

RESILIENT EAST

*Climate Ready
Eastern Adelaide*

21 December 2020

State Planning Commission
Planning and Land Use Services Division
GPO Box 1815
Adelaide SA 5001
By email: DIT.PlanningReformSubmissions@sa.gov.au

CC: Hon Vickie Chapman – Minister for Planning – attorneygeneral@sa.gov.au
Hon Jayne Stinson – Shadow Minister for Planning – badcoe@parliament.sa.gov.au;
Hon David Speirs – Minister for Environment and Water – minister.speirs@sa.gov.au
Natural Resource Committee – nrc.assembly@parliament.sa.gov.au
Environment, Resources and Development Committee – ERDC.Assembly@parliament.sa.gov.au
Local Government Association – lgasa@lga.sa.gov.au

Phase 3 – Planning & Design Code – Public Consultation 4 November – 18 December 2020 Resilient East Climate Adaptation – Submission

Dear Mr Lennon,

Thank you for providing Resilient East, our partner councils and community a second opportunity to submit comments on Phase 3 of the draft *Planning & Design Code*. Members of the Resilient East Steering Group appreciated the opportunity to recently meet with Commission Member Allan Holmes and PLUS representative, Brett Steiner, to discuss sustainability issues arising from the draft Code. This discussion was well received and a good opportunity to consider future improvements to the Code through the monitoring of new infill development requirements for tree planting, open space and improved stormwater management.

Introduction

The purpose of this submission is for the Resilient East Steering Group to provide feedback on the revised draft Planning and Design Code to support the objectives of improving climate resilience including the related **canopy cover, water sensitive urban design** and **biodiversity outcomes**. This submission builds upon several previous submissions, correspondence and meetings by the Resilient East Steering Group on various aspects of the Planning Reforms.

Resilient East have concerns that the inclusion of important greening and water sensitive urban design policies for infill developments especially will not be strong enough in their application to achieve a cooler, greener and more climate resilient Adelaide. We have also presented to the Natural Resource



Committee Parliamentary Inquiry into urban green spaces highlighting some of the broader concerns with planning and valuing of trees in urban development .

Resilient East is a partnership between the Campbelltown City Council, the Cities of Adelaide, Burnside, Norwood Payneham & St Peters, Prospect, Tea Tree Gully, Unley and the Town of Walkerville and the South Australian Government, a regional alliance tackling climate change. Resilient East seeks to ensure the eastern region remains a vibrant, desirable and productive place to live, work and visit, and that our businesses, communities and environments can respond positively to the challenges and opportunities presented by a changing climate.

This submission does not reflect formal Council consideration by any of the constituent Councils or participating State Government agencies. This input is intended however, to complement the specific planning feedback from participating Councils and provide a perspective from regional climate change adaptation practitioners.

The Resilient East Steering Group acknowledges the amount of work and consideration that has gone into ensuring that the planning system accounts for the long-term impacts of what we plan for and build now. We support that the revised Code leverages a key role in the planning system to mitigate and adapt to climate change, facilitate green infrastructure and WSUD. Improved urban development outcomes are critical in responding to our changing urban form, protecting and securing our water sources, valuing and enhancing biodiversity and building resilience to hazards. Key policy improvements in the Code include the requirement for trees to be planted and rainwater tanks to be installed with all new houses.

Our submission includes:

- A summary of key evidence and knowledge gained between the two consultation periods
- An analysis of relevant themes which demonstrates what we support, our ongoing concerns and our key recommendations. We think the code could be further strengthened to meet mutually-beneficial outcomes, with improved delivery of the Code and its monitoring and review process.
- Appendix 1 – is an updated table, based on the table we prepared for our February 2020 submission, with detail on specific policy with new comments and recommendations

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28 Feb'20 https://plan.sa.gov.au/_data/assets/pdf_file/0016/652021/Resilient_East.pdf

12 Nov'20 <https://www.parliament.sa.gov.au/en/Committees/Committees-Detail>



New knowledge between consultation periods

Since February 2020 there have been several key pieces of work completed that support the intent to 'raise the bar' for new infill development within this iteration of the code.

These include:

- [What's happening to Adelaide's Trees](#) (June 2020) a major new report prepared by community, non-profit and professional organisations concerned with what's happening to significant, regulated and mature trees, which highlight the **loss of canopy coverage and trees across Adelaide and also the need for metropolitan-wide data and monitoring**. This report and subsequent forums demonstrate strong community sentiment for retention of trees in our urban and peri-urban landscapes.
- [LiDAR canopy mapping](#) Resilient East recently collaborated with DEW, DIT and other Regional Climate Partnerships to undertake an analysis of already captured Light Detection and Ranging (LiDAR) data of the Adelaide area. One key outcome of this work is a mapped benchmark of canopy cover and tree height at a point in time, which can be replicated in the future to track canopy loss or gain. Analysis of land ownership suggests that our greatest opportunity to meet the 30-Year Plan for Greater Adelaide's target of a 20% increase in urban green cover by 2045 is on private land. Despite the best efforts of State and Local Governments to increase tree canopy and green cover, **there is not enough space available on public land to keep up with the loss of trees and garden space on private land**.
- [Options Analysis: Costs and Benefits of Urban Tree Canopy Options for Minor Infill Development in the Planning and Design Code](#) BDO EconSearch (Sept 2020) Independent study commissioned for the Attorney-General's Department in response to demand for a cost-benefit analysis around the proposed one tree policy and offset scheme. **This study broadly supports the maintaining of the one tree policy and provides a range of options for development of an offset scheme**. This paper is referenced further as (BDO canopy report 2020).
- [Options Analysis: Costs and Benefits of Stormwater Management Options for Minor Infill Development in the Planning and Design Code](#) BDO EconSearch (Sept 2020). Independent study commissioned for the Attorney-General's Department in response to above to test policy options for onsite retention tanks, addition of detention capacity and offsite management in wetlands or biofilters via an offset scheme. **The report suggests that onsite detention capacity should be included in new Code policy, to assist in managing peak flow policy targets, and plumbing them into non-potable household uses**.
- [Climate Change Science and Knowledge Plan for South Australia](#) (Sept 2020) Department of Environment and Water – a framework for renewed effort and action to underpin SA's responses to climate change and support a climate-smart state. Stage four of the framework is for Planning and Design activities, including Infrastructure design implications with regard

to flood and storm risks, extreme heat, water demands, carbon neutrality, and urban planning impacts. Key relevant actions required include developing coordinated hazard data collection and mapping. **Better planning and design now will save costly retrofitting of major infrastructure in the future.**

- [Guide to climate change projections for risk assessment and planning in SA](#) (Green G and Pannell A Nov 2020) Department of Environment and Water – provides a summary of likely changes to key climate variables with the most up-to-date climate change projections for immediate use. These projections continue along the trajectory of what was expected – lower but more seasonal variation in rainfall, higher average temperatures, more extreme rain, heat and storm events leading to more bushfire risk days. Average air temperatures globally have warmed 1°C since 1850, in Australia warmed by 1.44 ± 0.24°C since 1910. The occurrence of days of 42°C or more in central Adelaide has been markedly higher in the 10 years from 2010 than in earlier decades. **Action to both mitigate and adapt for climate changes is imperative.**
- [Citizen Science for Creating a Greener Adelaide](#) (report complete July 2020)² This SA Health and Metropolitan Council project utilised a citizen science approach to explore perceptions of quality green spaces across metropolitan Adelaide, between 26 February and 18 May 2020 – which fell during the time of social distancing measures due to COVID-19. The research report aims to further understandings of what makes quality green spaces for citizens of metropolitan Adelaide and also provide commentary in reference the State Government’s Quality Green Public Space principles. During this time there was an increase in engagement with the natural environment – notably related to exercise, and time in these parks, waterbodies and greenspace – **indicating that increased engagement with natural environment became more important when social interactions with others were restricted.** When movement is restricted to within your property, private greenspace becomes more important. Referenced later as HPHP Citizen Science 2020.
- [Where will all the trees be: the 2020 update of green cover benchmarking in our cities and suburbs](#) (November 2020) This is the third instalment in a national series running since 2013, following 2013 and 2017 updates by Greener Places Better Spaces. Although the study demonstrates that between 2016–2020 63% of Councils measured across Australia increased their green cover, 73% increased their hard surfaces. City of Burnside came out second highest at 5.2% indicative increase of “grey cover”.
- [Government of South Australia Climate Change Action Plan 2021-2025](#) (16 December 2020) Actions 5.1-5.5, 5.8 and 5.9 all refer to strengthening the Planning System’s ability to improve climate smart planning, development, and design, greening, **going ‘beyond compliance’, and improving tools and understanding to achieve greener and cooler neighbourhoods.**

² Barr e, H., Lange, J., & Wa ker, L. 2020. *Citizen Science for Creating a Greener Adelaide*. Hugo Centre for Popu at on and Hous ng, the Un vers ty of Ade a de. Produced for the South Austr a an Department of Hea th and We be ng (not on ne), funded through Hea th y Parks Hea th y Peop e and co laborat on w th the Metropo tan Counc Greenspace Reference Group. Contact at SA Hea th: Tahna Pettman Tahna.Pettman@sa.gov.au

Analysis of key themes

This evidence-based research has informed key changes in Code policy, including:

- Retention of tree planting policy as originally proposed (albeit the Commission has now proposed a Tree Offset Scheme, an issue discussed further below)
- Introduction of a detention component in larger rainwater tanks to provide for better stormwater management outcomes
- Increased percentage of roof area connected to tanks to maximise water capture, reuse and tank performance
- Relocation of the tree and water tanks policy from General Development Policy into the new Urban Tree Canopy and Stormwater Management Overlays. This elevates the importance of the policy in the Code.

