NOTICE

of

STRATEGIC PLANNING AND DEVELOPMENT
POLICY COMMITTEE

Pursuant to the provisions of Section 87 of the
Local Government Act 1999

to be held in the

WALKERVILLE CIVIC CENTRE
COUNCIL CHAMBERS
66 WALKERVILLE TERRACE GILBERTON

on

THURSDAY 4 JULY 2019 AT 4.00PM

KIKI MAGRO
CHIEF EXECUTIVE OFFICER

MEMBERSHIP

Councillor J Williams - PRESIDING MEMBER

Cr M Bishop  Cr N Coleman  Cr C Wilkins
AGENDA
4 July 2019

1. ATTENDANCE RECORD

1.1 Present
1.2 Apologies
1.3 Not Present / Leave of Absence

2. CONFIRMATION OF MINUTES

That the minutes of the Strategic Planning and Development Policy Committee meeting held on 6 June 2019 be confirmed as a true and accurate record of the proceedings.

3. DECLARATIONS OF INTEREST (material, actual, perceived)

4. PRESENTATIONS

Nil.

5. REPORTS REQUIRING DECISION OF COMMITTEE TO COUNCIL

5.1 Urban Forest Strategy
5.2 Urban Forest Management Policy

6. REPORTS PRESENTED FOR INFORMATION

Nil.

7. CONFIDENTIAL ITEMS

Nil.

8. OTHER BUSINESS

9. CLOSURE
Meeting: Strategic Planning and Development Policy Committee

Title: Urban Forest Strategy Final

Responsible Manager: Chief Executive Officer, Kiki Magro

Author: Group Manager, Assets & Infrastructure, Joshua Bowen

Key Focus Area: Strategic Community Plan Focus area 2- Sustainable and resilient future

Key Focus Area: Strategic Community Plan Focus area 4 – Healthy, connected and inspired community

Type of Report: Decision Required

Recommendation

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive the Urban Forest Strategy (UFS) report; and

2. That the SPDPC recommend to Council that the Urban Forest Strategy be adopted.

Summary

The purpose of this report is to provide the SPDPC with the final version of the Urban Forest Strategy (UFS) for endorsement and adoption by Council.

SPDPC and Council endorsed the UFS to be released for public consultation at a previous meeting held on 04 March 2019. This report tabulates the feedback and recommends the UFS be formally endorsed by the SPDPC and recommends adoption by Council.

Background

At Council’s ordinary meeting held 21 March 2016, Council resolved the following as it relates to the Tree Management Policy:

CNC317/15-16

1. That the Tree Management Policy be referred to the SPDPC committee for review and presented to Council at its April meeting;

2. Council postpones the 2015/2016 tree planting program and allocates $15,000 from the program budget, towards the development of a Tree Management Strategy for the Town of Walkerville to commence during 2015/16;

3. The Administration commences development of a Tree Management Strategy for the Town of Walkerville forthwith and a further report be presented to Council through the SPDPC Committee, once a draft strategy has been developed.”
Administration undertook a township wide street tree audit to understand the current status of the urban forest which provided the basis for the UFS. Through this process experts in tree management were engaged to inform the strategy and ensure the targets developed are measurable and relevant.

Administration presented a draft strategy to SPDPC at its ordinary meeting on 14 December 2019. Members felt that the strategy was by in large on the right track but required reworking and editing prior to seeking Council endorsement for public consultation. As such SPDPC resolved the following:

**SPD5/18-19**

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive the Urban Forest Strategy (UFS) report; and
2. That the SPDPC recommend that the UFS requires editing before presenting to Council.
3. The revised UFS report be presented to the next Strategic Planning and Development Policy Committee (SPDPC) meeting for review.

Based on feedback received, Administration in conjunction with Seed Consulting reworked portions of the UFS. The UFS was then presented back to SPDPC for its consideration at a meeting held on 04 March 2019. At this meeting the SPDPC resolved the following:

**SPD13/18-19**

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive the updated Urban Forest Strategy (UFS) report; and
2. That the SPDPC recommend to Council that the UFS be released for public consultation.
3. That a further report be presented to SPDPC (SPDPC) following the conclusion of the public consultation outlining the community feedback received.

**Discussion**

The Town of Walkerville has not had a Tree Management Strategy in the past. The previous Council believed that trees form a crucial part of the township’s identity and stressed the importance of its management now and into the future.

The UFS highlights the challenges that are present in managing the urban forest and has provided a framework to ensure its survival and betterment into the future. Administration has worked closely with Seed Consulting in putting the strategy together to balance aspirational goals and operational initiatives over the strategy timeline.

Administration sought feedback from the community commencing 19 April 2019 and conclude 31 May 2019. A number of different mediums were used to promote the UFS to ensure broad exposure across the township. A combination of forums, drop in information sessions, social media exposure and surveys were made available to members of the public.

**Public Forum**

Administration conducted a public forum which was facilitated by Seed Consulting and was held Monday 13 May 2019. The session ran for just over an hour and was attended by 5 members of the public and several Elected Members.

**Drop in information session**

Administration held a drop in session on 18 May 2019 between 9:00am and 11:30am at the Walkerville Terrace Shopping Centre.

In total, 27 people stopped at the stall to enquiry about the draft UFS and or discuss their views on tree management and the urban forest in general. A number of people took survey forms away with
them to complete however none were completed on the day. A summary of the feedback received was provided by Seed Consulting for Administration’s records (Attachment B).

**Formal submissions**

A number of formal submissions were submitted by members of the community. These have been tabled as Attachment C.

The majority consensus is that UFS is a step in the right direction and residents consistently place a high value on the urban forest and their protection.

Whilst there were some suggestions around formatting and content within the Strategy it is the view of Administration and Seed Consulting that the feedback is minor in nature and holistically the proposed strategy addresses the elements raised.

**Options for Consideration**

**Option 1**

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive the updated Urban Forest Strategy (UFS) report; and

2. That the SPDPC recommended to Council that the Urban Forest Strategy be adopted.

**Option 2**

That SPDPC recommend the following amendments to Council;

1. ............
2. ............
3. ............

**Preferred Option & Reasoning**

**Option 1**

Administration has conducted an extensive consultation program with the community to help inform and develop the UFS. The feedback received throughout the entire process has been positive and reflects the communities desires to protect and improve the urban forest within the Town of Walkerville. Option 1 is the first step in providing a transparent strategic framework for the ongoing management and betterment of the urban forest.

**Attachment/s**

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment A</td>
<td>Final Draft Urban Forest Strategy</td>
</tr>
<tr>
<td>Attachment B</td>
<td>Drop in information session consolidated feedback summary</td>
</tr>
<tr>
<td>Attachment C</td>
<td>Submitted feedback forms</td>
</tr>
</tbody>
</table>
Urban Forest Strategy
Town of Walkerville

DRAFT FOR PUBLIC CONSULTATION
Urban Forest Strategy
Town of Walkerville

Prepared on behalf of the Town of Walkerville by:
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# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the Mayor</td>
<td>4</td>
</tr>
<tr>
<td>Summary</td>
<td>5</td>
</tr>
<tr>
<td>1 Introduction</td>
<td>7</td>
</tr>
<tr>
<td>2 Strategic context</td>
<td>9</td>
</tr>
<tr>
<td>3 Why the urban forest matters</td>
<td>9</td>
</tr>
<tr>
<td>3.1 Environmental benefits</td>
<td>9</td>
</tr>
<tr>
<td>3.2 Community benefits</td>
<td>9</td>
</tr>
<tr>
<td>3.3 Economic benefits</td>
<td>10</td>
</tr>
<tr>
<td>4 The Town of Walkerville’s urban forest</td>
<td>12</td>
</tr>
<tr>
<td>4.1 City-wide trends</td>
<td>13</td>
</tr>
<tr>
<td>4.1.1 Land cover</td>
<td>14</td>
</tr>
<tr>
<td>4.1.2 Land tenure</td>
<td>15</td>
</tr>
<tr>
<td>4.1.3 Ecosystem services</td>
<td>16</td>
</tr>
<tr>
<td>4.2 Suburb trends</td>
<td>17</td>
</tr>
<tr>
<td>4.2.1 Medindie</td>
<td>18</td>
</tr>
<tr>
<td>4.2.2 Gilberton</td>
<td>19</td>
</tr>
<tr>
<td>4.2.3 Walkerville</td>
<td>20</td>
</tr>
<tr>
<td>4.2.4 Vale Park</td>
<td>21</td>
</tr>
<tr>
<td>What is plantable space?</td>
<td>22</td>
</tr>
<tr>
<td>5 Issues and challenges</td>
<td>23</td>
</tr>
<tr>
<td>6 Future direction</td>
<td>26</td>
</tr>
<tr>
<td>6.1 Vision, goals and objectives</td>
<td>26</td>
</tr>
<tr>
<td>6.2 Annual business plan and budget process</td>
<td>28</td>
</tr>
<tr>
<td>Glossary</td>
<td>29</td>
</tr>
<tr>
<td>Further reading</td>
<td>30</td>
</tr>
<tr>
<td>Attachment A</td>
<td>31</td>
</tr>
</tbody>
</table>
Our glorious urban forest defines the character and appeal of the Town of Walkerville. This priceless asset enhances our environmental, economic, social and community wellbeing. The health benefits of urban forests are well-established, along with their ability to create and enhance social interactions.

Council’s draft Urban Forest Strategy sets out a plan for the future management of our shared urban forest on both public and private land. The distinction between public and private land is an important one to make. The small land area of our Council means we cannot increase the size of our ‘tree canopy’ on our own. Every tree in the Town of Walkerville is part of our urban forest and every tree owner has a role to play in ensuring it continues to thrive for future generations. Our urban forest covers approximately 25% of the Township and that includes private and public land. Furthermore, 80% of the Council area is privately owned. Hence, this draft Strategy addresses the need for Council to engage with the community and to ensure residents, schools, businesses and other stakeholders are encouraged to care for and protect our shared urban forest.

The draft Strategy will guide and shape tree management decisions in alignment with the aspirations and targets of Council’s overall strategic framework (refer page 8). This is the first-time Council has produced a strategic document dedicated to the preservation, management and promotion of our urban forest. This reflects the feedback we have consistently received from residents in our Town-wide community survey on the importance of open spaces, parks, gardens, visual presentation (beautification) and lots of trees.

More broadly, the draft strategy also connects with the State Government’s strategic plans including:

- The Resilient East Regional Climate Change Adaptation Plan, which aims to increase urban greening as a way of addressing the impacts of current and future project temperature increases.
- The 30 Year Plan for Greater Adelaide’s target of increasing tree canopy cover by 2045.

I hope you will be part of this important community conversation by sharing your views and feedback through the process of public consultation.

The draft Urban Forest Strategy will be open for public consultation between XXXX March and XXXX 2019.

[Signature]

Elizabeth Fricker | Mayor
Trees are an essential part of cities and shape how we live and work. They provide a multitude of benefits for the community, economy and environment. Collectively, the trees on public and private land form what is called the urban forest.

The Town of Walkerville has a well established and extensive network of trees on public and private land. However, like many parts of Australia, our urban forest faces challenges on multiple fronts:

- urban development and infill is contributing to the loss of green space and trees on private land
- climate change is creating hotter and drier conditions that will make a healthy urban forest more difficult to maintain
- the interaction between trees and infrastructure means that some trees are in locations that can lead to management challenges for residents and Council alike
- insufficient water availability can lead to stressed trees and a need for greater investment in responses such as water sensitive urban design.

This draft Urban Forest Strategy has been developed to:

- inform how the Town of Walkerville’s urban forest can be maintained and expanded
- help the Township adapt to climate change
- mitigate the urban heat island effect by bringing temperatures down
- create healthier ecosystems
- engage and involve the community.

Walkerville’s urban forest

The Town of Walkerville’s urban forest covers approximately 25% of the Council area. More than half of the remaining area is covered by impervious surfaces (e.g. building roofs and roads), and only about 15% has the potential to support new plantings of trees. At the suburb level, Gilberton has the highest proportion of urban forest cover (28%) and also the lowest amount of impervious cover (53%). In contrast, Vale Park has the lowest proportion of urban forest cover (23%), but the highest area of potential plantable space. Medindie and Walkerville have 25% and 26% canopy cover, respectively.

Street trees are a key component of the urban forest and are estimated to provide more than $12,131 worth of annual ecosystem services, $22,258 worth of total carbon storage value, and have a like-for-like replacement value of more than $12.3 million.

Trees in the urban forest are a mixture of native and introduced species of varying ages and condition. A 2017 audit of the Council’s 4,130 street trees, for example, reported that although 62% of the street trees were considered mature, the overall health of the trees was very good, with two thirds having a useful life expectancy of more than 20 years.

Public land covers approximately 17% of the Council area, of which 8% could support further tree plantings. In contrast, 19% of the private land could support more plantings.
Future direction

To meet the target set for Metropolitan Adelaide in the 30 Year Plan for Greater Adelaide the Township will need a 20% increase in canopy cover. To achieve this target requires an increase of approximately 9.5 Adelaide Ovals of tree canopy. This will require significant plantings on both public and private land, which will be difficult given the limited plantable area. As such, other forms of greening can be explored such as green roofs and green walls. Without the support of residents, maintaining the existing level of canopy cover will be difficult to achieve.

To meet the vision for the Town of Walkerville’s future urban forest, the following goals will be used to guide strategies and actions for on-ground works:

- **GROW**
  Grow the urban forest through new plantings to maximise the social, economic and environmental benefits of trees and urban greening.

- **PROTECT**
  Protect the urban forest from threats and loss by preserving the Town’s existing street trees and maintaining established trees on public and private land.

- **ENGAGE**
  Engage with the community, businesses and government to care for the urban forest and broaden the understanding of the benefits it provides.

- **FUND**
  Continue to develop funding mechanisms that enable further investment into on-ground actions, that manage and grow the urban forest.

- **MANAGE**
  Manage the urban forest through coordinated planning, design and maintenance to ensure its long-term health and sustainability.
1 INTRODUCTION

Trees are an essential part of cities and the urban environment. They shape the character of our cities and how we live. Collectively, the trees on public and private land form what is called the urban forest.

