
RAINWATER HARVESTING NATIONAL POLICY
Rainwater Harvesting Association 2025
RHA
RAINWATER
HARVESTING ASSOCIATION

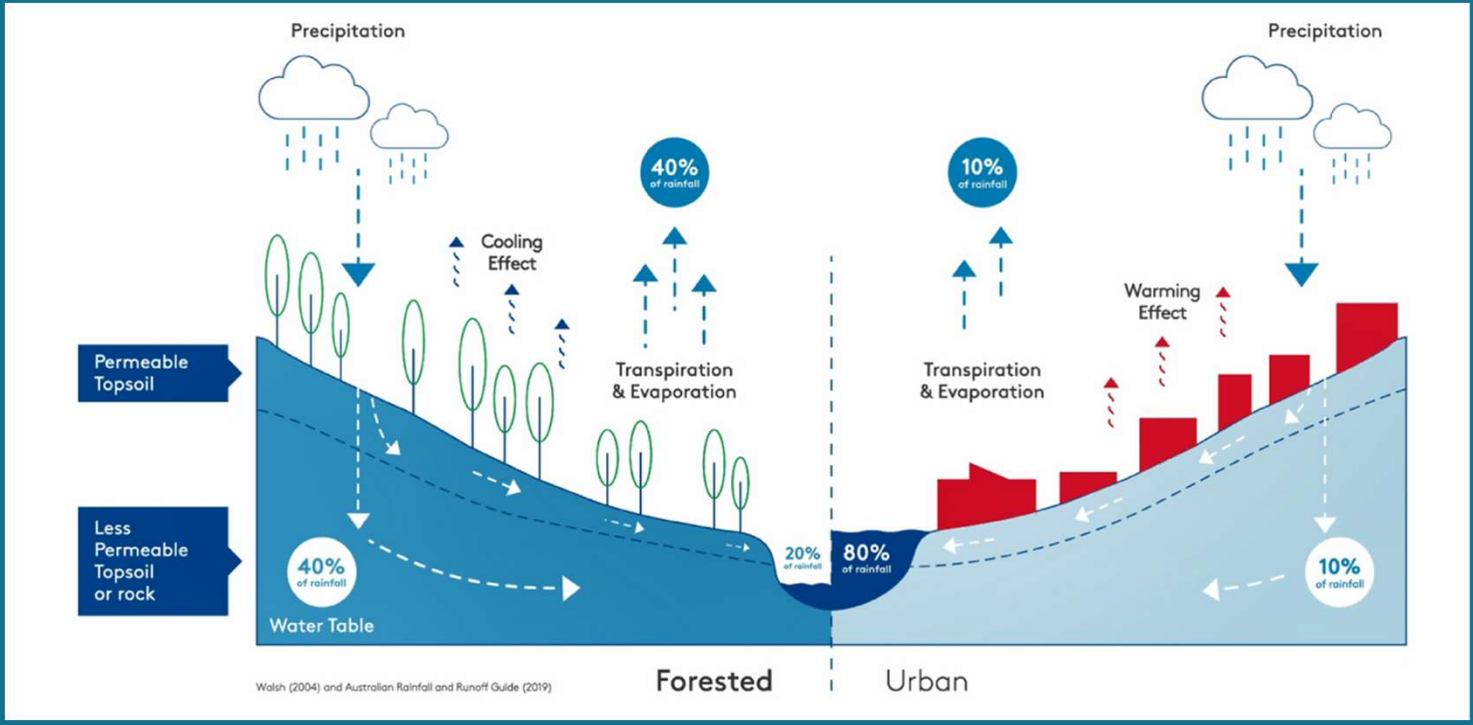
Why a Policy now?

There is strong supporting research and precedents for a rainwater harvesting policy in Australian urban areas.

Stormwater risks and water infrastructure costs have rapidly increased over the last decade.

The Rainwater Harvesting Association acknowledges Prof. PJ Coombes for the underlying strategic insight and technical analysis.

