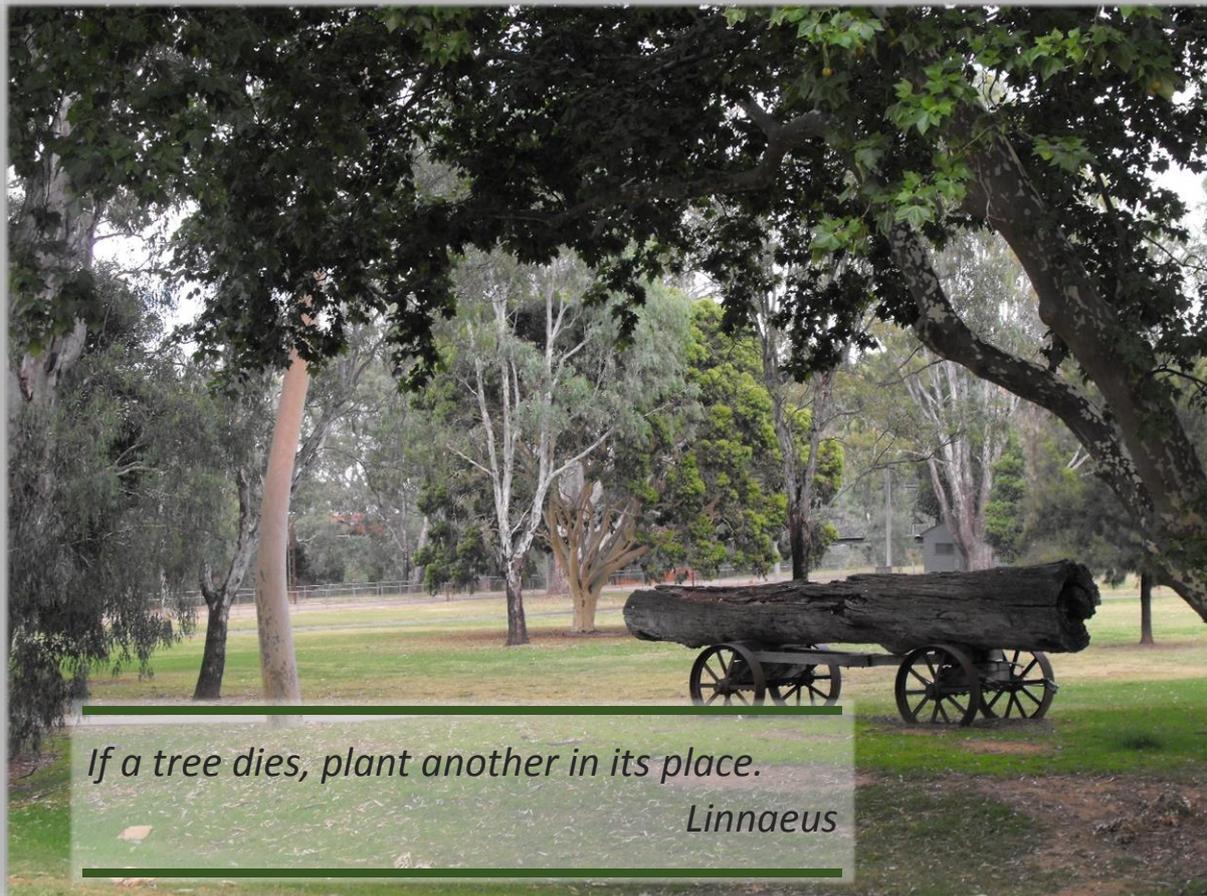
Where immediate removal is required for safety reasons, notification of works completed will be provided to the affected residents after the safety risk has been resolved.

Timber from removed trees

On occasion, timber may be placed in the Community Firewood Depots, located in Eldorado and Glenrowan. To collect wood from these locations a Rural City of Wangaratta Firewood Permit is required. Timber supply to these depots is likely green and not guaranteed. It is advisable to check what material is in the depot before purchasing a permit.

Alternatively, branches and leaves will be chipped and used as mulch for Council's parks and gardens.

Should the removal of a large or significant tree be required, there may be an opportunity to salvage timber for use by the community. Expressions of interest (EOI) will be requested for the use of salvaged timber, with a preference for the timber to be used to benefit the broader community. EOI's for the use of salvaged timber will be called for at the beginning of each financial year. Applicants will be placed on an offer list and will be contacted when suitable timber becomes available.



If a tree dies, plant another in its place.
Linnaeus

Tree Valuation

Providing a dollar value for individual trees may be required in some instances including the removal of a healthy tree for development or to gain compensation for the loss of a tree due to negligent work or vandalism. A replacement cost can be calculated equivalent to the value of the tree lost.

Tree replacement costs

Where a Council tree does not comply with the *General guidelines for Removal* and is approved for removal in relation to a development or through appeal, the associated cost will be paid by the property owner, developer or their representative *prior* to the removal. This charge will cover the value of the tree to be removed (initial tree cost, establishment and amenity), removal of the tree, and the cost of planting and establishing a replacement. Approval for tree removal will only be granted after all alternative options for tree retention have been investigated.

For trees with a Diameter at Breast Height (DBH) of 10 cm or less, a replacement cost will be charged. The purchase of replacement tree cost is representative of the current level of investment in the tree by Council, and the purchase price of a tree of similar size from the nursery.

Trees with a DBH greater than 10 cm will have their monetary value calculated using the Revised Burnley Method of tree valuation. This methodology will be used for the duration of the TMP unless an Australian Standard is developed and adopted. See *Appendix C- Tree Valuation Methodology*.

These recovery costs will be used to compensate Council for the loss of an asset, and to ensure that funds are available to secure a replacement tree. The costing for a replacement tree will be for a tree of equal size to the one removed. The replacement tree planted will be a standard 45Litre pot size. Any excess funds received through this process will be used to maintain and increase the future canopy potential of the area.



Tree Planting

Council focuses on improving tree species diversity, and the sound principles of planting “the right tree in the right place”. Careful tree selection and planting will assist in ensuring urban Wangaratta remains a pleasant and liveable place into the future, and is better able to cope with the challenges of drought and climate change.

Tree selection

It is important to remember that there is no such thing as the perfect street tree. Trees are living organisms with different features and tolerances that must be considered prior to planting. If it is deemed that a particular species is unsuitable for planting in one location that does not exclude planting the tree in an alternative location. The following are criteria Council considers when selecting trees to be planted;

Table 4: Tree Selection Features

FEATURE	ATTRIBUTE
Tree Features	<i>Habit, height, spread, limb strength, fruit, seed, flowers, possible allergens or poisonous parts, root invasiveness, pest and disease susceptibility, weediness, leaf retention/fall/ colour, ability to cope in an urban environment, longevity, water requirements</i>
Location	<i>Planting area, soil type, proximity to roads, paths and infrastructure, access for watering and maintenance, overhead and underground services, streetscape character, adopted masterplans, strategies or development plans, rainfall, climate and micro-climate of site</i>
Functional area use	<i>Park, garden, street, courtyard, picnic area, natural recreation, conservation</i>

An assessment of potential planting sites is undertaken before species selection to assist in determining the most suitable tree for the location.

In aiming to maintain species diversity across Wangaratta, new species or varieties are often selected for trial plantings. Potential species undergo a risk assessment to provide an indication of suitability for more wide spread plantings (See *Appendix C- New Tree Risk Assessment*).

Tree diversity

A lack of tree species diversity can leave the urban tree population vulnerable to threats from pests, disease and stress due to the effects of climate change. Selecting a wider range of tree species provides some resistance to potential insect infestations and disease spread. This minimises the potential for the loss of a large proportion of urban trees.

Provision of tree stock

Council uses the Australian Standard 2303:2015 Tree stock for landscape use as a guide when sourcing trees for planting. The objective of the Standard is to provide those who grow, specify or purchase tree stock for landscape use with a set of measures to identify quality trees, regardless of production method. Where possible, tree stock will be viewed prior to purchase to ensure they will meet these Standards.

Planting themes

Species selection lists are being developed for areas within Wangaratta. The aim of this is to enhance the aesthetics of the specific neighbourhood to be planted. These themes will consider the existing tree species, characteristics of local buildings, width of the road, planting space and any relevant Overlays for the area.

Planting in heritage areas will require that new and replacement trees complement existing avenues, whilst minimising some of the recognised issues presented by the current tree species.

Planting Programs

Proactively planting trees contributes to maintaining a sustainable canopy cover for Wangaratta into the future. There are several types of planting programs being developed, which are used to assist in prioritising the most efficient allocation of planting funds to provide the maximum impact.

