Urban Tree Strategy

2014 - 2025

City of Burnside

This page intentionally blank

CONTENTS

Forward:

The management of our City's trees is a highly successful aspect of Council's function however community expectations and demands are continually rising, and managing these important assets is becoming more difficult and complex.

The City's urban forest population is ageing and nearing the point where major tree replacement initiatives will be necessary. In some cases, this will completely change the character of parts of our City. The following Strategic document provides the foundation of how Council will continue to enrich and enliven our neighbourhood character and amenity through the continued management of our most valuable assets now and for future generations.

Prolonging the life and safety of our ageing trees is a high priority for many residents of our City. Recognising this, this Strategy includes a broad approach to street tree care that balances creating a new and bold urban forest whilst retaining aging trees that contribute so much to our cultural identity. Our older tree stock will be managed through measures and practices that retain as many aged trees as possible, whilst replacement plans maintain the diversity and level of canopy coverage that defines our City.

Total tree canopy cover is an important method of measuring the character of any urban forest. Broad calculations suggest that large mature trees provide 75% more environmental benefits than smaller trees. As a single large tree can shade a larger area than several small trees, the measure of canopy cover is more valuable than simply counting the total number of trees. It is a repeatable benchmark that can be measured regularly and will be used as a guide to future tree planting programs.

A good example of this type of approach to managing the urban forest can be found in the Chicago Trees Initiative. This initiative determined that the economic benefits of maintaining a 17.2% canopy cover at:

- Stores $14.8M of carbon.
- Sequesters carbon at a value of $521,000 per year
- Filters air pollution at $6M per year
- Has a structural value of $2.3 billion
- Chicago's urban forest annually sequesters 318,800 tonnes of carbon from the atmosphere, equivalent to the annual greenhouse gas emissions from over 50,000 passenger vehicles.

Whilst the City of Burnside does not have a full quantitative understanding of the environmental and financial benefits our urban trees have on our City it is evident that with our City's canopy coverage at approximately 19% (includes all park reserves) that the values would be similar to the Chicago tree initiative.

Climate Change

The Australian Government's most recent report on climate change, 'the Critical Decade', states unequivocally that it is 'beyond doubt' that climate change is occurring. The primary cause of the observed global warming and associated changes since the mid-20th century are human related emissions of greenhouse gases.

The most widely used indicator of climate change is the global mean, annual average, near-surface air temperature – commonly referred to as the global average temperature. This has risen by about 0.17°C over the last three decades. More notably, the global average temperature from 2001-2010 was 0.46°C above the 1961–1990 average, making it the warmest decade on record.

Cities around the world now regard trees and other vegetation as critical urban infrastructure – as important to how a city functions as roads or public transport and particularly vital to the health and wellbeing of communities. The benefits of urban forests span environmental, economic, cultural and political domains. These benefits are interrelated, with each cumulatively feeding into the creation of resilient and sustainable urban landscapes.

Given the pressure on governments to plan for greater populations, increased urban density and climate change adaptation, there is a clear opportunity to communicate the importance and benefits of urban forests in creating resilient, sustainable cities that provide healthy and enjoyable places for people to live and work. Some of the major benefits of urban forests in supporting and providing essential services are explored in this section.

Whilst the effects of climate change are just becoming discernible, they will become increasingly prominent. The effects over coming decades will include warmer average temperatures, heat waves, more extreme storm events and lower average annual rainfall. We have already observed the damage caused by extreme heat and floods in Australia in recent years, and it is likely that these events will become more prevalent.

The risks to cities of more severe weather conditions will increase, bringing with them high economic, social and environmental costs. For the urban forest, the impacts of climate change will include:

- the susceptibility of vegetation to increasing and emerging pests and diseases will challenge the urban forest's ability to withstand and recover from these outbreaks.
- Extreme weather events directly affect vegetation health, generally leading to a reduction in canopy cover and overall decline. Heat extremes can lead to foliage and trunk scorch and canopy desiccation. Storms can shred foliage, break branches and uproot trees.
- Lower rainfall will result in increasing frequency of tree death in many species and overall forest health decline in response to frequent and severe drought.
- Inundation can lead to soil erosion, salinity, tree instability, tree mortality and damage to infrastructure. In southern Australia, more frequent extremes of wet and dry periods may increase the incidence of the root rot pathogen *Phytophthora cinnamomii*. Trees weakened by this disease have a reduced capacity to survive drought.

What is clear from these known outcomes is an increasing reliance and burden on Council as the managers of the Urban Forest. The major wind storm event that hit the City in February 2014 clearly indicated the significant financial, as well as environmental impacts an event like this can have on the City's urban tree coverage. In that one event alone Council was forced to close major parks and reserves due to the inherent safety risk presented by trees that had suffered catastrophic branch and trunk failures.

The volume of debris that littered the City's streets, footpaths and reserves was enormous and created a management crisis that tested the Councils resource base even to the point where assistance was required from neighbouring Councils. From that one event alone Council managed over 700 customer requests for assistance, worked over 350 man hours just on debris removal, and removed over 20 'Landmark Trees', some that were over 150 yrs. old.

The impact to Council and its community vary remarkably and in many cases will be felt and seen for decades to come. The loss and damage to many large remnant trees has and will change the face of our City's landscape. It is hard to comprehend the significant burden and change of community

amenity one event can bring to a community. What is unsettling to Council and hasn't been fully recognised until now is that evidence suggest these types of events will become more frequent and intense, placing even further pressure on Council to ensure that it manages its tree assets in recognition of these changing environmental challenges in to the future.

STRATEGY OBJECTIVES

The objective of this Strategy is to re-define tree-management practices, create plans and actions that will maintain and improve the quality of our urban forest for the future. Council policies and practices need to meet community expectations in line with available resources. Council recognises its responsibility to maintain an asset that is dynamic and subject to increasing environmental change in both built and natural environments. Management systems and practices must be flexible enough to adapt to these changes without being vague and inconsistent.

This Strategy embraces the opportunity to generate a new legacy for the City of Burnside and create a forest for future generations. This document sets out how our urban forest will become diverse, robust and resilient in the face of current and future challenges. We know that climate change and increasing density and growth within our city will place new pressures on our urban forest, but the targets we have set in this document will meet those challenges.

The City of Burnside has adopted a scientifically-based formula for calculating the amenity value of our public trees (Amenity Tree Valuation formula). The formula is based on factors including tree condition, species type and growth rate, aesthetics value and locality values. It is intended over the coming years to fully integrate this formula into Council's operational systems and practices to assist with ongoing asset management review, appropriate resource allocation and to assist Council and its community in placing a reflective value on our Urban Forest.

Given these factors it is important then to remember what Council considers as key drivers for the future management of our urban forest and what this City values for the future.

The key objectives of the City of Burnside Urban Tree Strategy 2014 - 2025 include;

1. Develop and integrate tree management actions that facilitate continuous improvement in Council's management of the Urban Forest.
2. Develop and Implement sustainable management practices;
3. Provide a clear frame work for all management actions including priority setting, timeframes and accountability settings to achieve the actions and goals.
4. Increase species diversity and improve the age spread of the urban forest
5. Recognise and protect trees considered significant due to heritage, cultural, social and ecological criteria now referred to as "Landmark Trees"
6. Improve the quality and quantity of The City of Burnsides canopy cover.

The Urban Tree Strategy is linked directly to Council's Tree Management Policy 2014, underpinned by operational new Urban Tree Technical Manuals. The Strategy includes a range of recommendations and actions to meet the broader objectives of the Strategy.

The Strategy is designed and structured to complement Council's Community Plan '**Be the Future of Burnside' 2014 - 2025** and drives Council's intentions of being a leader in local government administration. The key objectives of the strategy achieve Councils broader Community Plan goals and achievements.

Council's previous Tree Management Strategy 2007 combined a series of policy, plans and protocols into one comprehensive "all encompassing" document that at the time guided the City's visions for the future. It was and remains a best practice document endorsed and supported by the LGA Mutual Liability Scheme however recent climatic events, risk safety issues and changes to legislative controls suggest the 2007 Strategy needed review.

The Urban Tree Strategy 2014 – 2025 is the second of three key elements that document and define the City of Burnside's approach to an integrated and coordinated tree management regime.

The three key integrated documents comprise;

1. Tree Management Policy 2014
2. Urban Tree Strategy 2014 – 2025 and
3. Urban Tree Technical Manuals.

CONTEXT

1. The City of Burnside covers an area of 2752 Hectares. Land use varies but is best defined as a City of gentle undulating urban streetscapes with a back drop of urbanised foothills. The development of the urban forest has evolved over the life of the City however our character was defined early in our colonial establishment. The City is blessed with fertile soils, natural panoramic landscapes, diverse natural creek systems and pockets of remnant vegetation. Our established parks and reserves are iconic in South Australia dominated by stands of River Red, South Australia Blue and Grey Box Gums.

2. Within the intensively urbanised environment tree canopy density and coverage within private open spaces is declining. It is therefore critical that the community recognise the role that Council has in maintaining a diverse and growing urban forest that offsets private tree canopy loss and that continues to increase its identity across our urbanised environment. It is fundamental that the Urban Tree Strategy is cognisant of these changing dynamics and investigates new opportunities to maximise the City's 'green leafy character'.

3. Property owners and public authorities have certain obligations with respect to the protection of trees, and responsibilities for any damages or injury associated with the presence failure or growth of trees. Tree management in the urban environment is about balancing the various risks against the benefits that trees provide to ensure the best outcomes for the community.

4. The Urban Tree Strategy 2014 - 2025 is divided into three key areas and provides strategic direction and actions to meet the key principles associated with the Tree Management Policy 20143. The strategy incorporates the following principles:

    - Planned management – fundamental to achieving optimum extent and quality of urban forest.
    - Systematic Management – the optimum outcomes from the urban forest will be attained when the resources invested in its management are adequate and managed efficiently. This will provide the best economic outcome.
    - Integrated Management – management of the urban forest must be integrated with the management of the entire urban environment- built infrastructure and natural places, to achieve the best outcomes for urban areas.

5. The Strategy is a compilation of existing and planned management techniques currently undertaken by the City of Burnside. This Strategy has been pared back to define clear, long term actions associated with meeting the key management objectives.

6. Ongoing and daily operational activities that deliver those actions (through Council's operational activities) are addressed through the development of new Urban Tree Technical Manuals.

    These operational 'manuals' relate to standard work methods, standard operating procedures, appropriate standard and legislation such as the Australian Standards for tree pruning or development activity that may affect a tree.

7. The establishment of Council's urban forest management approach has required the development of a series of documents that combine to provide a suite of proactive and achievable management targets for our City.

   Figure 1.1 provides a summary of strategic documents either developed or requiring development that will influence management of our City's urban forest.

Fig 1.1 **Strategic and Operation Documents influencing the management of the Urban Forest**

Goal and Strategy definition	Be the Future of Burnside 2014 - 2025 Urban Tree Strategy 2014 - 2025 Biodiversity Strategy 2008 Public Domain Streetscape Policy/Strategy (future) Open Space Strategy 2005
Development Controls	City of Burnside Development Plan 2013 City of Burnside Environment Action Plan 2014 Local Government Act 1999 Asset Management Plan (future) Landmark Trees Register(future)
Urban Forest Enhancement	Street Tree Master Plans (under review) Vegetation Management Plans (future) Public Domain Streetscape Management Plans (future) Master Plans – Parks and Reserves (future)
Operational Management of the Urban Forest	LGA - Mutual Liability Scheme – Risk Management Guidelines for Local Government, Tree Management 2014 Urban Tree Technical Manuals Service Level Agreements for Parks and Reserves (under development)

8. Goal and Strategy Definition:

The City of Burnside recently redefined its Community Plan 'Be the Future of Burnside 2014 - 2025 to reflect the dynamic changes occurring across our City and within our community. The broader vision for our City remains unchanged and identifies the strong association the Urban Tree Strategy has on assisting Council meet that vision…..

> *We are renowned for our City's green and leafy character and unique integrated urban form. We are highly regarded for our sense of community spirit, support for one another, social diversity and commitment to the environment.*

9. The City's Community Plan is characterised by four broad key Strategic Directions, with a raft of desired outcomes and actions that Council will implement in the next 12 years to achieve that vision. It is therefore important that the Urban Tree Strategy and the principles that drive the actions to meet the Community Plan outcomes are identified. Those broader directions and relevance to the new Urban Tree Strategy 2014 – 2025 are;

Strategic Direction 1

Our integrated urban form and living spaces….

Our Strategic Direction is to integrate and enhance our living spaces to meet our diverse current and future needs and to embrace our City's character to ensure our continued pride in, and enjoyment of, living in Burnside

Historic Character

Our Desired Outcome:

1.1 Conservation and enhancement of the historic character of the City.

Our Approach:

1.1.1 Support the protection of the City's built and natural heritage, including Landmark Trees

Sustainable Development

Our Desired Outcome:

1.3 Environmentally sustainable development which complements the City's character.

Our Approach:

1.3.1 Balance future development and existing historic character through complementary and sustainable development practices

1.3.2 Enhance the character, amenity, safety, and accessibility of the City through promoting sympathetic and sustainable development

Public Space & Streetscapes

Our Desired Outcome:

1.5 Sustainable, engaging and functional community public spaces and streetscapes.

Our Approach:

1.5.1 Ensure that an accessible network of public spaces exists that responds to the needs of the community

1.5.2 Maintain and enhance streetscapes for improved amenity, character and environmental outcomes

1.5.3 Promote and educate community on the value of trees and their biodiversity.

Strategic Direction 2

Our protected and valued environment

Our Strategic Direction is to protect and conserve the environment, living in harmony with it to ensure that future generations can experience what we value so highly today

Natural Environments

Our Desired Outcome:

2.1 Natural environments and watercourses protected and conserved in both the Hills Face and the Plains.

Our Approach:

2.1.1 Undertake responsible bushfire management strategies to protect and enhance the natural environment and property

2.1.2 Restore and improve local native vegetation and habitat ensuring biodiversity is protected

2.1.3 Consider the strategic acquisition of land for "Urban Forest" purposes

2.1.4 Harness the city's water resources to achieve reuse, flood protection, healthy watercourses and improved stormwater quality

Strategic Direction 4
Our leading inclusive and connected Council
Our Strategic Direction is for Council to be engaging, open and approachable, to listen to and be representative of our views, to act on our behalf and in our best interest.

Engaged Community
Our Desired Outcome:
4.1 Our community is actively engaged and involved in shaping the City's future.

Our Approach:
4.1.1 Provide a range of opportunities for the community to actively engage and participate in Council's decision making activities
4.1.2 Ensure the Strategic Plan forms the basis of Council business and activities
4.1.3 Improve Council's understanding of community views and our performance as rated by the Burnside community performance as rated by the Burnside community.

Legislative Change & Action

1. The public inquiry into Local Government tree management practices (Public Inquiry into Trees on Public Land - 2012) suggested that most authorities provide basic tree risk safety management practices, however there appears to be little systematic, coordinated and cohesive structures that define how, when, where and why actions may / may not have been taken with regards to certain tree management activities.
2. It was evident that many Councils still address tree management actions reactively, and whilst this is not unexpected given the nature of managing a living organism that is subject to a range of environmental and urban impacts, it was also not surprising that few authorities have not developed appropriate systems that minimised that reactionary management style to trees under their care and control.
3. In many cases a Councils strategic initiatives were invariably linked to in/adequate resourcing issues however this has a tendency to shift some of the obvious long term risks further and further into the future, whilst not addressing fundamental tree decline or structural degradation of a tree that usually accumulates, and by default has the capacity to present even greater risk issues if they are allowed to progress further.

4. The independent inquiry (LGA MLS 2012) recommended a number of changes that were to inform and direct potential changes to government authority management practices. Those recommendations included;

"That all Council's develop and adopt a formal Tree Management Strategy with appropriate linkages to the Council's strategic management plans. A Tree Management Policy / Strategy sets out the objectives that a council wants to achieve through the management of trees. It guides how trees are planned, how risks are managed, the resources required to achieve the objectives and how other council activities relate to tree management."

A Tree Management Strategy:

1. *sets objectives for trees in the landscape, including the benefits trees provide and how these benefits are realised; reflects the setting of the council, including its landscape, history, biodiversity and community expectations; provides a long-term perspective, including planning for trees at maturity and planning for tree replacement at the end of their functional life;*
2. *sets out the extent to which Council's will formally adopt a framework to proactively manage the risks associated with trees on public land; identifies the preferred risk assessment methodology which the council will consistently apply;*
3. *sets out how the council itself will manage its various functions (planning, engineering, parks and gardens etc.) to ensure an integrated approach to managing trees and achieving the objectives of the policy;*
4. *presents ongoing costs in a comprehensive way, to allow efficiencies to be identified and priorities to be targeted;*
5. *identifies future resourcing requirements (e.g. trained staff) and enables plans to be made; and*
6. *identifies the key conflicts related to tree management and how these should be managed, e.g. sharing of information within Council's and cooperation with utilities.*

5. The inquiry also found that critical to an authority's progression of appropriate tree management practices and resourcing is;

1. establishing a register of priority trees which may include trees of high value, high failure potential, high exposure or high public concern;
2. assessing (inter alia) tree failure risks;
3. identifying actions to manage risk;
4. establishing and following a program to implement actions; and
5. ongoing tree surveillance and maintenance of the tree register.

6. Interestingly the inquiry of 2012 recognised The City of Burnside Tree Management Strategy 2007 as an example of tree management policy worthy of adoption.

OUR HERITAGE

1. There are very few places in Adelaide that invoke a greater sense of history and cultural identity than the City of Burnside. The City has a proud heritage of urban forest management. Our forefathers knew even then that a City's identity can be defined through the planting of major tree avenues. The war memorial tree avenues of Hazelwood Park, Alexandra Avenue and Prescott Terrace - Rose Park, the planting of major tree avenues of Toorak Gardens and Tusmore typifies the dedication and foresight our community leaders made to our City.

2. This vision has left the City with an asset that has been valued (under various formula) at more than $250M given all the environmental and financial benefits that an urban forest brings to a City streetscape.

   In that sense the ongoing management of the asset brings with it a greater responsibility to ensure that the capacity and care of that asset remains strong and that the City's dominant landscape is there for future generations.

3. In 1991 Council under took a survey of all streets within the City and rated the street trees to determine their health, form and condition. The findings and recommendations arising from that survey initiated the development of a broad strategic replacement plan referred to as the Second Generation Street Tree Replacement Program (SGSTRP). This program has to a large extent directed most replacement initiatives from the early 1990's. (The 1991 survey did not include trees within Council's parks and reserves.)

4. In 2004, Council undertook a review of the 1991 survey to determine whether the SGSTRP and other relevant tree management techniques had effectively addressed key objectives of the SGSTRP which included;

    1. addressing the problem of ageing tree stock by means of a tree replacement program
    2. Improving management programs
    3. Increasing and enhancing the quality of street tree stock
    4. Reducing and managing the risk associated with street, Reserve and park trees
    5. developing and expanding the flora and fauna of the urban forest of Burnside

5. The 2004 survey included the suburbs of Auldana and Skye, which were not part of Burnside Council at the time of the first survey in 1991. The 2004 survey also included trees growing within Councils major parks and reserves.

6. The 2004 survey found that of the total number of street trees surveyed, more than 70% consisted of just seven dominant tree species. The remaining 30% was a mixture of over 250 exotic and native species, with no individual species comprising over 4% of the total remaining plantings. The results reflected the percentage of random plantings made by individual residents in the early years of urban consolidation and at a time when street tree plantings were less planned and structured.

7. **Results of the 1991 survey:**

    The 1991 survey indicated that 67% of the total trees were rated as good, with another 17% rated as fair. Approximately 16% were rated in a state of decline, mainly due to age. Over 68% of the total population was considered to be mature.

    Suburbs with the highest numbers of trees in decline included Hazelwood Park, Dulwich, Rosslyn Park and Kensington Gardens. Approximately 66% of the trees did not require any form of pruning, with the majority of those that did need maintenance requiring only dead-wooding and canopy- lifting to clear the road and footpath areas.

    Over 1,500 trees needed immediate replacement and over 2,000 within the following ten years. Over 50% of the total number of trees surveyed at the time did not need to be replaced for another 20 years or more.

8. ***Results of the 2004 survey:***

    The survey showed that tree management practices including improved watering regimes, proactive juvenile tree maintenance and structured pruning regimes had significantly improved tree health and structure since the 1991 survey. The 2004 survey rated more than 70% of the trees as having a projected life expectancy of greater than 20 years.

    It is interesting to note that the term ‘declining’ (used in the 1991 survey) was applied quite generally across the tree population. From a strict arboriculture point of view, a ‘declining’ tree is a tree that is senescent: one that has begun its decline from maturity and going into a phase of very little seasonal growth activity and an increase in dead wood content as a percentage of canopy volume. The overall result is a canopy that begins to reduce in size, and is usually less tolerant of changes in growing conditions.

8.1 For instance a declining River Red Gum can theoretically decline for anywhere up to 150 years, given it has a projected life expectancy of 400 years, and may only reach maturity after 100 years.

The 1991 survey implied that a declining tree is a poor tree and in need of replacement. In fact, over 50% of trees did not need to be replaced for over 20 years and it can be assumed that the condition of the majority would be sound although with a declining health status.

The 2004 survey expanded the criteria for judging tree health. The criteria included:

1. the percentage of dead wood as opposed to live growth
2. new shoot ratio (new growth compared to old growth)
3. structural soundness of the tree
4. whether the tree required remedial pruning.

In all cases, the assessment of the tree was based on safe-life expectancy and a projected life expectancy if remedial works were under taken.

9. With the progression of current management practices it suggests that total tree canopy coverage and tree health (for the majority of the street trees) will decline progressively in the next 10 – 15 years. It appears that overall the tree population remains fairly stable with isolated tree species declining more rapidly than others. This can be directly linked to the recent drought conditions that existed across Adelaide between 2005 and 2010.

10. The impacts associated with climate change, clearly identifiable by the drought conditions and intense storm events that existed across South Australia in the first decade of the new millennium, indicates how vulnerable Council's tree population (or species make up of tree population) can be to prolonged periods of drought.

11. It was evident that some species, in particular Queensland Box (*Lophostemon conferta*) trees were not suited to Adelaide conditions when extended periods of drought existed. The percentage of trees that succumbed during this period was very high with many trees that did survive displaying reduced canopy size and poor tree condition. It was also evident that even the local indigenous trees growing within Councils parks, reserves and road reserves were not immune to the drought conditions, with the incidence of large limb failures rising, and overall tree condition was reducing measurably.

12. These types of issues were not isolated to the City of Burnside however, to some extent a few high profile tree failure incidents that caused significant property damage and the unfortunate death of a member of the public promoted the Local Government Association of SA through the Mutual Liability Scheme to sponsor an inquiry into trees growing on public land. The findings of that inquiry and an internal review of Council's tree management practices (in response to those key findings) identified areas requiring further consideration. The subsequent coronial inquest into the death of the young woman in 2012 indicated Council's internal auditing; record management practices and tree risk assessment practices were lacking and required review.

Changes to management in Response to 2012 Public Inquiry:

13. The following key operational changes have been implemented since the inquest findings were delivered;

    1. Review the Tree Management Strategy 2007. Investigate whether the strategy remains relevant, identify practices that should and do not occur.
    2. Implement a data capture and record management system linked to tree assessment and inspections.
    3. Prioritise frequency of inspections to mature remnant trees located on high profile, high traffic/pedestrian volume sites.
    4. Enhance tree inspection reviews particularly where tree branch/limb failures had previously occurred or where management actions had taken place. I.e. Where actions had been taken or were recommended, detail follow up actions and ensure that those actions had been successful and or further actions were required.
    5. Develop systems and processes to ensure tree inspections and actions were recorded on an internal Council record management system and were easily accessible.

14. In response, Council immediately instigated the development of a new data capture software system and commenced a systematic review of all trees the subject of management actions. The inspection regime and data capture process is now a core element of all tree management actions. As a priority Council has undertaken inspections and actions on most high profile sites such as arterial roads where remnant trees are located.

15. The development and review of the 2007 Tree Management Strategy is a progression and refinement of the established care and management practices established through the life of our existing strategy.

16. This document is a contemporary reflection of recommendations arising from changes to legislative controls, identified deficiencies and work practice failures arising from public liability claims managed by Council, and ultimately is a reflection of Council's ongoing commitment to be a leader in local government tree management administration and practice.

Our Biodiversity

1. In 2008, Council endorsed the Biodiversity Strategy, subtitled "Nature Conservation in an Urbanised Landscape".

   The City of Burnside is committed to preserving and enhancing the area's biodiversity - the plants, animals, and ecological communities that have survived within the City of Burnside from before European settlement. Although many of the indigenous flora and fauna communities have now been cleared, there are still precious remnants that require protection and maintenance.

2. There are also a variety of opportunities for restoration and enhancement. Preparation of the Biodiversity Strategy involved a review of existing relevant documents, compilation of available records of plants and animals, discussions with Council officers, audits and community consultation.

3. The document includes:

    1. summary of international agreements, national and South Australian legislation, policy and programs, catchment strategies and programs, local government responsibilities and powers, activities of relevant non-government organisations, and relevant policies and plans of the City of Burnside;
    2. an outline of Council's actions to date;
    3. a profile of Burnside's biodiversity, and the issues and recommendations for improved conservation;
    4. a vision, goals, strategic objectives, performance indicators and targets for biodiversity conservation;
    5. a summary of recommendations to be implemented over time.

4. For the City of Burnside to follow its vision, a shared picture is needed of what Burnside would look like if it were to continue and advance in becoming a nature-friendly city.

   The attributes of a nature-friendly Burnside would be:

   1. a linked reserve system across the hills face that incorporates all ecosystem types and provides a walking and bicycle trail network that is well planned and maintained to enhance natural values and not compete with them;
   2. linked open spaces follow the creeks into the residential areas with creek-lines well vegetated for habitat, water quality and stream stability;
   3. urban parks with areas of restored native forest and woodland;
   4. remnant native trees conserved and regenerating at appropriate sites across residential areas;
   5. native vegetation conserved, established wherever possible and managed to minimise weeds and fire hazard and to maximise conservation of wildlife and rare plant species;
   6. a nature-aware community that provides habitat in gardens, owns pets responsibly and embraces wildlife awareness;
   7. sustainably managed woodlands maintained and extended as an offset for Council's carbon emissions;
   8. a Council working cooperatively with community and other levels of government to develop and implement policies and systems to guide the built form towards ecological sustainability.

5. The Biodiversity action plan deals with the issues under five key headings. These are:

   1. indigenous trees
   2. remnant native vegetation
   3. urban planted sites
   4. wildlife
   5. community education and participation.

   The association of both the Biodiversity and Urban Tree Strategy are easily identifiable in that both provide Council and the Community with clear directions on the preservation and enhancement of our living environment.

6. The Biodiversity Strategy looks at a holistic approach to the management of our local indigenous vegetation strata but it does not occur in isolation to the activities associated with Council's tree management practices given many of Council's more prominent 'landmark trees' are in fact indigenous to the local area and include many excellent remnant specimens of River Red Gum (*Eucalyptus camaldulensis*), SA Blue Gum (*Eucalyptus leucoxylon*) and Grey Box (*Eucalyptus microcarpa*).

7. The prominence of our local indigenous trees is already well known however it is one of the key objectives of this strategy that defines how Council will promote and advance the care of these specific trees within the urban forest and highlight their prominence within our City It is therefore important that the Urban Tree Strategy objectives integrate key actions arising through the Biodiversity Strategy.

   Actions:

   To facilitate that integration Council will progressively develop Vegetation Management Plans (VMP) for key parks and reserves across the City. The emphasis (initially) will be on major and regional parks and reserves such as Hazelwood Park, Kensington Gardens,

Kensington Park, Tusmore Park however this does not preclude ongoing actions associated with the Biodiversity Strategy that continue to occur in areas such as the Hills Face Reserves through implementation plans such as the Southern Hills Face Reserves Vegetation

8. Management Plans and actions that will arise through the future development of plans for the Central or Northern Hills Face Reserves.
   Actions:
   1. *improve the habitat diversity and value of bushland reserves;*
   2. *improve shelter sites - ensuring dead trees are only felled where they are considered dangerous to park users and private property; away from the edges of bushland reserves, leaving fallen logs and branches for ground shelter for native terrestrial fauna; and*
   3. *Take steps to create buffers between bushland reserves and the urban interface by planting a dense "wall" of locally endemic native plants that can tolerate greater physical damage and exposure.*
   4. *Create and enhance vegetation corridors across the City*
   5. *Create suitable habitat by selecting tree species for street planting that provide habitat value (either as dense canopy, food or nesting sites) and*
   6. *Encourage residents who live in areas between reserves to plant suitable trees and shrubs to assist with the creation of sympathetic habitat and vegetation corridors.*
   7. *Focus resources on the removal of 'woody weed' species trees and declared plants tree species that compete and infringe the natural expansion and development of Councils natural landscapes and indigenous trees species.*

9. **Urban Corridors**
   The urban forest and in particular our local indigenous trees include many different types of corridors located across the City. The types of corridors include:
   1. wildlife corridors;
   2. remnant corridors;
   3. natural corridors, such as riparian corridors; and
   4. planted corridors that include tree lined streets and urban green belts.

10. Vegetation or "green" corridors usually comprise more than one type and have multiple functions. Accordingly, although the Biodiversity, Open Space and Tree Management Strategy have highlighted the need to improve corridor connections across the City generally, the most important function and purpose of a corridor must be first identified.

11. This will inform subsequent selection of tree species and the planting approach. The most significant function will not always be habitat conservation. For example, it may not be suitable to plant locally endemic native tree species as street trees in some locations close to reserves and a compromise will need to be reached whereby an exotic tree species that does not compromise overall woodland values is selected.

12. The Biodiversity Strategy is therefore considered to be a companion document to the Urban Tree Strategy and as such complimentary actions such as the location and planting of local indigenous trees within appropriate locations across the City of Burnside will require further development in the coming years. There will be important opportunities that must be incorporated into the future development of a new Public Domain Streetscape Policy and Strategy in the proceeding 12-18 months.

LEGISLATIVE AND CORPORATE REQUIREMENTS

The City of Burnside under takes all necessary tree management actions with regard to a number of Acts of Parliament. It is the responsibility of all staff to act in accordance with the relevant Acts, and if any conflict arises between this Strategy and those Acts, then the Acts will have precedence. The relevant Acts are listed below and include;

1. *Local Government Act 1999*
    - *1.1 Sections 196–199, Community Land Management Plans (CLMP) Section 232, Trees*
    - *1.2 Section 233, Damage*
    - *1.3 Section 244, Liability for injury y, damage or loss on community land.*
    - *1.4 Section 245, Liability for injury, damage or loss by certain trees*
    - *1.5 Section 299, Vegetation clearances*
    - *1.6 Development Act 1993 & Regulation 6A Regulated/ Significant Trees*
2. *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*
3. *Natural Resource Management Act 2004*
4. *Water Industry Act 2012*
5. *Environment Protection Act 1993*
6. *Electricity Act 1996*
7. *Heritage Places Act 1997*
8. *Road Traffic Act 1961*
9. *Native Vegetation Act 1991*

2. All relevant, internal City of Burnside policies and procedures will complement and be consistent with the Urban Tree Strategy 2014 - 2025. In some cases a review of current policies and work practices will be required.

