

A large, mature tree with a thick, textured trunk and dense, yellowish-brown foliage, likely a weeping willow, stands in a park-like setting. The tree is the central focus, with its branches spreading out. In the background, there are other trees, a paved path, and a grassy area. The lighting suggests a sunny day, with warm tones.

# **CLIMATE CHANGE**

**VULNERABILITY OF URBAN TREES**





# Contents

01

Introduction

02

Tolerance

03

Survival and  
suitability  
categorys

04

Recommended

20

Conditions  
required

35

Not  
recommended



# TREE LIST

## RECOMMENDED

Red Box	4
Kurrajong Tree	5
Southern Magnolia	6
Argyle Apple / Silver Dollar Tree	7
Yellow Gum	8
Narrow-leaved Peppermint	9
Aleppo Pine	10
Holm Oak	11
River She-oak	12
Chinese Pistachio	13
Crepe Myrtle	14
Ornamental Pear / Callery Pear	15
Feijoa	16
Velvet / Arizona / Modesto Ash	17
Chinese Elm	18
Prairie Crabapple / Bechtel Crab	19





## CONDITIONS REQUIRED

Monterey Cypress	20
<i>(Includes golden 'Aurea' cultivars)</i>	
Pencil Pine	21
Red Spotted Gum	22
Scribbly Gum	23
Deodar Cedar	24
London Plane Tree	25
Sweetgum	26
Persian Silk Tree	27
English Oak	28
Golden Elm	29
Manchurian Pear	30
Purple Leaved Plum	31
Black Locust / Mop Top	32
Japanese Spindle Tree	33
Trident Maple	34

## NOT RECOMMENDED

Cherry Tree	35
Japanese Maple	36
Canadian Maple	37
English Elm	38
Golden Ash	39
Dogwood Tree	40
Silver Birch	41
Red Oak / Scarlet Oak	42
Box Elder	43



This booklet is funded through  
the NSW Government Increasing  
Resilience to Climate Change (IRCC)  
grants program with support from  
Local Government NSW.





# INTRODUCTION

**Climate Change Vulnerability of Urban Trees** is a practical community resource aimed at helping residents living within the Queanbeyan-Palerang region understand the climate change impacts on common urban trees and identify which trees to continue to plant in the urban environment.

This work forms part of a broad range of climate change adaptation and resilience resources developed as part of Queanbeyan-Palerang Regional Council's 'Keeping it Cool- Vegetation and Heat Adaptation Strategy'.

# TOLERANCE

Species-level traits and regional climate change projections for the near future (2030) and far future (2070) have been used to develop a multi-criteria tool to assess a tree species' ability to survive and thrive in a changing climate. Each tree received a score of 1-5 for each criterion, where 1 was the poorest outcome and 5 the best.

Weightings were also applied to each of the criteria to reflect the importance of particular criteria in assessing a tree species' survivability and suitability in Queanbeyan-Palerang's climate change future.

Scores were then summed to produce an overall score allowing each species to be categorised.

The higher the overall score the better suited the tree is to our changing climate.

## Multi-criteria tool

Drought  
tolerant  
(20% weighting)



Frost  
tolerant  
(15% weighting)



Extreme heat  
tolerant  
(20% weighting)



Shade  
type  
(5% weighting)



Weed  
potential  
(20% weighting)



Useful life  
expectancy  
(5% weighting)



Irrigation  
requirement  
(15% weighting)





# SURVIVAL AND SUITABILITY CATEGORIES

**Green** - Tree species that are likely to perform well or okay under future climate change and are recommended for continued planting within urban areas throughout the Local Government Area (LGA). Weighted score is equal to or greater than 70 out of 100.

**Orange** - Tree species that are likely to perform well or okay under future climate change and in certain circumstances are recommended for continued planting within urban areas throughout the LGA. Weighted score is equal to or greater than 70 out of 100.

**Red** - Tree species that are unlikely to perform well under future climate change and are not recommended for continued planting within urban areas throughout the LGA. Weighted score is below 70 out of 100.

