

## Submission to the ACT Draft Urban Forest Strategy 9 September 2020

This submission to the Draft Urban Forest Strategy is provided by the ACT Climate Change Council. The ACT Climate Change Council (hereafter, the Council) was established by the ACT Government in 2011 under the Climate Change and Greenhouse Gas Reduction Act 2010, and advises the Minister for Climate Change and Sustainability on matters relating to reducing greenhouse gas emissions and building resilience and adapting to climate change. Council members are appointed to cover a range of experience and expertise in social, scientific, economic, transport and construction fields.

The Council welcomes the development of this draft strategy and its recognition of the importance of ACT's urban trees and forests to the health and well-being of Canberran residents and our wider community of plant and animal life in the Territory.

We appreciate the extensive context setting in the document and the acknowledgement of difficulties that have now arisen from the history of development in the ACT. These include issues with tree species diversity (too little heterogeneity at species and genus level), age class distribution (unbalanced), mixed coverage (ranging from less than 10% to almost 40% across suburbs) and issues relating to funding and maintenance of "public goods" on both leasehold and non-leasehold land.

Council also supports the desire to overcome the disproportionate disadvantage suffered by some socio-economic groups from the current unbalanced and mixed coverage forest estate.

With respect to our core remit, the Council particularly applauds the acknowledgement of the value of the urban forest in reducing the impacts of climate change and urban heat island effects. We strongly support the six objectives described in the draft strategy and congratulate those involved in the development of this draft.

However, due to omissions or lack of detail, some areas of the draft strategy could be improved. We bring these to your attention for consideration here.

- While the unbalanced nature of the age class distribution with a substantial number of trees in the "over-mature" / close-to-end-of-useful-life stages is acknowledged, there does not appear to be a strategy to rebalance this situation, in particularly dealing with the potentially large number of large trees requiring treatment within a short period. It is necessary to be proactive in dealing with the large percentage of trees identified as mature to over-mature in Table 2.
  - Suggested ACTION: Actively and systematically reduce the number of trees at the upper end of the age distribution and plant new trees to bring the forest into a more balanced distribution as part of on-going forest management.
  - Suggested ACTION: Actively plan to use the large number of mature and overmature trees that need to be removed in this age class balancing exercise. The volume is likely to be greater than can be used for "ecological deadwood" but could be useful for a small scale, sustainable wood-use industry within the ACT. Consideration might be given to supporting the further development of such industries.

- The draft strategy includes a commitment to plant a significant number of trees, but planting is only one of the stages in establishing a tree and allowing it to continue to provide essential goods and services for the five to ten decades of its useful life. Other stages must be adequately planned and funded. These stages range from site preparation, pruning for shape and aesthetics, crown maintenance as deadwood develops and eventual removal. Such planning and costings must consider the likely projections of climate change, including more heat stress and changing rainfall trajectories (drying overall, with a small number of relatively intense rain events).
  - Suggested ACTION: Estimate full costing of and provide mechanisms to support establishment and maintenance of trees into a future that includes a changing climate.
- In the draft strategy, species choice is largely restricted to consideration of those species most likely to thrive in the next few decades. Consideration should be extended to include local spatial issues including street orientation. For example, where avenue affects are not essential, species could be mixed to ensure taller and more densely crowned trees are promoted to the west of residences to provide maximum shade from hot afternoon sun in summer while smaller and more open canopied trees may be to the east of the residences to reduce shade on cold winter mornings.
- The draft strategy recognises that incentives for leaseholders (residential and commercial) would be useful to increase the canopy cover, but potential forms or responsibilities for such incentives or support are not discussed.
  - > Suggested ACTION: Investigate, support and incentivise planting and maintenance of trees on leasehold land.
- The draft strategy mentions "non-tree" aspects of the urban forest in setting its context, but these elements do not appear in further discussion. Such aspects are important to overall forest health, and should be integrated into the strategy for the enhancement of the biodiversity and functionality of green spaces. Multi-layered forests with understory and ground-layer species can improve carbon capture and city cooling, thus increasing species diversity whilst improving the comfort and enjoyment of large, otherwise somewhat bare, open spaces.

We suggest that the statement in the draft strategy that "grass and ground cover beds can achieve equivalent benefits" to trees may be overreach. Such land cover may complement the tree cover, but the cooling effects of tree canopies are likely to be orders of magnitude greater than that derived from grasses or garden beds. Grass and ground cover however, can host or support different species than do trees and thus can be a complementary element.

 The urban forest strategy should explicitly consider the integration of trees and understory in relation to: storm water run-off (including provision for water infiltration to tree roots); improving lake health (consideration of leaf fall in run off); road and transport infrastructure (including reducing maintenance costs by shading, cooling the roads); and social development.

On behalf of the entire ACT Climate Change Council,

Professor Penny D Sackett, Chair

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