About 80% of urban rainfall is wasted as stormwater runoff, because it runs off quickly rather than being retained in the landscape. (ARR derived)



- Rainwater Harvesting is low-cost technology well accepted by the Australian community.

- Land use planning policies already implement rainwater harvesting as deemed to satisfy WSUD in South Australia

- (picture credit InSite integrated water management)

- Rain is our primary source of water and is critical for urban water, urban greening, urban cooling and replenishing ground water.

- Picture credit Michael Smit

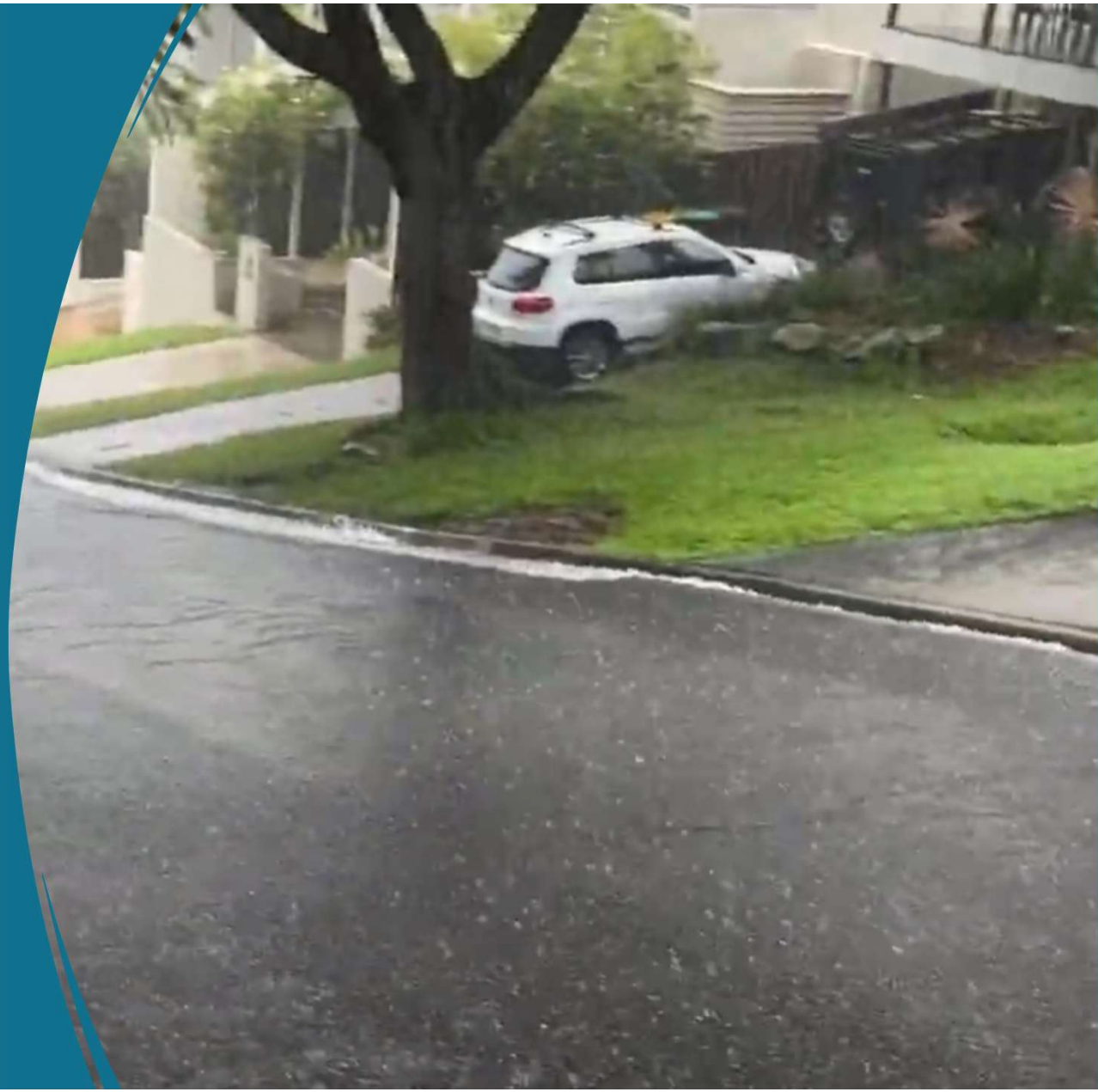
Rainwater harvesting simultaneously provides an additional source of water and reduces stormwater runoff, it’s the first step in managing urban water.