**Please note**

- *Further research is required to ensure that the chosen species is suited to specific site conditions*
- *Tree species listed within this booklet is not exhaustive, for further details or information on the climate change vulnerability of other tree species please visit [www.qprc.nsw.gov.au](http://www.qprc.nsw.gov.au)*
- *Soil type and other local factors may influence the size of the mature tree*

# RED BOX

*Eucalyptus polyanthemus*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

15 x 10

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Indigenous species

NSW Tablelands / ACT



99  
Weighted score

# KURRAJONG TREE

*Brachychiton populneus*

RECOMMENDED



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>40 – 60 years



Irrigation requirement



High None

Size

Metres

12 x 6

Height x Width

Available soil volume

Not included in weighted score

≥45m<sup>3</sup>

Geographic origin

Indigenous species

Inland eastern Australia



97  
Weighted score

# SOUTHERN MAGNOLIA

*Magnolia grandiflora*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

3-20 x 2-20

Height x Width

Available soil volume

Not included in weighted score

≥45m<sup>3</sup>

Geographic origin

Introduced species

Southern USA



Weighted score



# ARGYLE APPLE / SILVER DOLLAR TREE

*Eucalyptus cinerea*

RECOMMENDED



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

20 x 15

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Indigenous species

South-eastern NSW / ACT



# YELLOW GUM

*Eucalyptus leucoxydon*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

10 x 8

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Indigenous species

NSW Riverina / South Australia / Victoria



# NARROW-LEAVED PEPPERMINT

*Eucalyptus radiata*

RECOMMENDED



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

25 x 20

Height x Width

Available soil volume

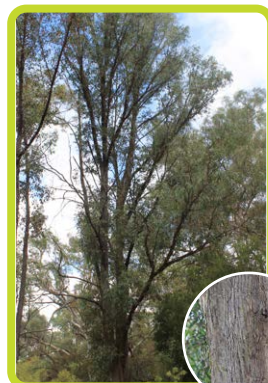
Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Indigenous species

South-eastern Australia



# ALEPPO PINE

*Pinus halepensis*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

20 x 15

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Introduced species

Mediterranean



92  
Weighted score



# HOLM OAK

*Quercus ilex*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

18 x 15

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Introduced species

Mediterranean



RECOMMENDED

# RIVER SHE-OAK

*Casuarina cunninghamiana*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

18 x 12

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Indigenous species

Riparian zones across eastern Australia



# CHINESE PISTACHIO

*Pistacia chinensis*

RECOMMENDED



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Deciduous



Weed potential



5 = non-invasive



Useful life expectancy



20 – 40 years



Irrigation requirement



High None

Size

Metres

12 x 10

Height x Width

Available soil volume

Not included in weighted score

≥15m<sup>3</sup>

Geographic origin

Introduced species

China



88  
Weighted score

# CREPE MYRTLE

*Lagerstroemia indica x fauriei hybrids*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

