

Tree Strategy 2018 - 2025

Towards an urban forest ...

August 2018



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Kaurna Acknowledgement

The City of West Torrens acknowledges that the Kaurna people and their descendants are still and will always be the first peoples of the land. The City of West Torrens commits to valuing and supporting the Kaurna people's inherent relationship to the land.

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Document history

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1.0	August 2017	Draft for internal review
2.0	May 2018	Second draft for internal review and consultation
3.0	August 2018	Approved by Elected Council.



The 50,000 trees in our streets and parks are often thought of as the lungs of our city, but for many of us they can also be seen as our heart and soul.

Each year we plant about 1,500 new trees and spend approximately \$1 million on tree maintenance and replacement. It is money well-spent.

Tree-lined streets add to the value of adjacent properties and shield us from our harsh summer climate. Streets lined with high fences, shopfronts and advertising signs cannot compare with avenues lined with trees. We need job-creating economic development, of course, but at the same time we need to recognise how years ago American humourist Ogden Nash commented:

"I think that I shall never see
A billboard lovely as a tree.
Perhaps unless the billboards fall,
I'll never see a tree at all."

We need economic growth but we also want the City of West Torrens to be known for its beautiful, leafy streets and parks.

That will not be achieved in full during my term as Mayor, but it is my hope that, in the not too distant future, our district can be referred to as the leafy western suburbs.

We are working towards that goal by developing a Tree Strategy which responds to the voice of our community and provides Council with the tools to properly and efficiently manage, protect and expand our urban forest for generations to come.

A handwritten signature in black ink that reads "John Trainer". The signature is fluid and cursive.

Hon John Trainer, OAM Mayor

INTRODUCTION



Background and purpose

The City of West Torrens comprises 36 square kilometres of Adelaide's western metropolitan area and includes the suburbs of Ashford, Brooklyn Park, Camden Park, Cowandilla, Fulham, Glandore (part), Glenelg North (part), Hilton, Keswick (part), Kurralpa Park, Lockleys, Marleston, Mile End, Mile End South, Netley, North Plympton, Novar Gardens, Plympton, Richmond, Thebarton, Torrensville, Underdale, West Beach (part) and West Richmond.

The greatest percentage of the land area is dedicated to residential development, while the commercial areas comprise a range of industrial, logistic, distribution and retail establishments.

Adelaide Airport Limited is a significant land holder within the city, taking up approximately 20 per cent of the total land area. About six per cent of the total land area within the city is dedicated to public open space, including the River Torrens Linear Park, local and neighbourhood parks and other public open spaces such as ovals and sporting grounds. Council also manages and maintains about 300 km of streetscapes.

These streetscapes and public parks are a significant feature of the Council area and are highly valued by the community, so it is critical that they are planned, planted and managed in a way that delivers on Council's many aspirations and its overall vision for future development within the city. To achieve this Council has prepared the City of West Torrens Tree Strategy – towards an urban forest (the Strategy).

The Strategy provides a framework for the ongoing management and development of Council's tree assets (trees in public streets, parks and other public places).

The term 'urban forest' is used to describe all of the trees (in streets, homes, parks, woodlands, alongside waterways, etc) located in urban communities. Measured as a canopy cover percentage of the total land area, the urban forest is recognised as a primary component of the urban ecosystem.

The Strategy details a vision for the future that sees the evolution towards a sustainable urban forest throughout the city, supported by a clear vision, objectives, actions and new tree management policies for sustainable tree management, preservation and renewal within the Council area.



The best time to plant a tree was 50 years ago. The second best time is right now.

Chinese proverb



Attractive streetscapes and public parks are highly valued by the community.

Legislative and strategic context

Council's strategic planning context

The City of West Torrens' 'Towards 2025 Community Plan' is built upon six community themes:

- Community Life.
- Natural Environment.
- Built Environment.
- City Prosperity.
- Financial Sustainability.
- Organisational Strength.

The Community Plan draws attention to the importance of trees as we plan for population growth and urban development. It contains strategies to improve the condition of local biodiversity, participate in local environmental projects and plant and maintain a diversity of appropriate tree species as a valued community asset.

The Tree Strategy links to a range of Council strategic management and action plans, as indicated in the diagram overleaf.

Legislative framework

The City of West Torrens undertakes all necessary tree management actions with regard to relevant State and Commonwealth Government legislation. If any conflict arises between this Strategy and those Acts, then the Acts will have precedence.

There are numerous pieces of relevant legislation, but some of the more important Acts include:

- *the Local Government Act 1999*
- *the Development Act 1993 and Development Regulations 2008*
- *the Planning, Development and Infrastructure Act 2016 and Planning, Development and Infrastructure Regulations 2018*
- *the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*
- *the Electricity Act 1996*
- *the Road Traffic Act 1961*
- *the Native Vegetation Act 1991.*

