



- 8.1 GREENING PORT PHILLIP**  
**WARD: WHOLE OF MUNICIPALITY**  
**GENERAL MANAGER: FIONA BLAIR, INFRASTRUCTURE & AMENITY**  
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**TRIM FILE NO: 62/01/331**  
**ATTACHMENTS:**
1. Performance against Greening Port Phillip - Attachment 1
  2. Benchmarking of Surrounding Councils Urban Forest Objectives 2017 - Attachment 2
  3. Greening Port Phillip Street Tree Planting Program 2017 - 2022 - Attachment 3
  4. Greening Port Phillip Street Tree Priority Planting List 2017/18 - Attachment 4

**PURPOSE**

To provide and update on the Greening Port Phillip an Urban Forest Approach 2010 (Greening Port Phillip) and propose a Greening Port Phillip Tree planting program 2017 – 2022

**1. RECOMMENDATION**

That Council:

- 1.1 Notes the progress of Greening Port Phillip an Urban Forest Approach 2010.
- 1.2 Endorses the Greening Port Phillip Street Tree planting program 2017 – 2022, Attachment 3.

**2. BACKGROUND**

**Development of Greening Port Phillip**

- 2.1. Greening Port Phillip was adopted by Council in 2010. It was intended to be a ten year strategy with two five year planting guides. It was informed by the Open Space Strategy 2009 and aligned with Council's Toward Zero Strategy.
- 2.2. The following community consultation was undertaken to develop the Greening Port Phillip.
  - 2.2.1. 380 telephone surveys.
  - 2.2.2. 105 surveys completed on line or via conversation tents.



2.2.3. Appointment of a Community Reference Group.

2.2.4. Two tree summits were held in 2009 at Port Melbourne and St Kilda town halls with approximately 180 in attendance.

2.3. The vision of ‘Greening Port Phillip’ is;

*“The City of Port Phillip will have a healthy and diverse urban forest that uses innovative greening solutions to enhance the community’s daily experience, ensuring environmental, economic, cultural and social sustainability for the future generations.”*

2.4. The City of Port Phillip Urban Forest is made up of trees on public and private land and can include roof top, vertical and balcony gardens.

**Our Performance against Greening Port Phillip**

2.5. Greening Port Phillip identifies five key indicators. Over the past seven years steps have been undertaken to better understand our current baseline position on the following indicators noted below in Table I.

Table I – Greening Port Phillip key indicators

Desired Outcome	Current Results	Notes
1. Reduction in hot spots	Removal of approximately 8000m <sup>2</sup> of hard surface for tree planting and garden beds  Streets which had significant de-paving as part of the first planting guide includes, Bridge St, Port Melbourne, James Service Place, South Melbourne, St Vincent St, South Melbourne	Tree canopy provides 21 degrees Celsius difference between tree shade and no shade on road surface on a 28 degrees Celsius day.  De-paving (a method used to help cool down our streets), has occurred in a number of locations throughout the municipality, including installation of nature strips with resident support, WSUD, medians and traffic treatments.
2. Increase in total area of canopy cover	Canopy cover has increased by 47076 m <sup>2</sup>	Baseline Data 2017 Total Street tree canopy - 1,093,633.9 m <sup>2</sup> Total area of road surface - 5,737,172.6 m <sup>2</sup> Total Park Tree Canopy - 556,612.3 m <sup>2</sup> Total area of parks - 4,565,540.0 m <sup>2</sup>
3. Increase in number of trees in streets and parks in the City of Port Phillip	Net increase of 4101 new trees	Total planted trees in streets: 6729 Total planted trees in parks: 1276



<p>4. New greening initiatives undertaken where trees are not an option</p>	<p>Community gardens which included raised garden beds for residents – Foundry Park, South Melbourne.</p> <p>“Growing Green Melbourne A guide to green roofs, walls and facades” was developed and supported by IMAP and State Government.</p> <p>Small poppy grants are supported for alternative greening options.</p>	<p>Alternate Greening options have been investigated/ researched and implemented when practical.</p> <p>Public space strategy is being developed over the next 16 months that will replace the Open Space Strategy 2009.</p>
<p>5. The City of Port Phillip community are satisfied with the action being undertaken by Council to maintain the urban forest</p>	<p>Parks and Open Space community satisfaction result for parks and open space was 89% in March 2010.</p> <p>The latest community satisfaction result was 97% in May 2017.</p>	<p>Other Community Satisfaction survey results from May 2017 that are relevant to Greening Port Phillip are;</p> <p>Summer Management 95%</p> <p>Recreation Facilities 95%</p> <p>Management of Local Roads 94%</p>

