Tree Policy 2016





Document Control

Versions

Version	Release Date	Author	Summary of changes made
Draft 1.0	12-04-16	Paul Mechelen	Draft Version
Version 1.			Amended as recommended by Council
Version 1.			Version Adopted by Council on / /

Amendment Authorisations

Name	Position	Signature	Date
Mark Varmalis	Director		

1. INTRODUCTION1
1.1 Overview1
1.2 Scope1
1.3 Strategic Policy Direction1
1.4 Purpose2
2. STRATEGIC POLICY DIRECTION
2.1 Avoid Tree Removal
2.2 Minimise Tree Removal
2.3 Offset Tree Removal
3. TREE ASSESSMENT FRAMEWORK4
3.1 Introduction4
3.2 Levels of tree assessment5
3.3 Reactive tree inspections5
3.4 Proactive tree inspections5
3.5 Tree Risk Classification6
3.6 Tree Risk Management Process7
3.7 Identifying Tree Risk Zones7
3.8 Risk Zones within Parks & Council buildings10
3.9 Risk Zones for Roads10
3.10 Tree Risk Zone Assessment Methods & Inspection Schedules
3.11 Method of Review11
3.12 Decision review process

Contents

1. INTRODUCTION

1.1 Overview

Yarra Ranges is home to some of the most significant vegetation in the state, providing substantial ecological value within the natural catchments surrounding metropolitan Melbourne.

Council's Environment Strategy, along with the Flora and Fauna Strategy, highlight that trees are one of the most important assets in Yarra Ranges. This Tree Policy sets out Council's strategic objectives and assessment framework that will inform clear operational guidelines for the management of trees on Council controlled land and road reserves.

There are approximately 1,250 ha of Council controlled parks and reserves and 1,757 kilometres of road corridors with a further 600 km of roadsides on main roads, which contain a large tree population. In a report on Australian local government tree canopy cover, *"Where are all the trees?"*, Yarra Ranges had the highest number of trees in Victoria and the second highest in Australia.

Whilst the flora of the Yarra Ranges, and in particular the native and indigenous vegetation, is one of the many natural assets that require strong protection and enhancement this plan only relates to the management of trees. The Yarra Ranges Planning Scheme provides controls for both the protection and retention of vegetation.

1.2 Scope

The Yarra Ranges Council Tree Policy has two main components: the strategic policy directions, and assessment framework. These are designed to retain, maintain and enhance the tree resource within Yarra Ranges.

The Tree Policy takes into consideration the affordability, available resources and management of risks and has determined the "levels of service" that meet the community's "reasonable" expectations of "day to day" maintenance and ongoing asset performance

It is essential to note that the Tree Policy is only applicable to land that council directly controls and does not apply to other reserves or private property. In the case of roads controlled by VicRoads council has no responsibility for the control or management of the roadside vegetation (including trees) adjacent to these roads.

1.3 Strategic Policy Direction

Contained within Chapter 1 are the key components of Council policy as they relate to the protection and management of the tree resource located on Council controlled land and roadside reserves.

Tree Assessment Framework

Contained within Chapter 2 is the general framework of how Council will assess and control the risk elements of managing the tree resource so that the danger associated with hazardous trees is minimised while ensuring the environmental value of the tree resource is maintained.

1.4 Purpose

The key purpose of the Tree Policy is to provide strategic direction, within an assessment framework, for a consistent approach to the operational procedures in the management of the tree resource on Council controlled land and roadsides.

2. STRATEGIC POLICY DIRECTION

The Yarra Ranges Tree Policy, while being underpinned by a Tree Assessment Framework is based on three broad policy objectives of:

- > Avoid Tree Removal
- Minimise Tree Removal
- Offset Tree Removal



The underlying theme related to the assessment of the tree resource impacts on all decisions in regard to tree management. This assessment theme relates to the health of the tree and the risk to the local environment from the removal of the tree as well as to the risk impacts on life and property.

