PORT PHILLIP EMERGENCY CLIMATE ACTION NETWORK

PECAN: Submission to the CoPP in response to the draft Vision Statement for the Urban Forest Strategy 2040 and our thoughts and recommendations for Part 2 of the Strategy's development.

Prepared by Pecan Blue Green Infrastructure Committee

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The City of Port Phillip has provided the following vision for the Urban Forest Strategy to 2040 for feedback:

- *We work **together** to value, protect, grow and care for healthy and sustainable greening everywhere.*[1]
- *We retain first, respecting established character, and adapt by adding more **resilient** plant species where they are most needed*[2] *to reduce heat and flood vulnerabilities.*
- *We prioritise **biodiversity**, supporting healthy ecosystems and establishing wildlife corridors*[3].
- *We invest in thriving integrated urban greening in streetscapes, buildings and gardens.*
- *We value the urban forest as a long-term asset that is critical to the health and wellbeing of our community and to our city's character and function, through **quality** design, construction and maintenance.*

This is an important first step in developing a bold and innovative Urban Forest Strategy, and is based on robust research, analysis and key stakeholder input.

PECAN's Response

Collectively humanity faces a frightening future. This needs to be acknowledged. Planting trees and restoring vegetation and water into the city environment are the key adaptation actions the latest IPPC report identifies as directly relevant in adapting to the actuality of a heated planet.

We fully support the Vision's ambition with some specific changes to the words proposed, to tighten the Vision (See footnotes 1-3 for amendments and the Pecan final proposed Vision statements on page 2). Executing the Vision requires an implementation framework which will also be decisive and far reaching. The evidence so far in documents produced for the Strategy show this level of effort is required to see more than marginal change.

The language used for the Vision is very inclusive and suggests common cause between the City and its community. We are all in this together- however as this is our home and since

[1] Add sustainable green and water sensitive city' and remove 'everywhere' Insert 'spatially prioritized greening for social equity across the city'
[2] Remove 'where they are most needed'. The addition of this proviso limits the scope of effort needed to increase the resilience of the plantings overall.
[3] Add 'shady corridors' to encourage walkability.

we rely on our Council to take effective action on our behalf, we propose a particular statement is needed as to how Council and community will work together

The Vision statements proposed and the background reports provided indicate that a new UFS will reach beyond trees and canopy cover, thus requiring engagement across many separate functional areas of Council's operations (open space, planning, transport, sustainability: water and roads as well as the responsible operational section : Urban Forest)

PECAN's Proposed Vision:

The City of Port Phillip works with its community

- *We value, protect, grow and care for a healthy and sustainable green and water sensitive city.*
- *We prioritise spatially delivered outcomes for climate **adaptation** and social **equity**.*
- *While respecting established character, we adapt by adding more **resilient** plant species to reduce heat and flood vulnerabilities*
- *We prioritise **biodiversity**, supporting healthy ecosystems and establishing wildlife corridors and shady connecting corridors for walkability.*
- *We invest in thriving **integrated** urban greening and water in streetscapes, buildings and on private land.*
- *We value the urban forest as a long-term asset that is critical to the health and wellbeing of our community and to our city's character and function, through **quality** design, construction and maintenance.*
- *We invest in developing a bold and innovative Urban Forest Strategy, based on robust research, analysis and key stakeholder input.*

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The following additional comments address the accompanying reports by consultants, our experiences and our hopes for the next stage of the development of the Urban Forest Strategy 2040

PECAN wishes to add the following issues for consideration in Stage 2: Developing the action, implementation and evaluation plan, including community participation.

It is important that the key recommendations of the main consultants, St Jack & Co, are incorporated into the discussion and final strategy regarding the key challenges and key directions for the city; these are identified in full because of their significance in delivering the Strategy - see Attachment 1. Additional considerations are:

Targets:

Though not set at this stage in the development of the Strategy they are a key issue in setting new goals for Canopy Cover. St Jack & Co recommend setting a target which is expressed as 'to' and 'by' rather than the current situation in Act and Adapt where the Target is confusingly expressed as a percentage of the existing canopy cover. Once understood the target to 2028 turned out to be vanishingly small. And interim targets must be set as well.