- 2.6. The companion document developed in 2010 titled, ‘Greening Port Phillip Street Tree planting guide 2010-2015 has been completed. This planting guide prioritised streets with tree condition assessed as poor health and low tree numbers.
- 2.7. Of the 250 streets identified in the planting guide, 230 streets were upgraded and 20 streets were deemed not required due to improved tree health and restrictions for installation of new trees by underground and aboveground services.
- 2.8. Examples of completed streetscape that have been delivered as part of the planting guide are:
  - 2.8.1. Maryville Street, Ripponlea
  - 2.8.2. James Service Place, South Melbourne
  - 2.8.3. Bridge Street, Port Melbourne
- 2.9. Other programs that contribute to greening across the municipality is summarised in Table 2

Table 2 – Additional programs that contribute to Greening Port Phillip

	2015/16	2016/17
Natural Heritage Area annual planting	25,000	29,472
Foreshore Vegetation implementation program	9,800	30,621
Parks and Traffic Treatment annual replacement and infill planting	14,030	7,997



- 2.10. Since 2010 Council has facilitated 59 Community planting days and supported 40 planting days with the Conservation Volunteer Australia program.
- 2.11. Since the development of the Greening Port Phillip, street trees have increased by 3868 and park trees by 233, which equates to a net increase of 4101 new trees. Refer below for annual performance in Table 3.

Table 3 – Annual performance of net tree gain from Greening Port Phillip

Year	Planting Budget		Street Trees		Park Trees		Tree Net Gain
	Infill Planting	Streetscape Upgrades	No. Planted	No. Removed	No. Planted	No. Removed	
2010	\$ 258,000	\$ 240,000	622	375	152	172	227
2011	\$ 325,000	\$ 720,000	963	319	254	208	690
2012	\$ 376,000	\$ 640,000	996	397	236	232	603
2013	\$ 388,000	\$ 540,000	954	408	216	109	653
2014	\$ 407,000	\$ 620,000	1088	428	195	164	691
2015	\$ 417,000	\$ 690,000	1157	484	148	108	713
2016	\$436,000	\$500,000	900	450	100	50	500
<b>Total</b>	<b>\$2,171,000</b>	<b>3,370,000</b>	<b>6729</b>	<b>2861</b>	<b>1276</b>	<b>1043</b>	<b>4101</b>

2.12. Reasons for tree removals include:

- 2.12.1. Poor health due to drought
- 2.12.2. Poor structure
- 2.12.3. Disease
- 2.12.4. Storm damage
- 2.12.5. Private and public developments

2.13. Tree planted from 2010 – 2016 currently provide 47,076 m2 of canopy cover. By 2021 these trees are estimated to provide three times this amount (145,482 m2).

2.14. Council has 45,011 trees listed on the Council asset register that are inspected annually, the breakdown of baseline canopy cover and tree numbers are summarised below in Table 4.

Table 4 – Tree and canopy numbers

	No. Trees 2016	Canopy Cover 2016
<b>Street Trees</b>	32,109	19.1%
<b>Park Trees</b>	12,902	12.2%

2.15. A more detailed summary of our performance against the Greening Port Phillip documented actions is summarised in Attachment I.



### **3. KEY INFORMATION**

#### **The value of trees provision to our community**

- 3.1. The Community show an interest in trees through the following;
  - 3.1.1. The Council Plan 2017 – 2022 committed to “A greener, cooler and more liveable city”, with seven community submissions related to trees
  - 3.1.2. 3170 tree related customer requests were received last financial year
  - 3.1.3. Positive feedback was regularly received from community consultation during the 34 streetscapes upgrades last financial year.
- 3.2. The budget allocation for Greening Port Phillip program in 2017/18 is \$540,000.
- 3.3. Benchmarking of surrounding Councils urban forest objectives has been undertaken and assessed as largely consistent with our objectives. A summary of our neighbouring Councils is provided as Attachment 2.

#### **Current and upcoming challenges**

- 3.4. As population increases and re-development occurs there is continued pressure on public trees, this is due to competing uses such as car parking, traffic and services above and below ground.
- 3.5. Trees within private property are susceptible to redevelopment due to the increased density of the built form.
- 3.6. State Government projects such as Melbourne Metro Rail will have an impact on tree canopy targets. For example, based on the reported estimated number of trees to be removed 13,000 m<sup>2</sup> of tree canopy could be lost.
- 3.7. Legislative clearance requirement for trees around powerlines poses challenges in establishing tree canopy cover.
- 3.8. Local climate conditions, varying soil types, soil compaction, variances in soil moisture, restrictive growing environments and vandalism, may affect the establishment and optimum growth of individual trees.

