

## **DIT:Planning Reform Submissions**

---

**From:** DEW:Stormwater Authority  
**Sent:** Wednesday, 16 December 2020 2:57 PM  
**To:** DIT:Planning Reform Submissions  
**Cc:** Stephen Hains; Walter Iasiello; Helen Donovan; Trevor Daniell; Simon Sherriff; Allen, Laura (DEW)  
**Subject:** SMA Final Consultation Submission--Planning and Design Code Phase 3 [DLM=For-Official-Use-Only]  
**Attachments:** 20201216\_OUT\_SPC\_Phase3CodeConsultation.pdf

Dear Mr Lennon,

Please find attached a final consultation submission in relation to the Planning and Design Code Phase 3 from the Stormwater Management Authority.

Regards,

**David S Trebilcock**  
General Manager

Stormwater Management Authority  
c/-Department for Environment and Water  
P [REDACTED]  
Level 5, 81-95 Waymouth Street, ADELAIDE, SA, 5000  
GPO Box 1047, ADELAIDE, SA, 5001  
[www.sma.sa.gov.au](http://www.sma.sa.gov.au) | [environment.sa.gov.au](http://environment.sa.gov.au) | [naturalresources.sa.gov.au](http://naturalresources.sa.gov.au)



DEW-D0013926297

Level 5, 81-95 Waymouth Street  
ADELAIDE SA 5000

Mr Michael Lennon  
Chair  
State Planning Commission

c/-GPO Box 1047  
ADELAIDE SA 5001

Telephone: (08) 8124 4787  
Email: sma@sa.gov.au

[www.sma.sa.gov.au](http://www.sma.sa.gov.au)

via email: [DIT.PlanningReformSubmissions@sa.gov.au](mailto:DIT.PlanningReformSubmissions@sa.gov.au)

Dear Mr Lennon

### Final Consultation Submission—Planning and Design Code Phase 3

The Stormwater Management Authority (SMA) is established as a statutory corporation pursuant to Schedule 1A of the *Local Government Act 1999*. The SMA acts as a state-wide planning and prioritisation body for stormwater management; and promotes the management of stormwater in a way that delivers multiple benefits including flood protection, public amenity, healthy waterways and healthy coasts.

The SMA recognises that the South Australian Planning and Design Code will play a pivotal role in supporting and regulating planning and development in South Australia, and again welcomes the opportunity to review and provide further comment on the draft Phase 3 Planning and Design Code (the draft Code). Enclosed are comments relating to:

- Water sensitive urban design
- Flooding

Should you require further information on this submission, please contact the General Manager, Mr David Trebilcock, on telephone [REDACTED] or email [REDACTED].

Yours sincerely

A handwritten signature in blue ink, appearing to read 'D Trebilcock'.

David Trebilcock  
**GENERAL MANAGER**

Date: 16 December 2020

Enc.

## SMA Submission – Planning and Design Code Phase 3, December 2020

### A. Water Sensitive Urban Design

The SMA notes the recent revisions to the deemed-to-satisfy (DTS) provisions of the proposed Stormwater Management Overlay, which include:

- Increasing the percentage of roof area connected to tanks to 80%
- Introduction of a detention requirement for sites of 200 m<sup>2</sup> or more
- A requirement to connect the rainwater tank to one fixture only (for sites less than 200 m<sup>2</sup>) and to two or more fixtures (for sites of 200 m<sup>2</sup> or more).

The policy changes aimed at increasing runoff capture and providing detention (for lot sizes of 200 m<sup>2</sup> and greater) are commended, as these will not only offer a water source for residents but were found by BDO Econsearch in its report *Costs and Benefits of Stormwater Management Options for Minor Infill Development in the Planning and Design Code* to deliver stormwater management cost savings by ameliorating the effects of infill-related runoff discharges to the minor drainage network.

It is also likely that these changes will lead to most of these types of developments better aligning with the water sensitive urban design performance principles and performance targets (particularly peak flow reduction for minor events) in the State Government's policy: *Water sensitive urban design: Creating more liveable and water sensitive cities in South Australia*.

The SMA is concerned, however, with the proposed DTS provision that relates to allotments of less than 200 m<sup>2</sup>. For these allotments, the current proposal would require 2000 litres of retention connected to one fixture, with no detention. Average daily use from a rainwater tank that is connected to, for example, only one toilet is fairly minimal, which will often lead to the tank being full or nearly full at the commencement of most 'minor' rainfall events (e.g. rainfall events that occur on average about once in five years or more often). Modelling undertaken for Water Sensitive SA indicates that this will not adequately reduce peak runoff in minor storm events, and the long-term consequence of this will be a continual reduction in the performance of minor drainage networks impacted by the increased impervious area arising from these types of developments.