What is Rainwater Harvesting?

Rainwater harvesting simultaneously provides an additional source of water and reduces stormwater runoff, it’s the first step in managing urban water

- Picture credit Blue Mountain Inc

- This is an important distinction because stormwater, which is rainfall runoff from urban areas, carries pollutants and has much higher treatment costs than rainwater harvesting
  - Picture credit Michael Smit



Rainwater is the primary source of rural drinking water, and almost three million people use it for household use. The risks of using rainwater are low, and there is no evidence of widespread health impacts.[2,3]

- Picture credit Michael Smit

Research

Professor PJ Coombes's modelling reveals yields of 50-100kl/annum in Greater Sydney suburbs and shows that rainwater harvesting and water efficiency could meet 45%-60% of household water demand with subsequent stormwater benefits.[13]

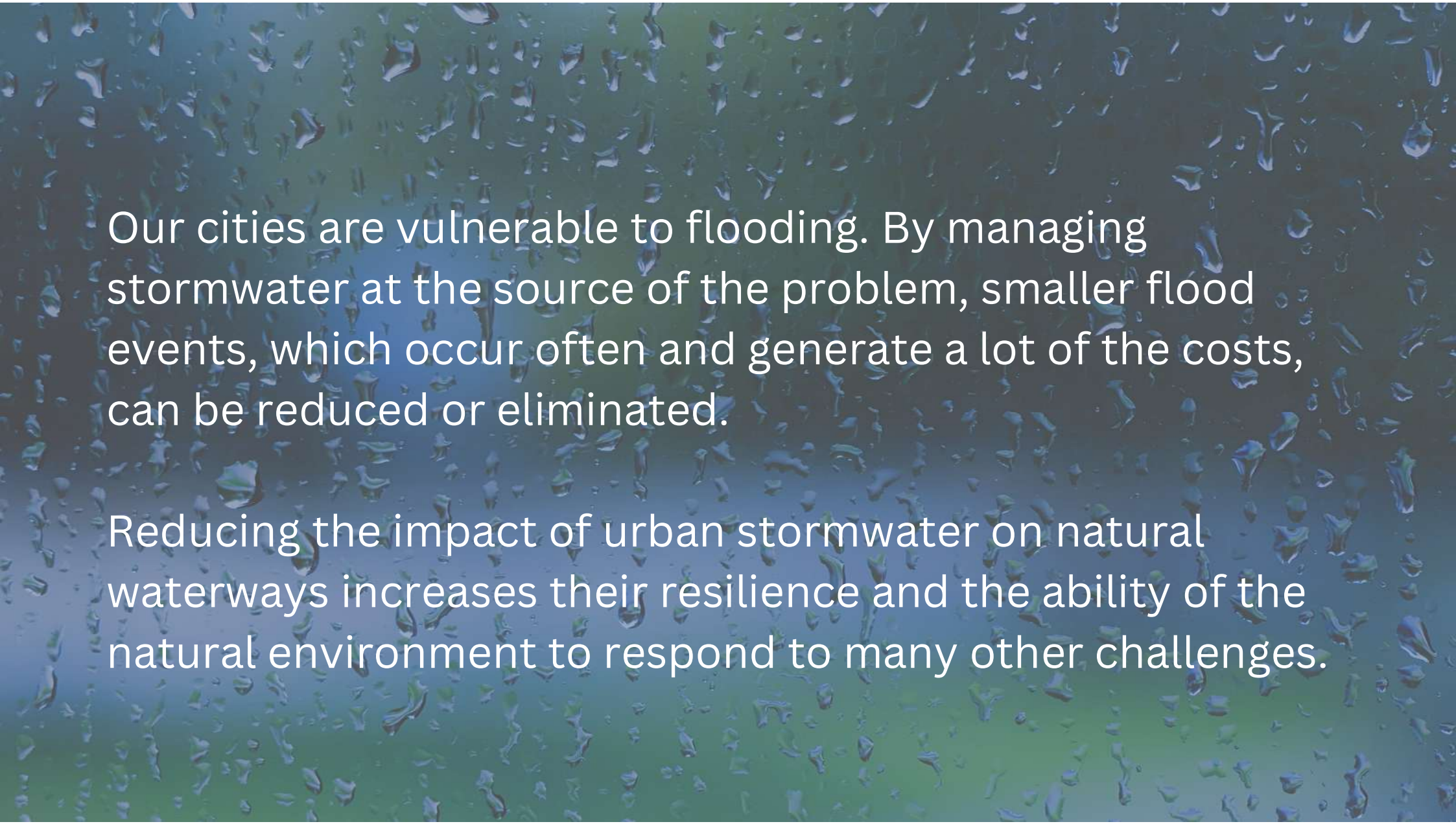
This reduces the demand for water and infrastructure across the urban system, providing long-term savings by deferring and reducing new infrastructure costs.

