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Changing perception of the value of urban water in Australia following investment in seawater desalination

Neil Palmer

CEO, National Centre of Excellence in Desalination Australia, Dixon Rd., Rockingham, Western Australia, Australia Tel. +61 8 9360 7170; Fax: +61 8 9360 7598; email: neil.palmer@murdoch.edu.au

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ABSTRACT

Recent climatic changes and population growth throughout Australia have highlighted the need for more diverse and climate-independent water sources to be introduced to secure local and regional water supplies. Australia is the world's driest inhabited continent and the unpredictable climate means that the Australian population generally requires up to five times the water storage than does an equivalent population in, for example, Europe. Although 85% of its people live within 50 km of the coast, the country has only begun to consider large-scale seawater desalination within the past seven years. The total potable and industrial water consumption in Australia is estimated to be around 50,000 ML/d. In 2005, the total capacity of installed desalination for potable and industrial use was about 0.6% (300 ML/d). This is expected to increase more than seven times to 4% (1,900 ML/d) by 2015. In response to the growth in desalination capacity, the Australian Government has invested \$20 m in desalination Australia (NCEDA), a consortium of 14 universities and research organisations. The NCEDA has 33 research projects in progress and has completed a Pilot Scale Test Facility and Desal Discovery Centre to educate schoolchildren in Perth.

Keywords: Seawater; Desalination; Australia; Urban; Perception

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