

22 February 2019

Sally Smith
General Manager, Planning and Development
Attn: Sarah Elding
Department of Planning, Transport and Infrastructure
GPO Box 1533
ADELAIDE SA 5001

via email: DPTI.PlanningEngagement@sa.gov.au

Dear Ms Smith

Update on Submission on Natural Resources and Environment

Thank you for the opportunity to provide feedback through this submission on the Natural Resources and Environment Policy Discussion Paper.

Further to the council administration submission dated 3 December 2018, Council at its Strategic Directions Committee meeting held 5 February 2019, approved the attached submission. The Council approved submission includes one amendment under Theme 5 Natural Hazards. We note there is discussion and questions on flood and climate change however no reference is made to bushfire risk and subsequent management of vegetation to mitigate risk. We consider this may be an oversight of the discussion paper noting that the (draft) [State Planning Policies](#) which set out the policy in our new planning system contain the overarching policy direction for bushfire risk management (see SPP 5 Climate Change and SPP 15 Natural Hazards).

We commend the Department on developing the blueprint for South Australia's Planning and Design Code (the Code), and in particular furthering the consideration of natural resources and the environment. The Discussion Paper has rightly highlighted the role the Code can play in ensuring the state's liveability and prosperity in ways that achieve ecologically sustainable land use and development outcomes.

The City of Onkaparinga will continue to attract population growth due to relative affordability and the appeal of its natural environment and as a result there will be a continued demand for land together with a need to renew existing urban areas.

Coupled with the areas' natural resources including primary production land, natural areas and coastal environment, there is a need to accommodate growth in areas that protect our natural assets, but also allow for long term sustainability and resilience of new and renewing communities.



We note the Discussion Paper suggests a number of improvements that the Department would like to make through the first Code transition. The nature of these changes are supported however without seeing the amended policy, it is not possible to provide an informed position or constructive feedback.

We also note and support the Department has identified some areas for more significant reform including:

- opportunities for offsite green infrastructure (GI) and water sensitive urban design (WSUD),
- improved biodiversity policy and mapping
- improved hazard mapping in coastal areas
- improved flood mapping and data and an updated Flood Risk Overlay
- improved site contamination policy for planning assessment

It is considered that policy alone will not achieve the desired outcomes pertinent to our natural resources and environment. Improved data collection and mapping and improved cooperation between 'relevant authorities' and government agencies will be necessary. There is also a need to develop infrastructure schemes at a district level to contribute to funding green and WSUD infrastructure, particularly in greenfield and renewal areas.

Our letter highlights matters of importance to council generally. The comments below summarise some of the more detailed comments enclosed in the attached analysis table.

THEME 1: Sustainable and Liveable Urban Environments

The Code should take a more holistic approach to facilitating sustainable and liveable environments. Simple assessment tools can be developed in the Code to require this at the allotment level and at a broader catchment/district level.

THEME 2: Water Security and Quality

For the Mount Lofty Ranges Watershed Protection Area the Code should apply the relevant 'Overlay' to all affected Council areas in addition to providing strong policy that encourages improvement to the water quality whilst maintaining a comprehensive non-complying list.

In other water protection areas it is important to better integrate relevant Department of Environment and Water (DEW) management of surface and subsurface water systems within planning systems. It is suggested that a mechanism to integrate any required DEW approvals with planning consent could be established.

THEME 3: Biodiversity

Overlays within the Planning and Design Code can protect areas of known biodiversity where the underlying zone is not conservation. However protection of biodiversity into the future will in part be impacted by the quality of mapping that underlines the Code. Currently in South Australia biodiversity has a relatively narrow focus compared to some

states. While we don't advocate layers of 'green tape' it is important to have a holistic understanding of significant native flora, fauna and ecological habitat. It is also recognised that it is difficult to address this via planning policy while data and mapping gaps exist. It is suggested that this be explored in future Code reviews (Gen 2 and beyond).

THEME 4: Coastal Environments

The coastal environment is naturally dynamic and fragile and this is only going to be heightened by the impacts associated with climate change such as sea level rise and increased intensity of storm events. It is therefore important to have accurate data and mapping that informs zones and overlays, which can trigger necessary referrals. We support the differentiation between the various coastal zones within SAPPL to reflect the distinct role and function different parts of the coast play, from urban environment through to natural landscape.