For individuals and the community, the urban forest can decrease the impact of heatwaves, increase longevity, reduce stress, and increase productivity. Economically, trees reduce energy costs to buildings by creating shade and cooling and there are increased property values for residential houses on leafy tree-lined streets. Trees provide resources for native wildlife, mitigate climate change through absorbing and storing carbon, and clean the air of pollutants.

The Town of Walkerville has a well-established and extensive network of trees on public and private land. The mix of native and non-native trees creates an urban forest that underpins the character of the Township and the open space supports an increasingly dynamic and vibrant community.

Many cities in Australia are working to increase the size of their urban forest to harness the broad range of benefits. This requires addressing a range of issues and challenges including:

- responding to urban development and infill
- climate change
- urban heat islands
- the interaction between trees and infrastructure
- water availability
- ageing tree populations.

The purpose of this draft Strategy is to help guide and shape future tree management across the Town of Walkerville and to inform how the urban forest is maintained and expanded.

The draft Strategy describes:

- why the urban forest matters
- key characteristics of the Town of Walkerville’s urban forest
- issues and challenges
- current and future targets for tree canopy coverage
- goals and strategies.

The development of the draft Strategy was informed by face-to-face and online consultation with the community. It was also informed by technical analyses of tree canopy cover and ecosystem services evaluations.
This draft *Urban Forest Strategy* will guide and shape future tree management decisions in a way that aligns with Council’s overall strategic framework (see below). The draft Strategy provides the broad direction for Council’s Street *Tree Management Policy and Procedures Manual*, which collectively inform on-ground management of Walkerville’s urban forest. Together, the draft Strategy, Policy and Manual will inform the development of the annual business plan and budget as it relates to the maintenance and re-establishment of trees on public land. The draft Strategy also sets the direction for how Council will work with residents to manage trees on private land.
The urban forest includes all trees growing within a town or city boundary on public and private land. Although other plants like shrubs and grasses are found in the urban forest, trees are the most iconic element and provide the most benefits.

The benefits provided by trees are wide and varied, spanning environmental, social, and economic benefits and many are interrelated (Figure 1, see page 11). It is this range of benefits that this Strategy aims to maintain and grow to ensure a sustainable, resilient and liveable Town in the future.

The following provides a summary of key benefits provided by urban trees. For further details, refer to the suggested further reading list at the end of this Strategy.

### 3.1 Environmental benefits

Environmental benefits are often the most well recognised by the community, with shade and wildlife benefits being the most commonly acknowledged. Trees, however, provide a range of other direct and indirect benefits to the environment, including:

- Cooling through shading and transpiration, including increased resilience to climate change related temperature increases.
- Mitigate climate change through absorbing and storing carbon and also through shading houses which results in reduced energy usage for heating and cooling, leading to reduced demand on electricity supplies and so lower greenhouse gas emissions.
- Manage stormwater through filtering rainwater and slowing runoff, which improves water quality.
- Absorbing odors and air pollutants (e.g. nitrogen oxides, ammonia, sulphur dioxide) and filtering particulates out of the air by trapping them on their leaves and bark.
- Provide wildlife resources, particularly habitat and foraging resources, such as nesting sites, hollows, flowers/nectar, fruit, and insects; all of which are increasingly important as native habitats continue to be cleared. In addition, all trees provide many native wildlife species potential refuge sites, which can be critical in urban areas for animals to escape threats such as dogs and cats.
- Connect habitats and facilitate movements, for many native species. This “corridor” creation through the built environment can be critical for some native species who are unable, or unwilling, to move through built urban areas. Providing tree-lined and vegetated corridors between key habitats can be critical for supporting wildlife conservation efforts, particularly under climate change.

### 3.2 Community benefits

Benefits provided by urban trees make cities healthier and more pleasurable places to live, with an increasing number of scientific studies showing that trees help people lead longer, healthier, and happier lives. The benefits to individuals and the community are both direct and indirect, ranging from physical, to mental, to cultural, including:

- Decreased morbidity and mortality rates for children, adults and senior citizens, including decreased heat-related deaths, alleviated respiratory system and cardiovascular related deaths, decreased sun (UV) exposure), improved immune system functioning, and increased physical exercise and sleep quality.
- Enhanced motor skill development for children able to play in trees and forest-like environments.
- Faster recovery rates and increased pain thresholds for hospital patients able to view trees and green spaces.
- Reduced stress and anxiety for people able to spend time amongst trees and workers able to view trees and nature from office buildings.
- Increased happiness and productivity with interactions with trees acting as a natural antidepressant, making us feel happier, improving overall mood and mental well-being, and enhancing workplace productive.
- Increased social interaction and decreased mental illness with access to treed streets and green spaces encouraging people into public open spaces and increasing community connectedness.
- Improved focus and reduced ADHD for children living in greener urban areas.
- Improved social confidence and problem solving for children able to climb trees, traits which lay the foundations for adults who are more socially and mentally balanced, confident and capable.
• Provide a nature connection, which has been shown to be important for many aspects of human health and well-being, as well as being essential for building people’s affinity for nature and natural elements. The so-called “extinction of experience”, that is the loss of people’s interaction with nature, results in a cycle of disaffection toward nature, making it increasingly difficult to gain community support for greening actions on public and private land.

The benefits to people are such that some countries have requirements built in to their national health policies for people to spend time in nature. In Japan, for example, the practice of spending time relaxing amongst trees and nature is referred to as shin-rin-yoku, which translates to “forest bathing”.

3.3 Economic benefits
Economic benefits provided by trees can be more difficult to quantify, and can vary substantially from area to area.

Key reported benefits include:
• Reduced energy costs to buildings shaded by trees.
• Increased property values for residential houses on leafy treed streets.
• Avoided costs of infrastructure maintenance and renewal through extended lifetimes of road and footpath surfaces shaded by trees.
• Decreased health system costs through improved community health and wellbeing.
• Enhanced tourism and marketing by creating more attractive places to visit.
• Improved local economic prosperity through more time spent in leafy treed retail precincts.

It is estimated that the town’s street trees provide more than $34,000 of ecosystem service benefits, and have a replacement value of over $12.3 million.
Tree Benefits

Some of the environmental, social, and economic benefits provided by trees.

- Carbon capture & storage
- Clean air
- Clean & manage stormwater
- Energy savings
- Look good
- Increase property values
- Reduce crime
- Enhance biodiversity
- Produce oxygen
- Shade
- Wind breaks
- Sense of place
- Improve physical health
- Improve mental health
- Provide food
- Enhance local business precincts

Figure 1. Some of the environmental, social, and economic benefits provided by trees.
A combination of globally leading tree monitoring, management, and valuation tools were combined with GIS analysis for this assessment.

The i-Tree Canopy tool was used to assess land cover, including canopy and plantable space. This tool classifies land cover under randomly allocated points within a user-defined area overlaid on Google Earth imagery.

As each point is classified, i-Tree Canopy provides an automated running statistical estimate for each land-cover category of the area (km²) and percent (%) cover within the study area, as well as an uncertainty estimate (i.e. standard error, SE). The classified points were then further analysed in a GIS to generate spatial outputs for each suburb and tenure.

i-Tree Eco was applied to a subset of street trees measured as part of the street tree audit. This tool provides an estimate of the ecosystem services produced by each tree, based on a set of measurements taken on each tree.

Ecosystem services assessed include: carbon sequestered annually and stored, rainfall intercepted, and air pollution removed.

The replacement value of the tree is also able to be estimated, this is an estimated like-for-like replacement cost based on species, age, size, and industry supply costs.
4.1 City-wide trends

- **Canopy**: 26%
- **Plantable**: 16%
- **Impervious**: 56%
- **Other**: 2%

**More Canopy and Other Cover on Public Land**

**More Impervious and Plantable Cover on Private Land**

**Street Trees are Valued at Over $12.3 Million**
4.1.1 Land cover

The Town of Walkerville’s urban forest covers approximately 25% of the Council area, including public and private land, with the remaining land area being predominantly impervious surfaces (e.g. buildings and roads), followed by potential plantable space, and small proportion of unplantable space such as water and sporting fields (Figure 2).

Based on this assessment, to align with the 30 Year Plan for Greater Adelaide (2017), the Council will be encouraged to increase its total canopy cover by at least 20% by the year 2045. That equates to an increase of 182,712.6 m² of canopy cover, or approximately 9.5 Adelaide Oval’s worth. A primary consideration in future planning is where and how this target increase in canopy cover can be achieved.

4.1.2 Land tenure

The ability to protect and grow the urban forest will depend not only on the health and age of existing trees, but also on the proportion of trees currently located on private and public land; with trees on private land often at higher risk of being lost due to urban in-fill development and human/infrastructure conflict.

More than 80% of the Council area is privately owned and managed. The majority of impervious, canopy, and plantable space cover falls within private land (Figure 3).

Figure 2. Estimated land cover, including canopy (tree) cover within the Town of Walkerville.
Underlying drivers of these broad land cover types vary somewhat. Impervious cover on public land, for example, is dominated by roads, whereas, buildings and other impervious cover types (e.g. driveways, pools) dominate on private land (Figure 4). On private land, canopy cover occurs mostly over pervious surfaces, but mostly over impervious surfaces on public land. More grass than bare ground areas are potentially able to be planted with a tree (i.e. plantable areas), with this trend being consistent on public and private land (Figure 4). Comparatively, more of the Town’s other unplantable land cover occurred on public than private land, with this being driven primarily by the number of grassy sporting fields and water bodies on public land (Figure 4).

The approximately 17% of public land within the Council area is equivalent to about 0.6 km². Of this public land, only 8% is considered plantable space (Figure 4). This is equivalent to approximately 49,909 m² or 2.6 Adelaide Ovals’ worth. In comparison, of the 2.95 km² of private land (Figure 3), approximately 19%, or 29 Adelaide Ovals’ worth, of area is considered to have plantable potential (Figure 4).

These findings are particularly important when considering the recommended 20% increase in total canopy cover by the year 2045. To achieve this target requires an increase of 182,712.6 m² of canopy cover from the current cover amount, or approximately 9.5 Adelaide Ovals. However, with only 2.6 Adelaide Ovals worth of potential plantable space on public land, approximately 3 times as much private land would need to be planted to achieve.
4.1.3 Ecosystem services

Trees comprising the urban forest represent a diversity of native and introduced tree species of varying ages and condition. Council’s 2017 audit of its 4,130 street trees, for example, reported more than 28 species (see Attachment A) with more than 22 Genus ranging in age from young to senescent and with a useful life expectancy ranging to more than 20 years. Although 62% of the street trees were considered mature, the overall health of the trees was very good, with 63% having a useful life expectancy of more than 20 years and a further 26% with a useful life expectancy of 10-20 years.

The useful life expectancy of a tree is an estimation of the number of years a tree can realistically be expected to remain in the landscape provided growing conditions do not decline and any recommended works for protecting the tree are completed.
Mature, healthy trees tend to provide the most benefits for community, economy and the environment. The Town’s street trees for example are estimated to provide more than $12,131 worth of annual ecosystem services, $22,258 worth of total carbon storage value, and have a like-for-like replacement value of more than $12.3M. In addition to the benefits provided, it is clear that people also intrinsically value mature trees. A community survey conducted to inform development of this draft Strategy indicated that residents value the Town’s large, mature trees (native or non-native), particularly those that are either visually attractive (e.g. Jacarandas, bottlebrushes), provide resources for wildlife (e.g. river red gums, bottlebrushes), or provide a sense of place (e.g. Moreton Bay figs, Plane trees).

4.2 Suburb trends
All suburbs (Figure 5) are comprised of between 50% - 60% impervious cover, between 20% - 30% canopy cover, and between 10% - 20% plantable space. Understanding suburb-level nuances in canopy cover and plantable space, as well as change over time in land cover will facilitate prioritisation of actions aimed at growing the urban forest, including planting actions as well as community engagement and incentive actions.

Figure 5. Town of Walkerville showing suburb boundaries in black and private (blue) and public (green) land tenures.
4.2.1 Medindie

Medindie comprises approximately 19% of the Council area, with 22.7% of the suburb being public land comprised primarily of road reserves. The suburb has the highest relative proportion of impervious cover of all suburbs (Figure 6), with most of this impervious cover falling on private land (45.83%). Over 25% of the suburb is covered by tree canopy, but at an equivalent area of 0.17 km², represents the least overall area of canopy cover of all suburbs. Most of this canopy also falls on private land (15.63%), likely explained by the high dominance of road reserves comprising the private land and limiting the space available for trees. Approximately 5 Adelaide Ovals worth of potential plantable space occurs in this suburb, with nearly all of it occurring on private land (15.10% of a total 15.63%).
4.2.2 Gilberton

Gilberton covers about 18% of the Council area, with 33% of the suburb being public land comprising a proportion of the River Torrens linear corridor. Of all the suburbs, Gilberton has the lowest relative proportion of impervious cover and the highest relative proportion of canopy cover. This is consistent with common global urban trends for the proportion of canopy cover to be inversely related to the proportion of impervious cover, indicative of urban in-fill processes. However, despite having the greatest total area of impervious cover, the area of canopy cover is not the greatest across suburbs. The majority of impervious and canopy cover is on private land. Approximately 4.6 Adelaide Ovals worth of plantable space cover occurs in this suburb, with most of this being on private land (11.72% of a total 14.32%).

Figure 7. Gilberton suburb showing tenure and pie chart of total land cover for suburb
4.2.3 Walkerville

Walkerville is the largest suburb, covering more than a third of the Council area. Nearly a third of this suburb is public land, including portions of the River Torrens linear corridor, and the Walkerville Sportsclub and Oval. Of all the suburbs, Walkerville has the second highest relative proportion of impervious and canopy cover [Figure 8]. Although not the highest relative proportion of cover, being the largest suburb, the total areas of impervious and canopy cover are the highest of all the suburbs. The majority of the impervious and canopy cover falls within private land. Nearly 9 Adelaide Ovals worth of potential plantable space occurs in this suburb, with nearly all of it occurring on private land (12.24% of a total 13.80%).