We are pleased to see the revised draft has retained the following:

- Requiring minimum one tree per dwelling
- Maintaining minimum requirement of 7% deep soil area for multi storey development
- Minimum 15-25% soft landscaping space (and defining this as 'living green landscaping')
- Increased provision of landscaping within common driveways and public realm
- Onsite rainwater tanks
- Quantification of the protection of street trees
- Provision of site permeability
- Retention and protection of Regulated and Significant Trees

Further policy improvements that we are supportive of and acknowledge the Commission has responded to the concerns of local councils:

- Two new terrestrial flooding overlays to address higher risk and lower risk areas which contain improved flood risk / mitigation policies
- Bushfire risk overlay
- Inclusion of water tank requirements as part of infill improvements package – introduce 1000L detention, and 80% roof capture
- Tree retention and replacement policies have been moved to Urban Tree Canopy Overlay
- Significant and Regulated Tree Protection
 - Reinstate additional policy for the protection of both Regulated AND Significant trees to better reflect current Development Plan policies
 - Title of Overlay amended to include reference to Significant trees as well as Regulated trees

Whilst a good first step, the minimum requirements are unlikely to go far enough to make our region climate ready, and that the opportunity to 'raise the bar' has not gone far enough to support and encourage meaningful change. There remain issues with the application, monitoring and enforcement of these policies as well as the potential "minor variation" erosion of deemed to satisfy (DTS) requirements.

The enormity of preparing Generation 1 of the Planning and Design Code means some of our recommendations could be prioritised as recommendations for Generation 2 of the Code, however it

will be important for the Commission to outline a clear program and scope of policy review and improvement. Each individual council partner in its individual submission has suggested many amendments that should be closely considered to assist in improving the accuracy and interpretation of the Code. **Appendix 1** adds further comments and recommendations based on our submission from February 2020.

Trees and soft landscaping

The creation of a separate Urban Tree Canopy Overlay is supported, along with the requirements for minimum tree numbers, deep soil zones and soft landscaping. Our recent evidence points to the fact that we will not meet the State Government's 30-Year plan targets for canopy and green space if urban infill continues the way it has (i.e. LiDAR canopy data, Greener Places Better Spaces, BDO Canopy study).

With Council footprints including far more private land than public, if the minimum approach is applied across the state we will not have enough collective cover to build resilience to climate change. Species diversity is likely to decline as well, with smaller trees being favoured for constrained urban spaces.

While this is a good first step, we would like to see these minimums increased in the next generation of the code, and a review process of the application of this overlay in particular.

There is also an inconsistency in this overlay only being applied for new dwellings as well as its varied application across zones, for buildings of different height and tenure (e.g. community housing) and not applied in master planned communities where street trees are relied upon to provide new trees. This represents a significant missed opportunity to increase canopy within our suburbs the policy should be triggered for all types of developments (including house extensions above a nominated size). In many inner metropolitan areas, the majority of developments are for extensions and ancillary development, which increase impervious surfaces and cause unregulated canopy loss.

Subsequent applications once a new house is approved and established (such as for verandahs, decks, pools and sheds) should also trigger an assessment as to whether this new development is at the expense of areas previously approved as soft landscaping area, Urban Tree Canopy Overlay planting, permeable paving, rainwater tanks etc.

Recommendations

- Include tree and soft landscaping minimum requirements for dwelling additions and ancillary development (outbuilding, garage, carport) which can equally occur up to a maximum site cover parameters and impact on tree planting potential
- Adjust the ratios to favour selection of larger trees, including in the discounts for existing trees
- The Code is supported by a Practice Direction to guide suitable selection of tree species that meet the small, medium and large requirements, and also an education campaign to encourage the retention of existing trees and planting of new trees for both new and existing properties

- Increase setbacks for Housing Diversity and Urban Renewal Zones to 5m to ensure trees have space for survival
- Include the Urban Tree Canopy Overlay for the City of Adelaide and master planned subdivisions
- Monitor the “longevity” of measures established under the banner of “raising the bar for residential infill” to inform future changes to the policies and their practical application (planted trees, soft landscaping areas, permeable paving, rainwater tanks, deep soil zones).
- For ongoing effectiveness, capture information on the extent to which section 106(2) of the PDI Act is being used to dispense with Deemed to Satisfy “requirements” for tree planting and WSUD measures

Stormwater management, water tanks and WSUD

We are supportive of the creation of two separate flood overlays based on high hazard areas and general flooding (1 in 100 AEP) maps. It is noted that the Federal Government is funding a further flood mapping project which will be able to improve the accuracy of the two flood mapping overlays currently. Given the projected weather pattern changes we will see over many years, we support ongoing consistent and collaborative methodology that incorporates up-to-date climate risks in the modelling. Resilient East is wanting to better understand the scope and inputs for this floodplain mapping. Work is required to ensure the mapping is consistent, correctly applied, and takes future climate change modelling into consideration.

We support a detention component added to the rainwater tanks required for residential properties, however it is only triggered for sites of 200m² or greater. Modelling commissioned by Water Sensitive SA (Dec 2020) indicates that this will not adequately reduce peak stormwater runoff in minor storm events, which creates longer term impacts to the performance of minor drainage impacts – we implore the Commission to incorporate the findings of this research into the policy. This is a missed opportunity – small-scale infill will typically result in the greatest increase in hard surfaces. When coupled with the likelihood of the offset scheme being used instead of complying with the minimum tree and soft landscaping space, runoff will be substantially increased and the responsibility for additional stormwater loads will be shifted back on Councils. Onsite detention is a cost-effective way of reducing the flows, and also ensuring fit-for-purpose water use on site by connecting to 80% of the roof area and increasing the minimum DTS standards for plumbed internal use.

In application of this policy, there are still a number implementation issues – the ability for assessment (by private certifiers) as a minor variation from the DTS provisions, and the lack of responsibility on the builder to connect the water tank and the lack of longer term monitoring and enforcement to ensure the rainwater tanks remains on site and connected to the internal water supply.

The compounding issue of localised changes to stormwater flows and flooding as a result of increasing private realm impermeability through infill development will need to be modelled into future flood mapping. Water Sensitive Cities CRC / Water Sensitive SA³ and the BDO EconSearch Stormwater study (2020) have completed modelling to support this and there are tools that

³ See WSSA submission

developers and planners can utilise to ensure minimal stormwater runoff. Improvements to WSUD policy can be achieved through standard guidelines, working with Water Sensitive SA and industry to improve the policies in the next generation of the Planning and Design Code.

Recommendations:

- Introduce a detention component for all small-scale development, including sites less than 200m²
- Require Certificates of compliance for stormwater management DTS prior to occupation to ensure that the systems are plumbed in and working
- Practice Guidelines developed to support better choices for DTS solutions for stormwater management for small-scale development
- Broaden the spatial application of WSUD under the code – by equitably applying performance outcomes to group dwellings, residential flat building and battle-axe dwellings, multi storey, single storey, Housing Renewal and other land uses (including non-residential)
- Ensure projected weather pattern changes are incorporated into a consistent and collaborative methodology that incorporates up to date climate risks in the modelling as part of the Federally funded grant allocation.
- Include the Stormwater Overlay for the City of Adelaide
- Support Water Sensitive SA involvement in future policy direction

Retention of existing mature vegetation – Significant and Regulated Trees

The Code has further work to do in terms of mechanisms not just for planting new trees in infill developments, but in retaining mature vegetation, ensuring post-establishment compliance and incentivising greening mechanisms on private land. There are several key points here:

1. Increased pressure to remove trees due to infill

In circumstances where smaller minimum site areas will now be permitted under the Code, subdivision opportunities will increase which may, in turn, result in increased removal of regulated or significant trees. The Code supports removal of a regulated tree where it is preventing development which is otherwise reasonable and expected, so a regulated tree is likely to be removed if it is preventing the subdivision of the property.