3. An important component of the way forward is the development of a Public Domain Streetscape Policy and Strategy that compliments many of the objectives and actions associated with the Urban Tree Strategy.

   The Urban Tree Strategy therefore has reference to the:
   - Open Space Strategy 2007
   - Community Land Management Plans, 2004
   - Biodiversity Strategy, 2008
   - City of Burnside Development Plan, 2014
   - Local Agenda 21
   - Community Plan ‘Be Burnside’ 2012 – 2025.

4. The development of the Urban Tree Strategy also recognises and reflects the significant level of discussions and findings associated with the 2012 Local Government Association (LGA) of South Australia Independent Inquiry into ‘Trees on Public Land’ and the adoption of a range of outcomes from that report, that led to a review of the LGA Mutual Liability Scheme – Tree Management – Risk Management Guidelines for Local Government.

TREE PROTECTION

1. The City of Burnside recognises the social, economic and environmental benefits that the urban forest provides. The effective management of trees includes the need to protect trees in line with this triple bottom line approach and will therefore be given high priority in all aspects of the City's activities.

2. Councils Tree Management Policy and Development Plan (DP 2014) provide the legislative tool for the protection of all trees located within the City of Burnside.

3. The following policy and planning principles will apply to tree protection:
   Communicate and Promote Council's Tree Management Policy
   Develop, promote and regularly review Urban Tree Technical Manuals (UTTM)
   Communicate and Promote Council's Environment Action Plan (EAP) and Development Plan 2013 (DP)

   Actions:
   The City of Burnside through its Development Plan will regulate tree pruning and tree removal. The use of assessment criteria by tree management staff will ensure a consistent approach to tree management.

4. **Register of "Landmark Trees"**

Actions:
The City of Burnside will recognise trees as individuals or stands of trees that contribute to the environmental, cultural and social character of the city through the creation of a Register of Landmark Trees. The City will prioritise the retention and protection of these Landmark Trees.

Council's Operation Services department is in the process of undertaking urban tree inspection and data collection that will endeavour as part of the broader project, identify locate and list "Landmark Trees". It is expected that trees (indigenous or exotic, wild or cultivated) will be considered for inclusion in the register on the basis of one or more of the following categories:

- Outstanding aesthetic significance,
- Outstanding for its height, trunk circumference, or canopy spread,
- A tree which is particularly old,
- A tree commemorating or having associations with an important historic event or significantly associated with a well-known public figure or ethnic group,
- A tree associated with aboriginal activities,
- A tree which occurs in a unique location or context and so provides a contribution to the landscape, including remnant native vegetation, important landmarks and trees which form part of an historic garden or park,
- A tree of a species or variety that is rare or of very localised distribution,
- A tree of horticultural or genetic value which could be an important source of propagating stock,
- Any stand or avenue of trees which is significant, and
- Any significant community of trees.

The 'Landmark Trees' register will be continuously developed however it will also be reviewed every five (5) years to ensure its alignment with the principles of the Urban Tree Strategy 2014 – 2025 and the annual review of the Tree Management Policy 2014.

5. **Development Applications**

Actions:
The City of Burnside will ensure that development applications include all necessary information to allow full assessment of potential impacts on public trees to be retained, and an appropriate standard associated with desired and required landscape design plans. The inclusion of vegetation or landscape plans must promote and enhance the planting of local indigenous trees as a matter of priority where ever possible.

It is envisaged that integration and compatibility between the Development Plan, Biodiversity and Urban Tree strategies is given priority.

6. **Bonds (Local Government Act 1999)**

Section 245A of the Local Government Act 1999 allows Council the opportunity to place a bond or other security on a Council asset that may be impacted by development activity not necessarily activity on private land but also public land.

S245A—Council may require bond or other security in certain circumstances

(1) Subject to this section, if—

(a) a person has approval to carry out development under the Development Act 1993 ; and

(b) the council has reason to believe that the performance of work in connection with the development could cause damage to any local government land (including a road) within the vicinity of the site of the development, the council may, by notice in writing served on the person who has the benefit of the approval, require the person to enter into an agreement that complies with any requirements prescribed by the regulations so as to ensure that money is available to address the cost of any damage that may be caused.

<u>Actions</u>:

The City of Burnside will investigate, develop and implement (where appropriate) new policy through a new Public Domain Streetscape Policy / Strategy the necessary controls that will include the application of bonds on developers and event organisers to ensure protection of public trees during development activity.

The application of a new Urban Tree Valuation formula to assist with decision making is one tool of many that aims to instil high quality environmentally sustainable development activity that contributes to the amenity and character of the area.

The proposed bonding system will look at the inclusion of a new 'Amenity Tree Valuation Formula' that will assist Council in recognising and truly reflecting the social, cultural and historical value Council's public trees have in and to the cultural identity of the City.
The formula and system of quantifying by way of a monetary value is by no means the only assessment that shall be undertaken with regard to future development impacts that affect a public owned tree.
The formula is an obvious snap shot assessment that brings a monetary value to a tree that would otherwise become one individual specimen within a large urban tree population. Its application will be selective and may not be required on all trees subject to a potential development impact, however its association with the potential application of a 'bond' placed over potential development impacts requires definition and in that sense the new Amenity Tree Valuation formula' provides that guidance.

This bond will be held by Council for the life of the activity and where appropriate and depending on the nature of activity, potentially held for over 12 months to ensure the stated activity does not have long term ramifications on the health of the tree.

The adoption of an Amenity Tree Valuation formula will assist Council in determining the appropriate financial measure that may arise through development activity affecting a public tree. The ATV is essentially recognition that our urban trees have an environmental, social & cultural value and that (in the process of undertaking development activity) should impacts arise to a tree under Council care and control that a financial cost / impost may arise to offset the loss or damage to the tree.

The essential elements of the Amenity Tree Valuation formula are;

1. base tree value;
2. tree species attributes;
3. tree aesthetics;
4. tree location and tree condition.

The formula assigns a numerical value to each criterion that a tree has or makes to the environment and ultimately determines a monetary value to that tree. It is intended that the ATV can bring a tangible value to a tree should situations arise through development activity or where Council may propose activity that will have an effect on the health of a tree.

It is usually undertaken on trees of cultural value however an example of where it may be applied includes the death of a public tree through negligence or illegal activity associated with adjacent development activity.

The formula relies on Council determining the “value” it assigns to individual criteria of the formula, and specific to the character of the locality. It is a formula that is “tailored” or unique to the City of Burnside.

For the purposes of the Urban Tree Strategy the following application shall be used by Council to determine the Amenity Tree Valuation of publicly owned trees;

Value ($$) = Basic Value of a standard tree purchased ($) x Species (S) x Aesthetics (A) x Locality (L) x Condition (C)

The following parameters exist and shall be applied within the ATV formula.

1: Basic Value ($):

Unit cost for a specimen of a specific size (retail). The value is a cost per unit measured at breast height of the tree trunk. The following unit value has been provided as a guide for the formula.

DBH cm	$	DBH cm	$	DBH cm	$
6	263	45	14815	85	52860
10	732	50	18290	90	59261
15	1646	55	22132	95	66029
20	2926	60	26338	100	73162
25	4573	65	30911	105	80661
30	6585	70	35849	110	88526
35	8962	75	41154	115	96757
40	11706	80	46824	120	105353

2: Species (S):

What the tree species life expectancy may be, and how quickly (or not) that species grows within that environment). This factor reduces by 0.5 to 0.9 accordingly i.e. low life expectancy, poor growth rate). An example of this rating scale may relate to the species of tree and how it may grow in the environment now (after activity) rather than how it was growing before the activity.

Species group	**Characteristics**	***Score***
1	Trees of short life span (less than 50 years) Fast growth rate *Examples: Prunus, Acacia, Melaleuca*	0.5
2	Trees of short life span (less than 50 years) Slow growth rate *Examples: Malus, Crataegus, Eugenia, Waterhousia, Pyrus*	0.6
3	*Trees of medium life span (50 – 150 years)* Fast growth rate *Examples: Populus, Liquidamber, Eucalyptus, Angophora, Grevillea, Melaleuca, Michelia, Salix, Casaurina, Hakea, Celtis, Acmena*	0.7
4	Trees of medium life span (50 – 150 years) Slow growth rate *Examples: Brachychiton, Fraxinus, Gleditsia, Lagunaria, Jacaranda, Schinus, Phoenix, Melia, Robinia, Lophostemon, Lirodendron, Agonis, Metrosideros,*	0.8
5	Trees of long life span (more than 150 years) Fast growth rate *Examples: Cupressus, Platanus, Ficus, Pinus, SA Blue Gum*	0.9
6	Trees of long life span (more than 150 years) slow growth rate *Examples: Ulmus, Quercus, Araucaria, River Red Gum, Grey Box Gum*	1.0
Modifiers	An ubiquitous species either a declared plant or wood weed species *Examples: Salix, Fraxinus, Populus, Crataegus* Dangerous (poor branch attachment) *Example: Ulmus fastigiata, Eucalyptus nicholii, Corymbia citriodora* Has undesirable characteristics (e.g. allergenic) *Examples: Lagunaria patersonii*	-0.1
	A rare species in the locality A special precious cultivated variety A 'landmark tree' / has historical value	+0.1

C

3: Aesthetics (A):

What contribution the tree makes to the landscape. (i.e. sliding scale for single standalone specimens or as an element within an avenue planting) and by implication its loss may not be so high given it is one of many.

Contributes little to the landscape	***0.5***
One of a group of close plantings	***0.6***
Wide plantings	***0.7***
Irregular spacing between trees; regular spacing one side	***0.8***
Street or pathway plantings, regular spacing both sides	***0.9***
Solitary feature specimen tree	***1.0***
	Score (min 0.5 or max 1.0)

4: Locality (L):

Prominence as a tree specimen. Is it located in a high profile area I.e. Grows within close proximity or as a part of a memorial avenue?

Undeveloped bushland or open forest	**0.5**
In country areas and country roads	**1.0**
In outer suburb areas and residential streets	**1.5**
In inner city suburbs	**1.75**
In city park or reserve; significant street near city centre	**2.0**
In city garden, city square, mall or city centre secondary street	**2.25**
City centre main street, principal boulevard	**2.5**
	Score (min 0.5 or max 2.5)

5: Condition (C):

Assesses tree health, condition and structural form. This is invariably influenced by tree species to some extent.

Assessment Criteria	Criteria Condition	Score
Trunk	Solid and sound	**5**
	Sections of bark damaged/missing	**3**
	extensive decay, hollow trunk	**1**
Growth	>15cm twig elongation this season	**5**
	5-15cm twig elongation	**3**
	<5cm twig elongation	**1**
Structure	Healthy, stable and sound	**5**
	Some deadwood and dead limbs	**3**
	Extensive dieback and deadwood	**1**
Pests and diseases	No pest/disease infestation	**5**
	Minor symptoms of infestation	**3**
	Advanced symptoms of infestation	**1**
Canopy Development	Full balance canopy	**5**
	Full but unbalanced, lop-sided	**3**
	Unbalanced and lacking full canopy	**1**
Life expectancy	>50 years	**5**
	10-50 years	**3**
	<10 years	**1**
	Total Score out of 30	**-**
Score out of a possible 30	6-9 very poor	0.2
	10-13 poor	0.4
	14-18 fair	0.6
	19-22 good	0.8
	23-30 excellent	1.0
	Score (min 0.2 or max 1.0)	

Application of the Urban Tree Valuation

For the purposes of the strategy an example of how the formula would be applied has been shown…….A tree identified as a mature River Red Gum (*Eucalyptus camaldulensis*) of 20m in height and with a DBH of 130cm growing in the Council road reserve and one of a few remaining examples of the species within the locality. The tree portrays average to good health, with a structure and form that is typical of the species and considered to be good. The tree has been damaged by unknown persons with the potential cause thought to be herbicide poisoning. For the purposes of a potential prosecution the tree has been determined to a have a value of

*Value (V) = Basic Value ($*105 353*) x Species (1) x Aesthetics (1) x Locality (1.75) x Condition (0.8)*

Based on the formula the tree would be considered to have an amenity value of $147,494.20.

It is suggested that should Council consider a potential Civil Claim against a party that is suspected of causing damage to a tree of similar stature that the amenity value provides a guide as to what monetary loss may be incurred by Council should the damages lead to the ultimate death of the tree or require Council to remove the tree based on the potential risks associated with its retention.

7. **Development activities / events**

Public trees will be protected from construction works and other activities/events that threaten tree health and stability. The Australian Standard for the protection of trees on development sites (AS4970) will be used to achieve consistency in tree protection requirements.

The Australian Standard for the protection of trees on development sites (AS4970) will be used to achieve consistency in tree protection requirements.

Actions:

Develop a series of educational / informational and promotional publications associated with development activity (in particular private building activity) and distributed through Council's Development Assessment Services and or Operation Services in relation to activity undertaken by service utility providers.

8. **Overhead power lines/utilities**

The City of Burnside will pursue measures to relocate infrastructure away from trees to reduce the need for excessive canopy pruning, reduce root damage, or to increase new opportunities for tree planting.

Actions:

Continue to engage with Power Networks to achieve minimum vegetation line clearance pruning regimes for street trees. Pursue amendments to the existing guidelines associated with legislation specifically 'Vegetation Clearance Around power lines.'

Actions:

Recognise that some tree species are not suitable for location under established power line networks and that replacement species options will need to be modified to reflect this.

Actions:

Investigate all opportunities to implement cable bundling and undergrounding of overhead power lines at locations where 'Landmark Trees' grow or sites of historical, cultural or biological significance exists.

9. **Unauthorised Works / Poisoned trees**

The City of Burnside will notify the community of illegal works and undertake site specific responses following tree poisoning or illegal tree removal. The City of Burnside will investigate unauthorised (tree pruning, poisoning/removal) and pursue enforcement action where appropriate in accordance with provisions under the Local Government Act 1999 S233.

It is envisaged that the attached UTV is applied in scenarios where Council may either be considering prosecution under provisions of the Local Government Act 1993 or as a potential Civil claim for damages.

Actions:

Fully develop the UTV an incorporate aspects of the system into all Council programs to ensure that should illegal or unauthorised works occur that Council has the opportunity to apply a monetary value to trees that may be impacted by those works.

10. **Installation and Upgrade of Council owned Infrastructure**

As Council moves to a more sustainable asset management system it is imperative that any works that Council manages are undertaken with minimal direct impact on urban trees, particularly trees growing within road reserves. To that end the following principles and actions will be phased into contract specifications where appropriate.

Verge Surfaces

There is a direct link between verge width and verge treatments, such as turf lawn, gravel dolomite, bitumen and paving. Typically, many grassed verges are well-watered and maintained. However, it is unfortunate that the percentage of poorly managed grass verges is rising, along with a greater reliance on Council's tree watering program as the availability of domestic watering of newly planted trees reduces.

Action:

In areas where the verge width does not exceed 1.5–2 metres in total width (boundary fence to kerb) it is suggested that all areas should be sealed with either a permeable paving compound or compacted dolomite.

Action:
Where trees are planted within a verge width of less than 1.5 metres, they should be fitted with either a tree-grate surround or water bowl treatment that retains the maximum footpath width but also allows Council to supply the new tree with at least 40 litres of water at any one time. Where appropriate, 'water well' devices should be fitted to any new tree located in a verge where the creation of a natural ear then water bowl may be ineffective.

Actions:
Council promotes the sustainable use of natural resources, and will investigate alternative verge treatments that require minimum watering and maintenance. 'Thirsty' exotic turf grasses, such as tall fescues and bent grass, couch or kikuyu grasses, could be replaced with hardier species of turf grass, or with drought-resistant local native grasses such as 'Wallaby' or 'Kangaroo Grass'. This could be achieved while maintaining the high streetscape amenity that is created by grass verges, and which is an important part of the character of the City.

Actions:
Council to pursue and design into all new road reserve kerbing and drainage contracts the principle to reduce on street parking to create discrete tree planting opportunities that may suit the planting of large standalone remnant species trees including supporting native flora garden beds.

Verge treatments
Well-manicured, lush green verges are synonymous with the character and amenity of the City. Ongoing maintenance of those turfed verges has always been a shared responsibility between Council and the residents, who both benefit.

Unfortunately, current trends in summer water restrictions have adversely affected the overall quality of verges in the last ten years. This has led to an increase in the number of verges not maintained by the owner/occupier. There is an increasing reliance on Council to maintain verges to a standard that residents have come to expect. The resources required to maintain this standard are significant and are directed towards a task that is considered unsustainable and at odds with sound environmental principles.

Decreasing levels of streetscape maintenance have a negative effect on the health and development of the tree located within the verge. Poorly-maintained grassed verges mean that additional water is required for street trees; overgrown water bowls also require a higher level of maintenance to correct.
As a general rule, the costs associated with establishing a turf verge, or a street tree located within that section of verge, must be borne by the resident or developer. Council supports the establishment of verge treatments that enhance the character of the streetscape, but also believes that such treatments must be environmentally and economically sustainable.

Actions:
Where appropriate, Council will consider and promote alternative verge treatments such as native drought-tolerant grass species, structured soils/gravels and various styles of block paving.

Footpaths
Since 1997, Council has initiated an intensive footpath replacement program to restore and rejuvenate degraded bitumen footpaths. Council is committed to replacing at least one side of every street within the City with a new, brick-block, paved footpath.

The installation and construction of the footpath system throughout the City has raised a number of issues regarding the impact the program is having on established trees within narrow verges, particularly where the road reserve is less than 1.5 metres wide. In some cases the location of the footpath in relation to large mature street trees can also be problematic.

Excavation of the upper layers of old bitumen pavement and layers of top soil can damage the upper primary and secondary feeder roots of the adjacent street trees. While every attempt is made to minimise physical damage to the root system of the tree, the long-term adverse impact of restricting the availability of water to the root zone of the tree is well known.

The nature and style of block pavement encourages upper root development such that any root disturbance within the bedding sand of the paving will force block pavers upwards thereby creating a hard-edge trip hazard.

Actions:
Where footpath replacement is required, alternative paving options should be considered where the closest edge of the proposed block pavement comes within 500 mm of the base of the tree, and/or where the trunk diameter is equal to or greater than 300 mm at breast height. It is suggested that alternative treatments such as stabilised crushed rock, permeable paving; or high density rubber, soft-fall paving should be considered as a preference.

Actions:
In confined narrow streets where verge widths are less than 1.5m in width (such as those within local conservation areas like Beulah Park, Rose Park and Eastwood, that the installation of heritage-style tree grates (or similar) are installed around trees in preference to any form of paving, within one metre of the tree base.

Kerb and Water Table replacement
The rate kerb and water table damaged directly attributed to surface roots from mature trees, has dropped measurably from the 1991 survey. However, the severity of damage that still exist across the City appears to have risen. Council upgrades and replaces kerbing through an ongoing, proactive program. During pre-assessment, all options regarding alternative re-kerbing works are explored to avoid damage to senescent or maturing trees that have an extensive and potentially expanding root system.

The principle of retaining remnant, local indigenous trees within road reserves suggests alternative design options shall be considered in preference to any potential removal of a remnant tree, this particularly applies to trees located within suburban back-streets.

Actions:
As an alternative to tree removal, hand-formed bitumen-formed kerbing can be created around existing tree roots. Where the level of kerb displacement stretches over long sections of road reserve then realignment of the section may be preferable.

Actions:
All existing kerbs or gutters that are displaced or damaged by an existing mature tree will be removed by hand excavation only. In certain conditions, existing kerbs may be left in situ with new kerbing built around, or entire road kerbing sections realigned to accommodate the retention of the tree. All back-of-kerb excavation works within close proximity (less than 1m) will be under taken by hand rather than by backhoe.

Actions:
New, precast kerbing should be formed in one metre sections, so that control joints are positioned two metres either side of the centre of the tree, and designed so that these individual sections are built with minimal compaction. The concept of replaceable and detachable kerb sections will then minimise potential damage from an expanding tree root system.

11. **Damages and Claims arising**

Council is responsible for both the management of street trees and of the infrastructure within the road Reserve. A formal recognition of the value that trees have within the overall streetscape dictates the level of liability Council is willing to accept in regards to damage to infrastructure and/or adjoining property.

In accordance with Section 245(1) of the Local Government Act:

5. *A Council is not liable for any damage to property, which results from*
   (a) the planting of a tree in a road; or
   (b) the existence of a tree growing in a road (whether planted by Council or not).
   However, if
   (a) the owner or occupier of property adjacent to the road has made a written request to the council to take reasonable action to avert a risk of damage to property of the owner or occupier from the tree; and
   (b) 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 has taken reasonable action.

Property owners or occupiers may make representation to Council asking that reasonable action is taken to alleviate the damage caused by a tree planted in the road Reserve. However, if it can be shown that Council has indeed taken all reasonable action, including tree pruning, tree-root pruning, realignment of paving or, as a last resort, tree removal, and then Council's liability will be determined with reference to the Local Government Mutual Liability Scheme.

Actions:
Claims of damages due to Council-managed trees will not be addressed unless that claim is made in writing. All potential claims for injury and/or damages are to be directed to Council's Risk Management Officer.

Actions:
No Council staff will admit or support the success or otherwise of a potential claim made against Council. All reference and or correspondence with regard to a claim made against Council will be through Council's Risk Management Officer.

The Officer will, where required, carry out an investigation of the issue including all actions taken preceding the claim. To this end, Council staff will maintain a complete record of all actions taken with regard to specific customer requests. As a minimum, all actions taken on trees under the control and management of Council will be recorded. Council will create a draft Tree Action Report Form.

Root Pruning

Root pruning is generally discouraged as a method of alleviating damage to adjoining property, such as infrastructure uplift or service-line disturbance. This is because the long-term implications of sustained and heavy root pruning are unknown.

Actions:
Root pruning will only be under taken when an obvious, positive outcome can be achieved without any long-term harm to the tree. Council will perform root pruning on any tree for as long as practical before removal is considered.

Actions:
Where appropriate, and preceding any potential damages claim, Council will undertake repair to the pedestrian footpath and driveway crossover sections where damage can be attributed to a street tree, or a tree located in the road Reserve. Where possible, Council staff will inspect the damage to the pavement and undertake the repairs. (Specific actions are detailed in Urban Tree Technical Manuals – Root Pruning)

TREE PLANTING AND SPECIES SELECTION

1. The City of Burnside will proactively identify opportunities to increase canopy cover across the local government area. Improving the quality of this canopy cover will be achieved through planting “the right tree in the right location”. This includes stock quality, installation, selection criteria and species diversity.

6. The City’s urban forest is a mix of native, exotic, evergreen and deciduous trees. The City of Burnside recognises that low species diversity has the potential to create an unstable ecosystem that is vulnerable to pest and disease attack.

7. It is envisaged that both the STMP and VMP are directly linked to the future development of a proposed Public Domain Streetscape Policy/Strategy. It is considered that both documents and plans are reviewed separately to the new Strategy given potential changes to Strategic initiatives associated with departmental annual business plans

The following Strategy principles will apply to tree planting and species selection:

Refer to Tree Management Policy statement.
Develop and Implement Street Tree Master Plans (STMP) & Parks / Reserves Vegetation Management Plans. (VMP). Where appropriate integrate actions with guidelines associated with the Public Domain Streetscape Strategy.

Actions:
The City of Burnside will plant trees in accordance with the STMP and VMP to ensure the coordinated development of streetscapes and parks and reserves that are both attractive and coordinated.

Action:
The City of Burnside will emphasise the planting of local indigenous trees and in a broader sense local indigenous vegetation to compliment the actions arising from the Biodiversity Strategy.

Action:
Promote the retention of open space on private land, especially in areas and in configurations that allow for planting canopy trees

Ensure that the overall urban design for places ensures that spaces and streets are best designed for the urban forest, and for people. Ensure that the Public Domain Streetscape guidelines and plans reflect the same principles.

8. **Park / Reserve trees**

The City of Burnside will recognise, plan and respond to park tree planting opportunities in accordance with the park / reserve specific Vegetation Management Plans that may occur separate to park / reserve upgrades.

Actions:
Continue to develop and revise existing STMP, develop new VMP in conjunction with the expansion and development of park/reserve Master Plans Integrate STMP with future Public Domain Streetscape Policy and Strategy.

Actions:
Given the increasing and aging tree population it is expected that interplant (isolated stand-alone tree replacements) occur as available resources direct. It is anticipated that programs such as the SGSTRP are further developed to better integrate with Public Domain Streetscape Strategy guidelines and plans and that overall replacement plantings in the next five years will increase by 15% to compensate for the increasing tree age population.

Actions:
As part of the Biodiversity Strategy action plans promote the use of local indigenous trees within Council's parks and reserves where ever possible. Through VMP integrate the creation of floral island plantings through understorey plantings utilising local indigenous species.

Actions:
In response to the potential increase in major wind / storm events Council consider large scale tree replacement initiatives that support a staggered age structure to all major parks and reserve replacement initiatives to ensure that tree canopy coverage affected by these types of events is not diminished over the longer term.

9. **Tree locations**

The City of Burnside will continue to seek new tree planting opportunities in appropriate locations to maximise canopy cover and deliver ongoing environmental, economic and social benefits.

Actions:
Where insufficient space exists in the footpath/nature strip area, but where the actual street or road width is above average, consideration should be given to the creation of generous planting islands within large dedicated verges. Council may consider reducing car parking to create discrete areas within the verge or road Reserve, to form stand-alone garden beds. Alternatively, tree islands that contain larger species and which are developed along the length of the street can contribute more to the streetscape than small trees planted along a narrow verge.

Actions:
The Street Tree Master Plans and Reserves Vegetation Management Plans incorporate many of these criteria in the development of species selection and planting locations.

The actual percentage of total tree coverage can be greater from individual stand-alone specimens growing at intervals along the streetscape than from numerous small trees squeezed into a narrow verge. Streets offering adequate verge width, appropriate verge treatments such as mulch or minimal turf lawn present the best and most efficient tree planting options.

It is not unrealistic to suggest that future planting opportunities will be negatively influenced by the increasing level of medium to high density housing activity. It is imperative that the Street Tree Master Plans reflect the selection and planting options best suited for the space but also maximise survival and contribution opportunities given to a tree.

Actions:
Remove asphalt and concrete surfaces where possible and replace with pervious surfaces to encourage healthy root growth for larger trees. This shall occur through a review of Council's current Footpath replacement program to investigate alternative surface solutions including permeable paving, compressed density rubber surfaces, integration of gravel paths where possible.

Investigate incorporate and expand water sensitive urban design measures where ever possible to ensure planting opportunities can be incorporated into the design framework.

10. **Tree selection criteria**

The City of Burnside will plant the most appropriate tree species based on site suitability, aesthetic, functional and biological attributes, performance and the potential to contribute to landscape character.

Actions:
Continue to develop and revise STMP and VMP to allow for potential climate change influences; natural species selection on suitability and hardiness under South Australian conditions, suitability in response to potential influences associated with demographic changes and suitability in response to potential influences of changes to density of housing within the City.

Where appropriate, local indigenous tree species will be planted in preference to Australian native trees. This includes species such as River Red Gum (Eucalyptus camaldulensis), SA Blue Gum (Eucalyptus leucoxylon) and Grey Box Gum (Eucalyptus microcarpa).

Actions:
On streets surrounding and leading into major parks and reserves, opportunities may exist to establish larger trees than would be appropriate for a typical street frontage. In many cases, local indigenous trees should replace existing exotic street tree plantings within expanded verge treatments.

Actions:
It may be possible to widen verge areas adjacent to the park or reserve to accommodate larger trees. The location of these extended or expanded verge area has to take account of the impact to car parking opportunities however innovative design solutions are available and provide benefits as yet untried.

Actions:
Stand-alone floral islands of local indigenous trees which link watercourses and existing wildlife corridors can be installed within existing street tree plantings to create 'stepping stones' for local indigenous birds and mammals throughout the City. Major intersections with low traffic volumes may suit the expansion of the verge area to accommodate these larger tree species.

Actions:
Ensure that the 'Landmark Trees' register is continually updated to reflect the importance that these types of trees have on our cultural identity and to ensure that the data is current.

11. **Species diversity**

The City of Burnside will increase species diversity (through new plantings) by ensuring the street and park tree population does not comprise more than 40% for any particular family, 30% for any particular genus and 10% for any species.

Actions:
Continue to develop and revise STMP and VMP to meet the principles of species diversity.

Actions:
Promote and investigate the retention and expansion of the City's remnant tree species where ever appropriate.

Actions:
With regard to VMP investigate and promote the potential revision of Australian native tree species with local indigenous tree species and where appropriate develop appropriate understorey plantings to create distinctive biodiversity pockets within parks and reserves.

Actions:
Provide habitat through the retention of dead trees where possible whilst ensuring public and private safety.

Actions:
Increase the diversity of trees (and other plants) to provide food sources, to protect habitat and to promote healthy ecosystems.

12. **Nursery tree stock specification**

The City of Burnside will use only quality nursery stock according to latest best practice and standards. All trees supplied will conform to the National Specification System of Australia (NATSPEC) guide *"Specifying Trees – a guide to assessment of tree quality"*.

Actions:
Implement changes to Council's contract and procurement systems to apply minimum standards to tree species stock selection. Where appropriate enforce non-compliance to the standards through the purchase and acquisition of tree stock by appropriately qualified / compliant nurseries where ever possible.

Actions:
These standards should be applied to the provision of Council grown provenance tree species grown by private providers.

Actions:
Select species of trees that are robust and resilient to the potential effects of climate change. This shall be achieved by regularly reviewing Council's existing STMP species palette to ensure species selection remains current and adaptive.

13. **Installation details**

Standard technical specifications and installation techniques will be used by service providers and developers to ensure successful establishment of newly planted trees throughout the local government area.

Actions:
Develop and revise existing tree planting standards through Urban Tree Technical Manuals.

Actions:
Develop new guidelines and Council owned publications to assist the community understand and acknowledge the importance of increasing the urban forest, the protection of 'Landmark Trees'; the value our urban forest has on our cultural identity and show through these actions how Council does the same.

14. **Community involvement**

The City of Burnside will encourage community involvement in tree planting activities and regularly promote the benefits of trees to the community through standalone programs such as 'Trees for Life', Greening Australia initiatives, community tree planting events, active participation in the creation and development of Public Domain Streetscape Guidelines and plans.

