

PORT PHILLIP EMERGENCY CLIMATE ACTION NETWORK

City of Port Phillip - Nature Strip Guidelines

Submission

PECAN Organising Committee:

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“...By transforming how we view nature, we can recognize its true value. By reflecting this value in policies, plans and economic systems, we can channel investments into activities that restore nature and are rewarded for it. By recognizing nature as an indispensable ally, we can unleash human ingenuity in the service of sustainability and secure our own health and well-being alongside that of the planet....”

António Guterres, Secretary-General of the United Nations, February 2021, in the Foreword to UN report *Making Peace with Nature*.

“Urban green (and blue) spaces, such as nature reserves, parks, waterways, private gardens and street trees, are essential elements of resilient and liveable cities. Yet, while an individual tree, park or waterway provides important local benefits, it is the integrated network of green and blue spaces across both public and private land that provides many of the benefits we value...”

Bush, J Ramalho, CE & and Hurley, J (2020) *Managing green spaces*¹

¹ Bush, J Ramalho, CE & and Hurley, J (2020) *Managing green spaces*. In Parris, K.M. et al. (eds.) (2020). *Cities for People and Nature*. Clean Air and Urban Landscapes Hub, Melbourne, pp.74–76.

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Key points

- The draft Nature Strip Guidelines appear unnecessarily restrictive, and do not appear to have been developed in the context of Council’s wider greening, open space and climate strategies.
- They do not acknowledge the efforts of the many residents who have created and nurture nature strip gardens.
- If a significant number of these gardens cannot continue as a result of the limitations placed by the Guidelines, the ecosystem services provided by the gardens, including biodiversity, will suffer, amenity will be reduced and considerable social capital will be lost.
- New, more flexible Guidelines need to be developed through a process of participatory co-design involving all relevant stakeholders; and nature strip policy should be developed and implemented in the context of Council's Public Space and Greening policies.
- Consideration needs to be given to new forms of governance across all areas of Council’s nature-based solutions initiatives and sustainability agenda to ensure an integrated policy approach, and community and stakeholder engagement in design and implementation.

Introduction

In this month’s Sustainability News, the City of Port Phillip provided a welcome and encouraging update of actions Council is taking to implement the 2019 Climate Emergency Declaration. The update report restates Council’s commitment to five sustainability priorities, including “a greener, cooler, more liveable City” and a “water sensitive City”.

The report notes Council is “working to reduce the impacts of heat, protect and enhance biodiversity and improve enjoyment of our public space” including through “planting trees and vegetation in our streets and parks and increasing biodiverse and climate resilient species”; developing an updated Greening Port Phillip strategy and “identifying new ways to improve greening outcomes”; and partnering with the EcoCentre to “deliver community programs about biodiversity and volunteering initiatives to protect and restore native vegetation and habitats”.

In light of this and other important activities the Council is undertaking to enhance the resilience and sustainability of our area, the draft updated Nature Strip Guidelines, released for consultation in October last year, have disappointed many in our community, and appear disconnected from the wider strategies Council is or will be pursuing.

The Guidelines do not mention “climate”, or “greening”. Sustainability appears only in a website link. The cooling and amenity properties of trees are mentioned but not other vegetation. Human health is mentioned but only in relation to edible plants as a potential health hazard.

In addition, there is no recognition or celebration of the huge efforts by so many residents of Port Phillip in creating and maintaining vibrant Nature Strip Gardens (NSGs) and the community benefit derived from this voluntary commitment. And there is no concept of Council working in partnership with this or the wider community to improve the local environment.

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The overall tone of the guidelines, sadly, seems negative. They spell out in great detail what would not be permitted. This is reflected in the statement of Purpose:

The Nature Strip Guidelines outline the considerations for gardening on nature strips across the municipality. It includes the safety and tree protection requirements. Council supports nature strip planting provided the nature strip remains safe and functional, no damage occurs to trees or other assets, and the nature strip is well maintained.

While it is likely that many residents who create and tend to gardens on nature strips do not necessarily do so to help mitigate climate change impacts as their primary motivation, there is no question that these gardens make an important contribution to the green infrastructure of the city. They provide multiple benefits beyond those obtained by the individual gardeners, including the enhanced amenity of the streets where the gardens are located.