Infill Planting

The infill planting program aims to fill vacant planting spaces in streets with established trees. If the species currently present is still deemed to be suitable, replacements will be of the same species and variety where available.

The objective of infill planting is to reinforce an existing tree theme in a street.

Renewal Planting

Renewal planting involves the planned removal and replacement of multiple trees throughout a streetscape. These works may cause a sudden change in the local landscape, and consultation with local residents is required for replacement planting to be successful.

The objective of replacement planting is to improve streetscapes that are in decline, and to create uniform avenues of trees throughout Wangaratta.

Planting requests

Individuals may request a street tree to be planted on their Nature strip by contacting Councils Customer Service Desk. Trees selected for individual requests will conform with existing trees where still appropriate, or to a new planting theme where the current or past tree species have caused issues. Residents will not generally receive an option of tree species to be planted.

Planting Prioritisation

Each year a general area is selected for planting. Grouping the plantings assists Council to provide consistent and efficient maintenance to new trees. Streets and Parks within the selected area are then prioritised for planting based of the following;

Table 5: Priority planting

PRIORITY	
High	<i>There are few to no trees, or existing trees are in poor condition</i>
Medium	<i>There is opportunity for substantial plantings</i>
Low	<i>Existing streetscape is reasonable but requires enhancement</i>
N/A	<i>There is no opportunity to plant trees</i>

Requests for whole-street planting

Residents in a street may nominate their entire street for planting or renewal via a submission letter. Streets nominated by residents will be prioritised above areas listed as having a Medium planting priority, provided planting is agreed to by 70% or more of the residents in the proposed area. Depending on budget, planting will only be undertaken once the High priority areas selected for that year have been completed. See *Appendix D- Community Application for Street Planting* for the process.

If planting cannot be completed in the year the request is received, the request will be added to a future planting programme.

Street Tree Planting

As a minimum, Council aims to plant **at least** one tree per property frontage where space allows. Depending on the location attributes, eventual tree size and available budget, more than one tree may be planted.

Park Planting

Plans for the development and enhancement of all major parks will include future plantings and renewals.

Unauthorised planting and nature strip modification

Residents are not permitted to undertake planting or any type of modifications on the nature strip under the *Local Law (No. 1 of 2014, Community Amenity (amendment))* without Council permission. Any changes may result in a request to reinstate the nature strip to its original condition at the residents cost.

If you would like a new or additional tree for the nature strip, please see '*Planting requests*'.



Tree Establishment

A new planting can be considered established once it no longer requires supplemental irrigation to maintain an appearance and growth consistent with expectations for the species. This will be a minimum of 12 months, although usually establishment requires supplemental irrigation for two summers.

Time of Planting

A majority of Council tree planting is undertaken yearly between April and October. Conditions at this time are optimal to allow young trees adequate time to generate new feeder roots prior to the heat of summer.

Watering

Council provides irrigation to young trees on average once a week for the first two summers after planting. Greenwell Water Savers are currently being trialled to save water, reduce water run-off and concentrate water infiltration where required. We encourage residents to provide supplemental watering over the warmer months where possible, by filling the Greenwell Water Savers around the base of the tree. Supplemental watering should be undertaken once a week to once a fortnight.

Mulching

Mulch is highly beneficial in the establishment of newly planted trees and is second in importance only to water application. Mulching helps in the suppression of weeds, and reduces evaporation, compaction and erosion.

A mulch cover of natural chip bark will be maintained by Council thorough-out the establishment period. Fresh grass clippings should never be used as mulch for trees. The use of fresh grass as mulch can strip essential nutrients needed by the tree from the soil and generate heat as it decomposes, burning the tree.

Staking and guards

Staking of new trees will generally not occur. Trees that are not self-supporting will not be selected for use in the landscape. Council discourages residents from tying new street trees to stakes, as this can adversely affect the growth and development of the tree.

Stakes that have been driven either side of new trees are for the purposes of securing tree guards.

New Estate tree plantings

Trees planted as part of new estate developments shall be maintained for a minimum of two (2) summers by the developer. This maintenance includes the watering, formative pruning, treatment of any pests and diseases, replacement of mulch and the protection of trees during further construction works.

Council will not accept the responsibility for any trees deemed to be below an acceptable condition or standard. Council should not be unduly burdened with issues of risk or maintenance of poor quality or inappropriate trees within land that they will become responsible for.

Persons or developers who purchase property within a new estate with the intention of building, are expected to locate cross-overs and other private infrastructure with the location of established trees in mind. Street trees are assets and it is expected that they are appropriately considered and planned around in the same manner as any other asset or Council infrastructure located within the nature-strip.

Tree Pruning

Tree pruning is the targeted removal of branches for a specific purpose, and can include crown maintenance or modification works and formative pruning. Prior to any pruning works being completed, an inspection by a Council arborist will be undertaken to assess the health, growth habit, structure, stability and growing environment of the tree.

Purpose of pruning

To enable trees to be adequately grown in an urban environment, they often require pruning. Pruning may be needed to maintain clearance for utility services and buildings, to improve the safety, structure, health and amenity of a tree or to reduce potential future issues, as is the case with formative pruning. Correct pruning practices can reduce the risk of hazard development, branch failure, pathogen infection and premature tree death. All Council staff and contactors engaged in the activity of tree pruning are qualified and experienced, with a working knowledge of Australian Standard AS 4373: Pruning of amenity trees.

Pruning schedules

Street trees

Street trees are proactively pruned on a 4 year cycle. This allows each tree to substantially recover from each pruning event, and minimise regrowth before branches and leaves begin to encroach on any required clearances. As trees can, and do, grow at varying rates, some may require more regular attention. The pruning cycle does not negate any requests received by the public for work, or other clearance pruning requirements under the *Road Management Plan* or *Electric Line Clearance Management Plan*.

Park trees

Park trees do not have the same level of site restrictions as street trees. This allows park trees to grow to their natural form and size without causing many issues. Park trees may be pruned to allow access around their base, or to remove any defect. This work will be completed as required, after routine inspections.

Unauthorised pruning

Residents are not permitted to undertake pruning works on Council managed trees. This includes trees located on nature strips adjacent to their private property.

Pruning needs to be undertaken by qualified and experienced persons who have been authorised by Council. This requirement is both to protect the safety of the person undertaking the works, pedestrians and traffic, and, also, to ensure pruning conforms to the Australian Standard 4373: Pruning of amenity trees.

If you would like a Council tree to be pruned, please contact Councils Customer Service Counter, and place a request



Pruning Clearances

There are several circumstances when Council is required to prune trees and maintain clearance zones for certain types of infrastructure.

Electric Line Clearance

Under the *Electricity Safety Act 1998*, Subdivision 1 of Division 2 of Part 8, a Council that has a 'declared' area is responsible for maintaining a clearance zone from any part of a tree under public powerlines in that declared area. To ensure this occurs, Council has an Electric Line Clearance Management Plan (ELCMP) that defines how the clearance zone is maintained and complies with the *Electricity Safety (Electric Line Clearance) Regulations 2015* and associated *Code of Practice for Electric Line Clearance*. The ELCMP is reviewed and updated yearly in March.

As part of the ELCMP, Council undertakes annual inspections of all vegetation in the vicinity of powerlines. All required works are scheduled for completion prior to the declared High Bushfire Risk season.

With the exception of emergency works, the community will be informed of power line clearance works in the Wangaratta Chronicle, 14 days prior to pruning beginning. Specific dates and locations will not be provided.

Other clearances

Under section 39 of the *Road Management Act 2004*, Council is required to prepare a Road Management Plan (RMP). This plan stipulates the service levels provided for all Council managed roads and paths. The RMP has implications for vegetation clearances around roads and paths. The RMP is available for view on the Rural City of Wangaratta website.

Private trees overhanging Council property

Where private vegetation encroaches over a Council path, the owner of the vegetation will receive a notification from Council's asset inspectors during the time of inspection. This notification is to inform the resident that they are required to remove or trim any vegetation which is obstructing the safe passage of path users.

Reinspection will occur 14 days after initial notification. Should private vegetation remain obstructing the path, the issue will be forwarded to Council's Community Compliance Unit.

Council trees overhanging private property

Residents are encouraged not to prune Council owned trees which are overhanging private property. If you believe that a Council tree overhanging your property boundary constitutes a private nuisance; in that the enjoyment and use of your land is being interfered with, contact Council for an inspection.

Notification of Pruning

Notification will not occur for reactive or scheduled pruning works unless a resident or business will be directly affected by these works. This may be done in the case of a temporary obstruction to access or excessive noise in sensitive areas, i.e. hospital or childcare centre.