TREE REMOVAL AND REPLACEMENT

1. Trees like all living things grow, age and eventually die. Whilst tree removal is a “last resort option”, public safety always takes priority. Selective tree removal and replacement programs, over many years, are vital in managing canopy cover to ensure that the numerous benefits trees provide are sustained for future generations.

2. The City of Burnside will assess all trees proposed for removal in public and implement tree removal and replacement programs as required. The following Strategy principles will apply to tree removal and replacement:

3. The following plan principles will apply to tree removal and replacement;
   Refer to Tree Management Policy statement
   Refer to Urban Tree Technical Manuals (UTTM) for Tree Removal& Replacement
   Develop Street Tree Master Plans & Parks / Reserves Vegetation Management Plans. (STMP & VMP) Where appropriate integrate actions with guidelines associated with the Public Domain Streetscape Strategy.

1. **Assessment**
   The City of Burnside will use its tree assessment procedures to ensure consistency in the approach in determining tree removal, root pruning, and pruning applications. The retention of “Landmark Trees” is a priority where cost effective risk management practices can be employed to foster the tree’s health and wellbeing.

   Actions:
   Tree removal will not be permitted to facilitate views (including advertising signs), off-street parking, and installation of solar panels or to reduce the extent of leaf / flower / fruit drop, or to reduce the impact from any bird / other animal waste or noise unless the

client/request is supported by medical or legal advice under Section 245 of the Local Government Act 1999.

Actions:
Trees listed for potential removal will be assessed against the Council's Tree Risk Assessment Formula. The assessment shall be undertaken by suitably qualified arborists of at least AQF level 4 or higher. The criteria used for assessment are contained within Council's Urban Tree Technical Manuals.

Actions:
The assessment criteria for live trees and dead trees is reflected in Council's Urban tree Technical Manuals however criteria and the level of communications associated with trees of a particular size and growing location varies.

Actions:
For "Landmark Trees" (Does not preclude trees captured through the Development Act regulations 6A):

No tree shall be removed without Council consent. Where a tree is considered to present an unacceptable risk to public or private safety, removal may occur with the approval of the Technical Officer Arboriculture with reference by approval to the Manager Operation Services/Manager Asset Services or General Manager Urban Services.

If this action arises, a report will be presented to Council at the next available meeting date. It is also recommended that both Ward Councillors are informed of the pending removal in this scenario.

If, in the course of Council's normal tree pruning program, the Arboriculture Unit forms the opinion that a live tree should be removed due to the presence of serious disease, or due to it posing an immediate risk or hazard that has no solution other than removal, the tree may be removed immediately, at the discretion of the Team Leader, Arboriculture with reference to the Technical Officer Arboriculture.

Actions:
Tree removal assessment associated with the Second Generation Street Tree Replacement Plan (SGSTRP) are unique and will not necessarily have the same criteria applied as stand-alone trees. The assessment criteria for trees within a street listed under the SGSTRP will be listed in Council's Urban Tree Technical Manuals – Second Generation Street Tree Replacement Program.

2. **Emergency situations**
Risk to public safety and property will take priority in tree removal decisions in emergency situations.

Actions:
It is preferred that any tree considered for removal; be retained and that the risk be minimised but in the likelihood that the tree has to be removed to reduce the public risk that as a minimum the agreement of the Team Leader Arboriculture and or the Technical Officer Arboriculture is sought prior to its removal.

Actions:
Within two working days a report will be presented to the Manager Operation Services detailing why and under what scenario the tree was removed. In the case of trees listed as a 'Tree of Significance'.

3. **Poor performing trees**
The City of Burnside will remove and replace poorly performing trees to reinvigorate the urban forest.

Actions:
Regularly review existing STMP to reflect known poor performing trees and replace with suitable specimens subject to investigation.

4. **Weed species / Declared Pest Plants**
The City of Burnside will undertake the staged removal and replacement of trees classified as noxious or environmental weed species declared by the Natural Resource Management Act. The impacts to canopy cover will be a key consideration in removing trees as part of this process.

Actions:
Review existing Watercourse Policy and references to listed weed species trees such that tree removals occur with regard to the long term objectives of restoring the biodiversity of watercourse areas to sustainable landscapes.

Actions:
Review existing STRP and VMP to recognise that weed species trees should be removed to ensure the survival of local indigenous tree species.

Actions:
Modify current water course management practices to ensure that the removal of woody weed species trees, in particular, trees that have negative attributes such as high seed dispersal rates and invasive root systems are cleared from the base of local indigenous trees to ensure the survival of the tree.

5. **Capital works improvements**
The City of Burnside will develop strategies for the installation of new plantings, where feasible, prior to tree removal required for capital work projects.

Actions:
Ensure that Streetscape Strategy and plans reflect the integration of tree plantings where ever possible. Ensure potential plantings are integrated with alternative surface treatments and where possible integration with Water Sensitive Urban Design principles.

7. **Age diversity**
The City of Burnside will maintain a spread of tree age classes to minimise the impact of tree removals required in close timeframes and / or within specific areas.

Actions:
Ensure that the annual interplant and SGSTRP are cognisant of the ageing tree population and endeavour to ensure that Council's urban tree population is diverse and structured to be sustainable under climatic changes and resource availability.

8. Replacement of Trees

As a part of the tree assessment criteria only suitably qualified Council staff (Technical Officer – Arboriculture) will apply a standard Tree Amenity Valuation formula to fully determine the costs associated with the removal and or retention of specific trees associated with the development activity.

Actions:
For the purposes of the Strategy all trees assessed and determined for replacement must be located in acknowledgement of all known infrastructure. The following tree replacement principles apply however specific information shall have reference to Council's new Urban Tree Technical Manuals – Tree Replacement.

Actions:
All dead trees that may be associated with a crossover application will be replaced, and as a rule the position of the new replacement planting will occur as near as possible to the previous tree location. Under exceptional circumstances a planting may be repositioned to accommodate the installation of a new driveway crossover; however, any changes to an approved driveway crossover location will be subject to approval by Council's Planning Authority (after approval from Councils Technical Officer Arboriculture has been gained).

Actions:
Any new tree replacement and new driveway crossover will provide at least 1.5 metres separation between tree and nearest edge of driveway crossover. All alternative driveway crossover designs will be assessed and approved by Council's Planning Authority (after approval from Councils Technical Officer Arboriculture has been gained).
It is not Council's role to provide advice on alternative designs. Driveway crossover proposals will have regard to the maturity and trunk diameter of any street tree that may be affected by a proposed new driveway crossover. Setbacks may be substantially more than 1.5 metres for specific trees.

Actions:
If the condition of the street tree is declining and its life-expectancy is short, tree removal may be considered to allow for the installation of a new driveway crossover; however, removal & replacement will be at the cost of the applicant and a new tree will be re-planted as close as possible to the original tree.

Actions:
Semi-advanced or juvenile trees less than three years planted will be considered for re-location if the tree species tolerates typical transplanting practices. However transplantation must occur at the appropriate time. All costs associated with the transplantation and re-location will be borne by the applicant. This practice is not endorsed in general as changes to planting can affect the amenity of the streetscape.

Actions:
Where appropriate, alternative arrangements that may include the relocation or removal of a juvenile tree(s) or a tree that may not be appropriate for the verge will be considered. However, in all cases the relocation or removal will be at the discretion of

Council's Technical Officer Arboriculture, who will determine the appropriate tree species for the verge with reference to the STMP. All costs associated with the relocation or removal will be borne by the developer or owner.

TREE ASSET MANAGEMENT

The City of Burnside recognises that trees are a major asset, and play an important role in making Burnside a liveable, attractive and healthy city. Our trees are growing in a harsh urban environment, which require specialised care and management. The City of Burnside is committed to a high quality maintenance program that provides adequate resources for the long-term health of its urban forest.

1. The major wind event of February 2014 created an unprecedented impact on the way Council manages and assesses its urban tree population. The event has highlighted a range of deficiencies with regard to ongoing risk safety inspection regimes and resultant actions that rise with those inspections. To that end Council will create management plans that to a large extent focus on risk minimisation whilst being cognisant of the long term value many remnant, Landmark Trees and tree boulevard plantings have on the identity of the City.

2. The following policy principles will apply to tree asset management:

   Refer to the Tree Management Policy statement
   Develop and apply Vegetation Management Plans (VMP): The City of Burnside will prepare Vegetation Management Plans for our primary and secondary parks, other iconic parks and streetscapes. Where appropriate integrate actions with guidelines associated with the Public Domain Streetscape Strategy.

3. The VMP will provide long term removal/planting strategies that will guide short term activities to ensure the health and amenity of tree assets. They will direct future tree planting options and guide all levels of vegetation strata that encompasses both trees (upper storey), shrubs (middle storey) and herbaceous (lower storey) plantings to create an overall vegetation plan that may, in as many opportunities as possible, create a biosphere common to the local area.

4. **Tree maintenance**

The City of Burnside will ensure that best practise tree management is applied across all street and park trees. Audits of street and park trees will be undertaken on an ongoing basis to ensure that high quality delivery standards are maintained at all times. It is envisaged that high risk sites such as arterial roads, sites adjacent to major playgrounds and car parks will receive specific attention proportional to the level of risk that may exist in that location.

In 2007 Council introduced the principles of a Complete Care Pruning Program (CCPP). The aim (of the program) is to address and complement previous Council initiatives for street tree management and replacement. Under the CCPP all pruning work is undertaken with due regard for the age, shape, size, character, condition and position of the tree. Trees are pruned in a manner that promotes the heath of the tree and should maintain the natural shape, form and character of the individual tree within the streetscape.

5. Many of our mature street trees do not conform to statutory clearance standards above footpaths, kerbs and roads. Given the age of these trees, any attempt to prune to normal requirements may be detrimental, leading to heavy canopy loss and large, intrusive wounds. In accepting that many trees may not be pruned to the required standards, Council acknowledges that there may be some sporadic limb loss resulting in damage claims and associated liabilities from the general public, Council will attempt to mitigate these risks as best as possible.

6. Risk management and minimisation is critical, but generally, Council undertake an intensive management program for individual trees before considering their removal. In accepting that it may not always be practicable for some trees to be pruned to certain Standards, the Council provides that it will attempt to mitigate identified issues by undertaking a risk assessment methodology to reasonably eliminate or minimise risk.

Actions:
Undertake a complete review of all pruning regimes that address tree decline such that the retention of the tree (with a minimum of inherent risks minimised as far as possible) is promoted.

Actions:
Pruning will be carried out in accordance with Australian Standard 4373, 'Pruning of Amenity Trees'. All staff associated with tree management must have the required knowledge and skills, or be able to attain the level of qualifications necessary. Ideally, Council staff should have, or be able to attain, as a minimum, a Level 3 Certificate in Arboriculture. Refer to Urban Tree Technical Manuals for more details.

Actions:
All pruning will be following the agreed standards. The standards and work methods undertaken by the unit will be contained in Council's Urban Tree Technical Manuals.

Actions:
The extent of pruning of an individual tree must take into account the age, condition, shape and form of the tree. Pruning has to produce a well-balanced, safe tree, while maintaining its overall amenity and significance to the street. Pruning must also meet

statutory requirements where possible. The vast majority of city streets are lined with either mature or senescent trees that require pruning on a cyclic basis.

Actions:
Council staff will undertake a coordinated, cyclic pruning program based on a 'palliative' approach to tree maintenance. The CCPP will be tailored to try and prune every street tree over a four-year period. The necessity to undertake further pruning of particular trees outside this cycle will be determined on a needs basis, with a particular attention to safety.

Remnant Vegetation:
All due regard will be given to remnant trees growing within the road reserve but statutory pruning clearance standards do not necessarily apply to these trees given their size, age and importance. Specific inspection and pruning regimes apply to these trees and Council seek to promote their retention within appropriate risk profiles.

It must be recognised that the major wind event of February 2014 seriously impacted the City's remnant tree population to varying degrees. This one event caused significant damage to a range of trees located across our reserve networks. The percentage of remnant trees that suffered major structural damage is as yet not determined however as a result of this event Council now recognises a structured and ongoing risk safety audit must be undertaken on Councils remnant tree population (whether located within a reserve or road reserve) as a part of the broader asset management audits currently under way.

7. The CCPP schedule will endeavour to prune every street tree once *over a four-year period*. The pruning will be based on the following factors:
   - extent and percentage of deadwood within a tree,
   - percentage of trees in the street with high dead wood content,
   - percentage of streets with trees showing high amounts of dead wood,
   - number of resident requests pending.

   While under taking the pruning regime the department will identify other relevant tree issues such as:
   - private overhanging vegetation,
   - non-conforming trees,
   - possible tree planting options.

8. Trees or vegetation presenting immediate safety issues will be dealt with under 'Emergency Pruning'. The following pruning criteria apply across the City.

9. ***Arterial Roads:***
   Council recognises that symmetrically balanced pruning of trees may not be possible when severe clearance conditions are required, for example, on arterial roads controlled by Transport SA. Many of the City's street trees lining arterial roads are mature, and their canopy, shape and form make it almost impossible to prune to statutory requirements without disfiguring the tree.

Actions:
On arterial roads, and others under the control of Transport SA, trees shall be pruned to meet statutory guidelines for trees on a road Reserve. The measurement is taken from the edge of the traffic lane next to the kerb line, marked parking bay, or bicycle lane. Council will endeavour to meet these guidelines.

10. ***Footpath and Edge of Road***

Council's Arboriculture Unit will prune Council-owned vegetation that intrudes into and over all infrastructure within the road Reserve, to the following minimum clearance specifications. (The exact amount cleared will depend on traffic loads and sight-line issues.)

Actions:
Footpath Clearance:

- *Edge of footpath: 2.4 metres*
- *Centre of footpath: 2.7 metres*

Road side:

- *Kerb line: 2.7–3 metres (arterial roads may prescribed a higher standard and is subject to constant review. Refer to Department of Road Transport and Infrastructure Standards and Road Traffic Act 1961)*
- *Centre of road (non-arterial): 5 metres*
- *Centre of Road(arterial): 6m if possible*

12. ***Street tree residential overhang***

Where a tree in a road Reserve, park or other site encroaches over private property and in response to a specific customer request, the Arboriculture Unit will make an assessment as to whether the canopy or spread of the tree should be reduced.

In considering the appropriate scope of work, the Unit considers:

- the health status of the tree,
- the contribution of the tree to the streetscape,
- potential risks to nearby residents and property.

In consultation with the resident or property owner, the Unit will reach agreement on the extent of works.

13. ***Overhang from Private Residential trees and shrubs***

Growth from adjoining private-property trees, overhanging footpaths and roads, will be trimmed and maintained to comply with all relevant statutory obligations placed on Council. Under section 254 of the Local Government Act, Council may undertake clearance of privately-owned vegetation if it is considered an immediate risk, without contacting the relevant owner or occupier of the land in question. Under normal circumstances, the clearance standards set out above apply.

Actions:
No pruning of private, overhanging vegetation, determined to contravene the Local Government Act 1999, will occur without issuing the owner or occupier a Resident Notification Card, with an attached Job Request number. Even where vegetation has been cleared as an immediate risk, a Card will be issued to the owner/occupier

informing them that Council has cleared the vegetation and that further action may need to be taken by the owner.

14. ***Liability and Claim against Council***

Council is responsible for both the management of street trees and of the infrastructure within the road Reserve. A formal recognition of the value that trees have within the overall streetscape dictates the level of liability Council is willing to accept in regards to damage to infrastructure and/or adjoining property.

Actions:

In accordance with Section 245(1) of the Local Government Act 1999 all claims made for potential damages and injury shall be made in writing and recorded through Council's normal record management systems.

15. **Tree Asset Database**

Ongoing management of the Landmark Trees Register is necessary to maintain its currency, authenticity and of ensure its effectiveness. Responsibly for the ongoing management and monitoring of the Register shall be undertaken by Council's Operation Services Department.

Actions:

Ensure all Council departments and the community have access to the Landmark Trees register.

Actions:

Educate Council staff and set up procedures to ensure that significant trees (as defined by the Development Act 1993 or listed on Council's 'Landmark Trees' register are appropriately managed during any development and construction.

Actions:

Use the Landmark Trees Register as a method to promote community awareness about the heritage, cultural and ecological value of trees.

Actions:

The City of Burnside will maintain a Tree Asset Database and strive to regularly update the information held within the data base for its park and street trees. This data base will facilitate appropriate decision making, prioritise resources and to maintain accurate historical data. Specific attention shall be placed on trees growing within high profile high risk sites that have a potential to impact high volume user spaces such as major arterial roads, playgrounds, and major car parking spaces.

Actions:

Investigate and implement the development of an interactive auditing system based on and driven by the new data base (Refer above action) that provides Council with information on the total monetary as well as environmental benefits that trees bring to society. In many respects the Council should consider adoption of software packages such as 'iTree' as an appropriate technology package that provides this level of detail with minimal integration into Councils existing Information technology systems and procedures.

16. **Risk management / insurance claims**

The City of Burnside will proactively manage tree risk management issues. This includes using the Tree Asset Database to manage risk. Council will apply the following actions with regards to managing tree risk across the City.

Actions:
Encourage a common and consistent (risk based) approach to tree management.
Investigate innovative data capture software that integrates tree risk safety auditing as a part of the ongoing City wide tree auditing process.

Actions:
The management of appropriate records and determining what is 'reasonable' action when a tree hazard is reported or identified.

Actions:
Include general risk management principles for tree management in accordance with AS/NZS ISO 31000:2009 – Risk Management Principles and Guidelines.

Actions:
Minimise risks leading to civil liability exposures.
As such Council shall follow and adhere to the Local Government Association Mutual Liability Scheme (LGAMLS) – Risk Management Guidelines for Local Government 2013.)

17. **Pests and diseases**

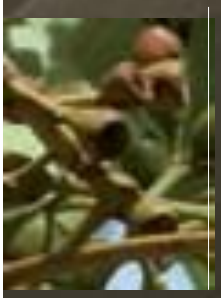
The City of Burnside will monitor and treat pest and disease issues, using best practice control techniques, as part of the tree maintenance program. The recent presence of Elm Leaf Beetle in Adelaide will have major implications on the survival of this tree species (Ulmus) within the City. Of specific concern is the affects this pest may have on the continued survival of the historic war memorial avenues of Alexandra Avenue and Prescott Terrace, Rose Park. As such a specific pest control management has been developed and will be implemented across this area.

Actions:
Continue to investigate and implement all integrated pest and disease management plans where appropriate. This shall (as a preference) utilise all biological treatment methods that minimise the use and treatment of harmful chemicals.

18. **Tree information systems**

The City of Burnside will keep abreast of new technology in the field of arboriculture and urban forestry, and incorporate technical tools into management and maintenance techniques where appropriate.

Actions:
Provide opportunity to all relevant staff to attend training and education programs to ensure staff are abreast of all information and programs relevant to arboriculture to ensure relevance within the industry.



COMMUNITY CONSULTATION AND ENGAGEMENT

1. The City of Burnside values our community's opinion and will encourage consultation and communication regarding tree management and the urban forest. The following policy principles will apply to community consultation and engagement:

   Create new Communication and Engagement Policy statement
   The statement shall address as a fundamental principal open and transparent communication with the community. The application of the statement will ensure that where ever possible community views, opinions are heard and acknowledged.

   Develop and Apply a new Community Urban Tree notification system: The City of Burnside will inform and consult with the relevant community about all street and park tree removal (except where emergency works are required), major tree planting projects and any other specialised projects impacting on its street and park trees.

2. The City of Burnside will provide information, regarding new street trees planted to the residents located adjacent to the planting. The City of Burnside will notify adjoining property owners of the removal of trees from private property that are listed on the City's Register of Significant Trees.

   Actions:
   The City of Burnside will develop programs to encourage community involvement in the ongoing care of its urban trees. To that end specific Community Consultation programs shall be developed to support the introduction of the proposed Public Domain Streetscape Strategy, plans and guidelines associated with major tree planting initiatives.

Actions:
The City of Burnside will increase community knowledge about the benefits of trees and the urban forest through the City's web page, the local media and tree information leaflets.

Actions:
The City of Burnside will consider and assess resident requests for tree planting in streets, parks and open spaces. Any planting undertaken will be in accordance with the Street Tree Master Plans, Park / Reserve Vegetation Management Plans or other relevant Council documentation.

Actions:
Ensure that in the adoption of the proposed Public Domain Streetscape Strategy that specific attention is brought to the selection of street tree species either as a part of the annual interplant program or the broader and strategic replacement program undertaken as part of the Second Generation Street Tree Replacement Program.

3. **Responsibilities**

The City's Manager Asset Services and Operation Services with field assistance from the Technical Officer – Arboriculture and Technical Officer - Parks will be responsible for implementation of the Urban Tree Strategy 2014 - 2025.

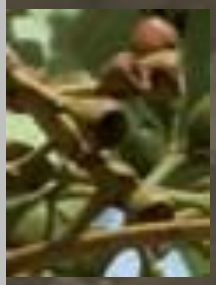
4. **Review**

The Urban Tree Strategy will be reviewed every five years to coincide with the review of the Tree Management Policy.

Actions:
The Urban Tree Technical manuals that accompany this document are reviewed annually or on as needs basis.

5. **Consultation**

The Urban Tree Strategy will be available for download at www.burnside,.sa.gov.au and will be available for public viewing at Council's Civic Centre/Library and Operation Services depot.
Hard copy versions of the Urban Tree Strategy shall be down loaded and copied to DVD / CD for community use as requested.



STREET TREE MASTER PLANS

Structure.

1. The City of Burnside Street Tree Master Plans (STMP) will inform and direct all future street tree planting across the City.

   The urban forest includes the collective of trees within streets and precincts as well as those growing within our parks and reserves. The Street Tree Master Plans will guide the City of Burnside in the management and enhancement of all street tree plantings across the City.

   The master plans define the strategic approach to selection and placement of street trees used by Council staff, designers and developers in the planning and designing of streetscapes in the City of Burnside.

2. The development of the Street Tree Master Plans link directly with the development of Councils proposed Public Domain Streetscape Strategy and to some extent the Vegetation Management Plans that can integrate street tree plantings into adjacent parks and reserve plantings. I.e. broaden the plantings from the street into an adjoining reserve such that there is a consistency of plantings that create tree corridors where ever possible.

3. Street trees represent a significant visual and physical presence to our streetscape. Many suburbs are identifiable by their street tree species. Suburbs such as Tusmore and Hazelwood Park are known for the long graceful avenues of Jacaranda. It is not hard to imagine what our streetscapes may look like were it not for our established tree avenues. However, that in itself can pose a burden that requires careful planning, resourcing and an ongoing commitment by Council and community to retain, maintain and enhance those streetscapes into the future.

4. The STMP brings together historical and current knowledge of tree species selection and location across the City. The STMP's have been developed to achieve the following objectives:

   - Recognise the character, amenity, historical background and location of the street in the City and its association to the surrounding streets,
   - Recognise existing and potential changes to infrastructure,
   - Recognise environmental conditions including the known effects of climate change,
   - Increases planting opportunities,
   - Increases the diversity of plantings and where possible the integration of and use of local indigenous tree species,
   - What, where and how much available open space exists to the planting site,
   - Recognise the character of the surrounding and prevailing vegetation.

5. In seeking to fulfil all the objectives it prevails on Council to also recognise the various limiting factors that affect species selection and planting opportunities for streets and precincts including;

   - Verge width,
   - Verge type: (grass, dolomite, rubble or paved),
   - Verge alignment: (north, south, east or west),
   - Footpath location: (e.g. hard to kerb, evenly spaced),
   - Location of services, (e.g. gas, water, electricity, telecommunications),
   - Overhead power lines,
   - Potential growth rate of the tree,

- expected growth habit of the tree, and its ability to tolerate pruning,
- of the tree to the amenity of the street,
- potential of the tree to cause damage to infrastructure, and
- physical location,
- contribution by and of resident preferences.

6. For the purposes of the Urban Tree Strategy 2014 - 2025 the City has been defined by geographical location, type and style of housing stock (this influences streetscape character) and dominant supporting infrastructure type (established roads, verges & power line etc.). The City's Development Plan 2013 provisions are also recognised in the development of the Street Tree Master Plan documents.

   The planting zones are defined as: residential plains; residential foothills / hills face; and local historic conservation areas a separate section on Councils historic avenues and major replacement program has also been included.

7. The Street Tree Master Plans also acknowledge that the list of preferred tree species defined within the plans essentially guide replacements based on the aforementioned criteria however it is also recognised that changes in climate, resource base, innovation and investigation of new tree species will influence the final tree species selection within an area. To that end replacement species is a fluid and adaptive approach that shall be cognisant of community views, changes to streetscape designs and may change on a continual basis.

Residential plains:

This zone covers the majority of older, well-established suburbs of the City. It is obvious that most of the City's senescent trees will be located in these areas. The dominant plantings include Jacaranda (*Jacaranda mimosifolia*), White Cedar (*Melia azedarach*), Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') (*Fraxinus oxycarpa*), Kurrajong (*Brachychiton sp*.) and a few of the more recent plantings such as Queensland Box (Lophostemon).

The plantings are formal, well-positioned and often date the initial development of the suburb. On the whole, verge width is greater and there are a proportional number of driveway crossovers per allotment. Often, there is excessive volume of vegetation overhang from residential properties, (which may affect the growing conditions of street trees). It is anticipated that the impacts of more infill development (in these areas) will have a greater influence on the continued streetscape character (created by the existing trees). It is anticipated that this may have a significant impact on suburb amenity and character in the coming decades, particularly if the Greater Adelaide 30 Year Plan outcomes are achieved.

Future planting choices should maintain and enhance the theme of traditional plantings. Re-planting with the same species is an obvious way to retain the character of the area. However, there are some exceptions. In the case of *Melia azedarach* (White Cedar), Council has chosen to discontinue its use due to inherent risks associated with the volume of berries dropped by the trees each season. Having said that recent advances in the production and trialling of a low fruiting variety have been very positive and it is appropriate to revisit the selection of this tree species across the City (given there are a very high number of this species across the City)..

Residential Foothills and Hills Face:

This zone represents some of the more outer suburbs of the City and includes recent additions such as Auldana, Skye, and suburbs such as Mt Osmond, Glen Osmond, Wattle Park and sections of Beaumont and Stonyfell. While sections of the zone are well-established, many plantings are relatively young and are not due for replacement for many years. In many of these streets there are less formal street tree plantings, and higher numbers of private tree plantings on Council-owned land. The percentage of remnant local indigenous trees within these areas (growing within the road reserves) is also very high.

The area is characterised by a higher percentage of steeply-sloping streets and property frontages that are informal with no footpath network.

Some areas, particularly Auldana, Skye and Beaumont, suffer from inappropriate tree species selection, which has created some ongoing infrastructure maintenance issues. The prevalence of exotic tree species in some areas has led to a few environmental issues associated with high autumn leaf drop and a corruption of the natural water ways from woody-weed infestations, (particularly in Auldana, Skye and Beaumont).

Such trees should be replaced over time with species compatible with Council's policies on environmental sustainability and where appropriate interact with Council's Biodiversity Strategy actions.

Suburbs including Mt Osmond and upper parts of Glen Osmond, Auldana and Skye, should as a preference be planted with species indigenous to the area and to some extent can build strong flora corridors from the lower foothills areas to the upper Hills Face Reserves managed by Council.

Fortunately, many of the streets in this zone are still without structured footpaths, providing an opportunity to build strong partnerships with the community to create informal but dense street tree islands featuring local indigenous plantings.

Local Historic Conservation Zones

The Historic (Conservation) Zones reflect the historic residential development of the City of Burnside. It contains a variety of buildings including a number of State Heritage Places, Local Heritage Places (refer Table Bur/2 City of Burnside Development Plan 2013).

These zones are characterized by a predominant building form usually of post settlement age and style. Specific sections of the zone can be characterised by small to medium sized frontages, narrow road and verge widths, and traditionally small front gardens. They include parts of Eastwood, Rose Park and Beulah Park. These unique areas require specialised street tree planting opportunities.

Unfortunately, many streets within the area have been undergone recent re-planting programs with inappropriate species, which have caused considerable damage to the road reserve and private infrastructure, whilst being inconsistent with current tree selection and replacement initiatives. Replacement plantings must fit the unique character of the area, and residents need to be educated to understand that large trunked, broad canopied tree species may not be suitable for the growing space available. There are many streets in Magill and Frewville that do not fall within the 'historic conservation' category, but which lend themselves to similar treatments.

In selecting street tree plantings for this area, the following factors should be considered:

- mature height
- mature spread
- trunk diameter/form
- overall shape and form of the tree
- typical root form and spread.

The 'historic conservation' areas such as Eastwood, Beulah Park and sections of Kensington Gardens include some tree species that may not normally be considered as traditional street trees, such as Mop Top hybrid deciduous trees, miniature grafted stock and even topiary trees. Even planter boxes with small topiary shrubs are a possibility.

The other suburbs within this Conservation zone such as Tusmore, Toorak Gardens and sections of Glenunga are well defined by (on average) wide verges, significant building setbacks and well established private gardens. The dominant tree plantings are well established and to some extent, retain trees that are senescent. The selection of species for these areas is not unlike those of the established sections of the residential plains areas.

Replacement species should by preference consider some of the larger canopied species given the verge widths can accommodate larger growing specimens. The use of *Fraxinus oxycarpa* shall be discontinued given the species has pest plant status.

Second Generation Street Tree Replacement Program (SGSTRP).

The SGSTRP has been included as a specific part of the Street Tree Master Plan documents given the significant impact this program may bring to a streetscape. It is intended that the SGSTRP shall ultimately be incorporated into the proposed is applied on a whole-of-street basis. By its nature, it involves the process of tree removal. It is in practice a difficult task to accurately judge the life expectancy of any individual tree when making a decision to remove it. The first principle must always be that if the tree cannot be cost effectively maintained to an acceptable level of risk or amenity then it should be removed.

Criteria for tree removal, as a part of the SGSTRP, must therefore be clear and consistent, so that all parties affected by the program are well- informed.

A visual streetscape assessment will always be under taken to determine how the replacement plantings and retained trees will look within the streetscape. For any street proposed as a candidate for the SGSTRP, it must be possible to demonstrate how the streetscape amenity will be improved by the replacement program within the following three to five years. It also needs to be shown that the retention of individual trees will contribute to the streetscape rather than detract from it.

The SGSTRP is a standalone program that has a direct link to the STMP's and the future Public Domain Streetscape Strategy actions, in that the program is the operational Strategic arm of the STMP's in so far as the program talks of whole of street replacements rather than individual stand-alone replacements. The program is considered as a capital initiative, and seeks to separate resourcing from the annual tree planting initiatives referred to as the Interplant program.

It is suggested that the SGSTRP is integrated into the broader actions associated with the proposed Public Domain Streetscape Strategy where whole of street infrastructure (including trees) is renewed holistically.