Built Environment



City Prosperity



Community Life



Financial Sustainability



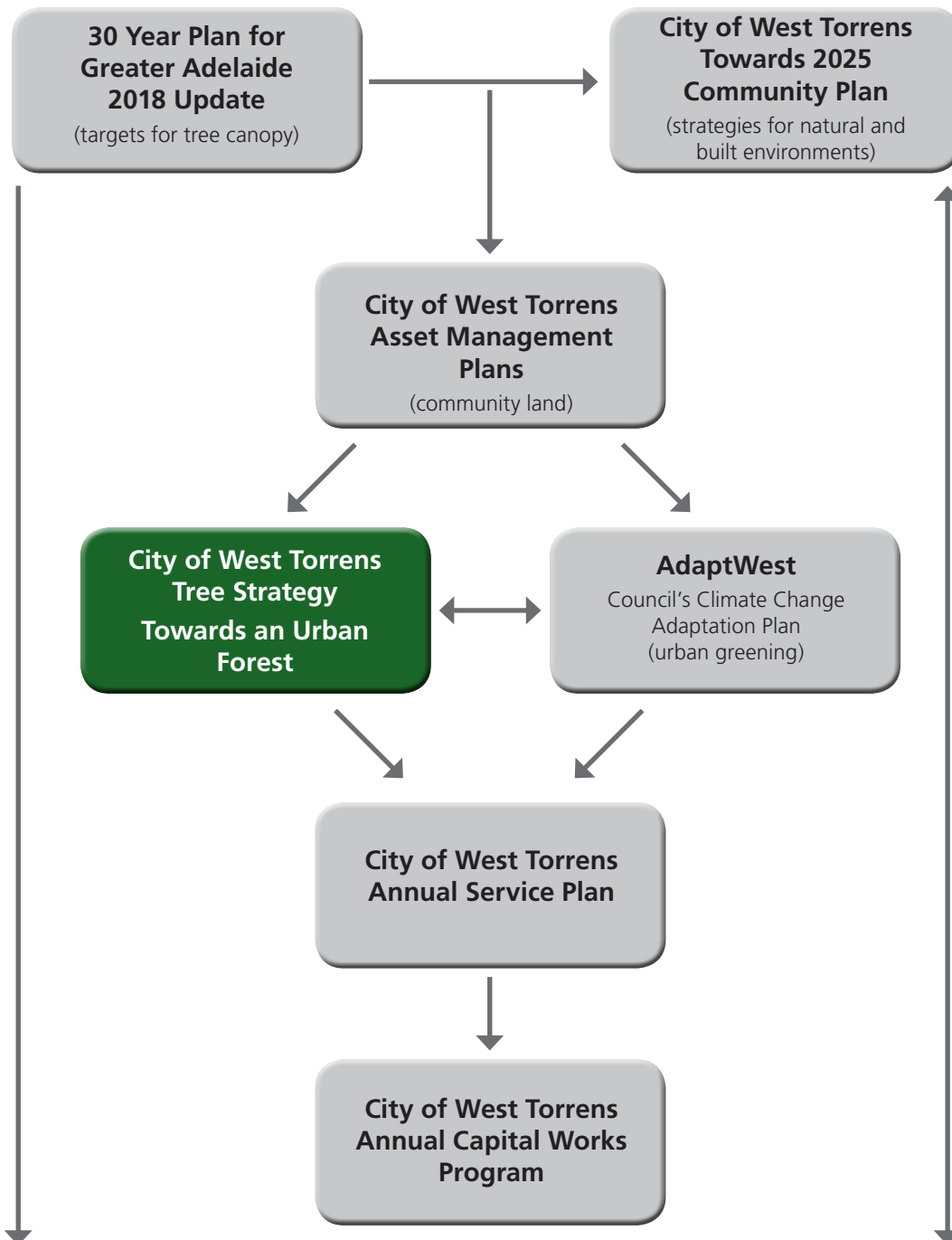
Natural Environment



Organisational Strength



Strategic context



This diagram illustrates the relationship of the Tree Strategy to other City of West Torrens' policy documents and strategies that underpin and inform it. Implementation of the Tree Strategy will require coordination with a wide range of other initiatives across the organisation as a whole.

Why do we need a Tree Strategy?

A management and decision making framework

This Strategy creates a framework for the ongoing management and decision-making for all Council-owned or managed street trees and trees in public parks. The Strategy will help to guide Council decision-making about trees, including their maintenance, pruning, planting, removal and replacement, the design of streets, parks and other infrastructure projects to better provide for trees.

The Strategy also:

- Provides clarity about Council's role and vision in tree management.
- Assists with planning for new trees.
- Reflects the unique characteristics of the City of West Torrens.
- Outlines the key Objectives and Actions for the ongoing management of trees in the Council area.
- Establishes a clear pathway through Council's administrative processes to manage tree-based queries and decisions through sound arboricultural practices.

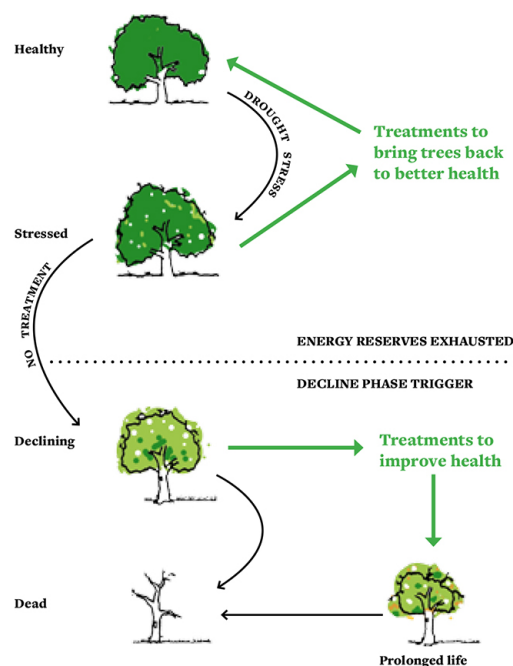
What are the key issues and challenges associated with trees?

The ongoing and proactive management of trees is necessary in order to address the challenges associated with a living, changing asset and to improve the environmental qualities of the city over time.

Some key issues and challenges relating to the urban forest include:

- Maintaining accurate records and knowledge of Council's current tree assets.
- Planning for the replacement of ageing trees, protecting existing trees and planting additional trees to grow the urban forest in the context of increased urban infill development.
- Designing for trees to support their growth and to protect built infrastructure.
- Planting appropriate tree species (and replacement of inappropriate species) and developing sustainable planting practices to address the changing climate.
- Engaging effectively with stakeholders and the community to address their expectations about the planting and management of trees.

Lifecycle of trees





TOWARDS A SUSTAINABLE URBAN FOREST

Kaurna heritage and pre-European landscape

Kaurna heritage

The area now known as West Torrens was originally part of Kaurna land, which stretched from Cape Jervis in the south to the region around Port Wakefield and Crystal Brook in the north. It stretched along the eastern shore of Gulf St Vincent and was defined in the east by the Mount Lofty Ranges.

The Kaurna people identified themselves so completely with their environment that the early European settlers failed to recognise this relationship. They roamed freely over their territory with their movements governed by the seasons and the availability of food supplies. Kaurna land contained several sub-regions which provided a variety of different foods - plants, birds, animals and marine life. These sub-regions included the coast, coastal sand dunes, marshes, lagoons and river estuaries, wide plains and mountain ranges.

The first inhabitants had a complex spiritual life encompassing spirits and ancestors who were responsible for creation of the physical world and its features. Their relationships with the various ancestral beings determined marriage lines and relationships to particular animals and plants. The West Torrens area formed only a small part of the Kaurna homeland and possessed valuable resources in the River Torrens and the Sturt River.

The Kaurna occupation of the region is evident from a burial site at Torrensville and marked trees at Lockleys. There was also evidence of an old camp site at Fulham, while occasional camps were made on the sand dunes along the coast.

The Kaurna people lived in harmony with their natural environment but they were probably responsible for changing aspects of it. Their practice of setting fire to the land must have produced great changes in the early vegetation balance of the region and may have been responsible for the extensive grasslands remarked on by early settlers. The practice of burning the dry summer grasses in order to expose and trap animals and fowl awed the first Europeans.