Resilience

Decentralised assets like rainwater tanks can be modified and adapted to suit local needs in earthquakes, bushfires, droughts or threats to the urban water supply.

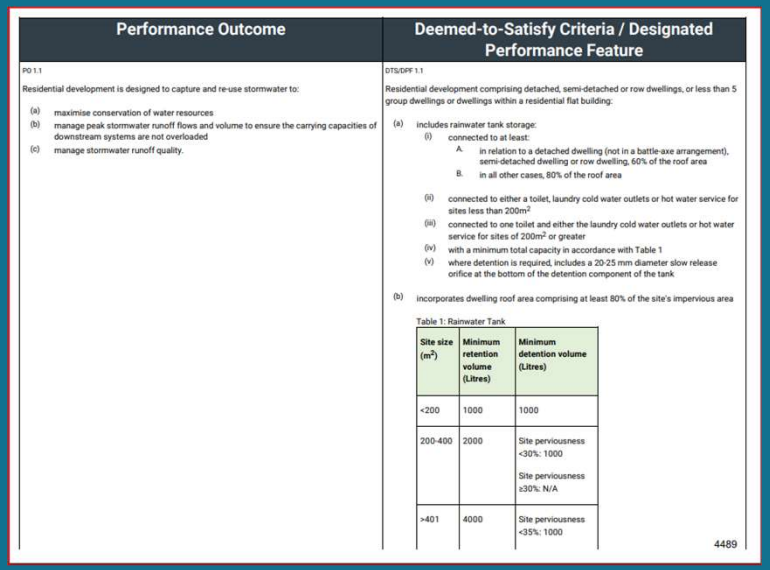
Rainwater harvesting is already plumbed into buildings and can be an essential local storage solution. When it rains, rainwater tanks become a self-renewing storage.

Flooding and Waterways


Our cities are vulnerable to flooding. By managing stormwater at the source of the problem, smaller flood events, which occur often and generate a lot of the costs, can be reduced or eliminated.
Reducing the impact of urban stormwater on natural waterways increases their resilience and the ability of the natural environment to respond to many other challenges.

Stormwater South Australia – Policy Response

- Policy identifies infill area runoff increasing to 250% of design capacity
- Cost Benefit analysis supported rainwater harvesting in infill areas
- Rainwater harvesting is a deemed to satisfy response for WSUD in the SA Planning Scheme