Historic and Cultural Tree Avenues

This refers to avenues of honour and or avenues of remembrance that require individual management plans distinct from Street Tree Master Plans and or programs under the SGSTRP. These plans include the management of the Alexandra Avenue and Prescott Terrace War Memorial Tree Avenues of Rose Park and the Hazelwood Park War Memorial Avenue. Both avenues have a distinct cultural identity on the City.

Alexandra Avenue & Prescott Terrace Soldiers War Memorial tree Avenues, Rose Park.

This is one of the City's iconic avenues of honour that is nationally recognised for its cultural, physical and visual impact on the streetscape of Rose Park.

It is a preeminent planting of English Elm (Ulmus procera). The avenues comprise of two double rows of trees that run through a central traffic island, intersecting with Fullarton Road to the west and Kensington Road to the north.

The avenues comprise 208 trees of varying condition and structural form. The avenue plantings are over 90 years of age and are on average nearing the end of their safe useful life expectancy. In 2011 Council endorsed a long term management plan for the successful restoration of the avenue plantings. The plan speaks directly to the management of both avenues to secure the long term physical and visual [presence the avenues bring to the landscape that dominates this area.

On average the plan has seen approximately 15/20 trees replaced each year. The plan requires a physical assessment of each tree for structural form, integrity, and projected growth rate in the coming year/s. The individual tree assessments are then collated to form the annual replacement program for the preceding year.

The assessment and proposed replacement program will be presented to Council (for endorsement) by no later than April each year and the community fully informed of the recommended replacement plantings by no later than June (on endorsement Council) each season prior to the replacement planting occurring.

Given the listed Tree Management Plan requires the planting of semi mature to mature tree stock it is imperative that replacement nursery stock are secured at least 24 months in advance to ensure that tree planting programs are not compromised. To that end Council has created a long term stock replacement initiative to ensure that adequate replacement stock of at least 5m in height are grown in advanced each year.

Council is required to provide adequate provision of annual budgets to secure the provision of replacement stock each year by no later than February of the replacement planting year. Given the avenues are state heritage listed it is a requirement that any activity associated with the restoration plan it is intended that a long term strategic management plan is created for submission to SA Heritage to negate the necessity to submit and development application each year or time trees are proposed for removal.

Actions

Continue to promote and educate the community on the social, cultural and historical significance the avenues have on and for the City of Burnside.

Ensure Council continues to adequately resource future replacement initiatives to prevent and promote the continued existence and prominence the tree avenues have and bring to the community.

Investigate all opportunities that build tree health and resilience to changes in climatic conditions that affect may reduce Council's ongoing resource commitment. This is particularly relevant given the presence of Elm Leaf Beetle and the potential arrival of Dutch Elm Disease in the future.

Hazelwood Park Memorial Tree Avenue

Whilst not as well-known as the avenues of Alexandra Avenue and Prescott Terrace this avenue comprising a double row of Sugar Gums (*Eucalyptus cladocalyx*) is none the less a planting of local historical significance.

In 2012 Council endorsed a medium to long term management plan to facilitate the restoration of the tree avenues due to ongoing structural flaws within the canopy of most trees.

The restoration plan specifically addresses branch and trunk failures that have affected the overall safety of each tree. The plan will undertake to systematically prune each tree to reduce canopy height and spread to promote lower epicormic bud development. It is suggested that the plan looks at the total replacement of the avenues within a 20 year period to ensure that the existence of the avenues into the future.

Actions

Ensure short term canopy management programs are undertaken to minimise immediate safety risks and canopy stability issues that may affect the long term survival and health of individual trees and by association the integrity of the avenues.

Continue to investigate all opportunities that provide the maximum potential for the future retention of the avenues in a safe and aesthetically pleasing standard.

STREET TREE MASTER PLANS

Auldana

The suburb of Auldana was a new addition to the City of Burnside in the early 1990's. The streets are typically sloping to steeply sloping with a mixture of housing stock usually from the 1970's onwards. There are numerous large acreage allotments towards the upper slopes of the hills face. Established tree plantings are rare and are usually associated with programs undertaken prior to Auldana coming under the care and control of the City.

Street Tree stock is varied and in quite a few cases associated with private plantings due to the lack of any previous planting structure, Council which is haphazard and not uniform. Many attempts to bring some structured plantings to the streets has resulted in a high incidence of vandalism and tree damage. Anecdotal evidence suggests that most vandalism is associated with the impacts the trees have on private property views and the use of native tree species as planting stock.

It is expected that tree species selection for many of the streets may be controversial and will require appropriate consultation to be successful.

The preference is to plant local indigenous species well suited to the sloping sites of the Mt Lofty Ranges and would include species such as *Eucalyptus odorata*, or *E. porosa.*

Worthy Australian native species (as alternatives) would include *Agonis flexuosa*, Wilga (Geijera parviflora) or *Angophora costata*

It is suggested that informal plantings that maximise planting opportunities in wider verge areas instead of structured or uniform single row plantings may be a better option that minimises the incidence of vandalism.

Auldana

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Bushy Park Drive	*Iron bark gum (Eucalyptus sideroxylon)*	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Mallee Box Gum *(Eucalyptus porosa)***
Coach Road	Cherry Plum *(Prunus serrulata)*	Mallee Box Gum *(Eucalyptus porosa)*	**Wilga (Geijera parviflora**
Connell Road	Willow Myrtle *(Agonis flexuosa)*	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Wilga (Geijera parviflora**
Edmund Wright Avenue	*Wilga (Geijera parviflora)*	Wilga (Geijera parviflora)(Geijera parviflora))	**Wilga (Geijera parviflora**
Gamay Court	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon 'meglacarpa')*	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Mallee Box Gum *(Eucalyptus porosa)***
Hermitage Road	Lemon Scented Gum *(Corymbia citriodora)*	Smooth Bark Apple Gum *(Angophora costata)*	**Mallee Box Gum *(Eucalyptus porosa)***
Old Norton Summit Road	Peppermint Gum *(Eucalyptus odorata)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo (Cupaniopsis anacardiodes)**
Palomino Road	Eucalyptus	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Mallee Box Gum *(Eucalyptus porosa)***
Patrick Auld drive	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon 'meglacarpa')*	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Mallee Box Gum *(Eucalyptus porosa)***
Pellew Avenue	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon 'meglacarpa')*	Red Flower Gum *(Corymbia ficifolia 'sunset')*	**Wilga (Geijera parviflora)**
Rebecca Avenue	*Spotted Gum (*Corymbia maculata)	Wilga (Geijera parviflora)	**Wilga (Geijera parviflora)**
Shiraz Place	*Red flower SA Blue Gum (Eucalyptus leucoxylon)*	Eucalyptus Mallee Box Gum *(Eucalyptus porosa)*	**Wilga (Geijera parviflora)**
Sylvaner Avenue	*No defined species*	Wilga (Geijera parviflora)No defined species	**Wilga (Geijera parviflora)**
The Parade	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Traminer Way	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Verdelho Court	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon 'meglacarpa')*	Wilga (Geijera parviflora)	**Wilga (Geijera parviflora)**

Beaumont

Beaumont is one of the more established foothill sections of the City. There are distinctive zones within the suburb that have defined street tree planning options and styles. The older formal sections around lower Beaumont are structured and typify quarter acre allotments with single dwellings; cross over placement is structured and uniform.

There appears to be a growing rate of infill development however the majority is not having a direct impact on street tree stocks of these streets. However it appears that with this infill development comes a greater impact through the provision of additional service utilities and this is causing some impact to tree stock.

Tree planting species is not as well defined as sections of Burnside however dominant tree species include *Lophostemon conferta, Prunus nigra, Koelreutaria paniculata,* and *Jacaranda mimosifolia.*

It is expected that replacement species will look at evergreen species of good tight form, spring flowering where possible and good autumn colour (more in keeping with foothills areas). The prominence of local indigenous species in sections of the upper foothills and around Waterfall Gully suggests the potential to create stand-alone flora islands that include understorey shrubs and perennials particularly streets that abut Councils major Hills Face reserves.

It is suggested that *Eucalyptus leucoxylon, or microcarpa* are well suited to the dominant verge widths and informal sections around the area. Beaumont Common and adjacent streets are ideal sites for the establishment of floral islands that closely link these streets to Beaumont Common, sections of Waterfall Gully and into the upper foot hills.

Beaumont

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Waterfall Gully	No defined species	Grey Box Gum *(Eucalyptus microcarpa)*	***Acacia melanoxylon***
McAllan Avenue	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Borthwick Street	*No defined species*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo (Cupaniopsis anacardiodes)**
Pam Street	*Flowering plum*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Golden Rain Tree *(Koelreutaria paniculata)***
Glynburn Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Ivory Curl Flower *(Buckinghamii***
Bonython Avenue	*Fiddlewood (Citharexylum quadrangulare)*	Chinese Pistachio (Pistacia chinensis)	***Eucalyptus cosmophylla***
Katoomba Road	Fiddlewood (Citharexylum quadrangulare)	Golden Rain Tree *(Koelreutaria paniculata)*	**Koelreutaria bipinnata**
Wilaroo Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Ivory Curl Flower *(Buckinghamii***
Toolaby Avenue	Chinese Pistachio (Pistacia chinensis)	Chinese Pistachio (Pistacia chinensis)	**Malus ionensis**
Bayview Court	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear (Pyrus calleryana**
Duncan Road	Fiddlewood (Citharexylum quadrangulare)	Golden Rain Tree *(Koelreutaria paniculata)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Robinson Avenue	*Bottlebrush (Callistemon viminalis)*	Bottlebrush *(Callistemon viminalis)*	***Eucalyptus cosmophylla***
Warburton Court	Desert Ash (Fraxinus oxycarpa)	Chinese Pistachio *(Pistacia chinensis)*	**Golden Rain Tree *(Koelreutaria***
Gumbrae Street	Willow myrtle	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Chinese Pistachio *(Pistacia chinensis)***
Schebella Court	No defined species	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova serrata—**
Nioka Court	Crepe myrtle	Crepe Myrtle *(Lagerstroemia)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Evelyn Court	Cimmaron Ash	Claret Ash (Fraxinus 'Raywood')	**Chanticleer Pear *(Pyrus calleryana***
Dashwood Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Chanticleer Pear *(Pyrus calleryana***
Sunnyside Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Chanticleer Pear *(Pyrus calleryana***
Sherwood Terrace	Hackberry (Celtis occidentalis) *(Celtis*	Chinese Pistachio (Pistacia chinensis)	**Willow Myrtle *(Agonis flexuosa)***
Bibury Avenue	No defined species	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Willow Myrtle *(Agonis flexuosa)***
Bellevue Drive	Flowering Plum *(Prunus cerasifera)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Willow Myrtle *(Agonis flexuosa)***
Thirkell Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Willow Myrtle *(Agonis flexuosa)***
Lascelles Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Bonvue Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Tennyson Drive	Flowering Plum *(Prunus cerasifera)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear (Pyrus ussuriensis)**
Milton Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Ivory Curl Flower *(Buckinghamii***
Gordon Place	No defined species	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	***Acacia pycnantha***
Caithness Avenue	*(Pinus)*	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon)**
Fernleigh Avenue	*Fiddlewood (Citharexylum quadrangulare)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Sturt Place	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	***Acacia pycnantha***
Penarth Avenue	Claret Ash *(Fraxinus 'Raywood')*	Claret Ash *(Fraxinus 'Raywood')*	**Cimmaron Ash *(Fraxinus pennslyvanica 'Cimmaron')***
Vansittart Place	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Kurrajong *(Brachychiton populneus)***
Greengate Crescent	Grey Box Gum *(Eucalyptus microcarpa)*	Kurrajong *(Brachychiton populneus)*	**Illawarra Flame Tree *(Brachychiton acerifolius)***
Cooper Place	Queensland Box	Tuckeroo (Cupaniopsis anacardiodes)	**Kurrajong *(Brachychiton populneus)***
Devereux Road	Zelkova *(Zelkova serrata)*	Zelkova *(Zelkova serrata)*	**Chinese Pistachio *(Pistacia chinensis)***
Montrose Place	Bottlebrush *(Callistemon viminalis)*	Bottlebrush *(Callistemon viminalis)*	**Ivory Curl Flower *(Buckinghamii***
Travers Drive	Kurrajong *(Brachychiton populneus)*	Kurrajong *(Brachychiton populneus)*	**Chanticleer Pear *(Pyrus calleryana***
Tregenza Close	White Cedar *(Melia azedarach)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Native Cypress Pine *(Callitris gracillis)***
John Cleland Drive	Flowering Plum *(Prunus cerasifera)*	Golden Rain Grey Box Gum *(Eucalyptus microcarpa)*	**Golden Rain**
West Terrace	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Illawarra Flame Tree *(Brachychiton***
Glenroy Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes) *(Cupaniopsis*	**Tuckeroo (Cupaniopsis anacardiodes)**
The Common	*Grey Box Gum (Eucalyptus microcarpa)*	Jacaranda	**Wilga (Geijera parviflora)—**
Bennett Avenue	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear *(Pyrus ussuriensis)***

Clearview Street	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear *(Pyrus ussuriensis)***
East Terrace	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon meglacarpa)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Manchurian Pear *(Pyrus ussuriensis)***
Burton Avenue	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	**Snow Pear *(Pyrus nivalis)***
Buchan Avenue	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	**Snow Pear *(Pyrus nivalis)***
Holly Grange Court	No defined species	Native Cypress Pine *(Callitris gracillis)*	**Wilga (Geijera parviflora)**
Grey Avenue	Willow Myrtle *(Agonis flexuosa)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Wilga (Geijera parviflora)**
Adnunda Place	Fuschia gum (Eucalyptus socialis)	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	**Chanticleer Pear (Pyrus calleryana 'Chanticleer')**
Short Crescent	**Jacaranda *(Jacaranda mimosifolia)***	**Jacaranda *(Jacaranda mimosifolia)***	***(Eucalyptus melliodora)***

Beulah Park

Beulah Park is one of Burnside's older established areas typified by small to medium housing allotments. There are a higher proportion of heritage style dwellings, with small garden allotments that front narrow verges and narrow road widths.

The suburb is mostly defined by the housing stock styles north and south of Beulah Road. Street tree species selection has changed in the last 10 years with a greater emphasis placed on smaller tree species better suited to the narrow verges.

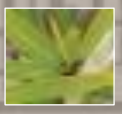
There are quite a few streets to the north of Beulah Road that retain good quality tree stock such as *Jacaranda* and *Lophostemon*. The opportunity to plant or use different types of tree stock within the local heritage listed sections of Beulah Park is high. On some streets that have very narrow verges it is suggested that stand-alone large canopied trees may offer a better alternative rather than a series of small canopied trees as single row plantings.

There is even a potential to develop potted plantings in preference to trees planted with island grates. The incidence or level of blue stone kerbing in the streets is high and in that sense defines the areas as heritage and requiring plantings that are a little dynamic rather than structured.

Recent plantings have seen many of the Lagerstroemia cultivars used in preference to *Lophostemon conferta* and *Prunus*. Another popular species has been the new *Pyrus* cultivars such as Capitol and Chanticleer and whilst worthy species they are a little uniform and lack innovation. The use of some of the new smaller deciduous species of *Malus* & *Prunus* is not to be discouraged as long as resident participation and support is high.

Beulah Park

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Gurrs Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (*Cupaniopsis anacardiodes*)	**Tuckeroo (Cupaniopsis anacardiodes)**
Melrose Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Osborn Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Brand Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	***Flindersia maculosa***
Thornbury Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova serrata**
Beulah Road	Queensland Box	Tuckeroo (Cupaniopsis anacardiodes) *(Cupaniopsis anacardiodes),*	***Eucalyptus ficifolia***
Mathilda Street	Queensland Box *(Lophostemon conferta)*	Crepe Myrtle *(Lagerstroemia x indica 'Sioux')*	**Jacaranda *(Jacaranda mimosifolia)***
Margaret Street	Queensland Box *(Lophostemon conferta)* Golden Rain Tree *(Koelreutaria*	Jacaranda *(Jacaranda mimosifolia)* Golden Rain Tree *(Koelreutaria paniculata)*	**Cupaniopsis anacardiodes**
Catherine Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chanticleer Pear *(Pyrus calleryana***
Andrew Street	English Oak *(Quercus robur) confertus)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**English Oak *(Quercus robur)*** **Capitol Pear *(Pyrus calleryana 'Capitol')***
Young Street	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)* Jacaranda *(Jacaranda mimosifolia)*	***Mop top Robinia*** **Chinese Pistachio *(Pistacia chinensis)***
Salop Street	Bottlebrush *(Callistemon viminalis)*	Bottlebrush *(Callistemon viminalis)*	**Jacaranda**
Howard Street	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Pistachio *(Pistacia chinensis)***
Glyde Street	Crepe Myrtle (Lagerstroemia 'sioux')	Tuckeroo *(Cupaniopsis anacardiodes),* Crepe Myrtle	**Crepe Myrtle *(Lagerstroemia x indica 'soiux')***
Union Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda	**Capitol Pear *(Pyrus calleryana 'Capitol')***
Dimboola Street	Queensland Box *confertus)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tulipwood *(Harpullia pendula)***
Douglas Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda	**Jacaranda / *Pyrus 'Chanticleer***
Duke Street	Bottlebrush *(Callistemon viminalis)*	Bottlebrush *(Callistemon viminalis)*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Heyne Place	Crepe Myrtle	Chanticleer Pear *(Pyrus calleryana 'Chanticleer') / Tuckeroo (Cupaniopsis anacardiodes)*	**Crepe Myrtle**
Scott Street	Tulipwood *(Harpullia pendula)*	Crepe Myrtle *(Lagerstroemia x indica 'natchez')*	**Tuckeroo (Cupaniopsis anacardiodes) *'natchez')***
Vine Street	Crepe Myrtle	Crepe Myrtle *(Lagerstroemia x indica 'natchez')*	**Crepe Myrtle *(Lagerstroemia x indica 'natchez'***
Kings Close	*No defined species*	Bottlebrush *(Callistemon viminalis)*	**Crab Apple *(Malus ionensis)***
Magill Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo *(Cupaniopsis anacardiodes)***
Oban Street	Bottlebrush	Harkness Bottlebrush *(Callistemon 'Harkness')*	**Chanticleer Pear *(Pyrus calleryana***
The Parade	**Oriental Plane tree *confertus)***	**Tuckeroo *(Cupaniopsis anacardiodes)***	**Zelkova *(Zelkova serrata)***

Burnside

The suburb of Burnside is divided by Greenhill Road and defines the lower foothills sections from residential plains areas to the north and west. The tree planting palette is diverse and in many respects a juxtaposition between established avenues of streets such as High Street and Chisholm Avenue, and the lower foothills streets such as Garden Avenue, Wyatt Road, and Queen Street.

The species vary considerably and in that sense replacement species will be hard to define without looking at their association to the foothills and residential plains areas. It may be worth considering broadening the definition between suburb streets so that tree avenues extend into adjacent suburbs.

The opportunity to choose a broad range of tree species is high with many of the species well suited to the area. Preference should be given to create opportunities for single stand-alone large species local indigenous trees within wide verges of the lower foothills sections is possible and includes areas around Newland Park, Sitters Memorial Drive and Langman Reserve.

Burnside

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Allen Street	Swamp mallet	Willow Myrtle *(Agonis flexuosa)*	**Willow Myrtle *(Agonis flexuosa)***
Borrow Drv.	Desert Ash *(Fraxinus oxycarpa)*	Claret Ash *(Fraxinus Raywood*	**Harkness Bottlebrush Kings Park Special *(Callistemon 'Harkness')***
Bradfield Street	Grey Box Gum *)*	Grey Box Gum	**Grey Box Gum *(Eucalyptus microcarpa)***
Chisholm Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio (Pistacia chinensis)**
Debney Drv.	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Native Cypress Pine *(Callitris gracillis)***
Elizabeth Court	Grey Box Gum *(Eucalyptus microcarpa)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Chanticleer Pear *(Pyrus calleryana***
Finnis Terrace	*Chanticleer Pear (Pyrus calleryana*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear *(Pyrus ussuriensis)***
Garden Avenue	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear (Pyrus calleryana**
Gartrell Street	Oriental Plane Tree	Chinese Elm	**Cornish Elm *(Ulmus cornubiensis)***
Glen Street	Queensland Box *(Lophostemon conferta)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Wilga (Geijera parviflora)—**
Hill Street	Queensland Box *(Lophostemon conferta)*	SA Blue Gum (Eucalyptus leucoxylon)	**Wilga (Geijera parviflora) —**
High Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus Raywood)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Hubbe Crescent	No defined species *flavum)*	Grey Box Gum *(Eucalyptus microcarpa)*	***Acacia pycnantha***
Ifould Drv.	SA Blue Gum (Eucalyptus leucoxylon)	SA Blue Gum (Eucalyptus leucoxylon)	**SA Blue Gum (Eucalyptus leucoxylon)**
John Street	Queensland Box *(Lophostemon conferta)*	Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*	**Crepe Myrtle (Lagerstroemia x indica)**
Kings Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda (Jacaranda mimosifolia)	**Jacaranda**
Kurralta Drv.	No defined species	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon)**
Lockwood Road	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	*Claret Ash* Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus Raywood)***
Moorcroft Crescent	Various Eucalypt	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon)**
Nelson Crescent	Grey Box Gum *(Eucalyptus microcarpa)*	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon)**
Newland Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo (Cupaniopsis anacardiodes)**
Nilpinna Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Jacaranda**
Norwich Avenue	*Bottlebrush (Callistemon viminalis)*	*Bottlebrush (Callistemon viminalis)*	**Manchurian Pear *(Pyrus ussuriensis)***
Penong Avenue	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear (Pyrus calleryana**
Queens Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Willow Myrtle**
Ringmer Dr	SA Blue Gum (Eucalyptus leucoxylon)	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon)**
Rosalind Street	Cherry Plum *(Prunus serrulata)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear (Pyrus calleryana**
Royal Avenue	*Various Eucalypt*	Grey Box Gum *(Eucalyptus microcarpa)*	**Native Cypress Pine *(Callitris gracillis)***
St. Albans Dr	SA Blue Gum (Eucalyptus leucoxylon)	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Sitters Memorial Dr	Grey Box Gum *(Eucalyptus microcarpa)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Slapes Crescent	Various Eucalypt*)*	SA Blue Gum (Eucalyptus leucoxylon)	**Grey Box Gum *(Eucalyptus microcarpa)***
Slapes Gully Road	Various Eucalypt	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Stuart Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus Raywood)*	**Manchurian Pear *(Pyrus ussuriensis)***
Thorpe Road	No defined species *camaldulensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Undelcarra Road	Native Frangipani *(Hymenosporum flavum)*	Red Flower Gum *(Corymbia ficifolia 'Sunset')*	**SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus***
View Street	Queensland Box *(Lophostemon conferta)*	SA Blue Gum (Eucalyptus leucoxylon)	***Grey Box Gum (Eucalyptus microcarpa)***
Warren Avenue	Flowering Plum	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	***Lagerstroemia x indica 'Lipan'***
Waterfall Terrace	Nettle Tree *(Celtis australis)*	Nettle Tree *(Celtis australis)*	**Hackberry (Celtis occidentalis) *(Celtis***
William Street	Cherry Plum *(Prunus serrulata)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear (Pyrus calleryana**
Willowbridge Grove	No defined species	SA Blue Gum (Eucalyptus leucoxylon)	**Grey Box Gum *(Eucalyptus microcarpa)***
Windarra Avenue	Tuckeroo (Cupaniopsis anacardiodes)	Tuckeroo (Cupaniopsis anacardiodes)	**Grey Box Gum *(Eucalyptus microcarpa)***
Windsor Avenue	Grey Box Gum	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Wyatt Road	Queensland Box *confertus)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Young Street	White Cedar *(Melia azedarach)*	White Cedar (*Melia azedarach)*	**Chinese Pistachio (Pistacia chinensis)**
Zenith Avenue	Various Eucalypts	SA Blue Gum (Eucalyptus leucoxylon)	**Manchurian Pear *(Pyrus ussuriensis)***
McAllan Avenue	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*	**Zelkova *(Zelkova serrata)***
Berry Crescent	*Various Eucalypts*	**Grey Box Gum *(Eucalyptus microcarpa)***	Grey Box Gum *(Eucalyptus microcarpa)*
Glynburn Road	Desert Ash (Fraxinus oxycarpa)	Tuckeroo (Cupaniopsis anacardiodes)	**Claret Ash (Fraxinus 'Raywood')**
Hallet Road	**Queensland Box *(Lophostemon***	**Tuckeroo (Cupaniopsis anacardiodes)**	**SA Blue Gum (Eucalyptus leucoxylon)**

Dulwich

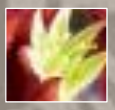
Dulwich is one of the first suburbs established in Burnside and en compasses streets that have well defined and established housing stock, and supporting street tree plantings. The suburb is dominated by Jacaranda, Melia and Fraxinus species.
There is an increasing level of infill development however this does not appear to be causing a significant impact to the streetscapes given allotment sizes have limited the typical division of land and creation of semi detached dwellings and the addition of driveway crossovers.

The opportunity to bring in new tree species is possible however careful consideration must be made to the potential changes to suburb amenity and character. The general use of Jacaranda and Melia should continue. Use of the low fruiting variety of Melia is encouraged. Alternative deciduous species including *Pistacia, Malus* and *Fraxinus* 'Raywoodii' is a good alternative.

This suburb is one of a few that lends itself to major streetscape upgrade projects, as tree replacements would best occur with major kerbing and water table projects. This could include innovative Water Sensitive Urban Design initiatives already trialled in Albert Street.

Dulwich

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Albert Street	Desert Ash (Fraxinus oxycarpa))	Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus 'Raywood')***
Ascot	Queensland Box *confertus)*	Tuckeroo (Cupaniopsis anacardiodes)	**Kurrajong *(Brachychiton populneus)***
Cleland	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Dulcie Street	Black Locust *(Robinia pseudoacacia),* Weeping Gleditzia	Chinese Pistachio (Pistacia chinensis) *(Pistacia chinensis)*	**Zelkova *(Zelkova serrata)***
Dulwich	Desert Ash (Fraxinus oxycarpa)	Claret Ash (Fraxinus 'Raywood')	**Zelkova *(Zelkova serrata)***
Everett	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio (Pistacia chinensis) *(Pistacia***
Fullarton	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Kurrajong *(Brachychiton populneus)***
Grandview	White Cedar *(Melia azadarach)*	Chinese Pistachio (Pistacia chinensis)	**Kurrajong *(Brachychiton populneus)***
Gurney	Desert Ash (Fraxinus oxycarpa)	Claret Ash (Fraxinus 'Raywood')	**Zelkova *(Zelkova serrata)***
Hillview	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Chanticleer Pear (Pyrus calleryana	**Chanticleer Pear (Pyrus calleryana 'Chanticleer')**
	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Kitchener Avenue	Queensland Box / Desert Ash (Fraxinus oxycarpa)	Tuckeroo (Cupaniopsis anacardiodes)	**Chinese Pistachio *(Pistacia chinensis)***
Mellington	Illawarra flame tree	Illawarra flame tree	**Tuckeroo *(Cupaniopsis anacardiodes)***
Mill Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Ormond	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Parkstone	Desert Ash (Fraxinus oxycarpa)	Claret Ash (Fraxinus 'Raywood')	**Chinese Pistachio (Pistacia chinensis) *(Pistacia***
Scott Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Stuart Road	Desert Ash (Fraxinus oxycarpa)	Jacaranda *(Jacaranda mimosifolia)*	***Red Cedar (Toona australis)***
Swift	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
The Grove	Crepe Myrtle	Crepe Myrtle (Lagerstroemia x indica)	**Chinese Pistachio *(Pistacia chinensis)***
Thornton	White Cedar *(Melia azadarach)*	Chinese Pistachio *(Pistacia chinensis)*	**Chinese Tallow Tree *(Sapium serbiferum)***
Tudor Street	Claret Ash (Fraxinus 'Raywood)	Claret Ash (Fraxinus 'Raywood')	**Chinese Pistachio *(Pistacia chinensis)***
Union Street	Jacaranda (Jacaranda mimosifolia) / Golden Rain Tree (Koelreutaria bipinnata)	Golden Rain (Koelreutaria bipinnata)	**Tuckeroo *(Cupaniopsis anacardiodes)***
Williams	White Cedar *(Melia azadarach)*	White Cedar *(Melia azadarach)*	**Chinese Pistachio *(Pistacia chinensis)***
Greenhill	**Queensland Box *(Lophostemon conferta)***	**Tuckeroo (Cupaniopsis anacardiodes)**	**Chinese Pistachio *(Pistacia chinensis)***

Eastwood

Eastwood is one of Burnside earliest suburbs typified by small heritage style cottages and small allotments. Verges are narrow and offer limited planting opportunities. Council has recently begun a program of using *Lagerstroemia* species for replacement plantings and this has to some extent made a positive change to the streetscapes of many streets.

The future use of small potted tree species, island plantings as opposed to structured street plantings is very high given the issues that arise with tree plantings on very narrow verge widths, with very short dwelling setbacks.

It is suggested that Eastwood, Beulah Park and Rose Park suburbs are ideal for inclusion in the first stages of any implementation plan associated with a future Public Domain Streetscape Strategy.

Tree species selection remains limited however *Lagerstroemia* species and or slower growing species that have well-structured canopy forms are preferred. It is worthwhile to look at floral island planting designs that reduce a number of on street parking areas in preference to continuing with structured street plantings on verges that are narrow and not ideally suited to tree plantings.

It is suggested that the inclusion of road protuberances and or closures offer many opportunities to these narrow streets and provide a good addition to the hard landscape.

Eastwood

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Elizabeth Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Glen Osmond	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes) *(Cupaniopsis anacardiodes)*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Greenhill Road	Jacaranda *confertus)*	Crepe Myrtle	**River Red Gum *(Eucalyptus camaldulensis)***
Hauteville Terrace	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus oxycarpa)*	Evergreen Ash *(Fraxinus griffithii)*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*, Claret Ash *(Fraxinus Raywood)***
John Street	Qld Box Tree *(Lophostemon conferta)* / *Crepe Myrtle (Lagerstroemia x indica 'Biloxi)*	*(Lagerstroemia x indica 'Biloxi')*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Markey Street	Queensland Box *(Lophostemon conferta)*	*(Lagerstroemia x indica 'Biloxi')*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Moar Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Main Street	Queensland Box *(Lophostemon conferta)*	Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Matilda Street	Weeping Gleditzia *(Gleditzia tricanthos 'Shademaster')*	Lagerstroemia x indica'sioux/lipan or biloxi'	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*, Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*,**
Trust Lane	River Red Gum *(Eucalyptus camaldulensis)*	Cyprian Plane *(Platanus insularis)*	**Cyprian Plane *(Platanus insularis)***
Greenhill Road	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *confertus)*	Spotted Gum *(Corymbia maculata)*	
Bath Street	*Tree Plantings not appropriate*	*Tree Plantings not appropriate*	***Tree Plantings not appropriate***
Birkin Street	Crepe Myrtle	Crepe Myrtle	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Fullarton Road	**No defined species**	**No defined Species**	**Spotted Gum *(Corymbia maculata)***

Erindale

Erindale is one of the more established suburbs on the eastern side of the City with well-developed and uniform verge widths. The prevalence of uniform wide verges has allowed for the planting of large and more structured plantings similar to the suburbs of Tusmore, Toorak Gardens, Leabrook and Kensington Park.