THEME 5: Natural Hazards

It is important that Overlays are regularly updated with current data and hazard mapping that also accounts for the projected effects of climate change. As more information concerning the impacts of hazards is collected and mapped it may warrant the need to revisit land use zoning in sensitive locations.

THEME 6: Environment Protection and Public Health

The code needs to carefully consider envisaged land uses in mixed use areas and how they are managed through the policy in terms of impacts to and from different activities.

We welcome the opportunity to discuss the matters raised in our submission or provide further explanation.

Should you have further questions, please contact Jonathan Luke, Senior Development Policy Planner on [REDACTED] or email [REDACTED].

Yours sincerely



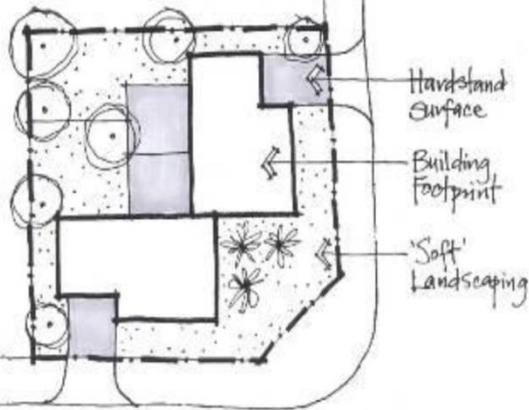
Erin Thompson
Mayor

enc. Natural Resources and Environment Submission Analysis Table (revised 5 February 2019)

Discussion Questions	Response / Suggested Policy Direction
THEME 1: Sustainable and Liveable Urban Environments	
1.1 Green Infrastructure and Water Sensitive Urban Design	
<p><i>Should existing Water Sensitive Urban Design (WSUD) and Green Infrastructure (GI) policies also apply to regional areas and for all development scales and types?</i></p>	<p>Thinking more widely than just WSUD and GI, we already see that exclusions according to scale and type can be counterproductive by encouraging development that is deliberately designed to avoid an appropriate level of scrutiny and associated investment through the strategic adjustment of scale, type, location etc.</p> <p>We should avoid creating disadvantage to (already disadvantaged) populations in regional areas by ensuring that developers make appropriate investments regardless of location. WSUD & GI treatments can and should apply to both regional and urban environments, however the treatments are likely to be different (e.g. there may be more room for wetlands in a township environment). This is why there needs to be flexibility in the application of WSUD & GI with a performance based assessment rather than a prescriptive one.</p> <p>The emphasis needs to be given for WSUD to be multi-benefit. For example a stormwater detention basin located at one end of the development on a main road fulfils the developer’s requirement to limit stormwater run-off and improve water quality, and it would also cool the area. But through better design such as flatter graded sides, planting of sedges and trees and a path provided, it could also provide habitat, recreation and access to nature.</p> <p>Suggest introducing WSUD and GI Draft State Planning Policies and performance based criteria for all relevant developments (regardless of scale) in the Code.</p>
1.2 Energy Efficient Design	
<p><i>What role should the planning system play regarding preservation of sunlight to solar panels from adjacent development?</i></p>	<p>The extent of overshadowing of solar panels as well as access to winter sun should be considered in the assessment of adjacent development.</p> <p>Incorporate policies that consider access to Winter sunlight and limit overshadowing of solar panels.</p>