Pre-European landscape

The area of the Adelaide Plains that now incorporates the City of West Torrens was once a diverse native landscape of large trees, grasslands, sand dunes and swamps. Land adjacent the creeks and rivers was covered with the tallest and most dense vegetation comprising South Australian blue gum forest (*Eucalyptus leucoxylon*, *Eucalyptus camaldulensis*), with very large trees and a thick understory of wattles and shrubs which thinned out away from the waterways.

Many of the small creeks now confined within concrete drains once overflowed each winter to gently cover and irrigate the West Torrens' plains. As they flowed from the east, the waters spread out into a series of large wetland ponds (reed beds) which covered a large area of the western side of West Torrens. These wetland areas, bordered to the west by coastal sand dunes, were dominated by sedges, reeds (*Phragmites australis*) and by Paperbark (*Melaleuca halmatarorum*) which grew on the banks of the rivers and permanent water areas.

Further inland, red sand dunes and salt lakes covered with samphire dominated the area east of the reed beds.

The suburbs of Camden Park and Plympton had large stands of native pine (*Callitris preissii*) forests. Mallee Box Woodland (*Eucalyptus porosa*) was found on the eastern side of the Council area adjacent the Adelaide Park Lands and featured an incredible diversity of smaller plants (in the range of 800 different species). The areas of Marleston, Richmond and Cowandilla featured rich open grasslands (*Austrostipa nodosa*, *Austrodanthonia ceaspitosa*) with scattered eucalypts.

Towards a sustainable urban forest

The post-European landscape

Following European settlement from 1836, the European population grew quickly. Land was taken up for farming purposes, with many areas cleared for wheat and barley crops and sheep and cattle grazing.



The early settlers planted European and exotic trees around their properties. For example, 'The Gums' homestead located in Lockleys is surrounded by trees planted by the first European occupants and includes many exotic species.

During the 1930s and 40s, much of the land was subdivided into smaller blocks for housing. Wetlands were drained and there was a transition from grazing to growing fruit and vegetables.

During the 1950s and 60s many parts of the Council area developed more intensively, predominantly with residential but with a range of commercial/industrial activities as well. During this period many residents planted fruit trees and other trees in their back gardens, while this period saw the start of Council's street tree plantings.

The 1970s and 80s saw a rapid increase in the planting of ornamental trees in private rear gardens and Council further developed its program for street tree planting.

During the 1990s and through to current day, Council has significantly increased its street tree planting program, including Council parks.

Many of the early plantings have now reached maturity, creating attractive, tree-lined streetscapes in many parts of the Council area.

However, the past decade has seen a lot of urban renewal comprising the replacement of single houses with multiple homes, with many trees cleared as part of the redevelopment process. This has occurred on both private land and along streets, where additional driveways and infrastructure has seen the loss of street trees.



Lockleys 1949



Lockleys 1998

Moving forward

The City of West Torrens' urban forest comprises all of the trees – and the soil and water that supports them – within the Council area.

Trees in cities are a major component of the green infrastructure, the natural resources upon which the city relies. As well as providing an important source of food and habitat for fauna living in our urban environment, trees contribute to biodiversity and are a vital part of many natural ecosystems.

The urban forest also assists in filtering groundwater, stormwater and water in natural drainage networks. Trees reduce the flow (volume and velocity) of stormwater run-off, which is an important consideration in areas of increased urban infill (such as the City of West Torrens). Trees absorb carbon and thus reduce air pollution, while they also improve thermal comfort which results in improved health outcomes for the community.

The benefits of the urban forest are not just environmental. Trees improve the overall amenity of neighbourhoods by providing shade and colour, reinforcing the character of a street or precinct, slowing traffic, reducing noise, screening views to less attractive parts of our cities and improving privacy. There are psychological and social benefits to trees - they provide a connection to nature that is often perceived to be missing in urban areas.

Looking holistically at the urban forest and its associated ecosystem allows for consideration of the broader issues of climate change, urban heat island effects and population growth that can be influenced by, and that can affect, an urban forest.

For an urban forest to be sustainable there must be a wide age-distribution of trees to create a continuous cycle of succession.

Apart from ensuring that there is a new generation of trees to take the place of trees which must be removed for health or structural reasons, the most expensive stages of a tree's life are in the very early stages and in old age or senescence. Hence a mix of ages is more financially sustainable and assists Council to manage the renewal of its tree assets.

Having a diverse mix of species - both native and exotic - reduces the risk of loss should one species be susceptible to a new pest or disease. Diversity of tree species also provides benefits for biodiversity, aesthetics, improves resilience and the provision of summer shade and winter sun (University of Technology Sydney, 2008).

Notwithstanding the many benefits of trees, it is important to acknowledge that trees also have costs associated with planting and maintaining them. There are also many challenges involved in growing healthy trees in complex urban environments (including narrow streets and verges).



Trees provide many benefits including providing food for native birds.

Towards a sustainable urban forest

For example, species need to be selected to minimise potential damage to infrastructure including fencing, footpaths, kerbs and road pavements and underground infrastructure on public and private property.

While our urban forest is most definitely an asset, when not properly cared for and managed, it can also become a liability.

The management of an urban forest is usually considered a local government responsibility, but frequently extends well beyond that - local communities, schools, community groups, developers, business, industry and State and Federal Government all have important roles to play. In fact, every part of the community contributes in some way to the urban forest as a whole.

Nonetheless, the primary focus of this Strategy and the recommended actions is the public realm for which the City of West Torrens is directly responsible (ie trees on Council managed land in streets, parks, plazas and Council car parks, drainage corridors and the River Torrens Linear Park).

The key messages in promoting the urban forest to support the goals of this Strategy are as follows:

- A healthy and safe urban forest doesn't happen by chance - it is a result of proper planning, management and community investment.
- Healthy urban forests can assist with many community problems.
- Urban forests and natural areas are connected - good management of one helps the other.



Urban forestry can be described as the science and art of managing trees, forests and natural ecosystems in and around urban communities in order to maximise the physiological, sociological, economic and aesthetic benefits that trees provide society.

Schwab, 2009



An urban forest is an asset to a suburban street.

TREE STRATEGY 2018 - 2025



Tree Strategy 2018 - 2025

Our vision

The tree vision for West Torrens is to create a city that recognises the contribution trees make to the character and amenity of neighbourhoods, to biodiversity, to public health and the wellbeing of the community.

Our commitment

Council recognises the fundamental and intrinsic value of trees in the urban environment.

Our commitment is that trees in the public realm will be a sustainable asset that are managed consistently and effectively so that they flourish and provide great benefit to our community and our city's amenity.

Decision-making about trees will be transparent and follow a coordinated and timely pathway through the organisation that is reflective of broad community aspirations for the city's future urban forest.