It is therefore surprising that the guidelines are not framed in the context of Council's wider greening strategy, the Climate Emergency response and Council's broader social and environmental sustainability objectives.

Potential impact of the guidelines

It has been suggested that if these guidelines were implemented as currently written a large number of the existing nature strip gardens would not comply and could be dismantled by Council. This would be a tragic loss to the amenity and well-being of the city, and a major disincentive to future efforts.

It would potentially also lead to the loss of the planned Melbourne Pollinator Corridor (MPC), an 8km community-driven wildlife corridor which would offer huge benefits for biodiversity and eco-system services.

The encouragement of more native and productive plantings in nature strips would increase biodiversity across the City of Port Phillip. These biodiversity islands would form a network across the city, and supplement biodiversity corridors and large parks. The biodiversity corridors, such as the Elwood canal, foreshore, and the proposed Green Line linear park, could form crucial connections for wildlife across the city.

As the guidelines are currently framed, it appears all of this and more, would be at risk.

What are the benefits of NSGs?

Many of these have been well spelt out by Emma Cutting in [her blog](#)², and by Adrian Marshall in [the Conversation](#)³, in his [PhD](#)⁴ and subsequent papers. The importance of nature strips is well addressed by Marshall in pointing out that in Melbourne nature strips and median strips typically constitute about a third of all public space, so it is important that this volume of space is optimally utilised to provide cooling, aesthetic and biodiversity benefits. Further, he points out that well managed lawns can also provide significant benefits.

² <https://www.theheartgardeningproject.org.au/blog-1/some-of-the-benefits-of-street-gardening>

³ <https://theconversation.com/our-land-abounds-in-nature-strips-surely-we-can-do-more-than-mow-a-third-of-urban-green-space-124781>

⁴ <https://minerva-access.unimelb.edu.au/handle/11343/235809>

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To give full weight to the benefits, it is firstly important to consider the context in which Council has issued the new Nature Strip guidelines.

We know that the world is facing many major and interconnected challenges. Three of these, designated global emergencies by the United Nations, are climate change, biodiversity loss and pollution⁵. We continue to suffer the effects of the COVID-19 pandemic, with the possibility of new strains and outbreaks into the future. Among the many impacts of the pandemic has been a significant rise in mental health problems, associated with lockdowns, social isolation, and loss of employment and income. In addition, obesity is a major problem globally, and in Australia where 60% of the population is now overweight or obese. The obesity epidemic, according to the World Bank, now presents a “formidable challenge to human capital” and shared prosperity.

How are these complex global issues related to nature strips?

Council’s Act and Adapt Strategy points to the answer to this question, with the section “Global challenges, local impacts”, noting that the “challenge of environmental sustainability is not just limited to the City of Port Phillip”; it is a worldwide issue to which Council can make a contribution at the local level.

There is wide agreement – and strong evidence - that local ‘nature based solutions’⁶ have a role to play across all of these challenges. Greening urban environments is a key strategy offering *multiple co-benefits*; reference to these is made in numerous Council documents, such as Greening Port Phillip, the draft Public Space Strategy and the Council Plan 2021-31.

Just a few of these benefits are summarised here:

Greener environments:

- help mitigate increased temperatures and reduce the urban heat island effect
- promote and protect biodiversity, provide habitat for bees, pollinating insects, birds and other fauna
- improve the urban microclimate
- reduce cooling costs and CO2 sequestration from the atmosphere
- help filter traffic-generated pollution
- contribute to better mental health
- provide an attractive environment for walking, cycling and being physically active – hence reducing one of the leading causes of obesity; and encouraging social interaction
- green space and vegetation reduce water run-off and storm water pollution, and provide other ecosystem services such as returning rainwater to the local water cycle by evapotranspiration, and improving biodiversity
- contribute to the overall amenity and beauty of our streetscapes.

⁵ United Nations Environment Programme (2021). Making Peace with Nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies. Nairobi. <https://www.unep.org/resources/making-peace-nature>.