Tree Root Management

Good root growth and function are essential for healthy, aesthetically pleasing and structurally sound plants. Unfortunately, interactions between tree roots and constructed infrastructure can cause issues. As the density of development in urban environments has increased, and with nature strips becoming narrower, the likelihood of conflict between trees and infrastructure increases. On occasion this conflict can be in the form of tree roots causing damage to both public and private infrastructure.

Tree root issue mitigation

Where it is alleged that roots from a Council managed tree are causing damage to infrastructure, an inspection will be undertaken by the appropriate Council Officer.

Council utilises a Tree Root Assessment Tool to assist in determining the likelihood that a Council managed tree is contributing to infrastructure damage. The findings from this tool guides the appropriate action should reactive works be required. The inspections will be undertaken by a staff member with an appropriate level of experience and the requestor will be notified of the outcomes in writing. Should it be identified that it is possible or likely that a council tree is the cause of damage on private property, Council will abate the nuisance within a 3 month time frame.

The location of trees with root barriers installed, or trees that have had root pruning works will be recorded against the tree asset. These trees will be included in a two (2) year inspection cycle. This inspection will monitor the effectiveness of works and any resultant decline in tree health or stability.

A tree without roots is just a piece of wood.
Marco Pierre White



Pest, disease and weed management

The goal of tree management is healthy trees. Healthy and structurally sound trees are better able to resist environmental stress, non-infectious disorders, diseases, pests and insects.

Where possible, Council will undertake an Integrated Plant Management (IPM) or Plant Health Care (PHC) approach to treating pests and disease, with an aim to reducing chemical usage and improving the over-all tree health.

Monitoring and treatment

Monitoring for tree pests is undertaken during routine maintenance activities. The severity of the expected tree damage will determine the need for treatment or future preventative action. Proactive pest and disease treatment is provided for populations of trees that are particularly prominent in urban areas. These trees provide a significant contribution to the history and amenity of Wangaratta. Their loss would greatly reduce the liveability of urban areas and these trees would be impossible to replace.

Removals

In some instances, removal of an infected tree may be the only means of pest or disease containment. All contaminated material will be disposed of as recommended for the particular issue.

Termites

Council does not routinely treat street or reserve trees for termites unless there is concern for the structural integrity of the tree. It is the responsibility of the resident to undertake any treatment or preventative actions for the protection of their own properties.

Weed Species

Street and park trees classed as a weed or invasive species (See *Appendix E- Weed species List*) will be removed and replaced as funds become available. Council will not actively plant trees that are known as a weed or invasive species.

It should be recognised that as new varieties of trees become available on the market, species that would not previously have been planted may be selected for trial plantings. The new varieties have been selected by plant breeders to eliminate undesired, weedy features, such as copious amounts of viable seeds or fruit. There are several 'seedless' varieties previously considered invasive that are currently being trialled. Trees such as White Cedar (*Melia azderach*) and Sensation Maple (*Acer negundo*) now have low to no fruiting varieties that greatly reduce the species invasive abilities.



Tree Protection

Established trees of appropriate species and sound structure are beneficial components of the built environment, and an asset to any urban site. It is rarely possible to repair stressed and injured trees as a result of insensitive practices, so substantial injury needs to be avoided during all stages of development, when in the vicinity of trees which are to be retained. This protection applies to outdoor events in parks and gardens, as well as to construction sites, and ideally needs to be considered at the earliest stages of planning.

Guidelines for protection

The purpose of implementing tree protection measures is not to retain every tree on site to the detriment of development, rather to focus resources on effectively retaining trees of value to ensure their long term survival.

The Australian Standard for the Protection of trees on development sites (AS 4970) provides guidance on the selection of trees for retention, and methods for their protection. Any development or works within a street, parkland or roadside should take all practical steps to preserve existing trees in a healthy and safe condition. Trees should be assessed at the early stages of planning to determine any trees not worthy of retention, and to select appropriate protection measures for the trees to be retained.

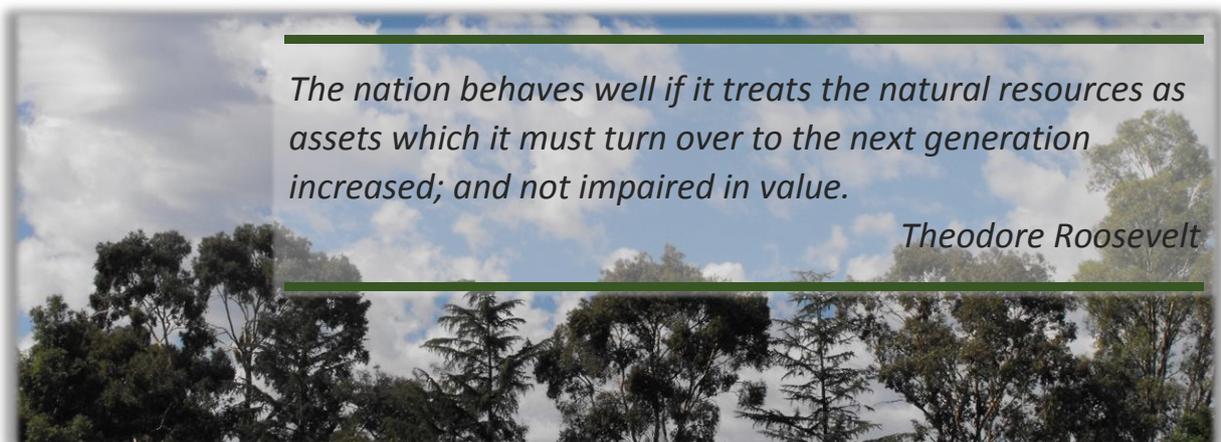
Damage to trees from construction

Damage caused by construction works to any part of a tree, both above and below ground, can and will cause stress and decline to the tree as a whole. This may result in a tree requiring remedial works, removal and eventual replacement earlier than originally planned.

Compensation

Prior to all Council projects, tree condition information, including photos, need to be provided where trees (public and private) may be impacted by works. This information will be used for monitoring the impact of works and, if necessary, to resolve compensation issues for any trees requiring remedial works or removal due to negligent practices. Where a tree may require pruning or removal for the works to proceed, pre-approval can be granted for the work to be carried out by qualified staff to the relevant Australian Standards.

Any costs associated with damage to a Council or private tree, by a Council contractor, that results in remedial works or removal of a tree, will need to be covered by the offending contractor. These costs will also apply to tree removals required due to damage caused during construction works.



Management of Significant and Veteran trees

A Significant tree is a special class of tree that has a wide range of environmental, historical, cultural, aesthetic and scientific values over and above the accepted benefits of an average street or park tree. Veteran trees are considered to be older mature trees or remnant native species that may pre-date European settlement of the area.

Wangaratta is fortunate to have many large trees that were established in the early- to mid- 1900's. These trees contribute considerably to the 'sense of place' experienced in locations such as King George V Gardens, Merriwa Park, and many of Wangaratta's listed heritage areas. Wangaratta also encompasses many Veteran trees progressing through the later stages of their lifecycle. It can take many decades for trees to develop important habitat hollows for local wild life, and as such, Veteran trees are an incredibly important to retain. Both Significant and Veteran trees require an extra level of consideration, care and protection above that received by a normal street tree, as without them, Wangaratta and surrounding towns will have lost a living link to the past.

Identification and Protection of Significant and Veteran trees

Trees can be deemed significant for a number of reasons, including having scientific, social, historic or aesthetic value.

At present Council is developing a recognised Significant Tree Register for locally important trees, and uses similar benchmarking criteria to the National Trust. Trees in the Rural City of Wangaratta can be nominated for inclusion on this list by using the appropriate nomination form (See *Appendix F-Significant Tree Nomination Form*). In addition to the Register, there are several mechanisms currently used to acknowledge and protect trees of significance. These include trees:

- Covered in a Heritage Overlay;
- Covered in a Vegetation Protection Overlay;
- Covered in an Environmental Significance Overlay;
- Listed on the Victorian Heritage Register;
- Listed by the National Trust;
- Listed on the Victorian Aboriginal Heritage Register;
- Listed on the 'Big Tree' register;
- Placed on the advisory list for Rare or Threatened Plants in Victoria; or
- Are a species that is recognised habitat for any animal listed on the advisory list of Threatened Vertebrate or Invertebrate Fauna.

Trees specifically identified through a local Planning Scheme or Overlay are protected under the provisions of the *Planning and Environment Act 1987*. Overlays protect significant trees against removal, as well as adverse pruning or construction works. Any pruning works or removal requires a permit which is available through Council.

Trees listed on a Heritage Register are protected under the *Victorian Heritage Act 1995*. Changes to a place that is on one of these registers requires a permit from Heritage Victoria, and over-rides local Council heritage permits.