Objectives and actions

In order to achieve the vision for a sustainable urban forest, four key Objectives (with corresponding Actions) have been developed that will be implemented over time:

1. Protect the existing urban forest.
2. Expand the urban forest canopy cover comprising a diverse species mix.
3. Improve the health and growing conditions of the urban forest.

4. Inform and engage with the community and stakeholders to help develop Council's urban forest initiatives.










These objectives and actions respond to the current issues relating to trees in the West Torrens' area and the potential future benefits to the environment and community. However, they will need to be implemented within the context that the area is largely characterised by a dense 'built up' urban fabric that is intensifying over time.



Trees increase the character and amenity of where you live.

Objective 1- protect the existing urban forest

Protect against further unnecessary tree loss caused by urban infill by documenting the existing trees in the Council area and appropriately planning for new tree planting.

Action	Time frame
1.1 Undertake a full tree audit of Council owned trees. From the audit: <ul style="list-style-type: none"> (a) develop an electronic tree management program (b) develop precinct masterplans to guide future tree planting in streets and parks, based on desired neighbourhood character and open space/recreation strategies and plans, while not impacting upon high activity areas such as kick-a-bout spaces (c) identify key streets and parks where the age/condition of trees may require action for tree replacement (d) prioritise streets, parks and other locations for: <ul style="list-style-type: none"> • additional tree planting • tree management (e) identify biodiversity and species gaps and potential impact of climate change on existing trees. 	
1.2 Require all development applications affecting the public realm to accurately indicate the location and detail of existing trees/vegetation on public land.	
1.3 Review and improve our costing/valuation method relating to proposals for street tree removals associated with development applications.	
1.4 Prioritise tree management and planting along existing and potential biodiversity corridors and areas identified as 'hot spots' through urban heat island mapping.	
1.5 Design infrastructure projects, where possible, to facilitate the retention of existing healthy trees, additional tree planting and the healthy growth of the trees.	
1.6 Identify and protect trees with historic or cultural significance (on both public and private land) through the preparation of a Development Plan Amendment or amendment to the Planning and Design Code.	
1.7 Identify, protect and effectively manage significant and regulated trees.	
1.8 Through education and negotiation with applicants: <ul style="list-style-type: none"> (a) minimise loss of medium/large healthy trees on both private and public land as part of urban infill projects through the development assessment process (b) aim to ensure that, following redevelopment in new infill housing developments and subdivisions, that there is at least one street tree remaining or planted in the verge per property. 	
1.9 Investigate the potential for an incentive scheme to assist with the preservation costs of significant and regulated trees on private properties.	

Indicators



1 - 3 years



3 - 5 years



5 - 7 years

Tree Strategy 2018 - 2025

Objective 2 - expand the urban forest canopy cover comprising a diverse species mix

Help mitigate the impacts of urban infill, a changing climate and the heat island effect by increasing the overall canopy cover in the Council area. This canopy should comprise a broad mix of tree species in order to promote biodiversity, sustainability and increase amenity in the urban landscape.





Action	Time frame
2.1 Develop a Tree Planting and Replacement Plan that: <ul style="list-style-type: none"> (a) increases the total number of trees in public areas (ie achieves an annual net gain taking into account of trees planted and trees removed) (b) prioritises increased planting in Council managed areas that have low tree canopy coverage and where gaps exist in streetscapes or parks (c) identifies opportunities to plant trees on Council owned and managed land (d) achieves species diversity (e) considers appropriate tree species that are tolerant to a changing climate and soil conditions (f) implements, monitors and documents trials of new species (g) includes an 'Adopt a tree' program that encourages residents to help water and maintain healthy growth of street trees, particularly in drier seasons and during early establishment. 	●
2.2 Develop a tree planting assessment table and checklist to assist in the selection of tree species for application in the public realm and to inform the Tree Planting and Replacement Plan.	●
2.3 Develop annual Streetscape and Park Renewal Plans that implement the overall Council-wide Tree Planting and Replacement Plan.	●
2.4 Develop a 'Plant and Enjoy' program to encourage tree planting in private front and rear gardens. Such a 'tree giveaway' program may see Council give each new home owner in a new dwelling a suitable tree to plant in their garden area.	●



The urban forest canopy can help reduce the harmful effects of climate change.






Objective 3 - improve the health and growing conditions of the urban forest

Support the longevity of the urban forest and other Council assets by utilising innovative construction and planting techniques that consider the lifespan of built and green infrastructure. Maintain the urban forest and their assets appropriately.

Action	Time frame
3.1 Develop and implement tree planting and construction guidelines for Council projects based on Water Sensitive Urban Design (WSUD) and that assist with: (a) addressing existing stormwater drainage problems in streets and parks (b) promoting tree and root growth (c) minimising the impacts on built infrastructure and services.	
3.2 Develop a Tree Maintenance Plan to guide the ongoing maintenance of street trees and trees in parks.	
3.3 Incorporate landscape/streetscape design opportunities for additional street tree planting in street upgrade initiatives.	
3.4 Develop and implement a Tree Risk Assessment procedure applicable to public areas to minimise the risk to public safety.	

Objective 4 -inform and engage with the community and stakeholders to help develop Council's urban forest initiatives

Inform and promote the actions being undertaken by Council to create a sustainable urban forest, increasing public knowledge of the benefits of trees, their management and impact on community wellbeing.

Action	Time frame
4.1 Prepare Precinct Masterplans to identify locations where planting of additional trees will have maximum health benefits to residents, including: (a) key walking routes (b) adjacent health/aged care precincts (c) adjacent childcare/educational facilities (while not impacting kick-a-bout play areas).	
4.2 Continue to provide information and resources through the Council's website (eg about current tree programs, community planting days, development assessment information).	
4.3 When undertaking major planting projects, consult with relevant stakeholders and the community.	
4.4 Promote the benefits of trees (including trees in private gardens) and the importance of sustainability/conservation/biodiversity/being water wise to the community through education and school programs including community planting days.	
4.5 Trial the planting of fruit and nut trees in parks for community harvesting.	

Indicators

 1 - 3 years  3 - 5 years  5 - 7 years

TREE MANAGEMENT POLICY



Tree Management Policies

Apart from the overall Vision, Objectives and Actions, the Strategy is supported by a number of Tree Management Policies. These policies and operational guidelines assist staff and contractors by providing direction and clarification to issues raised within tree management practices for both Council and its community.

In particular, these relate to:

- Tree planting and replacement.
- Community consultation.
- Tree protection, pruning, maintenance and removal.
- Risk management.

