



WATER SERVICES ASSOCIATION
of Australia

6 October 2004

The Building Productivity Commission
PO Box 80
BELCONNEN ACT 2616
By email building@pc.gov.au

Dear Sir/Madam

Comments on the Reform of Building Regulation – Productivity Commission Draft Research Report

Thank you for the opportunity of providing comments on the above report.

The Water Services Association of Australia (WSAA) was established in 1995 and currently has 28 members and 25 associate members from across Australia and New Zealand. WSAA's Members provide water services to more than 15 million urban based customers, including many of Australia's largest industrial and commercial businesses. The Association provides a forum to discuss issues of importance to the urban water industry and, where appropriate, is a focal point for communicating the industry's views. In this context WSAA has a major interest in the future sustainability of water supplies to Australia's cities.

Overall, WSAA is disappointed that the report fails to address issues relating to water in the built environment in any great detail. This is in stark contrast to the amount of detail and discussion on issues concerning energy. Much of Australia is still in a record 8 year drought and many cities and towns have been under harsh water restrictions for the last number of years. Water resources to our cities are limited as most available surface water has already been allocated. Given that the population of the major cities is expected to grow by greater than 4 million people by 2030, it is imperative that we commence without delay the process of making our new suburbs and houses more water efficient. It should be remembered that retrofitting existing houses and developments is extremely expensive and the most cost effective opportunity to 'hard wire in' water efficiency is at the development stage. This is why building regulations have such an important role to play in encouraging the adoption of water efficient buildings across Australia.

Although the report devotes a number of pages to the issue of energy, it must not be forgotten that there is a strong interdependency between water use and energy consumption in the built environment. For instance, any measure that reduces the amount of hot water consumed delivers a substantial dividend in the form of reduced energy consumption.

Because of climate change and the increasing unreliability of rain fall, water utilities are increasingly diversifying their sources of water, based on fit for purpose, as a means of managing risk. In the future this will mean far greater use of recycled water, rain water tanks, stormwater and desalination as a means of providing our growing cities with reliable sources of water.

We currently have a 'once through' system for the supply of potable water to homes and other buildings and the removal and transport of sewage to a treatment plant prior to being disposed of to receiving waters. The way of the future will be to recycle water within buildings or within sub-divisions for use for purposes that do not require water of a potable standard, such as garden watering and toilet flushing. This new way of configuring water infrastructure will make household plumbing more complex and if plumbing regulations and building codes are not aligned there will be a greater risk of public health and environmental objectives being compromised through cross connections and inappropriate discharges to the environment.

MELBOURNE OFFICE

8/469 LATROBE STREET MELBOURNE VIC 3000
PO BOX 13172
LAW COURTS POST OFFICE VIC 8010
TEL: 03 9606 0678 FAX: 03 9606 0376

ABN: 72 214 691 307

www.wsaa.asn.au

INC REG NO: A0030872B

SYDNEY OFFICE

SUITE 21 LEVEL 5
321 PITT STREET SYDNEY NSW 2000
PO BOX A812 SYDNEY SOUTH NSW 1235
TEL: 02 9283 0723 FAX: 02 9283 0799

The National Water Initiative recently signed by the Commonwealth and the States and Territories (with the exception of Western Australia and Tasmania) contains a number of actions which are germane to The Productivity Commission's review of building regulation. In particular I would like to highlight the following sections:

Innovation and Capacity Building to Create Water Sensitive Australian Cities

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- i) National health and environmental guidelines for water sensitive urban development (WSUD) by 2005
- ii) guidelines for evaluating WSUD options by 2006
- iii) evaluate 'icon water sensitive developments' to identify knowledge gaps by 2005 review institutional and regulatory models for achieving WSUD by 2006
- iv) review of incentives to encourage innovation by 2006

The water sensitive urban design concept outlined above refers to the new trend of reconfiguring the way water infrastructure is provided to new developments to ensure that the demand on the potable water resources are minimised. This often involves the installation of rain water tanks and third pipe systems for garden watering and toilet flushing.

Recently State governments around Australia have commenced to mandate a percentage improvement in water efficiency for new houses. These initiatives also have a significant implication for building codes.

An example of how the concept of water sensitive urban design has implications for building regulations is outlined below:

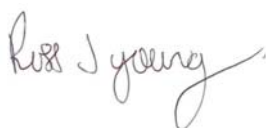
The roof of domestic residences is now becoming part of the water supply catchment supplying urban communities. The roof is now also required to maintain the quality of the water collected and delivered to a rainwater tank. Roofing and gutter design can have a marked influence on the rainwater yield whereas roofing and gutter materials can contaminate rainwater run-off. However, most importantly, the roof and rainwater collection and storage system has become an integral part of the water supply system, which will now be designed to take account of this water source which can be substituted for reticulated drinking water. Probably for the first time private domestic infrastructure now may need to be operated and maintained to supplement publicly owned infrastructure.

As a general point WSAA believes that the reform of building regulations should address the following issues:

- (a) provide a holistic approach to issues such as sustainability.
- (b) ensure there is alignment between the approaches of the Building Code of Australia, Plumbing Code of Australia, energy and telecommunication regulators who have varying and overlapping responsibilities within the built environment.
- (c) engage with public health and environmental regulators who also have legitimate responsibilities affecting the built environment.
- (d) manage duplication, overlap and conflict in the emerging field of sustainability, in particular as they relate to water and energy use efficiency.

Thank you for the opportunity of making comment on the draft report and if you wish to follow up on any matter raised in this submission please call me on (03) 9606 0678.

Yours sincerely



Ross Young
Executive Director