The broad principles for the Tree Policy relate directly to the Flora and Fauna Strategy, which provides the rationale for tree management in the context of the total environment.

2.1 Avoid Tree Removal

Objective:

> All available alternatives will be explored to retain trees and avoid and minimise unnecessary tree removal.

Council will avoid the removal of trees from Council land and roadsides where possible. When considering any options for the maintenance, management or development of Council controlled land, alternatives will be identified to retain vegetation where possible in order to avoid unnecessary tree removal.

This may include relocation of existing assets such as paths, car parks and playgrounds where there are public risk concerns. Alternative alignments and methods of construction may need to be considered to preserve vegetation. Other methods of risk reduction may also be considered including pruning or cabling to improve tree stability.

2.2 Minimise Tree Removal

Objective:

Using agreed best arboriculture practices vegetation will be maintained in healthy condition.

Council, in minimising the need for vegetation removal, will use agreed best arboriculture practices such as tree pruning, root management, tree support systems and the control of weeds, animals and diseases as a means by which the health of trees and their longevity can be enhanced.

2.3 Offset Tree Removal

Objective:

Council will replant trees or carry out offset planting where tree removal cannot be avoided.

Council will implement a planned approach to tree planting within the municipality

Council, in managing its tree resource will, where tree removal takes place, carry out replanting. In addition Council will implement a planned approach to tree planting within the municipality taking into consideration available funding, landscape requirements, seasonal conditions, and availability of stock and community expectations.

3. TREE ASSESSMENT FRAMEWORK

3.1 Introduction

Trees provide a significant benefit for the community. However, trees can sometimes become a liability within the landscape. In some cases it is necessary to determine the risks posed by trees and whether any action is required to mitigate or avoid that risk.

A key issue confronting the community is how to manage the extensive tree resource within Council, from both an ecological and a public safety perspective, ensuring that reasonable care is taken to assess and manage the risks associated with hazardous trees and avoid unnecessary tree removal. The need to identify and manage tree hazards also has to take into account the environmental values of the unique natural asset.

The tree assessment framework approach provides a systematic process for the allocation of resources for assessment and management of trees on Council controlled land and roadsides. Due to the vast tree resource located within the municipality, it is cost prohibitive to assess and perform maintenance works on all trees. Rather, a system is presented that prioritises tree assessment and maintenance works based on levels of risk. Based on these defined levels of risk a scheduled program of inspections is recommended so that, given time, all sites within the municipality will have been inspected and assessed at varying levels of detail.

Consequently, a broader, systematic approach to tree assessment is required that prioritises works on hazardous trees based on the establishment of tree risk zones. The tree assessment framework approach provides a process for scheduling and inspecting trees to enable the prioritisation of works and responsible resource management.

An assessment program for trees on Council controlled land and roadsides utilises a similar process to the risk management of hard landscape elements.

- First it is necessary to understand what the assets include and where the risks lie;
- Secondly, to inspect the assets and perform maintenance to address the issues within a reasonable timeframe; and
- Thirdly, to maintain a record of the inspections and the subsequent maintenance.

Implementation of scheduled asset inspections, with follow-up maintenance, if required, provides proactive management in protecting the tree resource and reducing the need for tree removal.

It is not possible to avoid all risk associated with trees, as to do so would require removal of the majority of urban trees. The Tree Policy takes into consideration, ecological values, affordability, available resources and management of risk to determine the level of service that would meet the reasonable expectation of the community.

Tree assessment and risk management encompasses a broad range of tree related issues. This section of the Tree Policy addresses the overall notion of tree asset inspection, assessment and management through the following objectives.

- Utilise a program of systematic tree assessment and best practice tree management to mitigate tree risk for residents and visitors to Yarra Ranges.
- Undertake proper selection, placement and planting of trees to reduce long term risk.
- > Take all necessary steps to reduce risk and retain trees.
- Only remove trees where there are no other alternatives in order that Council's landscapes are maintained with regard to safety.