The set of Tree Management Policies outlined on the following pages are to be reviewed on a regular basis, with potential for additional policies to be added as required.

Tree planting and replacement

Streetscape and Park Renewal Plans

Streetscape and Park Renewal Plans will be prepared annually (for streets, precincts, parks and neighbourhoods) which:

- take account of the long-term view in managing the city's trees
- take account of the overall impact of trees in the urban design of the area in question
- are consistent with budget provisions
- detail planting sites, species and numbers
- include post planting maintenance to be carried out.

Council will appoint delegates (Council Delegates) who will be authorised to plant and replant trees and vegetation on Council land in accordance with the relevant Streetscape and Park Renewal Plan.

Tree selection and planting

The selection of appropriate trees for street planting will be critical for their successful establishment and a well-managed streetscape. Council staff will ensure that the species selected for planting are rigorously assessed to ensure the establishment of the right tree for the right location. The selection of quality tree stock will be guided by Australian Standard (AS) 2303:2015 *Tree Stock for Landscape Use* and sourced from nurseries that meet these minimum standards. Accordingly, Council Delegates are authorised to select and plant the appropriate tree species in any street or reserve within the following guidelines.

Tree species selection for new plantings will consider the following requirements:

- the surrounding composition of vegetation and any local environmental or aesthetic considerations
- the potential impact of a changing climate on tree health and longevity
- the purpose of the road as well as the type of construction of the road and any impact the trees might have on the road, or any of the surrounding structures
- the impact of the tree planting on statutory and regulatory requirements with regard to service utilities and other built infrastructure present above or below the ground
- the type of traffic using the road and potential impacts on road safety
- the possible impacts on the safety of the public
- utilising the best available arboriculture standards and practices, including ease of maintenance, longevity, growth rate and appearance
- where whole streets are to be planted through programmed replacement, Council Delegates are authorised to select the location and species in consultation with the **Ward Councillors** and the appropriate residents in accordance with section 232 of the *Local Government Act, 1999*
- any other matters which might be pertinent to the site or local conditions, including soil and weather conditions
- the *Local Government Act, 1999*.

For a list of current tree species refer to Council's tree fact sheets on Council's website - westtorrens.sa.gov.au

Tree Management Policies

The establishment or maintenance of an avenue of trees, or of a consistent planting theme, may require planting against the wishes of the resident immediately adjacent, or of a minority group. Council Delegates will make a judgement regarding the benefit to the wider community when necessary (eg to fill a gap in a strong, consistent planting theme that preserves the overall streetscape or park character).

Trees will generally be located in accordance with the following:

- consideration should be given to whether the tree is, on balance, appropriate to the proposed site taking into account:
 - o environmental and aesthetic issues
 - o the use and construction of roads and associated below- and above-ground infrastructure
 - o road safety matters
- potential impact on residents.
- a tree of a species with a mature height of greater than six metres should be planted, where possible, more than 1.5 metres from a vehicle crossover
- trees should not be planted, if possible:
 - o within one metre of a stormwater drain

- o within one metre of a residential water service or ferule connection to water mains
- o within one metre of a telecommunication inspection point
- o within two metres of an electricity pole (except for species which, at maturity, have a canopy spread of less than four metres)
- trees should be planted in accordance with the regulations associated with all relevant legislation such as the *Sewerage Act 1929* and the *Electricity Act 1996*. The requirements, requests and submissions of all service and public authorities should be taken into consideration

'Whole of street' tree replacement

Where the condition of a streetscape warrants more significant improvement, Council may undertake 'whole of street' (or sections of a street) street tree replacement, or more significant streetscape upgrades comprising a range of physical infrastructure and traffic management improvements.

In such cases, an integrated urban design approach will be adopted within which planning for street tree and other vegetation plantings will be considered as part of the overall urban design to achieve the best possible streetscape for the community.

In these more significant renewal projects, extensive community consultation will be undertaken.



When planting street trees it's important to take into account aesthetics and environmental issues.

Planting in parks

Tree planting in parks should be undertaken in accordance with the relevant Community Land Management Plan and generally planting in parks should be prioritised according to:

- existing tree cover
- level of community interest
- level of park usage
- type of park use.

Where planting is considered warranted, species selection should be based on:

- existing landscape character
- environmental (natural) importance of the site
- environmental conditions
- submissions by residents
- impact upon high activity areas such as kick-about spaces
- effect on local fauna.

Community consultation

Council's Public Consultation Policy sets out principles to be upheld and responsibilities for consulting the community.

The guidelines associated with that Policy provide a range of techniques and resources to assist in planning consultation in the various circumstances that may arise.

Council Delegates are to ensure that residents are informed/consulted effectively regarding:

- the planting and replanting of street trees throughout the city
- the landscaping, planting and replanting of trees in open spaces (parks and reserves) throughout the city in accordance with Community Land Management Plans (*Local Government Act, 1999*) and other relevant Council policies and plans.

Council Delegates are to ensure that residents are informed/consulted regarding the removal of street trees, including anticipated timeframes. The consultation process is to be based on the following:

- for an individual street tree:
 - o inform the adjoining resident that the tree requires removal via direct contact (or if resident is not at home, then via a note in the letterbox)
- for tree removal/replanting associated with Council's Greening Program (ie: tree replacement/infill planting):
 - o inform and consult with affected residents via a letter box drop (for a whole street removal/replanting, all residents within the street will be consulted)
- for tree removals/replanting associated with a major streetscape renewal (involving civil engineering works as well as tree planting/landscaping):
 - o a more formal and comprehensive community engagement process involving notifying all affected residents and local community groups (when applicable) and including the preparation of concept plans for review and comment
 - o advice to the relevant Elected Members of the consultation process prior to residents receiving the written notice.

Council Delegates will consider all feedback received as part of the decision-making process to determine a preferred approach and design relating to tree planting and removal.

Council's Elected Members may also decide to bring decisions relating to tree planting and removal to the full Council for determination. Removal will be achieved within four to six weeks of a Council decision, unless other approvals are required.

Where whole streets are to be planted through programmed replacement, Council Delegates are authorised to select the location and species in consultation with the Ward Councillors and the appropriate residents in accordance with Section 232 of the *Local Government Act, 1999*

Any requirements relating to community consultation under the *Development Act, 1993*, the *Planning, Development and Infrastructure Act 2016* or the West Torrens Development Plan with regard to Regulated Trees which conflict with the above process take precedence.

Tree Management Policies

Community consultation is not required regarding the removal, replacement and maintenance of trees:

- which are less than three metres in height
- when Council officers are implementing approved streetscape plans which have incorporated community consultation
- which are noxious weeds as defined by the *Natural Resources Management Act, 2004*
- when a hazardous tree needs to be removed for safety concerns.