There is a fairly high percentage of J*acaranda* and *Lophostemon* trees planted throughout the area. In that respect and because of the wider verge widths there are a higher percentage of trees that are in good condition.

Recent infill development has been limited however this has grown significantly in the last 5 – 7 years and given the large allotment sizes and planning provisions it appears that sub division of these allotments is growing. The impact this infill development is having on tree planting opportunities will become more difficult over the coming decades, particularly as trees begin to reach maturity and senescence.

The continued use of Jacaranda is favoured and the use of the drought intolerant *Lophostemon* is to be discouraged. The alternative tree species includes many of the *Pyrus* varieties, *Zelkova* and *Fraxinus* 'Raywoodi' on large width verges.

On the narrow verges it would be appropriate to plant the more upright *Pyrus* varieties or for an evergreen option, the *Cupaniopsis* offers numerous opportunities to shape and form into an upright cleaned trunked tree.

Erindale

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Godfrey Terrace	Manchurian Pear *(Pyrus ussuriensis)*	Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis)***
Stanley Street	Jacaranda *(Jacaranda mimosifolia)* Chinese Elm	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Elm**
Egmont Terrace	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Crab Apple *(Malus ionensis)***
Lock Avenue	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Malus ionensis**
Vauxhall Street	Weeping Gleditzia *(Gleditzia tricanthos 'Shademaster')*	Crab Apple *(Malus ionensis), Ginkgo*	**Jacaranda *(Jacaranda mimosifolia),* Zelkova *(Zelkova serrata)***
Talbot Street	*Chanticleer Pear (Pyrus calleryana 'Chanticleer')*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear *(Pyrus ussuriensis)*** **Chinese Pistachio *(Pistacia***
Crossley Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Hamilton Street	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Chanticleer Pear (Pyrus calleryana 'Chanticleer') *(Pyrus calleryana 'Chanticleer')*	**Crab Apple *(Malus ionensis), Ginkgo***
Myall Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Lockwood Road	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Ivory Curl Flower *(Buckinghamii celssisimia)***
Jarvis Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia),* Zelkova *(Zelkova serrata)*	**Kurrajong *(Brachychiton populneus)*** **Ivory Curl Flower *(Buckinghamii***
Goyder Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata),*** **Ivory Curl Flower *(Buckinghamii***
Wallace Street	Chanticleer Pear (Pyrus calleryana	Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear (Pyrus calleryana**
Cowan Street	Claret Ash *(Fraxinus 'Raywood')*	Claret Ash *(Fraxinus 'Raywood'),*	**Cimmaron Ash *(Fraxinus pennslyvanica 'Cimmaron'),***
Newland Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes) *(*	**Kurrajong *(Brachychiton populneus),*** **Ivory Curl Flower *(Buckinghamii***
Hallett Road	Tuckeroo (Cupaniopsis anacardiodes)	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo *(Cupaniopsis anacardiodes)***
Glynburn Road	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus 'Raywood')*	**English Elm *(Ulmus procera)***
Rosalind Street	Flowering Plum *(Prunus cerasifera)*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Manchurian Pear *(Pyrus ussuriensis)***
Statenborough	**Queensland Box *(Lophostemon***	**Tuckeroo (Cupaniopsis anacardiodes)**	**Tuckeroo *(Cupaniopsis***

Frewville

The suburb of Frewville suburb is similar to Eastwood or sections of Rose Park where verge widths are narrow and fairly constrained. Housing stock is slightly different and most allotments are larger in area. Building setbacks are greater but because of the narrow verge widths the percentage of larger growing species trees is quite low. The majority of plantings are J*acaranda* or *Prunus*, with some recent plantings of *Pistacia*.

The level or volume of infill development appears to be very low in comparison to areas such as Glenside or Glenunga and is probably a reflection that allotment size and planning provisions discourage land division potentials.

Whilst the lack of infill development is favourable replacement planting options and the use of appropriate tree species in some streets is becoming difficult (especially when in conflict with underground utility services).

The use of the smaller structured tree species like *Pistacia, Jacaranda* and *Pyrus* is not to be discouraged however it would be an opportunity to investigate some of the smaller *Malus* and *Lagerstroemia* varieties.

The streets are also ideal for the potential inclusion of flora islands integrated with any form of traffic calming treatments that may be installed.

Frewville

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Avenue Road	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Jacaranda**
Birdwood Street	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle	**Willow Myrtle *(Agonis flexuosa)***
Bruce Street	Manchurian Pear	Manchurian Pear	**Manchurian Pear**
Bythurst Avenue	Golden Rain	Golden Rain	**Golden Rain**
Carr Avenue	Chinese Pistachio (Pistacia chinensis)	Chinese Pistachio (Pistacia chinensis) *(Pistacia*	**Manchurian Pear *(Pyrus ussuriensis)***
Conygham St	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Chessington Place	Queensland Box *(Lophostemon conferta)*	Willow Myrtle *(Agonis flexuosa)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Frederick Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio (Pistacia chinensis)**
Glen Osmond	Queensland Box	Tuckeroo (Cupaniopsis anacardiodes) *(Cupaniopsis*	**Zelkova serrata**
Hollard Street	*Jacaranda (Jacaranda mimosifolia)*	*Jacaranda (Jacaranda mimosifolia)*	**Chanticleer Pear (Pyrus calleryana**
Jane Street	Jacaranda (Jacaranda mimosifolia)	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Knox Street	Cherry Plum *(Prunus serrulata)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Manchurian Pear *(Pyrus ussuriensis)***
Main Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Millawa Avenue	*Oriental Plane Tree (Platanus orientalis)*	*Oriental Plane Tree (Platanus orientalis)*	***Oriental Plane Tree (Platanus orientalis***
North Street	**Bottlebrush (Callistemon 'Harkness') and Jacaranda *(Jacaranda***	**Bottlebrush (Callistemon 'Harkness') and Jacaranda *(Jacaranda mimosifolia)***	**Chinese Pistachio *(Pistacia chinensis)***

Glen Osmond

Glen Osmond is is a broad mix of older 1960's housing stock and a growing volume of new replacement infill development. The streets are predominantly located in the lower foot hills sections but extends to the west of Portrush Road where there are smaller higher density housing stock.

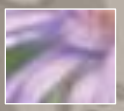
This makes tree planting selection slightly difficult given the great disparity between zones of the suburb. The western side of Portrush Road is better suited to the smaller species such as *Lagerstroemia* or upright narrow canopy trees like Chanticleer or Capitol *Pyrus*. The eastern side has more verges of medium to large width that allow for species that are large canopied and trucked.

There is trend to plant some of the smaller local indigenous species in this area but it is felt that the use of some of the smaller Australian Native species such as *Agonis, Geijera* and to some extent *Angophora* may be better suited to the area and provide a good contrast to streets in St Georges and Mt Osmond.

The ability to investigate and implement direct corridor linkages between Glen Osmond, Mt Osmond, and Beaumont is very high and it would be appropriate to investigate the opportunity to plant large growing local indigenous trees in selected sites where traffic volumes and housing stock set backs are low and high respectively.

Glen Osmond

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Allawa Street	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Bottlebrush *(Callistemon viminalis)*—**
Allandale Street	No defined tree species	Grey Box Gum *(Eucalyptus microcarpa)*	**Grey Box Gum *(Eucalyptus***
Benacre Close	*No defined Species*	Kurrajong *(Brachychiton populneus)*	**Kurrajong *(Brachychiton populneus)***
Blyth Street	White Cedar *(Melia azadarach)*	Manchurian Pear *(Pyrus ussuriensis)*	**Manchurian Pear *(Pyrus ussuriensis)***
Brook Avenue	Golden Rain Tree	Golden Rain Tree *(Koelreutaria paniculata)*	**Claret Ash *(Fraxinus Raywood)***
Boucat Street	Pink Pogoda *(Sophora japonica)*	Chinese Elm *(Ulmus parvifolia)*	**Zelkova *(Zelkova serrata)***
Bagot Street	Willow Myrtle	Willow Myrtle	**Bottlebrush *(Callistemon viminalis)***
Chapel Street	—	—	**-**
Chapman Street	*No defined Species*	Native Cypress Pine *(Callitris gracillis)*	***Wilga (Geijera parviflora)***
Derrington Street	*No defined species*	Capitol Pear *(Pyrus calleryana 'Capitol')*	**Chanticleer Pear *(Pyrus calleryana***
Dutton Street	Cherry Plum *(Prunus serrulata)*	Manchurian Pear *(Pyrus ussuriensis)*	**Pyrus calleryana 'Chanticleer'**
Day Road	Willow Myrtle *(Agonis flexuosa)*, Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Bottlebrush *(Callistemon viminalis)*, Chinese Pistachio *(Pistacia***
Everade Street	Platypus Gum *(Eucalyptus platypus)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Elinor Terrace	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Fulton Crescent	No defined species	Manchurian Pear *(Pyrus ussuriensis)*	**Manchurian Pear *(Pyrus ussuriensis)***
Glebe Road	Queensland Box *(Lophostemon conferta)*	Willow Myrtle *(Agonis flexuosa)*	**Manchurian Pear *(Pyrus ussuriensis)***
Goldsack Street	Bottlebrush *(Callistemon viminalis)*	Bottlebrush *(Callistemon viminalis)*	**Bottlebrush *(Callistemon viminalis)***
Gilles Road	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Golden Rain Tree *(Koelreutaria***
Gill Terrace	No defined species	Manchurian Pear *(Pyrus ussuriensis)*	**Manchurian Pear *(Pyrus ussuriensis)***
Howard Crescent	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear *(Pyrus calleryana***
Jikara Drv	Queensland Box *(Lophostemon conferta)*	*Tuckeroo (Cupaniopsis anacardiodes)*	**Chanticleer Pear *(Pyrus calleryana***
Lewis Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus Raywood)*	**Red Flower Gum *(Corymbia ficifolia***
Leslie Street	Bottlebrush	Bottlebrush	***Malus ionensis***
Morton Crescent	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	***Malus ionensis***
Milne Street	Queensland Box	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	***Malus ionensis***
Myrona Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Playford Street	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Laburnum *(Laburnum speciosum)***
Paynter Street	*Willow Myrtle (Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Pridmore Road	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Jacaranda *bipinnata)***
Queens Avenue	Bottlebrush	Bottlebrush	**Harkness Bottlebrush**
Vine Lne	Crepe Myrtle	Crepe Myrtle	**Harkness Bottlebrush**
View Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Whitington Grove	*Manchurian Pear*	Manchurian Pear	**Pistacia chinensis**
Sunnyside Road	Queensland Box	Tuckeroo (Cupaniopsis anacardiodes)	**Zelkova (Zelkova serrata)**
Snow Street	No defined tree species	No defined tree species	**No defined tree species**
Wheal Watkins Road	Sugar Gum	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus**
Woodley Road	Jacaranda *(Jacaranda mimosifolia*	Jacaranda *(Jacaranda mimosifolia)*, Jacaranda *(Jacaranda mimosifolia)*	**Jacaranda *(Jacaranda mimosifolia)*, Zelkova *(Zelkova serrata)***
Portrush Road	Queensland Box	Tuckeroo (Cupaniopsis anacardiodes)	**English Oak *(Quercus robur)***
Ashley Avenue	**Willow Myrtle**	**Chanticleer Pear (Pyrus calleryana**	***Bottle Tree (Brachychiton rupestris)***

GLENSIDE

Glenside is one of those suburbs that is experiencing a significant volume of infill development. The suburb streetscape is well established and has a high percentage of verges of average to large widths. The suburb has a high percentage of J*acaranda* and *Fraxinus* trees of average to good condition.

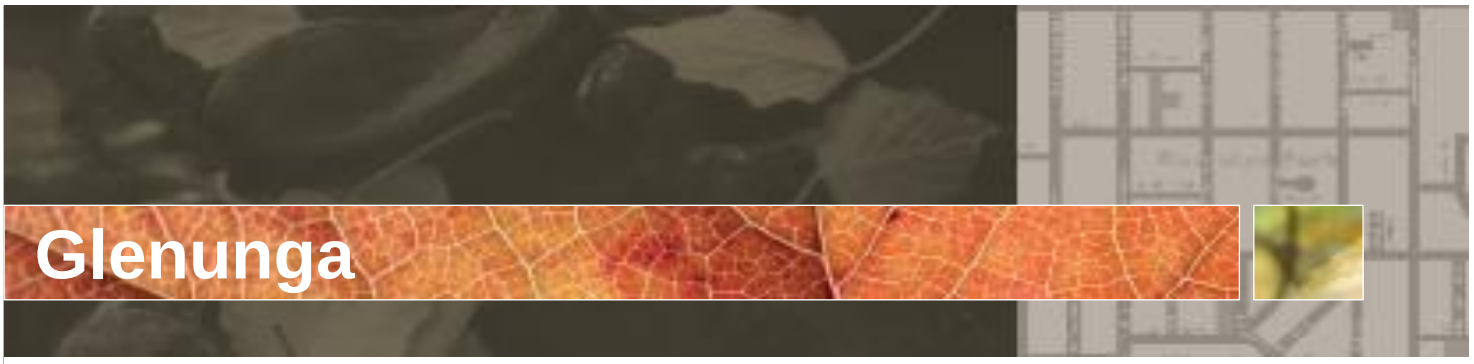
The wide verges provide significant opportunity to use the larger growing species and favours the continued use of the J*acaranda* and *Fraxinus* 'Raywoodi'. The ability to develop larger planting sites that can handle stands or clumps of trees in preference to single rows of trees should be investigated.

Should opportunities arise where road widths are reduced it would be ideal to create pocket plantings of Eucalyptus leucoxylon and associated understorey plants. The use of these types of plantings could also be integrated into any traffic calming devices at intersections away from the main shopping district i.e Burnside Village complex

Glenside

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Allinga Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova serrata**
Broughton Street	Jacaranda, *Queensland Box*	Jacaranda *(Jacaranda mimosifolia)*, Kurrajong *(Brachychiton populneus)*	**Zelkova *(Zelkova serrata)*, Illawarra Flame Tree *(Brachychiton***
Cranwell Street	White Cedar	Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Tallow Tree *(Sapium***
Conygham Street	Lemon Scented Gum *(Corymbia*	Smooth Bark Apple Gum *(Angophora costata)*	
Cator Street	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus Raywood)*, Claret Ash (Fraxinus 'Raywood')	**Chinese Pistachio *(Pistacia chinensis)*,**
Holton Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia***
Kyle Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus Raywood)***
L'Estrange Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia***
Sydney Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)*, Chinese Pistachio *(Pistacia***
Webb Avenue	Willow Myrtle	Chinese Pistachio *(Pistacia chinensis)*	**Zelkova *(Zelkova serrata)***
Windsor Road	*Red Flower SA Blue Gum (Eucalyptus*	Chinese Pistachio *(Pistacia chinensis)*	**SA Blue Gum (Eucalyptus**
Greenhill Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Claret Ash *(Fraxinus Raywood)***
Almond Avenue	Desert Ash (Fraxinus oxycarpa)	Chinese Pistachio *(Pistacia chinensis)*	**Manchurian Pear *(Pyrus ussuriensis***
Flemington Street	**Jacaranda *(Jacaranda mimosifolia)***	**Jacaranda *(Jacaranda mimosifolia)***	**Chinese Pistachio *(Pistacia chinensis)***



Glenunga

Glenunga is a suburb that has a blended mix of both wide and narrow verges. The broader verges are usually associated with streets that extend into the suburb of Glenside, with the narrower verges associated with the upper sections nearer Glen Osmond.

In that sense, trees within each of the areas is well defined with a predominance of *Jacaranda Lophostemon* and *Fraxinus* in the northern sections and Prunus and Melia in the southern sections. There are some examples where the narrow verges do hold large structured trees like *Jacaranda* or *Melia*.

It is suggested that current replacement programs are adequate and that replacement tree species are well defined. In streets such as Glenunga and Allinga Avenue consideration will need to be given to reducing the overall number of tree plantings given recent changes to road widths that has reduced appropriate replanting & growing space.

It may be more appropriate that the total tree numbers within the street are reduced so that on street parking opportunities are retained and that planting / growing opportunities are maximised.

Glenunga

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Allinga Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Ashmore Street	Willow Myrtle	Willow Myrtle	**Tuckeroo *(Cupaniopsis anacardiodes)*** **Red Flower Gum *(Corymbia ficifolia) 'Sunset')***
Bethune Avenue	Queensland Box	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)*** **Chinese Pistachio *(Pistacia chinensis)***
Bevington Road	White Cedar *(Melia azadarach)*	Jacaranda od')	**Chinese Pistachio *(Pistacia chinensis)***
Brooker Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Cedar Avenue	White Cedar *(Melia azadarach)*	White Cedar *(Melia azadarach)*	***Chinese Pistachio (Pistacia chinensis)* /** **Jacaranda *(Jacaranda mimosifolia)***
Conygham Street	Lemon Scented Gum *(Corymbia citriodora),*	Smooth Bark Apple Gum *(Angophora costata),*	**Smooth Bark Apple Gum *(Angophora costata),***
Dalaston Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo *(Cupaniopsis anacardiodes)***
Eringa Avenue	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus 'Raywood')*	**Cimmaron Ash *(Fraxinus pennslyvanica***
Glenunga Avenue	White Cedar *(Melia azadarach)*	Chinese Pistachio (Pistacia chinensis) *(Pistacia*	***Toona australis***
Kingsley Avenue	*(Phoenix canariensis), Chanticleer Pear (Pyrus calleryana 'Chanticleer')*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	***Phoenix canariensis,*** **Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Le Roy Street	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Pistachio *(Pistacia chinensis)***
Lebanon Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
L'Estrange Street	White Cedar *(Melia azadarach),* Desert Ash (Fraxinus oxycarpa)	Illawarra flame tree	**Jacaranda *(Jacaranda mimosifolia),*** **Chinese Pistachio *(Pistacia chinensis)***
Myola Avenue	*Chanticleer Pear (Pyrus calleryana*	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chinese Pistachio *(Pistacia chinensis)***
Odea Drv	Manchurian Pear *(Pyrus ussuriensis)*	Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis)***
Queen Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Rowell Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Sydney Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Manchurian Pear *(Pyrus ussuriensis),*** **Zelkova *(Zelkova serrata)***
Taminga Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Tallow Tree *(Sapium***
Trevorten Avenue	White Cedar *(Melia azadarach),* Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Tuckeroo *(Cupaniopsis anacardiodes),*** **Chinese Tallow Tree *(Sapium serbiferum)***
Windsor Road	*Chinese Pistachio (Pistacia chinensis)sa)*	Chinese Pistachio (Pistacia chinensis)	**Willow Myrtle *(Agonis flexuosa)***
Portrush Road	**Queensland Box *(Lophostemon***	**Tuckeroo (Cupaniopsis anacardiodes)**	**Chinese Pistachio *(Pistacia chinensis)***

Hazelwood Park

Hazelwood Park is one of the iconic and well known suburbs of Burnside. It is surprising that the dominant tree species for the suburb is/was the smaller growing *Prunus* tree but there are a few stand out streets where *Jacaranda* and *Fraxinus* still grow well.

The tree planting selection differs to the north and south of Greenhill Road, where to the south smaller species such as *Koelreutaria* and *Prunus* are in abundance whilst to the north *Jacaranda* and *Brachychiton* prevail.

It appears that recent infill development is having an impact on replacement planting schematics given the increasing number of additional driveway crossovers being installed. It is suggested that alternative tree species will need to take account of the reduced growing space and influence root systems will have on these new pieces of infrastructure, and in some cases may ultimately reduce the current population of some trees within specific streets.

The streets surrounding Hazelwood Park and Wood Park are ideally positioned to accept some of the smaller local indigenous trees species that creates strong vegetation corridors across Greenhill Road.

The section of Greenhill Road between Devereux and Glynburn Roads currently retains a large dominant stand of *Eucalyptus camaldulensis*. This stand dominates the landscape and in many respects defines the entry to the upper sections of the City. It is evident that the location and proximity of these trees to a major arterial road requires special attention, given the potential risks that exist for large trees that extend over both carriageways. It is important that if this species of tree is replanted that Council recognises the significant resources that are required to manage this size tree in that high risk area.

The current replacement tree selection palette is sufficient and retains the current character and amenity created by the existing street species.

Hazelwood Park

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Burns Avenue	Weeping Gleditzia	Tuckeroo *(Cupaniopsis anacardiodes),* Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster'),* Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Ivory Curl Flower *(Buckinghamii celsissimia),* Chinese Pistachio *(Pistacia chinensis),* Chinese Pistachio *(Pistacia chinensis)***
Byron Avenue	Manchurian Pear	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Snow Pear *(Pyrus nivalis)***
Collingwood Avenue	Flowering Plum *(Prunus cerasifera),*	Snow Pear *(Pyrus nivalis)*	**Snow Pear *(Pyrus nivalis)***
Cooper Place	Queensland Box *(Lophostemon*	Tuckeroo *(Cupaniopsis anacardiodes)*	***Flindersia maculosa***
Davenport Terrace	Flowering Plum Manchurian Pear *(Pyrus ussuriensis)*	Manchurian Pear *(Pyrus ussuriensis),* Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis)***
Devereux Road	White Cedar *(Melia azadarach)*	Zelkova *(Zelkova serrata)*	**Chinese Pistachio *(Pistacia***
Doonoon Avenue	Queensland Box *(Lophostemon conferta),*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),*	**Chinese Pistachio *(Pistacia chinensis),***
Dryden Avenue	No defined species	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*	**Grey Box Gum *(Eucalyptus***
Hawthorn Crescent	Flowering Plum *(Prunus cerasifera),*	Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster')*	**Manchurian Pear *(Pyrus ussuriensis)***
Hazelwood	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia***
Howard Terrace	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus 'Raywood'),* Golden Rain Tree *(Koelreutaria paniculata)*	**Grey Box Gum *(Eucalyptus microcarpa),***
Kintore Avenue	*Manchurian Pear*	Manchurian Pear *(Pyrus ussuriensis)*	**Snow Pear *(Pyrus nivalis)***
Kirkdale Avenue	M*anchurian* Pear *(Pyrus ussuriensis),* Flowering Plum *(Prunus*	Manchurian Pear *(Pyrus ussuriensis),* Manchurian Pear *(Pyrus ussuriensis)*	**Snow Pear *(Pyrus nivalis),* Snow Pear *(Pyrus nivalis)***
Knightsbridge	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia***
Lancelot Avenue	*Weeping Gleditzia*	Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster'),* Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster')*	**Chinese Pistachio *(Pistacia chinensis)***
Lerwick Avenue	Flowering Plum *(Prunus cerasifera)*	Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster'),* Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster')*	**Manchurian Pear *(Pyrus ussuriensis),* Manchurian Pear *(Pyrus ussuriensis)***
Linden Avenue	Golden Rain Tree *(Koelreutaria paniculata),*	Golden Rain Tree *(Koelreutaria paniculata),* Claret Ash *(Fraxinus 'Raywood')*	**Chinese Pistachio *(Pistacia chinensis),* Claret Ash *(Fraxinus 'Raywood')***
Maud Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia),* Kurrajong *(Brachychiton populneus)*	**Zelkova *(Zelkova serrata),*** **Ivory Curl Flower *(Buckinghamii***
Moore Avenue	Weeping Gleditzia 'Shade Master'	Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster')*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Chinese Pistachio *(Pistacia***
Olive Grove	Nettle Tree *(Celtis australis)*	Nettle Tree *(Celtis australis)*	**Hackberry (Celtis occidentalis)*(Celtis***
Rothesay Avenue	Flowering Plum *(P cerasifera)*	Manchurian Pear *(Pyrus ussuriensis),*	**Manchurian Pear *(Pyrus ussuriensis),***
Ruskin Place	Grey Box Gum	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Russell Avenue	Bauhinia	*Bauhinia variegata, Bauhinia variegata*	
Seaforth Avenue	Flowering Plum *(Prunus cerasifera)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Snow Pear *(Pyrus nivalis)***
Seaton Avenue	Queensland Box *(Lophostemon*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Ivory Curl Flower *(Buckinghamii***
Sidney Place	Flowering Plum *(Prunus cerasifera),*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Strathespay Ave.		Kurrajong *(Brachychiton populneus),* Jacaranda *(Jacaranda mimosifolia)*	***Flindersia maculosa,*** **Zelkova *(Zelkova serrata)***
The Parkway	Desert Ash (Fraxinus oxycarpa)	Manchurian Pear *(Pyrus ussuriensis)*	**Jacaranda *(Jacaranda mimosifolia)***
Wood Grove	**Desert Ash *(Fraxinus oxycarpa)***	**Claret Ash *(Fraxinus 'Raywood')***	**Grey Box Gum *(Eucalyptus microcarpa)***

Kensington Gardens

Like Hazelwood Park and Tusmore, Kensington Gardens has an established treescape that is fairly dominant and well known. The streets are dominated by *Fraxinus, Jacaranda* and *Brachychiton*. Many of the *Jacaranda* are nearing senescence and are a priority replacement species for the suburb. The *Fraxinus* continue to thrive but the ongoing issue of seasonal White Fly insect attack is having a detrimental effect on the longevity and health of this species.

The area has an above average number of streets with very wide verges and provides a significant opportunity to retain a good proportion of large canopied tree species like *Fraxinus* 'Raywoodi', *Pyrus ussuriensis*. There is potential to introduce *Eucalyptus leucoxylon* or *microcarpa* into some of the streets surrounding Kensington Gardens Reserve and Kensington Oval and in doing so, create some good vegetation corridors between both major parks and the natural watercourse areas leading into the lower foothill areas of Stonyfell and Wattle Park.

The above average verge widths need to be exploited further as there is a good opportunity to install a range of Water Sensitive Urban Design principles for any new kerb and water table reconstruction projects. The opportunity to direct seasonal clean stormwater back into the existing creek systems that run through the area is not utilised enough.

Kensington Gardens

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Bayly Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova serrata**
Brigalow Avenue	Jacaranda *(Jacaranda mimosifolia),*	Jacaranda *(Jacaranda mimosifolia),* Claret Ash (Fraxinus 'Raywood')	**Kurrajong *(Brachychiton populneus),* Claret Ash *(Fraxinus 'Raywood')***
Coolibah Avenue	Kurrajong *(Brachychiton populneus)*	Kurrajong *(Brachychiton populneus)*	**Illawarra Flame Tree *(Brachychiton***
Cuthero Terrace	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Manchurian Pear *(Pyrus ussuriensis)***
East Terrace	Jacaranda *(Jacaranda mimosifolia*	Red Flower Gum *(Corymbia ficifolia 'Sunset'),* Jacaranda *(Jacaranda mimosifolia),*	**Kurrajong *(Brachychiton populneus),* Zelkova *(Zelkova serrata),* Kurrajong *(Brachychiton populneus)***
Elford Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Crepe Myrtle *(Lagerstroemia x indica***
Ellerslie Street	*Golden wych elm*	*(Ulmus glabra 'Lutscens')*	***(Ulmus glabra 'Lutscens')***
Feres Court	Crab apple	Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Fort Avenue	Golden Rain, Queensland Box	Manchurian Pear *(Pyrus ussuriensis),* Golden Rain Tree *(Koelreutaria paniculata)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Manchurian Pear *(Pyrus ussuriensis)***
Kadonga Avenue	Liquidambar	Crepe Myrtle *(Lagerstroemia x indica*	**Capitol Pear *(Pyrus calleryana 'Capitol')***
Korra Avenue	Desert Ash (Fraxinus oxycarpa) (Fraxinus	Claret Ash *(Fraxinus 'Raywood')*	**Manchurian Pear *(Pyrus ussuriensis)***
Leonore Avenue	Flowering Plum *(Prunus cerasifera),* Black Plum *(Prunus 'nigra')*	Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Lincoln Street	Willow Myrtle *(Agonis flexuosa), Manchurian Pear*	Willow Myrtle *(Agonis flexuosa)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Mahar Street	Manchurian Pear *(Pyrus ussuriensis)*	Manchurian Pear *(Pyrus ussuriensis)*	**Snow Pear *(Pyrus nivalis)***
Myall Avenue	Red Flower Gum *(Corymbia ficifolia 'Sunset')*	Red Flower Gum *(Corymbia ficifolia*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Orient Road	English Oak *(Quercus robur)*	English Oak *(Quercus robur)*	***(Quercus palustris)***
Peroomba Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Quondong Avenue	Red Flower Gum *(Corymbia ficifolia 'Sunset')*	Jacaranda *(Jacaranda mimosifolia),* Red Flower Gum *(Corymbia ficifolia*	**Zelkova *(Zelkova serrata),* Tuckeroo *(Cupaniopsis anacardiodes)***
Roslind Street	Manchurian Pear Manchurian Pear *(Pyrus ussuriensis)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),* Snow Pear *(Pyrus nivalis)***
Sandford Street	Crepe Myrtle	Crepe Myrtle *(Lagerstroemia x indica*	**Chanticleer Pear *(Pyrus calleryana***
South Terrace	English Oak, Jacaranda	Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
West Terrace	Jacaranda *(Jacaranda mimosifolia),Red Flower Gum*	Jacaranda *(Jacaranda mimosifolia),* Claret Ash *(Fraxinus 'Raywood')*	**Kurrajong *(Brachychiton populneus),* Manchurian Pear *(Pyrus ussuriensis)***
White Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Wilga (Geijera parviflora)Avenue		Claret Ash *(Fraxinus 'Raywood'),* Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Kurrajong *(Brachychiton populneus)***
Magill Road	**Queensland Box *(Lophostemon conferta)***	**Tuckeroo *(Cupaniopsis anacardiodes)***	**Chinese Pistachio *(Pistacia chinensis)***

Kensington Park

Similar to its neighbouring suburb of Kensington Gardens, Kensington Park has a slightly different streetscape where there are a greater number of streets that have narrow verges and road widths. The suburb is dominated by J*acaranda, Fraxinus, Lophostemon* and *Prunus*.

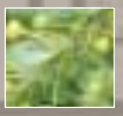
The plantings would suggest that current tree species are to a certain degree in conflict with utilities and services, particularly those streets where infill development is rising.

