17 September 2018

Sarah Elding
Project Lead State Planning Policies
Department of Planning, Transport and Infrastructure
Level 5, 50 Flinders Street, Adelaide 5000
GPO Box 1815, Adelaide SA 5001

Dear Sarah,

Re: Resilient Hills & Coasts Submission on the State Planning Policies

Resilient Hills & Coasts is one of twelve climate adaptation regions across the State, established in 2014 as part of the South Australian Government's push to prepare our communities for a changing climate. Our region covers the Adelaide Hills, Fleurieu Peninsula and Kangaroo Island. We are a partnership between six Councils (Adelaide Hills, Alexandrina, Kangaroo Island, Mount Barker, Victor Harbor and Yankalilla), the Southern & Hills Local Government Association, two Natural Resources Management Boards (Adelaide & Mount Lofty Ranges and Kangaroo Island) and the South Australian Government.

Our goal is to strengthen the resilience of our communities, economies and natural and built environments. We work together through a Steering Committee to progress priority actions laid out in our Regional Climate Change Adaptation Plan, which was developed in consultation with our communities and adopted by our partner Councils in late 2016.

Under that Plan, Resilient Hills & Coasts partners have committed to advocacy and action under two strategic themes:
- **Where we build** – improve development planning and management in high risk areas
- **What we build** – provide leadership in climate-ready development.

Our region is already experiencing significant urban development – particularly in growth hotspots like Mount Barker, Goolwa and Victor Harbor – and we anticipate this growth to continue as residents of hotter and drier parts of our State, including metropolitan Adelaide, seek out a more comfortable living environment. We aim to attract further growth by positioning ourselves as a resilient region – a leader in empowering climate-ready and resilient communities.

To build resilient communities, we must integrate climate-readiness into all aspects of where we build and what we build. We must foster a culture of shared responsibility in homeowners, builders, developers and planners – helping them to understand, disclose, mitigate and adapt to climate risk. We want to see a reformed planning system that achieves this.

We strongly agree with the State Planning Commission that the housing stock and urban infrastructure we build now must perform well and be fit-for-purpose throughout its life. We agree that what we put in place now must support community liveability, sustainability and prosperity well into the future. In our region, that means development must support a hotter, drier climate, and mitigate risks and liabilities from more intense and frequent hazards like extreme heat, bushfires, coastal erosion and flooding.

Unfortunately, under the current planning system and rules, our Councils have been obliged to allow development that often does not reflect these principles. We have seen developments with little regard to climate-ready design considerations that would, if incentivised, increase liveability, affordability and health and wellbeing for households.

For example, green infrastructure lowers urban temperatures, but large-scale greenfield developments generally leave little if any open green space or mature trees within private allotments, with house footprints almost abutting property boundaries. While a more compact urban form can have transport and landuse efficiency benefits, it can also reduce our ability to provide for green infrastructure in both private and public realms. This is a major gap.

We are also seeing developments that are located in high-risk, hazard-exposed areas and are poorly designed to mitigate that risk – leaving residents exposed to consequent financial and insurance liabilities. The lifespan costs and benefits of climate-ready and resilient development are not adequately factored into our current planning system.

With that in mind, Resilient Hills & Coasts congratulates the State Planning Commission on striving for an integrated planning approach that does value good design. We greatly value the emphasis that has been placed on climate change in the draft planning policies, both through the legislated State Planning Policy (SPP) 6: Climate Change and through bringing aligned policies to the fore in other SPPs, including those related to hazards, transport, energy, water and biodiversity. These focus areas have been key gaps in the existing planning system, and we greatly appreciate their prominence in these reforms.

We see these planning reforms as the most significant lever in decades to encourage a wholesale shift to climate-ready and resilient development in our region. This kind of development will minimise community vulnerability during extreme events, while providing improved liveability, affordability and health and wellbeing for households every day.

Aligned with our Adaptation Plan priorities, we encourage the State Planning Commission to consider:
- Raising awareness about the benefits of climate-ready and resilient development
- Introducing definitions and minimum standards for climate-ready and resilient development
- Using multiple levers – including incentives – to encourage cultural change in the development industry that supports adoption of climate-ready and resilient design
- Fostering a culture of shared responsibility to disclose, mitigate and adapt to risk
- Disclosing hazard exposure (risk) in state-coordinated overlays that factor in whole-of-life climate projections
- Adopting planning policy settings that require development to mitigate and adapt to whole-of-life risk.

Our comments on specific polices are listed under Attachment 1.

Resilient Hills & Coasts is keen to be strongly engaged in the Planning Reforms, and would appreciate being actively involved in the remaining stages, particularly on any climate change related discussion papers and the Planning and Design Code.

