Rainwater Harvesting AUSTRALIA

A DIVISION OF IRRIGATION AUSTRALIA

31 May 2021

The Hon David Spiers
Minister for Environment and Water
The Hon Vickie Chapman
Minister for Planning

Dear Minister Spiers and Minister Chapman,

Rainwater Harvesting and Best Practice Stormwater Management in the New Planning Code

A land use planning code expresses government policy for the form and function of our cities. *The primary object of the (Planning Act 2016) is to support and enhance the State's liveability and prosperity in ways that are ecologically sustainable….*

The new SA Planning Code has serious shortfalls in water management which will not contribute to a more liveable, prosperous and ecologically sustainable South Australia.

Since 2006 Rainwater tanks have been compulsory for new development through the Building Code providing stormwater management, waterway health and water efficiency benefits and reducing the demand on the Murray River and the desalination plant. The mandatory requirement has now been abolished through the new SA Planning Code without due justification or analysis.

Adelaide has a long history of rainwater tanks reflecting a population that needed to be self-sufficient and resilient in a dry country and who also understood the efficiencies of collecting roof water rather than using highly treated utility water for flushing toilets and watering trees. Indications are the level of public support for mandatory rainwater harvesting on new development in Adelaide is remarkable. Planning SA conducted a cost benefit analysis on retaining rainwater tanks which found the benefits exceeded the costs and recommended MORE use be made of rainwater tanks, not less.

There have been major changes in Australia in the last decade in the way we understand and manage stormwater, understanding the impact of urban development on our local waterways and understanding how important healthy waterways are to our quality of life and natural environment. We have provided references for ARR 2019, ISMAC, Walsh and Coombes. Planning SA policy documents identified *High levels of stormwater run-off associated with infill development can result in increased flood risk, public infrastructure costs, loss of water to green our suburbs and pollution in waterways.* Despite this, Planning SA have issued many stormwater performance outcomes without measurable standards.

11/58 Metroplex Avenue, Murarrie 4172
PO Box 13, Cannon Hill, Brisbane 4170
M: 0407 886 358
E: rainwaterharvesting@irrigation.org.au
w: www.rainwaterharvesting.org.au
ACN 002 567 633
ABN 41 002 567 633

The scale at which Planning SA and the Department of Water and Environment have appeared to remove any quantitative obligations from permit applicants is illustrated in the attached comparison of the original 2019 draft Code provisions for land division with the final 2021 version. We would like to understand the justification for the complete removal of several pages of quantitative requirements, the removal of the requirement for a Stormwater Management Plan, the removal of requirements for 5-19 lots, the removal of requirements for non-residential lots and the assessment of the costs and benefits for the community from those changes.

In infill areas rainwater harvesting is preferred including science-based performance criteria but there is a lack of guidance to guide discretion and ensure best practice. A standard 12-month permit condition appears to invite builders to complete the sale without providing a rainwater tank or plumbing connections.

Could the Minister for Environment and Water please clarify how best practice management and government policy has informed the Planning Code in the following areas:

- Does the new Code meet best practice stormwater management to address the impact of new development and what quantifiable protections are there for managing peak flow and flood water volumes?

- Does the new Code protect local waterways (in both developed and undeveloped areas) from ecological destruction and what quantifiable protections are there for natural waterway stormwater quality, stormwater volumes and directly connected impervious areas?

- How does the new Code ensure and quantify new development is water efficient?

- When an applicant chooses to propose a different solution to a deemed to satisfy rainwater tank what criteria and what processes are in the Planning Code to protect the interests of the community?

Could the Minister for Planning please clarify:

- Why does the standard planning permit condition for rainwater tanks include a loophole that allows builders to shift responsibility onto the homeowner for installing rainwater tanks and connections to toilets and laundry at considerable additional cost and a high risk of rainwater tanks not being installed? The standard planning permit condition does not require a rainwater tank required by the planning permit to be installed until 12 months after the building has been occupied.

Yours sincerely

John Bithell
Rainwater Harvesting Industry representatives SA.

Mike Thompson
Rainwater Harvesting Australia

Stormwater Management Draft Planning Code October 2019 – General Development Policies - Land Division in Urban Areas

MINOR LAND DIVISION (UNDER 20 ALLOTMENTS)

PO 5.2
Land division creating 5-19 non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.