5-8 x 3-8

Height x Width

Available soil volume

Not included in weighted score

≥30m<sup>3</sup>

Geographic origin

Introduced species

East Asia





# ORNAMENTAL PEAR, CALLERY PEAR

*Pyrus calleryana*

RECOMMENDED



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

10 x 4-10

Height x Width

Available soil volume

Not included in weighted score

≥15m<sup>3</sup>

Geographic origin

Introduced species

China / Vietnam



# FEIJOA

*Acca sellowiana*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

3 x 2

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Introduced species

Southern Brazil / Paraguay / Uruguay / Argentina



# VELVET, ARIZONA, MODESTO ASH

*Fraxinus velutina*

RECOMMENDED



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Deciduous



Weed potential



5 = non-invasive



Useful life expectancy



20 – 40 years



Irrigation requirement



High None

Size

Metres

12 x 10

Height x Width

Available soil volume

Not included in weighted score

$\geq 45\text{m}^3$

Geographic origin

Introduced species

South-western USA / Mexico



# CHINESE ELM

*Ulmus parvifolia*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

15 x 12

Height x Width

Available soil volume

Not included in weighted score

$\geq 70\text{m}^3$

Geographic origin

Introduced species



East Asia




# PRAIRIE CRABAPPLE / BECHTEL CRAB

*Malus ioensis*

RECOMMENDED


 Drought tolerance   
Low High

 Frost tolerance   
Low High

 Extreme heat tolerance   
Low High

 Shade type   
Deciduous

 Weed potential   
5 = non-invasive

 Useful life expectancy   
10 – 20 years

 Irrigation requirement   
High None

Size  
Metres **4 x 3**  
Height x Width

Available soil volume **≥15m<sup>3</sup>**

*Not included in weighted score*

Geographic origin **Introduced species**  
*Mid-west USA*





# MONTEREY CYPRESS *(includes golden 'Aurea' cultivars)*

*Cupressus macrocarpa*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

25 x 20

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Introduced species

California coast

Conditions

Extremely large tree with spreading habit. Suitable for historic plantings or in large parks and open spaces. Prone to Cypress canker.



100  
Weighted score

# PENCIL PINE

*Cupressus sempervirens*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

15 x 3

Height x Width

Available soil volume

Not included in weighted score

$\geq 70\text{m}^3$

Geographic origin

Introduced species

Italy

Conditions

Poor shade type, consider for architectural purposes only.  
Prime possum real estate.



Weighted score

CONDITIONS REQUIRED

# RED SPOTTED GUM

*Eucalyptus mannifera*

	Drought tolerance	 Low High
	Frost tolerance	 Low High
	Extreme heat tolerance	 Low High
	Shade type	 Evergreen
	Weed potential	 5 = non-invasive
	Useful life expectancy	 >60 years
	Irrigation requirement	 High None
	Size	12 x 10
	Metres	Height x Width
	Available soil volume	≥45m <sup>3</sup>
	Not included in weighted score	
	Geographic origin	Indigenous species
		South-eastern NSW / ACT
	Conditions	Can be prone to dropping branches in strong winds.



# SCRIBBLY GUM

*Eucalyptus rossii*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Evergreen



Weed potential



5 = non-invasive



Useful life expectancy



>60 years



Irrigation requirement



High None

Size

Metres

18 x 15

Height x Width

Available soil volume

Not included in weighted score

≥70m<sup>3</sup>

Geographic origin

Indigenous species

NSW Tablelands, Western Slopes and Central Coast / ACT

Conditions

Tolerates poor, skeletal soils, but not waterlogging or compaction. Avoid planting in areas with high compaction (nature strips) or heavy clay soils.



Weighted score

CONDITIONS REQUIRED

# DEODAR CEDAR

*Cedrus deodara*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

35 x 20

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Introduced species

Himalayas

Conditions

Extremely large tree with spreading habit. Suitable for historic plantings or in large parks and open spaces.



# LONDON PLANE TREE

*Platanus × acerifolia*

CONDITIONS REQUIRED



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

30 x 20

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Introduced species

Horticultural origin; one of its parents is *P. occidentalis* from Southern USA.

Conditions

Produces large amounts of pollen during the flowering period which may cause allergies. In periods of high temperature London Plane Trees emit isoprene, a precursor for tropospheric ozone, a key pollutant and greenhouse gas.



92  
Weighted score

# SWEETGUM

*Liquidambar styraciflua*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

12 x 10

Height x Width

Available soil volume

Not included in weighted score

≥45m<sup>3</sup>

Geographic origin

Introduced species

Eastern USA / Central America

Conditions

Vigorous root system - not suitable for paved areas, poor soils or poorly drained sites. Spiky fruits can be a nuisance in pedestrian areas.





# PERSIAN SILK TREE

*Albizia julibrissin*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

6 x 6

Height x Width

Available soil volume

Not included in weighted score

$\geq 30\text{m}^3$

Geographic origin

Introduced species

Middle East to eastern Asia

Conditions

Very susceptible to borer infestation. Short aesthetic life.