Figure 8. Walkerville suburb showing tenure and pie chart of total land cover for suburb
4.2.4 Vale Park

Vale Park is the second largest suburb, covering nearly 30% of the Council area. Just over 20% of this suburb is public land, including portions of the River Torrens linear corridor and Levi Park Caravan Park. Of all the suburbs, Vale Park has lowest relative proportion of canopy cover, but the highest relative proportion of potential plantable space (Figure 9). The area of plantable space is also the greatest across the suburbs, equivalent to more than 10 Adelaide Ovals worth. Whilst most of this area occurs on private land (15.36% of a total 19.79%), the greatest opportunity for plantings on public land also occur in this suburb.

Figure 9. Vale Park suburb showing tenure and pie chart of total land cover for suburb
What is plantable space?

Plantable space is an area of land which is assessed from aerial imagery as being potentially suitable for planting a tree. Identifying these areas is important to help determine where trees could be planted and canopy cover increased. Assessing plantable space generally excludes open space areas like sporting fields and golf fairways where living turf is irrigated to maintain green playing surfaces. Further on-ground examination of potential plantable space areas would need to occur to determine suitability for tree plantings (e.g. consideration of over- and under-ground utilities).

By suburb the highest proportions of impervious cover on private and public land occurs in Medindie (70% and 19%, respectively), with the lowest proportions occurring in Gilberton (45% on private, 14% on public). Comparatively, the highest proportions of canopy cover on private land occurs in Walkerville (26%), and on public land in Vale Park (16%).

Gilberton has the lowest proportions of canopy cover on private and public lands. Vale Park offers the highest proportion of plantable opportunities on both private and public lands (24% and 7%), whereas the lowest proportions of plantable space on private land occurs in Gilberton (13%), and on public lands in Medindie (0.8%).
5 ISSUES & CHALLENGES

Despite the many benefits provided by trees they are vulnerable to a range of threats, some of which are local and others that are regional and global. Managed poorly, trees can also present challenges to residents and Council alike.

The following section outlines some of the key threats and management challenges that need to be addressed as part of maintaining and growing the Township’s urban forest.

Urban development and infill
The State’s commitment to managing growth within the existing urban footprint has seen a significant increase in the ratio of infill development compared to fringe development in Greater Adelaide. Currently, approximately 76% of Greater Adelaide’s new housing growth is in established suburbs. The 30 Year Plan for Greater Adelaide suggests that 85% of all new housing in metropolitan Adelaide will be built in established urban areas by 2045.

Infill development can lead to the loss of established trees, especially on private land, during the building and construction phase. Furthermore, an increase in the area of buildings and hard surfaces can reduce the amount of land available to support trees.

The Town of Walkerville is experiencing infill development across the Council area, however, it is currently strongest in Vale Park due to the type of existing housing and block sizes in this area. This is resulting in older houses on larger blocks being replaced by more than one dwelling and reduced green space.

The effects of infill on tree canopy cover can be addressed in part by property owners working closely with Council early during a development so that trees can be protected. Council encourages the protection and promotion of trees in accordance with the Australian Standard for the protection of trees on development sites (AS4970-2009), which describes how existing trees can be managed to reduce preventable damage.

Climate change
Climate change is caused by the release of greenhouse gases into the Earth’s atmosphere, which trap additional heat (energy) from the Sun. In turn this is causing a change in the global climate. For example, evidence from the CSIRO and BoM* indicate that temperatures in Adelaide have already increased by approximately 1°C from 1910 to 2013.

At a local scale, climate change is creating warmer and drier conditions. Temperature is projected to increase by up to 1.6°C on average in Eastern Adelaide by 2050 coupled with a reduction in Spring rainfall of at least 20%†. In addition, the number of periods with two or more days exceeding 35°C is projected to more than double. This places additional stress on trees but also raises the importance of the cooling and other benefits they provide.

Given the lifespan of trees, the maintenance and regeneration of the urban forest needs to consider the longer term changes in the local climate.

People and trees
Many of the benefits provided by trees are related to their growth and canopy cover and so benefits provided increase as trees mature and remain healthy. However, in urban environments, there can be competition for space between trees and built infrastructure and facilities, often creating conflicts which need to be resolved to ensure human safety and uninterrupted utility services.

For example, inappropriate tree selection and/or soil and site preparation, can lead to:
- a tree too large for a given site
- a tree not capable of reaching full maturity if located beneath powerlines or too close to a building
- tree root systems chasing soil moisture which can uplift footpaths and cause damage to building footings
- impact on private property such as fences.

Leaf fall for deciduous trees can also create concerns for some residents during Autumn when large amounts of leaves can accumulate on footpaths.

Another challenge for Council and the community is the design and maintenance of avenue or boulevard plantings. For many people, such plantings are highly valued and represent highly attractive streetscapes that typify the character of Walkerville. However, avenue plantings often consist of single tree species which is not ideal from a tree diversity and hence long-term resilience perspective. More work is required with the community to identify where avenue plantings are desired and how best to get an appropriate species diversity while still achieving the desired local amenity outcomes.

With appropriate tree selection, soil and site selection and preparation, and ongoing management, many of the management problems and concerns of residents and the Council can be addressed. For example, the Town of Walkerville has an Autumn leaf program, which conducts leaf fall street sweeping on a needs basis in troublesome areas informed by leaf accumulation audits.

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* Bureau of Meteorology
†Further information on project changes in the climate for Eastern Adelaide are provided in the Resilient East Regional Climate Change Adaptation Plan https://www.environment.sa.gov.au/topics/climate-change/programs-and-initiatives/adapting-to-climate-change/regional-adaptation-plans
Urban heat island

Heat accumulates differently in the urban landscape depending on the land surface type. This accumulation of heat can create “urban heat islands” in cities where the average surface temperature is at least 2°C warmer than that of the suburb, region or city as a whole.

Heat islands can impact individual and community wellbeing due to heat stress, cause reduced economic productivity especially for people working outdoors, and impact on plants and animals. This is especially important given that residents in Adelaide are considered to be the most susceptible to heat impacts of all Australian capital cities².

Heat can accumulate for a variety of reasons including:

• Impervious hard surfaces: Buildings and pavements are typically impervious and have high heat absorption capabilities. Evidence from heat mapping undertaken in Adelaide shows that major and minor roads accumulate far more heat than areas of green open space. Also, artificial surfaces such as rubber softfall used in playgrounds and artificial turf, can experience significantly higher surface temperatures than other types of hard surfaces.

• Human activity: Motorised transport is a major contributor to increased greenhouse gas emissions. In hot weather, the use of air conditioners increases, generating more waste heat.

• Low vegetation coverage: With less vegetation, cities receive less natural cooling from shade and evapotranspiration. Research undertaken in Adelaide shows that there can be at least a 7°C different in the average surface temperature of major roads compared to irrigated open space.

The urban forest is a proven performer when it comes to cooling cities through a combination of shade and transpiration from leaves. Continuing to support the maintenance and growth of Walkerville’s urban forest will help manage heat island impacts into the future.

Heat islands occur across councils and hence need collaboration to address. For example, one of the most significant heat islands in close proximity to Walkerville is in the northern parklands in an area managed by the City of Adelaide³. This area is not irrigated during summer and as a result the dry ground and grass are warmer than the average regional surface temperature. Addressing heat islands now and in the future will require collaboration across councils, as has occurred with the Eastern and Northern Adelaide Collaborative Heat Island Mapping project, in which the Town of Walkerville has partnered with other councils in eastern Adelaide and with the City of Salisbury.

Water availability

The health of trees is influenced by factors such as climate, soil conditions, pests and diseases and the availability of soil moisture. The ability for trees to access sufficient water as they grow impacts whether they reach full maturity and also influences whether they impact infrastructure. For example, tree roots that uplift footpaths may in some instances be searching for water.

The impact of water stress on trees became evident when a decade ago during the Millennium Drought many large, mature trees died as a result of water stress. Periods of water stress as a result of drought and drier seasons in general are expected to increase with climate change.

The Town of Walkerville has already been very proactive in responding to water stress for trees by ensuring that irrigation requirements are suitable and by investing in water sensitive urban design features that help to better manage stormwater and provide water for vegetation. One example of water sensitive urban design that is helping the Township’s trees are the TREENET inlets on Rose Street, Elm Court and Briar Ave. These devices are located at the kerb face and allow the first flush of storm water runoff to be captured. This in turn allows water to directly access trees which can reduce the damage by tree roots to road pavements that can be caused by roots searching for soil moisture.

Warmer and drier conditions by mid-century will make growing trees more difficult, but also increase their importance for cooling.


Ageing tree population

As trees grow and mature they increase the range of benefits that they provide to the community and environment. However, as they age they require maintenance and then eventually removal and replacement. In a natural system this happens gradually and with little impact on people.

In an urban environment, an ageing or hazardous tree cannot usually be left until it completely falls apart, which is often seen through limb fall or dieback of branches and loss of leaves. Managing the aesthetic impact of ageing trees is also a challenge because in many instances entire streets will have been planted within a short period of time meaning that when trees are removed and replaced there can be periods with limited tree canopy.

The Town of Walkerville has a dedicated program for tree replacement which is revised annually and informed by their Street Tree Management Policy, which has been updated as part of developing this draft Strategy. This ensures that street tree management and replacement is done according to current practices taking into consideration tree species, infrastructure location, and future development (urban infill).

Maintaining a resilient urban forest

Maintaining a resilient urban forest means having a tree stock that is able to withstand and bounce back from a range of impacts. Aside from water and temperature stresses, the tree stock can also be impacted by pests and diseases.

Maintaining a resilient urban forest requires diversity at the tree species, genus and family levels, which reduces the chance of pest and disease impacts in particular. As a general rule of thumb, the Santamour Diversity Index (SDI) is often used as a basis for achieving adequate urban tree species diversity, particularly in street trees. The SDI states that no tree species should comprise more than 10% of a city’s tree population, no tree genus should comprise more than 20%, and no tree family should comprise more than 30%. This rule of thumb is often adapted to suit local Council requirements. For example, diversity targets applied for the City of Sydney and the City of Melbourne range from between no more than 5-10% of the same species, 10-30% of the same genus, and 20-40% of the one family.

Diversity needs to be considered for council wide plantings as well as avenue or boulevard plantings. While traditional avenue plantings commonly consist of one species, introducing a greater diversity of species is important for long term resilience of these areas to pest and diseases. Working with the community to ensure that new avenue plantings or replantings continue to meet amenity objectives while also being more diverse will be important.

In determining the appropriate diversity for the Town of Walkerville, consideration should be given to the size of the Council, the well-established nature of the trees, the limited opportunity to achieve very high diversity targets, and the drier climatic conditions meaning that there is lower species availability than may be the case in some wetter parts of Australia.

Encouraging diversity in tree selection should also include the use of native and non-native trees. While native trees may be well suited to the local environment and provide biodiversity benefits, non-native species provide other benefits such as shedding leaves during winter which provides greater natural light around homes and natural buildings.

- Residents believe most challenges to growing the urban forest can be overcome, but urban infill, the “NIMBY” effect, and lack of political support are considered challenges.
- Mature trees that are visually attractive, provide resources for wildlife, or provide a sense of place are highly valued by the community, such as large mature Eucalypts along the River Torrens, flowering Jacarandas, and well-maintained and flourishing boulevard plantings.

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4 Santamour FS, Jr. (1990) Trees for urban planting: Diversity, uniformity, and common sense. Proceedings 7th Conference Metropolitan Tree Improvement Alliance (METRIA), 7: 57–65

5 The “Not In My Back Yard” (NIMBY) effect is a natural human psychological phenomenon of ownership and influence whereby community members strongly oppose a project of change affecting their property or local neighbourhood, though are not necessarily opposed to the project occurring elsewhere.
6 FUTURE DIRECTION

6.1 Vision, goals and objectives
This Strategy will guide and shape future tree management within the Town of Walkerville to deliver the following vision:

A healthy and resilient urban forest that contributes to the health and wellbeing of the Town of Walkerville’s community, economy, and environment, creating a desirable place to live, work and visit.

Increasing the level of tree canopy cover will require Council and the community to work together. Based on the Town of Walkerville’s current canopy cover of 25%, to meet the target set for Metropolitan Adelaide councils in the 30 Year Plan for Greater Adelaide will require a 20% increase in canopy cover by 2045. This will require significant plantings on both public and private land.

This Strategy is based on five goals for the urban forest. Each goal is accompanied by objectives, which will inform actions identified as part of the annual business plan and budget process. Identification and implementation of actions will also be informed by the Council’s Street Tree Management Policy and Procedures Manual, which collectively inform on-ground management of Walkerville’s urban forest.

The goals and objectives are as follows:

1. GROW
Grow the urban forest on public and private land through new plantings to maximise the social, economic and environmental benefits of trees and urban greening.

To grow the urban forest, the following objectives will be met:
(a) plan and implement yearly tree planting programs on public land to increase the number of trees currently planted by 20% within the Township
(b) undertake a baseline audit of all trees currently growing on public land, including species, size, canopy spread, and health/condition
(c) increase the existing Council-wide canopy cover by 1% - this will be measured in the four-yearly review
(d) undertake four-yearly tree audits to review and understand the changes in the urban forest across public and private land.

A four-yearly tree audit will provide the data to determine whether tree plantings and increased canopy objectives are being met. While a 1% annual increase in canopy may appear a modest objective, the limited area of plantable space available on public land means that this could prove challenging to achieve. As such, reaching this objective will require work on public and private land, and in some instances, may require more generic green cover activities that allow for contributions from (for example) green walls and green roofs in addition to tree canopy.

2. PROTECT
Protect the urban forest from threats and loss by preserving the Town’s existing street trees and maintaining other established trees on public and private land.

The Town of Walkerville strongly values its trees, which are recognised as having both important amenity and significant ecosystem services values as identified in Section 3 of this Strategy.

To achieve this goal, the following objectives will be met:
(a) manage the urban forest on public land in a sustainable way to ensure overall good health is maintained and promoted
(b) undertake successional and infill plantings on public land to ensure that at least 90% of the urban forest on public land is maintained at a useful life expectancy of more than 20 years
(c) encourage the protection of the urban forest on public and private land through consideration of current development plan policy in the assessment of development applications which considers the importance of trees against a number of other relevant planning considerations
(d) encourage the protection of trees on public and private land during development through adhering to AS4970-200.

A four-yearly tree audit will provide the data to determine the overall health and useful life expectancy of the trees on public land.

