



## Using recycled water for drinking: National Water Commission position

In response to Australia's current water challenges, many towns and cities are increasingly looking to augment their water supplies. Introducing recycled water into the drinking water supply is one viable option to reduce water shortages and make water supplies less vulnerable to climate. As the National Water Commission (the Commission) stated in its report to the Council of Australian Governments (COAG) in June 2006 (*Progress on the National Water Initiative: A Report to the Council of Australian Governments*, 1 June 2006), it is essential that all water supply options are considered in order to find the most effective combination of means to secure water for our cities.

The Commission believes that the introduction of treated recycled water into the drinking water supply (i.e. indirect potable re-use (IPR)) is an important option to improve Australia's long-term water security. The Commission strongly encourages objective and even-handed consideration of IPR as one option for communities to augment their water supplies and to enhance their water security and urges leadership by water decision-makers throughout Australia to enable recycled water for drinking to be considered and implemented.

Recycling water is not a new concept to Australia. For decades, towns and cities have drawn upon this resource for watering recreation facilities such as parks and golf courses, supplementing environmental flows and, in some cases, for irrigated agriculture. Recycled water has long been discharged into some Australian watercourses and accessed by downstream communities, including for drinking purposes.

The Commission recognises the risks associated with recycled water for drinking but considers that these risks can be satisfactorily and safely managed. It also emphasises the importance of sound, consultative community decision-making processes, well informed by science and evidence.

The issues associated with recycled water for drinking in any location should always be made clear to communities as they make choices about their water supply options. This paper, produced by GHD at the request of the Commission, provides an accessible overview of national and international experiences of indirect and direct potable re-use and can be used to assist communities when they are considering the option of sourcing recycled water for drinking purposes.



How recycled water for drinking is viewed across Australia depends on several factors including the management of health risks, cost effectiveness and public perceptions or the 'yuck factor'. Each of these factors will be unique to each region, and each community needs to have the opportunity and the information to understand all water options on their merits. The National Water Commission believes that no options should be discounted, particularly if traditional supplies are not sustainable.

The Commission endorses the conclusion reached in this study that national and international experience indicates that risk associated with recycled water for drinking is manageable.

The National Guidelines for Water Recycling (the Guidelines) currently being developed under the National Water Initiative (NWI) will provide an effective risk management framework for providing safe and reliable recycled water. The new Guidelines will improve flexibility and innovation and are likely to encourage increased water recycling over the longer term. The first phase of these Guidelines, which focus on sewage effluent and grey water, were endorsed by all Australian governments in November 2006. The Phase 1 Guidelines are available from the Environment Protection and Heritage Council website at [www.ephc.gov.au](http://www.ephc.gov.au).

In endorsing the Guidelines, Ministers recognised the importance of safeguarding water supplies for the future, particularly in the face of challenges such as drought, climate change, and the inefficient and wasteful use of water. Development of phase two of the Guidelines, including recycled water for drinking is already underway. This module is expected to be completed by the end of 2007. These Guidelines will be a critical step in building community confidence and helping to ensure that recycled water use is safe and reliable.

How the cost of recycled water compares to other water supply options including desalination, harvesting stormwater and extracting groundwater will also vary across Australia and depend on regional environmental, social and economic factors. In comparing systems, issues to be considered include: energy costs associated with treating and delivering the water; social acceptance of the water source and trust in the water service provider to manage risk; and any environmental impacts where the water is sourced and where the wastewater is discharged.

Australians are facing major decisions in relation to the water future of our cities and towns—decisions not just by governments but also by communities and individual consumers. To help communities make informed decisions about drinking recycled water, quality information needs to be disseminated in an accessible and transparent manner. Each water supply option will have advantages and disadvantages.

This Waterlines publication from the Commission is a contribution to the national debate about the use of recycled water for drinking. Through such contributions, the Commission aims to encourage innovation in water recycling, and ultimately improved water security for Australians.