Tree pruning and maintenance

Council will prune and maintain trees to ensure they remain healthy and structurally sound. This program should have a long-term perspective aimed at maximising the functional life of trees.

Trees will be maintained in accordance with Australian Standard AS4373-2007: Pruning of Amenity Trees. This Standard describes methods for pruning trees and encourages practices and procedures that reduce the risk of hazard development, branch failure, fungal infection or premature tree death. It includes formative pruning, hazard reduction, selective pruning and thinning.

The Standard recommends that pruning be carried out by tree workers who are suitably qualified, or under the supervision of a suitably qualified arboriculture worker, and that work should be performed in accordance with relevant WHS guidelines.

Council will undertake formative pruning to ensure young trees have good structure to minimise limb failure in the future.

Where requests for pruning of trees growing on property under Council's care and control are made, each request will be considered on an individual basis as detailed in this policy.

Council has obligations as defined under Section 26 of the *Highways Act* and Section 221 of the *Local Government Act 1999* to maintain street trees to strict guidelines. Where possible, Council will undertake reasonable action to address concerns raised by residents.

Minor pruning may be approved provided it does not impact on the shape and integrity of the tree.

Although trees may present a degree of risk, only a small number actually cause damage or injury. Trees present risks in relation to:

- the potential for a tree or its limbs to fail
- their potential to strike a target and cause physical injury or damage.



Council's tree maintenance program ensures that trees are kept healthy.

A target can be anything of value that may be struck when a tree fails (eg person, building, fence, vehicle).

The level of risk posed by trees depends on a combination of factors related to the tree itself and the context in which it is growing.

Risks are assessed in terms of:

- likelihood of tree or limb failure (in relation to tree health and integrity)
- likelihood of exposure (eg whether a frequently used playground or a rarely used site is exposed)
- target value (whether people, minor infrastructure or major infrastructure are exposed)
- severity of the impact (in relation to the size and weight of the tree or limb and the damage it can cause).

Risk assessment methods generally rely on visual inspection of trees by qualified arborists who assess the likelihood of tree or limb failure from defects or weakness in the tree. Based on these inspections, a number of risk management options can then be carried out.

Inspections are to be conducted as part of a regular program, as part of a strategic tree monitoring program, or when trees are being evaluated for removal for some other purpose, such as to allow for new development projects.

After risks are assessed, the most appropriate management measure is identified. Effective risk management will reduce the likelihood or severity of a risk to an acceptable level.

A range of options may be available to achieve this. The most appropriate option will be chosen with respect to costs, which will include impacts to habitat value, amenity value, heritage value and cost of the works.

Risk management options may include:

- removal of dangerous branches
- pruning
- cabling and bracing
- moving the target
- exclusion from the site
- prevention of hazardous defects
- tree removal.

Changes to climate are likely to impact on the longevity of some species, particularly where these impacts may not have been considered at the time of planting. This may increase the number of requests for maintenance and removal works as some species decline more rapidly, or are no longer suited to increased periods of hot weather, or changes to rainfall patterns.

Arboriculture as a science has progressed significantly over the past 20 or so years. There is a scientific basis and understanding of tree physiology, branch structure, wounding response and root growth characteristics. Tree management and maintenance practices need to be based on this science.

A programmed approach to managing any asset is essential. Residents expect a level of response to tree problems or requests. Severe weather events, for example, can also create a need for unplanned tree works.

The conflict between programmed and reactionary works will always be present and needs to be managed carefully when the level of resources is limited.

Risk mitigation should be the determining factor in balancing programmed versus reactionary works.

Within the constraints of its annual budget, Council's tree maintenance program aims to:

- Manage the level of risk to provide adequate public safety.
- Promote the long-term tree and/or habitat health.
- Promote the biodiversity and conservation values where appropriate.
- Improve the amenity values provided for the community.
- Select the most appropriate tree species for the location, including the suitability of existing trees nearby and the compatibility with local infrastructure and sites uses.
- Utilise the best available arboriculture practices.
- Record all aspects of planning and management and monitor outcomes.

Street and park trees remain the responsibility of Council and, as such, pruning and/or removal is to be performed by Council's trained arboricultural staff only. Arboricultural staff undertake pruning in line with Australian Standards in order to minimise tree-related risks or issues. Residents and ratepayers are able to make a formal request to the City of West Torrens for the pruning and/or removal of trees growing on property under Council's care and control. Work is not to be undertaken by residents and ratepayers (or contractors working on their behalf).



Tree planting in response to a resident request

Residents are not to plant trees in the road verge (streets) or in parks. Unauthorised planting of inappropriate trees or plant species may result in their removal.

Residents and ratepayers are able to request trees to be planted (refer to planting list on Council's website) through a formal request to the City of West Torrens.

Where individual trees are planted by the City of West Torrens at the resident's written request, the resident will be encouraged to undertake some watering of the trees until established.

Council may support community tree planting events in parks and public places. Community groups, schools or individuals wishing to plant trees (including fruit trees) in parks and public places must apply to the City of West Torrens in writing for authorisation prior to the event.

Tree removal

Tree removal by Council

From time to time it will be necessary to remove trees from within streets and from within parks due to a range of factors. Trees may be removed:

- Which are dead, dying, diseased, disfigured, dangerous, or in a state of decline for which there is no likelihood of a remedy.
- Which are a risk to public safety.
- Which are causing significant damage to property (either private property or Council property).
- Where infrastructure improvements required to be made around the tree will damage the tree beyond what is deemed to be reasonably acceptable, or render the tree in a hazardous state.
- Where the tree preservation is not cost effective compared to the tree's monetary or heritage value.
- Where the aesthetic value of the tree is extremely low or where the tree interferes with the growth and development of a more desirable tree.

Where a Council tree is removed the stump will be ground and the area will be backfilled to enable a suitable replacement tree to be established, unless it is impractical within the guidelines of this policy or where there is inadequate room to ensure the establishment of a healthy tree.

Council Delegates have the authority to remove any tree (or part of a tree), other than Regulated Trees (as defined by the *Development Act, 1993* and its Regulations and the *Planning, Development and Infrastructure Act, 2016*).

Notwithstanding any recommendation to remove or retain a tree on public land made by Council Delegates, the Council has the authority to make the decision regarding tree removal or retention and determining suitable fees and charges payable based upon the tree value.

Where Council wishes to remove a Regulated Tree or undertake an activity affecting a Regulated Tree (other than maintenance pruning), a Development Application will be prepared and the removal or tree damaging activity can only occur if the application is granted Development Approval.