3. ENGAGE
Engage with the community, businesses, schools and the government to care for the urban forest and broaden the understanding of the benefits it provides.

To engage with residents and the broader community, the following objectives will be met:
(a) run tree engagement activities that educate and inspire the community
(b) investigate incentive schemes and guidelines for protecting trees on private land
(c) invite community volunteers to participate in tree audit and planting programs on public land.
4. MANAGE

Manage the urban forest through co-ordinated planning, design and maintenance to ensure its long-term health and sustainability.

To effectively manage the urban forest, the following objectives will be met:

(a) implement and retrofit water sensitive urban design infrastructure into ongoing Council Works programs

(b) develop “right tree, right place” guidelines for tree species selections on private and public land

(c) implement innovative retrofitting solutions for addressing infrastructure and community conflicts with existing mature trees.

5. FUND

Fund on-ground actions that manage and grow the urban forest by continuing to develop funding mechanisms that enable further investment.

To achieve this funding goal, the following objectives will be met:

(a) establish a tree valuation method to ensure appropriate value of compensation is received when public trees are wilfully removed

(b) develop a business case for urban trees to advocate for increased government funding for tree planting programs.
6.2 Annual business plan and budget process

This Strategy will inform the annual business plan and budget process. Each year it will be used to revise and update an Urban Forest Action Plan which will provide details about actions to be taken to achieve goals and objectives, guidelines for implementing the actions, and an adaptive monitoring and evaluation program to assess implementation and relative success of actions in achieving objectives.

Key considerations in developing the Urban Forest Action Plan will include quantifiable, time-based and prioritised actions, and a defined procedure for tracking the progress and relative success of actions.

A Monitoring and Evaluation Program (MEP) is a strategic mechanism for assessing whether the Strategy is meeting its goals and objectives through the outlined actions in the Urban Forest Action Plan. Specifically, an MEP is “... a detailed program of works which defines what monitoring activities will take place, when and by whom, and how that information will feed back into actions and management decisions”. In this way, the MEP assumes the Strategy is adaptive in nature to allow, if necessary, changes to objectives and actions to ensure greater on-going success of the Strategy’s goals.

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**GLOSSARY**

**ABUNDANCE** – the quantity or amount of something. When used in relation to species (i.e. species abundance), it refers to the number of individuals of a particular species.

**ACTION** – used here to describe a specific set of steps to achieve goals.

**ADAPT** – a term used to describe animals, plants, or habitats/ecosystems that are able to change or adjust to suit new/altered conditions.

**BASELINE** – describes the condition of target biodiversity prior to, or in the early stages of, project implementation. It is a benchmark against which management-induced changes can be identified and measured.

**Biodiverse** – used in relation to a habitat or region having a high level of biodiversity.

**Biodiversity** – an umbrella term encompassing all species of plants, animals, and micro-organisms, and the variation in ecosystems and ecological processes of which they are part. It is a multi-dimensional concept, difficult to define in an operational sense and difficult to measure.

**Citizen Science** – scientific research conducted in whole or in part by amateur (i.e. non-professional) scientists and/or community volunteers. Typically conducted in collaboration with professional scientists. A BioBlitz event is an example of citizen science.

**Distribution** – the spread of something over an area. When used in relation to species (i.e. species distribution) it tends to indicate where areas of suitable environmental and habitat conditions occur for a species. For this BAP, it may be used to indicate if a species is found across the whole Council area, or restricted to certain localities or habitat types/associations.

**Diversity** – the amount of variation in something. When used in relation to species (i.e. species diversity) it relates to the number of different species (e.g. to measure species diversity is to quantify the number of different species; to increase species diversity is to increase the number of different species).

**Ecosystem** – refers to the complex network of living organisms and their interactions with each other and their environment.

**Environment** – the natural surroundings or conditions in which an animal or plant lives or operates. Can be used to describe the whole of the natural world, or a particular area.

**Goal** – what is trying to be broadly achieved through implementation of the targets and actions.

**Impervious Surfaces** – ground surfaces that do not allow water to percolate into the soil and so prevents filtering of pollutants and recharging water tables. These surfaces are often covered by mand-made sealed surfaces (e.g. roads, buildings, footpaths) (compared to pervious surfaces).

**Indicator** – a short-term measurable aspect contributing to the target.

**Measuring [biodiversity]** – data collected about a snapshot in time of a specific biodiversity value (e.g. number of species). Measurements are useful for comparing relative biodiversity values (e.g. whether one area is more species-rich than another area) [32]

**Monitoring [biodiversity]** – comparing multiple measurements taken over time of the same biodiversity value so as trends in changes can be identified and decisions made regarding whether a management action is having the desired result or whether the action needs to be changed.

**Pervious Surfaces** – ground surfaces that allow water to percolate into the soil to filter out pollutants and recharge water tables. These surfaces are not covered by mand-made sealed surfaces (e.g. roads, buildings, footpaths) (compared to impervious surfaces).

**Resilient** – relates here to animal and plant species and/or habitats, environments or ecosystems being able to withstand, recover quickly from, or adapt to threats and difficult conditions.

**Strategy** – used here to refer to the direction developed to an overall goal.

**Target** – used here to describe a quantifiable element that may be measured to gauge progress towards achieving goals.

**Threat** – anything that has a negative impact on animals, plants, habitats, environments and ecosystems. For example, cats and dogs chasing/predating native animals, vegetation clearing/land use change, climate change.


List of common street trees located in the Town of Walkerville.

<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Hackberry</td>
<td>Celtis occidentalis</td>
</tr>
<tr>
<td>Black Locust</td>
<td>Robinia pseudoacacia</td>
</tr>
<tr>
<td>Box Elder</td>
<td>Acer negundo</td>
</tr>
<tr>
<td>Brazillian Rosewood</td>
<td>Jacaranda mimosifolia</td>
</tr>
<tr>
<td>Brush Box</td>
<td>Lophostemon confertus</td>
</tr>
<tr>
<td>Chinese Pistacio</td>
<td>Pistacia chinensis</td>
</tr>
<tr>
<td>Coral Gum</td>
<td>Eucalyptus torquata</td>
</tr>
<tr>
<td>Crepe Myrtle</td>
<td>Lagerstroemia indica</td>
</tr>
<tr>
<td>Desert Ash</td>
<td>Fraxinus angustifolia subsp. angustifolia</td>
</tr>
<tr>
<td>European Hackberry</td>
<td>Celtis australis</td>
</tr>
<tr>
<td>Evergreen Ash</td>
<td>Fraxinus griffithi</td>
</tr>
<tr>
<td>Golden Ash</td>
<td>Fraxinus excelsior ‘Aurea’</td>
</tr>
<tr>
<td>Golden Rain Tree</td>
<td>Koelreuteria paniculata</td>
</tr>
<tr>
<td>Hong Kong Orchid Tree</td>
<td>Bauhinia x blakeana</td>
</tr>
<tr>
<td>Kurrajong</td>
<td>Brachychiton populneus</td>
</tr>
<tr>
<td>London Plane Tree</td>
<td>Platanus x acerifolia</td>
</tr>
<tr>
<td>Maidenhair Tree</td>
<td>Ginkgo biloba</td>
</tr>
<tr>
<td>Manchurian Pear</td>
<td>Pyrus calleryana</td>
</tr>
<tr>
<td>Oleander</td>
<td>Nerium oleander</td>
</tr>
<tr>
<td>Oriental Plane Tree</td>
<td>Platanus orientalis</td>
</tr>
<tr>
<td>Pagoda Tree</td>
<td>Sophora japonica</td>
</tr>
<tr>
<td>Red Iron Bark</td>
<td>Eucalyptus sideroxylon</td>
</tr>
<tr>
<td>Red-leaf Photinia</td>
<td>Photinia robusta</td>
</tr>
<tr>
<td>River Red Gum</td>
<td>Eucalyptus camaldulensis</td>
</tr>
<tr>
<td>South Australian Blue Gum</td>
<td>Eucalyptus leucoxylon</td>
</tr>
<tr>
<td>Spotted Gum</td>
<td>Corymbia maculata</td>
</tr>
<tr>
<td>Weeping Bottlebrush</td>
<td>Callistemon viminalis</td>
</tr>
</tbody>
</table>
Urban Forest Strategy
Town of Walkerville

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DRAFT FOR PUBLIC CONSULTATION
Draft Urban Forest Strategy, Walkerville

Comments by resident, Penny Paton, M Env Sc, from 47 Gilbert Street Gilberton

Phone: 0414 648 891

I commend the Council and the Consultants for a thorough and well-researched strategy.

My comments respond to three aspects of the strategy: one is the issue of climate change, the second relates to tree/shrub selection and the third is the nexus between the requirement for more trees, pervious areas and open space and the state government’s strong support of infill housing in inner suburbs, supported by the new Planning Strategy and legislation.

Climate Change and Species Selection

On the issue of climate change, it is clear from scientific modelling (as well as our own experience in Adelaide and South Australia over the past 20 years) that we are experiencing hotter drier conditions, not just in summer but extending into spring and autumn. This trend will continue so that trees and vegetation adapted to the previous climate will no longer be suitable for the new conditions.

I have experience in revegetation on a broad-acre scale in the Mt Lofty Ranges and Kangaroo Island as well as smaller scale plantings in my garden and in the Linear Park near my home over 30 years. Increasingly indigenous plants (trees, shrubs, groundcovers) are unable to cope with the more arid and hotter conditions experienced over 20 years but more particularly in 2017, 2018 and the beginning of 2019. Even established trees and shrubs like Drooping Sheoak (Allocasuarina verticillata), Sticky Hop-bush (Dodonaea viscosa) and some wattles (Acacia spp) have died over the past few years, despite in some cases some supplementary watering. Hand-watering of seedling trees and shrubs has been a weekly occurrence since September 2018 to enable plants put in the ground in winter of 2018 to survive.

In response to the changing climate I have started to introduce species from hotter drier parts of South Australia in my plantings, as well as focussing on species that I know cope better with the new climate. In the latter category tree species include Southern Cypress Pine (Callitris gracilis), Dryland Titree (Melaleuca lanceolata) and some eucalypts. Shrubs include Christmas Bush (Bursaria spinosa) and cassias (Senna spp). In the former category, I have planted Drooping Myall (Acacia pendula) over 15 years and found that it does not require extra watering beyond its first year.

There would be many more native tree and shrub species that would be suitable for Adelaide’s new climate and there are resources available to help the Council to choose from these species. TreeNet is one resource, as is Australia’s eucalypt expert, Dean Nicolle (who has published books as well as establishing an arboretum near Currency Creek). Dean could recommend suitable eucalypt species for various situations based on his experience, as well as methods of maintenance.

I am not averse to planting non-native species for certain situations: eg where winter sun is required and some non-native trees and shrubs provide benefits for wildlife. However I have less expertise in this area.
In regard to biodiversity, I have wide experience in this area, particularly in the interactions between birds and vegetation. However I only want to comment on one aspect as it is often neglected because it is little-known outside the birding community. Noisy Miners are native honeyeater that have ‘invaded’ the Adelaide suburbs in recent times. They are communal and aggressive and, where they are in large numbers, can completely exclude smaller bird species and even larger ones too. Their preferred habitat is parkland with few shrubs and large eucalypts, so the Linear Park is ideal habitat for them. When we moved into our house in Gilbert Street in 1980, Noisy Miners were not found east of the city of Adelaide, but in time they progressively moved along the River Torrens Linear Park (as it was established in the 1980s) and now dominate the bird fauna close to the River and in some adjacent suburbs.

My garden abuts the Linear Park on two boundaries and there are large numbers of Noisy Miners (probably 20 or more) in the Park a few metres from the garden. By careful planting of many shrubs and groundcovers as well as planting a diverse range of trees and large shrubs (not too many eucalypts) I have managed to retain some smaller honeyeater species, as well as other smaller birds like pardalotes and Blackbirds in the garden. So a diversity of tree species and planting of shrubs and not just trees are key to making the environment less attractive to Noisy Miners. This is not to say that I do not support the planting of large eucalypts in some situations, as they are spectacular trees and provide great benefits for wildlife.

One further comment on species selection relates to the importance of ground cover. The Strategy refers to the brown North Parklands and how in summer they are a heat source due to lack of cover. Native perennial groundcovers like saltbushes and native grasses have the ability to survive harsh conditions and, even though they will brown off or recede during summer, will often bounce back with summer rainfall and in winter. This is not the case with annual weeds and weed grasses, which are only green in winter and early spring, before dying off with hot weather. Including small perennials in planting can therefore be advantageous.

Urban Planning

There is a strong push for infill housing in suburbs, including the inner suburbs like Walkerville, under the new Planning Strategy and associated legislation. This change in character is already occurring in all areas of Walkerville and will only continue. This is acknowledged in the Urban Forest Strategy, as is the need to not only retain trees and green spaces (pervious areas) but to grow these areas on private land due to the small amount of public land in the Walkerville area suitable for trees.

However, given the two opposing requirements (more houses and more trees) the Strategy does not address in a meaningful way how these conflicting forces will be managed. I would like to see more pro-active statements about how these conflicts will be addressed, whether that be more engagement with residents or stronger planning regulations.

Further engagement

I cannot attend the 13th May meeting but would be happy to be contacted for further comment/engagement as the Strategy moves through to adoption.
Response to Urban Forest Strategy Draft

21/5/2019

Future Direction

Engage with local community and government

Protecting and increasing canopy on private land:

If private land owners forego selling part of their land to infill and monetary gain, and provide canopy for the benefit of the community, there needs to be incentive schemes to assist purchase of plants and ongoing maintenance. Small footprint edge to edge housing without room for even small trees or bushes benefit from their neighbours who provide landscaping. Owners of significant trees which benefit the wider community, solely bear the cost of maintenance. St Peters/Norwood /Payneham council are trialling a scheme to financially support carers of significant trees.

State government legislation needs to consider seriously how continuing infill development conflicts with a policy to maintain and increase tree canopy. Legislation needs to ensure that developments allow for small to mature trees. An example is a recent development in Tyne St Gilberton. Part of the backyard was sold off and a small house erected. No room for even a garden and edge to edge impervious pavers.

It would probably be a hard sell to pass legislation which would deny owners the opportunity to realise the equity in their property.