DTS 5.2
Land division creating 5-19 non-residential allotments is accompanied by an approved Stormwater Management Plan and manages up to and including the 100 –year ARI flood event (1% AEP) to avoid flooding of buildings and:
(a) maintain
i. a pre-development peak flow rate from the site based upon a 0.35 runoff coefficient for the 5-year ARI (18.1% AEP) 30 minute storm; and
ii. the stormwater runoff time to peak to match that of the pre-development; or
(b) capture and retain the difference in pre-development runoff volume (based upon a 0.35 runoff coefficient) vs post development runoff volume from the site for a 5-year ARI (18.1% AEP) 30 minute storm; and
(c) manage site generated stormwater runoff up to and including the 100 –year ARI flood event (1% AEP) to avoid flooding of buildings.

Water Sensitive Design

PO 7.1
Land division creating 5-19 allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.

DTS 7.1
Land division creating 5-19 allotments is accompanied by an approved Stormwater Management Plan and achieves the following stormwater runoff outcomes:
(a) 80 per cent reduction in average annual total suspended solids;
(b) 60 per cent reduction in average annual total phosphorus;
(c) 45 per cent reduction in average annual total nitrogen.

PO 7.2
Land division creating 5-19 non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.

DTS / DPF 7.2
Land division creating 5-19 non-residential allotments includes a storm water management system designed to:
(a) maintain a pre-development peak flow rate from the site based upon a 0.35 runoff coefficient for the 20-year ARI (5% AEP) 30 minute storm, unless a lower performance measure is specified in an approved catchment based Stormwater Management Plan;

MAJOR LAND DIVISION (20+ ALLOTMENTS)

Water Sensitive Design

PO 9.1

Land division creating 20 or more residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.

DTS/DPF 9.1

Land division creating 20 or more residential allotments is accompanied by an approved Stormwater Management Plan and manages up to and including the 100 –year ARI flood event (1% AEP) to avoid flooding of buildings and:

(a) maintains pre-development peak 5-year ARI (18.1% AEP) flow rate from the site, and maintains the time to peak to match that of the pre-development; or

(b) captures and retains the difference in pre-development volume vs post development volume from the site for a 5-year ARI (18.1% AEP) 30 minute storm; or where there is no adequate local drainage scheme to connect to, captures and retains post development volume from the site for a 5 year ARI (18.1% AEP) 30 minute storm.

PO 9.2

Land division creating 20 or more non- residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure the carrying capacities of downstream systems are not overloaded.

DTS/DPF 9.2

Land division creating 20 or more non- residential allotments is accompanied by an approved Stormwater Management Plan and manages up to and including the 100 –year ARI flood event (1% AEP) to avoid flooding of buildings and:

(a) maintains pre-development peak 20-year ARI (5% AEP) flow rate from the site and, maintains the time to peak to match that of the pre-development; or

(b) captures and retains the difference in pre-development volume vs post development volume from the site for a 20-year ARI (5% AEP) 30 minute storm; where there is no adequate local drainage scheme to connect to, captures and retains post development volume from the site for a 20 year ARI (5% AEP) 30 minute storm.

PO 9.3

Land division creating 20 or more allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies

DTS 9.3

Land division creating 20 or more allotments is accompanied by an approved Stormwater Management Plan and achieves the following stormwater runoff outcomes:

(a) 80 per cent reduction in average annual total suspended solids;

(b) 60 per cent reduction in average annual total phosphorus;

(c) 45 per cent reduction in average annual total nitrogen.

Stormwater Management Planning Code March 2021 – General Development Policies - Land Division v2021.5 (current)

Minor Land Division (Under 20 Allotments)

Water Sensitive Design	
PO 7.1 Land division creating a new road or common driveway includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 7.1 None are applicable.
PO 7.2 Land division designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 7.2 None are applicable.

Major Land Division (20+ Allotments)

Water Sensitive Design	
PO 10.1 Land division creating 20 or more residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.1 None are applicable.
PO 10.2 Land division creating 20 or more non-residential allotments includes a stormwater management system designed to mitigate peak flows and manage the rate and duration of stormwater discharges from the site to ensure that the development does not increase the peak flows in downstream systems.	DTS/DPF 10.2 None are applicable.
PO 10.3 Land division creating 20 or more allotments includes stormwater management systems that minimise the discharge of sediment, suspended solids, organic matter, nutrients, bacteria, litter and other contaminants to the stormwater system, watercourses or other water bodies.	DTS/DPF 10.3 None are applicable.

John Bithell, Chair of SA Rainwater Harvesting Industry Group

Peter Turner
Director Thin Tanks.

Steve Eckert
Director ECO Building Supplies

Tracey Gwatkins
Director Complete Tanks & Pumps.

Gerry Clark
GM, Team Poly Rainwater Tanks.

Paul Hoppo
Director Taurus Tanks.

Shane Hume
State Manager Bushmans Tanks.

Scott Dalling, Director Maxiplas Rainwater Tanks.