2. Neglecting to check for regulated trees when approving development

There is a risk that Significant and Regulated trees on development sites (and the policy that goes with it) may be missed by accredited professionals when assessing Development Applications for building work. An applicant is unlikely to indicate that the element of “tree damaging activity” forms part of their development application for a house extension, if they are not aware of what this means. Therefore, it is essential that the mechanics of the Code pulls up the question “Is there a regulated or significant tree on or within 20m of the subject land?” for every proposed development in every assessment pathway. This will ensure that the presence of a Regulated or Significant tree is not inadvertently missed and the correct policy and assessment pathway is pulled up to enable assessment of the tree damaging activity.

3. Exemptions or removal without approval

There is still the ability for regulated and significant trees to be readily removed without engagement or approval by State Government – for example the development exemptions provided for transport corridor projects and schools.

Recommendations:

- The Code must integrate and reference the Regulated and Significant Tree legislation
- The Code must protect all existing Regulated and Significant Trees, and strengthen the mechanisms to prevent unnecessary removal and excessive pruning
- The Code needs to pull up the question for all development sites “*Is there a regulated or significant tree on or within 20m of the subject land?*” and place accountability on the applicant for being aware of this and identifying this on an application
- Changes to Regulations to require the location of any regulated or significant tree to be shown on plans for development
- A declaration of no potential for tree-damaging activity should be a criterion for Accepted and Deemed to Satisfy development applications
- For equity purposes, Government of SA should be subject to assessment for the removal of Regulated and Significant Trees

Putting a cost on removal or replacement of trees

The true value of trees is not recognised in many aspects of the development and asset management processes. While there are some methods being employed to measure a monetised value of trees, they are not consistently applied and used across councils or departments. Several methods have been developed that can be used to determine the value of trees (see BDO canopy report p 22-23), typically showing a great difference in the value placed on a tree in public land compared with private land.

Fees relating to the removal of trees are far too low and do not act as a disincentive to remove trees. In most cases, it makes more economic sense to remove the tree(s) and pay the minimal fees. For example, the contributions to be made into the Urban Tree Fund as set by the PDI Act regulations is currently 3 x \$150 fee for removing a Significant tree and 2 x \$150 fee for removing a Regulated tree on private land. This nominal fee falls well short of covering the costs of planting and maintaining a replacement tree (identified in the BDO report as at least \$1,165), let alone the lost benefits.

The independent BDO Cost Benefit Analysis recommends that the cost of replacing trees through an offset fund could be as a minimum of \$603 – \$1,165 when taking into consideration planting and 25 years maintenance costs. The study notes a limitation that they have not considered any other monetised benefits of trees which are the benefits the local residents experience on a daily basis – reduction of urban heat island, biodiversity, amenity, cooling of microclimate and some physical and mental health benefits. A City of Burnside study found lost benefits the community to be in the range of a few thousand dollars for small mature trees through to tens of thousands or more for large mature trees (i.e. \$3,435 for an average unregulated tree, BDO canopy report p30).

The cost of planting a tree in highly constrained urban environments can be a considerably higher. The cost will also increase as to improve tree survivability there often requires more structural support and WSUD, which increase costs also.

Recommendation

- Any review under the PDI Act which looks at the cost of removing and replacing Significant and Regulated trees needs to increase the disincentivise removing mature trees

Tree Offset Scheme

In lieu of planting the minimum one tree per dwelling, an offset scheme under the PDI Act has been proposed, designed to capture funds to replace trees. This would allow either State Government or Councils to accept financial contributions from infill applications. Below is an outline of some of the key concerns we have with this scheme, followed by recommendations, noting that the commissioned BDO report provides a thorough analysis.

1. Inconsistent with intent of State Planning Policies

The policy in the previous draft of the Code for tree planting and provision of deep root zones for infill housing and small lot housing has been weakened due to the proposed introduction of an Offset Fund for the planting of trees required by the policy. The creation of such a scheme goes directly against the intent of the policy to ensure good design outcomes and improved thermal comfort and amenity for the occupiers of dwellings by allowing for the urban heat island to expand. It provides a cheap 'opt out' whereby the responsibility falls back on councils to pay for and maintain greenspace and trees in the limited public space available.

In general, the development of an offset scheme should be a last resort. The remaining recommendations are suggesting conditions for the scheme in the likelihood that it will go ahead.

2. Cost of offsetting a tree

As discussed in the previous section, we do not have a good precedent for putting an adequate value on trees, whether it's the removal of an existing tree or in lieu of planting a new one to meet the DTS requirements. The contribution amount for this has not yet been finalised, although has been touted to be from \$300. This cost is again, nominal, and the BDO has prepared a cost-benefit analysis that looks at appropriate costs that could be used as a starting point. However, these calculations may not necessarily include increasing costs of planting and managing trees in a changing climate (i.e. WSUD and better passive design), the increasing costs in tree survivability in contested urban landscapes, and the cost of the land required to be purchased. It is acknowledged that there is not enough public land available for meeting canopy targets, so this needs to be factored into the cost for an offset tree contribution.

3. It's too easy to offset on private land and it becomes Councils problem

It is likely that the Housing Diversity and Urban Renewal Zones with 3m setbacks for urban infill will make it easier for high density developments to pay a minimal amount into a fund rather than planting a tree. Setbacks can include verandas which would further limit the space available for a

tree. If the intent of the scheme is to ensure that urban infill also contributes to the greening and cooling of the houses and suburbs, this policy seems at odds with that objective.

4. There needs to be limited circumstances in which the offset scheme kicks in

The offset scheme must be used in the most exceptional circumstances, for example where the tree can't be planted because of soil types or other evidence-based and documented reason for dispensing with the requirement, not just because the owner or developer doesn't want to plant a tree. The requirement for a tree is an opportunity for more creative design, rather than standard designs that don't suit every property.

5. Management of fund in hands of Councils – cheaper and more locally applied

There is a concern that the spatial application of relocated trees will not have any reference to a local vegetation plan or strategic response. The offset scheme should facilitate the replacement trees being planted in the local area – as per the BDO study advice.

Furthermore, there are concerns that the \$200,000 per annum administration costs identified in the BDO canopy report represents \$200,000 worth of missed tree planting investment. The Act enables collection and management of the offset schemes to be available to Councils, similar to the existing urban tree fund or carpark scheme – they are typically well administered and governed, and the money goes directly where it is meant to go. This will be an effective way to keep the benefits localised. Managing the fund inhouse is recommended, where there are negligible administration costs.

Recommendations:

- Enable use of the offset scheme as a last resort.

Ensure any progression of an offset scheme is done in consultation with LGA, Councils, Green Adelaide, WSSA (etc) and requires:

- A consultation on the BDO reports and analyses
- Reasons to offset should be limited and rigorous - require parameters and implications of relocating plantings in terms of available space and spatial imbalances of tree cover
- Needs to be easy for councils to use and access, reduce centralised Government SA costs in administering – utilise existing mechanisms to deploy with conditions and parameters around it
- Councils should not have to co-contribute to access funds.
- Need to establish vegetation plans for local areas so a strategic approach can be implemented
- The appropriate costs for offsetting minimum trees, soft landscaping space and deep root zones, taking into consideration the declining space and increased costs of planting and maintaining trees in public realm, and the full range of benefits and values (i.e. in \$'000s not \$'00s)
- Audit review process prepared to ensure that private accredited professionals are not dispensing of the requirement to plant a tree or pay into the scheme as a minor variation

Planning and Development Fund

The delivery of quality open space is getting harder to achieve for councils as suburban areas continue to grow in housing and population density.

Local, quality open space that people can walk to has been noticeably important during the mobility restrictions we have faced due to Covid-19 during 2020. A citizen science study conducted by Healthy Parks Healthy People⁴ during this time found that there was an increase in engagement with the natural environment – notably related to exercise, and people spent more time in these parks, waterbodies and greenspace – indicating that increased engagement with natural environment became more important when social interactions with others were restricted.

There are concerns that the sizeable annual contributions to the P&D Fund from infill development are not currently being used for its intended purpose of purchasing and developing quality open space. The fund is being heavily withdrawn from, for the implementation of Planning Reforms rather than its purpose – to *“support the purchase, planning and enhancement of public spaces throughout South Australia”*. This comes at a time when it is critical to provide more open space and quality open space development (urban green spaces). While it is noted that a Government Gazette issued on 12 November 2020 notes that the fund cannot be spent on these activities from the 1 July 2021, there are concerns that many millions of dollars will have been lost from urban greening projects by this time.