Performance Outcome	Deemed-to-Satisfy Criteria / Designated Performance Feature
PO 1.1 Residential development is designed to capture and re-use stormwater to: (a) maximise conservation of water resources (b) manage peak stormwater runoff flows and volume to ensure the carrying capacities of downstream systems are not overloaded (c) manage stormwater runoff quality.	DTS/DPF 1.1 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: A. in relation to a detached dwelling (not in a battle-axe arrangement), semi-detached dwelling or row dwelling, 60% of the roof area B. in all other cases, 80% of the roof area (ii) connected to either a toilet, laundry cold water outlets or hot water service for sites less than 200m² (iii) connected to one toilet and either the laundry cold water outlets or hot water service for sites of 200m² or greater (iv) with a minimum total capacity in accordance with Table 1 (v) 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

Site size (m²)	Minimum retention volume (Litres)	Minimum detention volume (Litres)
<200	1000	1000
200-400	2000	Site perviousness <30%: 1000 Site perviousness ≥30%: N/A
>401	4000	Site perviousness <35%: 1000

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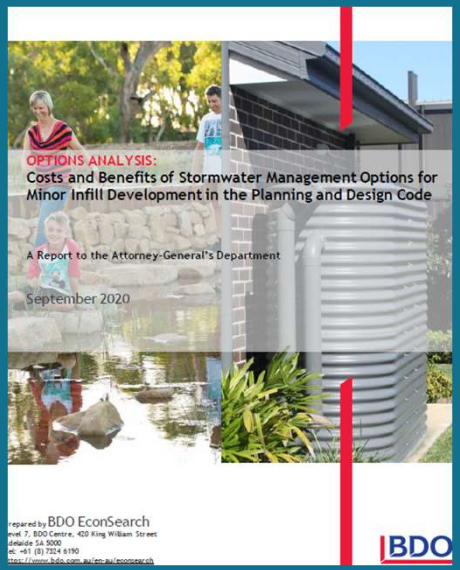
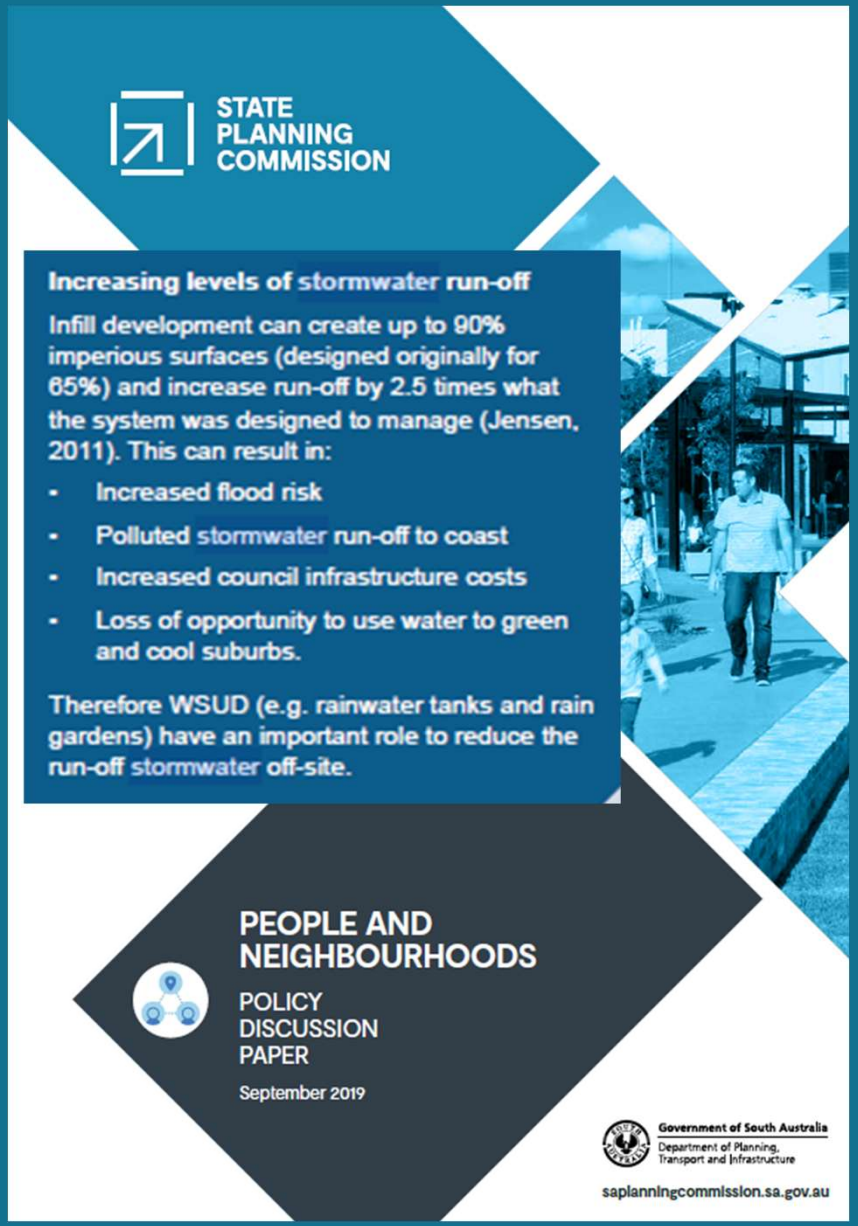
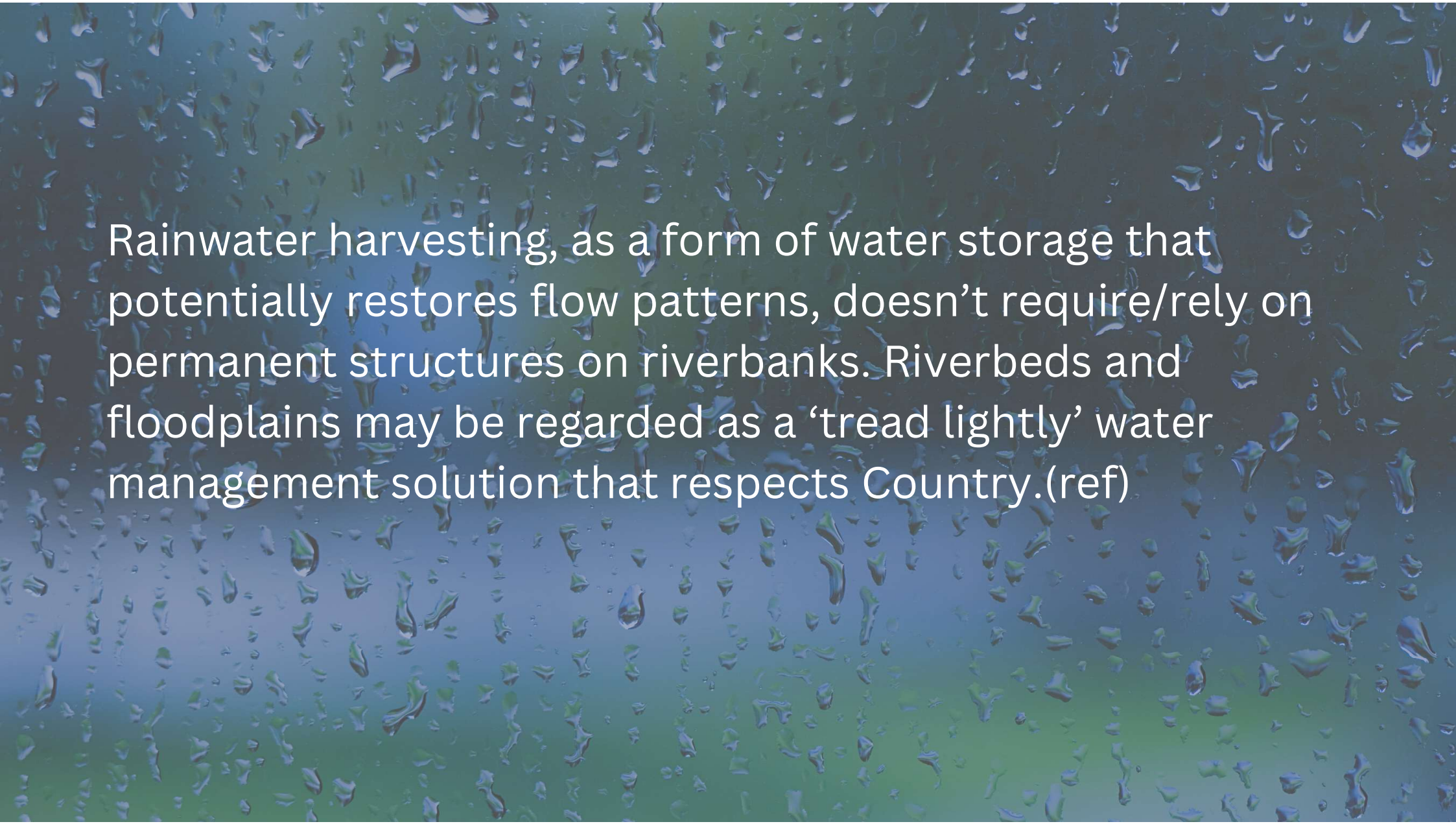