#### **How we continue to deliver Greening Port Phillip**

##### Streetscapes

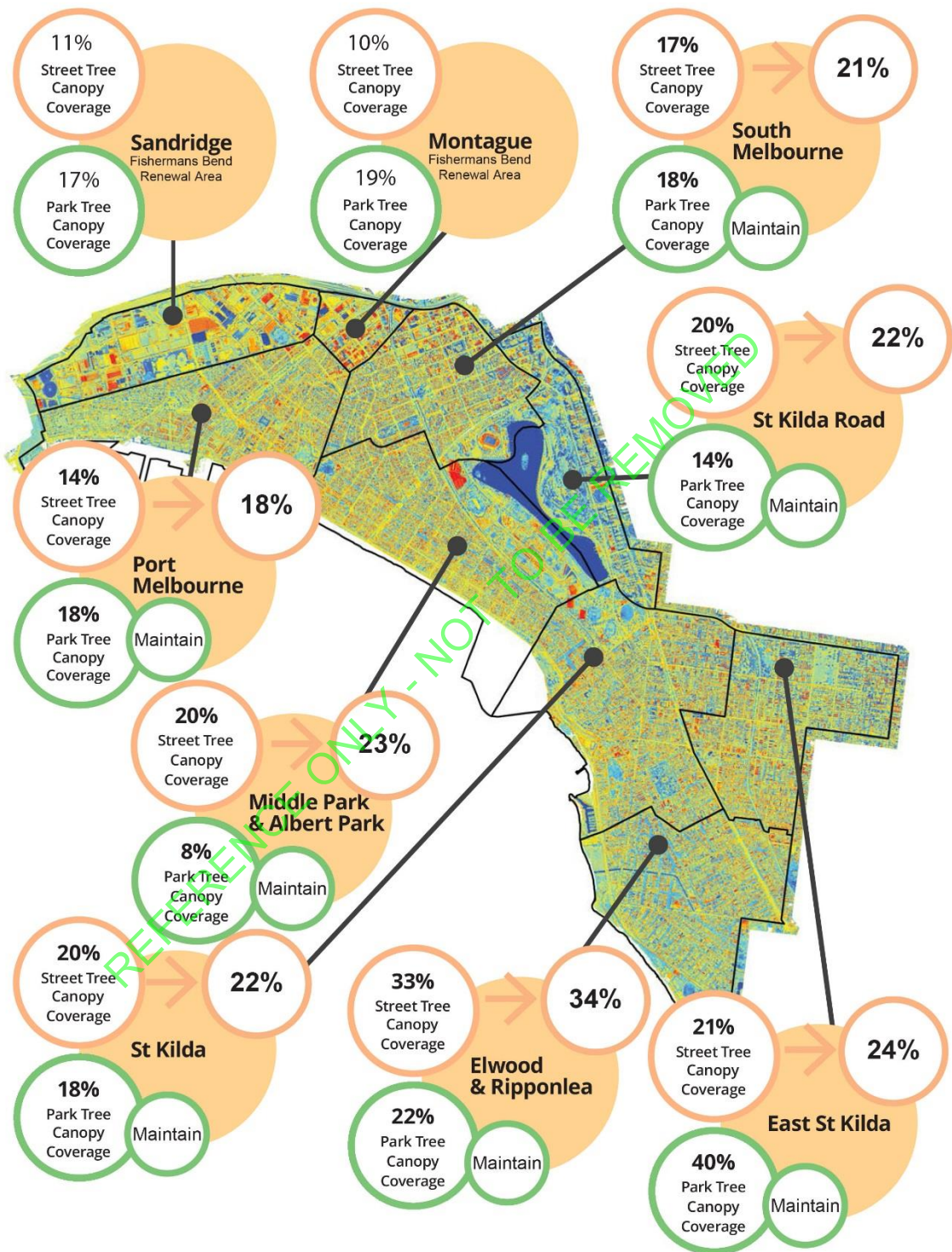
- 3.9. The Greening Port Phillip Street Tree planting program 2017 – 2022, Attachment 3, has been developed to continue prioritising street tree planting throughout the City of Port Phillip for the next five years.
- 3.10. The tree planting guide outlines a multi-faceted strategic approach to tree planting by;
  - 3.10.1. Maintaining a balance of young, semi mature and mature trees across the municipality (to minimise risk of simultaneous mature tree loss across the city).
  - 3.10.2. Delivering the right tree for the right place
  - 3.10.3. Undertaking in-fill / replacement planting to replace street trees that have died or been removed.