With the technology for assessing Canopy Cover used by consultants Player Piano, the CoPP can now be more exact in assessing and delivering the following[4]. Using this technology it is possible to:

- Develop spatially specific targets on an area basis capable of responding to opportunity and need across the city.
- Identify land usage type and outcomes – Including Council owned public parks and street space, and parks and street space owned by other government instrumentalities and private space.
- Identify major vegetation types from ground cover and shrubs to trees.

Urban heat mapping:

This should sit alongside the more detailed maps relating to canopy cover. No mention is made of this tool which was last done for the city around 2013[5] and was updated for the South Melbourne Strategic Plan. This is a complementary exercise to canopy cover measurement by demonstrating the impact of heat waves generally and identifying areas in greatest need of cooling.

Precinct Plans:

Comprehensive area based mapping is an essential next step in the development of the UFS, bringing together canopy cover, heat mapping and socio-economic data. It has the capacity to identify both assets and issues area by area and can allow real community engagement through area based workshops.

[4] See Player Piano Booklet Council Managed and Residential and Commercial Managed canopy.
[5] See Coutts http://www.vcccar.org.au/publication/technical-report/multi-scale-assessment-urban-heating-in-melbourne-during-an-extreme

The second stage mapping information to be provided by Player Piano is essential for the development of an action plan for UFS delivery. It should also provide the basis for discussion with the CoPP community where concerns about specific implementation issues need to be addressed. Full community engagement is needed both in setting overall targets and directions, ensuring that areas of greatest need are prioritised.

Consistency and Continuity:

The importance of building outcomes is recommended by St Jack & Co, enabling a comprehensive program of works to be completed within the annual cycle needing to be spread throughout the precincts. This should include all canopy types relevant to the criteria in the Plan and include all publicly owned land types.

Act and Adapt and the 2017 Greening Program eliminated plantings in parks and failed to address understorey plantings. Act and Adapt also set a very low canopy cover target, while CoPP made a decision to stop planting in the 2021 planting season due to concerns about Covid. These actions have added to the current low level of performance in the public domain.

Similarly, removing key boulevard maintenance and plantings from the CoPP area of operation must be reversed if we are to secure an overall canopy cover target. The CoPP, like many Councils, has taken responsibility for median plantings on VicRoads land since the first days of development of Melbourne in the 1840's. The Council decision to hand back control to VicRoads has been at the expense of the amenity of many of CoPP residents. VicRoads do not have a record of treating boulevards kindly.

St Jack & Co has identified them as key assets for urban cooling:

'Boulevards are significant features of Port Phillip's urban landscape – wide streets featuring a median down the centre and higher quality landscaping and scenery. These boulevards include Brighton Road, Queens Road, St Kilda Road, Kerferd Road, Beach Street, Beaconsfield Parade, Jacka Boulevard, The Esplanade, Marine Parade, Ormond Esplanade, Bay Street, and Fitzroy Street. Trees in boulevards are critical to maintaining the distinct urban character of Port Phillip and provide shade for major walking, cycling, and vehicle thoroughfares. [6]

Equity across the City:

Tree planting/greening generally is increasingly an equity issue. Areas of high need exist through most of the city in one form or another. Balaclava misses out on practically every score with low levels of open space, poor canopy cover and areas of high socio-economic need. Investment in WSUD projects has gone largely to Port Melbourne and more recently Middle Park, with WSUD schemes throughout this area involving engineered solutions to permeability and pollution control.

The next stage of the UFS should identify areas for action and propose solutions as part of the Precinct Plans as they are/or should be developed. During heat waves people in high rise low income housing have generally suffered the brunt of the situation, with the very young

[6] St Jack & Co, Background and Benchmarking Report p 32

and the very old being particularly vulnerable. In many cases they do not have a car and rely on shady streets to enable them to shops etc. They should be our first priority.