Requests from the public for tree removal or replacement on public land

Residents and ratepayers are not authorised to remove trees from Council property.

Requests for tree removals and/or streetscape upgrades for trees growing on public land under Council's care and control must be made in writing addressed to the City of West Torrens. These requests can be made via email to csu@wtcc.sa.gov.au or via the Civic Centre, 165 Sir Donald Bradman Drive, Hilton 5033.

Each request will be considered on an individual basis as detailed in this policy. If a request is received for tree removal based on an allergic reaction, a medical specialist's evidence is required for consideration.

The fact that a tree species loses leaves, limbs, bark, berries, flowers, needles, fruit or nuts is not to be used as a reason in itself for the removal of any tree. The fact that a tree on public land does, or may, in the future obscure private advertising signage does not constitute just cause for pruning or removal of the tree.

Tree Management Policies

Where proposed developments or driveway crossover modifications give rise to a request for the removal of existing trees, all alternatives are to be explored and Council Delegates must determine that no alternative site for the crossover is available.

Where removal is approved:

- A suitable replacement tree is to be planted by the City of West Torrens, where an appropriate planting site is available.
- Costs for removal and replacement will apply.
- A fee, as set by Council, will be payable by the applicant. The fee will include not only removal and replacement of the tree, but the amenity value of the tree being removed.
- Affected residents will be notified.
- The resident or occupier will give an undertaking to water any replacement tree(s) until the tree(s) is established.

Council will not remove a tree for access to sun for solar panels or to provide a view. Some pruning may be approved at the cost of the applicant provided it does not impact on the shape and integrity of the tree.

When a request for tree removal on public land is received, a qualified member of staff will carry out an appropriate risk assessment.

Trees of possible heritage value or other recognised significance should only be removed following consideration by Council. In these cases a detailed report on the significance and issues surrounding the removal request will be prepared for Council.

Requests from the public for pruning of overhanging branches

Requests for the pruning of tree branches located on property under Council's care and control must be made to Council. The primary consideration of each request will be the effect that the pruning may have on the tree.

It is important when either approving or carrying out this work that:

- The form of the tree will not be adversely affected.



Encroaching vegetation from a residential property can cause safety issues.

- Where the growth of a tree owned by the City of West Torrens is causing concern to the owner or occupier of a private property, staff seek to alleviate the problem through judicious pruning and negotiation with the property owner/occupier. The owner/occupier will be advised of the pruning that will be carried out and given a timeframe for the work. If the owner/occupier is unable to be contacted a note will be placed in the letterbox outlining the degree of work proposed and the scheduled date of the works.
- Where the health or shape of the tree may be affected by pruning, the degree of cut back shall be as minimal as possible, but adequate consideration must be given to Council's responsibility and liability under sections 244 and 245 of the *Local Government Act, 1999*, and under any SA Power Networks Vegetation Agreement.
- Trees will normally not be pruned to alleviate shading of properties or outdoor advertising signs.

Encroaching vegetation

It is the responsibility of the property owner to ensure their trees do not encroach onto public land causing a safety risk. Where encroaching vegetation from private property is required to be removed by Council staff, after due notice in accordance with section 254 of the *Local Government Act, 1999*, a charge per person and equipment hour shall apply with a minimum charge, as set by Council.

Regulated trees

Trees on private land are the responsibility of the land owner, however the City of West Torrens administers the *Development Act, 1993* as it relates to Regulated Trees on private land, including trees that encroach onto Council land. Council, as the planning authority, is responsible for considering development applications relating to Regulated Trees.

For further information regarding Regulated trees please see Appendix 1.

Tree protection for works in proximity to trees on public and private land

All work in the vicinity of trees should be in keeping with AS 4790-2009: Protection of Trees on Development Sites. Risk Management Standards should ensure minimal damage is caused to the tree and its root system. Care should be taken to install appropriate temporary fencing to define a tree protection zone (TPZ) if machinery or digging equipment is to be used around trees.

Activities which require particular care include:

- footpath construction
- installation and maintenance of services
- installation of crossovers
- herbicide and pesticide programs
- infrastructure development (buildings, fences, outbuildings etc) and maintenance
- any work in proximity to Regulated or historic trees.

Develop and maintain a tree database

The City of West Torrens will develop and maintain an electronic database which will comprise a record of tree plantings and removals by staff, as well as complaints submitted by residents and ratepayers relating to trees on public land.

This database will include mapping and will be used as a management tool to identify trends that may assist in managing trees throughout West Torrens.

Tree Management Policies

Damage caused by Council trees

Trees can, and at times will, shed leaves, twigs and branches with little or no warning. This is often exacerbated during high temperatures or strong winds. This is a naturally occurring behaviour of trees, which no one can control or prevent. Trees are dynamic and they will exploit the environment in which they grow, this means at times they will impact on the infrastructure around them.

Trees which are perceived as causing damage to an adjacent private property are to be reported to the City of West Torrens.

The impacts associated with trees under the care and control of Council will be managed by firstly a thorough investigation of the issue raised and then every reasonable action will be taken to ensure that the most appropriate outcome and a suitable remedy is implemented. This may include and not be limited to:

- pruning of tree limbs
- pruning of tree roots
- below ground Hydro-vac excavations
- installation of appropriate barriers

While Council acts as 'caretaker' of trees, it does not have an absolute responsibility for all its trees. Council is not liable for damage to property which results from the planting of a tree, or the existence of a tree (whether planted by Council or not).

The Council notes its responsibilities, and those of residents, under Section 245(1) of the *Local Government Act, 1999*, regarding 'liability for injury, damage or loss caused by certain trees'.

Council Delegates are authorised to institute proceedings against any person who destroys, damages or injures, or who causes the destruction,

damage or injury of any West Torrens' owned tree under Section 221 of the *Local Government Act, 1999* or undertakes 'tree damaging activity' to a Regulated Tree as defined in the *Development Act, 1993*.

Limits of liability

Trees are living structures; they are dynamic and behave according to their environment.

Councils have a vast number of trees within their Council areas. The cost associated with individual specific attention to each and every tree would not be within available financial resources and would prove a heavy and unwarranted burden on ratepayers.

Having regard to the *Local Government Act, 1999*, Section 245, Council is only liable as occupier of community land for injury, damage or loss that is a direct consequence of a wrongful act on the part of Council.

Council is not liable for any damage to property which results from:

- the planting of a tree in a road
- the existence of a tree growing in a road (whether planted by Council or not).