- 3.10.4. Increasing the overall number and canopy cover of trees in the municipality.
- 3.10.5. Reducing the urban heat island effect (UHI) by reducing hot spots.
- 3.10.6. Maximising the use of street trees to create and enhance the character of areas experiencing urban renewal and development intensification.
- 3.10.7. Improving and maintaining biodiversity corridors throughout the municipality.
- 3.11. The streets have been ranked from lowest canopy cover to highest for each neighbourhood and then those with lowest canopy cover were inspected individually to determine appropriateness for tree planting.
- 3.12. Existing data was also interrogated to clarify tree species, age, condition and the street's suitability for future planting.
- 3.13. The Greening Port Phillip Street Tree planting program (2017 – 2022) aims to by 2022:
  - 3.13.1. Increase overall tree numbers by 5,000 tree (approximately 1000 tree per annum).
  - 3.13.2. Select trees species that are the right tree for the right place.
  - 3.13.3. Provide biological diversity.
  - 3.13.4. Increase net canopy cover.
  - 3.13.5. Preserve and enhance our local character.
- 3.14. Based on the proposed tree planting guide, and assuming budgets are maintained, we estimate an additional 10% (200,000 m<sup>2</sup>) of total tree canopy (after 10 years' growth).
- 3.15. The list of streets that have been prioritised for tree planting was developed predominately based on the existing canopy cover in each street. 37 Streets have been identified for upgrade and an additional five for consultation only in 2017-18. These are noted in Attachment 4.

#### Parks

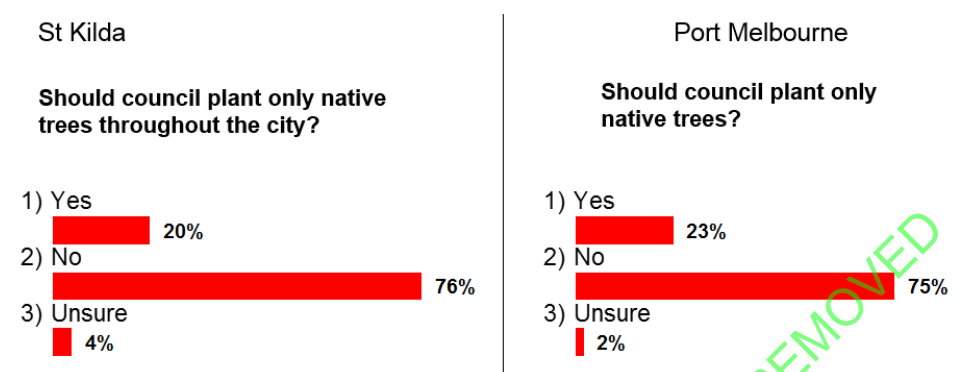
- 3.16. Greening Port Phillip Street Tree planting program (2017 – 2022), provides a baseline measure Park tree canopy.
- 3.17. Overall parks are well stocked with trees with optimum numbers in varying ages. The majority of park trees are in good health with only 1% (152 trees) in poor health. When trees are in poor health, they are removed and replaced with suitable trees.
- 3.18. Park tree canopy is to be maintained and in the majority of cases increased, as young trees mature.
- 3.19. Increased provision of park trees will be considered as part of future master plans and capital works upgrades. For example, Montague Community park within the Fishermans Bend Urban renewal area.
- 3.20. Open areas in parks will be maintained to encourage active recreation and community health and wellbeing benefits
- 3.21. Canopy Cover by Neighbourhood and targets (is shown below in Figure 1). The targets have been developed in consultation with Councillor feedback and in accordance with the Council Plan municipal target for tree canopy.



Choosing the right tree for the right place



- 3.22. Selecting tree species for planting is based on their suitability to the site, canopy cover, biological tolerances, future climate change conditions and potential to contribute to the landscape without onerous management implications. ‘The right tree in the right place’.
- 3.23. The tree summit Community consultation results from 2009 regarding tree species is shown below in Figure 2.



- 3.24. Our current tree population numbers are a 50% split between native and exotic trees. Indigenous species from the Sandbelt Region make up 15.5% of the total tree population.
- 3.25. Table 5 below provides key municipal species.