Discussion Questions	Response / Suggested Policy Direction
<p><i>Should the Code introduce incentives for developments that can incorporate passive solar design (siting) techniques, green infrastructure and WSUD?</i></p>	<p>An incentive program could be a good way to encourage better incorporation of passive solar design, WSUD and green infrastructure, however better policy support is also needed if true improvement is going to be achieved, as incentives may not be as competitive as achieving additional allotments.</p> <p>Policy should include requirement for integration of solar and WSUD infrastructure to be complementary to (instead of sacrificing) existing environmental values and features, including existing trees. Consideration should also be given to what is included in the 'Green infrastructure' definition. Some of the definitions of green infrastructure include 'existing trees' (including street trees) and smaller pockets of native veg, but the definitions vary. This term needs to be clearly defined and included in the definitions within the new legislation.</p> <p>A potential major source of heating and stormwater management is (non-permeable) site coverage where infill is occurring. As the discussion centres on 'designing climate-smart development ... to reduce emissions, support green industries and green infrastructure, and enable the better management of water,' provisions for maximum (non-permeable) site cover be incorporated to ensure greening and cooling that soft landscaping (green infrastructure) has on residential and commercial areas .</p> <p>It is suggested that support be given to the recommendations contained in the <i>Performance Based Planning Provisions and Assessment Framework for Green Infrastructure and Water Sensitive Urban Design Background Paper</i>, that has performance-based measures for GI and WSUD that include:</p> <ul style="list-style-type: none"> • the development of a green cover performance measure, which could be assessed through calculation of a green cover score based on a range of landscaping features such as trees, shrubs, irrigated turf and vertical gardens • an online stormwater assessment tool.
<p><i>How can planning policy contribute to reduced carbon emissions from the built</i></p>	<p>At a macro level, locating new development with access to public transport and of a design that encourages walking and cycling as modes of movement. At a micro level, site layout in</p>

Discussion Questions	Response / Suggested Policy Direction
<p><i>environment sector?</i></p>	<p>greenfield developments should favour living areas to the north and appropriate eave sizing, provides the greatest lasting opportunity for housing to reduce ongoing energy costs and therefore emissions.</p> <p>At a more detailed level, policy should encourage appropriate solar design within building form and materiality- including location of and shading to glazing, eave depth, roof colour etc. A quantifiable solar performance review could be a requirement for planning assessment for new dwellings. Or further a holistic energy efficiency assessment rating tool such as the BASIX system in NSW could be introduced for residential development. [BASIX or Building Sustainability Index is a scheme introduced by the government of New South Wales, Australia in 2004 to regulate the energy efficiency of residential buildings. It offers an online assessment tool for rating the expected performance of any residential development in terms of water efficiency, thermal comfort and energy usage. It aims to reduce water consumption and greenhouse gas emissions by 40% compared to pre-BASIX (2004) buildings.]</p> <p>Policy could include conditioning of tree planting as part of development with each allotment guaranteed to have at least 1 tree at all times. Residents do not have the option of not having a tree and if a tree dies or is removed it is required (conditioned?) to be replaced. Allotments in new developments should be designed to accommodate this. Additionally, new developments should incorporate adequate verge widths and open space to facilitate carbon offset plantings for the development (this also contributes to achievement of canopy targets and reduced heat reflectivity).</p> <p>In denser developments (e.g. group dwelling arrangement/ community title), policy could enable / encourage planting of (a reduced number of) larger tree species (rather than the 1 tree per Lot rule, which often yields small / ornamental trees), where an applicant can demonstrate that deep soil zones and landscape areas are supportive of sustainable growth and acceptable spatial separation from buildings.</p> <p>Planning policy should consider the application of a 'soft landscaping' site percentage requirement. Different to 'site coverage' this, this would require a certain proportion of</p>

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	<p>development sites to be dedicated to landscaping free of paved and impervious surfaces. E.g. A minimum % of site area at ground level should be 'soft' landscaping, excluding all hardstand areas. Open space areas and setback areas may be included in this calculation only where these do not include hardstand surfaces. See Figure 1</p>  <p>Figure 1 In addition to assisting in 'greening' Adelaide (and other areas), a soft landscaping percentage requirement will provide for deep soil planting and areas on site that permits stormwater infiltration and accommodate some WSUD elements. Open space and green areas integrated throughout a development can provide water infiltration and passive cooling, reducing the need for air-conditioning. Master planning needs to also consider permeability in street design to allow multiple access and egress points for small buses, and to encourage walking and riding. The use of low carbon building materials would also be beneficial and should be incorporated into planning policy.</p>