⁶ “... actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits” International Union for the Conservation of Nature (2020)

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These are some of the benefits that NS gardeners contribute to, which serve the whole the community. But in addition, the activity of gardening has multiple benefits for those who participate: being physically active, interacting with nature, collaborating with neighbours, a sense of creating something of value and beauty, providing learning opportunities for children and so forth.

Given these benefits, we look below at whether there is room for some flexibility in the guidelines in order to preserve the investment made in these gardens to date, and encourage further initiatives.

Safety and access

One of the major arguments for the clearances and plant heights proposed is related to the need for safety and accessibility to be maintained on all streets. In drawing up the guidelines, it was clearly necessary to have regard to Council's legal and ethical responsibilities in this area, public liability risk, and with reference to national standards, guides and best practice.

There is no question that public safety is always of the highest importance, and that our streets should always be accessible, welcoming and inclusive of people of all ages and abilities.

Nevertheless, there are also other objectives that need to be taken into account in street design, including those that have become a higher priority than they may have had in the past, such as environmental sustainability and various dimensions of mental and physical health.

While there may potentially appear to be some tensions between safety and accessibility and these other objectives, it is increasingly seen that they must be considered together in the wider interests of the well-being of people and the planet.

In Council's Act and Adapt strategy, there is a commitment to the UN's Sustainable Development Goals (SDGs). While most of the SDGs are relevant for local authorities, the specific goal for cities, SDG 11, is: *Make cities inclusive, safe, resilient and sustainable*. The accompanying targets spell out more detail, for example:

"By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities."

In other words, urban areas should aim to be both sustainable and inclusive. This suggests the need for some assessment of how risks of harm versus potential benefits might best be balanced.

The safety and accessibility issues as set out in the Guidelines are:

- everyone can safely travel on the footpath
- people driving can see people walking and cycling
- people can get out of a car parked on the street
- workers can safely access service pits
- there is space for bins and rubbish collection
- a safe street environment that maintains good surveillance, light and access is maintained

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Falls can be a significant problem, particularly for older people, and may cause serious injury. However, most falls on footpaths where the environment is a major contributing factor, are attributed to uneven and poorly maintained footpaths and poorly designed access to crossings and kerbs⁷. Protruding tree roots, unfilled holes, slippery surfaces may also be contributors. However, hazards such as these are largely Council's responsibility. Council most likely has data on the specific incidents or hazards that have arisen as a result of nature strip gardens, and in what sort of instances problems are most likely to arise.

In this regard we would note that accessibility is regularly compromised by many other factors than nature strip gardens, such as development and building works, other trades work, removalists, scooters on pavements, cyclists, bins left on footpaths, poorly maintained pavements, placement of pay parking machines in some streets, utilities work etc.

It is very likely that where neighbours are engaged in their local environment through work on nature strips that defective footpaths and other matters would get more attention, enabling early reporting to Council of any hazards which would enable preventive measures to be taken⁸. Local residents and neighbours also have a stake in ensuring a safe street environment more generally, and ensuring good surveillance, light and access are maintained for the benefit of all, including children, older people, and people with a disability.

The issue of a line of sight for drivers to see and be aware of pedestrians and cyclists on pavements is frequently raised. However, we think it unlikely that a nature strip garden could impair visibility more than the SUVs, vans and other vehicles that can legally park along the side of a road. A child running out to the road from between two large vehicles is likely to be more at risk than if in the unlikely event that they step through vegetation.

Similarly, with regard to people getting out of their cars, residents who are working on street gardens, will be aware of parking patterns and needs and will obviously design gardens so that friends and relatives arriving by car can visit without problem.

While cars are important for mobility, under a holistic approach to inclusive and sustainable streetscape design, the issue of changing perspectives on the domination of urban environments by private car use, also needs to be factored in to longer term considerations with regard to city greening strategies.

These above points suggest that there could be opportunities for less restrictive or more flexible guidelines for nature strip gardens to be developed having regard to access and safety considerations, subject to engagement with, and deliberation among, all of the relevant affected parties. Such a process is one of our major recommendations – see below.

Trees

The other major reason for the recommended clearances in the guidelines is the maintenance of tree health.