Species	Common Name	Origin	Total	% of Tree Species
<i>Platanus x acerifolia</i>	London Plane Tree	Exotic	4207	10%
<i>Lophostemon confertus</i>	Queensland Box Brush	Native	1689	4%
<i>Banksia integrifolia</i>	Coastal Banksia	Indigenous	1634	4%
<i>Allocasuarina verticillata</i>	Drooping She-oak	Indigenous	1591	4%
<i>Phoenix canariensis</i>	Phoenix Palm	Exotic	1103	3%
<i>Ulmus procera</i>	English Elm	Exotic	1037	3%
<i>Fraxinus oxycarpa</i>	Claret Ash	Exotic	939	2%
<i>Olea europaea subsp.</i>	Olive Tree	Exotic	833	2%
<i>Pyrus calleryana</i>	Ornamental Pear	Exotic	820	2%
<i>Corymbia maculata</i>	Spotted Gum	Native	799	2%

- 3.26. London Plane Trees, *Platanus x acerifolia* are the most prominent tree as they provide strong character and significant canopy cover for example areas of Elwood.
- 3.27. To deliver the right tree for the right place and create a diverse urban forest. We investigate the opportunities for alternatives species for streetscape upgrades. As a result the percentage of London Plane Trees has been reduced from 16% in 2010 to 10% in 2016.





## FURTHER SUPPORTING INFORMATION

### 4. ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

#### 4.1 Direction 3: We have smart solutions for a sustainable future

##### *3.1 - A greener, cooler and more liveable city*

*A) Increasing canopy cover and diversity of tree species across our streets and open spaces.*

*B) Facilitating the greening of our built environment, through green roofs, walls and facades*

#### 4.2 Direction 4: We are growing and keeping our character

*4.1 - Liveability in a high density City. Deliver open space and streetscape works in Fishermans Bend, particularly in the Montague neighbourhood and at the Ferrars Street Education and Community Precinct.*

*4.2 - A City of diverse and distinctive neighbourhoods and places. Ongoing investment in upgrading the foreshore including vegetation projects and maritime infrastructure renewals.*

### 5. CONSULTATION AND STAKEHOLDERS

#### 5.1 The following community consultation was undertaken to develop the Greening Port Phillip an Urban Forest Approach 2010

5.1.1 380 telephone surveys

5.1.2 105 surveys completed on line or via conversation tents

5.1.3 A Community Reference Group was appointed to assist with the development of the Tree Strategy.

5.1.4 Two tree summits were held in 2009 at Port Melbourne and St Kilda town halls with approximately 180 in attendance

#### 5.2 Consultation is undertaken when designing and delivering streetscape upgrades

5.2.1 Letter to residents and where necessary include a plan of the proposal

5.2.2 Receive feedback and make changes as necessary

5.2.3 Notify residents of delivery dates

### 6. LEGAL AND RISK IMPLICATIONS

6.1 There are no legal or risk implications associated with Greening Port Phillip and Greening Port Phillip Street Tree planting program 2017 – 2022.

6.2 Electricity Safety (Electric Line Clearance) Regulations 2015 requires trees to be planted and maintained. City of Port Phillip Electric Line Clearance Management Plan (2017-2018) ensures that these works are undertaken to code.



**7. SUSTAINABILITY – Triple Bottom Line**

**7.1 ENVIRONMENTAL IMPLICATIONS**

7.1.1 Greening Port Phillip Street Tree planting program (2017 – 2022) has targets to increase canopy cover that will reduce the urban heat island effect (UHI) by reducing hot spots. It also reduces stormwater flows and nutrient loads, reduces air pollution and improves biodiversity.

**7.2 SOCIAL & CULTURAL IMPLICATIONS**

7.2.1 In an urban environment trees provide a critical link to the natural world from which we have evolved and helps restore the mind and spirit.

**7.3 ECONOMIC IMPLICATIONS**

7.3.1 The economic benefits are variable depending on species, tree size, condition, and function makes determining their economic value difficult. Economic benefits can be associated with energy costs savings. Well-placed shade trees can reduce energy consumption in a home by as much as 30%.

**7.4 FINANCIAL IMPLICATIONS**

7.4.1 The budget allocation for 2017-2018, Greening Port Phillip Street tree planting program is \$500,000 and Park Tree planting is \$40,000.

7.4.2 The Greening Port Phillip Street tree planting program is a funded program within the Council Plan 10 year projections.

**8. IMPLEMENTATION STRATEGY**

**8.1 TIMELINE**

8.1.1 The planting program will commence immediately with the 37 streets to be designed and delivered in 2017/18.

8.1.2 Five streets will be consulted on in preparation for future year's delivery.

**8.2 COMMUNICATION**

8.2.1 If adopted, Greening Port Phillip Street tree planting program 2017-2022 will be made available on our website.

8.2.2 All residents within streets subject to be upgraded will be consulted prior to delivery.

**9. OFFICER DIRECT OR INDIRECT INTEREST**

9.1 No officers involved in the preparation of this report have any direct or indirect interest in the matter.