The Urban Forest Strategy (UFS ) is complex and a huge task. Only 4 residents attended the information session in the Walkerville Hall recently. I do not doubt the wide publicity it was given, but the poor attendance cannot solely be attributed to community lack of interest and apathy. The interest and attendance at the shopping centre I’m sure would have been better.

The UFS reads well in some places, but is overall, a long weighty ‘academic style’ document which despite its significance, fails to capture the initial interest of the public. First introduction needs to be a smaller and lighter read document giving an overview of the document. Can this be included in the community About Town?

I read the policy a couple of times: print size too small in many areas of the policy; light print on coloured background hard to read. Any information document needs to consider the diversity of readers within the community and accessibility/readability is hugely important.

Future Direction

Smaller bites of the policy included in About Town

Continue focus displays in the library

Resident interest group to share ideas

Expand displays into the community – encourage businesses to display posters.
No one could deny how important the UFS is to the local and wider community- it sells itself. However a very big task for council.

Rhonda Avard
0421 597879
WHAT ARE YOUR VIEWS ON
"OUR URBAN FOREST"?

The Town of Walkerville’s Draft Urban Forest Strategy

The Town of Walkerville has released its draft Urban Forest Strategy to provide a strategic framework for protecting and increasing urban trees to help create a healthier and more resilient place for you to live and work. To help finalise the Strategy, we would welcome your feedback in relation to the following five questions. General feedback can also be provided on the reverse side of this form.

1. Where do you think increased tree plantings could occur in the Town of Walkerville? What should the percentage breakdown be?
   a. Parks = ___ %
   b. Streets = ___ %
   c. Backyards = ___ %
   d. Other = ___ % (Please describe)

2. How could Council support residents, developers and commercial property owners to retain more trees on private land?

   Promote the value (financial/cooling/privacy) with statistics to back it up (like in the Urban Forest Strategy).
   When I moved here I received a welcoming letter from Council so maybe this could include a list of appropriate trees for the area and/or a sapling (like what’s given at citizenship ceremonies). Also need a seriously big stick for unauthorised removal of trees on private property.

3. How would you like Council to work with residents to manage the urban forest?

   Keep us informed. This is an important issue for me but if I hadn’t wandered into Council about something else, I wouldn’t have known about this Draft Strategy.

---

Town of Walkerville Urban Forest Strategy - Community Consultation May 2019
4. What do you consider to be the biggest obstacles to choosing the right tree for future planting programs? (number your top three from 1 to 3, with 1 being the most important)
   a. Location of overhead powerlines [3]
   b. Verge width [__]
   c. Concerns about nuisance issues like leaf fall [__]
   d. Water availability [1]
   e. Climate change [2]
   f. Other [__]

5. What type of incentives do you think would encourage residents to plant more trees on private property?
   The only incentive I can think of is education. Once people understand the benefits of the right tree in the right place, it's a no-brainer. If they've been allowed to cover their block with hard surfaces, green walls/rooves should be promoted or maybe enforced.
   Do you have any other general feedback that you would like to provide?

   • Has Council considered a "Cool Seal" for asphalt and paving? (Cool Change Cities Project). I think there's currently a trial in Adelaide's north.
   • Could Council also look into permeable/porous concrete and paving which rapidly drains stormwater from parking surfaces, driveways, footpaths etc?
   • White (not silver) roofs are proven in reducing heat entering homes and should be encouraged for renovations and new builds.

While it is not compulsory, we would be grateful if you could provide us with your:

Name: Helena Stone

Email address / phone number: helenas.ahme@outlook.com

Suburb you live in: Walkerville.

Please email this form to: Walkerville@walkerville.sa.gov.au or drop it into the Concierge during business hours.
WHAT ARE YOUR VIEWS ON "OUR URBAN FOREST"?

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1. Where do you think increased tree plantings could occur in the Town of Walkerville? What should the percentage breakdown be?
   a. Parks = ___%
   b. Streets = ___%
   c. Backyards = ___%
   d. Other = ___% (Please describe)

2. How could Council support residents, developers and commercial property owners to retain more trees on private land?
   
   More consistent monitoring of health of existing trees.

3. How would you like Council to work with residents to manage the urban forest?
   Field public consultation & feedback sessions.
4. What do you consider to be the biggest obstacles to choosing the right tree for future planting programs? (number your top three from 1 to 3, with 1 being the most important)
   a. Location of overhead powerlines [__]
   b. Verge width [3]
   c. Concerns about nuisance issues like leaf fall [__]
   d. Water availability [2]
   e. Climate change [__]
   f. Other [__]

5. What type of incentives do you think would encourage residents to plant more trees on private property?
   More knowledge about appropriate tree size, watering conditions, root range etc.

Do you have any other general feedback that you would like to provide?
   Love the areas existing greenery but concerned that new trees will overtake the older trees and not replace their profile.

While it is not compulsory, we would be grateful if you could provide us with your:

Name: ____________________________
Email address / phone number: ____________________________
Suburb you live in: Walkerville

Please email this form to: Walkerville@walkerville.sa.gov.au or drop it into to the Concierge during business hours.
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1. Where do you think increased tree plantings could occur in the Town of Walkerville? What should the percentage breakdown be?
   a. Parks = 20 %
   b. Streets = 30 %
   c. Backyards = 40 %
   d. Other = 20 % (Please describe)

   Planting by replacing impervious pavers with pervious ones.

2. How could Council support residents, developers and commercial property owners to retain more trees on private land?

   I believe that the only way to achieve this end would be for the State Government to reform to Council's power to regulate or prevent urban infill.

3. How would you like Council to work with residents to manage the urban forest?
   Council lacks the legislative powers to force tree preservation and planting; it will have to rely upon persuasion by the usual methods of communication.
4. What do you consider to be the biggest obstacles to choosing the right tree for future planting programs? (number your top three from 1 to 3, with 1 being the most important)

a. Location of overhead powerlines [3]
b. Verge width [2]
c. Concerns about nuisance issues like leaf fall [2]
d. Water availability [3]
e. Climate change [2]
f. Other [ ]

5. What type of incentives do you think would encourage residents to plant more trees on private property?

None if there is more money to be gained by not planting them.

Do you have any other general feedback that you would like to provide?

I suggest that our Council ask the Councils to join with it to urge the Local Government Association to ask government to give Councils the power to regulate or prevent urban infill

I suspect that the poor turn-out may have been because residents overwhelmingly support urban forest

While it is not compulsory, we would be grateful if you could provide us with your:

Name: Peter Adamson

Email address / phone number: peter.adamson@gmail.com

Suburb you live in: Walkerville
Recommendation

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive and note the (draft) Urban Forest Management Policy; and

2. That the SPDPC recommend to Council that the (draft) Urban Forest Management Policy be released for public consultation with a final report to be presented to Council (through SPDPC) prior to final adoption.

Summary

The purpose of the report is to provide the Strategic Planning and Development Policy Committee (SPDPC) with a copy of the (Draft) Urban Forest Management Policy (the Policy) for review and consideration prior to being presented to Council for endorsement to be released for public consultation.

Background

The Urban Forest Management Policy (formally known as the Street Tree Management Policy) was considered by Council on 21 March 2016 and the following was resolved:

CNC317/15-16

1. That the Tree Management Policy be referred to the SPDPC committee for review and presented to Council at its April meeting;

2. Council postpones the 2015/2016 tree planting program and allocates $15,000 from the program budget, towards the development of a Tree Management Strategy for the Town of Walkerville to commence during 2015/16;

3. The Administration commences development of a Tree Management Strategy for the Town of Walkerville forthwith and a further report be presented to Council through the SPDPC Committee, once a draft strategy has been developed."
As Members are aware, Administration has tabled the revised Urban Forest Strategy (UFS) in this agenda and it is our intention to present the updated Urban Forest Management Policy (Attachment A) concurrently for the committee’s consideration prior to being presented to Council for endorsement.

**Discussion**

The previous Tree Management Policy (Attachment B) was endorsed by Council on 18 April 2016 (CNC354/15-16). It was Administration’s intention to develop the UFS with an update of supporting documents to follow formal adoption of the UFS.

A tracked changed copy of the existing Tree Management Policy appears at Attachment B for ease of reference.

The Policy has been updated to reflect the intent of the UFS and has strengthened sections of the previous policy to ensure an adequate framework is in place to manage and protect the urban forest.

**Options for Consideration**

**Option 1**

1. That the Strategic Planning and Development Policy Committee (SPDPC) receive and note the (draft) Urban Forest Management Policy; and

2. That the SPDPC recommend to Council that the (draft) Urban Forest Management Policy be released for public consultation with a final report to be presented to Council (through SPDPC) prior to final adoption.

**Option 2**

1. That the Strategic Planning and Development Policy Committee receive and note the (Draft) Urban Forest Management Policy as contained in Attachment A

2. That the Strategic Planning and Development Policy Committee recommend that the (Draft) Urban Forest Management Policy be presented to Council for review and endorsement “in principle” inclusive of the following amendments

   a) ………………………………………
   b) ………………………………………
   c) ………………………………………

**Preferred Option & Reasoning**

**Option 1**

Administration has conducted an extensive consultation program with the community to help inform and develop the UFS and the policy reflects its content and intention. The revised policy applies the necessary framework for Administration to manage the urban forest.

**Attachment/s**

<table>
<thead>
<tr>
<th>Attachment A</th>
<th>Revised Urban Forest Management Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment B</td>
<td>Original Tree Management Policy with tracked changes</td>
</tr>
</tbody>
</table>
1. **Purpose**

This Policy is intended to deal with trees across all areas of Walkerville Council's operations including:

- Council’s commitments in relation to trees under its Urban Forest Strategy
- Planning and Development Assessment issues.
- The selection, planting, management and removal of trees situated on land owned by Council or under Council's control and management comprising:
  - roads;
  - Community Land, including parks, gardens, reserves, playgrounds, ovals, sporting grounds, water courses and the like;
  - areas of land specifically excluded from Community Land classification;
    - Trees on private property (where, as required under the provisions of the Development Act 1993, the Council is required to deal with Significant or Regulated Trees.)
- Civil and personal liability issues.

2. **Introduction**

The Policy will guide the Council in accordance with its Strategic Plan and Urban Forest Strategy, in the future development and enhancement of community and open space and streetscapes in the Town, and the protection and enhancement of trees on private land.

The Policy will provide information for the community on the Council's goals and objectives in the management of trees and the urban forest.

The Policy will guide Council’s planners and private developers in the development of land adjoining roads and open spaces to minimise the impact on trees.

The Policy is supported by a procedure which will assist Council staff in implementing the provisions of this Policy.
3. **Power to make the policy**

This Policy incorporates the strategies required to fulfil the Council's obligations in all areas of tree management with regard to:

- Sections 221, 232 and 245 of the Local Government Act 1999.
- Development Act 1993 regarding ‘Significant or Regulated Trees’.
- The Native Vegetation Act 1991 for trees along the River Torrens

4. **Strategic plan link**

This Policy has the following link to Council's Strategic Plan Living in the Town of Walkerville:

A lively local culture

**Objective 2**

Promote and support diverse cultural values, heritage and identity.

**Sensitive environments & development**

**Objective 1**

Create a safe, well-planned and biodiverse Linear Park that allows for recreation along the river.

**Objective 2**

Promote development in balance with the natural environment.

**Objective 3**

Create accessible, useable and connected open spaces and streets.

4.1. **Urban Forest Strategy Link**

This Policy outlines how trees will be maintained and established on public land and in so doing, contributes to the following goals in Council's Urban Forest Strategy.

**Grow**

Grow the urban forest on public and private land through new plantings to maximise the social, economic and environmental benefits of trees and urban greening.

**Protect**

Protect the urban forest from threats and loss by preserving the city's existing street trees and maintaining established trees on public and private land.

**Engage**

Work with resident, the community, business and government to care for the urban forest and broaden the understanding of the benefits it provides.

**Manage**

Manage the urban forest through coordinated planning, design and maintenance to ensure its long-term health and sustainability and management of resident concerns.

**Fund**

Continue to develop funding mechanisms that enable further investment into on ground actions that manage and grow the urban forest.

5. **Principles**
Greening of the Town

This Tree Policy is based on the fundamental belief that trees are an important community asset for the following reasons:

- Trees provide a softening influence on often harsh urban landscapes, providing an amenity to residents and visitors through the introduction of colour, form and texture to either highlight or mask architectural and natural features.
- Trees have practical as well as aesthetic benefits for the community as a whole. These include a capacity for reduction in noise and air pollution, reduction of erosion, positive effects on the micro-climate of the surrounding area in modifying extremes of temperature and wind, as well as influencing in a positive way, the human psyche.
- Trees have an important role in the retention of natural habitats for indigenous plants and animals. This is particularly applicable to those parts of the Town that are to be preserved in their natural state for future generations and to retain their biodiversity.
- Trees provide economic benefits in a range of ways, including, but not limited to; increasing property values, increasing retail revenue for shopping precincts and reduction in energy consumption.
- Trees have health benefits including reducing the heat island effect, improving general health and wellbeing and reducing stress and anxiety.
- Trees provide a means to reduce the townships carbon footprint caused by a range of its activities through carbon sequestration and storage.

Why manage the Urban Forest?

The value of trees to the urban environment cannot be overstated. However, there are many factors that need to be taken into account in maintaining or introducing trees to the landscape which, at least potentially, can have an adverse effect.

The overarching principles of why the urban forest must be managed include;

- Maintaining the urban forest as a sustainable asset in the Town of Walkerville.
- Work toward an increase in urban forest cover to meet targets set in the Urban Forest Strategy.
- Maintaining the character and aesthetics of the tree population that form part of the identity of the Town of Walkerville.
- Managing the risk of personal injury to residents and visitors to the Town.
- Managing the risk to property through the failure of trees and tree limbs.
- Managing tree health to ensure the trees provide the intended benefits for longer periods of time.
- Managing conflicts between trees and the delivery of infrastructure and services (i.e. buildings, roads, power, sewer and water) through the use of suitable species.
- Managing pest plants in situations where they have the potential to proliferate.

6. Definitions

Definitions for the purpose of this Policy are:

**Community Land:** Includes all land owned by Council or under Council’s care, control or management, except roads or land that Council has resolved to exclude from Community Land classification.