However, if

- The owner/occupier of property adjacent to the road has made a written request to the council to take reasonable action to avert risk of damage to property of the owner or occupier from the tree; and
- The council has failed to take reasonable action in response to the request, the council may be liable for any damage to property that would have been averted if the council had taken reasonable action in response to the request.



Tree root damage can be caused by established trees. This should be reported to Council by residents.

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Information in this report has been prepared by Jensen Plus in consultation with the City of West Torrens.



Appendix 1

In South Australia, controls are in place to protect certain trees known as Regulated Trees and Significant Trees.

These controls are provisioned under the *Development Act 1993*.

What is a Regulated Tree?

A Regulated Tree is any tree with a trunk circumference of two or more metres measured at one metre or more above natural ground level.

For trees with multiple trunks, a Regulated Tree is one that has:

- a total circumference of two metres or more and
- an average circumference of 625mm or more measured at a point one metre above natural ground level.

A number of tree species are exempt from Regulated Tree controls due to their location or species.

What is a Significant Tree?

A Significant Tree is a Regulated Tree that has a trunk circumference of three or more metres measured at a point one metre above natural ground level.

For trees with multiple trunks, a Significant Tree is one that has:

- a total circumference of three or more metres and
- an average circumference of 625mm or more measured at a point one metre above natural ground level

or

- any tree identified as a Significant Tree in a Development Plan.

Damaging activities

Any activity that damages a Regulated or Significant Tree requires development approval from Council.

Tree damaging activity includes:

- removal
- killing or destruction
- branch or limb lopping
- ringbarking or topping
- other substantial damage including damage to the root system.

Maintenance pruning is not classed as tree damage however we suggest that you contact Council before undertaking any work.

Emergency work

If an emergency arises, work involving a Regulated or Significant Tree can be undertaken without having received a development approval.

The owner of tree, however, must lodge a development application with Council seeking retrospective approval as soon as possible once work has been completed.

Penalties

Penalties apply for any unauthorised activity to both Regulated and Significant Trees.

The person(s) undertaking the activity are responsible for the breach.

The maximum penalty \$120,000.

Breaches relating to Regulated and Significant Trees are enforced using existing provisions under the Development Act 1993 that apply to all other types of development.

More information

Contact Council's City Development team, email development@wtcc.sa.gov.au, telephone 8416 6333, 9am to 5pm, Monday to Friday.

This is an extract from the Development Act 1993. For further information visit www.sa.gov.au

List of specific tree species exemptions

Is my tree exempt from controls?

The *Development Regulations 2008* list a range of tree species as 'exempt' from Regulated Tree controls. The trees listed are:

- limited to exotic species
- trees considered to have a medium-high or high risk for limb failure and infrastructure
- common trees planted in urban areas.

A list of tree species that are exempt can be found below. If you are uncertain if your tree is an exempt species you should seek your own professional advice to confirm the species and whether or not it is exempt from these controls.

In addition, the *Regulations* also exempt the need for an applicant to seek approval to:

- remove a Regulated or Significant Tree that is dead
- remove a Regulated or Significant Tree within 20 metres of a dwelling in medium or high bushfire protection areas.

Tree species

- All trees located within 10 meters of an existing dwelling or existing in-ground swimming pool, unless it is a *Agonis flexuosa* (Willow Myrtle) or *Eucalyptus* (any tree of the species).

Any of the following listed tree species are also excluded from the controls:

- *Acer negundo* (Box Elder)
- *Acer saccharinum* (Silver Maple)
- *Ailanthus altissima* (Tree of Heaven)
- *Alnus acuminata* subs. *Glabrata* (Evergreen Alder)
- *Celtis australis* (European Nettle Tree)
- *Celtis sinensis* (Chinese Nettle Tree)
- *Cinnamomum camphora* (Camphor Laurel)
- *Cupressus macrocarpa* (Monterey Cypress)
- *Ficus* spp. (Figs), other than *Ficus macrophylla* (Moreton Bay Fig) located more than 15 meters from a dwelling
- *Fraxinus angustifolia* (Narrow-leaved Ash)
- *Fraxinus angustifolia* ssp. *Oxycarpa* (desert ash)
- *Lagunaria patersonia* (Norfolk Island Hibiscus)
- *Melaleuca styphelioides* (Prickly-leaved Paperbark)
- *Pinus Radiata* (Radiata Pine / Monterey Pine)
- *Platanus x acerifolia* (London Plane)
- *Populus alba* (White Poplar)
- *Populus nigra* var. *italica* (Lombardy Poplar)
- *Robinia pseudoacacia* (Black Locust)
- *Salix babylonica* (Weeping Willow)
- *Salix chilensis* 'Fastigiata' (Chilean Willow, Evergreen Willow, Pencil Willow)
- *Salix fragilis* (Crack Willow)
- *Salix X rubens* (White Crack Willow, Basket Willow)
- *Salix X sepulcralis* var. *chrysocoma* (Golden Weeping Willow)
- *Schinus areira* (Peppercorn Tree)

Appendix 2

Common tree species planted by the City of West Torrens

- Acer buergerianum)
- Acer campestre evelyn
- Acer nagundo 'Sensation'
- Acer platanoides 'Crimson Sentry'
- Acer momspessuianum
- Acer truncantum x Aver platanoides
- Acer x freemanii
- Acer freemanii 'Jeffersred'
- Angophora costata
- Brachychiton acerifolius
- Brachychiton populneus
- Brachychiton rupestris
- Caltis occidentalis
- Corymbia eximia 'Nana'
- Corymbia ficifolia
- Eucalyptus leucoxydon "Eucky Dwarf"
- Geijera parviflora
- Ginkgo biloba
- Jacaranda mimosifolia
- Koelreuteria paniculata (Golden Rain Tree)
- Lagerstroemia indica x Lagerstroemia fauriei "Lipan"
- Lagerstroemia indica x Lagerstroemia fauriei "Natchez"
- Lagerstroemia indica x Lagerstroemia fauriei "Sioux"
- Lagerstroemia indica x Lagerstroemia fauriei "Tuscarora"
- Lagerstroemia indica x Lagerstroemia fauriei "Tonto"
- Melia azedarach 'elite'
- Pistachia chinensis
- Pyrus chanticleer
- Pyrus ussuriensis
- Pyrus calleryana Bradford
- Pyrus calleryana 'Capital'
- Pyrus calleryana 'Winterglow'
- Quercus suber
- Quercus robur
- Quercus cerris
- Sapium Sebiferum
- Zelkova serrata



City of
West Torrens

Between the City and the Sea



A: 165 Sir Donald Bradman Drive, Hilton SA 5033
P: (08) 8416 6333
E: csu@wtcc.sa.gov.au
W: westtorrens.sa.gov.au