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	<p>The National Construction Code (NCC) is the critical external lever for carbon emissions in housing through residential design and through a mandatory star ratings at point of sale, so that people can understand what the ongoing running costs of their purchase will be. This will create demand for higher performing housing.</p> <p>Encourage a viable future for heritage assets and sustainable heritage conservation outcomes through appropriate use and adaptive re-use of heritage places.</p> <p>Encourage use of easily available local materials.</p>
<p>1.3 Waste Management</p>	
<p><i>How do we plan for current waste removal practices and technologies and provide flexibility for innovative future solutions?</i></p>	<p>There is brief reference to onsite effluent disposal in the Background Paper (pg. 49) in relation to management of coastal environments, and wastewater management must inevitably be relevant to the Background Paper’s reference to ‘hierarchy of acceptable effects’ for site run off (pg. 35 & 36). Further, the Discussion Paper (pg. 20) refers to the ‘effective management of effluent disposal...’ however; there is no explicit treatment of the issue elsewhere in either of the papers.</p> <p>With respect to wastewater management, our current approach to planning is often not always strategic enough and there are no mechanisms to ensure a sufficient level of strategy. For example, in a number of regional locations in our state, developments involving medium density allotments (arising commonly by infill) are experiencing a high rate of onsite wastewater system failure owing to the inadequate provision of public infrastructure in combination with unfavourable site, soil, groundwater etc. conditions for sustainable onsite wastewater disposal. The effect is that biologically contaminated and very high nutrient-containing waters are released into the environment, creating public health and environmental risks and impacting negatively on liveability of the respective areas.</p> <p>Presently, defined thresholds / conditions that trigger mandatory referral to the EPA have the effect of encouraging development to a scale and in locations that deliberately intend to avoid an appropriate level of public health and environment protection scrutiny.</p>

Discussion Questions	Response / Suggested Policy Direction
	<p>The proposal to recognise highly sensitive referrals by way of 'overlays' is noted. The use of overlays exclusively to trigger higher level scrutiny may not be sufficiently flexible because in some instances the location in itself may not be a concern though the nature and scale of a development will be. In relation to scale, the number of allotments and density, for example, might mean quite different things depending on the whole context.</p> <p>Mechanisms need to be in place to ensure that developers undertaking developments in regional areas where there is no pre-existing infrastructure, invest in appropriate infrastructure to ensure sustainable protection of the environment, public health and liveability.</p> <p>Flexibility for innovative future solutions (with respect to all types of waste management) is provided for by our reasonably progressive Public Health, Environment Protection and Local Nuisance and Litter Control legislation.</p> <p>Encourage recycling and reuse of building waste.</p> <p>Require that development at any scale pay explicit regard through the development application process to the State's Public Health, Environment Protection and Nuisance Control legislation.</p> <p>So far as it is reasonably possible, wastewater should always be managed by infrastructure that removes wastewater to an offsite location for treatment.</p> <p>Regardless of the location of the proposed development, whenever public wastewater infrastructure is not available at a location, require minimum residential allotment size (e.g. 1200 m² as some local Development Plans already require) <u>AND</u> require demonstration by an appropriately qualified person that all conditions associated with the proposed allotment(s) (including holistic context) are compatible with sustainable onsite wastewater management that will create neither a nuisance nor a risk to public health and/or the environment in the foreseeable future. This is all consistent with existing provisions in the South Australian Public Health and Environment Protection legislation that intend to avoid risks to health and the environment by a precautionary approach.</p>

Discussion Questions	Response / Suggested Policy Direction
THEME 2: Water Security and Quality	
2.1 Mount Lofty Ranges Watershed Protection Area	
	<p>Comments above apply.</p> <p>Development Policy staff from the City of Onkaparinga were involved in the state government’s working group to develop the Mount Lofty Ranges Watershed Protection Overlay.</p> <p>The Code should apply the Overlay to all affected Council areas in addition to strong policy to encourage development to improve the water quality whilst maintaining a comprehensive non-complying list.</p>
2.2 Other Water Protection Areas	
<p><i>Should dams be assessed as development in the planning system?</i></p>	<p>Yes, for example, onsite wastewater management systems must be appropriately separated from dams according to the State’s Onsite Wastewater Systems Code.</p> <p>Similarly, we also suggest that the installation of bores (i.e. for accessing ground waters) should be assessed as a development in the planning system because the current mechanism for approval of bores may not always allow for adequate consideration of surrounding (existing or potential) development – including onsite wastewater management systems.</p> <p>Better integrate relevant DEW management of surface and subsurface water systems with Planning systems.</p> <p>A mechanism to integrate any required DEW approvals with planning consent should be established. This may be achieved by ensuring triggers for referral for ‘direction’ is comprehensive enough to capture such development. A ‘fast’ planning consent process that avoids such additional approvals is not necessarily efficient and inevitably will slow down the overall ‘approval’ process required before relevant works can commence.</p>
2.3 River Murray	
<p><i>Should we instead use the 1956 flood data as</i></p>	<p>Advice for flood risk data should consider past flood levels but also advice from the Bureau of</p>