Some of this funding has gone towards Green Adelaide’s competitive Greener Neighbourhoods Grants by Green Adelaide for 50/50 split street tree planting and WSUD, so councils are still having to demonstrate they can raise the half of the capital in order to access this funding.

Recommendation:

- The Planning and Development Fund is clearly quarantined to be used to *“support the purchase, planning and enhancement of public spaces throughout South Australia”*.
- A review of the Planning and Development Fund is conducted, with a focus on equitable distribution, as many of our councils are experiencing high infill development.

⁴ Refer to page 4

Application and use of the Code

There are several inconsistencies and issues with the application of the Code, and concern by Councils that it will not be fit-for-purpose prior to the implementation date. Below is a quick summary of key points:

1. Lack of local policy could lead to unintended consequences:

The simplifying and rationalising of the policy reduce the nuances expressed in current Council Development Plans where development could lead to poorer development outcomes.

2. Code should be one source of truth:

The hard copy Code doesn't necessarily match policy returned in the e-planning system – if it is not going to be ready in the online system and Councils are still finding many errors, this will incur big risks and costs to both Government of SA and councils. It is preferred to delay in order to identify and remedy these errors and inconsistencies.

3. Application of some policy / layers not consistently applied:

Council planning staff have found that provisions might appear in the Code, but when put spatial layers are overlaid, certain policies and requirements aren't applicable, or it is easier to reduce the retention of these policies (i.e. urban renewal areas, community housing providers, multiple storey, City of Adelaide spatial omissions).

4. Minor Variations with DTS:

There is concern that the deemed-to-satisfy process will be too easy for minor variations to be made by a privately accredited professional assessing applications, especially for the number and size of trees per property, soft landscaping, deep soil zones, and water tanks. We are concerned over how this might diminish our long-term targets for greening and cooling our suburbs. Therefore, before the P& D Code goes live, it requires consideration of mechanisms for ensuring DTS loopholes do not reduce soft landscaping, tree survivability, water tanks.

Several Councils support changes to the Act to restrict private accredited professionals (private certifiers) from the ability to approve variations to Deemed to Satisfy (DTS) criteria in the Code. Such applications that do not meet the DTS criteria should be assessed by an Assessment Manager or Council Assessment Panel.

The ePlanning system should as a minimum be enhanced to include a requirement for private certifiers to identify which DTS parameters have been assessed as minor departures and the reasons why this is justified to not impose on the application.

5. Discretion to decide which policies are key:

If a development type is not defined or does not appear in one of the assessment tables in a zone ("Accepted" "Deemed to Satisfy" or "Performance Assessed"), it is at the discretion of an assessment manager which policies are considered during assessment. Key, or even basic design, policies which could be key to achieving Resilient East goals could easily be overlooked during assessment. If there

are key policies which must always be considered during assessment, there should be another mechanism to allow for this, rather than via an Overlay. There is a risk that some policies won't be 'called up' for different zones, and therefore we recommend assessing the code for improved consistency in setting out the relevant policies.

Recommendations:

- Ensure quality not time dictates the timing of the launch of the Code
- Set out the time and scope of the legislated review of the P & D Code
 - Require timescales so we can be certain of when Generation 2 will be initiated, and the process for auditing the effectiveness and issues with Generation 1 of the code.
 - Therefore, before the PDI code goes live, it requires identification of what strategic indicators and data capture will be put in place to ensure accurate measurement can occur on the effectiveness of new Code policy (e.g. soft landscaping, tree survivability, water tanks)
 - Establish an audit process with for example, 1,2,5year auditing of tree and WSUD features retained on approved developments
 - Use aerial photography and LIDAR to measure longer-term changes
- Guidance be provided through a Practice Direction or Guideline (and education) as to what constitutes a minor variation, for example a minor variation should only be applied to minor departures for measurable figures such as site area, site frontage, wall length etc. They should not apply to qualitative criteria, tree planting or RWT requirements. This will make it harder to be subjective and not water down the intent of the scheme
- All decision makers should be required to document all minor variations and the reasons why the variation was considered minor
- Consistently apply the minimum standards for soft landscaping, deep soil zones, minimum tree sizes and stormwater management to all housing types and tenures and community housing

Regional Planning

In addition to the suggested changes to the Planning and Design Code, the Steering Group restates its view, made in earlier submissions on the Planning Reforms, that successful implementation of the State Planning Policies requires translation and resolution of competing State Planning Policy objectives into clear, spatial guidance through Regional Plans.

Regional Plans were identified in the PDI Act and in the planning reforms process as the logical sequential step before preparing the Code policy detail, which has not occurred. The role of Regional Plans is crucial in providing the spatial delineation, to strike a balance between competing environmental and urban growth needs. Currently the interim 30 Year Plan (used in the absence of a regional planning process) does not provide the level of detail or the degree of integration needed, to guide the spatial application of planning policy.

The Regional Plan for Greater Adelaide would provide a consolidated, up to date strategic roadmap, including integration of all relevant regional strategic documents such as the Resilient East Adaptation Plan.

The Regional Plans have not been prepared prior to drafting of the Planning and Design Code. These should have been carefully developed and negotiated with local government, business sector, infrastructure providers and communities to facilitate appropriate policy setting prior to the application of the Planning and Design Code.

Notwithstanding this missed opportunity to inform Code policy, future amendments to the Code will be an important process to refine, improve and maintain contemporary applicable zoning and policy for desired development. It is important these Regional Plans are prioritised as soon as possible, to provide guidance for the large number of Code Amendments expected to be lodged upon commencement of the Code.

The *Planning Development and Infrastructure Act 2016*, creates new options for land owners to individually pursue a site-specific Code Amendment, with the support of the Minister.

This could result in randomised but cumulative infill impacts that negatively affect canopy cover, established gardens, significant trees, erodes the functionality of urban habitat corridors (typically across residential gardens and canopy) and diminishes the heritage and amenity of areas in an uncoordinated and unconsidered manner. Significant local area planning investigation and negotiation is required before areas of increased infill opportunity can be delineated in the Regional Plan and needs to be matched with appropriate policy that addresses infrastructure standards and staging, provision of green cover on private land, water sensitive urban design and heat island mitigation measures.

The private Code Amendment opportunities created under the new legislation have the potential to compromise broader strategic outcomes, precinct planning and prioritisation, and exclude councils and their communities from meaningful influence of the development of their neighbourhoods.

The process governing Code Amendments should provide for Councils to maintain a lead responsibility in setting policy and strategic control. Land owners should be directed to collaborate with councils to facilitate their interests as part of broader strategic approach.

The availability of spatially resolved and agreed strategic directions for regions through the Regional Plan will be critical in considering Code Amendments, particularly those by private interests. It is recommended the process commence as soon as possible for collaboration with local government and other key stakeholders on a Regional Plan under the PDI Act 2016.

Building back better – reform for change

Economic stimulus packages that target the building and construction industries have been utilised during the 2019 global financial crisis and the 2020 pandemic, benefitting this industry that employs 1 out of 10 working Australians. However, there have not been any specific sustainability requirements attached to recent federal 'homebuilder' stimulus packages. In the future, having a planning system that embeds the principles of environmentally sustainable design (ESD) in South Australia, will ensure that construction stimulus will enable 'building back better', as implied in the State Planning Policies. Good building and planning design, especially localised greenspace is better for the environment, better for living conditions and living costs in a heating and drying climate.

There has been strong support for the stronger use of low carbon materials and greening policy elements featured within this Planning Reform, especially conflicted with rules around removal of mature trees or street trees and increase of hard surfaces, losing character of areas and trees and greenspace not being replaced that adequately cool and provide the various benefits that were previously there. Reforming the planning system to enable this change through increased performance of urban infill will help mainstream the necessary and inevitable transition to a low-carbon and climate resilient building stock.

Contact and follow-up

Thank you for your consideration of the feedback provided in this submission to provide an increased policy focus on improving climate resilience and climate adaptation, including enhanced liveability for urban communities, increased canopy cover, improved water sensitive urban design and biodiversity outcomes.

We acknowledge the large amounts of work completed so far, the policies included that move towards our shared goals, and look forward to being involved in the review of the PDI Act and the development of Regional Plans.

Should you have any questions please contact Bec Taylor, Resilient East Coordinator at [REDACTED].

Yours faithfully,



Ben Clark

Chair

Resilient East Steering Group

Group Manager, Assets & Infrastructure

Town of Walkerville

Ph: [REDACTED]
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On behalf of resilienteast.com



Appendix 1: Resilient East Planning and Design Code feedback – Updated December 2020

The following comments are offered in response to specific parts of the Planning and Design Code with recommendations on how this can be overcome in revisions to the policy. We have kept our comments from the February 2020 submission. Recommendations are underlined.