**Native Vegetation:** Means a plant or plants of a species indigenous to South Australia.
Planting: The installation of a tree at a site where no tree previously existed or the replacement of a tree that was removed

Reserves: Includes parks, gardens, reserves, playgrounds, ovals, sporting grounds, water courses and the like.

Road: Means a public or private street, road or thoroughfare to which public access is available on a continuous or substantially continuous basis to vehicles or pedestrians or both and includes:
(a) a bridge, viaduct or subway; or
(b) an alley, laneway or walkway.

Road (Main): Means any road owned and maintained by DTEI or is a bus route.

Road (Minor): Means all other roads.

Significant Tree: Means a tree within a class of trees declared to be Significant Trees by the Development Regulations 1993; or a tree declared to be a Significant Tree, or a tree within a group of trees declared to be Significant Trees, by a Development Plan.

Regulated Tree: Means a tree within a class of trees declared to be Significant Trees by the Development Regulations 1993; or a tree declared to be a Significant Tree, or a tree within a group of trees declared to be Significant Trees, by a Development Plan.

Streetscape: The vegetation, including trees, along a street or road, which provides local tree benefits and amenity.

Tree: Means any ‘woody’ plant, including shrubs or vines if they are pruned into a tree like shape and excludes groundcovers, annual or perennial plants, or indoor plants. Most larger Palms are also included as trees even though they are not ‘woody’.

Tree Health: A reflection of the tree’s vigour as exhibited by a range of characteristics, including crown density, crown cover, level of dieback, leaf colour, leaf size, the degree of epicormic sprouting and the ability of the tree to cope with insect predation. A tree may be deleteriously affected by insects, parasites, disease, environmental damage, or other problems. Its ability to resist these problems characterises its degree of health. A tree in poor health infers the tree as a whole is malfunctioning and survival may be threatened. A tree in excellent health has good vigour and few if any pest problems.

Urban Forest: The entire population of trees and woody shrubs in an urban environment that are a critical element of urban infrastructure that provide a wide range of social, economic, aesthetic, environmental and ecological benefits. The urban forest is made up of individual trees, but is managed as an entire urban forest.

7. Policy

7.1. General

The Walkerville Council has the following strategic objectives in relation to the trees under its influence and control:

- To formally recognise the value of trees as fundamental and intrinsic landscape elements in the urban environment.
- To increase tree cover in line with the Urban Forest Strategy.
• To improve local streetscapes by introducing trees appropriate to the local environment and urban services present.
• To pursue a planned, consistent and coordinated approach to the planting and replacement of trees throughout the Town in accordance with agreed tree selection criteria, and to provide direction to residents and Council staff on the care and management of trees.
• To formally recognise that indigenous and exotic tree species each have a practical and aesthetic role in the improvement of the Town's amenities.
• To protect and enhance the integrity of the natural landscape features of the Town.
• To create bio-diverse corridors along creeks and vegetated areas through tree planting and re-vegetation initiatives.
• To formally recognise that indigenous and exotic tree species each have a practical and aesthetic role in the improvement of the Town's amenities.
• To protect and enhance the integrity of the natural landscape features of the Town.
• To create bio-diverse corridors along creeks and vegetated areas through tree planting and re-vegetation initiatives.

7.2. Planning and Development Issues

Trees are living organisms that are sensitive to changes in their environment. Any encroachment, disturbance or compaction of the soil around a tree is likely to damage or destroy a tree’s fine absorbing roots that are responsible for the collection of water and nutrients. Injury caused by cutting or crushing, suffocation through raising of the grade, poisoning or site contamination, and moisture stress by inundation or dehydration, can result in the decline or death of the tree. Injuries caused during development adjacent to trees may not be apparent for many years, but can significantly affect the health and viability of the tree many years later. Damage to a tree’s root system also has the potential to adversely affect tree stability, creating a risk issue.

The Walkerville Development Plan provides guidance for tree management of regulated and significant trees on public and private land.

Development applications should include sufficient information, including detailed plans and an arboricultural report detailing tree impact and protection measures to ensure those regulated and significant trees on both private and public land are not adversely affected by such activities. These plans and reports should be reviewed by qualified arborists with reference to Australian Standard AS 4970-2009 Protection of trees on development sites and with the Development Act 1993 and Development Regulations 2008.

Civil and infrastructure works on Council land should also follow these same guidelines.

Where relevant, these must include plans for the retention or placement of trees on roads adjacent to the development where appropriate.
The preservation of trees already growing on the road or in other Council properties adjacent to development, or the planting of new trees in these circumstances must comply with the provisions of this Policy and conform with operational procedures.

7.2.1 Protection of trees on development sites

Trees on or adjacent to a development site shall be adequately protected from the potentially adverse impacts of such development. This will apply to development that is occurring on public or private land. Tree protection measures should follow the guidelines outlined in Australian Standard AS 4970 Protection of trees on development sites.

Where a development is occurring in the vicinity of a Council owned tree, or a regulated or significant tree on public or private land, the following is required:

- A report from a qualified arborist assessing the impacts of the development and the implementation of appropriate tree protection measures. All relevant information should be provided by the applicant to assist the assessing officer.
- Gaining relevant Development Approvals.
- The lodgment of a bond from the developer or its agent, at Council’s discretion.

Where a tree is damaged during development, the person responsible may be liable for tree damaging activity (as defined under the Development Act) and may lose all or part of the bond.

7.3 Other Authorities/Agencies

Other Authorities/Agencies have responsibility for managing their own infrastructure on Council land including the management of trees and services. Tree management agreements with these other authorities will be sought to avoid any last minute or unforeseen conflicts which may result in poor tree health, aesthetic, or safety outcomes. Where these agencies are working in the vicinity of such trees, they should seek arboricultural advice from an appropriately qualified arborist. If working in the vicinity of regulated and/or significant trees, they are required to seek relevant development approvals.

7.4 Planting Objectives

To improve the sustainability, diversity, age distribution, quality and suitability of the urban forest across the entire Town and to increase the number of appropriate plantings on Council land in a variety of planting situations. This will occur in line with the availability of resources and the Council’s capacity to maintain all trees planted to acceptable standards.

Records will be kept of the site and species assessment process used in determining the suitability of tree species used, and all tree planting programs will be carried out in accordance with operational procedures.

7.4.1 Planting Trees on Road Related Area

The selection and management of trees for planting in roads will be planned with great care and will have regard to local conditions, safety, and compatibility with existing plantings, and be designed to enhance the character and amenity of the streetscape. Species used must come from the approved list of street trees and adhere to the right tree right space mantra.

New tree plantings will take into account:

- the surrounding vegetation composition
- aesthetic enhancement of the local setting
• the purpose of the road as well as the type of construction of the road and any impact the trees might have on it, or surrounding structures
• the impacts the proposed trees may have on any services present, above or below the ground, taking into account Legislative requirements e.g. Sewerage Act 1929, Electricity Act 1996
• the type of traffic using the road and potential impacts on road safety
• the possible impacts on the safety of the public
• impact on aged residents or those using mobility equipment
• opportunities to upgrade the streetscape to improve traffic flow and tree planting requirements
• any other matters which might be pertinent to the site.

Where tree planting is likely to have a significant impact on local residents, business proprietors, or other stakeholders, Council will ensure that public consultation occurs according to the provisions of its Public Consultation Policy.

An ongoing program will ensure all Council roads suitable for planting will be planted with trees and is consistent with the Urban Forest Strategy and this policy.

7.4.2 Planting Trees on Community Land

Preference will be given to the planting of local indigenous species, or trees on the approved tree species list.

While recognising the need to maintain adequate open space, Council may consider reserving land for development or treed corridors, linking and extending areas of native vegetation for wildlife, or for other passive recreational pursuits, following appropriate examination of the circumstances in each case. This process will include a risk management assessment of the project.

7.4.3 Unauthorised Planting

Tree planting by persons other than Council officers in roads and Community Land requires authorisation by Council.

Where a tree has been planted by a resident in any road or Community Land, the Council officer may report the matter to Council for consideration.

7.4.4 Tree List

The list of tree species suitable for planting in the Town will be reviewed in accordance with the Council's Urban Forest Strategy and operational Procedures. Independent Arborists will have input into this list periodically to ensure it remains up to date via the introduction of new tree species, while non performing species or species where undesirable attributes have become apparent should be withdrawn from use.

The approved tree list forms part of operational procedures developed by Council officers.

7.5. Tree Maintenance Objectives

Council will ensure that all trees growing under its care and control in the Town, be they on roads or Community Land, are adequately maintained in accordance with the Urban Forest Strategy suitable for the circumstances.

The allocation of resources by Council for managing trees will determine the extent of implementation of any maintenance programs developed for the purpose. Therefore the implementation of maintenance programs will be prioritised based on the level of funding and resources available.

Maintenance programs will be developed which aim to:

• promote long term tree and or habitat health;
• comply with relevant best practices including but not limited to Australian Standards and legislative requirements
• promote biodiversity and conservation values where appropriate;
• manage the level of risk to provide adequate public safety;
• improve the amenity values provided for the community of all vegetation;
• ensure the compatibility of proposed and existing trees with local infrastructure and site uses; and
• record all aspects of planning and management.
• Maintenance programs will be reviewed on an 'as needs' basis, and where stakeholders affected by a plan have an interest in its outcomes, Council will ensure that public consultation occurs according to the provisions of its Public Consultation Policy.

7.6. Trees on Council Land

7.6.1. Criteria for Removal at Council Cost

Removal and replacement of trees will be at Council's expense when:
- To Council's satisfaction, the tree requested to be removed is a health hazard as certified by a recognised medical authority and cannot be effectively managed through commonly available over the counter medications.
- The tree requested to be removed is causing significant damage to property with appropriate supporting evidence (either private or Council).
- The tree requested to be removed is in the opinion of the Council causing significant nuisance to a resident.
- The tree is diseased with a short life expectancy or is dead.
- The tree is identified as presenting an unacceptable risk using a suitable tree risk assessment method as detailed in Councils operating procedures.
- The tree is not providing minimum levels of amenity expected of such a planting.
- The tree is causing unsustainable damage or conflict with surrounding infrastructure.

7.6.2. Removal for Development

The removal of a regulated or significant tree in relation to a development application must be assessed within the legislative framework of the Development Act 1993. The opinion of a qualified arborist or other relevant expert may be required to determine when tree removal is acceptable.

The removal of a street tree under the control of Council in relation to a development application shall be determined with consideration to legislative requirements under the Development Act 1993 and Local Government Act 1999.

When authorisation is granted to remove a tree due to development of adjoining land, Council may place a monetary value on the said tree by a recognised valuation method. Removal and replacement will be at the applicant's expense with payment to be made prior to work being commenced.

The applicant will pay the following:
- Tree valuation.
- Valuation report cost.
- Removal cost.
- Cost of replacement tree.
All building applicants are to be advised of their liability for damage/loss of any street tree on the site frontage and that Council may seek to recover costs in respect of any damage/loss of public trees.

7.6.3. **Removal for Resident Benefit**

Where approval is granted for the removal of a tree for the benefit of a resident Council may place a monetary value on the tree using a recognised valuation method. Removal and replacement will be at the resident’s expense with payment made prior to work being commenced.

When a Council tree is:

- located in an extension to or in a supplementary driveway to a property,
- located on a street boundary and is therefore subject to cost share with Council,
- an unauthorised planting on Council property by any person,

The resident may pay or share the following:

- Tree valuation.
- Valuation report cost.
- Removal cost.
- Cost of replacement tree.

7.6.4. **Removal After Vehicle Impact**

Where a Council officer attends reported damage/removal of a tree by vehicle impact the officer will, where possible, obtain the driver's name and address and accident details which will then be the subject of a report to the Executive Planning & Infrastructure or Team Leader Works. In such cases Council may seek to recover costs or part thereof of:

- Tree valuation.
- Valuation report cost.
- Removal cost.
- Cost of replacement tree.

7.6.5. **Unauthorised Tree Damage or Removal**

Responsibility for the care, control and management of trees and shrubs on land under the care, control and management of the Council is vested in the Council.

It is an offence for a person to cut, saw or remove any tree or shrub on any land under the care, control and management of the Council even if the tree is overhanging private property.

It is an offence for a person to cut, saw or remove any regulated or significant tree on private land without the approval of Council.

Should Council wish to prosecute in relation to an unauthorised removal, consideration should be given using a recognised valuation method.

7.6.6. **Removal of Trees on Council Land**

The removal of trees on Council land may be necessary for a range of reasons. This may include trees that are in poor health, trees that pose a risk to people or property, or trees that are causing damage to structures or infrastructure.

The removal of trees on public land must fulfil the following requirements:
• The tree/s should be assessed by a qualified arborist (AQF level 3 Arborist or higher) to determine the reasons for tree removal.
• Consider reasonable alternatives before removing the tree/s.
• Tree removal applications for regulated and significant trees must meet one of the relevant criteria for removal before being granted. These criteria are based on the criteria set out in the Development Act 1993 and are outlined in the Town of Walkerville Development Plan.
• Gain the required development approval by lodging a development application with the Town of Walkerville.
  o In the case of a regulated tree, the applicant is not required to provide an arborist report.
  o In the case of a significant tree, the applicant is required to provide a report from a relevant professional, such as a qualified arborist (AQF level 5 Arborist or higher), plant health professional, building engineer or similar.

7.7. Trees on Private Land

7.7.1. Fallen Trees onto Public Land

Where a tree on private property is felled and obstructs a public road and the Council causes the fallen tree to be removed from the public road, the Council may seek to recover the cost of such removal from the owner of the property from which the tree originated.

Such cost will include:
• Labour charge.
• Cartage.
• Chipping.
• Damage to public property (i.e. street tree).
• Cost of any contracts.

7.7.2. Pruning of Trees on Private Land

The pruning of trees on private land may be necessary for a range of reasons. This may include pruning to mitigate risk, pruning to provide suitable clearances to dwellings, private structures, footpaths, roadways and associated infrastructure and other possible reasons.