Discussion Questions	Response / Suggested Policy Direction
<i>an indicator of risk in the future?</i>	Meteorology and CRCs such as Goyder and NRM Boards that will in time, take into account the most recent IPCC Assessment report released in October 2018.
<i>Should sheds be made an exemption from the requirement to refer notice under the River Murray Act 2003?</i>	Not applicable to the City of Onkaparinga.
<i>General comment.</i>	Whenever flooding is possible and whenever there is likelihood that wastewater is disposed onsite, a high level of scrutiny is warranted – regardless of the nature of the development – because all development can impact and be impacted by flood risk.
THEME 3: Biodiversity	
<i>Can the Code protect biodiversity in areas not identified as native vegetation and in modified landscapes with biodiversity values?</i>	<p>Yes, given that the majority of our landscapes are modified to some degree, the Code should contain policies that require the incorporation of biodiversity features into new developments, and facilitate protection of these features. This should include Regulated / Significant trees, good quality non-Regulated scattered trees (both native and planted), and areas of native vegetation. The code should also build in the requirement to adhere to Tree Protection Zones, referring to the relevant Australian Standard (AS 4970-2009 <i>Protection of trees on development sites</i>).</p> <p>The paper discusses the role that planning plays in in 'protecting and enhancing our natural resources and environment, including:</p> <ul style="list-style-type: none"> • protecting areas of environmental significance • protecting and enhancing areas that attract tourism and are value to the community • maximising the use of our natural resources • optimising the use and maximising the benefit of our natural resources.' <p>The Code can encourage the protection and improvement of areas of biodiversity values by describing them as having 'ecosystem service' values.</p> <p>In Queensland law, the term ecosystem services refers to the recognition of the additional</p>

Discussion Questions	Response / Suggested Policy Direction
	<p>benefits (natural, economic and social) provided by some natural resources in terms of ecosystem services or landscape services.</p> <p>This term is useful for describing how natural resources can be quantified, valued or described as value adding to a property, development or activity.</p> <p>For example, protecting and revegetating a degraded waterway encourages improved amenity (land value), increased biodiversity and habitat (recreation opportunities) and other tangible benefits.</p>
<p><i>Can planning policy assess the cumulative impact of development on biodiversity?</i></p>	<p>Yes, planning policy should require that the cumulative impacts on biodiversity are assessed and recorded, and appropriately offset, for each development. This may combine a number of different types of assessment, depending on the kinds of environments present in and around a development site; and may include numbers of trees and areas of native vegetation impacted, quality and value of trees (may involve utilising a tree valuation method e.g. the City of Melbourne tree valuation method, or eco service analysis (e.g. i-Tree). Canopy mapping and heat mapping could be utilised in urban areas, and repeated at regular intervals to monitor changes and impacts of development and policy change.</p> <p>Canopy mapping and heat mapping could perhaps be an overlay to influence allowable amounts of dwelling density and therefore hard surfaces for new developments, limits of trees allowed to be removed as part of development (along with consideration of other tree quality criteria), requirements for replanting within development areas, and percentages of open space required as part of new developments (e.g. more open space required in areas with less canopy and higher heat reflectivity).</p> <p>Policy should include the requirement for new developments to incorporate and contribute to landscape scale ecological linkages (e.g. attempt to link existing environmental features), with complementary open space treatments. For example if a development is in an area comprising patches of threatened Grey Box Woodland (including on roadsides), the open space areas within the developments could include plantings of Grey Box and associated understorey</p>