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
BIODIVERSITY			
<i>There are limited examples of where biodiversity is referenced in the code. Biodiversity in selection of plant species is important to improve resilience in our urban forest and natural ecosystems, especially with a future of projected temperature increases, varied rainfall, bushfire risk increasing and potential for increase in pests. Reducing</i>			
<u>State Planning Policy 4 Biodiversity</u> is not reflected in an overarching biodiversity policy as a Desired Outcome.	A number of important policies contained in current Development Plans and South Australian Planning Policy Library have not been transitioned across to the Code.	The opportunity to include biodiversity as Desired Outcome at the zone level and Performance Outcomes in the General Development Provisions is desirable. Code policy to be reviewed and tested to ensure current policy protections have not been lost.	There is still very limited application in the Code. <u>1. The criteria for 'soft landscaping' should incorporate a provision for biodiversity.</u> This is more important with a likely loss in backyard biodiversity with the trend of decreasing allotment sizes.
<u>Overlay</u> – new overlay required	State Planning Policy 4.1 is not reflected in policy to ensure significant habitat protection.	Develop a Critical Habitat Overlay that includes critical habitat for threatened species and ecological communities listed at state and national level.	Further opportunity to develop overlay.
<u>Open Space Zone</u> The Open Space Zone seeks “visual relief to the built environment for the enjoyment for the community”	There is no recognition of these important natural assets (eg River Torrens Linear Park) for their environmental and biodiversity value. The lack of policies addressing biodiversity for open space areas is a significant shortcoming, given the priority focus of providing green space and canopy cover necessary for healthy living conditions.	Biodiversity value to be incorporated in all relevant Desired Outcomes for open space, with corresponding Performance Outcome policy.	Suggestion has been adopted in revised Desired Outcome: Open Space Zone – Desired Outcome <i>Areas of natural and landscaped open space provide for biodiversity, tree canopy cover, urban cooling and visual relief to the built environment for the health and enjoyment of the community.</i>
Environmental Design Considerations – Urban Infill and Design			
Intensification of development need to be balanced with the overarching need for excellence and best practice in environmental design considerations for building and infrastructure development.			
The Code contains several good policies that relate to environmental performance for all developments including solar access, minimising energy consumption and green walls, however these are only available through the performance assessed pathway.	There is need for the Code to give full consideration of sustainable design outcomes to meet South Australian climatic conditions, including the orientation and design of buildings and the overshadowing of solar panels.	More emphasis on passive design solutions in the Code. Include greater qualitative and quantitative requirements (as distinct from ‘guidelines’) for building orientation, sun-shading, window/glazing areas, in order to minimise summer solar heat gains, so as to reduce air conditioning, and to maximise winter solar access, so as to reduce winter artificial heating requirements. A requirement that all new dwellings have eaves will have obvious environmental benefits.	<ul style="list-style-type: none"> <u>Insert new DTS/DPF 4.1 under the heading ‘Environmental Performance’:</u> <u>DTS/DPF 4.1</u> <u>Locate living areas, private open space and communal open space in a position that will receive sunlight by:</u> <u>(a) providing a minimum of two hours of direct sunlight solar time on 22 June to:</u> <ul style="list-style-type: none"> <u>i. at least one habitable room window (excluding bathroom, toilet, laundry or storage room windows);</u> <u>ii. to at least 20% of the private open space; and</u> <u>iii. communal open space, where the space provides the primary private open space for any adjacent residential development.</u> <u>(b) Appropriate orientation of the building to:</u> <ul style="list-style-type: none"> <u>i. maximise north/south facing facades;</u> <u>ii. ensure the north facade receives good direct solar radiation;</u>

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
<p>Design in Urban Areas – All development – Environmental Performance</p>	<p>The P & D Code should provide greater policy guidance for encouraging passive solar design. No Designated Performance Features are included in the Code.</p>	<p>Greater opportunities for environmental performance should be expanded upon in the Code.</p> <p>In addition, a mechanism could be explored for inclusion of a disclaimer at the start of every application, requiring an applicant to tick a box to indicate they have considered and addressed climate adaptation/future climate in the design of their development.</p>	<p><i>iii. minimise east/west facades to protect the building from summer sun and winter winds:</i> <i>iv. narrow floor plates to maximise floor area receiving good daylight: and/or v. minimise the ratio of wall surface to floor area.</i></p> <p>Design in urban areas module does not go far enough to include policies that meet strategic targets of the state and councils by being stronger on low-carbon, water sensitive design, biodiverse plantings and future potential energy sources and demand. Recommendations:</p> <ol style="list-style-type: none"> 1. <u>Insert new PO under the heading 'Landscaping':</u> <i>PO: Landscaping incorporating local indigenous species suited to the site and development and consistent with the character of the area.</i> 2. <u>Insert new PO under the heading 'Environmental Performance':</u> <i>PO: Buildings designed to utilise low carbon design and construction measures.</i> 3. <u>Revise PO 5.1 under the heading Water Sensitive Design to also include:</u> <i>(d) incorporating waste water and stormwater re-use including the treatment and re-use of grey water.</i> 4. <u>Insert new PO under the heading 'Waste Management':</u> <i>Development designed to ensure waste minimisation, re-use and recycling and encourages waste water, grey water and stormwater re-use and does not generate unacceptable levels of air, liquid or solid pollution</i> 5. <u>PO 13.2 under the heading 'Landscaping' – Ensure appropriate research has been undertaken to ensure the deep soil zones are of a sufficient depth and dimension to ensure existing vegetation is protected and capable of being planted with large canopy trees</u> 6. <u>Include policy that addresses car parking areas to be future proofed for electric vehicle charging points.</u> 7. <u>Apply water sensitive design principles for group dwellings, residential flat buildings and battle-axe development (PO 36.1 –PO 36.2) to all development.</u>
<p>Community solar or shared energy savings developments.</p>	<p>Neighbourhood zones could encourage consideration of community or shared energy-saving facilities.</p>	<p>Include provisions for community solar schemes with applicable location and siting requirements</p>	<p>Revise PO 4.3 and add the following at the end of the sentence: <i>"other decentralised energy generation and embedded networks."</i></p>
<p><u>Too much variation in design and environmental requirements</u> – depending on 4 or more building levels, all residential development, all development, residential 3 levels or less,</p>	<p>Design policy applying to development over 3 storeys has now changed to only apply to over 4 storeys. It is not made clear why this has occurred. Separate policy for different building forms now results in inconsistent policy– varied</p>	<p>Provide a more consistent suite of policy requirements for good urban design and improved environmental outcomes to avoid policy loopholes and gaps.</p>	<p><u>Review to ensure consistently applied across land use and tenure types and revise extent of Code's environmental requirements commensurate with size of site and scale of development.</u></p>

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
residential 4 or more levels, group dwellings, Residential Flat Buildings, battle-axe, supported accommodation and housing for aged people	landscaping requirements, varied WSUD requirements, under 4 dwellings vs 5-19 dwelling, no policy for 20+ dwellings.		
Design General Development Policy *new			<p>This is a new GDP that has been introduced as part of the consultation. The policy content is almost the same as the Design in Urban Areas GDP however does not contain policy for 'All Development (4 or more storeys)' and is missing some of the performance outcomes in regard to private open space, water sensitive design and peak flows in downstream systems. It is also missing DTS/DPF's in regard to landscaping of street level parking, storage of waste bins, pervious driveway surfaces and battle axe driveways servicing more than 3 dwellings.</p> <p><u>It is important that key policies are actually 'called up' in the assessment tables to be used with particular development types within each zone to enable them to be applied during assessment.</u></p> <p><u>Review to ensure applicability to all relevant land uses.</u></p>
Policies do not apply consistently to community housing projects where Housing Renewal policies remove zone and General Development Policies	No requirement for housing (where Housing Renewal General Development Policies apply) for: o tree planting o rainwater tanks (DUA 22.1) o water quality objective (DUA 22.2)	<u>Ensure consistency in Code for social housing occupants in terms of environmental performance residential amenity liveability and reduced household cost of living</u>	<u>Clarify how the spatial application of Housing Renewal will be undertaken and/or triggered during development assessment.</u>
Overshadowing PO 3.3 need clarification of what 'unduly reduce' means	Policy should include greater consideration to ensure solar energy facilities are still able to be installed in the future. Current Council Development Plans quantify an acceptable access to sunlight.	<u>Provide DTS that gives an indication of what is reasonable overshadowing and include the word potential and well as existing.</u>	Policy to protect existing rooftop solar energy facilities does not provide parameters on what is considered acceptable. This will create confusion and be open to interpretation as to what is considered acceptable. Recommendation still stands.
Restrictions should be introduced to prevent new development reducing solar access to adjacent properties. The provision of shadow diagrams and modelling should be mandatory for all development greater than one storey.	Some Councils are losing current Development Plan policies that quantify extent of shadowing on adjoining development (including solar panels) that is considered reasonable.	<u>Quantify solar access and include shadow diagrams as required lodgement documentation for 2 storey and above</u>	<u>Include acceptable criteria for ensuring adequate sunlight to solar panels</u> <u>e.g. Sunlight to solar panels should be maintained for a minimum of 2 consecutive hours between 9.00am and 3.00pm solar time on 22 June provided it does not restrict the reasonable development of adjoining sites</u>
Outdoor Open Space			