⁷ Oxley, J., O'Hern, S., Burt, D., Rossiter, B. (2016). *Fall-Related Injuries While Walking in Victoria*, Victoria Walks, Melbourne

⁸ Jane Jacobs introduced the concept of "eyes on the street" as one of the most important contributors to street safety. She was mainly referring to street crime but the idea has wider application.

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Trees are the critical building blocks of an urban forest and provide a range of environmental, social and health benefits. We do not dispute the vital importance of safeguarding our trees, nor the harms that can occur through physical damage to the root system, or if the necessary nutrient or water requirements are unintentionally restricted by plant beds or excessive mulch.

However, we would ask whether, with an informed and tree sensitive approach, taking account of different types of trees and of different types vegetation, along with the context of particular areas – soil, water, exposure to vehicle pollution, micro climate etc - if there might be some flexibility with regard to clearances that would be tolerable in certain situations?

This again suggest the need for street design to be considered as a whole, in which synergies between existing trees and new plantings, and nature strip gardens, including lawns, would be managed in collaboration between Council and residents.

PECAN has repeatedly argued that further investment by Council in the tree population, and accelerating the planting schedule to increase canopy cover in many parts of the city, has to be a high priority. Canopy cover is particularly lacking in many streets of the more disadvantaged areas of the city (which are also lacking in access to green space more generally) where the urban heat island effect is or will become a significant problem. These are also areas where for various reasons there are fewer nature strip gardens. This situation raises numerous environmental justice concerns and we urge Council to give this urgent consideration.

An integrated approach

Council should consider nature strip gardens in the context of the overall strategy for, and governance of, greening Port Phillip, which in turn will be a major contributor to Council's Climate Emergency response (alongside other measures). A piecemeal approach will not achieve the outcomes needed.

As the Australian Institute of Landscape Architects have proposed in their Green Infrastructure Position Statement (2019):

"[Green Infrastructure] should not be thought of as individual elements in the landscape (a tree, a wetland, a park, or a garden). Rather it should be treated as components of an infrastructure system that interact with a range of other urban systems (transport, stormwater, ecological communities) that perform certain functions and provide ecosystem services that contribute to the sustainable operation and enhancement of urban and regional settlements..."

We suggest this requires seeing the gardens in the context of the street ('complete streets'), the street in the context of the neighbourhood, the neighbourhood in the context of the city, and the connections between them. This framework needs to be informed by an eco-social perspective i.e. the interaction between people, and people and their environments.

The contribution of nature strip gardens needs to be considered alongside trees, green roofs, green walls and facades, private gardens, parks, transport corridors, community gardens, water sensitive urban design, ovals, and all other elements of green infrastructure.

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Also of value in this context, based on recent studies, would be consideration of the potential contribution of ‘sustainable lawns’, in situations for example, where residents may have a preference for lawns on nature strips, or for other applications, in verges, parks and other settings. The concept of sustainable lawns is based on a ‘complex hybrid approach’, where the essence of lawn is retained ie the durable surface, but created by plants – grasses, herbaceous species and/or ground covers. This avoids a homogenous mono-species approach, and can potentially reinforce local biodiversity while offering important ecosystem services such as cooling and mitigation of the heat island effect, carbon sequestration and regulation of the water cycle. This would require new approaches to sustainable lawn management e.g. electric mowing, soil preparation and smart irrigation schemes, in order that the positive benefits of soil carbon sequestration were not outweighed by greenhouse gas emissions associated with fertiliser application and motor mower use.⁹

Governance

As noted previously, the draft Nature Strip Guidelines do not reference other Council blue-green infrastructure and sustainability strategies; nor apparently were they devised in collaboration with community members who create and manage nature strip gardens.

It is not unique to the city of Port Phillip that this has occurred, and many research studies of the implementation of nature-based solutions point to problems of coordination across different policy domains, and limitations in how communities are engaged.

But to achieve an integrated approach as suggested above, and because many of the social, cultural, technical and environmental dimensions of green infrastructure are interconnected and interdependent, successful and effective implementation requires novel approaches to governance.