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	species.
<p><i>Can planning policy play a role in protecting and encouraging backyard biodiversity?</i></p>	<p>With infill this is difficult due to land area, however the use of native species in landscaping should be encouraged. Planning policy can encourage protection and enhancement of backyard biodiversity via indirect means such as ratio or percentage requirements for 'soft landscaping area', deep root planting zones and rear building setbacks to preserve back of allotment vegetation.</p> <p>However the implications of legislation such as the <i>Native Vegetation Act 1991</i> need to be considered, with regards to the allowed clearance of native veg within 20 metres of a dwelling.</p> <p>Planning policy can be strengthened as above and made more user-friendly to provide more clarity around the provisions for minimum areas for deep soil, trees and landscaping elements. Additionally, tables providing species suggestions for particular areas (targeted specifically to various ecosystems such as coastal, hills face etc.) to encourage greater biodiversity and provide wildlife habitat be provided for guidance.</p>
<p><i>Do we need a policy to protect and encourage development of roadside vegetation?</i></p>	<p>Yes, particularly with regards to impacts from development. Impact on roadside vegetation is often forgotten with new developments. This can result from establishment of dwellings and other structures too close to roadside vegetation, resulting in pressure for clearance due to concerns such as impacts on root systems from construction and services, safety (risk of tree failure and fire risk), shading of solar panels, leaf litter, impacts on swimming pools and clearance for establishment of driveway entrances and associated safe sight distances. Policy should require larger sized residential allotments in the vicinity of roadside vegetation and good quality scattered trees, to ensure adequate space for dwellings and associated infrastructure without impacting vegetation. Additionally, application of Australian Standard AS 4970-2009 <i>Protection of trees on development sites</i> should be required (and demonstrated) when siting structures and services.</p> <p>Where an existing road into a new development comprises important vegetation and / or trees, and upgrading the road would result in significant impacts, alternative options for access roads</p>

Discussion Questions	Response / Suggested Policy Direction
	<p>should be considered and utilised where possible.</p> <p>Also for new developments there should be policy to ensure sufficient verge widths to facilitate establishment of roadside vegetation within new developments, as well as footpaths, services etc.</p> <p>To ensure that verge and roadside vegetation (where appropriate) is adequately provided and maintained, all new greenfield development (and development providing more than 'x' allotments) should be required to provide a landscape master plan. Resourcing would come from priority infrastructure plans (scheme) funded by the developer.</p> <p>This would benefit property values as well as contribute to greening and habitat provision in line with canopy cover targets.</p>
THEME 4: Coastal Environments	
<p><i>What level of development (including accommodation) is appropriate for a Coastal Conservation Zone?</i></p>	<p>Generally low level development only is appropriate for the Coastal Conservation Zone, which is extremely fragile, open to both natural and anthropogenic impacts and is particularly susceptible to inappropriate development. Dwellings should not be allowed within this zone, as this results in impacts that are at variance with the intention of a conservation zone. Only those developments that are small, unobtrusive, of very minimal impacts, fulfil conservation objectives and necessary for tourism or recreation purposes should be allowed (e.g. boardwalk to consolidate accesses, seating, signage, viewing platforms, etc.). New developments should consider whether it is absolutely necessary to be located within this zone, if opportunity exists to locate outside of the zone where conservation values will not be threatened. This zone should also consider the impacts of future sea-level rise and either avoid or integrate planned retreat.</p> <p>When public wastewater infrastructure is not available, onsite wastewater management is inappropriate for any coastal development and certainly not within 100 m of the mean high water spring along coastal foreshores (per the State's Onsite Wastewater Systems Code called up by the <i>South Australian Public Health Act 2011</i> by way of the (Wastewater) Regulations).</p>