Furthermore, limiting the connection requirement for allotments of less than 200 m<sup>2</sup> to a single connection severely restricts the potential to use stormwater within the home in place of potable mains water, which the BDO Econsearch report demonstrated *will provide long-term economic benefits for the home-owner*.

The SMA strongly recommends that the State Planning Commission restore the DTS provision for rainwater tanks to be connected to all toilets and one other fixture for allotments of less than 200 m<sup>2</sup>, as this would then provide for a single and straightforward requirement for all sites regardless of allotment size.

Alternatively, and if it is the State Planning Commission's desire to provide for flexible compliance pathways, a detention option for allotments of less than 200 m<sup>2</sup> could be introduced alongside the reduced connection requirements. For such sites, a detention requirement of 1000 litres could be introduced without increasing the overall volume (and therefore cost) of the tank. This would give homeowners and builders on allotments of less

## SMA Submission – Planning and Design Code Phase 3, December 2020

than 200 m<sup>2</sup> a choice between plumbing a greater number of fixtures, or provided detention storage.

In this way, the DTS provision (DTS/DPF 1.1) could be expressed in the following manner:

*Residential development comprising detached, semi-detached or row dwellings, or less than 5 group dwellings or dwellings within a residential flat building:*

- (a) *includes rainwater tank storage:*
  - (i) *connected to at least 80% of the roof area;*
  - (ii) *with a minimum total capacity in accordance with Table 1;*
  - (iii) *connected to fixtures in accordance with Table 1; and*
  - (iv) *where detention is required, includes a 20-25 mm diameter slow release orifice at the bottom of the detention component of the tank.*
- (b) *incorporates dwelling roof area comprising at least 80% of the site's impervious area.*

**Table 1: Rainwater Tank**

<b>Site size (m<sup>2</sup>)</b>	<b>Minimum retention volume (Litres)</b>	<b>Minimum detention volume (Litres)</b>	<b>Connection requirements</b>
<200	1000	1000	One toilet or the laundry cold water outlets or the hot water service
	2000	N/A	All toilets and either the laundry cold water outlets or the hot water service
200-400	2000	Site pervious area <30%: 1000 Site pervious area ≥30%: N/A	All toilets and either the laundry cold water outlets or the hot water service
>401	4000	Site pervious area <35%: 1000 Site pervious area ≥35%: N/A	

## SMA Submission – Planning and Design Code Phase 3, December 2020

### **B. Flooding**

Different levels of flood risk have been acknowledged in the draft Code by splitting the Hazards (Flooding) Overlay into two overlays:

1. The Hazards (Flooding) Overlay, for areas which experience high or extreme flood risk (>300 mm water depth), and;
2. The Hazards (Flooding – General) Overlay, for areas where only low risk inundation is expected.

The SMA acknowledges the recent inclusion into these overlays of additional flood mapping held by local government as a positive step, but the move from one flood hazard overlay and general provisions for the remainder of the state to an approach with two overlays and no general provisions has some shortcomings, which include:

- The Hazards (Flooding – General) overlay includes areas identified from existing flood studies as ‘lower risk’ *and* all areas of the state with ‘unknown’ flood risk. It is not possible to distinguish between the two.
- The naming of the two overlays is potentially confusing and does not communicate the fact that the separation between the two is based on the risk in a 1% annual exceedance probability (AEP) flood scenario only.
- The Hazards (Flooding) Overlay invokes specific policies for areas with more frequent inundation where no buildings are allowed. While this policy may be practicable in areas with defined watercourses, the policy may not work in the flatter floodplain areas of the northern and western suburbs of Adelaide.
- The approach creates a perverse situation where councils with no flood study information are included in the Hazards (Flooding – General) overlay with easier assessment pathways, while councils who have invested in detailed flood studies find significant parts of their council area defined as higher risk.
- No attempt has been made to identify flood free areas.

The SMA notes that the Attorney-General’s Department (Planning and Land Use Services) received \$3 million over two years in the recent State Budget to improve flood hazard mapping for inclusion in the planning portal and has invited the SMA to be represented on the steering committee for this project as an important stakeholder, alongside the South Australian State Emergency Service and Department for Environment and Water. The funding creates an opportunity to improve flood mapping and policies for generation 2 of the Code, however the SMA notes that amendments to the current draft Code may be required sooner to address some of the issues identified above.