All Aboriginal cultural places and artefacts (including trees) are protected by law in Victoria under the *Aboriginal Heritage Act 2006*. It is against the law to disturb or destroy an Aboriginal place. Artefacts (including trees) should not be removed from sites.

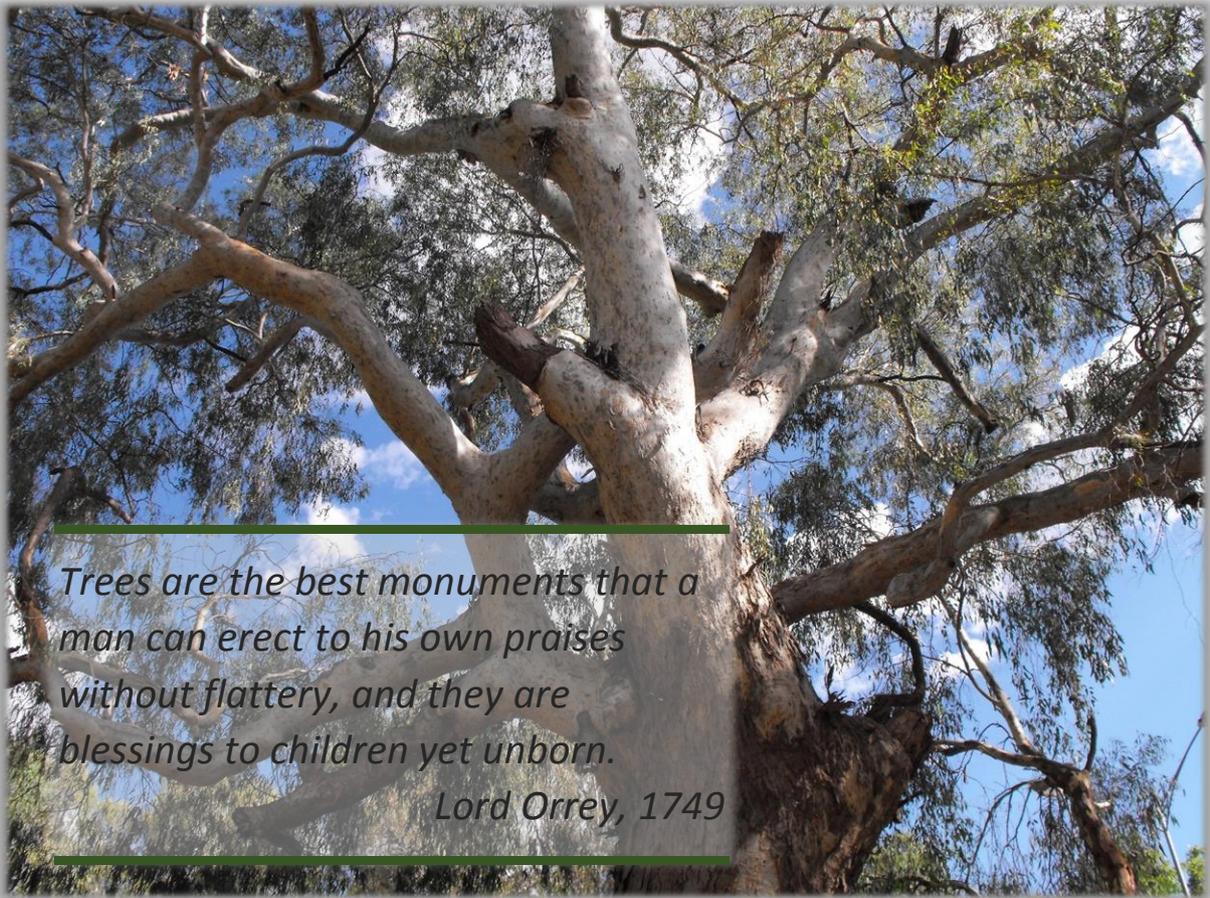
Nomination for a Significant Tree

All nominations for inclusion on Wangaratta's Significant Tree Register will be discussed at the bi-monthly internal Tree Management Steering Group meeting and will be assessed against the benchmarking criteria. (See *Appendix F- Significant Tree Nomination Form*).

Reinstatement of avenues

Historically, it has been popular to establish trees in avenues of the same species and age. Avenues have always been a popular planting style. They are aesthetically pleasing and can transform an area by defining space. Wangaratta is fortunate enough to have many established and impressive avenues of Plane trees (*Platanus X acerifolia*) and Oaks (*Quercus sp.*), particularly in the Heritage precincts.

Given the consistent nature of avenues, the effects can easily be lost if one or more trees are removed or fail. A proactive approach is necessary in maintaining and securing the landscape value of these avenues over time. The uniformity that creates and defines an avenue, such as even-age and singular species, can create some management issues. Regeneration may be difficult, and dependent upon the original function of the avenue, its heritage or cultural values (such as Avenues of Honour). The limitations of space, species availability, and community understanding and willingness to accept some tree removal in order to allow new tree establishment are also factors requiring consideration for avenue regeneration. Each situation of avenue reinstatement will require an in-depth assessment, and community involvement prior to the commencement of any works.



Community Engagement

The community is passionate about its trees and relies on Council to ensure the maintenance and preservation of public trees for the long-term benefit of the town.

In order to foster community pride and ownership of trees throughout the municipality, Council will place an emphasis toward informing, consulting, and where appropriate, involving the community in tree management decisions. Consultation with residents can create a sound understanding of tree issues and a wider acceptance of the role and works undertaken by Council.

Where appropriate, Council will engage with the community on tree issues, as per the *Community Engagement Strategy* (as adopted by Council), by;

- Providing information to the community on actions and tree management decisions;
- Consulting with community groups for large scale planting projects;
- Involving the community to work through specific tree related issues; and
- Empowering the community to have an active role in the establishment and protection of trees and the recycling of timber products.

There are currently several ways Council communicates with the community about tree management activities, including:

- The Rural City of Wangaratta’s website,
- Social Media;
- Direct letter to residents or special interest groups;
- Information brochures; and
- Advertising in the local paper.



Council Employees and Appointed Contractors

Caring for trees requires specialised knowledge and skills. Tree work can be dangerous and may result in serious injury or worse to persons not suitably experienced or qualified. Council requires all staff and contractors working on Council trees to have a minimum of Certificate III in Arboriculture or to be under the direct supervision of a staff member who does have this qualification. In addition, staff are required to have the skills, qualifications and experience to operate specific equipment and plant, or to undertake tasks such as powerline clearance. For these reasons residents are not permitted to work on Council owned and maintained trees.



Tree Management Plan Review

Tree Data Management

The Rural City of Wangaratta recognises the importance of managing its infrastructure assets, including trees. Council operates an Asset Management System to store and manage data on all of Council's assets. Tree condition data is collected every five (5) years. Data collected includes tree species, location, size and health, expected useful remaining life (ULE) and the level of risk posed by the tree in its current condition. Council uses the data to identify risk, develop tree planting, replacement and maintenance programs, prioritise works, ensure species diversity across the city, and identify trees of significance. This ensures that Council resources can be allocated efficiently for the greatest long term benefits.

Reporting

Following the adoption of an electronic works order system, compliance with Council's Tree Management Plan will be reported to Council's Corporate Management Team on a quarterly basis. The reports will be based on information recorded in Council's Asset Management Database.

Compliance will be determined by;

- Percentage compliance with scheduled inspections;
- Percentage compliance with defect rectification;
- Percentage compliance for reactive requests - inspections and closure (defects only);
- Details of any outstanding defects/overdue inspections;
- Copies of any relevant reports;
- Total number of trees removed, replaced and planted.

All procedures, lists and plans supporting this Tree Management Plan are to be reviewed annually.

Tree Management budget review

The Tree Management (TMP) Plan will be reviewed regularly during Council's budget development period from March to June. The review will consider the levels of service for tree assets maintained by this Council. Particular attention will be given to managing the demand for tree maintenance with the proposed level of resources each year. The performance measure will be reviewed and any non-conformance will be reviewed for action.

A formal review of the TMP will be conducted every four years in line with Council elections.

Exceptional Circumstances

Council will endeavour to meet all aspects of its TMP. However, in the event of natural disasters/events, including, but not limited to, fires, floods, and human factors, such as lack of Council staff or suitably qualified contractors, Council reserves the right to suspend compliance with its TMP.