At the end of the reform process, we want to see a planning system that goes as far as reasonably practicable to encourage climate-ready, resilient communities.

Please note that this submission was prepared by the Resilient Hills & Coasts Steering Committee and does not necessarily constitute Resilient Hills & Coasts partner views or policy positions, nor does it replace individual partner submissions.

We express our support for the submissions made by other climate adaptation regions.

On behalf of the Resilient Hills & Coasts Steering Committee, thank you for considering this submission and for keeping us engaged in future consultations.

Regards,

Jen St Jack
Resilient Hills & Coasts Regional Coordinator
On behalf of the Resilient Hills & Coasts Steering Committee

Attachment 1

Resilient Hills & Coasts – Comments on State Planning Policies

#	Policy	Comments
1.	Integrated Planning	There is a gap in this policy regarding where we build to support resilient communities. Suggested wording of a new policy: *"To support community resilience, plan growth in areas with low hazard exposure and ensure development in hazard exposed areas mitigates risk to as low as reasonably practicable."*
2.	Principles of Good Design – Durability	Durability should be applied throughout the entire expected life of a development, factoring in projected changes to climate and hazard exposure.
2.2	Promote best practice in access and inclusion planning…	This policy combines multiple design principles under the access and inclusion banner, but they're not all aimed at those outcomes. Suggest separating ESD and WSUD into a separate policy with a climate-ready and resilience outcome, for example: *"Ensure the development of climate-ready and resilient communities through mitigating hazard exposure and applying the principles of Environmentally Sustainable Design and Water Sensitive Urban Design."*
2.3	Ensure the development of safe, welcoming, comfortable and efficient buildings and places to reduce economic and social disparity.	We strongly support this policy. Consider adding "climate-ready" and "resilient" to the list of building attributes – minimising climate vulnerability is key to reducing economic and social disparity.
2.6	Provide high-quality, functional and accessible public green spaces and streetscapes…	We strongly support this policy. Consider adding "climate-ready" and "resilient" to the list of attributes, and/or amending "multi-functional" to reflect that open green spaces and streetscapes have an increasingly important role in providing multiple benefits such as urban cooling, biodiversity, water quality improvement and hazard mitigation.
5.	Climate Change	We strongly support this policy, and greatly value its prominence. Climate change is affecting communities now – we suggest replacing "will be" (implying a future scenario) with "are".
5.1	Create carbon-efficient living environments through a more compact urban form that supports active travel, walkability and the use of public transport.	Achieving carbon-efficient living environments goes well beyond transport. Consider adding other design elements like green infrastructure, orientation and passive thermal control, or be clear that this is about urban form rather than building design. It should also be recognised that a more compact urban form is often sold as being more carbon-efficient, when in reality it increasingly results in a lack of room for green infrastructure. This drives up

		carbon/energy and water use in both public and private realms, and reduces walkability. There are equity issues here, as a compact urban form will achieve higher profits for the developer while passing ongoing social, economic and environmental costs on to individuals and their communities. Suggested wording: *"Reduce transport-generated greenhouse gas emissions through a more compact and well-designed urban form…"*	
5.2	Ensure the design of public places increases climate change resilience and future liveability.	For our communities to be climate-ready and resilient, planning provisions must provide for retention of adequate open green space and mature trees on public and private land. The open space must be both present and well-designed to provide effective resilience outcomes from green infrastructure (incl WSUD, urban greening and tree canopies). This is a significant gap in the current system and warrants a separate policy. The new planning system will need to consider how it will incentivise retention of open green space and mature trees – our current system encourages allotment levelling, maximising the footprint to allotment ratio, and minimising space for streetscapes. The SPPs could also consider defining and using green infrastructure (for example) as a catch-all term for WSUD, trees and other assets, to avoid confusion. Note that liveability is an outcome of green infrastructure now, not just in the future. Suggested wording: *"Ensure that adequate open green space and mature trees are retained on private and public land, and that sufficient green infrastructure is incorporated and designed to increase the liveability, resilience and wellbeing of our communities."*	
5.3	Ensure the development of climate-smart buildings that reduce our demand for water and energy and mitigate the impacts of rising temperatures by encouraging water sensitive urban design, green infrastructure, urban greening and tree canopy enhancement.	Our buildings will need to mitigate more than just rising temperatures – with increasing extreme events, our built environment will be increasingly exposed to a range of natural hazards. Building design and private open space design are linked, but the wording of this policy confuses the intent. See comments on 5.1 & 5.2 for further discussion of open green space. To ensure that our living environments are designed to be climate-ready from the outset – rather than needing to be retrofitted by residents – the new planning system will need to consider incentives for ensuring climate-ready development. For example, there is potential to include a minimum building standard in the Planning and Design Code, such as a minimum Green Star rating, to ensure there is a clear definition of what constitutes climate-ready design. Suggested wording: *"Ensure buildings are designed to be climate-ready and resilient, including by reducing demand for water and energy and mitigating exposure to hazards including heatwaves, bushfires and floods."*	

