STORMWATER AUSTRALIA

Submission to the Productivity Commission 2020 Inquiry into progress with the reform of Australia's water resources sector

20 August 2020

Stormwater Australia

www.stormwater.asn.au

Introduction

Stormwater Australia is the trading name of the Stormwater Industry Association Limited, the peak body for the stormwater sector in Australia. Our members and stakeholders in the public and private sector are experts in stormwater evaluation, treatment and management in Australia. Many are also experts in integrated water management and Water Sensitive Urban Design (WSUD).

We welcome the opportunity to comment on the Productivity Commission's *Issue Paper on National Water Reform*. Our previous submissions include input to:

- The Australian Senate's Environment and Communications References Committee's 2015 *Report on Stormwater Management in Australia*, and
- The 2017 Productivity Commission *Issues paper on National Water Reform*

Our submission notes only four mentions of 'Stormwater' in the Issues Paper on the following matters:

- In Water Services as 'stormwater management';
- In Planning for major supply augmentation as ''reuse of stormwater';
- In Information Request 11 as the question: Is further guidance on implementing an integrated water cycle management approach for delivering water supply, wastewater and stormwater management services required? And,
- In the Glossary for the term Integrated water cycle management as: 'Unified approach for delivering water supply, wastewater and stormwater management services.

We therefore invite the Productivity Commission to investigate the ways in which stormwater and rainwater issues are marginalised in water monopoly perspectives to the detriment of best practice water management. We refer the *Inquiry* to The Senate Environment and Communications References Committee's *Report on Stormwater Management in Australia* which is still relevant and to note in particular the quoted contributions of Dr Peter Coombes and Dr Darren Drapper, as well as The Senate's recommendations.

A key concern of Stormwater Australia is for the Inquiry to consider the hydrological cycling giving rise to stormwater and rainwater before assessing the policy settings on water supply, sanitation and investments, and then the extent to which monopoly powers ignore stormwater and rainwater in best practice stormwater management.

Recap on recommendations of the previous Senate Inquiry

We draw attention to the statement made in the 2015 *Report on Stormwater Management in Australia* by Professor Ana Deletic, Deputy Chair of the Australian Academy of Technological Sciences and Engineering's Water Forum. In the Senate's report, she is quoted as saying:

> *Stormwater is maybe the only source of water which, if it is taken out of our rivers or prevented from going into our rivers, will help our rivers, which is totally the opposite, as you know, in rural settings.*

In this regard, stormwater is *unique* among sources of water with respect to how the environmental outcomes can be addressed and hence how water policy should be formulated.

We draw the Productivity Commission's attention to how stormwater can be considered *unique* to indicate the merits of systematically separating out water issues in a future report as:

- surface and groundwater issues in which surface water is differentiated between rivers, streams, and overland flow on the one hand; and stormwater and rainwater on the other, and that,
- policy settings for urban and rural stormwater issues need to take into account the different environmental outcomes to be achieved.

As the Productivity Commission deliberates findings from its issues paper, we recommend further study of the Senate Committees *Report on Stormwater Management in Australia* including the recommendations provided in Table 1.

Table 1: Stormwater Management in Australia

Senate Committee Recommendations 2015

Recommendation 1: 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: 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.

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: 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: 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: 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.

Importance of water sensitive urban design in the creation of green resilient liveable cities

We reiterate a point made in our 2017 submission that an "absence of policies encouraging Water Sensitive Urban Design (WSUD) and stormwater management at state and local government levels ensures ongoing under management and underutilisation of urban stormwater, and ongoing excessive environmental impact".

For example, the lead agency within the Commonwealth Government for water matters changed in 2019 from the Department of Agriculture and Water Resources to the Department of Agriculture, Water and the Environment with three Ministers. Our previous observation made in 2017 that this "may well reflect the importance of agriculture in the Australian community, and the importance of water to the agricultural sector" is still relevant, because "the critical importance of WSUD and stormwater management to the cities, towns and rural areas of Australia" is not clearly addressed in this alignment of Ministries, "nor the need to transition to becoming Water Sensitive".