In the event that the limited financial resources of Council and its other conflicting priorities; or the occurrence of a natural disaster such as flooding or fire, result in Council being unable to meet the requirements of this TMP, some, or all, of the timeframes and responses in Council's TMP may be suspended

Process for Suspension and Reactivation of the TMP

The process to suspend the TMP is as follows:

- The Director of Infrastructure shall write to the Chief Executive Officer, outlining the circumstances contributing to the inability of the Rural City of Wangaratta (RCOW) to meet the requirements of the TMP; and
- Shall recommend suspension of the TMP until these circumstances are resolved.
- The Chief Executive Officer shall approve, in writing, the recommendation to suspend the TMP until notified by the Director of Infrastructure that the TMP may be reactivated.
- The Director of Infrastructure shall notify, in writing, internal staff and external stakeholders, that the TMP has been suspended, and the reasons for this decision.

The process to reactivate the TMP is as follows:

- The Manager- Infrastructure Planning and Delivery, and the Manager- Field Services shall agree that the circumstances leading to the suspension of the TMP have been resolved, and shall determine an appropriate timeframe for the reactivation of the TMP.
- This agreement and the timeframe for reactivation shall be recommended in writing to the Director of Infrastructure.
- The Chief Executive Officer shall approve the recommendation to reactivate the TMP.

Amendment of the TMP

If the adopted level of service is not achievable, the level of maintenance effort may need to be varied. The level of service, the anticipated quantity of works, and Council's budget and resources should then be reviewed and a new TMP proposed. The revised Plan would be subject to a consultation and approval process.

Consultation Process

In any review associated with this TMP, consultation will be undertaken as follows:

- Internally by the Tree Management Steering Group and staff associated TMP implementation;
- Externally by placing this document on exhibition and calling for submissions from the general public; and
- Seeking advice from Council's insurer and legal advisors.

Inspection and response standards have been based on an approach that aims to balance customer expectations with sustainable resource management. Information gained from external and internal sources, including historical knowledge of demand, risk and expectation has guided the development of these standards. The Rural City of Wangaratta recognises the need to continually review and update these standards.

Rural City of Wangaratta

Tree Management Plan

2018-2022

Appendix

Contents

Appendix A- Tree Risk Management	2
Tree Defects	2
Proactive Inspection Frequency	3
Appendix B- Tree removal	5
CRMS Flow-chart.....	5
Tree Removal Flow-chart.....	6
Appendix C- Tree Valuation	7
Tree Valuation Methodology	7
Tree Valuation Examples	8
New Tree Risk Assessment	10
Community Application for Street Planting	11
Appendix E- Pest, disease and weed management	12
Weed species List.....	12
Appendix F- Tree Protection in the Rural City of Wangaratta	13
Works near Council Trees.....	13
Appendix G- Management of Significant Trees	15
Significant Tree Nomination Form	15

Appendix A- Tree Risk Management

Tree Defects

Defects or defect indicators that may be identified during a routine inspection.

Table 4: Description of tree defects

DEFECT	DESCRIPTION
Dead tree, top or branch (also tree in decline)	<i>A dead tree, top or branch may be structurally unsound. Failed branches may become lodged in the tree canopy.</i>
Decayed Wood	<i>Wood that has rotted, degraded or is missing.</i>
Cracks	<i>A separation of the wood, a deep split extending through the bark and into the wood.</i>
Root Problems	<i>Inadequate anchoring by the root system, damaged roots, or stem-girdling roots.</i>
Weak Branch Unions	<i>A poor junction between two or more branches. For example, included bark, epicormic growth or narrow angles.</i>
Cankers	<i>A wounded area where bark and/or cambium are dead.</i>
Mechanical Damage	<i>Structural damaged due to vandalism or accident (ie, machinery, mower, whipper-snipper operation or car impacts)</i>
Poor Structure	<i>Trees demonstrating structural imbalance or weakness in multiple branches.</i>
Tree Location	<i>The suitability of the tree in its location.</i>

Proactive Inspection Frequency

The minimum frequency of inspections to be completed for each Hazard Zone Category.

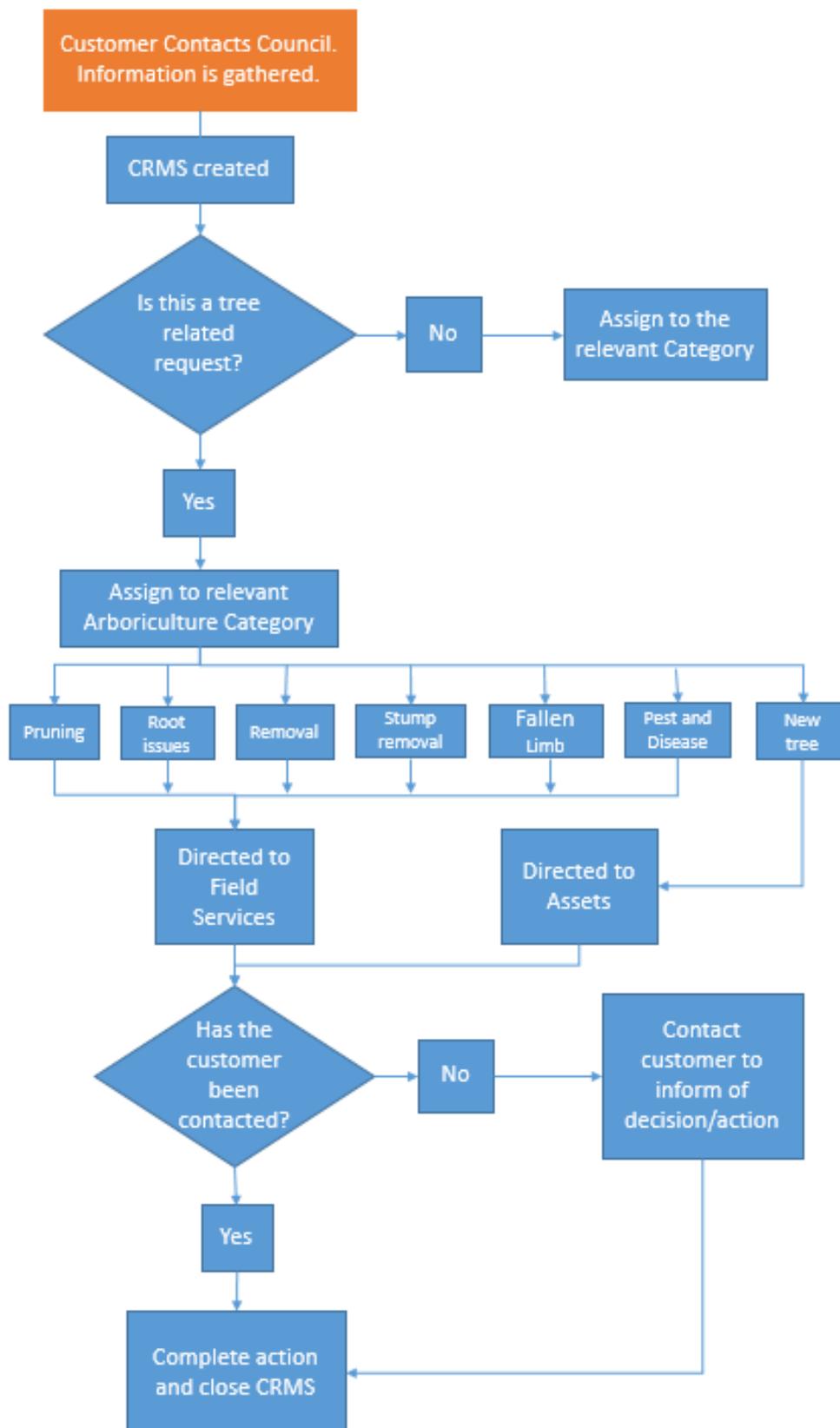
Table 2: Inspection frequencies

HAZARD ZONE CATEGORIES	COLOUR CODE	TIMING OF INSPECTION	INSPECTION METHOD	COMMENT
Very High	Red	18 Months	<i>Walk by/ individual tree (Internal Staff)</i>	If individual tree has QTRA rating <1/1,000 immediate action required. If <1/10,000 but >1/1,000 arrange for 2 inspections per year until remedial action can be undertaken.
High	Orange	36 months	<i>Walk by/ individual tree (Internal Staff)</i>	Exception: Trees along bike path are to be inspected every 2 years in conjunction with path inspections. These will be drive by/windshield inspections unless otherwise required.
Moderate	Yellow	5 Years	<i>Walk by/ individual tree (External Contractor)</i>	In addition, a drive by inspection during an "off year" may be conducted in conjunction with the regular bi-annual powerline clearance inspections
Low	Green	5 Years	<i>Walk by/ individual tree</i>	In addition, a drive by inspection during an "off year" may