Best Practice Planting Outcomes:

Plantings and the resulting canopy cover outcomes have been identified by Player Piano as uneven - the analysis in the Tree Ledger report needs careful reading in this regard. Their review of canopy cover identifies some areas of the city as having high canopy cover levels (St Kilda East/Ripponlea and Elwood) due to the historic dominance of very large and well established plane trees, however within these areas there are densely populated areas where canopy is lacking; assessment and solutions are needed to meet canopy cover targets across all streets.

The analysis indicates that the main area of improvement over the life of the 2010 UFS was Port Melbourne, demonstrating a 0.37% canopy cover increase. PECAN and other groups have repeatedly drawn Council's attention to the visible improvement in this area which needs to be explored and understood so that work done there can be repeated elsewhere. Clearly median ribbon plantings in the wide streets such as Rouse, Graham and Liardet provide a model for similar opportunities in other areas such as Alma Road, Westbury and Alexandra Street in East St Kilda, to name one area of need.

Narrow streets can also be improved. The protocol of squeezing small trees onto small plots in small streets is no longer an option. Hopefully the work underway in Woodstock Street will serve as a model. Outcomes in narrow streets need to be given extra attention, ensuring trees are well selected, well placed and subject to the best standards and engineering solutions to meet passive watering and tree space requirements.

PECAN supports the Council's initiatives with green corridors such as Danks Street and Bothwell Street and urges the Council to continue to activate the Greenline and other areas in South Melbourne, Balaclava and St Kilda East where need is high and space limited.

Tree Health:

Support of tree health requires adherence to protocols in plantings such as structural soils, accounting for electricity wires in site selection, consideration of a diverse selection of species, and formative pruning.

- The issue of formative pruning is vexed. St Jack & Co note that Tree Planting Guidelines and the ongoing maintenance of young trees was a recommendation in the Greening Port Phillip 2010 Plan[7] but was never activated [8]. This work is essential and explains why so many trees will die prematurely due to neglect. PECAN has documented numerous instances of plantings in streets with no ongoing attention especially regarding formative pruning.
- Evaluation of the use of external contractors is needed regarding many aspects of tree health.

[7] Greening Port Phillip Tree Asset Management p 31.
[8] Jack @Co greening Port Phillip Evaluation 2020 p 13 (p 230) '*Much of the existing tree population has had no formative pruning, leading to increased ongoing maintenance*'

- Planting species by availability/or organizational preference for certain species raises the potential that areas planted with one species could all disappear at the same time. The widespread use of poorly performing Crepe Myrtles in narrow streets is an obvious example.
- Historic poor selection of species by soil type and area: Planting into the smallest space possible in the most adverse locations; many such plantings are evidenced by gaps in pavements rather than the original intent of systematic (if misguided) plantings.
- Unwillingness/prohibition against any loss of public car parking spaces to trees needs to be addressed.
- Creative use of road space: there are many instances of visually pollution in the urban environments in the City including the wanton use of areas such as around the St Kilda cemetery for work vehicles and trailer storage. Restricting parking and converting such areas into linear parks seems an obvious opportunity.

Water

The availability of water is essential to tree health. This relationship needs closer inspection as part of the next stage of development of the 2040 UFS. Linking the 2040 UFS to the Council's reporting on its Water Sensitive City Strategy 2010 is an essential next step. Reports to review the WSCS have been completed but are still to be fully reviewed and evaluated, including by the community. Such a review is needed to allow an assessment of outcomes against objectives.

The two main mechanisms for harvesting water in the landscape and potentially reducing flooding are by WSUD and Water Retention and Recycling in parks.

WSUD (Water Sensitive Urban Design) encompasses passive watering of trees through street and pavement design. Passive watering should be an essential component of all street design.

Active WSUDs involve engineered solutions which are almost entirely useful as a mechanism for pollution reduction but can only be realistically implemented in wide streets and have a high cost attached. A recent assessment done by E2 Design for Melbourne Water confirms that WSUD's main function is for pollution reduction.

PECAN has identified 18 WSUD installations in Middle Park, over 33 in Port Melbourne and a further 20 are apparently slated for Elwood whilst Balaclava has a total of 1. This is not an equitable outcome.