5.4	Avoid development in hazard-prone areas or, where unavoidable, ensure risks to people and property are mitigated to an acceptable or tolerable level through cost-effective measures.	There is an inconsistent risk management framework through the SPPs. The preferred risk mitigation hierarchy appears to start with "avoid", but the remaining levels vary across different policies.

For example:

Climate Change 4.4 = avoid > mitigate to acceptable level

Coastal Hazards 13.1 = avoid > accommodate > adapt

Natural Hazards 15.2 = avoidance > adaptation > protection

Risk is difficult to manage in simplified terms under the planning system, because each case can require a different response depending on the likelihood and consequence of the risk, as well as matters like the frequency and intensity of events, the value and expected lifespan of assets at risk, and the capacity and willingness of the community to pay for damage and liabilities (including more expensive insurance and finance for at-risk developments).

It is considered best practice in coastal adaptation to go through a community-led decision-making process to agree to undertaking mitigation actions in a staged approach when specified trigger points are met. For example, a community in a projected coastal inundation area may agree to immediately accommodate the risk by requiring any new dwellings to be built on stilts, but to hold off on defending against the risk, by building a levee bank, until the esplanade floods three times a year.

It is also important to use clear and widely-understood language when talking about risk. Avoid, accommodate, protect/defend and retreat are risk mitigation controls. Including the words "adapt" and "mitigate" within a risk mitigation hierarchy makes the intent unclear.

Using "avoid" as a first-pass risk mitigation control would require setting threshold risk levels that trigger that response. There is also a question on what "unavoidable" means in SPPs – it may be argued, for example, that building new housing in severe bushfire risk areas is unavoidable, as allotments in those areas would otherwise be devalued or even rendered worthless. Other risks, on the other hand, may have a much higher certainty level and warrant an immediate avoid response. We anticipate that clearer guidance on this will be provided in the Planning and Design Code and overlays.

The ALARP principle is commonly applied to the regulation of safety-involved systems, including in South Australia's mining and petroleum industries. The principle requires risks to be mitigated to a tolerable level – residual risks are tolerable when they are "as low as reasonably practicable". The ALARP principle considers how realistic, effective and affordable mitigation controls are. The new planning system could consider adopting this principle.

Suggested wording:

"Minimise hazard exposure throughout the development's lifespan by mitigating risks to people, property and the environment to as low as reasonably practicable." |
| **5.5** | Facilitate green technologies and industries that reduce | We strongly support this policy, but it is unclear how it would be applied. |

		reliance on carbon-based energy supplies.	It could be strengthened by adding *"reduce reliance on carbon-based energy supplies <u>and have a net positive carbon and biodiversity footprint</u>."* Consider integrating it under SPP 12. Energy
5.6		Protect areas that provide biodiversity and maximise opportunities for carbon sequestration.	We strongly support this policy, but it is unclear how it would be applied. It would need to ensure a net positive impact – not encourage impacts to be pushed offsite. Consider integrating it under SPP 4. Biodiversity
5.7		Ensure decision-making considers the impacts of climate change using the best available information on climate risk which is regularly reviewed and updated.	We strongly support the intent of this policy. It could be strengthened by clarifying that development must be designed to be fit-for-purpose throughout its life, including under future climate projections. We also strongly support the South Australian Government coordinating standardised monitoring and mapping (for example, of coastal hazards, bushfire hazards, tree canopy and urban heat), and making this information readily publicly available. Under current arrangements, Councils use different methodologies, collect data at different times and under different conditions, and do not always present the data in a consistent and readily available way. This results in inconsistent, patchy and inefficient information gathering, analysis and sharing – which is not compatible with implementing this policy. Suggested wording: *"Ensure decision-making considers <u>whole-of-life climate risks</u>, using the best available information <u>and projections that are</u> regularly reviewed and updated."*
5.8		Support development that does not contribute to increasing our vulnerability…	We support this policy's intent, but the wording is confusing. Suggested alternative wording: *"Support development that makes the fullest possible contribution <u>to emissions reduction, climate-readiness and community resilience</u>."*
6.8		Support the creation of healthy neighbourhoods…	Suggest embedding climate considerations in this policy: *"Support the creation of healthy <u>and resilient</u> neighbourhoods that: include diverse housing options… and provide quality open space, <u>green infrastructure,</u> recreation and sporting facilities."*
12.2		Support and promote alternative sources of energy supply at the neighbourhood level.	We strongly support this policy's implied support of community energy programs and renewable energy infrastructure. However, it should not be restricted to neighbourhood scale supply. Suggested wording: *"Support and promote alternative <u>energy supply models and renewable energy technologies</u>."*
12.5		Ensure renewable energy technologies support a stable energy market and continued supply and do not adversely affect the amenity of regional communities.	<u>We strongly oppose this policy</u>, as it inaccurately implies that renewable energy adversely affects stable and continuous energy supply and amenity of regional communities. Our region is a leader in community energy solutions, initiating one of Australia's first solar bulk buy schemes in 2009. Our regional communities have demonstrated – via their enthusiastic uptake of