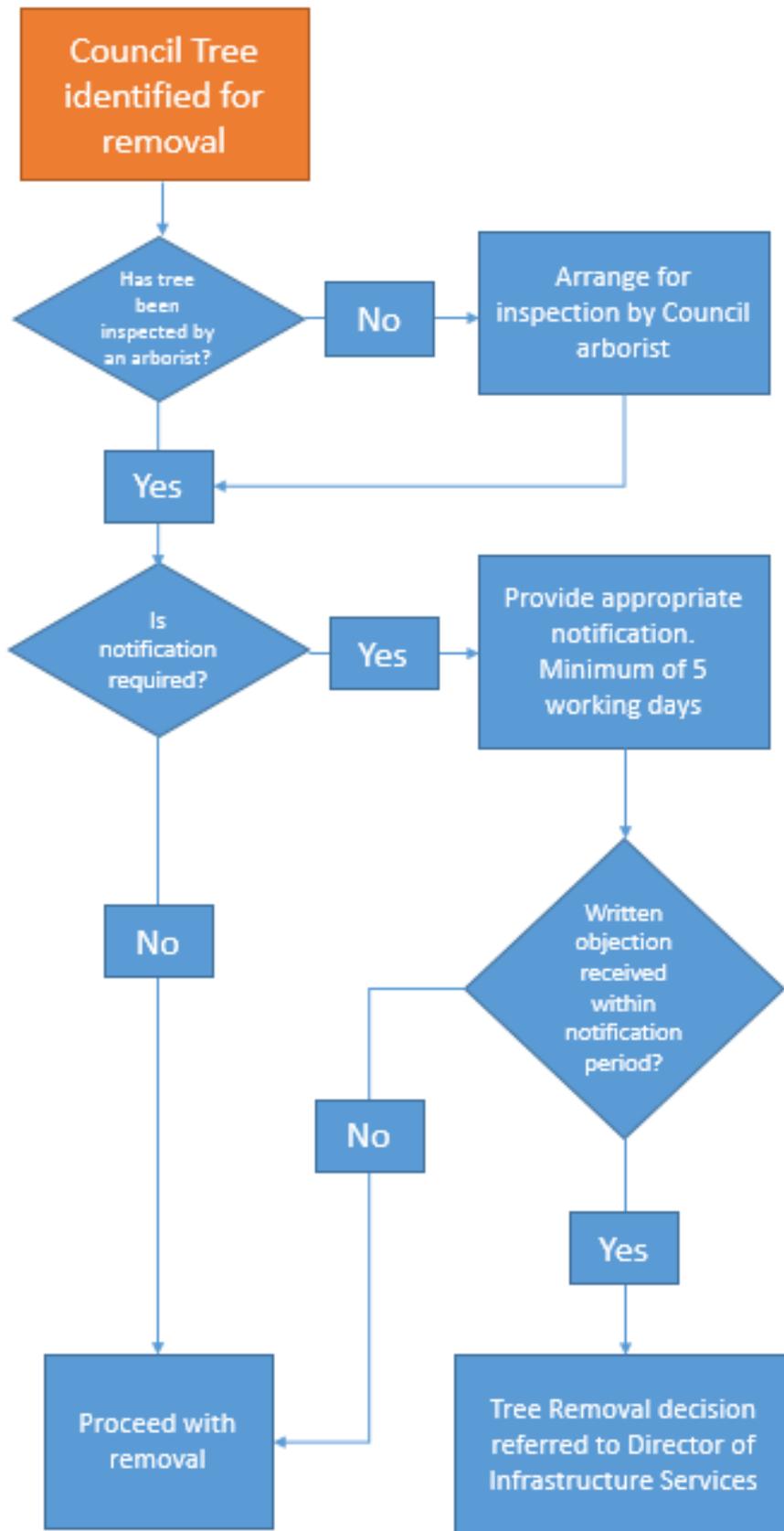
HAZARD ZONE CATEGORIES	COLOUR CODE	TIMING OF INSPECTION	INSPECTION METHOD	COMMENT
			<i>(External Contractor)</i>	be conducted in conjunction with the regular bi-annual powerline clearance inspections
Reactive	N/A	<i>Within 10 working days of receiving request</i>	<i>Walk by/ individual tree (Internal Staff)</i>	
All Areas	N/A	<i>After Severe Storm, Flood or Fire Events</i>	<i>Drive by/ windshield survey (Internal Staff or External Contractor)</i>	If potentially hazardous trees detected, follow up with individual inspection

Appendix B- Tree removal

CRMS Flow-chart



Tree Removal Flow-chart



Appendix C- Tree Valuation

Tree Valuation Methodology

The cost for the removal of a tree that does not comply with the 'general guidelines for removal' will be based on a 'Replacement Value' for a tree of that age. This applies to trees up to 10cm Diameter at Breast Height (DBH). Trees of 10cm DBH or over will be valued using the 'Revised Burnley Method'.

TREE AGE	REMOVAL OF TREE	PURCHASE OF REPLACEMENT TREE	PLANTING OF TREE	MAINTENANCE OF NEW TREE UNTIL ESTABLISHED	TOTAL COST
0-2 years	\$50* (no grinding)	\$100 (45L)	\$75	\$75	\$300
3-5 years	\$175**	\$180 (100L)	\$75	\$75	\$505
5-8 years	\$250***	\$400 (200L)	\$75	\$75	\$800
DBH >10cm	<i>Determined by the 'Revised Burnley Method' of tree valuation</i>				

*Allow 1 hour per tree at \$50/hr, including green waste- No grinding needed

**Allow 1.5 hours per tree at \$50 per/hr, including green waste- Includes \$100 for stump grinding

***Allow 2 hours per tree at \$50/hr, including green waste- Includes \$150 for stump grinding

Purchase of replacement tree is based on average costings for a tree of equivalent size or age from a tree nursery. The replacement tree planted will be a standard 45Litre pot size. Any excess funds received through this process will be used to maintain and increase the future canopy potential of the area.

Revised Burnley Method for Tree Valuation

Amenity tree evaluation systems place a monetary value on trees, usually for the purposes of insurance, compensation and litigation. However, the major significance of placing such value on trees is that they are recognised as assets. The recognition of trees as assets has major implications, not only for their management, but also for the decision making processes that involve trees. The Burnley Method was first developed in 1988 to meet these needs in Australia, and was intended to be easily used and to minimise operator error.

The focus is on two simple elements;

- 1.) The establishment of tree size; and
- 2.) Establishing a dollar base value for the tree.

The key modifiers of the value equation used are; Useful Life Expectancy (E), Form and Vigour (FV) and Location (L).

The entire tree value equation is represented as:

$$\text{VALUE (\$)} = \text{TREE VOLUME} \times \text{BASE VALUE} \times (E) \times (FV) \times (L)$$

More detailed information of the values of the modifiers and how to use the Revised Burnley Method for Tree Valuation can be found at:

<http://croydonconservation.org.au/wp-content/uploads/Burnley-method-Tree-value-pdf..pdf>

Tree Valuation Examples
Revised Burnley Method

Example 1

Tree Details:

Height- 31m

Canopy Radius- 10m

Therefore:

Volume of tree=

3246.31m³

Modifying factors:

Life Expectancy (E) -

>50yrs=1

Form and Vigour (FV) –

Bifurcation of trunk with
good vigour= 0.55

Location (L) – Species

unsuited or causing
problems= 0.7

The average cost of a
Eucalyptus in a 27Litre pot,
with a height of 1.8m and radius of 1m is \$90.

Cost being divided by volume of the tree equates to a Base Value of \$47m³.

Using the formula for tree value;

$$\text{VALUE (\$)} = \text{TREE VOLUME} \times \text{BASE VALUE} \times (E) \times (FV) \times (L)$$

Therefore, Tree Value is:

$$3246.31\text{m}^3 \times \$47\text{m}^3 \times 1 \times 0.55 \times 0.7 = \mathbf{\$58,741.98}$$



Example 2

Tree details:

Height- 16m

Canopy Radius- 6m

Therefore:

Volume of tree= 603.18m^3

Modifying factors:

Life Expectancy (E) –

>50yrs= 1

Form and Vigour (FV) –

Good vigour with average

form= 0.70

Location (L) – Could be

better located but no

problems = 0.9

The average cost of a Queensland Brush Box in a 27Litre pot, with a height of 1.7m and a radius of 0.7m is \$90.

Cost being divided by volume of the tree equates to a Base Value of $\$42\text{m}^3$.