The pruning of regulated or significant trees on private land must fulfil the following requirements:
• Must not constitute a tree damaging activity as defined under the Development Act 1993.
• Must comply with Australian Standard AS 4373 Pruning of amenity trees.
• Must be carried out by qualified arborists (AQF level 3 Arborist).
• Where pruning works are likely to constitute a tree damaging activity, the following is required.
  o The tree/s should be assessed by a qualified arborist (AQF level 3 Arborist or higher) to determine the reasons for pruning and appropriate pruning requirements.
  o Where tree risk is alleged in the application, tree risk should be assessed by a qualified arborist (AQF level 5 arborist or higher) using a tree specific and industry accepted tree risk assessment method.
  o Gain the required development approval by lodging a development application with the Town of Walkerville.

7.7.3. Removal of Trees on Private Land

The removal of trees on private land may be necessary for a range of reasons. This may include trees that are in poor health, trees that pose a risk to people or property, or trees that are causing damage to structures.
The removal of regulated or significant trees on private land must fulfil the following requirements:

- The tree/s should be assessed by a qualified arborist (AQF level 3 Arborist or higher) to determine the reasons for tree removal.
- Tree removal applications must meet one of the relevant criteria for removal before being granted. These criteria are based on the criteria set out in the Development Act 1993 and are outlined in the Town of Walkerville Development Plan.
- Gain the required development approval by lodging a development application with the Town of Walkerville.
  - In the case of a regulated tree, the applicant is not required to provide an arborist report.
  - In the case of a significant tree, the applicant is required to provide a report from a relevant professional, such as a qualified arborist (AQF level 5 Arborist or higher), plant health professional, building engineer or similar.
  - Where tree risk is alleged in the application, tree risk should be assessed by a qualified arborist (AQF level 5 arborist or higher) using a tree specific and industry accepted tree risk assessment method.

7.7.4. Management of Trees on Private Land

Council should aim to provide guidance to rate payers about the management of trees on private land. This has the overall benefit of contributing to the Urban Forest. This should include, but is not limited to the following:

- What is a regulated and significant tree.
- Pruning of a regulated or significant tree.
- Removal of regulated or significant trees.
- Protection of regulated or significant trees on development sites.
- General care and maintenance of trees.
- Tree planting guidelines and species suggestions.
- Control of pest trees in certain situations.

Council could also consider providing incentives for rate payers to maintain regulated or significant trees on private land.

7.8. Pest Trees

Tree species which occur outside of their intended environments and reproduce freely, have the potential to impact on the viability of native species and habitats, or cause a nuisance through prolific regeneration. Not all tree species that have weed potential create a pest problem in all settings.

Where it has been identified that a tree is adversely impacting on native species and habitats, or are causing a nuisance through uncontrolled regeneration, every reasonable effort should be made to control the spread of the pest tree.

Weed species are those identified by reputable environmental organisations that outline the species of tree and how it can pose a weed problem.

There will be regular monitoring by Council staff of potential pest trees occurring in waterways, reserves and other natural areas under Council’s control.

Periodic checks of all Community Land will be conducted for the purpose of monitoring pest trees and identifying newly emerging species that may gain pest tree status from time to time.

Pest trees growing in private gardens as ornamentals, or planted in roads as street trees, need not be automatically considered for removal, unless they form part of a removal and replacement strategy, or
where it can be clearly shown that they are a seed source contaminating areas affected by the said species’ pest tree status.

7.9. Independent Arborists

Advice will be sought externally from Independent Arborists to assist in planning, assessments, monitoring, species selection and other tree management decision making processes where circumstances dictate. This will include those trees on council land and regulated and significant trees on council or private land.

The level of advice sought will be consistent with the person’s experience and qualifications (but the minimum level of qualification is to be Level 5 Consulting Arborist).

8. Review & Evaluation

This Policy will be reviewed two yearly. The Chief Executive Officer will report to Council on the outcome of the review and make recommendations for amendment, alteration or a substitution of a new Policy if considered necessary.

9. Availability of the Policy

This Policy will be available for inspection at Council’s principal office during ordinary business hours and at Council’s website www.walkerville.sa.gov.au. Copies will also be provided to interested members of the community upon request, and upon payment of a fee in accordance with Council's Schedule of Fees and Charges.
1. Purpose

This Policy is intended to deal with trees across all areas of Walkerville Council's operations including:

- Council’s commitments in relation to trees under its Strategic Plan Urban Forest Strategy.
- Planning and Development Assessment issues.
- The selection, planting, management and removal of trees situated on land owned by Council or under Council’s control and management comprising:
  - roads;
  - Community Land, including parks, gardens, reserves, playgrounds, ovals, sporting grounds, water courses and the like;
  - areas of land specifically excluded from Community Land classification;
    - trees on private property (where, as required under the provisions of the Development Act 1993, the Council is required to deal with Significant or Regulated Trees.)
- Civil and personal liability issues.

2. Introduction

Tree Management Policy Benefits

The Policy will guide the Council in accordance with its Strategic Plan and Urban Forest Strategy, in the future development and enhancement of community and open space and streetscapes in the Town, and the protection and enhancement of trees on private land in the future development and enhancement of community and open space and streetscapes in the Town.

The Policy will provide information for the community on the Council’s goals and objectives in the management of trees and the urban forest.

The Policy will guide Council’s planners and private developers in the development of land adjoining roads and open spaces to minimise the impact on trees.
The Policy is supported by a procedure which will assist Council staff in implementing the provisions of this Policy.

3. Power to make the policy

This Policy incorporates the strategies required to fulfil the Council’s obligations in all areas of tree management with regard to:

- Sections 221, 232 and 245 of the Local Government Act 1999, and to the
- Development Act 1993 regarding ‘Significant or Regulated Trees’.
- The Native Vegetation Act 1991 for trees along the River Torrens

4. Strategic plan link

This Policy has the following link to Council’s Strategic Plan Living in the Town of Walkerville:

**A lively local culture**

**Objective 2**

Promote and support diverse cultural values, heritage and identity.

**Sensitive environments & development**

**Objective 1**

Create a safe, well-planned and biodiverse Linear Park that allows for recreation along the river.

**Objective 2**

Promote development in balance with the natural environment.

**Objective 3**

Create accessible, useable and connected open spaces and streets.

4.1 Urban Forest Strategy Link

This Policy outlines how trees will be maintained and established on public land and in so doing, contributes to the following goals in Council’s Urban Forest Strategy.

**Grow** - Grow the urban forest on public and private land through new plantings to maximise the social, economic and environmental benefits of trees and urban greening.

**Protect** - Protect the urban forest from threats and loss by preserving the city’s existing street trees and maintaining established trees on public and private land.

**Engage** – Work with residents, the community, business and government to care for the urban forest and broaden the understanding of the benefits it provides.

**Manage** - Manage the urban forest through coordinated planning, design and maintenance to ensure its long-term health and sustainability and management of resident concerns.

**Fund** – Continue to develop funding mechanisms that enable further investment into on ground actions that manage and grow the urban forest.

5. Principles

**Greening of the Town**

Tree Management Policy
This Tree Policy is based on the fundamental belief that trees are an important community asset for the following reasons:

- Trees provide a softening influence on often harsh urban landscapes, providing an amenity to residents and visitors through the introduction of colour, form and texture to either highlight or mask architectural and natural features.
- Trees have practical as well as aesthetic benefits for the community as a whole. These include a capacity for reduction in noise and air pollution, reduction of erosion, positive effects on the micro-climate of the surrounding area in modifying extremes of temperature and wind, as well as influencing in a positive way, the human psyche.
- Trees have an important role in the retention of natural habitats for indigenous plants and animals. This is particularly applicable to those parts of the Town that are to be preserved in their natural state for future generations and to retain their biodiversity.
- Trees provide economic benefits in a range of ways, including, but not limited to; increasing property values, increasing retail revenue for shopping precincts and reduction in energy consumption.
- Trees have health benefits including reducing the heat island effect, improving general health and wellbeing and reducing stress and anxiety.
- Trees provide a means to reduce the township’s carbon footprint caused by a range of its activities through carbon sequestration and storage, ways to reduce the township’s carbon footprint caused by harsh urban landscapes.

Why manage the Urban Forest?

The value of trees to the urban environment cannot be overstated. However, there are many factors that need to be taken into account in maintaining or introducing trees to the landscape which, at least potentially, can have an adverse effect.

The overarching principles of why the urban forest must be managed include;

- Maintaining the urban forest as a sustainable asset in the Town of Walkerville.
- Work toward an increase in urban forest cover to meet targets set in the Urban Forest Strategy.
- Maintaining the character and aesthetics of the tree population that form part of the identity of the Town of Walkerville.
- Managing the risk of personal injury to residents and visitors to the Town.
- Managing the risk to property through the failure of trees and tree limbs.
- Managing tree health to ensure the trees provide the intended benefits for longer periods of time.
- Managing conflicts between trees and the delivery of infrastructure and services (i.e. buildings, roads, power, sewer and water) through the use of suitable species.
- Managing pest plants in situations where they have the potential to proliferate.

6. Definitions

Definitions for the purpose of this Policy are:

**Community Land:** Includes all land owned by Council or under Council’s care, control or management, except roads or land that Council has resolved to exclude from Community Land classification.
Native Vegetation: Means a plant or plants of a species indigenous to South Australia.

Planting: The installation of a tree at a site where no tree previously existed or the replacement of a tree that was removed.

Reserves: Includes parks, gardens, reserves, playgrounds, ovals, sporting grounds, water courses and the like.

Road: Means a public or private street, road or thoroughfare to which public access is available on a continuous or substantially continuous basis to vehicles or pedestrians or both and includes:
(a) a bridge, viaduct or subway; or
(b) an alley, laneway or walkway.

Road (Main) Means any road owned and maintained by DTEI or is a bus route.
Road (Minor) Means all other roads.

Significant Tree: Means a tree within a class of trees declared to be Significant Trees by the Development Regulations 1993; or a tree declared to be a Significant Tree, or a tree within a group of trees declared to be Significant Trees, by a Development Plan.

Regulated Tree Means a tree within a class of trees declared to be Significant Trees by the Development Regulations 1993; or a tree declared to be a Significant Tree, or a tree within a group of trees declared to be Significant Trees, by a Development Plan.

Streetscape: The vegetation, including trees, along a street or road, which provides local tree benefits and amenity.

Tree: Means any 'woody' plant, including shrubs or vines if they are pruned into a tree like shape and excludes groundcovers, annual or perennial plants, or indoor plants. Most larger Palms are also included as trees even though they are not 'woody'.

Tree Health: A reflection of the tree's vigour as exhibited by a range of characteristics, including crown density, crown cover, level of dieback, leaf colour, leaf size, the degree of epicormic sprouting and the ability of the tree to cope with insect predation. A tree may be deleteriously affected by insects, parasites, disease, environmental damage, or other problems. Its ability to resist these problems characterises its degree of health. A tree in poor health infers the tree as a whole is malfunctioning and survival may be threatened. A tree in excellent health has good vigour and few if any pest problems.

Urban Forest The entire population of trees and woody shrubs in an urban environment that are a critical element of urban infrastructure that provide a wide range of social, economic, aesthetic, environmental and ecological benefits. The urban forest is made up of individual trees, but is managed as an entire population.

7. Policy

7.1 General

The Walkerville Council has the following strategic objectives in relation to the trees under its influence and control:

- To formally recognise the value of trees as fundamental and intrinsic landscape elements in the urban environment.
- To increase tree cover in line with the Urban Forest Strategy.
• To improve local streetscapes by introducing trees appropriate to the local environment and urban services present.
• To pursue a planned, consistent and coordinated approach to the planting and replacement of trees throughout the Town in accordance with agreed tree selection criteria, and to provide direction to residents and Council staff on the care and management of trees.
• To formally recognise that indigenous and exotic tree species each have a practical and aesthetic role in the improvement of the Town’s amenities.
• To protect and enhance the integrity of the natural landscape features of the Town.
• To create bio-diverse corridors along creeks and vegetated areas through tree planting and re-vegetation initiatives.
• To plant where appropriate, species that are tolerant of low water or are drought-resistant.
• Develop and implement water sensitive urban design (WSUD) strategies and green infrastructure strategies that improve the health and sustainability of the urban forest.
• To support tree assessment procedures and management practices which deal with risks and complaints in a timely and efficient manner.
• To conduct all tree planning, selection, planting, assessment, maintenance, removal and arbitration practices in accordance with the provisions of Council’s Risk Management Framework.
  - To observe and comply with all relevant legislation.
  - To maintain a record of trees under its control.
  - To follow industry best practice in tree planting and maintenance.
  - To improve the sustainability of the urban forest by ensuring adequate diversity in tree species and tree age.
  - To ensure trees on both public and private land are adequately protected during development activities by following industry best practice.

7.2 Planning and Development Issues

Trees are living organisms that are sensitive to changes in their environment. Any encroachment, disturbance or compaction of the soil around a tree is likely to damage or destroy a tree’s fine absorbing roots that are responsible for the collection of water and nutrients. Injury caused by cutting or crushing, suffocation through raising of the grade, poisoning or site contamination, and moisture stress by inundation or dehydration, can result in the decline or death of the tree. Injuries caused during development adjacent to trees may not be apparent for many years, but can significantly affect the health and viability of the tree many years later. Damage to a tree’s root system also has the potential to adversely affect tree stability, creating a risk issue.

The Walkerville Development Plan provides guidance for tree management of regulated and significant trees on public and private land.

Development applications should include sufficient information, including detailed plans and an arboricultural report detailing tree impact and protection measures to ensure those regulated and significant trees on both private and public land are not adversely affected by such activities to ensure those regulated and significant trees both on private and public land are not adversely affected by such activities. These plans and reports should be reviewed by qualified arborists with reference to Australian Standard AS 4970-2009 Protection of trees on development sites and with the Development Act 1993 and Development Regulations 2008.

Civil and infrastructure works on Council land should also follow these same guidelines.

Where relevant, these must include plans for the retention or placement of trees on roads adjacent to the development where appropriate.
The preservation of trees already growing on the road or in other Council properties adjacent to development, or the planting of new trees in these circumstances must comply with the provisions of this Policy and conform with the operational procedures outlined in the 'Tree Procedures Manual'.