Based on budget, risk and other factors, resources will be provided to manage and mitigate potential tree risk.

Council's tree programs are broken down into two parts, reactive and proactive.

3.2 Levels of tree assessment

There are three levels of assessments undertaken, as recommended by the International Society of Arboriculture:

Level 1: Limited Visual Assessment.

Level 1 inspections are undertaken when a large number of trees have to be inspected, and are usually done from a car or walking. Information is not recorded about each tree. If a fault is noticed, then a level 2 inspection is completed.

Level 2: Basic Assessment Process

This is our standard assessment. A tree or group of trees in inspected from the ground, often using binoculars. A full report is written on each tree

Level 3: Advanced Assessment

If required from a level 2 assessment, more detailed assessments are undertaken. Methods may include using a climbing arborist or an elevated work platform to access the crown of a tree, or tomography to assess extent of wood decay. Testing for tree diseases is also included under level 3. Information from a level 3 assessment is either added to the level 2 report or contained in a new report.

3.3 Reactive tree inspections

Reactive tree inspections and works are in response to staff, residents and members of the public or other organisations advising Council of a potentially hazardous tree.

Council arborists assess the health of the inspected tree and determine any required works using a level 2 assessment in most cases. Level 3 assessments are undertaken if required.

3.4 Proactive tree inspections

The proactive program has three components:

Electric Line Clearance in Declared Areas

Council conducts proactive tree inspections and works to maintain clearance space around electric lines in *declared areas*, as required by the *Electricity Safety (Electric Line Clearance) Regulations 2015.* Under Section 81 of the *Electricity Safety Act* 1988, land can be made a "declared area". In a declared area the local council is responsible for tree clearing around power lines on public land. The electric line clearance work is also bundled up with road clearance, a program to allow for the safe passage of trucks and high vehicles, within the declared area. Level 1 assessments are undertaken in this program.

Road Clearance

The aim of the proactive Road Clearance program is to provide adequate clearance for vehicle and other road users in the non declared areas. Maintaining road clearance is a responsibility Council has through the *Road Management Act 2004*.

As well as providing road clearance, the tree crews also remove large dead or damaged branches overhanging roads. The contractors will contact the supervisor if they see any trees they are concerned about.

Under this program, roads are selected using local knowledge and monitoring roads that have a large amount of reactive customer requests. Level 1 assessments are undertaken in this program.

> Council owned Parks and Buildings inspections and works.

Proactive (Council owned) Parks and Buildings tree inspections and works are programed. The program gave a risk rating to each park and facility, based on the type of tree stock and density, which determined the inspection frequency. Initially a level 1 assessment is undertaken, and a level 2 where required.

3.5 Tree Risk Classification

In line with normal risk management principles the level of risk for all tree assessments is determined by probability level of the risk and its consequences. Table 1 below sets out the various level of risk.

			Proba	ability/Level	of Risk	
		1	2	3	4	5
		Very unlikely to occur	Unlikely to occur	May occur	Likely to occur	Very likely to occur
Con	sequences					
Α	Insignificant	Low Risk	Low Risk	Low Risk	Low Risk	Low Risk
В	Minor	Low Risk	Low Risk	Low Risk	Low Risk	Moderate Risk
С	Moderate	Low Risk	Low Risk	Moderate Risk	Moderate Risk	High Risk
D	Major	Low Risk	Low Risk	Moderate Risk	High Risk	Very High Risk
Е	Catastrophic	Low Risk	Moderate Risk	High Risk	Very High Risk	Extreme Risk

Risk analysis matrix

Table 1

Low Risk	Low priority work.	
Moderate Risk	Part of routine maintenance.	
High Risk	Prompt action required.	
	Immediate action required to make safe.	
Very high Risk	The Manager Parks & Environment will be advised and will decide if other agencies and Council officers need to be involved.	
	Immediate action required to make safe.	
Extreme Risk	The Municipal Emergency Response Officer (MERO) and the Manager Parks & Environment will be advised. The MERO will decide if other agencies and Shire officers need to be involved.	

