

# Chapter 6

## Committee view

6.1 As Dorothea Mackellar observed in her timeless poem *My Country*, Australia is a land of droughts and flooding rains. When considering the management of stormwater, both of these features of Australia's climate are relevant. In Australia's urban environments, rain events generate significant volumes of runoff that must be removed from the streets. Yet the overwhelming majority of this water is not utilised; rather, the stormwater is discharged out of the city as quickly as possible via an extensive drainage network. In a country that has a history of acute water shortages, the under-utilisation of stormwater is, on the face of it, surprising.

6.2 Stormwater can also cause significant environmental damage. The traditional method for stormwater management relies on drainage networks that convey stormwater out of urban areas as quickly as possible. The pollutants and waste from city streets and other urban surfaces carried by the runoff are transferred into waterways. Both the pollutants and the quantity of the inflow degrade the health of the bodies of water that receive the runoff. Further urbanisation will increase the amount of impervious area in Australia's cities and, therefore, the volume of stormwater that cities will generate. The effect that climate change may have on rain events also needs to be considered, particularly as climate change could potentially result in worsening stormwater-related flooding in Australia's urban areas.

6.3 Stormwater appears to be a problem that will be of increasing importance to address. As stakeholders repeatedly told the committee, however, stormwater is unlike most other environmental challenges in that addressing the problem also presents opportunities. Finding ways to harvest more stormwater will help preserve other water supplies and, for non-potable uses of stormwater, result in less water being treated to drinking quality standard when this degree of treatment is not required. There are several other potential benefits from stormwater, such as the ability for stormwater to help improve the liveability of Australia's cities through the use of green infrastructure. Additional uses for stormwater and rainwater may also make cities more resistant to flooding, while also potentially reducing the need to increase the capacity of existing stormwater infrastructure. With ageing stormwater infrastructure in many of Australia's major cities, it is timely to consider new and improved solutions to stormwater management.

6.4 The committee is cognisant of the Commonwealth's limited role in urban water management. Stormwater is a municipal issue that is the responsibility of individual state and local governments. This has some advantages: state and local governments across the country have the flexibility to develop policies and projects that best suit them. Stormwater management challenges also vary between cities because of geological differences—the best practice approach to managing stormwater in Perth, for example, will differ to the approach needed in Melbourne.

This may allow different techniques to be developed and tested, with demonstrated successes replicated elsewhere and less effective projects not repeated.

6.5 Nevertheless, the current approach to stormwater management has various apparent weaknesses. The primary responsibility for stormwater often falls to local governments, which are limited in their ability to make decisions that are outside their immediate area of responsibility and can be affected by actions, or inaction, in neighbouring local government areas. Evidence received by the committee during this inquiry also suggested that the regulation of water monopolies by state governments prevents those entities from considering how better stormwater management outcomes could be achieved. It was put to the committee that improved stormwater management outcomes potentially could be realised if water monopolies had broader objectives that allow them to become more involved in best practice stormwater management.

6.6 Increased attention to, and investment in, stormwater management across all levels of government could result in considerable environmental and economic benefits. Responding to the threats of flooding, climate change and ecosystem degradation should be priorities for all levels of government. The costs of inadequate stormwater planning are borne by the nation as a whole, with direct costs including those related to flood clean-up and recovery, higher insurance premiums, and riparian management. Proactive planning and well-targeted investment is needed to account for these threats.

6.7 The Australian Government is uniquely placed to promote the advantages of improved stormwater management. The committee received evidence demonstrating several examples where Commonwealth funding for projects and Commonwealth-backed research enabled stormwater projects to be undertaken. Given that infrastructure projects and responses to major flooding disasters often require Commonwealth assistance, the minimisation of the long-term costs associated with stormwater through better stormwater management also appears to be in the best interests of the Australian Government.

6.8 The Australian Government can make a significant contribution by providing national leadership in stormwater policy. State governments should still try different stormwater solutions and pursue those that best suit them; however, if the Australian Government can facilitate coordination between the states and the sharing of lessons learnt from stormwater policies and projects, this will help achieve the best outcomes nationwide. A consistent, national approach to stormwater could also assist private firms to have leading edge technologies they develop adopted throughout the country. In addition, this has the potential to assist these firms to focus on export opportunities, rather than understanding and overcoming domestic regulatory differences.

6.9 The committee considers that the Australian, state and territory governments should develop a National Stormwater Initiative, which would establish a national policy framework for stormwater management. The Initiative will provide a mandatory national agenda for stormwater management that seeks to realise economic and environmental benefits from the increased utilisation of stormwater and which

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incorporates whole-of-water-cycle principles. The Initiative will also outline the structure for funding, co-funding, conditions for funding, incentives, policy setting (using agencies like the Productivity Commission, Bureau of Meteorology and the Australian Bureau of Statistics) and data collection.

6.10 The development of a National Stormwater Initiative would enable various funding models and financing issues to be considered, including co-investment models and impediments to greater private sector investment. Best practice stormwater management policies across a wide range of matters, including the state government regulation of water monopolies, would also be identified and refined. Throughout the development of the National Stormwater Initiative, consideration should also be given to the contribution that stormwater management can make to future national prosperity as we adapt to the challenges of urbanism, climate variability, and population pressures.

6.11 Although the Australian Government should promote the adoption of best practice regulatory frameworks, funding arrangements and policies for stormwater, the committee envisages that the main ongoing role for the Australian Government in stormwater management is to support research and encourage innovation. Research and innovation in stormwater management and other water-related matters is in the national interest. This research supports evidence-based policy development and provides the greatest opportunity for stormwater projects to improve outcomes and to be cost-effective. The National Stormwater Initiative should outline the objectives of research and innovation support, and consider how all levels of government can facilitate innovation in stormwater management.

### **Recommendation 1**

**6.12 The committee recommends that the Australian Government work with the state and territory governments to develop and implement a national policy framework for stormwater management (a National Stormwater Initiative).**

### **Recommendation 2**

**6.13 To inform the development of the policy and regulatory framework under the National Stormwater Initiative, the committee recommends immediate audits to:**

- **establish the scope of stormwater opportunities, taking into account water security, environmental issues and economic benefits; and**
- **collate stormwater knowledge into a central repository to aid future decision-making processes.**

**6.14 The committee further recommends that the audits:**

- **be conducted by a balanced, independent expert panel with input from relevant agencies, peak bodies and scientific representatives;**
- **give due consideration to industry practice, science and innovation; and**

- use whole-of-community, whole-of-life-cycle and system analysis methodologies when assessing and prioritising potential stormwater projects and policy reforms.

### **Recommendation 3**

**6.15** The committee recommends that the Australian Government place water policy on the agenda of an upcoming meeting of the Council of Australian Governments (COAG) and that COAG recognise the benefits that improved stormwater management can provide.

### **Recommendation 4**

**6.16** As part of the development of the National Stormwater Initiative, the committee recommends that the Australian, state and territory governments consider new funding models and financial incentives that would facilitate improved stormwater management outcomes in an economically efficient way.

### **Recommendation 5**

**6.17** The committee recommends that the Australian Government restore funding for stormwater research. As part of the development of the National Stormwater Initiative, consideration should also be given to how the overall level of research and development can be increased by attracting co-investment from other levels of government and the private sector to support and expand research activities that receive funding from the Australian Government.

**Senator Anne Urquhart**  
**Chair**