



**Senate Standing Committee on Environment and
Communications— Inquiry into Stormwater Resources**

Submission from the South Australian Government

September 2015

South Australia's Approach to Stormwater Management

South Australia has long been a leader in stormwater management, particularly in regard to stormwater harvesting and re-use. South Australia's approach to stormwater is based on ensuring the delivery of economic, social and environmental benefits, linked to the following specific outcomes:

- The provision of adequate flood protection for properties, businesses, infrastructure and human life;
- Minimising the transfer of nutrients, suspended solids and other pollutants into urban streams and the coastal environment; and
- The capture, treatment, storage and re-use of the resource for fit-for-purpose applications.

A multifaceted management approach to stormwater exists in South Australia, with responsibilities distributed across State agencies, local government and the private sector. In summary, key management instruments include:

- The *Natural Resources Management Act 2004*, including its provisions for the preparation of water allocation plans and regional natural resources management plans under which stormwater capture and quality can be addressed on a catchment basis;
- The *Environment Protection Act 1993* and the associated *Environment Protection (Water Quality) Policy* and *Adelaide Coastal Water Quality Improvement Plan*, providing regulatory and other controls for water quality;
- Schedule 1A of the *Local Government Act 1999*, which provides for the establishment of the Stormwater Management Authority and associated powers to support the appropriate planning and construction of infrastructure for stormwater management;
- The *Local Government Act 1999*, which establishes requirements for local government to protect their communities from hazards; and
- The *Metropolitan Drainage Act 1935*, which provides for drainage works in areas subject to flooding by the key metropolitan watercourses.

The South Australian Government's water security plan, *Water for Good*, was released in 2009 as a comprehensive approach to the millennium drought. It included a number of key reforms and commitments pertaining to stormwater, such as improving governance, increasing stormwater harvesting capacity and implementing stronger arrangements and targets for water sensitive urban design.

Delivering on these elements of the *Water for Good* plan, over recent years the South Australian Government has:

- In partnership with the Adelaide and Mount Lofty Ranges Natural Resources Management Board, local government and the Australian Government, supported the development of eight new stormwater harvesting schemes. Together with existing schemes, these schemes provide Adelaide with the capacity to harvest over 20 gigalitres of water per year;
- Established a new State and Local Government Stormwater Management Agreement which establishes a more strategic and comprehensive role for the Stormwater Management Authority in stormwater planning;
- Adopted a state-wide water sensitive urban design policy, which includes a range of actions to increase the adoption of water sensitive urban design techniques across urban areas, such appropriate urban development and planning policies, arrangements to increase use in Government infrastructure projects and specific performance targets;
- The Adelaide and Mount Lofty Natural Resources Management Board, in conjunction with several local government partners, has established a specific water sensitive urban design capacity building program, Water Sensitive SA, to build the capability of practitioners with regard to such approaches; and
- Adopted the *Adelaide Coastal Water Quality Improvement Plan*, which outlines a number of strategies to improve the quality of stormwater discharged to the coast, including the Catchment to Coast project supported by the National Landcare Programme.

In addition, the Government has also significantly invested in research to underpin its policy approach to stormwater and urban water matters. The Goyder Institute for Water Research, a partnership between the Government, CSIRO and the three local universities, has undertaken a number of significant research projects over the last five years that may be of interest to this Inquiry. This includes research into targets for and impediments to water sensitive urban design and managed aquifer recharge and stormwater use options.

Further detail on the Goyder Institute for Water Research is available from the following website: <http://www.goyderinstitute.org/>

The South Australian Government undertook a comprehensive expert assessment of water supply and demand management options as part of *Water for Good*. A key message from that process was that stormwater recycling can play a fundamental role, alongside desalination, wastewater recycling and other management practices, in an approach to urban water resources management.

Due to recent investments, Adelaide now has access to six urban water sources for potable and non-potable supplies, these being:

- Water from the River Murray;
- Mount Lofty Ranges catchment water;
- Groundwater;
- Stormwater;
- Wastewater; and
- Desalinated seawater.

South Australia will continue to face a number of challenges in its approach to the management of stormwater over coming decades, driven primarily by the impacts of climate change and higher density development. However, in responding to these challenges it is possible that additional benefits can be realised for the community.

The South Australian Government recognises that a more integrated approach to urban water resources is required into the future, if the full economic, social and environmental benefits of these resources are able to be unlocked.

In October 2014, the Minister for Water and the River Murray released an Issues Paper to initiate a broad process of engagement with local government, industry, not-for-profit organisations and the community to support the development of an integrated urban water management plan for Greater Adelaide.

A range of feedback was received and a draft plan is nearing finalisation for further community engagement.

It is clear from this process so far, that a more strategic and integrated approach to urban water, including stormwater, can assist to deliver on a range of key priorities across various stakeholders. The Government also believes that a new approach to urban water will assist it to deliver on its strategic and economic priorities.

A key focus of the Urban Water Plan will be around how the Government and stakeholders can work together to achieve such outcomes.

The South Australian Government notes that the Commonwealth Government has reduced its activity in the stormwater and urban water sector over recent years. While much of the policy and legislative responsibility for stormwater matters rests with the states and territories, it is important the Commonwealth continues to play a significant role in stormwater management across Australia.

In particular, the funding of stormwater drainage infrastructure that can mitigate future flood risk is an area where additional Commonwealth support should be considered. Such funding will ensure that existing flood risks and the future impacts of climate change can be proactively minimised and reduce the need for Commonwealth Government Funding for compensation and the disruption of economic activity from major events.

In conclusion, the South Australian Government continues to regard stormwater as a significant resource that needs appropriate and targeted management. By introducing a more integrated approach to urban water management more generally, significant economic, environmental and social benefits can be leveraged for all South Australians.