Unfortunately, recent tree replacements associated with the SGSTRP have not been totally successful and have (in some streets) created ongoing conflicts with road user's particularly waste collection vehicles. It is suggested that a review of these streets in particular should be a priority. These streets will need to be revisited in the coming 7 – 9 years to ensure the amenity of the streetscape is retained.

The narrower streets are better suited to some of the smaller upright species such as *Lagerstroemia*, and *Pyrus* Chanticleer. On streets where verges are wider it would be suitable for combinations of *Zelkova* and *Pistacia* as they offer significant deciduous autumn colour and contrast to the evergreen foliage of the local indigenous trees growing in a number of verges. However, the current tree selection palette appears to be well suited to the suburb.

Kensington Park

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Alpha Street	Chinese elm	Chinese Pistachio *(Pistacia chinensis)*	**Chinese Tallow Tree *(Sapium serbiferum)***
Bedford Street	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Chinese Elm *(Ulmus parvifolia)*, Zelkova *(Zelkova serrata)*	**Zelkova *(Zelkova serrata)*, Manchurian Pear *(Pyrus ussuriensis)***
Beulah Road	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Birnie Avenue	Bottlebrush	Bottlebrush *(Callistemon 'Kings Park Special')*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Borda Street	Chinese Pistachio (Pistacia chinensis)	Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Bowman Avenue	*Chanticleer Pear (Pyrus calleryana*	Zelkova *(Zelkova serrata)*	**Chinese Pistachio *(Pistacia chinensis)***
Bradman Crescent	Chinese Pistachio (Pistacia chinensis)	Manchurian Pear *(Pyrus ussuriensis)*	**Snow Pear *(Pyrus nivalis)***
Corinda Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Ivory Curl Flower *(Buckinghamii***
Cotham Avenue	White Cedar *(Melia azadarach)*	Chinese Pistachio *(Pistacia chinensis)*	***Quercus palustris***
Desamaurez Street	English Oak *(Quercus robur)*	English Oak *(Quercus robur)*	***Quercus palustris***
Dunstan Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Eden Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Zelkova *(Zelkova serrata)*, Ivory Curl Flower *(Buckinghamii***
Ellesmere Street	Claret Ash *(Fraxinus 'Raywood')*	Claret Ash *(Fraxinus 'Raywood')*	**Chinese Pistachio *(Pistacia chinensis)***
Guilford Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Manchurian Pear *(Pyrus ussuriensis)***
Gurrs Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Crepe Myrtle *(Lagerstroemia x indica***
Holden Street	White Cedar *(Melia azadarach)*, Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*, Golden Rain Tree *(Koelreutaria paniculata)*	**Manchurian Pear *(Pyrus ussuriensis)*, Chinese Pistachio *(Pistacia chinensis)***
Jessie Street	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus 'Raywood')*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Chinese Pistachio *(Pistacia chinensis), Flindersia***
Lockhart Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Lomond Avenue	Pink Pogoda *(Sophora japonica)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Manchurian Pear *(Pyrus ussuriensis)***
Lossie Street	Evergreen Ash	Chinese Pistachio *(Pistacia chinensis)*	**Manchurian Pear *(Pyrus ussuriensis)***
May Terrace	*Jacaranda, Crepe Myrtle*	Crepe Myrtle *(Lagerstroemia x indica 'Sioux')*, Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
McKenna Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Oak Crescent	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Orange Grove	*Citrus limone*	*Citrus limone*	**Chinese Pistachio *(Pistacia chinensis)***
Park Road	Queensland Box *(Lophostemon conferta), Jacaranda*	Tuckeroo *(Cupaniopsis anacardiodes)*, Claret Ash (Fraxinus 'Raywood')	**Ivory Curl Flower *(Buckinghamii celsissimia),***
Pembroke Street	Claret Ash *(Fraxinus 'Raywood')*	Claret Ash *(Fraxinus 'Raywood')*	**Cimmaron Ash *(Fraxinus pennslyvanica 'Cimmaron')***
Shipsters Road		Chinese Pistachio *(Pistacia chinensis)*, Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)* Zelkova *(Zelkova serrata)***
Spencer Street		Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis)***
Thiele Grove	Evergreen Ash	Chinese Pistachio *(Pistacia chinensis)*	**Chinese Pistachio *(Pistacia chinensis)***
Tobruk Avenue	Jacaranda	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis)*, Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Toowong Avenue	Manchurian Pear	Manchurian Pear *(Pyrus ussuriensis)*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*, Ivory Curl Flower *(Buckinghamii***
Treloar Avenue	Chinese Pistachio (Pistacia chinensis)	Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Uxbridge Street	Lemon Scented Gum *(Corymbia citriodora)*, Jacaranda *(Jacaranda mimosifolia)*	Smooth Bark Apple Gum *(Angophora costata), Jacaranda (Jacaranda mimosifolia)*	**Smooth Bark Apple Gum *(Angophora costata), Jacaranda (Jacaranda mimosifolia)***
Walsall Street	Jacaranda	Chinese Pistachio *(Pistacia chinensis)*	**Golden Rain Tree *(Koelreutaria***
Water Street	Golden Rain Tree, *Crepe Myrtle*	Golden Rain Tree *(Koelreutaria paniculata)*, Crepe Myrtle *(Lagerstroemia x indica 'Sioux')*	**Zelkova *(Zelkova serrata)***
Yeronga Avenue	Manchurian Pear *(Pyrus ussuriensis))*	Manchurian Pear *(Pyrus ussuriensis)*, Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*, Chinese Rain Tree *(Koelreutaria***
Oval Terrace	***No defined species***	**Chinese Elm *(Ulmus parvifolia)***	**Golden Rain Tree *(Koelreutaria paniculata)***

Leabrook

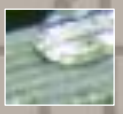
Tusmore has the highest proportion of *Jacaranda* trees per street than any other suburb in the City. Recent plantings in the 1980's have seen a very high proportion of Lophostemon as replacement trees and has disappointingly created some major issues with damage to kerbing and footpaths.

It is anticipated that over the coming 7 – 10 years these trees will need to be replaced as matter of urgency as replacement costs for kerbing and repairs to footpaths become significant. The replacement program considers *Fraxinus* 'Raywoodi' or Pistacia but may in the future look at some of the newer Fraxinus hybrids. t.

Consideration should be given to the retention of the larger remnant trees that grow in the road reserve abutting the streets around Tusmore and Hazelwood Park as many are becoming increasingly at risk through infrastructure upgrade works and or increasing pressures from infill development activity around the base of these trees.

Leabrook

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Brettwalder Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Jacaranda *(Jacaranda mimosifolia)***
Dobbie Crescent	*Cupressus sempervirens 'stricta'*		**—**
Doerwyn Avenue	*Grevillea robusta*	Chinese Pistachio (Pistacia chinensis) *(Pistacia*	**Chinese Pistachio *(Pistacia***
Godfrey Terrace	White Cedar *(Melia azadarach)*	Chinese Pistachio (Pistacia chinensis)Claret Ash	**Chinese Pistachio *(Pistacia***
Howard Terrace	Jacaranda / Queensland Box	Jacaranda	**SA Blue Gum (Eucalyptus**
Jean Street	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus 'Raywood')*	**Cimmaron Ash *(Fraxinus pennslyvanica***
Knightsbridge Road	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia),*	**Chinese Pistachio *(Pistacia chinensis)***
Kooyong Crescent	*Chinese elm*	Crepe Myrtle (Lagerstroemia x indica)	**Crepe Myrtle (Lagerstroemia x indica)**
Philip Avenue	Queensland Box *(Lophostemon conferta)*	Jacaranda *(Jacaranda mimosifolia)*	**Grey Box Gum *(Eucalyptus microcarpa),***
Rochester St	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Kurrajong *(Brachychiton populneus)***
Rodger Avenue	Chanticleer Pear (Pyrus calleryana	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	**Chanticleer Pear *(Pyrus calleryana***
Stanley Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Jacaranda *(Jacaranda mimosifolia)***
Statenborough Street	Queensland Box *(Lophostemon conferta)*	Chinese Pistachio (Pistacia chinensis) *(Pistacia*	**Chinese Pistachio *(Pistacia***
The Parkway	Queensland Box *(Lophostemon conferta)*	Tuckeroo (Cupaniopsis anacardiodes)	**Tuckeroo *(Cupaniopsis***
Tusmore Avenue	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash *(Fraxinus 'Raywood')*	**Cimmaron Ash *(Fraxinus pennslyvanica***
Glynburn Road	English Elm *(Ulmus procera)*	English Elm *(Ulmus procera)*	**Cornish Elm *(Ulmus cornubiensis)***
Newcastle Street	**Queensland Box *(Lophostemon***	**Tuckeroo (Cupaniopsis anacardiodes)**	**Zelkova *(Zelkova serrata)***

Linden Park

Linden Park is one of the newer suburbs of the City where the majority of housing stock was created through the 1950/60's. There is a breath of tree species used across the suburb. Dominant species include *Lophostemon* and *Koelreutaria*

The suburb is undergoing a tremendous rate of redevelopment and to some extent infill development. The impact to tree planting opportunities is significant and will in the next 10 years create some issues as far as loss of tree canopy coverage. The palette of replacement species requires careful consideration given the impact that additional driveway crossover installations is having on reducing available planting spaces.

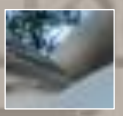
It may be appropriate to look at different species for each side of the streets to counter the position of overhead power lines and to some degree counter land division impacts.

Whilst *Koelreutaria paniculata* is a good tree species it is slow to develop and in that sense leaves the streetscape looking slightly denuded until the trees fully develop. The *Zelkova* species is a fast growing flat domed species that is well suited to most of the streets in the suburb and has been shown to grow well in the area (Devereux Road).

The smaller narrow streets lend themselves to the use of the *Lagerstroemia* varieties and there is potential to include (as a contrast) the *Malus* varieties. Every opportunity should be made to reduce road widths in back streets to provide greater planting opportunities as they arise and the potential to install flora islands along streets like Sturdee Street needs to be explored further.

Linden Park

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Hay Road	Hackberry (Celtis occidentalis)*(Celtis*	Hackberry (Celtis occidentalis)*(Celtis occidentalis)*	**Hackberry (Celtis occidentalis)*(Celtis***
Sturdee Street	Desert Ash (Fraxinus oxycarpa) Nettle Tree *(Celtis australis)*	Claret Ash (Fraxinus 'Raywood'), Hackberry (Celtis occidentalis)*(Celtis occidentalis)*	**Ulmus parvifolia 'Greenvase'**
Mariner Street	Golden Rain Tree *(Koelreutaria paniculata)*	Tuckeroo *(Cupaniopsis anacardiodes)*, Golden Rain Tree *(Koelreutaria paniculata)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Burnell Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Golden Rain Tree *(Koelreutaria***
Hewitt Avenue	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*	**Zelkova *(Zelkova serrata)***
Baulderstone Place	Chinese Pistachio (Pistacia chinensis)	Chinese Pistachio *(Pistacia chinensis)*	**Zelkova *(Zelkova serrata)***
Rayne Avenue	*Queensland Box*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
Hawke Street	SA Blue Gum (Eucalyptus leucoxylon)	Red Flower Gum *(Corymbia ficifolia 'Sunset')*	**Ivory Curl Flower *(Buckinghamii***
Hughes Street	*Swamp Mallet (Eucalyptus spathulata)*	Smooth Bark Apple Gum *(Angophora costata)*	**Manchurian Pear *(Pyrus ussuriensis)***
Torrens Street	*Swamp Mallet (Eucalyptus spathulata)*	Ivory Curl Flower *(Buckinghamii celsissimia)*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
Laurel Avenue	Golden Rain Tree	Golden Rain Tree *(Koelreutaria paniculata)*	**Zelkova *(Zelkova serrata)***
Linden Avenue	Claret Ash (Fraxinus 'Raywood) / (Golden rain Tree Koelreutaria paniculata)	Claret Ash (Fraxinus 'Raywood) / (Golden rain Tree Koelreutaria	**Claret Ash (Fraxinus 'Raywood) / (Golden rain Tree Koelreutaria**
Wemyss Street	Various Eucalypts	Claret Ash *(Fraxinus 'Raywood')*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Cimmaron Ash *(Fraxinus pennslyvanica 'Cimmaron')***
Warrego Crescent	Crepe Myrtle (Lagerstroemia x indica) and SA Blue Gum (Eucalyptus leucoxylon)	Crepe Myrtle *(Lagerstroemia x indica 'Tuscarora)*	**Manchurian Pear *(Pyrus ussuriensis)***
Verdale Avenue	*Queensland Box*	Tuckeroo *(Cupaniopsis anacardiodes)*, Ivory Curl Flower *(Buckinghamii celsissimia)*	***Flindersia maculosa*, Manchurian Pear *(Pyrus ussuriensis)***
Tamarack Street	*Cherry Plum*	Manchurian Pear *(Pyrus ussuriensis)*	—
Williams Crescent	*Lophostemon conferta*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
Collyer Court	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Pistachio *(Pistacia chinensis)***
Devereux Road	*Zelkova, White Cedar*	Zelkova *(Zelkova serrata)*	***Toona australis***
Linden Court	Golden Rain Tree *(Koelreutaria paniculata)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Kurrajong *(Brachychiton populneus)***
Craddock Street	*Golden Rain*	Claret Ash *(Fraxinus 'Raywood')*	**Ivory Curl Flower *(Buckinghamii***
Fon Street	*Queensland Box(Lophostemon conferta),and* Jacaranda *(Jacaranda mimosifolia)*	Tuckeroo *(Cupaniopsis anacardiodes)*, Jacaranda *(Jacaranda mimosifolia)*	**Manchurian Pear *(Pyrus ussuriensis)*, Jacaranda *(Jacaranda mimosifolia)***
Booth Avenue	*Swamp mallet* *Melaleuca*	Tuckeroo *(Cupaniopsis anacardiodes)*, Bottlebrush *(Callistemon viminalis)*	**Kurrajong *(Brachychiton populneus)* Bottlebrush *(Callistemon viminalis)***
Park Street	*Pink Pogoda, Chanticleer Pear (Pyrus calleryana 'Chanticleer')*	Manchurian Pear *(Pyrus ussuriensis)*	**Zelkova *(Zelkova serrata)***
Keyes Street	Golden Rain Tree *(Koelreutaria paniculata), Qld Box Tree (Lophostemon conferta)*	Golden Rain Tree *(Koelreutaria paniculata)*, Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
Austral Avenue	*Prunus,* Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Pistachio *(Pistacia chinensis)***
Hood Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Zelkova *(Zelkova serrata)***
Park Crescent	*Lophostemon,* Golden Rain Tree *(Koelreutaria paniculata)*	Tuckeroo *(Cupaniopsis anacardiodes)*, Golden Rain Tree *(Koelreutaria paniculata)*	**Kurrajong *(Brachychiton populneus)***
Beatty Street	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Kurrajong *(Brachychiton populneus)***
Keyes Street	*Golden Rain ,* *Queensland*	Golden Rain Tree *(Koelreutaria paniculata)*, Golden Rain Tree *(Koelreutaria paniculata)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer'),***
Jellicoe Street	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Chinese Pistachio *(Pistacia chinensis)***

Magill

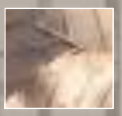
One of the older suburbs that borders the City of Campbelltown, Magill is a mix of short narrow streets on the lower plains sections and steeply sloping streets adjacent to Auldana. The selection of species has become slightly difficult because of the disparity in some sections where road and verges differ along the length of the streets.

There are quite a few streets like Pepper, Tyler Jackson and Ellis that are very narrow with very narrow verges. These streets have very limited planting opportunity that limits tree species selection. Current plantings are totally inappropriate for the verge widths and require immediate attention to reduce ongoing damage to infrastructure.

The choice of species on the eastern side of Penfold Road needs to be broaden slightly in the coming years to avoid the creation of monotypic planting regimes. The ongoing use of Agonis flexuosa in some of these streets is appropriate however it may be an opportunity to bring in some of the new varieties of this species to broaden the streetscape appeal.

Magill

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Briant Road	Willow Myrtle *(Agonis flexuosa),*	Willow Myrtle *(Agonis flexuosa)*	**Chinese Pistachio *(Pistacia chinensis)***
Gardiner Crescent	Queensland Box *(Lophostemon conferta)*	Willow Myrtle *(Agonis flexuosa)*	**Chanticleer Pear *(Pyrus calleryana***
Chapel Street	Pink pogoda	Weeping Gleditzia *(Gleditsia tricanthos 'Shademaster')*	**Chinese Pistachio *(Pistacia chinensis)***
Rowland Road	Golden Rain Tree *(Koelreutaria*	Chanticleer Pear *(Pyrus calleryana*	**Crepe Myrtle *(Lagerstroemia x indica***
Rosedale Place	Golden Rain Tree *(Koelreutaria*	Manchurian Pear *(Pyrus ussuriensis)*	**Chanticleer Pear *(Pyrus calleryana***
Ellis Street	Willow Myrtle *(Agonis flexuosa), Nettle*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
The Parade	Willow Myrtle *(Agonis flexuosa)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
La Perouse Avenue	Golden Rain Tree *(Koelreutaria*	Peppermint Gum *(Eucalyptus odorata)*	
Ormond Avenue	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Greenham Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Chinese Pistachio *(Pistacia chinensis)***
Lentara Ct	—	Chanticleer Pear *(Pyrus calleryana*	**Crepe Myrtle *(Lagerstroemia x indica***
Burchett Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Oakleigh Avenue	Jacaranda	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Elm Grove	Jacaranda *(Jacaranda mimosifolia)*	*Jacaranda (Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Maple Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Chinese Pistachio *(Pistacia chinensis)***
McGlasson Avenue	*Evergreen Ash (Fraxinus griffithii)*	Chanticleer Pear *(Pyrus calleryana*	**Crepe Myrtle *(Lagerstroemia x indica***
Armison Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Giles Street	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Ash Grove	Lemon Scented Gum , Willow	Smooth Bark Apple Gum *(Angophora costata)*	**Smooth Bark Apple Gum *(Angophora***
Romalo Avenue	Golden Rain Tree, Willow Myrtle	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
East Street	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Adelaide Street	Queensland Box	Tuckeroo *(Cupaniopsis anacardiodes)*	**Chinese Pistachio *(Pistacia chinensis)***
Park Street	Hackberry (Celtis occidentalis)	Hackberry (Celtis occidentalis)*(Celtis*	**Chinese Pistachio *(Pistacia chinensis)***
Perkins Crescent	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Palomino Road	Fiddlewood (Citharexylum	Tuckeroo *(Cupaniopsis anacardiodes)*	**Peppermint Gum *(Eucalyptus odorata)***
Barnes Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Crepe Myrtle *(Lagerstroemia x indica***
Cuthero Terrace	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Sophia Crescent	No defined species	Chanticleer Pear *(Pyrus calleryana*	**Crepe Myrtle *(Lagerstroemia x indica***
David Street	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Bottlebrush *(Callistemon viminalis)***
Pepper Street	Willow Myrtle *(Agonis flexuosa),*	Crepe Myrtle *(Lagerstroemia x indica*	**Chanticleer Pear *(Pyrus calleryana***
Tyler Street	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Jackson Street	**Golden Rain Tree *(Koelreutaria***	**Golden Rain Tree *(Koelreutaria paniculata)***	**Chinese Rain Tree *(Koelreutaria bipinnata)***

Rose Park

Rose Park is another iconic suburb withion the City of Burnside, the streets retain a similar tree palette like that of Dulwich and parts of Toorak Gardens. The suburb encompasses streets that have well defined and established housing stock, and support aged street tree plantings. The suburb is dominated by *Jacaranda*, *Melia* and *Fraxinus* species.

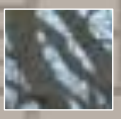
The suburb is dominated by the historic avenues of Alexandra Avenue and Prescott Terrace, but some of the wider streets like Grant, Hewitt and Watson have a streetscape dominance that is hard to ignore.

Slightly disappointing is that many of these streets have such wide road widths (at the expense of verge width) that future tree species selections are limited. Every opportunity to reduce the road widths of as many of these types of streets as possible should be made. If the road widths cannot be reduced the it is suggested that singular road protubérances that allows for larger tree species use should be promoted.

It is envisaged that over the next 5 – 9 years the dominant Melia trees of Swaine Avenue will need to be replaced. The potential use of the low fruiting variety has potential and needs to be investigated further.

Rose Park

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Alexandra Avenue	English Oak *(Quercus robur)*, English Elm *(Ulmus procera)*	English Oak *(Quercus robur)*, English Elm *(Ulmus procera)*	***Quercus palustris*, Evergreen Oak *(Quercus ilex)*, Cornish Elm *(Ulmus cornubiensis)***
Prescott Terrace	English Oak *(Quercus robur)*, English Elm *(Ulmus procera)*	English Oak *(Quercus robur)*, English Elm *(Ulmus procera)*	***Quercus palustris*, Evergreen Oak *(Quercus ilex)*, Cornish Elm *(Ulmus cornubiensis)***
Close Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus 'Raywood')*, Jacaranda *(Jacaranda mimosifolia)*	**Cimmaron Ash *(Fraxinus pennslyvanica 'Cimmaron')*,**
Grant Avenue	Willow Myrtle *(Agonis flexuosa)*, Jacaranda *(Jacaranda mimosifolia)*	Willow Myrtle *(Agonis flexuosa)*, Jacaranda *(Jacaranda mimosifolia)*	***Toona australis*, Chinese Pistachio *(Pistacia chinensis)***
Gurney Road	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus oxycarpa)*	Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus 'Raywood')***
Hewitt Avenue	Queensland Box *(Lophostemon conferta)*, Jacaranda *(Jacaranda mimosifolia)*	Chinese Elm *(Ulmus parvifolia)*, Jacaranda *(Jacaranda mimosifolia)*, Golden Rain Tree *(Koelreutaria paniculata)*	**Zelkova *(Zelkova serrata)*, Chinese Pistachio *(Pistacia chinensis)*, Chinese Rain Tree *(Koelreutaria***
Swaine Avenue	White Cedar *(Melia azadarach)*, Willow Myrtle *(Agonis flexuosa)*	Chinese Pistachio *(Pistacia chinensis)*, Willow Myrtle *(Agonis flexuosa)*, Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)*, *(Toona australis)***
Victoria	Desert Ash (Fraxinus oxycarpa)	Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus 'Raywood')***
Watson	Jacaranda *(Jacaranda mimosifolia,*	Jacaranda *(Jacaranda mimosifolia)*	**Zelkova *(Zelkova serrata)***
Webb Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Kensington	Queensland Box *(Lophostemon*	*Tuckeroo (Cupaniopsis anacardiodes)*	***Tuckeroo (Cupaniopsis anacardiodes)***
Fullarton	**Queensland Box *(Lophostemon***	**Tuckeroo *(Cupaniopsis anacardiodes)***	**Chinese Pistachio *(Pistacia chinensis)***

Rosslyn Park

Rosslyn Park is one of the more recent additions to the City and includes the section of land once occupied by the Stonyfell winery. The suburb retains a very good proportion of streets with wide roads and verges and in that sense holds greater opportunity to retain large canopied tree species.

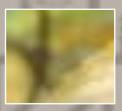
However, as has been seen recently in the neighbouring suburbs of Wattle Park and Kensington Gardens there is a growing level of infill development and is creating issues for the appropriate planting of larger species given the influence new driveway crossovers and underground services is having on the root systems of the trees.

No better example can be found than in the dominant streetscape of Edgecumbe Terrace where recent development activity has caused some issues for the large *Corymbia citriodora*. Whilst this species is being slowly replaced with *Angophora* the challenges remain for these trees that have an expected life expectancy of more than 20 years.

The growing use of *Zelkova, Pistacia* and Ulmus parvifolia should be continued as they bring a degree of softness to the landscape that is not provided by the evergreen species like *Angophora* or *Agonis*.

Rosslyn Park

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Lanark Street	Queensland Box *(Lophostemon conferta)*	Claret Ash (Fraxinus 'Raywood')	**Claret Ash *(Fraxinus 'Raywood')***
Ayr Street	Red Flower SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon*	Chinese Elm *(Ulmus parvifolia)* Chinese Elm *(Ulmus parvifolia)*	**Zelkova *(Zelkova serrata)***
Park Avenue	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus*	Claret Ash (Fraxinus 'Raywood'), Manchurian Pear *(Pyrus ussuriensis)*	**Claret Ash *(Fraxinus 'Raywood')*, Manchurian Pear *(Pyrus ussuriensis)***
Dalwood Court	No defined species	Manchurian Pear *(Pyrus ussuriensis)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Grange Avenue	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Wattle Court	Manchurian Pear *(Pyrus ussuriensis)*	Manchurian Pear *(Pyrus ussuriensis)*	**Hackberry*(Celtis occidentalis)***
Hyland Terrace	Chinese Pistachio (Pistacia chinensis)	Chinese Pistachio *(Pistacia chinensis)*	**Smooth Bark Apple Gum *(Angophora***
Kadonga Avenue	Crepe Myrtle	Crepe Myrtle *(Lagerstroemia x indica 'Sioux')*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Taylor Terrace	Weeping Gleditzia, Nettle Tree	Weeping Gleditzia *(Gleditsia tricanthos 'shademaster')*	**Willow Myrtle *(Agonis flexuosa)***
Angove Court	*Golden Ash*	*Fraxinus excelsior*	**Kurrajong *(Brachychiton populneus)***
Gillard Drive	No defined species	Chinese Pistachio *(Pistacia chinensis)*	**Zelkova *(Zelkova serrata)***
Wilson Court	*No defined species*	*Fraxinus excelsior*	**Zelkova *(Zelkova serrata)***
Inez Court	Cherry Plum	Bottlebrush *(Callistemon viminalis)*	**Chanticleer Pear *(Pyrus calleryana***
Schubert Court	Red Flower *SA Blue Gum (Eucalyptus leucoxylon 'meglacarpa'),*	Red Flower *SA Blue Gum (Eucalyptus leucoxylon)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Primrose Terrace	Golden Rain Tree *(Koelreutaria*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Gordon Terrace	Nettle Tree	Hackberry*(Celtis occidentalis)*	**Zelkova *(Zelkova serrata)***
Edgecumbe Terrace	Lemon Scented Gum *(Corymbia*	Smooth Bark Apple Gum *(Angophora*	**Smooth Bark Apple Gum *(Angophora***
Penfold Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Coach Road	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Ivory Curl Flower *(Buckinghamii***
Kensington Road	**Queensland Box *(Lophostemon conferta)***	**Tuckeroo *(Cupaniopsis anacardiodes)***	***Wilga (Geijera parviflora)***

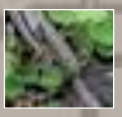
Skye

STREET TREE REPLACEMENT

The majority of streets within the suburb of Skye do not have a formal planted verge structure. There are a few streets that have been formally planted and do retain some good specimens. The future planting plans for the suburb are still variable and will over the coming years evolve depending on the level of infrastructure that is upgraded in individual streets. The majority of current and future plantings will be a selection of local indigenous tree species such as the SA Blue Gum (*Eucalyptus leucoxylon*), Mallee Box Gum and Native Cypress Pine.

STREET	Current Species	Replacement Species	ALTERNATIVE Species
Bishop Street	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus leucoxylon)	**SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus leucoxylon)**
Coach Road	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Haven Road	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Homestead Crescent	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Horsnell Gully Road	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Knox Terrace	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Kurrajong Street	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
McBeath Drive	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Old Norton Summit	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Vale Street	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Vista Avenue	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Whitbread Grove	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
Windmill Street	N/A	Mallee Box Gum *(Eucalyptus porosa)*	**Mallee Box Gum *(Eucalyptus porosa)***
Wyfield Street	N/A	SA Blue Gum (Eucalyptus leucoxylon) (Eucalyptus	**SA Blue Gum (Eucalyptus leucoxylon)**
	N/A		

St Georges



St Georges is a suburb that has a slightly confusing streetscape character given the dominant streets of Wootoona Terrace, Craighill Road and Inverness Avenue. There has been a fairly high rate of replacement undertaken in the last 10 years where many old streets filled with Prunus have been replaced with *Ulmus, Pyrus* and *Jacaranda*.

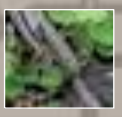
Wootoona Terrace species selection will be reviewed as the use of the Pengarry Ash is not as tolerant of the drought conditions that the City experienced in the last 7 years. It is appropriate that the Pengarry Ash be replaced with *Fraxinus* 'Raywoodi' as it appears this variety has better resilience over the longer term.

Given there are quite a few streets of great length it would be appropriate to create more floral island plantings which could be incorporated into any future traffic calming devices.

The current tree replacement palette appears to be well balanced apart from the issue of tree replacement species in Wootoona Terrace.

St Georges

STREET TREE REPLACEMENT



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Drew Grove	Camphor Laurel	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Crab Apple *(Malus ionensis)***
Crossing Street	White Cedar *(Melia azadarach)*,	Tuckeroo *(Cupaniopsis anacardiodes)*, Chinese Pistachio *(Pistacia chinensis)*	**Chinese Pistachio *(Pistacia chinensis***
Inverness Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	**Crab Apple *(Malus ionensis)***
William Queale Court	Silver Birch *(Betula pendula)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Native Cypress Pine *(Callitris***
Sunnyside Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*, Crab Apple *(Malus ionensis)*	**Claret Ash *(Fraxinus 'Raywood')***
Kincardine Avenue	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*, Crab Apple *(Malus ionensis)*	**Zelkova *(Zelkova serrata)***
Gulfview Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*, Crab Apple *(Malus ionensis)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Hewitt Avenue	Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)*, Crab Apple *(Malus ionensis)*	**Zelkova *(Zelkova serrata)***
Fifeshire Avenue	KI mallee	Chinese Pistachio *(Pistacia chinensis)*, Crab Apple *(Malus ionensis)*	**Chinese Pistachio *(Pistacia chinensis***
Highfield Avenue	Chanticleer Pear (Pyrus calleryana 'Chanticleer')	Manchurian Pear *(Pyrus ussuriensis)*, Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Chinese Pistachio *(Pistacia chinensis)***
Anglesley Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Kurrajong *(Brachychiton populneus)*,	**Zelkova *(Zelkova serrata)*, Ivory Curl Flower *(Buckinghamii celsissimia)***
Austin Crescent	*Fiddlewood (Citharexylum quadrangulare)*	Tuckeroo *(Cupaniopsis anacardiodes)*, Crab Apple *(Malus ionensis)*	**Ivory Curl Flower *(Buckinghamii celsissimia)***
Craighill Road	Queensland Box , Kurrajong	Tuckeroo *(Cupaniopsis anacardiodes)*, Jacaranda *(Jacaranda mimosifolia)*,	**Ivory Curl Flower *(Buckinghamii celsissimia)*, Zelkova *(Zelkova serrata)*,**
Brae Road	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Zelkova *(Zelkova serrata)***
Durham Avenue	Various Eucalypt	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Ivory Curl Flower *(Buckinghamii***
Woodcroft Avenue	Lilly Pilly *(Syzygium paniculatum)*, Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*, Manchurian Pear *(Pyrus ussuriensis)*	**Chinese Pistachio *(Pistacia chinensis***
Blairgowrie Avenue	Fiddlewood (Citharexylum quadrangulare)	Willow Myrtle *(Agonis flexuosa)*, Ivory Curl Flower *(Buckinghamii celsissimia)*	**Bottlebrush *(Callistemon viminalis)***
Purnana Avenue	Jacaranda *(Jacaranda mimosifolia)*, *White Cedar*	Jacaranda *(Jacaranda mimosifolia)*, Crab Apple *(Malus ionensis)*	**Zelkova *(Zelkova serrata)***
Wootoona Terrace	**Pengarry Ash (Fraxinus pengarry Ash)**	**Pengarry Ash (Fraxinus pengarry Ash)**	**Claret Ash *(Fraxinus 'Raywood')***

Stonyfell

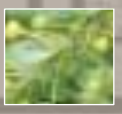
Stonyfell is a suburb that has a fairly diverse streetscape amenity that is dominated by informal verges that lack structured footpaths. The dominant tree species is remnant Eucalyptus leucoxylon, microcarpa and camaldulensis. Exotic species includes a few streets that have been the subject of recent replacement initiatives.