		rooftop solar – a strong willingness to invest in renewable energy solutions that improve reliability of supply and reduce individual energy costs. These systems are now saving our communities at least $50 million per year. Our communities continue to call on us to reduce the cost of living for as many people as possible – including more vulnerable members of our community who cannot afford to own their own home and invest in rooftop solar. We continue to pursue projects that empower our whole community to participate in the transition toward a clean energy future.
		With that in mind, we do support a stable and continuous energy supply and regional amenity – and planning policies should ensure these outcomes from all types of energy development.
		Suggested wording:
		"Ensure energy developments support a stable energy market and continued supply."
		Regional amenity outcomes should be integrated into policy 12.1.
13.1	Ensure development is not at risk from current and future coastal hazards… consistent with the hierarchy of avoid, accommodate and adapt.	We support the intent of this policy.
		There is some inconsistency in the lists of potential hazards between here and policy 15, which should be addressed:
		13.1. "coastal flooding, erosion, inundation, dune drift and acid sulphate soils"
		15.1. "coastal flooding, erosion, dune drift and acid sulphate soils"
		Note that <u>storm surges</u> are a major hazard that should be included.
		It is also worth noting that some coastal hazards are intense but infrequent (like storm surges resulting in coastal battery and temporary flooding), while some are incremental but more permanent (like sea level rise and coastal retreat). These risks require different mitigation responses. For example, areas with high erosion risk should not be developed at all (the 'avoid' response), but areas only subject to 100 ARI inundation events from storm surges may be adequately risk mitigated with raised foundations or stilts (the 'accommodate' response).
		See further comments on risk management under policy 5.4.
13.4	Locate development in areas that are not subject to coastal hazards…	We strongly support this policy.
13.5	Facilitate sustainable development that requires a coastal site… where environmental impacts can be managed or mitigated.	We support this policy, and suggest it be broadened to include mitigation of hazards to development:
		"… where <u>risks to people, property and the environment </u>can be mitigated <u>to as low as reasonably practicable</u>."
13.4	Provide for infrastructure and land use policy that aims to decrease flood risk…	Suggested wording:
		"Provide for infrastructure and land use policy that <u>mitigates</u> flood risk and improves water quality and urban amenity.

15.	Natural Hazards	We support the policies under SPP 15. Natural Hazards. There is a lot of overlap with policy 13. Coastal Environment, which may be confusing. Consider whether these can be better aligned.
		Suggested wording of the Objective:
		"Resilient communities are fostered and risks to people, property and the environment are mitigated to as low as reasonably practicable."
15.1	Identify and minimise the risk to people, property and the environment…	As discussed under policy 5.4, there should be consistency across policies regarding risk management and mitigation control hierarchies.
		There are strong connections with policy 5.7, regarding hazard mapping. Consider whether another policy is needed under this section to specifically discuss hazard mapping, for example:
		"Ensure hazard mapping and mitigation responses consider the best available information, including climate risk projections across the development's lifecycle."
15.2	Design and plan for development in accordance with a risk hierarchy…	As discussed under policy 5.4, there should be consistency across policies regarding risk management and mitigation control hierarchies.
15.3	Locate critical infrastructure…	We strongly support this policy.
15.4	Mitigate the impacts of extreme heat events…	We strongly support this policy, but it should go further to mitigate risks to residents in their own homes, particularly the most vulnerable who cannot afford air conditioning.
		Suggested wording:
		"Mitigate the impact of extreme heat events by retaining open green space and mature trees on private and public land and designing green infrastructure to create cooler microclimates."
15.5	Protect key coastal areas…	Duplication of policy 13.