Measure of probability

Table 2

Level	Descriptor	Description
1	Very unlikely to occur	May occur in exceptional circumstances
2	Unlikely to occur	May occur at some time
3	May occur	Even chance of occurring at some time
4	Likely to occur	Expected to occur in most circumstances
5	Very likely to occur	Will occur in most circumstances

Measure of consequences

Table 3

Level	Descriptor	Example detail description
А	Insignificant	Very low risk of injury, death or minor property damage
В	Minor	Low risk of injury, death or minor property damage
С	Moderate	Moderate risk of injury, death or moderate property damage
D	Major	High risk of injury, death or major property damage
E	Catastrophic	Very high risk of death or major property damage

3.6 Tree Risk Management Process

All Council controlled assets, property and roads, within Yarra Ranges that contain trees are allocated into risk zones:

- Low Risk
- Moderate Risk
- ➢ High Risk
- ➢ Very High Risk

The risk zones designate how these areas are to be treated with regards to the type and timing of scheduled tree inspections. The zones are based on the tree resource and the occupancy of the area surrounding the trees (refer Identifying Tree Risk Zones).

The timing of Council assets scheduled tree inspections is determined by the risk zone and is detailed in table 5 below.

The method of scheduled inspection will also vary depending on the risk zone and asset type.

There are two steps in the inspection of trees in Yarra Ranges. Evaluation at the end of the step determines whether a decision can be made or if it is necessary to proceed to the next step.

The process for managing trees at Yarra Ranges described in this brief overview is elaborated in subsequent sections of the document.

3.7 Identifying Tree Risk Zones

The format of dividing municipal assets into zones is based on a system developed by the U.S. Department of Agriculture (USDA) Forest Service (Pokorny, 2003).

Determining the level of risk for each asset and therefore the corresponding zone is based on three factors:

- roadway characteristics, including the road type, traffic volume and congestion patterns;
- public use and occupancy patterns within public areas, which could be considered to be low, moderate or high; and
- tree resource characteristics, including tree condition, such as species characteristics or age, and location factors, for example, the position of trees in relation to areas used by the public.

Table 2 below presents indicative risk classification of assets within Yarra Ranges. These categories may change dependent on the nature and condition of the tree resource in conjunction with occupancy levels. The treatment of trees in the different risk zones is presented in *Chapter 2, Tree Assessment Framework, Tree Risk Zone Assessment Methods and Inspection Schedules*.

The allocation of an asset into a risk zone will be dependent on the nature and condition of the trees in combination with occupancy rates. A specific example would be Lillydale Lake, where there is high use but the site generally has a semi-mature tree population with low hazards. Therefore this may reduce the risk category for this reserve. Individual assets may be classed into different risk categories from similar asset types based on further considerations, including, the presence of known 'problem' species, declining tree populations, or different occupancy levels to similar assets.

Risk Zone Category	Parks and Bushlands	Council Road Listing	Municipal Properties
Low Risk	Low use public areas with dispersed recreation, including: Flora Reserves Walkways Easements Vacant land Open areas	Allocation of roads into risk categories to be determined by in-house YRC staff based on occupancy (traffic volume), the tree resource and local knowledge.	Heritage Museums Waste transfer stations
Moderate Risk	Moderate-use parks, playgrounds and picnics areas. Neighbourhood parks and reserves. Memorials (with adjacent trees)	Allocation of roads into risk categories to be determined by in-house YRC staff based on occupancy (traffic volume), the tree resource and local knowledge.	Car parks servicing moderate use public areas. Community Houses Libraries Public Toilet Blocks (other than those in high-use areas /reserves) Swimming Pools Tennis Clubs Bowling Clubs Pony Clubs
High Risk	High-use parks, playgrounds and picnic areas. Sports grounds and reserves with pavilions and sporting clubs e.g. Pinks Reserve. BBQs with shelters	Allocation of roads into risk categories to be determined by in-house YRC staff based on occupancy (traffic and pedestrian volume), the tree resource and local knowledge.	Car parks servicing high use public areas Senior Citizens Aged accommodation and Day Care Centres Community Links Council depots Community Halls
Very High Risk	High public use areas. e.g. Karwarra Garden, and Lillydale Lake	Allocation of roads into risk categories to be determined by in-house YRC staff based on occupancy (traffic volume), the tree resource and local knowledge.	Child-care centres Pre-schools Maternal & child health centres Caravan parks