It is appropriate that some effort is made to retain the informality of this area so that the local indigenous trees can be retained and promoted. In that sense, the installation of formal footpaths through some of the streets may be detrimental to the health and longevity of these trees and has to be considered carefully.

Given the volume of traffic in the upper streets of the suburb are usually associated with local traffic it may be worth considering the development of more flora islands that encompass prominent specimen trees that are considered ‘Landmark Trees’ rather than rebuilding kerbing in situ or as previously built.

Stonyfell

STREET TREE REPLACEMENT-PREFERRED OPTIONS



STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Acacia [illegible]	*Pinus radiata*	Grey Box Gum *(Eucalyptus microcarpa)*	**Willow Myrtle *(Agonis flexuosa)***
Allendale Grove	SA Blue Gum (Eucalyptus leucoxylon)	Grey Box Gum *(Eucalyptus microcarpa)*	**Illawarra Flame Tree *(Brachychiton acerifolius)***
Ayrbank Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Wilga *(Wilga (Geijera parviflora))*	**Harkness Bottlebrush Kings Park Special *(Callistemon 'Harkness')***
Brierbank Terrace	Queensland Box	Grey Box Gum *(Eucalyptus microcarpa)*	**Chanticleer Pear *(Pyrus calleryana 'Chanticleer')***
Edinburgh Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Harkness Bottlebrush Kings Park Special *(Callistemon 'Harkness')*	**Grey Box Gum *(Eucalyptus microcarpa)***
Eucalypt Crescent	SA Blue Gum (Eucalyptus leucoxylon)	Tuckeroo *(Cupaniopsis anacardiodes)*	**SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)***
Fernbank Terrace	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Gothic Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Crab Apple *(Malus ionensis)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Grevillea Crescent	River Red Gum *(Eucalyptus camaldulensis)*	Crepe Myrtle *(Lagerstroemia x indica 'Sioux')*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Heatherbank Terrace	Red Flower SA Blue Gum (Eucalyptus leucoxylon)	Grey Box Gum *(Eucalyptus microcarpa)*	**Zelkova *(Zelkova serrata)***
Karri Street	River Red Gum *(Eucalyptus camaldulensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	
Kurrajong Avenue	Sugar Gum (Eucalyptus cladocalyx)	Illawarra Flame Tree *(Brachychiton acerifolius)*	**Willow Myrtle *(Agonis flexuosa)***
Mingara Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Harkness Bottlebrush Kings Park Special *(Callistemon 'Harkness')*	**Grey Box Gum *(Eucalyptus microcarpa)***
Monarto Crescent	River Red Gum *(Eucalyptus camaldulensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Willow Myrtle *(Agonis flexuosa)***
Morland Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Harkness Bottlebrush Kings Park Special *(Callistemon 'Harkness')*	**Grey Box Gum *(Eucalyptus microcarpa)***
Myrtlebank Terrace	Swamp Mallet *(Eucalyptus spathulata)*	Grey Box Gum *(Eucalyptus microcarpa)*	**SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)***
Nara Crescent	SA Blue Gum (Eucalyptus leucoxylon)	Grey Box Gum *(Eucalyptus microcarpa)*	**Capitol Pear *(Pyrus calleryana 'Capitol')***
Penfold Road	SA Blue Gum (Eucalyptus leucoxylon)	Tuckeroo *(Cupaniopsis anacardiodes)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Waratah Way	River Red Gum *(Eucalyptus camaldulensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Chanticleer Pear *(Pyrus calleryana [illegible])***
Wurinya Avenue	SA Blue Gum (Eucalyptus leucoxylon)	Manchurian Pear *(Pyrus ussuriensis)*	**Grey Box Gum *(Eucalyptus microcarpa)***
Hallet Road	Various Eucalypt	Tuckeroo *(Cupaniopsis anacardiodes)*	**Manchurian Pear *(Pyrus ussuriensis)***
Marble Terrace	*SA Blue Gum (Eucalyptus leucoxylon)*	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*	**Zelkova *(Zelkova serrata)***
Willowbridge Grove	—	**Willow Myrtle *(Agonis flexuosa)***	**Wilga (Geijera parviflora)**

Toorak Gardens

Like Tusmore, the suburb of Toorak Gardens has a well developed treescape that is dominated by a few species such as *Jacaranda, Melia and Prunus*. The condition of the Melia is declining rapidly and will present some replacement issues in the coming years. The use of the low fruiting variety offers some potential to retain this species as the choice of tree for the suburb however as an alternative the *Pistacia and Zelkova* may be appropriate.

The prevelance of wide verges provides ample opportunity to retain the large canopied tree species but it may be appropriate to ALTERNATIVE these trees with smaller varieties under powerlines to avoid some of the historically disfiguring pruning programs undertaken by the utility providers that have affected the *Melia* in the past.

Some of the recent replacement initiatives using *Fraxinus pennslyvanica* 'Urbanite' have not been offerly succesful and will require some further work to restore the streetscape amenity however *Fraxinus pennslyvanica* Cimmaron or F. 'Raywoodi' appear to be a suitable replacement species.

Toorak Gardens

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Alexandra Avenue	White Cedar *(Melia azadarach)*, English Oak *(Quercus robur)*	Chinese Pistachio *(Pistacia chinensis), Quercus palustris*	***Toona australis*, Cornish Elm *(Ulmus cornubiensis)***
Arthur Street	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	**Chinese Rain Tree *(Koelreutaria bipinnata)***
Barker Grove	Kurrajong *(Brachychiton populneus)*	Illawarra Flame Tree *(Brachychiton acerifolius)*, Kurrajong *(Brachychiton populneus)*	**Tuckeroo *(Cupaniopsis anacardiodes)*, *Flindersia maculosa*, *Flindersia australis***
Bolingbroke Grove	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Illawarra Flame Tree *(Brachychiton acerifolius)*	**Chinese Pistachio *(Pistacia chinensis)*, Cornish Elm *(Ulmus cornubiensis)***
Chatsworth Avenue	White Cedar *(Melia azadarach)*, Jacaranda *(Jacaranda mimosifolia)*	Claret Ash (Fraxinus 'Raywood'), Claret Ash (Fraxinus 'Raywood'), Jacaranda *(Jacaranda mimosifolia)*	**Claret Ash *(Fraxinus 'Raywood')*, Chinese Pistachio *(Pistacia chinensis)***
Christie Avenue	White Cedar *(Melia azadarach)*	Chinese Pistachio *(Pistacia chinensis)*	**Chinese Tallow Tree *(Sapium***
Cudmore Avenue	White Cedar *(Melia azadarach)*	Claret Ash (Fraxinus 'Raywood'),	**Claret Ash *(Fraxinus 'Raywood')* Chinese Tallow Tree *(Sapium serbiferum)***
Elliot Street	Kurrajong *(Brachychiton populneus)*	Jacaranda *(Jacaranda mimosifolia)* Kurrajong *(Brachychiton populneus)*	**Chinese Pistachio *(Pistacia chinensis)*, Tuckeroo *(Cupaniopsis***
Fergusson Street	Flowering Plum *(Prunus cerasifera)*,	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Manchurian Pear *(Pyrus ussuriensis)***
Grandview Grove	White Cedar *(Melia azadarach)*,	Chinese Pistachio *(Pistacia chinensis)*, Jacaranda *(Jacaranda mimosifolia)*	**Chinese Tallow Tree *(Sapium serbiferum)***
Grant Avenue	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Hewitt Avenue	Kurrajong *(Brachychiton populneus)*, *Queensland Box*, Chinese Elm *(Ulmus parvifolia)*	Kurrajong *(Brachychiton populneus)*, Illawarra Flame Tree *(Brachychiton acerifolius)*, Chinese Elm *(Ulmus parvifolia)*	***Flindersia maculosa*, Willow Myrtle *(Agonis flexuosa)*, Chinese Tallow Tree *(Sapium serbiferum)***
Leighton Walk	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Tallow Tree *(Sapium***
Lloyd Street	White Cedar *(Melia azadarach)*	Tuckeroo *(Cupaniopsis anacardiodes)*	***Toona australis***
Martindale Avenue	White Cedar *(Melia azadarach)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Chinese Tallow Tree *(Sapium***
Moore Street	White Cedar *(Melia azadarach)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Ivory Curl Flower *(Buckinghamii***
Ormond Grove	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*	***Flindersia maculosa***
Raymond Walk	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Illawarra Flame Tree *(Brachychiton acerifolius)*	**Chinese Tallow Tree *(Sapium serbiferum)*, Kurrajong *(Brachychiton populneus)***
Sprod Avenue	White Cedar *(Melia azadarach*	Jacaranda *(Jacaranda mimosifolia)*, Kurrajong *(Brachychiton populneus)*, Claret Ash (Fraxinus 'Raywood'), Claret Ash (Fraxinus 'Raywood')	**Zelkova *(Zelkova serrata)*, Illawarra Flame Tree *(Brachychiton acerifolius)*, *Toona australis***
St Albyns Avenue	Jacaranda	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Tallow Tree *(Sapium***
Sturt Street	White Cedar *(Melia azadarach)*	Golden Rain Tree *(Koelreutaria paniculata)*, Chinese Pistachio *(Pistacia chinensis)*	**Zelkova *(Zelkova serrata)*, *(Toona australis)***
Swaine Avenue	White Cedar *(Melia azadarach)*	Chinese Elm *(Ulmus parvifolia)*	**Cornish Elm *(Ulmus cornubiensis)***
Warwick Avenue	White Cedar *(Melia azadarach)*	Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia***
Watson Avenue	White Cedar	White Cedar (Melia azadarach) Jacaranda *(Jacaranda mimosifolia)*	**Chinese Pistachio *(Pistacia chinensis)***
Giles Street	White Cedar *(Melia azadarach)* Chinese Elm *(Ulmus parvifolia)*	Chinese Elm *(Ulmus parvifolia)* Zelkova *(Zelkova serrata)*	**Chinese Pistachio *(Pistacia chinensis)* Chinese Tallow Tree *(Sapium***

Tusmore

Its not hard to imagine a more well-known suburb in Adelaide than that of Tusmore. It is synonymous with Jacaranda flowers and is a flagship suburb of the City. The dominant tree species is *Jacaranda* but there are a few streets of established and healthy *Fraxinus.*

Replacement tree species have been dominated by Jacaranda but recent replacement initiatives in the late 1990's have not been successful and in some streets replacement plantings have been undertaken twice. There is a growing use of *Fraxinus* 'Raywoodi' and *Pyrus ussuriensis.*

Replacement programs in the coming years will need to address the declining health of the older Jacarandas and may require significant resourcing to maintain the streetscape amenity these trees bring to the suburb.

Streets adjacent to Tusmore Park could be planted with stand-alone examples of the local indigenous trees such as *Eucalytpus leucoxylon* and *Acacia melanoxylon* to broaden the palette of tree species around this iconic park.

Tusmore

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Fisher Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Crab Apple *(Malus ionensis)*	Chinese Pistachio *(Pistacia chinensis)*, Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*
Bakewell Street	Desert Ash (Fraxinus oxycarpa) (Fraxinus oxycarpa 'Aurea') *(Fraxinus oxycarpa)*	Claret Ash (Fraxinus 'Raywood'), Claret Ash (Fraxinus 'Raywood')	Chinese Pistachio *(Pistacia chinensis)*, Crab Apple *(Malus ionensis)*
Barr Smith Street	*Manchurian Pear, Claret Ash*	Claret Ash *(Fraxinus 'Raywood')*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Crab Apple *(Malus ionensis)*
Rothbury Avenue	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus 'Raywood')* Chinese Pistachio *(Pistacia chinensis)*	Chinese Pistachio *(Pistacia chinensis)*, Crab Apple *(Malus ionensis)*
Lynington Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Zelkova *(Zelkova serrata)*
Treacy Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Zelkova *(Zelkova serrata)*
Kennaway Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus 'Raywood')*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Capitol Pear *(Pyrus calleryana 'Capitol')*
Rivington Grove	Box elder (Acer negundo)	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*, Zelkova *(Zelkova serrata)*
Northumberland Street	Oriental Plane Tree *(Platanus orientalis)*, Jacaranda *(Jacaranda mimosifolia)*	Oriental Plane Tree *(Platanus orientalis)*, Jacaranda *(Jacaranda mimosifolia)*	*Platanus*, Cyprian Plane *(Platanus insularis)*, Chinese Pistachio *(Pistacia chinensis)*
Tusmore Avenue	Desert Ash (Fraxinus oxycarpa)	Chinese Pistachio *(Pistacia chinensis)*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Tallow Tree *(Sapium serbiferum)*, Zelkova *(Zelkova serrata)*
Burke Street	Jacaranda *(Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Capitol Pear *(Pyrus calleryana 'Capitol')*
Hyde Street	*Prunus cerasifera 'nigra' and Jacaranda (Jacaranda mimosifolia)*	Jacaranda *(Jacaranda mimosifolia)*, Manchurian Pear *(Pyrus ussuriensis)*	Chinese Pistachio *(Pistacia chinensis)*, Capitol Pear *(Pyrus calleryana 'Capitol')*
Brandreth Street	Desert Ash (Fraxinus oxycarpa)	Claret Ash *(Fraxinus 'Raywood')*, Claret Ash (Fraxinus 'Raywood')	Claret Ash (Fraxinus 'Raywood'), Chinese Pistachio *(Pistacia chinensis)*
Greenhill Road	Kurrajong *(Brachychiton populneus)* Queensland Box *(Lophostemon conferta)*	Kurrajong *(Brachychiton populneus)*	Kurrajong *(Brachychiton populneus)*

Wattle Park

Wattle Park covers sections both east and west of Penfold Road and borders the suburb of Stonyfell to the south. The current selection of tree species is very diverse and to some extent disparate with the streetscape character. The housing stock is similarly diverse with most from around the 1960/70's. There is an increasing level of infill development occuring in sections between Kensington, Penfold and Stonyfell Roads.

The current stock of plantings is dominated by Agonis, Lophostemon, and Prunus. There are many remnant trees growing in Wynyard Grove and Wanbrow Avenue that require special attention given the emphasis being placed on road rebuilding programs. The location of kerb and water table infrastructure has to be reviewed to ensure that these trees are retained in the longer term. There is a potential that these types of streets could be modified to limit flow through traffic to create small cul de sacs.

The use of some of the smaller site specific Malus and or Pyrus has to be limited to the narrower streets in preference to mass plantings because of their success rates. It is envisaged that the use of the smaller local indigenous trees like Eucalyptus microcarpa should be promoted where possible.

Wattle Park

STREET TREE REPLACEMENT

STREET	CURRENT SPECIES	REPLACEMENT SPECIES	ALTERNATIVE SPECIES
Caloroga Street	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Manchurian Pear *(Pyrus ussuriensis)***
Carunta Avenue	Willow Myrtle *(Agonis flexuosa)*	Manchurian Pear *(Pyrus ussuriensis)*, Willow Myrtle *(Agonis flexuosa)*	—
Caryn Place	No specific dominant species	Kurrajong *(Brachychiton populneus)*	**Zelkova *(Zelkova serrata)***
Clark Street	Various Eucalypts	Golden Rain Tree *(Koelreutaria paniculata)*	**Zelkova *(Zelkova serrata)***
Cooper Angus Grove	*(Pinus halepensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	**Red Flower Gum *(Corymbia ficifolia 'Sunset')***
Crompton Dr	Queensland Box *(Lophostemon conferta)*	Manchurian Pear *(Pyrus ussuriensis)*	**Claret Ash *(Fraxinus 'Raywood')***
Darrell Avenue	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Manchurian Pear *(Pyrus ussuriensis)***
Frontignac Avenue	*Liquidamber*	Chinese Pistachio *(Pistacia chinensis)*	**Manchurian Pear *(Pyrus ussuriensis)***
Gordo Avenue	Manchurian Pear	Manchurian Pear *(Pyrus ussuriensis)*	**Crab Apple *(Malus ionensis)***
Grenache Avenue	Various Eucalypts	Manchurian Pear *(Pyrus ussuriensis)*	**Crab Apple *(Malus ionensis)***
Hambour Place	No defined species	Crab Apple *(Malus ionensis)*	**Crepe Myrtle *(Lagerstroemia x indica 'Biloxi')***
Illfracombe Drive	River Red Gum *(Eucalyptus camaldulensis)*	Crab Apple *(Malus ionensis)*	**Crepe Myrtle *(Lagerstroemia x indica 'Sioux')***
Joseph Avenue	No defined species	—	***Wilga (Geijera parviflora)***
Kamali Avenue	Native Frangipani *(Hymenosporum flavum)*	Native Frangipani *(Hymenosporum flavum)*	**Willow Myrtle *(Agonis flexuosa)***
Kensington Road	Queensland Box	Tuckeroo *(Cupaniopsis anacardiodes)*	***(Flindersia maculosa)***
Loma Linda Grove	Queensland Box *(Lophostemon conferta)*	Willow Myrtle *(Agonis flexuosa)*	**Crab Apple *(Malus ionensis)***
Muscatel Avenue	No defined species	*Manchurian Pear (Pyrus ussuriensis)*	**Crab Apple *(Malus ionensis)***
Penfold Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	***(Flindersia maculosa)***
Redounau Crescent	Queensland Box	Grey Box Gum *(Eucalyptus microcarpa)*	***Wilga (Geijera parviflora)***
Riesling Crescent	Manchurian Pear	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Manchurian Pear *(Pyrus ussuriensis)***
Rosedale Avenue	Golden Rain Tree *(Koelreutaria paniculata)*	Golden Rain Tree *(Koelreutaria paniculata)*	***Wilga (Geijera parviflora)***
Simpson Road	Queensland Box *(Lophostemon conferta)*	Chanticleer Pear *(Pyrus calleryana 'Chanticleer')*	**Grey Box Gum *(Eucalyptus microcarpa)***
Stonyfell Road	River Red Gum *(Eucalyptus camaldulensis)*	Grey Box Gum *(Eucalyptus microcarpa)*	
Wahroonga Avenue	Willow Myrtle	Willow Myrtle *(Agonis flexuosa)*	**Manchurian Pear *(Pyrus ussuriensis)***
Wanbrow Avenue	Bottlebrush (Callistemon viminalis)	Crab Apple *(Malus ionensis)*, Willow Myrtle *(Agonis flexuosa)*	**Crab Apple *(Malus ionensis)***
Wyfield Road	Queensland Box *(Lophostemon conferta)*	Tuckeroo *(Cupaniopsis anacardiodes)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Wynyard Grove	Willow Myrtle	Willow Myrtle *(Agonis flexuosa)*	**Tuckeroo *(Cupaniopsis anacardiodes)***
Yeltana Avenue	Willow Myrtle *(Agonis flexuosa)*	Willow Myrtle *(Agonis flexuosa)*	**Manchurian Pear *(Pyrus ussuriensis)***
Woodhouse Crescent	**No defined species**	—	—

This page intentionally blank

Vegetation Management Plans

The City of Burnside is noted for its well-established and maintained parks and reserves. Hazelwood Park is a listed 'local heritage item' and Kensington Park was Don Bradman's 'backyard'.
The City is proud of the heritage created by our forebears.

The creation of strategies to nurture and maintain our parks and reserves is now an obligation under the Local Government Act 1999 (the Act) and tree management is a vital part of this responsibility.

The Act introduced the concept of 'community land', and nominated Councils as the custodians of land for the benefit of current and future generations of the community. Section 193 of the Act defines community land as:

> *All local government land (except roads) that is owned by a council or under the council's care, control and management.*

Council recognises community land as an important component of the urban environment, providing space for leisure and recreation activities. It is a requirement that Council has a Community Land Management Plan (CLMP) for any community land that we own and manage.

A CLMP identifies an area of land as a community facility, and provides authority to control the future uses, development and maintenance of that land. It aims to balance the preservation of the unique features of the site with community needs for open-space recreation facilities. A CLMP provides a framework within which Council can develop a balanced response to present and future opportunities and pressures.

The Council's CLMP establishes strategic approaches and clear objectives for the management and maintenance of Burnside's parks and reserves; clarifies direction, both to Council staff and the general public; and assists Council to assign priorities in budgeting and works programming.

While there are at least 11 different categories of community land across the City, the main parks and reserves can be defined within six categories and include:

- regional parks and reserves,
- foothills and hills face reserves,
- special feature reserves,
- neighbourhood parks,
- pocket parks, and
- local sports parks.

Any future tree management strategies for the City's parks and reserves will sit within Council's CLMP and will be a key component of any individual Master Plan for the reserve or park.

Traditionally vegetation management plans speak to the actual operational management of vegetation existing within the reserve. These plans address how and when vegetation is managed to create or facilitate the long term direction set by the Master Plan document.

For the purposes of the Urban Tree Strategy 2014 - 2025 the term 'vegetation management plans' discusses the future replacement and guiding principles concerning tree planting. It can, in some cases, extend into all vegetation strata including understorey herbaceous material but in the broader context these plans will only address in very broad terms, future and dominant tree species or species type that are required within a given area of the reserve or park.

To assist with the formulation of these documents a template has been created to outline key issues and actions required to meet the broader objectives of the Urban Tree Strategy within each Reserve.

These include:

- tree coverage and condition rating;
- special features;
- replacement themes;
- priority replacement: low, medium, high; and
- risk management rating.

Actions:
Where issues for a particular site are more complex, site-specific vegetation management plans that are part of the broader Master Plan process shall be created.

These areas include Tusmore Park, Hazelwood Park, Kensington Gardens Reserve and Kensington Park Reserve, given their prominence and level of recreational and sporting activity that occurs on the sites.

This does not preclude opportunities for developing new vegetation styles, consistent with Council's strategic goals within reserves of such importance, but invariably these reserves are traditional in nature and status, have very defined mature vegetation that is or should remain for the foreseeable future or have very clear boundaries to the extent of land that can or may be given over to open space, as opposed to new sporting or recreational opportunities.

An example of a Vegetation Management Plan for Tusmore Park has been provided as a guide to documents that shall be created in the coming years and over the life of the Urban Tree Strategy 2014 – 2025..

Actions:
In principle, and in accordance with Council's Watercourse Policy, all watercourse areas will be re-vegetated with local indigenous species and managed sustainably. All development sites will be planted with local indigenous plants in preference to exotic or non-local Australian natives. It is considered that in areas such as this that the Biodiversity Strategy and the actions arising from that document will take precedence.

Vegetation management plans for the listed Hills Face Reserves follows action management plans already developed such as the Southern Hills Face Reserves Vegetation Management Plan.

REGIONAL PARKS AND RESERVES

Hazelwood Park

Hazelwood Park is an iconic Burnside feature park synonymous with expansive grassed areas, large stately trees and one of the state's most popular swimming centres. The landscape is dominated by large stands of River Red and South Australia Blue Gums. The south-western side of the park contains many mature, exotic species interspersed with native trees..

In early colonial times the area was open grassland paddock that was heavily grazed. The State Government handed over control of the park to the City of Burnside in the early 1940s. Within the heart of the park is a heritage listed war memorial avenue planting of Sugar Gum (Eucalyptus cladocalyx). Specific details can be found in Section 8.

On the surface, the Reserve appears to be in good condition; however, many of its trees are nearing senescence, and present significant structural faults that may become apparent in the coming decades.

The Reserve is no longer an open country park, but a well patronised event-based reserve, utilised throughout the year, particularly in summer. Due to its year round usage it is necessary to adopt some prudent risk management controls and actions with respect to the vegetation..

The condition of the River Red Gums and SA Blue Gum (Eucalyptus leucoxylon)s is rated as average to good. Most of the structural issues relate to age and sporadic maintenance. The remaining trees, including some of the exotic mature trees to the west of the main reserve (Hawthorn Crescent) are in a relatively poor state with numerous previous wound points, high deadwood content, structural faults and an increasing level of dieback.

Past maintenance has been reactive, stopping short of addressing wound points, branch break-outs, die-back in the upper canopy, and significant decay or hollow points. The level of recent replacement plantings has not been high enough to adequately cover for the period when the senescent trees finally succumb. This is nearing a critical stage, with young trees not sufficiently developed to replace the older trees as they die.

The essential elements to a Vegetation Management Plan will be directed to maximising the retention of existing senescent indigenous trees in a condition that reduces safety risks. The majority of changes to vegetation and tree coverage will occur around the central creek system with the majority of changes associated with converting exotic weed species trees with indigenous riparian vegetation types.

A general exception to this overall approach will be the retention of select mature historic trees that link to known cultural infrastructure but as these trees reach the end of their natural life they will be replaced by sustainable indigenous trees. The woodland type tree coverage will remain and be enhanced through indigenous riparian vegetation types over time.

Priority areas for risk abatement include areas around playspaces, main seating zones, and main pedestrian traffic routes. The main car park area remains a high priority given the consistant volume and frequency of use.

The recent storm event that hit the City in February 2014 caused a significant level of damage to the remnant trees growing within Hazelwood Park. The intensity and direction of prevailing winds during the event caused varying levels of damage to main trunks and branch systems. In some cases this has required the total removal of trees or heavy formative and corrective pruning to address structural defcts that arose fromk those winds.

As such a complete review and inspection of all major trees within the reserve was undertaken as a matter of priority. The audit has to a large extent identified a range of ongoing management issues that will need to be undertaken to ensure all trees within the reserve are regularly audited for risk safety.

Kensington Gardens Reserve

Kensington Gardens Reserve contains a diverse range of sporting facilities including those for cricket, rugby, and tennis with a large area given over to various 'passive recreation' activities such as walking, bike riding, and dog walking. There are two major playground features that are well utilised. The landscape is open space with two major ovals, and numerous public and leased tennis courts.

The main open space area is linked by Second Creek, dominated by a mixed blend of large stands of River Red Gums, small clumps of SA Blue Gum (Eucalyptus leucoxylon) and sections of exotic infill plantings along the northern boundary. The majority of trees are in average to fair condition with a few rated as poor to dangerous.

The dominant planting theme is will be local indigenous species of River Red Gum and SA Blue Gum (Eucalyptus leucoxylon) with supporting riparian vegetation along the main creek system There are existing mature exotic tree plantings adjacent to cultural boulevards and isolated specimens of some dubious historical significance that will be replaced over time.

The prevalence of Australian native species such as Lemon Scented, Spotted and hybrid SA Blue across the entire reserve is not unusual given most were planted through the 1960's & 70's.

It is intended that any replacement plantings (for the Australian native species in particular) is shifted towards local indigenous trees. The existing mature exotic plantings may be retained where appropriate, particularly the cultural boulevards in the centre of the reserve but as these trees reach the end of their natural life they will be replaced by sustainable indigenous trees in preference to exotic trees.

Risk management protocols see a focus on car parking areas, playgrounds, sporting facilities seating areas and BBQ meeting places. Open space 'passive recreation' sites are considered a lower priority.

Kensington Park Reserve

This area previously known as the Olympic Sports Field and now renamed Kensington Oval has to some extent had a makeover in the late 1990's. The main section of open space is essentially managed by Pembroke College under a long term lease agreement. The dominant large tree stocks are local indigenous River Red (Eucalyptus camaldulensis) and SA Blue Gum (*Eucalyptus leucoxylon*). Through the 1990's reconstruction works a number of standalone Australian native trees were used to increase urban tree coverage to the site.

In the early 2000's the eastern edge of the reserve was rehabilitated adjacent to an old drainage reserve. This landscape now dominates this section of the reserve to suggest it is now a separate space from the main recreational zones of the park.

The exotic plantings are all over-mature and nearing senescence and are specimens historically linked to previous private ownership, particularly the established Moreton Bay Figs and Elms on the western side of the main park near the car parking areas.

It is planned that any replacement initiatives follow a similar theme whereby Australian native trees are replanted with local indigenous species whilst the existing exotics are slowly phased out where possible.

Risk management has to address the inherent structural problems with the River Red Gums in both the western and eastern car parking areas. Those in the eastern sections are sound, while those in the south and north sections need review and appropriate maintenance.

Tusmore Park

Tusmore Park is a significant family based Reserve within the heart of Tusmore. There are many aged, remnant trees within close proximity to high-use areas, such as the children's wading pool, tennis courts and primary passive recreation areas on the southern side of the reserve. There is a small level of isolated, aged exotic plantings towards the western side closer to Stirling Street frontage, as well as a small pocket in the central eastern edge near the tennis courts. Of particular note is the First Creek watercourse that runs almost directly through the centre of the Reserve.

The level of required tree maintenance varies throughout the Reserve. Most trees have a high degree of dead wood and previous break-out points that have led to increasing decay within the main trunks. This raises the risk level where trees are within close proximity to higher use areas such as the pool and tennis courts.

A long-term tree management plan will take into account the fact that the local indigenous trees are all located closer to the main creek line and are over-mature, with life expectancy varying from 20 to 60 years (unless they experience catastrophic failures).

The exotic infill plantings are senescent and in some cases dying. Recent major trunk and branch failures (during the drought conditions of the late 2000's) have a direct impact on the visual and physical presence that the exotic trees bring to the park.

It is suggested that maintenance regimes are directed to high traffic areas such as the car parks, main pedestrian traffic routes and play space sites.

The balance between exotic and local indigenous plantings is considered acceptable and should be maintained for the time being noting that any replacement initiatives should follow a similar theme whereby Australian native trees are replanted with local indigenous species to create a similar feel.