Using the formula for tree value;



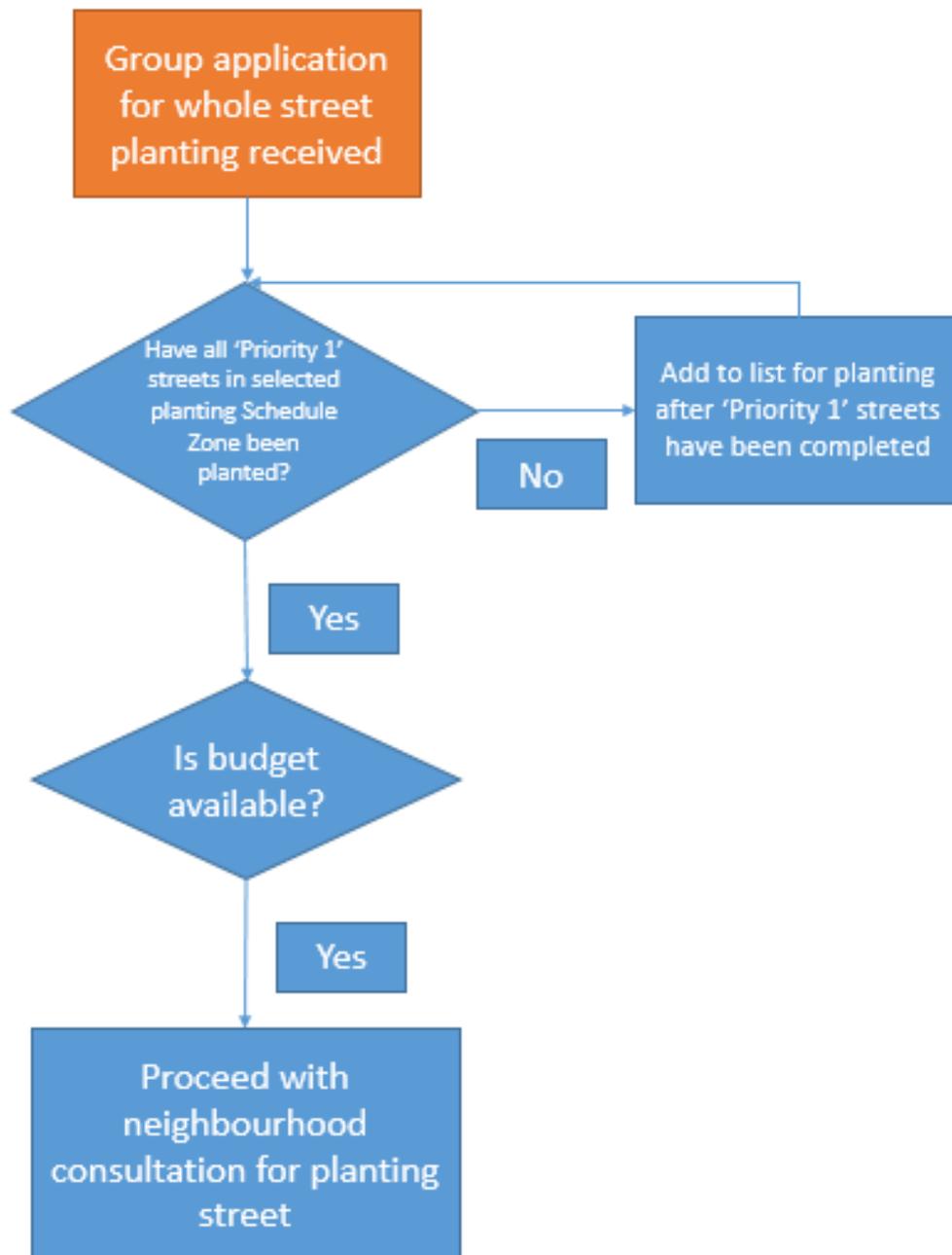
$$\text{VALUE (\$)} = \text{TREE VOLUME} \times \text{BASE VALUE} \times (\text{E}) \times (\text{FV}) \times (\text{L})$$

Therefore, Tree Value is:

$$603.18\text{m}^3 \times \$42\text{m}^3 \times 1 \times 0.70 \times 0.9 = \mathbf{\$15,960.14}$$

Community Application for Street Planting

Flow chart depicting the process for street planting submitted by residents of the street.



Appendix E- Pest, disease and weed management

Weed species List

The following plants are 'environmental weeds'. These plants are not native to the local area but have a hardy constitution and spread very easily. They commonly become 'garden escapees'.

Because of their invasive tendency these plant species are not permitted for planting in the Rural City of Wangaratta.

Botanical Name	Common Name	Comment
<i>Acacia baileyana</i>	Cootamundra wattle	Native to the Wagga Wagga area it is highly invasive in other areas of Australia outcompeting local wattles.
<i>Acer negundo</i> *	Box Elder	Major problem along waterways in Wangaratta and rural areas. Fruits prolifically, quick growing.
<i>Ailanthus altissima</i>	Tree of Heaven	Very invasive in urban areas and waterways. Spreads from seed, suckers often many meters from parent tree forming thickets.
<i>Crataegus monogyna</i>	Hawthorn	Invasive of bushland, roadsides and waterways. A major woody weed throughout the Rural City of Wangaratta. Seeds spread by birds and animals
<i>Fraxinus angustifolia spp</i>	Desert Ash	Major problem on waterways in our municipality. Spread by seeds and root suckers. Problem in chipped mulch.
<i>Ligustrum lucidum</i>	Broad-leafed privet	Berries are eaten and seed spread by birds. Invasive species in our native bushland and waterway reserves.
<i>Ligustrum sinense</i>	Small-leafed privet	Berries are eaten and seed spread by birds. Invasive species in our native bushland and waterway reserves.
<i>Macula pomifera</i>	Osage Orange	Spiny tree to large shrub. Large green, non-edible fruit, splits open releasing many seeds. Highly invasive.
<i>Melia azdarach</i> *	White Cedar	Spreading, deciduous tree. Lilac flowers and hard yellow berries which are distributed by birds. Seeds readily germinate resulting in prolific numbers of seeds.
<i>Pittosporum undulatum</i>	Sweet Pittosporum	Spreads by seeds (berries) and suckers.
<i>Schinus areira</i>	Peppercorn tree	Berries spread by birds and animals. Major weed invading roadsides bushland and along waterways. Produces huge amounts of seeds.

*Seedless varieties are currently being trialled of these species

Appendix F- Tree Protection in the Rural City of Wangaratta

Works near Council Trees

This document provides guidance for service providers and contractors undertaking works in the vicinity of public trees to ensure their long-term protection, integrity and health. It applies to all trees in the municipality that are either owned or managed by the Rural City of Wangaratta. Protection of trees on and in the vicinity of all work sites should be incorporated from the beginning of the site evaluation and project design process.

All works near public trees must abide by the protection and retention requirements outlined in this document. This includes applying for an Asset Protection Permit.

For further information, refer to Australian Standard: Protection of trees on development sites (AS4970-2009).

Tree Protection Requirements

A living tree is a dynamic organism that needs specific environmental conditions to continue healthy, stable growth. It is rarely possible to repair stressed and injured trees, so substantial injury needs to be avoided during all stages of development and construction.

These protection measures need to be taken into account at the earliest planning stage of any outdoor event or design of a development project where trees may be impacted.

Tree Protection Zones

Exclusion of works and activities within the Tree Protection Zone (TPZ) is the principal means of protecting trees on development sites. The TPZ is a combination of the root area and crown area requiring protection. The TPZ is isolated from construction disturbances, so that the tree remains viable.

The radius of the TPZ is calculated for each tree by multiplying its DBH x 12.

$$\text{TPZ} = \text{DBH} \times 12$$

Where:

DBH = trunk diameter measured at 1.4m above ground

Radius is measured from the centre of the stem at ground level.