Following on from our 2017 submission, a clear agreement on the meaning of the term Water Sensitive Urban Design, addressing all elements of water related design not just stormwater harvesting and runoff management, is required for national use to drive policy outcomes.

Stormwater harvesting as a resource

As stated in our 2017 submission, "Failure to incorporate management and use of stormwater into urban water and rural water strategies has the same impacts – future stormwater opportunities and threats should be a significant component of urban and rural water management and planning, including ensuring minimisation of stormwater-borne pollutants, minimisation of hydrologic impacts through utilisation of the "urban excess" (stormwater harvesting and reuse), and at-source treatment and infiltration of stormwater through vegetation to reduce urban heat island effects".

The Productivity Commission could address some of these concerns by addressing urban and rural issues separately and providing definitions of stormwater and stormwater harvesting management that can be shared by all jurisdictions.

Need for policy alignment between states on stormwater quality

Policy alignment needs to take into account that not all surface water falls into the same policy toolkit. We ask the Productivity Commission to develop separate sections in its report which distinguishes between surface water (rivers, streams, overland flow) and stormwater (urban and rural differences), and groundwater and wastewater. Selected points from our 2017 comments are restated here also.

Stormwater is:

- a finite resource, potentially valuable and potentially harmful, and therefore requires management – both in the urban and rural contexts;
- currently for the most part under managed and under-utilised and allowing unnecessarily large impacts on receiving environments;
- not always well understood:
  - before the term can be used nationally to drive policy outcomes, definitions of all terms need to be clear;
  - the concept of "stormwater harvesting and management" needs clarification and both policy-makers and the water industry require consistent and better understanding of the term, to ensure appropriate collaborative responses;

Urban stormwater is:

- barely used for water supply and can provide much greater benefits to the community and environment with large scale utilisation;
- often ignored rendering attempts at triple bottom line outcomes and hence accounting inaccurate.

A changing climate has:

- the capacity to deliver stormwater in quantities which are currently not planned for, and the directive in the Report to properly contemplate climate change should explicitly mention the need to do this in order to protect against adverse impacts from stormwater;

States and territories, and local governments,

- need to consider the capacity for stormwater to positively impact urban heat islands, and hence public health;
- should when developing their approach to water at any scale, ensure stormwater is integrated into their planning and management approach;
- should examine whether there is a need to change their regulatory frameworks to encourage a more appropriate approach to management and use of stormwater in urban and rural areas;

Policy and management

- (As noted above) Failure to incorporate management and use of stormwater and rainwater into urban water and rural water strategies has the same impacts – future stormwater opportunities and threats should be a significant component of urban and rural water management and planning, including ensuring minimisation of stormwater-borne pollutants, minimisation of hydrologic impacts through utilisation

of the “urban excess” (stormwater harvesting and reuse), and at-source treatment and infiltration of stormwater through vegetation to reduce urban heat island effects;

- An absence of policies encouraging WSUD and stormwater management at state and local government levels ensures ongoing under management and underutilisation of urban stormwater, and ongoing excessive environmental impact;

Integrated water management decision-making:

- at every level of government, needs to incorporate consideration of current and future stormwater opportunities and threats;

Senate Committee Recommendations

- are important to keep considering.

Need for coordinated research and data gathering

We reiterate our view stated in 2017 that “Investment in research and brokering of knowledge through a dedicated stormwater research and development structure is an essential underpinning to a National response”.

Australian and State government buy in to SQIDEP

Stormwater Australia is the custodian of an industry-formulated, independent evaluation process for verifying performance of technologies for improving stormwater quality called the Stormwater Quality Improvement Device Evaluation Process (SQIDEP). SQIDEP provides a uniform set of criteria to which stormwater treatment measures can be field-tested and reported. These criteria should guide and inform field monitoring programs seeking to demonstrate pollutant removals for stormwater treatment measures included in pollutant export modelling software. Field testing has been underway since January 2019. Australian and State government buy in would support SQIDEP as a national protocol for verifying performance.