Weighted score

CONDITIONS REQUIRED

# ENGLISH OAK

*Quercus robur*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

20 x 18

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Introduced species

Europe / Northern Africa / Western Asia

Conditions

Susceptible to oak leaf miner and powdery mildew. However this is usually inconsequential to health and performance.



# GOLDEN ELM

*Ulmus glabra 'Lutescens'*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

15 x 20

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin

Introduced species

Horticultural origin

Conditions

Prefers sheltered conditions. Highly susceptible to elm leaf beetle attack and with repeat defoliation (4-5 consecutive years) the tree may die.



CONDITIONS REQUIRED

# MANCHURIAN PEAR

*Pyrus ussuriensis*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

12 x 8

Height x Width

Available soil volume

Not included in weighted score

≥15m<sup>3</sup>

Geographic origin

Introduced species

China / Vietnam

Conditions

Requires formative pruning to avoid branch shear. Fruit may attract significant birdlife.



# PURPLE LEAVED PLUM

*Prunus x blireiana*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

5 x 3

Height x Width

Available soil volume

Not included in weighted score

≥15m<sup>3</sup>

Geographic origin

Introduced species

Horticultural origin

Conditions

Can be susceptible to a large number of diseases and pests such as black knot.



CONDITIONS REQUIRED

# BLACK LOCUST / MOP TOP

*Robinia pseudoacacia*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

10 x 8

Height x Width

Available soil volume

Not included in weighted score

≥30m<sup>3</sup>

Geographic origin

Introduced species

Eastern USA

Conditions

May pose a biosecurity risk - vigorous suckering can occur if the root zone is disturbed which can exclude other vegetation. Pods, leaves and other plant parts are toxic.



# JAPANESE SPINDLE TREE

*Euonymus japonicus*

CONDITIONS REQUIRED



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

3 x 2

Height x Width

Available soil volume

Not included in weighted score

≥45m<sup>3</sup>

Geographic origin

Introduced species

Japan

Conditions

Susceptible to powdery mildew in wet warm conditions.  
Do not plant within 2m of water/sewer infrastructure.





# TRIDENT MAPLE

*Acer buergerianum*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

6 x 6

Height x Width

Available soil volume

Not included in weighted score

≥30m<sup>3</sup>

Geographic origin

Introduced species

East Asia

Conditions

Formative pruning required to ensure single trunk. Produces large quantities of seeds which may result in an abundance of new seedlings/saplings. Avoid planting in areas with high compaction (nature strips).