Integrated Water Management IWM (stormwater reduction, pollution control and water recycling) can only be achieved by larger scale schemes in parks. The CoPP has one such scheme in Alma Park and also uses recycled water from Elsternwick Park on the Elwood foreshore. The use of the recycled water from EP is slated for extension along the Elwood Foreshore as part of this regionally important resource. Another opportunity for storm water capture is from St Kilda hill for storage and re-use in the Catani Gardens – this project is still to have funding allocated.

City of Melbourne has updated its Watermark Strategy[9] and is able to demonstrate measurable outcomes on all scores for IWM including significant nitrogen reduction and replacement of potable water by recycled water and flood mitigation in its parks, with six such schemes spread across the city. The CoM largely uses passive elements of WSUD with permeable paving and passive watering for street trees.

We suggest that water in the landscape needs to be the first aspect of Council's operations to be assessed and integrated into the 2040 Urban Forest Strategy.

Private Land Protections:

The Hansen Report provides a wealth of new material which we have not had the opportunity to analyse fully. We welcome the fact that the Council is considering greening/climate change issues across the full range of Council's operations, particularly including planning controls on private land.

This information should be a key consideration for Stage 2 of the development of the UFS.

Decline in canopy cover in the private domain has a clear association with densification, however it is interesting to see that Tree Ledger report identifies the private realm as having new plantings which will provide canopy in the future[10].

A key issue relates to removal of trees on private land due to perceived problems with roots and canopies. Recent examples include the legal and illegal removal of stately gum trees and the failure to provide alternative plantings; eg 19 Robe Street and the Nonda Katsilidis development in St Leonards Avenue.

The CoPP Statutory Planning regulations on public realm plans (how a development interfaces with the street) have the following omissions requiring urgent statutory change:

- Not all developments are required to have such plans.
- There is no requirement to provide plans consistent with any local planning guidelines - eg Balaclava Station. The Planning officers can only 'consider' proposals put to Council by developers, thus creating outcomes which are inconsistent with the overall framework for the area.
- Public realm plans can only be determined and required after the development is complete.

[9] https://www.melbourne.vic.gov.au/SiteCollectionDocuments/municipal-integrated-water-management-plan-2017.pdf
[10] Tree Ledger p 5

Attachment 1 from St Jack & Co.
Challenges for Urban Forestry and Key Themes

Challenges for urban forestry

- **Climate change:** Trees are long-lived assets, so tree populations need to be diverse and well-managed to resist extreme heat, drought, pests and diseases. Greening is an important tool to prepare our communities for these changed conditions, especially through carbon capture, urban cooling and flood risk reduction.
- **Contested urban spaces:** Plants need soil, water, nutrients, space, air and light to grow and thrive. New development, utilities and infrastructure, limited water access, compacted soils, pollution, heat, and direct damage all threaten greening. Public space is scarce, with tradeoffs and smart design needed to address all desired objectives. (un)Healthy tree populations – Urban forests can be at risk long-term without 'defensive diversity' through a mixture of species, age, sizes and functions. They need proactive management including good design, site and soil preparation, passive irrigation, young tree care, health audits, pest treatments, risk management, and other ongoing maintenance.
- **Community values**: Perceptions on urban greening can have a large impact on the quality and quantity of the urban forest. For example, communities who value trees and actively engage in greening are likely to retain trees and increase greening, whereas, in communities where trees are not valued, they may not be well-funded or prioritised in capital works. Fears and concerns, both real and perceived, all threaten the urban forest.

Key Themes

- Spatially prioritised greening for climate adaptation and social equity
- Outcome-oriented targets, with proactive monitoring and promotion of progress
- Strengthened tree protections
- Defensive diversity and biodiversity, sensitive urban design (BSUD)
- Engineered solutions to recover space and support thriving trees
- Community education, stewardship and engagement
- Greening on private land
- Manage trees as assets, reflecting their true economic value
- Systematic integration of greening across Council and beyond
- Proactive innovation, including R&D partnerships.

Blue Green Infrastructure Committee: Helen Halliday, Colin Sindall, Justin Halliday