

Urban Water Reform
C/O Metro Water Branch
Department of Water and Energy
GPO Box 3889
SYDNEY NSW 2001

6 June 2008

To whom it may concern,

Re: Draft National Principles for Urban Water Planning

Thank you for the opportunity to comment on the Draft National Principles for Urban Water Planning prepared by the inter-jurisdictional Project Group on Urban Water Reform. We understand that these principles have been prepared for the purpose of informing the delivery of an 'enhanced urban water reform framework' for consideration by the Council of Australian Governments (CoAG) later this year. It is widely acknowledged that the current National Water Initiative does not adequately address Australia's contemporary urban water reform needs and we commend CoAG and the Council for the Australian Federation for initiating this important process given the unprecedented challenges faced by Australia's urban water sector in relation to population growth, supply scarcity, climate change and environmental degradation.

This submission has been prepared with input from Monash University researchers, academics and associates working at the forefront of best practice water management, governance, climate change and sustainability. This draws upon expertise across the Arts, Engineering, Science, Business and Economics and Law faculties at Monash University. Over the past few decades, Monash University has established itself as a centre of excellence, for research into the sustainable management of water resources and urban sustainability and is host to prominent water related institutes and programs including: the National Urban Water Governance Program; the Institute for Sustainable Water Resources; the Water Studies Centre; the Monash Sustainability Institute; the Australian Centre for Biodiversity; the Monash Climate Group; and the Facility for Advancing Water Biofiltration.

It is from this perspective that we believe we can make salient, informed comments on the urban water planning principles required for delivering infrastructural and governance solutions that offer more sustainable and effective outcomes, while improving the resiliency of Australian urban environments in the long-term.

1. Our most significant concern with the Draft National Principles for Urban Water Planning is with the narrow scope. The consultation document purports to provide principles for urban water planning; however they are primarily principles for urban 'water supply' planning.

Best practice urban water management, is widely acknowledged as complex, because it requires urban water planning to protect, maintain and enhance the 'multiple' benefits and values of the total urban water cycle for society. These include: supply security; public health protection; flood protection; waterway health protection; amenity and recreation;

mitigating the urban heat island effect; end-use conservation; greenhouse neutrality and demonstrable long-term environmental sustainability.

Part of this complexity is that these values are often highly interdependent, and therefore optimising one part of the water cycle such as ‘supply security’ in isolation and/or in absence of reliable consideration to the of other dimensions of the cycle is highly likely to produce sub-optimal planning outcomes.

Planning principles that consider the full suite of values and benefits are likely to result in more resilient solutions over the long-term.

2. It is widely accepted across the scientific and practitioner community that the traditional approach to urban water management involving the optimisation of reticulated water supply is too narrow, and has lead to unanticipated consequences including significant environmental degradation and increased vulnerability to changes to the broader scale environmental and social factors that affect the urban water environment (such as climate change and associated extremities of weather such as drought and flooding, growing populations and higher urban densities, changing demographics and community expectations, and emerging technologies).

Australian cities can have access to a diverse range of water sources in addition to the established convention of capturing rainfall-runoff from rural and forested catchments. These alternative water sources for cities include groundwater, urban stormwater, rainwater (roof runoff), recycled wastewater and desalinated water. Many of these sources are within city boundaries and each of the alternative water sources have unique reliability, environmental risk and cost profiles with the tendency for sources of high reliability to also have associated high cost and environmental risk profiles and vice versa.

In a future water sensitive city, access to these alternative sources can be optimised dynamically (even on a short term basis) through the availability of diverse infrastructures that include both centralised and decentralised water supply schemes.

These sources would be drawn upon in differing combinations depending on the local and regional climatic conditions, and the mix of sources selected would be those resulting in the lowest environmental, social and economic costs over the long term. Optimisation would ensure preferential access of available sources of low cost and environmental risk ahead of options with higher cost and environmental risk.

While the draft planning principles recognise the importance of a diversity of supplies, they appear to focus only on centralised reticulated sources with no mention of decentralised sources or of the need for a fit-for-purpose context.

3. We strongly encourage the ‘Inter-jurisdictional Project Group on Urban Water Reform’ to substantially broaden the scope of the *Draft National Principles for Urban Water Planning* from a narrow water supply focus to a ‘total water cycle’ focus. This will contribute to Australia as a sustainable, innovative and liveable country well into the future.


We invite the inter-jurisdictional Project Group on Urban Water Reform and the Council for the Australian Federation to meet with us at Monash University as part of this review process, and to incorporate the lessons from scientific thinking in sustainability and urban water management into the 'enhanced urban water reform framework' for Australia. Please do not hesitate to contact Nina Keath on (03) 9905 4618 if you should wish to take up this offer.

Yours Sincerely,



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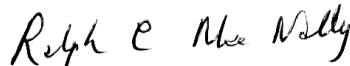
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