Discussion Questions	Response / Suggested Policy Direction
<p><i>Does current planning policy adequately address the risk of new development from climate change impacts (coastal retreat, sea level rise and storm surges, etc.) for at-risk coastal settlements?</i></p>	<p>No, current policy does not adequately address the risk of new development from climate change impacts. Low-lying coastal zones may end up being sacrificial areas due to sea-level rise, so opportunities for returning areas to coastal zoning should be investigated (e.g. disused industrial areas).</p> <p>New developments should not be allowed in known low-lying coastal locations open to impacts from storm surges, sea-level rise, etc. and cliff top areas susceptible to rock fall and landslip.</p> <p>The use of new technologies that predict future sea-level rise within the Coastal Conservation Zone should be utilised for any proposed new developments, and the tidal gauge at Port Stanvac which was removed with the jetty should be reinstated.</p> <p>The City of Onkaparinga & DEWNR are currently undertaking a study which is analysing the impacts of extreme events such as storm surges on specific areas of our coast. The storm in May 2016 broke the previous record for tidal height that was previously set in 2007. There are implications for erosion and marine flooding in these events which will need to be taken into account in the Coastal Conservation Zone and other flood risk areas, including protecting natural assets such as dunes which mitigate these threats to property.</p> <p>In relation to onsite wastewater management, currently planning policy is considered inadequate. The Onsite Wastewater Systems Code called up by the <i>SA Public Health Act</i> refers to current but not projected offsets from coastal waters.</p>
<p>THEME 5: Natural Hazards</p>	
<p><i>How can we better integrate council-owned flood data with the new Code and achieve consistency?</i></p>	<p>Councils are best placed to maintain up to date flood (and other natural hazard) data for their region. Whilst a centralised, state based, consolidated repository of flood data could be advantageous in theory, the logistical difficulties of establishing and maintaining the information and ensuring that it remains current may not be practical.</p> <p>The new Code will therefore need to point to sources of data, rather than attempting to consolidate it all in one location.</p> <p>Mechanisms for ensuring consistency in the standards for flood modelling already exist through</p>

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	<p>the grant funding processes of the Coast Protection Board and Stormwater Management Authority. Provision of greater resources to these authorities such that they can appropriately fund flood modelling would ensure that Councils do not have to go it alone with the risk of non-standardised data collection methods being used.</p>
<p><i>What climate change projections should be used? What time-frame and emission scenarios?</i></p>	<p>The latest IPCC report should form the basis of climate change projections. We have used a mid- range emissions projection in previous council strategic planning through Resilient South, but emissions projections are rising at higher levels than previously predicted. Sea level rise projections will also need to be updated in light of this report.</p> <p>Localised studies such as our coastal study and several others being done around the SA coast will provide valuable information on the impact of sea level rise based on the marine and land topography which is more useful than the 'bathtub' modelling done on a larger scale.</p>
<p><i>Should flood risk categories be based on physical (depth and velocity) and function and isolation risk factors?</i></p>	<p>Yes, but there is also the need to recognise that this depth and velocity flood information will not always be available due to the high expense of full 2D flood modelling studies. In some situations, for example low-lying coastal areas, simple "bathtub" inundation modelling (i.e. depth only) may be all that is available. It is still appropriate to consider this as "best available information" during development assessment. The code should therefore enable the use of this type of low level information as well as the information from more complex flood modelling.</p>
<p><i>General comment.</i></p>	<p>Any work to improve availability and accessibility of flood data will improve the capacity of regulatory authorities to more accurately assess sites for suitability for onsite disposal of wastewater.</p>
<p><i>Bushfire Risk</i></p>	<p>We note under THEME 5: Natural Hazards there is discussion and questions on flood and climate change however no reference is made to bushfire risk and subsequent management of vegetation to mitigate risk.</p> <p>We consider this may be an oversight of the discussion paper noting that the (draft) State Planning Policies which set out the policy in our new planning system contain the overarching policy direction for bushfire risk management (see SPP 5 Climate Change and SPP 15 Natural</p>