Establishment of a TPZ

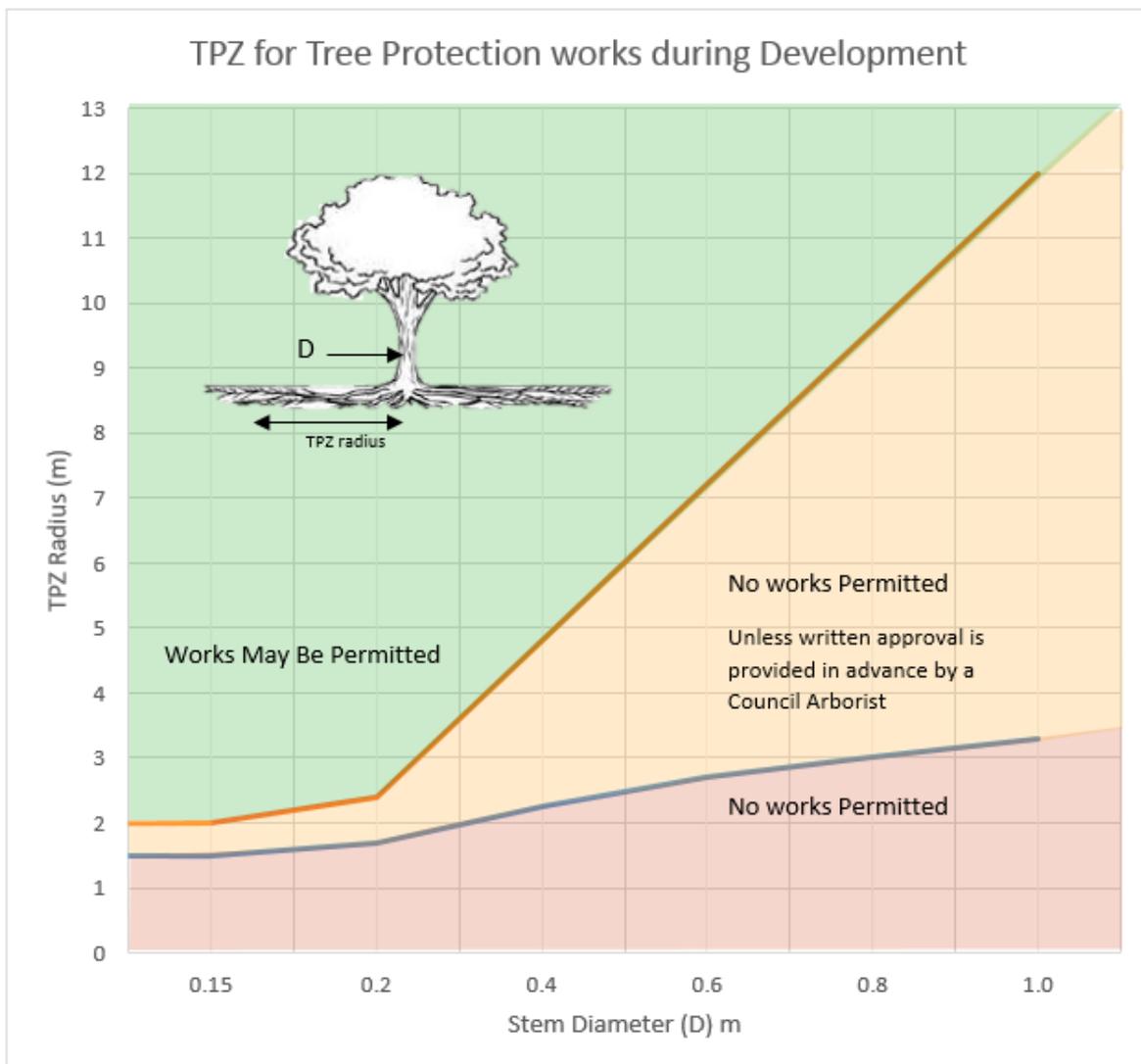
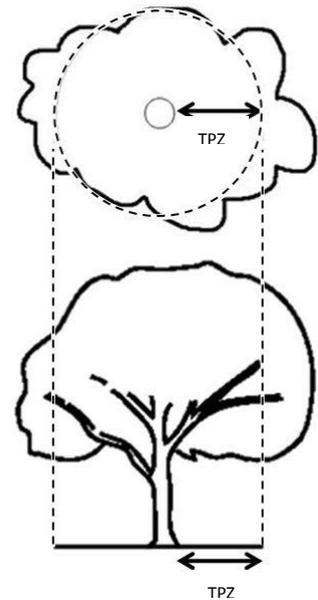
Tree protection measures can include a range of activities and structures. To ensure that public trees in the municipality are fully protected at all times, the following requirements must be complied with:

- An Asset Protection Permit should be obtained prior to commencing any works on Council land;
- A TPZ shall be defined and established before the commencement of any works and remain in place for the entire duration of the works;
- No unapproved tree pruning works may be carried out. Any approved tree pruning works should be carried out prior to the installation of tree protection measures;
- Secure protective fencing or structure should be erected around the TPZ to restrict access;
- When tree protection fencing cannot be installed, or requires temporary removal, other tree protection measures should be used. Refer to AS4970-2009 for further information.

Works within the TPZ

Activities excluded from the TPZ include but are not limited to-

- Machine excavation of any type, including trenching;
 - Stockpiling or storage of building materials, chemicals, debris or soil;
 - Vehicular or pedestrian traffic or parking, except on existing paved surfaces;
 - Alteration of soil levels, including the placement of fill;
 - Wash down and cleaning or refuelling of equipment;
 - Temporary or permanent installation of utilities and signs.
- Some works and activities within the TPZ may be authorised by the Rural City of Wangaratta. The Council’s arborist must approve any modifications to a TPZ.



Appendix G- Management of Significant Trees

Significant Tree Nomination Form



Significant Tree Register Nomination Form

Nominations are invited for a tree or group of trees to be assessed and considered for inclusion in the Rural City of Wangaratta Significant Tree Register. Nominated trees will be inspected by the Rural City of Wangaratta and reviewed by the Tree Management Steering Group.

Please assist us by providing as much detail and information as possible about the tree or group of trees.

Tree Details

Common name:.....
Botanical name:.....
Estimated age:.....
Date planted (if known):.....
Planted by (if known):.....
Number of trees:.....

If the nomination is for a group of trees with a variety of species of different selection criteria, please complete a separate nomination form for each tree. Please provide photos of each tree, including leaf, flower, bark and surrounds.

Location

Please provide an accurate location, e.g. "10 Novelty St, Madeup, centre of front yard". If the property address is uncertain or unknown, provide a detailed location plan or aerial image.

.....
.....

Is access restricted? YES or NO
(please circle)

Tree Owner or Controlling Authority

Are you the owner of the property the tree is on? YES or NO (please circle)

Name and contact details of the owner or controlling authority:
.....

Is the owner aware of this tree nomination?
YES or NO (please circle)

If yes, how and when were they informed?
.....

Selection Criteria

Check each criteria category that you believe applies to the nominated tree. Detailed explanations are on the reverse of this form.

- | | |
|---|---|
| <input type="checkbox"/> Horticultural values | <input type="checkbox"/> Historical value |
| <input type="checkbox"/> Location or context | <input type="checkbox"/> Aboriginal value |
| <input type="checkbox"/> Rare or localised | <input type="checkbox"/> Outstanding example of species |
| <input type="checkbox"/> Outstanding age | <input type="checkbox"/> Outstanding habitat value |
| <input type="checkbox"/> Outstanding size | <input type="checkbox"/> Microclimate |
| <input type="checkbox"/> Aesthetic value | <input type="checkbox"/> Other social, cultural or spiritual values |
| <input type="checkbox"/> Unusual form | |

Supporting Documents

Please provide as much detail related to the nominated tree as possible to demonstrate the significance of the tree.

This documentation may be in the form of arborist reports, newspaper and journal articles, historical information or images and other documentation that may be specific to the tree.

Letters from neighbours and community members may assist in supporting the nomination.

Person Making Nomination

Name:.....
Phone:.....
Email:.....
Address:.....

Nominations without a name, contact or with insufficient detail may not be considered for further assessment



Selection criteria definitions

Horticultural value	A tree of outstanding horticultural value that could be a source of propagating stock. This could include specimens that are particularly resistant to disease or known environmental tolerances for the species.
Location or context	A tree growing in a unique location or context and so provides a contribution to the surrounding landscape. This may include remnant vegetation, important landmarks and trees that form part of an historical park, garden, precinct or rural landscape.
Rare or localised	A tree species that is rare or of limited local distribution.
Outstanding age	A tree that is particularly old or venerable.
Outstanding size	A tree outstanding for its large height, trunk circumference or canopy spread.
Aesthetic value	A tree of outstanding aesthetic qualities. This may include prolific flowering, unique foliage or branch structure.
Unusual form	A tree exhibiting interesting or unusual physical features.
Historical value	A tree that was planted to commemorate a particular occasion, having association with notable people or local history event.
Aboriginal value	A tree that has a recognised association with historical aboriginal activities, including scar or corroboree trees or special meeting places.
Outstanding example of species	A tree that is an outstanding example of the species.
Outstanding habitat value	A tree that provides outstanding habitat for local wildlife, including activities such as breeding, foraging, roosting or as part of a wildlife corridor. Particularly if the tree is associated with rare or endangered species.
Microclimate	This applies to a grouping of trees that provide microclimate benefits. For example; Significant shade or cooling, wind break, linking canopy in urban areas.
Other social, cultural or spiritual values	A tree associated with positive community engagement, cultural meanings or adds to the sense of 'place'.