Table 4

(Adapted from Pokorny 2003)

3.8 Risk Zones within Parks & Council buildings

Parks and reserves will not have multiple risk zones within a site. The classification of risk associated with a park/reserve is a general indication, primarily pertaining to perceived use and occupancy rates and to a lesser degree the types and condition of the tree resource.

There will be areas within particular open space (parks/reserves/sports grounds) that will present a higher risk due to tree type, condition and location. For example, trees around the playground, toilet block or car park may present higher risk than trees on the periphery of the space or adjacent to semi-natural areas where occupancy rates are lower and targets are low.

The risk rating for the entire reserve will represent the highest rating in the reserve, and the inspections will be scheduled accordingly. All areas within a site will be inspected at the same time. Assessment of the trees and the level of work required will be based on the targets near the tree and the level of risk.

3.9 Risk Zones for Roads

A two-factor approach is utilised for establishing risk zones within a road. Consideration is given to the hierarchy, use and occupancy of the road & local knowledge, as well as the tree resource. Main roads may need to be divided into sections for classification into risk zones.

Roads around commercial areas will have a higher occupancy and therefore will be classed into higher risk zones.

3.10 Tree Risk Zone Assessment Methods & Inspection Schedules

Scheduling of asset tree inspections in the risk zones is based on the classification of each zone. Therefore, trees in municipal assets in Very High Risk zones are inspected more frequently than those classified in lower risk zones.

The type of inspection for municipal properties, parks and bushland will preliminarily be ground based Asset Scheduled Tree Inspections with follow-up Tree Inspection Reports if required (*refer to Chapter 3.2, Levels of Tree assessment*).

Table 3 below details the inspection schedules and methods for each risk zone.

Risk Zone Category	Timing of Inspections	Suggested Inspection Method
Low Risk	Every four years	General Tree Inspections Individual tree inspections (if required)
Moderate Risk	Every two years	General Tree Inspections Ground – municipal properties and parks Individual tree inspections-(if required)
High Risk	Every two years	General Tree Inspections Ground – municipal properties, parks and reserves Individual tree inspections-(if required)
Very High Risk	Every year	General Tree Inspections Ground – municipal properties, parks and reserves Individual tree inspections-(if required)
		(Adapted from Pokorny, 2003)

Table 5

After storms Council will act on internal notification, reports from emergency services and customer requests for tree inspections.

3.11 Method of Review

In line with AS/NZS ISO 31000: 2009 (Risk Management), ongoing reviews are essential to ensure that tree risk management remains relevant.

The Tree Policy will be reviewed every four (4) years, within six months following a Council election. The process will include reassessment of the Yarra Ranges asset classification into risk zones, and evaluation of the tree inspection and recording processes.

The Director Environment and Engineering is empowered under delegation to amend details of operational procedures providing they do not conflict with the Strategic Policy Objectives in Chapter 1 of this plan.

3.12 Decision review process

If a resident disagrees with a decision made by the tree management team to retain a tree, it will be escalated to Coordinator Tree Management Team. If the matter is not resolved the Executive Officer Parks & Bushlands or Manager Parks & Environment will intervene.

Residents may also raise the matter with a Councillor. Councillors will choose how they want to deal with the resident, including going through the process detailed below.

The process does not cover incidents where residents want a tree recommended for removal to be retained. In this instance, the Coordinator Tree Management Team, Executive Officer Parks & Bushlands or Manager Parks & Environment will communicate with the resident.



Page 12 of 12