Respecting Country


Rainwater harvesting, as a form of water storage that potentially restores flow patterns, doesn’t require/rely on permanent structures on riverbanks. Riverbeds and floodplains may be regarded as a ‘tread lightly’ water management solution that respects Country.(ref)

Policy

POLICY

The Rainwater Harvesting Policy is a performance-based standard within land use planning. It provides a ‘deemed-to-satisfy’ solution for various land uses and building types, based on roof area, tank size, and water connections.

The policy emphasizes water volume as the primary factor influencing stormwater impacts and the demand for what infrastructure.

Case Study - Sustainable Buildings SPP NSW

500,000 BASIX Compliant Homes, increasing by 30,000 each year since 2004

Each year BASIX is saving 79 billion litres of potable water, 49 billion from water efficient devices, 30 billion litres rainwater harvesting reducing stormwater volumes by the same amount

BASIX is a land use planning policy, not a water industry policy

POLICY

The policy requires rainwater harvesting designs to include:

- A connected roof area that directs rainwater to the tank.
- A specified volumetric tank capacity.
- Connections to designated appliances.

For example, planning approval for a detached residential home would require:

- 150m2 of connected roof area.
- A 5000-litre rainwater tank.
- Connections to all toilets, washing machines and outdoor taps.

POLICY

The policy has three key objectives:

1. **Resilient Cities and Catchments** – Reduce stormwater runoff volume at both lot and city scales.
2. **Efficient Water Use** – Lower demand for utility water across lot and city scales.
3. **Practical Support** – Provide guidance and understanding of rainwater harvesting systems.

POLICY

The policy is designed to achieve a 30% reduction in stormwater runoff at the lot level and a 30% reduction in residential utility water demand.

It applies to land use categories guided by sustainable planning principles, including economic efficiency, community engagement, and equity and inclusion.

DEEMED TO SATISFY RAINWATER HARVESTING

HOUSING TYPE	ROOF CATCHMENT AREA	MINIMUM TANK SIZE	USAGE
Detached Housing	150sqm roof catchment	5000 L Storage	Connected to Toilets and Outdoor Taps
Semi-Detached Housing	100sqm roof catchment	3000 L Storage	Connected to Toilets, Laundry, and Outdoor Taps
Unit Housing	18sqm roof catchment	2500 L Storage	Connected to Toilets, Laundry, and Outdoor Taps.
Non-Residential Buildings based on eight classes of land use.	100sqm roof catchment	Generally, 2000 L storage/100sqm roof area	Connected to Toilets and other indoor and outdoor water applications.

POLICY

A key strength of the policy is Peter Coombes' systems-based modelling. The Systems Framework is based on behaviour at the individual building and lot level to determine local and regional impacts.

The modelling allows costs and benefits to be accurately considered at the local government and city levels for policymakers to consider.

Conclusion

The policy establishes a framework for Australian cities that priorities small, incremental changes to every building and alignment with the natural water cycle as the first response. Large-scale infrastructure investment can then be pursued where necessary.

Download the policy and supporting information at

rainwaterharvesting.org.au