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	TREE CONDITION RATING	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Hazelwood Park — Burnside Swimming Centre	Open Space/ Playground/ BBQ/Swimming Pool	Majority Local Indigenous, Aust Native secondary infill, Minor exotic planting	Local Indigenous: Poor, Aust Native: Average, Exotic: Average	Local Indigenous	Local Indigenous: High, Exotic: Low	High around car parks areas/ swimming pool/BBQ facilities and event areas

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	TREE CONDITION RATING	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Kensington Gardens Reserve	Open Space/Tennis Courts /Playground/ BBQ/ Sporting facilities	Local Indigenous, Aust Native, Exotic spread throughout	Local Indigenous: Average/Poor, Aust native: Good/ Average, Exotic: Average	Dominant Local Indigenous, Exotic infill plantings gradually phased out	Medium/High	Medium/High Around Playground and high traffic areas, car parks, sporting areas, BBQ facilities

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	TREE CONDITION RATING	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Kensington Park Reserve	Open Space/ Playground sporting recreation	Aust native Local Indigenous, Exotic infill	Exotic: Average to good, Local Indigenous: Average/Poor, Aust native: Average	Local Indigenous, Exotic infill gradually phased out	Medium Low	Medium High around car park areas, paths, BBQ facilities, sporting areas.
Kensington Park Reserve	Car Park/Open Space	Local Indigenous, Exotic infill	Local Indigenous: Average, Exotic: Average	Local Indigenous	Medium/Low	Medium around car parks, paths, seating

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	TREE CONDITION RATING	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Tusmore Park	Open Space/ Playground sporting recreation	Local Indigenous with low, Exotic infill	Exotic: Average to poor, Local Indigenous: Average/Good, Aust native: Average	Local Indigenous, Exotic infill gradually phased out	Medium	High around wading pool and tennis courts. Medium around paths and general passive rec areas.

Foot Hills and Hills Face Reserves

The Foothills and Hills face areas of the City are unique, and have considerations distinct from those of more established parks and reserves. Their management is a complex matter. Unfortunately, many of the reserves comprise land recovered from other agencies, or land that has never been considered to be appriopriate for development. Many reserves were once old drainage areas and are heavily infested with woody weeds seeded from other areas. In many cases bushfire risk is a major concern.

Management objectives for the Hills Face reserves are presented in the Council-endorsed *Hills Face Reserves Management Plan (1995)* and the *Auldana Reserves Action Plan, and the recently endorsed Southern Hills Face Reserve Vegetation Management Plan 2012*. Council is in the process of developing additional M<anagement Plans for both the central and northern hills face reserves.
It is expected that both documents will mirror the format and content as discussed within the Southern Hills Face Reserve Management Plans.
Within all documents reference will be made to future proofing existing vegetation strata and dominant tree coverage. Many of the actions associated with vegetation management and retention promotion of tree canopy coverage with each of the reserves and the principles followed are addressed through the Biodiversity Strategy 2008.

Key objectives sought through these types of management plans include:

- conserve and restore native flora,
- gradually eliminate weedy species,
- restore appropriate indigenous tree cover,
- develop other habitat, and
- manage vegetation to reduce fire hazard and maintain accessibility.

Achieving these objectives requires the removal of inappropriate feral woody weed tree species and the replacement and regeneration of indigenous species more suitable to the environment and climate. It is intended that all management plans will focus ultimately on achieving a suatinable landscape. The table below outlines the existing tree cover in hills face reserves and the appropriate tree species to develop in these reserves.

Hills Face Road Reserves

Road verges in the hills face areas fall into three categories according to the density of housing along them:

- residential streets,
- undeveloped residential streets, and
- Unmade roads.

Some roads display the features of more than one category. Where road verges contain significant native flora, blue roadside markers are positioned along the edge of the verge. These markers comply with the State standard for the marking of significant roadside vegetation.

There are nine of these marked roads in the city of Burnside.

RESERVE NAME	EXISTING LANDSCAPES AND	APPROPRIATE REPLACEMENT TREE SPECIES
Danthonia Reserve	Scattered indigenous trees, thick olive and some hawthorn	River Red Gum *(Eucalyptus camaldulensis),* SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon),* Grey Box Gum *(Eucalyptus microcarpa), (Allocasuarina verticillata)*
Gully Reserve	Scattered indigenous, some planted Australian	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon),* Grey Box Gum *(Eucalyptus microcarpa), (Eucalyptus viminalis), (Allocasuarina*
Zig-Zag Reserve	Scattered indigenous, thick olive and pine	River Red Gum *(Eucalyptus camaldulensis), (Allocasuarina verticillata)*
Wheal Gawler Mine Reserve	Scattered olive. pine and hawthorn	*(Allocasuarina verticillata),* River Red Gum *(Eucalyptus camaldulensis),* SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*
Chimney Reserve	Australian native. some olive	*(Allocasuarina verticillata)*
Chamber s Gully Reserve	Native woodlands of several indigenous species, areas of	River Red Gum *(Eucalyptus camaldulensis), (Eucalyptus viminalis),* SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon), (Allocasuarina*
Gleeson Hill Reserve	None	*(Allocasuarina verticillata)*
Auldana South Reserve	Native woodlands with areas of olive	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon),* Mallee Box Gum (*Eucalyptus porosa), (Allocasuarina verticillata)*
Auldana North Reserve	Small area of native woodland with indigenous	Mallee Box Gum (*Eucalyptus porosa),* SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*
Wyfield Reserve	Native woodland with thick	Mallee Box Gum (*Eucalyptus porosa)*
Laver s Reserve	Native woodland with thick	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*
Waterfall Gully Reserve	Thick pine	*(Eucalyptus viminalis),* SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus*
Dashwood Gully Reserve	Scattered pine and sallow wattle	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon),* Grey Box Gum *(Eucalyptus microcarpa), (Allocasuarina verticillata)*
Magill Stone Mine Reserve	Some native woodland relics,	Mallee Box Gum (*Eucalyptus porosa),* SA Blue Gum (Eucalyptus leucoxylon)
Queens Avenue closure	Some exotics and indigenous	Grey Box Gum *(Eucalyptus microcarpa), (Allocasuarina verticillata)*

Residential streets in the hills face have trees that depict a mix of remnant indigenous species together with various horticultural plantings. Indigenous trees should be encouraged in order to create a natural appearance in the streetscape. The use of indigenous trees and plants on road verges also ensures that nearby native vegetation is not compromised by weed invasion or hybridisation. Plantings on road verges will be negotiated with residents as they often have a personal affiliation for the road verge adjacent their property.

Less developed roads in the hills face are characterised by low housing density, and are less affected by the planting practices of adjoining residents. They therefore have significant populations of native wild flora. This can also apply to verges behind adjoining properties, where impact from residential use is not as high. Management should aim at protecting and restoring indigenous native vegetation on these verges.

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	TREE CONDITION RATING	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Alexandra Avenue Reserve	Open Space/ Historical Significance	Dominant Exotic	Average/Poor	Exotic	Medium/High	Medium/Low
Beaumont Common	Open Space	Local Indigenous, Exotic infill	Average/Good	Local Indigenous	Low	Low
Davenpor t Olive Reserve	Exotic/historical	Exotic	Average/Good	Local Indigenous/ Exotic	Low	Low
Fergusson Square	Open Space/ Playground/ feature	Exotic	Average/Good	Exotic	Medium/Low	Low
JV Allen Mine Reserve	Open Space	Aust native, Exotic	Average	Exotic Local Indigenous	Low/Medium	Low
Kensington Road Lookout	Look out car park	Aust native/ Exotic/ Local indigenous	Average	Local Indigenous	Medium/Low	Low
Linden Gardens	Open Space/ Feature	Local Indigenous, Aust Native	Juvenile Good	Local Indigenous	Low	Low
Magill Olive Gr & Stone Mine	Features/Historic	Local indigenous/ Feral Weed Trees	Average/Good	Local Indigenous	Low	Low
Michael Perr y Botanic Reserve	Open Space/Feature/ Playground	High Exotic/Local Indigenous and Aust native infill	Ver y poor	Exotic/Local Indigenous	Ver y High	High
Wheal Gawler Reserve	Feature/Historical	Local Indigenous and Exotic dominates some Aust Native	Average	Local Indigenous/ Exotic	Medium/Low	Medium

Unmade road reserves provide a good opportunity for walking trail development and native flora restoration. Vegetation at these sites should reflect the indigenous flora of the area. Roads within the hills face zone are listed below

SIGNIFICANT ROADSIDE VEGETATION- MARKED SECTIONS OCCUR ON THE FOLLOWING ROADS			
MARKER	LENGTH	ROAD	VEGETATION TYPE
1	200 m	Haven Road	SA Blue Gum *(Eucalyptus leucoxylon)* woodland
2	10 m	Haven Rd	*(Hymenanthera)* sp.
3	200 m	Knox Terrace	Mallee Box Gum *(Eucalyptus porosa)* woodland
4	1 km	Old Bullock Track, W side	*(Eucalyptus obliqua),* SA Blue Gum *(Eucalyptus leucoxylon)*
5	1 km	Old Bullock Track, E side	*(Eucalyptus obliqua),* SA Blue Gum *(Eucalyptus leucoxylon)*
6	200 m	Mt Osmond Road, near S end	*(Eucalyptus viminalis)*
7	20 m	Mt Osmond Rd, op no 71	SA Blue Gum *(Eucalyptus leucoxylon), (Themeda)* sp.
8	100 m	Mt Osmond Road, op no 75	SA Blue Gum *(Eucalyptus leucoxylon)*
9	300 m	Waterfall Gully Road	Grey Box Gum *(Eucalyptus microcarpa)* woodland
10	300 m	Coach Rd	Mallee Box Gum *(Eucalyptus porosa)* grassland
12	150 m	Ifould Drive	Remnant grassy understorey
13	100 m	Old Mt Barker Road	Very diverse SA Blue Gum *(Eucalyptus leucoxylon)* woodland
14	200 m	Heatherbank Terrace	Grey Box Gum *(Eucalyptus microcarpa)* woodland

Special Feature Reserves

The special feature reserves are dominated by three 'iconic reserves': The Common, Michael Perry Reserve and Alexandra Avenue/Prescott Terrace Reserve. All possess unique features and are dominated by distinctive tree planting themes.

The Common is dominated by local indigenous species, with stand-alone exotic specimens. The recent soft landscape works around the base of the old Grey Box and SA Blue Gum (Eucalyptus leucoxylon)s has been a very positive measure, and will certainly improve the health of all the old gums.

Michael Perry is both historically and botanically significant with a diverse range of exotic tree species interspersed with the occasional local indigenous tree. The Michael Perry Reserve Vegetation Management Plan details how the site will be managed into the longer term taking into consideration the return of the waterway to a healthy riparion state, propogation of natural indigenous species, removal of exotic weedy species and the retention of the historic exotic central garden area.

Alexandra Avenue/Prescott Terrace Reserve is a listed 'War Memorial Avenue' and has both cultural and historical significance for its residents and the state as a whole. Smaller reserves, such as Linden Gardens, Allen Mine and Fergusson Park, are all rated as low-risk, as the trees are either small, young, or located on the outer edges of the Reserve.

Action:
The Common is well-maintained and cared for by the Parks and Biodiversity units. Current management practices must expand mulch beds beneath all existing remnant trees to promote correct microbial activity, in this and other, similar areas. (A similar technique is being developed and practised in Heywood Park, Unley.).

Although Alexandra Avenue is directly linked with Prescott Terrace as the 'War Memorial Avenue', the overall condition of the trees in Prescott Terrace, particularly the English Elms, is significantly poorer than that of Alexandra Avenue. The preservation of both iconic tree avenues is a high priority and as such a long term management plan was endorsed by Council in 2011
The gradual replacement of these avenues is now defined by that management plan, the installation of supportive Glenelg Adelaide Pipeline (GAP) water to both avenue plantings in 2011/12 now ensures a consistant and regulated water supply during periods of extreme drought.

The ongoing treatment and control of the Elm Leaf Beetle will be a challenge that requires adequate resourcing. Whilst there is no known permanent treatment that removes Elm Lefaf Beetle it is suggested any failure to reduce or stop this treatment to the avenue plantings will have a dramatic and fatal impact on the continued use of the English Elm (Ulmus procera) as the prefered tree species for the avenues.

ROADS WITHIN THE HILLS FACE ZONES			
LEAWOOD GARDENS	MARKER NO.	TYPE	DESIRED TREE POPULATION
Mt Barker Road	14	Less developed	Very significant flora at Eagle on the Hill, SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)* restoration
Old Bullock Track	4,5	Less developed	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*, *(Eucalyptus* viminalis), (*Allocasuarina*
MT. OSMOND	MARKER NO.	TYPE	DESIRED TREE POPULATION
Mt Osmond Road, made	6,7,8	East less developed, West residential	Flora conservation, SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*, *(Eucalyptus viminalis), (Allocasuarina verticillata)*
Mt Osmond Road, unmade		Unmade	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*, (*Allocasuarina verticillata)* Potential walking trail site
Gleneagles Road		Residential	Gradually increase in SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*, *(Eucalyptus viminalis), (Allocasuarina verticillata)*
Hayward Drive		Less developed	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)*, River Red Gum *(Eucalyptus camaldulensis), (Allocasuarina verticillata)*
St Andrews Ave		Residential	*(Allocasuarina verticillata),* Native Cypress Pine *(Callitris gracilis)*
Gill Terrace		Less developed	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon), (Eucalyptus viminalis), (Allocasuarina verticillata)*
Mountainview Place		Residential	*(Allocasuarina verticillata),* Native Cypress Pine *(Callitris gracilis)*
Oceanview Cres		Residential	*(Allocasuarina verticillata)*
Seaview Road		Residential	*(Allocasuarina verticillata)*
Stymie Place		Residential	Native Cypress Pine *(Callitris gracilis)*
Bir kdale Cres		Residential	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon), (Allocasuarina verticillata)*
WATERFALL GULLY	MARKER NO.	TYPE	DESIRED TREE POPULATION
Waterfall Gully Road	9	Less developed marked section, Residential	Grey Box Gum *(Eucalyptus microcarpa),* River Red Gum *(Eucalyptus camaldulensis)*
SKYE	MARKER NO.	TYPE	DESIRED TREE POPULATION
Haven Road	1,2	Less developed	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon)* woodland restoration
Knox Terrace	3	Less developed marked section, Residential	Mallee Box Gum *(Eucalyptus porosa)*
Coach Road	10	Less developed marked section	Mallee Box Gum *(Eucalyptus porosa)*
Windmill Street		Less developed	Mallee Box Gum *(Eucalyptus porosa)*
Bishop Street		Residential	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon), (Allocasuarina verticillata)*
Vale Street		Residential	*(Allocasuarina verticillata)*
Vista Avenue		Residential	SA Blue Gum (Eucalyptus leucoxylon) *(Eucalyptus leucoxylon), (Allocasuarina verticillata)*
Kurrajong Street		Less developed	Mallee Box Gum *(Eucalyptus porosa)*
Homestead Cr		Residential	Mallee Box Gum *(Eucalyptus porosa)*
McBeath Drive		Residential	Mallee Box Gum *(Eucalyptus porosa), (Allocasuarina verticillata)*
Whitbread Grove		Residential	SA Blue Gum *(Eucalyptus leucoxylon)*
BURNSIDE	MARKER NO.	TYPE	DESIRED TREE POPULATION
Greenhill Road		Less developed	Grey Box Gum *(Eucalyptus microcarpa), (Allocasuarina verticillata),* Native Cypress Pine *(Callitris gracilis)*
STONYFELL	MARKER NO.	TYPE	DESIRED TREE POPULATION
Gandys Gully Road		Residential, Less developed	River Red Gum *(Eucalyptus camaldulensis), (Allocasuarina verticillata)*
WATTLE PARK	MARKER NO.	TYPE	DESIRED TREE POPULATION
Kensington Road		Less developed	Mallee Box Gum *(Eucalyptus porosa), (Allocasuarina verticillata),* Native Cypress Pine *(Callitris gracilis)*

Neighbourhood Parks and Reserves

Reserves and parks covered under this section include a diverse range of areas, from unique hills face reserves to large expansive reserves of over 35 000 m². Each has distinctive features and uses, and a dominant planting theme.

Tree coverage within each Reserve is eclectic and does not adhere to an overall theme. This adds to management problems, and complicates risk management for the future.

Risk management priority rating is based on such things as visitation rates, whether the Reserve has a playground, and the proximity of hazardous trees to play equipment.

Replacement themes take into account whether the existing vegetation is appropriate for the area in terms of proximity to the foothills, watercourses or drainage reserves, and the nature of surrounding buildings.

Action:
Prioritisation for replacement considers the condition of existing vegetation and whether the existing vegetation is in keeping with the general character and amenity of the area. Replacement of existing vegetation may be staged over a 10- to 15-year period. Refer to the table adjacent.

Future Vegetation Management Plans will in reality be a low priority or subject to requirements. It is envisaged that existing planting themes will progressively shift away from Australian Native to local indigenous and from exotic to Australian native. Existing stand-alone specimen trees (exotic or Australian Native) may be retained and replaced should these specimens have some local cultural or historical significance.

Pocket Parks

Many of these parks consist of small allotments of open space that may contain a small piece of play equipment or infact isolated stand-alone trees. They may also include large isolated tree specimens of some local historical significance and cannot be dismissed lightly.

Tree coverage is usually concentrated around the perimeter, with stand-alone trees as a feature. Most of the major plantings are old exotic trees with relatively recent Australian native species plantings such as Lemon Scented Gum and Spotted Gum. Each pocket park has a unique character, intimate landscape theme, benches and picnic tables.

Replacement themes will result in a slight shift from Australian native to local indigenous, with exotic plantings gradaully phased out as they expire.

Risk management priority is based on high visitation rates, whether the Reserve has a playground, and the proximity of hazardous trees to play equipment.

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	FUTURE PLANTING THEME	PRIORITY Replacement	RISK Priority
Bell Yett Reserve	Open playing fields, tennis Courts, playfields upgrade to drainage Reserve	Eclectic mix exotic trees and remnant local indigenous trees. Watercourse plantings of local indigenous	Expand indigenous plantings along drainage Reserve. Reduce exotic plantings replace with local indigenous plantings	Medium	**Medium**
Bennett Reserve	Small basic open space Garden beds/single stand alone trees coverage	Exotic/Australian native	Continue eclectic mix but single specimen local indigenous plantings. Exotics gradually phased out over time	Medium	**Low**
W.H. Holmes Reserve	Perimeter tree plantings Aust native.	Dominant Exotic Theme/ Single Aust. Native specimens	Maintain existing, develop exotic central plantings. Aust native/local Indigenous	Medium	**Low**
Ifould Reserve North	Hills Face Reserve. rolling hills, underdeveloped	Local Indigenous dominant eclectic Aust native	Local Indigenous trees and shrubs. Maximise use of space for large species	Low	**Low**
Ifould Reserve South	Hills Face Reserve. rolling hills, underdeveloped	Local Indigenous dominant eclectic Aust native	Local Indigenous trees and shrubs	Low	**Low**
Main Street Reserve	Adjacent to playground, preschool	Local indigenous specimens, a few exotics	Maintain current short term, highly exotic	Low	**High**
Mellor Reserve	Play fields/preschool	Aust natives/ eclectic exotic	Site specific species, exotic/single specimens to be gradually phased out and replaced with indigenous trees	Low	**Low**
Penfold Park	Hills face/ playing fields/playground	Balance between exotic/Aust native	Good to very good	Low	**Low**
T.A. Phillips Reserve	Open space/creek line is focal point	Local indigenous, stand alone exotic species with a few exotics and Aust	Local indigenous trees that suit drainage Reserve	Medium	**Low**
Romalo Reserve	Biodiversity site	Local indigenous tree theme	High local indigenous trees & shrubs	Low	**Low**

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	FUTURE PLANTING THEME	PRIORITY Replacement	RISK Priority
J.B. Ware Reserve	Open space in the foothills area. Under developed with no real theme	Aust Native/local indigenous/exotic eclectic mix	Local indigenous trees such as SA Blue and occasional River Red Gum	Medium/High	**Medium/ High**
Webb Street Reserve	**Playing fields, playground, open space**	**Australian Native with a few exotics**	**Australian Natives/exotics gradually phased out**	**Medium/Low**	**Low**
Alan E Cousin Reserve	**Local indigenous/ open space**	**Local indigenous**	**Local indigenous**	**Low**	**Low**
Albert t Street Reserve	Exotic small open space	Exotic/Aust native	Exotic, smaller tree species/special interest	Low	**Medium/Low**
Ashley Avenue Reserve	Small open space. no theme	Exotic/Aust native	Local indigenous/ Aust native	Low/medium	**Low**
Austral Park Reserve	Open Space BBQ, feature	Exotic/ Aust native	Local Indigenous/Aust native	High	**Medium**
Bradman Park	Open space	Exotic/Aust native	Local Indigenous / Exotic gradually phased out	Low	**Low**
Riesling Crescent Reserve	Open space/ Playground/BBQ	Exotic/Aust native	Exotic Local Indigenous	Medium	**Medium**
Brock Reserve	Open Space. BBQ, Playground	Exotic/Aust native	Local Indigenous/ Exotic	Medium	**Medium**
Caloroga Street Reserve	Chapel Street, Magill	Exotic/Aust native	Aust native / Exotic gradually phased out	Low	**Low**
Effie Ferguson Reserve	Open Space/ Playground	Exotic/Local indigenous	Local indigenous/ Exotic gradually phased out	Medium	**Medium**
Gardiner Reserve	Open Space/ playground	Exotic/Aust native & some local indigenous	local indigenous/ Exotic gradually phased out	High	**Medium**
Glyde Street Reserve	Open Space/small playground	Exotic /Aust native	Aust native/ Exotic gradually phased out	Medium/Low	**Low**
Gurney Road Garden	**Open Space/ Playground**	**Exotic/Aust native**	**Aust native/ Exotic gradually phased out**	**Medium/Low**	**Medium/Low**

Henry Martin Reserve	**Open Space**	**Exotic**	**Exotic**	**Low**	**Low**
Hewitt Avenue Reserve	Open Space/ Playground	Exotic/Aust native	Exotic/Aust native	Low	**Medium/Low**
John F. Kennedy Memorial Reserve	Open Space	Exotic/Aust native	Aust native / Exotic gradually phased out	Low	**Low**
Knightsbridge Reserve	Open Space/ Playground	Aust native/local indigenous	Local indigenous	Medium	**Medium/High**
Matilda Street Reserve	Open Space	Aust native/Exotic	Aust native// Exotic gradually phased out	Low	**Low**
McKenna Street Reserve	Open Space	Local indigenous	Local indigenous	Low	**Low**
Penfold Wine Reserve	Open Space	Exotic/Aust native	Local indigenous / / Exotic gradually phased out	Low	**Low**
Pepper Street Reserve	Open Space	Local Indigenous	Local indigenous	High	**High**
Plane Tree Reserve	Open Space	Exotic/Aust native	Exotic	Medium/Low	**Low**
Queens Lane Reserve	Open Space	Exotic	Exotic	Low	**Low**
Russell Avenue Memorial Reserve	Open Space	Local Indigenous/ Exotic	Local indigenous	Medium	**Medium**
Salop Street Reserve	Open Space/Tennis Courts	Exotic/Aust native	Aust native / Exotic gradually phased out	Low	**Low**
Lamden Lane Reserve	Open Space	Local Indigenous	Local Indigenous	Low	**Low**
Tennis Courts (Symons & Symons Reserve)	Open Space/ Basketball	Exotic/Aust native	Aust native/ Exotic gradually phased out	Low	**Low**
War land Reserve	Open Space/ Playground	Local Indigenous/ Exotic	Local indigenous	Low	**Medium/Low**
Waterfall Terrace Reserve North	Open Space	Local Indigenous/ Aust native/Exotic	Local indigenous/ Aust native	Medium	**Low**
Waterfall Terrace Reserve South	Open Space	Local Indigenous/ Aust native/Exotic	Local indigenous/ Aust native	Medium	**Low**
Webb Street Reserve	Open Space/ Playground	Aust Native/Exotic	Aust Native// Exotic gradually phased out	Low	**Low**
Wood Park	Open Space/ Playground	Aust Native/Exotic	Aust Native/ Local Indigenous / Exotic gradually phased out	Medium/High	**Medium/High**
Woodley Wine Reserve	**Open Space**	**Exotic /Aust native**	**Local Indigenous/ Exotic gradually phased out**	**Low**	**Low**

Open Space and Sports Parks.

Areas designated for sport and recreation are characterised by open space, sometimes with closed-in sections for tennis courts. Tree plantings are usually perimeter-based with stand-alone specimens.

The majority of trees within these reserves are Australian Native. It is suggested that many were planted through the 1960's & 70's, most trees are mature tending towards senescent. Of the local indigenous specimens most are over mature to senescent.

Vegetation Management Plans should enhance the diversity of local indigenous trees and slowly reduce the level of exotic species over time. Isolated stand-alone historical specimens may be retained but by enlarge reduced in number to enhance the linkages between the reserves and create broken indigenous corridor plantings.

Risk management is usually high to medium priority given most of these reserves have playgrounds, tennis courts or BBQ facilities that increase the risk.

NAME OF RESERVE	DOMINANT LANDSCAPE	DOMINANT TREE COVERAGE	FUTURE TREE PLANTING THEME	PRIORITY REPLANT	RISK MANAGEMENT PRIORITY
Glenunga Reserve	Open Space/Tennis Courts/Playground	Aust Native/Exotic/ Local Indigenous	Aust native/Exotic	High	**High**
Kingsley Avenue Reserve	Open Space/Tennis Court/Playground	Aust native/Exotic	Aust/Exotic	Medium	**Medium**
Lancelot Avenue Reserve	Open Space/Tennis Courts/	Local Indigenous/ Aust Native	Local Indigenous	Medium/High	**Medium/High**
Langman Recreation Reserve	Open Space/Tennis Courts/Playground	Aust Native/Local Indigenous/Exotic	Local Indigenous/ Aust native	Medium	**Medium**
Miller Reserve	Open Space/ Playground/BBQ/ Tennis Courts	Aust Native/Exotic/ Local indigenous	Aust Native/Exotic/ Local Indigenous	Medium/Low	**Medium**
Newland Park	Open Space/Tennis Courts/Sports	Local Indigenous/ Aust Native/Exotic	Local Indigenous/ Aust Native	Medium/Low	**Medium**
Tregenza Oval	Open Space/ Playground	Aust native/local indigenous/exotic	Local Indigenous/ Aust native	Medium/Low	**Medium**
Warrego Crescent Reserve	**Open Space/ Playground/**	**Few specimens mostly Aust Native**	**Local indigenous and Aust native**	**Medium to high**	**Medium**

APPENDIX A

Definitions and Interpretations

It is important that when referring to the document that the following use of terminology is interpreted correctly. For the purposes of the Strategy the following definitions apply.

Arborist	The person with training to AQF Level 3 in Arboriculture, or above, or equivalent recognized and relevant experience that enables the person to perform the takes required by AS 4373.
Agreed Access	The route through the site from the public highway to the working area, which, the Superintendent's representative has agreed with the Contractor as appropriate for use during the works by the Contractor's vehicles or plant, by vehicles or plant hired by the Contractor and by supplier's vehicles in connection with the works.
Branch	A lateral shoot on a main axis such as a trunk or another branch. A branch arising off a trunk is a first order branch. A branch arising off a first order branch is a second order branch and so on. Second and successive order of branches may be referred to as lateral branches.
Branch Bark Ridge	Raised or furrowed bark in the branch union that marks where the branch wood and trunk wood overlap.
Branch Collar	Overlapping trunk and branch tissue forming a swelling around the base of many branches and containing defensive chemicals.
Cambium	The layer of actively dividing cells between inner bark and wood.
Cambium Savers	Propriety devices designed to prevent friction injury to the upper side of the branch, which is being used by the climber as the anchor point of his climbing rope system or as part of the lowering rope system.
Climber	An arborist skilled qualified and experienced in the safe access of a tree using rope and harness. A climber usually is skilled in the safe use of hand saws and chainsaws in the crown of a tree and the removal of material from the tree's crown. The climber should be able to work without direct supervision.
Crown	Portion of the tree consisting of branches and leaves and any part of the trunk from which branches arise.
Danger Zone	The area beneath and adjacent to a tree in which debris, arising from tree work, may fall, be dropped or thrown into. The danger zone is generally circular with a radius at least equal to the height of the tree. When straight felling, the danger zone will have a radius twice the height of the tree.
Debris	Timber, branches, leaves, fruit and sawdust etc as a result of the tree works, storm damage and/or failures.
Dismantle	The taking down of a tree in sections, which may or may not involve the removal of cut material using a lowering system.
Epicormic Shoot	Shoots produced from epicormic buds at the cambium of trunks or branches.
Formative Pruning	The pruning of young and establishing trees with the general aims of directing plant growth and/or developing a sound

	structure.
Lateral	A branch arising from another branch.
Lowering System	A system used to regulate the speed and/or location to which cut material is lowered to the ground. The system may employ a crane or cambium savers, ropes and strops etc. which may be used together.
Photographic Interpretation	The Contractor may be required to undertake work-using photographs annotated by the Superintendent's representative as an aid to illustrating the specific work requirements.
Project Aborist	A person responsible for carrying out the tree assessment, report preparation, consultation with designers, specifying tree protection measures, monitoring and certification. The project arborist will be suitably experienced and competent in arboriculture, having acquired through training, qualification (minimum AQF Level 5 in Arboriculture) and/or equivalent experience, the knowledge and skills enabling that person to perform the tasks required by AS4970.
Pruning Tools	The work equipment used to remove living or dead parts of the tree. Such tools may be simple hand tools (for example secateurs) or complex motorised work equipment (for example self-powered chainsaws).
Regulated/Significant Tree	As Defined in the Development Act 1993.
Stem	Organ which supports branches, leaves, flowers and fruit; may also be referred to as the trunk.
Stub	A short section of branch, which may have been left after inappropriate previous pruning or branch/stem failure.
Stump	The part of a tree trunk left protruding from the ground after the tree has fallen or has been felled.
Superintendent	Person nominated by the Principal's Representative to oversee the works/services of the contract. The work is being done on behalf of their department. As a Certifier or preventer of disputes, must act impartially between the parties in a reasond and unbiased manner.
Superintendent's Representative	Also known as the Contract Administrator who is responsible for the daily administration of the contract agreement.
Tree	A Long lived woody perennial plant greater than (or usually greater than) 3 metres in height with one or relatively few main stems or trunks. A tree includes palms.
Tree Worker	A worker who through related training (minimum AQF Level 2 in Arboriculture) or equivalent recognized and relevant on-the –job experience, has demonstrated competence in pruning according to AS 4373.
Work Equipment	Everything used in the performance of the work including, but not limited to, hand tools, machinery, pruning tools and plant of all kinds, including all the consumables, fluids, materials, safety equipment and transport required for the use of the work equipment for the proper completion of the works.
Working Area	The part of the site for the contract made available to the Contractor to work within as shown on the plan or as otherwise identified by the Principal's Representative.