# CHERRY TREE

*Prunus avium*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Deciduous



Weed potential



5 = non-invasive



Useful life expectancy



20 – 40 years



Irrigation requirement



High None

Size

Metres

10 x 8

Height x Width

Available soil volume

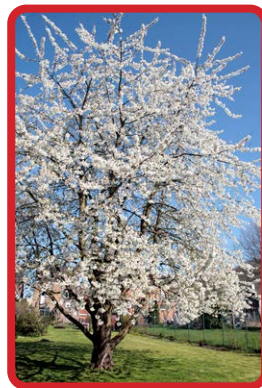
Not included in weighted score

$\geq 30\text{m}^3$

Geographic origin

Introduced species

Europe



Weighted score

NOT RECOMMENDED

NOT RECOMMENDED

# JAPANESE MAPLE

*Acer palmatum*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

5 x 5

Height x Width

Available soil volume

Not included in weighted score

$\geq 45\text{m}^3$

Geographic origin

Introduced species

Japan



# CANADIAN MAPLE

*Acer rubrum*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

*Metres*

9 x 5

*Height x Width*

Available soil volume

*Not included in weighted score*

≥15m<sup>3</sup>

Geographic origin

Introduced species

*Canada / Eastern USA*



Weighted score

NOT RECOMMENDED

NOT RECOMMENDED

# ENGLISH ELM

*Ulmus procera*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Deciduous



Weed potential



5 = non-invasive



Useful life expectancy



40 – 60 years



Irrigation requirement



High None

Size

Metres

30 x 15

Height x Width

Available soil volume

Not included in weighted score

≥100m<sup>3</sup>

Geographic origin














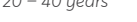
Introduced species

Western and Southern Europe



# GOLDEN ASH

*Fraxinus excelsior 'Aurea'*

	Drought tolerance		Low High
	Frost tolerance		Low High
	Extreme heat tolerance		Low High
	Shade type		Deciduous
	Weed potential		5 = non-invasive
	Useful life expectancy		20 – 40 years
	Irrigation requirement		High None
	Size		12 x 10
	Metres		Height x Width
	Available soil volume		≥45m <sup>3</sup>
	Not included in weighted score		
	Geographic origin		Introduced species
			Europe / Middle East



NOT RECOMMENDED

NOT RECOMMENDED

# DOGWOOD TREE

*Cornus florida*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

4 x 3

Height x Width

Available soil volume

Not included in weighted score

$\geq 30\text{m}^3$

Geographic origin

Introduced species

Eastern USA





# SILVER BIRCH

*Betula pendula*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

12 x 6

Height x Width

Available soil volume

Not included in weighted score

$\geq 30\text{m}^3$

Geographic origin

Introduced species

Europe / North Asia



Weighted score

NOT RECOMMENDED

NOT RECOMMENDED

# RED OAK / SCARLET OAK

*Quercus rubra*



Drought tolerance



Frost tolerance



Extreme heat tolerance



Shade type



Weed potential



Useful life expectancy



Irrigation requirement



Size

Metres

12 x 9

Height x Width

Available soil volume

Not included in weighted score

$\geq 30\text{m}^3$

Geographic origin

Introduced species

Eastern USA



# BOX ELDER

*Acer negundo*



Drought tolerance



Low High



Frost tolerance



Low High



Extreme heat tolerance



Low High



Shade type



Deciduous



Weed potential



5 = non-invasive



Useful life expectancy



20 – 40 years



Irrigation requirement



High None

Size

Metres

12 x 10

Height x Width

Available soil volume

Not included in weighted score

≥15m<sup>3</sup>

Geographic origin

Introduced species

North America



Weighted score

NOT RECOMMENDED

## Step 1

### Select the location

Choose a location that will allow the roots to spread and branches to grow freely, away from building foundations, walls, decks, and powerlines.



## Step 2

### Dig the hole

Dig a hole as deep as the root ball and two times as wide. Soil removed from the hole should be placed on the low lip of the hole. It should be a neat hole, the more the soil is broken up the better. If you need to move the hole due to a large rock **do it!**



## Step 3

### Remove the tree from the pot

Squeeze the pot in both directions then tap the tree out gently. Keep the soil around the roots in one piece if possible. Resist the temptation to pull it out of the pot by the stem, as this is likely to damage the tree.



## Step 4

### Plant the tree

Holding the plant in position by the soil ball, drag the soil removed from the hole under and around the soil ball. The soil level in the pot should be at or slightly below the level of the soil. This new soil level should be about 3cm below the surrounding undisturbed soil level.



## Step 5

### Watering bowl

With the tree placed about 3cm below the surrounding undisturbed soil a watering bowl is created. Use the excess soil removed from the hole and place it on the downhill side of the hole to form a mini dam. If required, mulch can be placed in and around the tree while retaining the water bowl shape.



## Step 6

### Water in gently

Each tree should receive a full bucket of water (9 litres). Apply this gently so that the soil is not washed from around the roots of the tree. Pouring it over your hands helps reduce damage. Apply it slowly enough so that the water bowl around the tree does not overflow. It is now ready for the tree guard (if required).



## CONTACT US

Telephone | 1300 735 025

Hours | 8:30am - 4:30pm - Weekdays

Afterhours emergency | 1300 735 025

256 Crawford St, Queanbeyan NSW 2620

10 Majara St, Bungendore NSW 2621

144 Wallace St, Braidwood NSW 2622

M | PO Box 90, Queanbeyan

E | [council@qprc.nsw.gov.au](mailto:council@qprc.nsw.gov.au)