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
In Design in Urban Areas Table 1 – Outdoor Open Space, there is significant variation in the open space requirements depending on the site area – representing a reduction in requirements for several councils.	The table should be more evenly graded – requiring a 20% of the total site area to be dedicated to open space. <ul style="list-style-type: none"> • 300m² site area – 60m² POS (20%) • 500m² site area – 60m² POS (12%) • 501m² site area – 80m² POS (16%) • 1000m² site area – 80m² POS (8%) • 1001m² site area – 20% POS (200m²) 	Increase the requirements for private open space provision to ensure equity and liveability in private open space provision and standardised proportion of green space.	The revised Code reduces the minimum POS requirements to a flat rate of 24m ² , regardless of allotment size. The justification for reduced areas of POS seems to be that there are soft landscaping, setback and site coverage requirements that developments must also meet. However, these POS areas can be further reduced by subsequent development applications as there are no provisions that seek to protect soft landscaping areas from being eroded by future ancillary structures and development (e.g. sheds, pools etc) like there is for POS. <u>We understand the 24m² is being reviewed and support a revised policy which increases the minimum POS.</u>
Design in Urban Areas Table 1 – Outdoor Open Space	Private open space for residential flat buildings that are not apartments should align with requirements for other dwelling forms	Apply open space consistently across building forms in the Code	<u>Review open space requirements</u>
Front yard private open space in Design in Urban Areas DTS/DPF 20.3 [now 21.3 (c)] should not be encouraged	This provides an ability to reduce rear private open space, setbacks and landscaping area, and increases the chance that the property will be bound by a 1.8m solid fence, which is detrimental to most open suburban streetscapes. There is also no reference to the desired northerly aspect as a qualifying factor.	It is recommended that DTS/DPF 20.3 is removed.	This has been partially addressed, now only enabled at the front of residential flat buildings.
Tree Planting and Soft landscaping			
There was a lot of industry opposition to policy relating to ‘deep soil zones’, ‘soft landscaping’ and ‘trees / canopy cover’. We appreciate that this iteration of the Code has maintained these policies and demonstrates the intent to keep them. There are several concerns we have with the consistency of how they will be applied, and reviewed, as we see there is potential for these to be strengthened over time. The creation of the new Urban Tree Canopy Overlay is supported, and the proposed Offset scheme is discussed further up in this submission.			
Urban Tree Canopy Overlay	<i>new</i>	<i>new</i>	<u>Elevating this to a separate layer is supported</u> <u>Include City of Adelaide</u>
<u>Tree planting provisions</u> DTS for Urban Tree Canopy Overlay	Given the inability of public space to meet the tree canopy targets, the tree planting provisions on private land is supported. <u>However these requirements should be strengthened.</u>	The opportunity to include a number of environmental performance techniques in a deemed-to-satisfy provision would also be desirable.	The policy does not go far enough to meet the overall green cover targets set in the 30-year plan or individual council targets. <ul style="list-style-type: none"> • <u>Apply to dwelling alteration and addition applications over specified size threshold.</u> • <u>Include planting of tree and its ongoing retention as condition of consent</u> • <u>Set up monitoring and enforcement of tree planting and other environmental measures (ongoing rainwater tank plumbed in, retention of soft landscaping)</u>

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
			<ul style="list-style-type: none"> Do not allow Private Certifiers to dismiss tree planting requirements as minor variation <p>Under Assessment Provisions PO1.1 the DTS requirements contains one small tree (with a spread of 2m canopy minimum) and a soil area of 10m² around the tree. This means that the tree canopy only needs to be approximately 1% of the site in order to be automatically approved, and the soil area only 2% of the site. For larger sites it's only slightly larger, so the maximum minimum is 2% canopy and soil area 7.5% of the site.</p> <p>For example, under the proposed P&D Code, a 450m² block would require 1 medium tree (4-8m spread) which at maturity would only produce 3-11% cover on that block.</p> <p>With most Councils having far more private land than public, if this is the minimum approach applied across the state we will not have enough collective cover to build resilience to climate change.</p>
<p>The proposals for 15-25% 'soft landscape' areas and minimum 1 tree per typical dwelling, is positive but insufficient.</p>	<p>More comprehensive and consistent increased tree canopy provision is required.</p> <p><u>Policy is not applied in Code to buildings of 4 or more levels or to community and social housing development.</u></p> <p>Planting opportunities on public spaces, (e.g. reserves and streets) is limited in Local Government Areas and if any meaningful advances on tree canopy cover are to be made, this needs to occur on private property.</p>	<p>Increase the requirements for new development (of all forms) to have an adequate deep soil area that allows for plantings that potentially achieve at least a potential tree canopy cover of 15% of the site.</p> <p>Increase the percentage of soft landscaping across sites and apply these to buildings of 4 or more storeys and to community housing developments</p>	<p>This has been revised to introduce a smaller (<150m²) site and 10% starting point up to 25% >45m² sites, and applied to Residential Development up to 3 storeys.</p> <ol style="list-style-type: none"> <u>Increase percentage of soft landscaping across all sites, could still have the same percentage for all sites. (i.e. 15% or 20% of the site, regardless of the site size). This would be more consistent and fair considering on public land we are striving to meet 20% canopy targets.</u> <u>Apply these targets to buildings of 4 or more storeys.</u> <u>Apply these targets to community housing developments.</u> <u>This only applies to new dwellings. Impact upon site amenity is the same for additions and ancillary additions – this should be equally applied.</u>
<p><u>Deep root zones</u></p>	<p>The criteria for deep root zones differs between buildings of 4 or more levels and those of 3 or less levels, and the requirement for soft landscaping only applies to buildings of 3 levels or less. Minimum side setbacks at ground level of 3m may not achieve effective planting spaces.</p> <p>The maintenance of existing 7% deep soil area, and only for medium to high rise development (4 storey or more), is inadequate.</p>	<p><u>Consistency should be provided between differing building forms and across all development types</u></p>	<p><u>Residential development in Neighbourhood Zones pursuant to the introduced Urban Tree Canopy Overlay encompasses requirements for trees relative to sites.</u></p> <p><u>Multi-storey development of 4 storey or more requires 'deep soil' of a minimum of 10m² for sites <300m² and 7% otherwise. For example, in a scenario of 300m² block, 7% site area = 21m². This is less than the 1 medium tree/30m² deep soil. There is confusion in the application – does this mean they do not require a tree? Or can they have 1 small tree? This requires clarification.</u></p> <p>These requirements only apply for new dwellings. Additions and ancillary developments (outbuildings, garage, carport etc) can occur to the same extent as new dwelling and impact yard space</p>