Two ‘critical enablers’ identified in research studies are investment in mechanisms for ‘integrative governance’ and ‘participatory co-design’¹⁰.

Integrative governance¹¹ aims to achieve effective collaboration across all relevant policy domains needed to ensure integrated solutions. These may include responsibilities which sit across different departments in one organisation or which may sit across a number of agencies, including, for example, land use planning, urban design, water quality, waste management, tourism, recreation, traffic management, heritage, health and well-being and community programs.

Participatory co-design involves novel community (and other stakeholder) engagement processes to help both shape the design of nature-based solutions, and, where appropriate,

⁹ Ignatieva, M.; Haase, D.; Dushkova, D.; Haase, A. Lawns in Cities: From a Globalised Urban Green Space Phenomenon to Sustainable Nature-Based Solutions. *Land* 2020, 9, 73. <https://doi.org/10.3390/land9030073>

¹⁰ Eg Bush, J., 2020, Green-blue space governance in a changing green urban landscape. Report for the Clean Air and Urban Landscapes Hub. The University of Melbourne, Melbourne; Martin, J.G, Scolobig, A, Linnerooth-Bayer, J.; et al Catalyzing Innovation: Governance Enablers of Nature-Based Solutions. *Sustainability* 2021, 13, 1971. <https://doi.org/10.3390/su13041971>; Zingraff-Hamed, A.; Hüesker, F.; Lupp, G.; et al Stakeholder Mapping to Co-Create Nature-Based Solutions: Who Is on Board? *Sustainability* 2020, 12, 8625. <https://doi.org/10.3390/su12208625>

¹¹ Many different terms are used including governance of complex systems, institutional mechanisms for policy coherence, polycentric governance, collaborative planning, joined up ways of working etc

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contribute to implementation, for example through community organisations, volunteers or citizen scientists. An important component of co-design is understanding how residents experience and value their living environment, and for this to be given some weight alongside expert technical opinion. A co-design approach also offers opportunities to draw on Indigenous knowledge systems to inform sustainable solutions in urban environments.

Integrated governance and participatory co-design can help support finding compromises that can resolve interest and value conflicts that can arise as change is introduced. In addition, attention to the multiple co-benefits agendas which nature based solutions can address– for example health and well-being, social and economic benefits – can build wider support for transformative initiatives.

Conclusion and recommendations

It is hard to understand how such a narrow approach to the new Nature Strip Guidelines occurred. Embracing the energy, commitment and goodwill of NS gardeners would benefit our municipality in multiple ways, and could provide an important plank for forthcoming Council plans and strategies on climate, greening and public space.

The number of signatures to the petition to Council show that this is an issue of significant concern in the community. Council could harness this momentum through a considered and strategic approach to consultation, including a well-designed, inclusive, deliberative forum (or series of forums) where topics and concerns (such as safety, accessibility, and tree health) could be jointly explored in depth. This should include opportunities for sharing of Indigenous knowledge. Such a forum could provide the basis for the co-design of new and more flexible guidelines, find solutions whereby risks are minimised and benefits are maximised, and also raise understanding of where nature strip gardens fit within the broader sustainability strategy for the city. In this respect, nature strip policy should be developed and implemented in the context of Council's Public Space and Greening policies.

This approach could then be extended to the overall, design of the greening of our community, and could position the City of Port Phillip as a leader in this area.

However, alongside such a process of community engagement and consultation, we would also urge Council to reflect on its sustainability governance model going forward. We know that there is a great deal of expertise and commitment among Council staff and the elected representatives. But some reflection and discussion, consistent with the UN Secretary-General's words at the beginning of this document, of how Council thinks about the relationship with nature and how nature is valued, might also offer some benefits. We believe it is important that the improvement of our natural environment is seen as an essential investment in the health and well-being of our community and the planet; and as a component of the infrastructure of the city on par with that of the infrastructure of buildings and roads. Prioritisation of how a greener, sustainable community is to be equitably achieved needs to become a whole-of-council commitment: it cannot be achieved by a siloed or sectoral approach.

This could provide the basis for a socially inclusive, and environmentally sustainable future for all residents of Port Phillip.