**7.2.1 Protection of trees on development sites**

Trees on or adjacent to a development site shall be adequately protected from the potentially adverse impacts of such development. This will apply to development that is occurring on public or private land. Tree protection measures should follow the guidelines outlined in Australian Standard AS 4970 Protection of trees on development sites.

Where a development is occurring in the vicinity of a Council owned tree, or a regulated or significant tree on public or private land, the following is required:

- A report from a qualified arborist assessing the impacts of the development and the implementation of appropriate tree protection measures. All relevant information should be provided by the applicant to assist the assessing officer.
- Gaining relevant Development Approvals.
- The lodgment of a bond from the developer or its agent, at Council’s discretion.

Where a tree is damaged during development, the person responsible may be liable for tree damaging activity (as defined under the Development Act) and may lose all or part of the bond.

**7.3 Other Authorities/Agencies**

Other Authorities/Agencies have responsibility for managing their own infrastructure on Council land including the management of trees and services. Tree management agreements with these other authorities will be sought to avoid any last minute or unforeseen conflicts which may result in poor tree health, aesthetic, or safety outcomes. Where these agencies are working in the vicinity of such trees, they should seek arboricultural advice from an appropriately qualified arborist. If working in the vicinity of regulated and/or significant trees, they are required to seek relevant development approvals.

**7.4 Planting Objectives**

To improve the sustainability, diversity, age distribution, quality and suitability of the urban forest across the entire Town and to increase the number of appropriate plantings on Council land in a variety of planting situations. This will occur in line with the availability of resources and the Council’s capacity to maintain all trees planted to acceptable standards.

Records will be kept of the site and species assessment process used in determining the suitability of tree species used, and all tree planting operations will be carried out in accordance with the 'Tree Procedures Manual'.

**7.4.1 Planting Trees on Road Related Area**

The selection and management of trees for planting in roads will be planned with great care and will have regard to local conditions, safety, and compatibility with existing plantings, and be designed to enhance the character and amenity of the streetscape. Species used must come from the approved list of street trees in the 'Tree Procedures Manual' and adhere to the right tree right space mantra.

New tree plantings will take into account:

- the surrounding vegetation composition
- aesthetic enhancement of the local setting
- the purpose of the road as well as the type of construction of the road and any impact the trees might have on it, or surrounding structures
• the impacts the proposed trees may have on any services present, above or below the ground, taking into account Legislative requirements e.g. Sewerage Act 1929, Electricity Act 1996
• the type of traffic using the road and potential impacts on road safety
• the possible impacts on the safety of the public
• impact on aged residents or those using mobility equipment
• opportunities to upgrade the streetscape to improve traffic flow and tree planting requirements
• any other matters which might be pertinent to the site.

Where tree planting is likely to have a significant impact on local residents, business proprietors, or other stakeholders, Council will ensure that public consultation occurs according to the provisions of its Public Consultation Policy.

An ongoing program will ensure all Council roads suitable for planting will be planted with trees, and a Tree Management Strategy is consistent with the Urban Forest Strategy and this policy. A Tree Management Policy will be developed to support these plantings.

7.4.2 Planting Trees on Community Land

Preference will be given to the planting of local indigenous species, or trees on the Tree List (refer tree procedures manual) approved tree species list.

While recognising the need to maintain adequate open space, Council may consider reserving land for development or treed corridors, linking and extending areas of native vegetation for wildlife, or for other passive recreational pursuits, following appropriate examination of the circumstances in each case. This process will include a risk management assessment of the project.

7.4.3 Unauthorised Planting

Tree planting by persons other than Council officers in roads and Community Land requires authorisation by Council.

Where a tree has been planted by a resident in any road or Community Land, the Council officer may report the matter to Council for consideration.

Where a tree has been planted by a resident in any road or Community Land, and the Manager Assets & Infrastructure, Depot Team Leader, or Manager Planning & Regulatory Services is of the view that the species and/or site of the planting is contrary to this Policy, the Manager Assets & Infrastructure may report the matter to Council for consideration.

7.4.4 Tree List

The list of tree species suitable for planting in the Town will be reviewed in accordance with the Council’s Tree Management Strategy and operational Tree Procedures Manual. Independent Arborists will have input into this list periodically to ensure it remains up to date via the introduction of new tree species, while non performing species or species where undesirable attributes have become apparent should be withdrawn from use. The approved tree list is included in the Tree Procedures Manual and forms part of operational procedures developed by Council officers.

7.5 Tree Maintenance Objectives

Council will ensure that all trees growing under its care and control in the Town, be they on roads or Community Land, are adequately maintained in accordance with a Tree Management Strategy suitable for the circumstances.

The allocation of resources by Council for managing trees will determine the extent of implementation of any maintenance programs developed for the purpose. Therefore the implementation of maintenance programs will be prioritised based on the level of funding and resources available.
Maintenance programs will be developed which aim to:

- promote long term tree and or habitat health;
- comply with relevant best practices including but not limited to Australian Standards and legislative requirements;
- promote biodiversity and conservation values where appropriate;
- manage the level of risk to provide adequate public safety;
- improve the amenity values provided for the community of all vegetation;
- ensure the compatibility of proposed and existing trees with local infrastructure and site uses; and
- record all aspects of planning and management.

Maintenance programs will be reviewed on an "as needs" basis, and where stakeholders affected by a plan have an interest in its outcomes, Council will ensure that public consultation occurs according to the provisions of its Public Consultation Policy.

### 7.6 Trees Removal on Council Land

#### 7.6.1 Trees on Council Land

**Criteria for Removal at Council Cost**

Removal and replacement of trees will be at Council's expense when:

- To Council's satisfaction, the tree requested to be removed is a health hazard as certified by a recognised medical authority and cannot be effectively managed through commonly available over the counter medications.
- The tree requested to be removed is causing significant damage to property with appropriate supporting evidence (either private or Council).
- The tree requested to be removed is in the opinion of the Council causing significant nuisance to a resident.
- The tree is diseased with a short life expectancy or is dead.
- The tree is identified as presenting an unacceptable risk using a suitable tree risk assessment method as detailed in Council's Tree operating Procedures Manual.
- The tree is not providing minimum levels of amenity expected of such a planting.
- The tree is causing unsustainable damage or conflict with surrounding infrastructure.

#### 7.6.2 Removal for Development

The removal of a regulated or significant tree in relation to a development application must be assessed within the legislative framework of the Development Act 1993. The opinion of a qualified arborist or other relevant expert may be required to determine when tree removal is acceptable.

The removal of a street tree under the control of Council in relation to a development application shall be determined with consideration to legislative requirements under the Development Act 1993 and Local Government Act 1999.

When authorisation is granted to remove a tree due to development of adjoining land, Council may place a monetary value on the said tree by a recognised valuation method. Removal and replacement will be at the applicant's expense with payment to be made prior to work being commenced.

The applicant will pay the following:
• Tree valuation.
• Valuation report cost.
• Removal cost.
• Cost of replacement tree.

All building applicants are to be advised of their liability for damage/loss of any street tree on the site frontage and that Council may seek to recover costs in respect of any damage/loss of public trees.

7.6.1.37.6.3 Removal for Resident Benefit

Where approval is granted for the removal of a tree for the benefit of a resident Council may place a monetary value on the tree using a recognised valuation method. Removal and replacement will be at the resident's expense with payment made prior to work being commenced.

When a Council tree is:

• located in an extension to or in a supplementary driveway to a property,
• located on a street boundary and is therefore subject to cost share with Council,
• an unauthorised planting on Council property by any person,

The resident may pay or share the following:

• Tree valuation.
• Valuation report cost.
• Removal cost.
• Cost of replacement tree.

7.6.1.47.6.4 Removal After Vehicle Impact

Where a Council officer attends reported damage/removal of a tree by vehicle impact the officer will, where possible, obtain the driver's name and address and accident details which will then be the subject of a report to the Executive Planning & Infrastructure or Team Leader Works. In such cases Council may seek to recover costs or part thereof of:

• Tree valuation.
• Valuation report cost.
• Removal cost.
• Cost of replacement tree.

7.6.1.57.6.5 Unauthorised Tree Damage or Removal

Responsibility for the care, control and management of trees and shrubs on land under the care, control and management of the Council is vested in the Council.

It is an offence for a person to cut, saw or remove any tree or shrub on any land under the care, control and management of the Council even if the tree is overhanging private property.

It is an offence for a person to cut, saw or remove any regulated or significant tree on private land without the approval of Council.
Should Council wish to prosecute in relation to an unauthorised removal, consideration should be given using a recognised valuation method.

### 7.6.6 Removal of Trees on Council Land

The removal of trees on Council land may be necessary for a range of reasons. This may include trees that are in poor health, trees that pose a risk to people or property, or trees that are causing damage to structures or infrastructure.

The removal of trees on public land must fulfil the following requirements:

- The tree/s should be assessed by a qualified arborist (AQF level 3 Arborist or higher) to determine the reasons for tree removal.
- Consider reasonable alternatives before removing the tree/s.
- Tree removal applications for regulated and significant trees must meet one of the relevant criteria for removal before being granted. These criteria are based on the criteria set out in the Development Act 1993 and are outlined in the Town of Walkerville Development Plan.
- Gain the required development approval by lodging a development application with the Town of Walkerville.
  - In the case of a regulated tree, the applicant is not required to provide an arborist report.
  - In the case of a significant tree, the applicant is required to provide a report form a relevant professional, such as a qualified arborist (AQF level 5 Arborist or higher), plant health professional, building engineer or similar.

Should Council wish to prosecute in relation to an unauthorised removal, consideration should be given to an appropriate method of valuation in accordance with Council’s Tree Procedures Manual.

### 7.7 Trees on Private Land

#### 7.7.1 Fallen Trees On toonto Public Land

Where a tree on private property is felled and obstructs a public road and the Council causes the fallen tree to be removed from the public road, the Council may seek to recover the cost of such removal from the owner of the property from which the tree originated.

Such cost will include:

- Labour charge.
- Cartage.
- Chipping.
- Damage to public property (i.e. street tree).
- Cost of any contracts.

#### 7.7.2 Pruning of Trees on Private Land

The pruning of trees on private land may be necessary for a range of reasons. This may include pruning to mitigate risk, pruning to provide suitable clearances to dwellings, private structures, footpaths, roadways and associated infrastructure and other possible reasons.

The pruning of regulated or significant trees on private land must fulfil the following requirements:

- Must not constitute a tree damaging activity as defined under the Development Act 1993.
- Must comply with Australian Standard AS 4373 Pruning of amenity trees.
- Must be carried out by qualified arborists (AQF level 3 Arborist).
7.7.3 Removal of Trees on Private Land

The removal of trees on private land may be necessary for a range of reasons. This may include trees that are in poor health, trees that pose a risk to people or property, or trees that are causing damage to structures.

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- The tree/s should be assessed by a qualified arborist (AQF level 3 Arborist or higher) to determine the reasons for tree removal.
- Tree removal applications must meet one of the relevant criteria for removal before being granted. These criteria are based on the criteria set out in the Development Act 1993 and are outlined in the Town of Walkerville Development Plan.
- Gain the required development approval by lodging a development application with the Town of Walkerville.

- In the case of a regulated tree, the applicant is not required to provide an arborist report.
- In the case of a significant tree, the applicant is required to provide a report form a relevant professional, such as a qualified arborist (AQF level 5 Arborist or higher), plant health professional, building engineer or similar.
- Where tree risk is alleged in the application, tree risk should be assessed by a qualified arborist (AQF level 5 arborist or higher) using a tree specific and industry accepted tree risk assessment method.

7.7.4 Management of Trees on Private Land

Council should aim to provide guidance to rate payers about the management of trees on private land. This has the overall benefit of contributing to the Urban Forest. This should include, but is not limited to the following:

- What is a regulated and significant tree.
- Pruning of a regulated or significant tree.
- Removal of regulated or significant trees.
- Protection of regulated or significant trees on development sites.
- General care and maintenance of trees.
- Tree planting guidelines and species suggestions.
- Control of pest trees in certain situations.

Council could also consider providing incentives for rate payers to maintain regulated or significant trees on private land.

7.7.8 Pest Trees

Tree species which occur outside of their intended environments and reproduce freely, have the potential to impact on the viability of native species and habitats, or causing a nuisance through prolific regeneration, will be controlled where it is demonstrated they are contributing to a weed infestation in their particular setting. Not all tree species that have weed potential create a pest problem in all settings.
Where it has been identified that a tree is adversely impacting on native species and habitats, or are causing a nuisance through uncontrolled regeneration, every reasonable effort should be made to control the spread of the pest tree.

Weed species are those identified by reputable environmental organisations that outline the species of tree and how it can pose a weed problem.

There will be regular monitoring by Council staff of potential pest trees occurring in waterways, reserves and other natural areas under Council's control.

Periodic checks of all Community Land will be conducted for the purpose of monitoring pest trees and identifying newly emerging species that may gain pest tree status from time to time.

Pest trees growing in private gardens as ornamentals, or planted in roads as street trees, need not be automatically considered for removal, unless they form part of a removal and replacement strategy, or where it can be clearly shown that they are a seed source contaminating areas affected by the said species' pest tree status.

A list of currently identified pest trees is included in the ‘Tree Procedures Manual’.

There will be regular monitoring by Council staff of potential pest trees occurring in waterways, reserves and other natural areas under Council's control.

Periodic checks of all Community Land will be conducted for the purpose of monitoring pest trees and identifying newly emerging species that may gain pest tree status from time to time.

Trees on the ‘Pest Tree’ list growing in private gardens as ornamentals, or planted in roads as street trees, need not be automatically considered for removal, unless they form part of a removal and replacement strategy, or where it can be clearly shown that they are a seed source contaminating areas affected by the said species’ pest tree status.

7.8 7.9 Independent Arborists

Advice will be sought externally from Independent Arborists to assist in planning, assessments, monitoring, species selection and other tree management decision making processes where circumstances dictate. This will include those trees on council land and regulated and significant trees on council or private land.

The level of advice sought will be consistent with the person's experience and qualifications (but the minimum level of qualification is to be Level 5 Consulting Arborist).

8. Review & Evaluation

This Policy will be reviewed two yearly. The Chief Executive Officer will report to Council on the outcome of the review and make recommendations for amendment, alteration or a substitution of a new Policy if considered necessary.

9. Availability of the Policy

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