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
			and provision for trees, and need to be subject to the same requirements. 1. <u>Equally applied for additions and ancillary developments. In these limited 7% DRZ areas the minimum canopy that could be achieved is approximately 1-6%. To get increased canopy cover there needs to be increased requirements for deep soil area and in both cases the size and / or number of trees.</u> 2. <u>Increase the deep root zone area</u> 3. <u>Minimum planting size of tree and mandatory standard conditions to highlight and reinforce ongoing provision and maintenance</u>
Missed opportunity for strategic linkage of tree canopy and landscape area requirements	Greater information is available about importance of tree canopy – this is not utilised in the P& D Code.	<u>Consider urban heat mapping as an overlay</u>	Urban heat mapping was not made into an overlay, however there was the creation of an Urban Tree Canopy Overlay.
Table 1 – Outdoor Open Space	Does not include Residential Flat Building but includes Apartments for which there is no definition.	Include consistent requirements and define policy terminology in Land Use Definitions in the Code	<u>NO definition of apartments in revised P & D Code. Include definition or remove reference to an undefined land use.</u>
Greening in non-res development	Policy should incorporate sustainable best practice regarding shade cover from trees in carparks. (Policy similar to that used in other states/countries regarding minimum shade cover areas could be considered for use in the Code.)	<u>Code policy should be enhanced for car parking areas (particularly non-residential open lot parking in retail, business and service outlets) to have a minimum area of tree shading. Suitable tree species with large canopy cover are required.</u>	<u>Policy improvement for carpark shading could be enhanced.</u>
Development	Lack of DTS criteria with only some PO having DTS criteria	<u>Revise Code to ensure sufficient policy detail and clarity is available to all assessment pathways.</u>	
Landscaping DTS/DPF 10.1	It is unclear whether the 4 x 4m deep soil in front of building has to accommodate a tree?	Make it clear if tree needs to be at the front of the building to soften the streetscape.	<u>Further clarification required.</u>
All development - 4 or more levels DTS/DPF 10.2 refers to multi storey development incorporating deep soil zones and trees, except in a location or zone where full site coverage is desired.	Where are the locations where multi storey development is desired to have full site coverage?	Delete this exception from the policy or define spatially where this exception applies.	<u>No change to DTS/DPF 13.2 – if it cannot be specified where full site coverage is required delete this clause so it does not reduce the application of the deep soil zone policy.</u>
DTS/DPF 10. 2 and 21.2 Tree planting identifies small, medium and large trees by mature height and spread	Will there be any guidance provided for assessing officers as to which species of trees will meet each of these criteria and which one are suitable and unsuitable outside of those identified in the Regulations? This is going to be very difficult for planning staff to assess without clear guidance as very few will have expertise in tree species. The position of the plantings as well as certain species have the potential to cause tension with neighbouring property owners also.	<u>Provide clear practice directions on how this policy is to be assessed and also how it is to be enforced and maintained so as to not undermine the intent.</u>	No changes. Concerns that there will be minor variations on the size of tree approved. <u>Devise methods to ensure tree planting is not dispensed with as minor variation and is retained for the life of the development.</u> <u>Use the Botanic Gardens of SA Plant selector and local Council lists to develop suitable plant species by zone, postcode.</u>

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
With tree planting provisions included in Code – reduced to a quantitative requirement – should also be qualitative provision	This should be supplemented in Code with greater qualitative provisions.	<u>A Practice Guideline or Direction could provide details of species selection – local provenance water tolerant non-invasive root systems etc</u>	Some resources that might be helpful: <ul style="list-style-type: none"> Resilient East has finalised a ‘Street Tree Species Guideline’ – compiled from local eastern arborists to support decisions made about tree selection (this is a good start and a dynamic list) Unley is working on a Tree Species Guide for residents that will be available from 27 January 2021.
DTS/DPF 10. 2 and 21.2 Tree planting	The Code and Act contains no provision to ensure that these trees (and future tree canopy) will be maintained, monitored or enforced. Will the trees need to be a certain size at planting?	<u>New mechanisms (such as additional conditions on all new residential development and an inspection fee) to ensure the planting and ongoing care of these trees is undertaken and enforceable to ensure longevity of planted trees.</u>	No change has occurred. Same recommendations for developing enforcement mechanisms apply.
DTS/DPF 10.1 to 10.4 (landscaping) apply only to buildings of 4 or more levels and DTS/DPF 21.1 to 21.2 (landscaping) apply only to residential development 3 buildings or less. Other forms of development including dwelling extensions, apartments, SAHT and Housing Renewal development, non-residential land uses do not have this requirement in the Classification tables.	Unlikely to achieve State targets for increased canopy cover without broader application. Minimum requirements should be specified for tree and vegetation GI on all sites where any development is proposed, including alterations and additions, regardless of the size of the development. (Landscape and number of existing established trees and vegetation should form part of the quantity requirement.)	<u>Revise application of tree planting policy to achieve equity and consistency towards green canopy across all forms of development.</u> <u>Minimum requirements should be determined by the size landscape and location of the site not only the size of the development.</u>	<u>Review equity and scalability of planting requirements.</u> <u>Apply to dwelling alterations and additions.</u>
Transport, Access and Parking Vehicle Access PO 3.5 and DTS/DPF 3.5 what classifies as a ‘mature’ street tree	This requires greater clarification for this to be effective and consistent assessment of the impact of development on ‘mature’ street trees. Juvenile street trees should not be accepted as able to be impacted/ damaged/ removed due to development.	<u>Code needs clarification about removal of, or damage to, street trees and what classifies as a mature tree</u>	No change. DTS/DPF 3.5 only protects against removal of mature street trees – not damage to street trees and no definition of mature street trees provided.
Only the Residential Neighbourhood Zone makes reference to <u>spaces around buildings for trees and other vegetation</u> No provisions in Code seeking objective of retaining existing trees and landscaping where possible	The Suburban, General and other Neighbourhood Zones provide no reference to the maintenance of non-regulated trees on private land that contribute to amenity, shading and cooling. Demolition on existing housing allotments typically removes all mature trees and vegetation, with no consideration for retention of large trees on redevelopment sites.	Revise all neighbourhood zones to include similar policy at zone level An additional desired outcome should be added to encourage the retention of mature trees on development sites	<u>Incentives for retaining existing vegetation is contained in Urban Tree Canopy Overlay.</u> <u>Further policy should be added to Desired Outcome as per previous recommendations.</u>
Lack of greening objectives for public realm	This is a significant policy gap as it is intended to focus increasing importance on this area under the new Act.	<u>Review Code and other policy instruments (including Design Standards) to increase policy for enhanced public realm, including protecting and enhancing street trees.</u>	Design Standards not developed.

P & D CODE SECTION	COMMENTS FEB 2020	RECOMMENDATION FEB 2020	FURTHER COMMENT and Recommendation DEC 2020
	Act refers to Design Standards which have not been produced to address public realm and infrastructure issues.		
Part 8 – Administrative Definitions “Soft landscaping” definition only refers to landscaped areas that are pervious and capable of supporting the growth of plant species	Definition should exclude elements that do not reduce the urban heat island effect or perviousness (such as artificial turf or compacted gravel) Include definition of “living green landscaping” separate from “soft landscaping”	<u>Further clarify in definition that this refers to actual planted areas – not just capable of supporting plant species</u>	This requires further clarification, same recommendation stands, and is there any compliance if it doesn't occur?
Outdoor Advertising	New provisions appear to disregard the impact of advertising signs on trees.	<u>Suggest inclusion of policy called up in Classification Tables for all forms of advertising that can impact on trees (roots and canopy):</u> <u>Advertisements and/or advertising hoarding should be sited to avoid damage to, or pruning or lopping of, on-site landscaping or street trees.</u>	No reference to tree damage – revised policy required.
Regulated and Significant Tree Policy			
The Code has further work to do in terms of mechanisms not just for planting new trees in infill developments, but in retaining mature vegetation, ensuring post-establishment compliance and incentivising greening on private land.			
<u>Regulated and Significant Tree Overlay.</u> The draft Code presently contains a single Regulated Tree Overlay. This is to be contrasted with current Development Plan policy which distinguishes between, and provides separate policy for both regulated and significant trees. There is concern that regulated tree policy has been consolidated within a single Regulated Tree Overlay with no higher order of policy relating to the proposed removal of a regulated tree that is a significant tree. Stronger protection is required for regulated and significant trees as one of the highest biodiversity priorities due to changing climate.	The recognition of regulated and significant trees is transitioned to the Code, however the policy wording has been revised and assessment considerations for the following have been removed: o Indigenous to the locality (for regulated and significant trees) o Important habitat for native fauna (for regulated and significant trees) o Important contribution to the character or amenity of locality (significant trees) o Part of a wildlife corridor (significant trees) o Biodiversity maintenance (significant trees) o Notable visual element (significant trees).	<u>Strengthen Significant Tree and Regulated Tree policy within the draft Code to reflect current policy</u> <u>Criteria for tree-damaging activity should reflect current controls including assessment criteria.</u> <u>Reinstate policy such as:</u> o <u>Indigenous to the locality</u> o <u>Important habitat for native fauna</u> o <u>Important contribution to the character or amenity of locality</u> o <u>Part of a wildlife corridor</u> o <u>Biodiversity maintenance</u> o <u>Notable visual element</u> <u>Development should have minimum adverse effects on regulated trees.</u> <u>Development should be undertaken with the minimum adverse affect on the health of a significant tree.</u>	Change made – Regulated and Significant Tree Overlay policy wording revised and more closely reflects the existing wording which can give more confidence in interpretation. Tree damaging activities (prune, lop, remove) will not be publicly notified.
The proposed criteria for a tree damaging activity that is not to be undertaken with other development does not reference the current test that “ <i>all other reasonable remedial treatments and measures must first have been determined to be ineffective</i> ”. The omission of this requirement, at least in	The test for damaging or removing regulated and/or significant trees should require applicants to demonstrate that all other reasonable alternatives have been found to be ineffective	<u>This must be rectified if the stated intention is to ensure that the Code affords the same level of protection to such trees as presently exists under the Development Plan.</u>	Changes made to better align with current policy.