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	<p>Hazards).</p> <p>As the SPPs are given effect through the creation of planning instruments, such as the Planning and Design Code, we strongly encourage the Commission to revisit Theme 5: Natural Hazards and include policy direction for bushfire risk to ensure these principles are embedded in all future decision making.</p>
THEME 6: Environment Protection and Public Health	
6.1 Site Contamination	
<i>General comment.</i>	Where known, mapping via an Overlay otherwise, General Section policy is adequate.
6.2 Interface including noise and air emissions	
<i>Should cumulative noise impact assessments be undertaken as part of the development assessment process?</i>	<p>Yes</p> <p>This issue will become more prevalent in mixed uses environments or at the interface of two differing zones</p> <p>The Code needs to carefully consider envisaged land uses in mixed use areas and how they are managed through the policy in terms of impacts to and from different activities</p>
<i>How can policy effectively address the interface between land uses in zones promoting mixed land uses? For example, a coffee roaster adjacent to a residential development in an urban corridor.</i>	To remain flexible, there should also be provision for assessing conditions other than cumulative noise (such as odours, vibrations, other noise conditions and possibly other unforeseen conditions) that have the potential to be perceived as a nuisance and/or could cause a risk to public health and/or the environment (see the Local Nuisance and Litter Control Act).
ADDITIONAL DISCUSSION POINTS	
State Public Health Plan	The <i>State Public Health Plan</i> is not included in the list of 'Relevant government Strategic Directions' on pg. 8 of the Discussion Paper though it is highly relevant in many respects (e.g. directions: 'build stronger communities and healthier environments'; 'protect again public and

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	<p>environmental health risks and respond to climate change’).</p> <p>Any policy direction must always pay due regard to the State Public Health Plan and relevant Regional Public Health Plan(s).</p>
<p>What capacity will there be for flexibility in the planning approval process in the event that new knowledge and understanding arises, or unforeseen circumstances associated with a development arises?</p> <p>Could a development be halted in the event that it is discovered that an approval has been issued without due regard to the public health and environmental impacts.</p> <p>Is there likely to be a mechanism (other than through the ERD Court) to reverse a planning decision if an unforeseen and undesirable public health, nuisance or environmental condition arises?</p>	<p>Don’t have ‘deemed-to-satisfy’ assessed development in areas that are not serviced by SA Water sewer or water.</p>
<p>On-site Wastewater. Will current loopholes be closed?</p>	<p>Wherever SA Water infrastructure is not available and wastewater management must be according the State’s On-site Wastewater Systems Code, the State’s Planning and Design Code needs to provide for strict control of development on existing allotments as well as development that involves subdivision. This is because land must always remain available to enable compliance with the On-site Wastewater Systems Code which provides for the protection of public health and the environment. Furthermore – depending on site and soil and other conditions – sometimes it might simply be impossible to safely service a site with an onsite wastewater system.</p> <p>Presently, there are circumstances that allow for developments in non-sewered areas to</p>

Discussion Questions	Response / Suggested Policy Direction
	<p>proceed without appropriate scrutiny and the consequences can be serious. For example, recently a development (involving subdivision and new dwelling) in a non-sewered area was approved by a private certifier without adequate consideration of on-site wastewater management using a loophole.</p> <p>The site had an existing dwelling, and the private certifier issued consent for a new dwelling adjacent to the existing under Schedule 4, 2B of the <i>Development Regulations 2008</i>. As this was a complying form of development approved by a relevant authority (i.e. the private certifier), the council was obliged to issue Development Approval without an opportunity to scrutinise provisions for management of wastewater. Presumably the private certifier judged that the relevant clause was satisfied with respect to onsite wastewater management (Schedule 4, 2B, (6), (q)) but no separate wastewater works application was lodged with council pursuant to the <i>South Australian Public Health Act 2011</i> to either propose another wastewater system for the new dwelling, or alter the existing system to accommodate both dwellings.</p> <p>Within days, the applicant then lodged a land division application to separate the existing dwelling onto one allotment, and their recently approved dwelling onto a separate allotment. Again the council had no choice but to give consent because this application was a complying form of development under Schedule 4, 2C of the <i>Development Regulations 2008</i>. The result was an inadequately controlled approval of subdivision plus new dwelling. The council was obliged to retrospectively require relevant application to undertake wastewater works pursuant to the <i>South Australian Public Health Act 2011</i>, and while in this circumstance the resolution was satisfactory, it highlighted a loophole that has the potential to end very unsatisfactorily and in a way that that threatens public health and the environment.</p>