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respect of significant trees, would result in a weakening of the current level of protection.			
“Elements” of a development. Lodgement information and Assessment Pathways	There is no reference to the Regulated Trees Overlay in the Accepted development or DTS development tables, and therefore the reliance is on the applicant to identify, disclose and apply for ‘tree damaging activity’ as a separate class of development. Rarely does this occur in practice and regulated or significant trees are, in the most part, picked up at the assessment stage by council staff.	<u>There should be a trigger for the relevant authority to consider whether the proposed accepted or DTS development may result in tree damaging activity (and therefore calling up the Regulated Tree Overlay policies)</u>	Still same recommendation. For example: <u>In the mechanics of the Code it needs to pull up the question “Is there a regulated or significant tree on or within 20m of the subject land?” for every proposed development in every assessment pathway. This is to ensure the presence of a Regulated or Significant tree is not inadvertently missed and the correct policy is pulled up to enable its assessment.</u>
Water Sensitive Urban Design			
Need to broaden the spatial application of WSUD under the Code	Performance outcomes should apply equitably to group dwellings, residential flat building and battle-axe dwellings, multi storey, single storey, Housing Renewal and other land uses	<u>Review is recommended of all WSUD policies through the Classification Tables to ensure greater application of these policies and consistency in their use.</u>	Review policy
Design in Urban Areas – Water Sensitive Design and Landscaping policy for non-residential land uses.	Requirements for Water Sensitive Design and landscaping appear to be less onerous for non-residential land uses than for residential, where arguably there may be greater risk (or opportunity for sustainable water and greening measures) for larger commercial, industrial and institutional land uses.	<u>Review all forms of land use against the Classification Tables and Design in Urban Areas provisions to ensure effective and equitable application of policy for:</u> <ul style="list-style-type: none"> • <u>Managing water pollutants</u> • <u>Increasing on-site water capture storage and re-use</u> • <u>Appropriate site coverage and permeable space</u> • <u>Soft landscaping</u> • <u>Tree planting and deep soil zone requirements</u> 	Review policy
WSUD Consideration of water resources and management is a critical component in planning for climate change.	Greater uptake of water sensitive design could occur through greater use of compulsory permeable paving, rain gardens, on-site wastewater reuse systems in multi-storey development and underground rainwater storage for green space irrigation.	<u>Review policy in conjunction with Water Sensitive SA.</u>	Review policy
Water Sensitive Design DTS 22.2 Stormwater Management Plan	Stormwater Management Plan stormwater runoff outcomes seem difficult to assess and to determine what is average also why just for 5 – 19 dwellings	Amend Code to ensure clarity and consistency in how this provision is to be applied.	Review policy
<u>Water tanks</u> Some Development Plans contain polices requiring stormwater detention systems to be installed for all new dwellings in defined areas.	Retention promotes water re-use but does very little in limiting the amount of water discharged from a development during a storm event. Detention facilities reduce the immediate impacts on natural waterways and drainage systems.	Need to provide for retention and detention to support the WSUD objectives Detention systems should be available as a deemed-to-satisfy criteria and designated performance features, particularly in vulnerable catchments.	Review policy

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<p>The Code includes a detention requirement for developments comprising more than 5 dwellings, however the vast majority of applications in many Council areas are for less than 5 dwellings. For developments comprising less than 5 dwellings, the Code suggests that 2000-5000L retention tanks connected to toilets or the laundry and the provision of minimum pervious areas is adequate to manage peak stormwater runoff flows and volumes.</p>			
Council Vegetation, Trees, Infrastructure and the Business Use of Public Roads			
<p><u>The P & D Code lacks policies relating to the public realm or Design Standards</u>, which formed part of the Expert Panel's recommendation that open space and public realm planning and design matters be embedded within the new planning system.</p> <p>The P & D Code should not be implemented until relevant policy is drafted addressing public realm matters and Design Standards are developed for reference in the Planning and Design Code.</p> <p>If the alteration of a road or the use of a road is approved by a development authorisation under the PDI Act, a person will no longer require an authorisation from the Council under Sections 221 or 222 of the LG Act</p>	<p>Amendments to Sections 221 and 222 of the Local Government Act 1999 (LG Act) which are not yet operational will be effected by Part 7 of Schedule 6 to the Planning, Development and Infrastructure Act 2016.</p> <p>Once operative, these amendments will have significant implications for Council vegetation and infrastructure in the public realm, together with the use of public roads for business purposes.</p> <p>Councils are concerned that private certifiers will effectively assume control for approving work in the public realm, including the removal of street trees.</p> <p>Non-Council accredited professionals will be able to approve vehicle access to car parking spaces within 2 or more metres of an existing street tree with no opportunity for Councils arborists/horticulturalist to have any input.</p>	<p><u>The Code and Design Standards should contain appropriate processes and policy that relates to these issues so that they may be appropriately considered by the various relevant authorities determining applications for planning consent.</u></p>	<p>Still an issue that is of utmost concern given the upcoming timelines.</p>
<p><i>DTS / DPF 23.4</i> <i>Vehicle access to designated car parking spaces:</i></p> <p>...</p> <p><i>(b) 2m or more from a street tree unless consent is provided from the tree owner;</i></p> <p>What measures will be put in place to ensure private certifiers do not accept access and street tree implications as a "minor variation" from DTS criteria?</p>	<p>This policy needs to better reflect the characteristics of the particular street tree in question with respect to its own TPZ. Two metres might be acceptable for a bottle brush but not for a 100 year old gum. It is also unclear where the 2m setback is measured from (i.e. the trunk, the canopy, etc.)</p> <p>The impacts to trees would be dependent on species type, age, surrounding growing conditions, health and condition. The Australian</p>	<p><u>Appropriate measures need to be put in place to direct these issues be resolved prior to the lodgement of a development application</u></p>	<p>Still an issue that is of utmost concern given the upcoming timelines.</p>

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To not include any local government technical advice to determine position and the appropriate setbacks will have significant consequences to the urban forest and potentially subject Councils to unacceptable risk.	Standard AS4970-2009 provides guidance to encroachment considerations. However, this Standard still needs input from a technically qualified person as it is not a simple "one rule for all". There is a risk to the urban forest by allowing these decisions to be made by private planners who may not have the technical skills to make such decisions.		
Hazards			
Hazards (Flooding) Overlay - policy	The Desired Outcome in the Hazards (Flooding) Overlay should refer to the need to consider how flood hazard will change given the projected increasing frequency and intensity of extreme weather events.	Policy to reflect design standards for floodprone land taking into account projected intensity and frequency of extreme weather events.	Floodplain mapping overlay and policy improved. <u>Clarity of scope of new floodplain mapping exercise is required – will this modelling take into account projected intensity and frequency of extreme weather events?</u>
The draft P & D Code does not contain accurate mapping of floodplains and enables Deemed to Satisfy pathways for new development outside the Overlay.	The goals of the State Planning Policy 15 (Natural Hazards) has not been achieved. This places an unacceptable level of risk in the proposed flooding policy.	Redundant Hazards (Flooding) Overlays should be removed from the Code and replaced with accurate, up to date floodplain maps with appropriate policy included to address both flood depths and flood hazard risk. Current Development Plan policy that manages flood hazard risk should not be removed from the applicable policies applying to new development through the Code.	This has been improved with incorporation of available floodplain maps and improved policy. <u>Funding received to develop and consistently adopt floodplain mapping for State.</u>
Water Resources Overlay			
Water resources overlay only used in some locations to protect watercourses	Not consistently applied	Consistently apply overlay to all watercourses	Improved application
Native Vegetation			
Native vegetation	A missed opportunity is little/no support for the desired outcome to restore areas of native vegetation. The native vegetation overlay is limited and does little to reflect existing urban areas comprising native vegetation, nor does it show how these isolated remnant vegetation areas can be connected and made more sustainable via vegetation corridors.	<u>This issue could be covered by a 'proposed native vegetation corridors overlay (or similar)' where native vegetation restoration is considered as a preferred use of the land</u>	Not achieved – recommendation as per previous.
In the Native Vegetation Overlay, Desired Outcome 1 refers to restoring areas of native vegetation.	However, there are no related performance outcomes that refer to restoring native vegetation.	Performance outcomes could be added relating to enhancing native vegetation similar to that included in the State Significant Native Vegetation Areas Overlay.	<u>Providing direction for vegetation corridor extensions/connections as a desired use of the land.</u>