# **NOD - National Outfall Database**

## Providing information to unlock recycled water

### Facilitating a market for recycled water

The strategic aim of the National Outfall Database is to facilitate the building of a more accessible market for wastewater recycling.

### Why facilitate a market for recycled water?

Droughts are predicted to increase in their duration and severity due to the impacts of global climate change<sup>1</sup>. As a result of this variability of water supply the use of wastewater in the form of recycled water has emerged as a new resource. Policies and targets for recycled water use now exist at all levels of Australian government. Despite this, during the Australian drought year of 2004-05, more than 1.6 million ML of wastewater was discharged to Australian waters without recycling or reuse<sup>2</sup>.

#### Changing the way we control information on recycled water

It is expected that the development of a market for wastewater will be accelerated where information on urban wastewater is more accessible. It is anticipated that a new approach could allow potential buyers access to the location, volume, quality and price of this water. This data will inform decision making across a range of augmented water supply activities including investment in recycling and reuse projects, sewer mining, town planning and property development decisions, rezoning of land, as well as many other activities.

#### A mechanism to capture the economic potential of wastewater

Urban wastewater has considerable economic potential. If treated to a Class A+ tertiary standard and sold for non-potable domestic use (at a unit price of \$1.60/KL³), wastewater currently being discharged may be worth as much as \$2.6 billion per year without taking into account demand elasticity.⁴

#### What will the National Outfall Database provide?

This research will contribute to a multi-disciplinary project which will involve the development of a database of the networks of wastewater disposal in Australia. It will contribute significant original knowledge by providing an Integrated Water Resource Management approach and a full life cycle perspective of water to decision makers. By merging this database in a comprehensive market based tool, it can ultimately assist in taking Australia towards the sustainable use of water resources and a reduction in the negative ecosystem impacts associated with mass wastewater discharge.

<sup>&</sup>lt;sup>1</sup> Australian Government Bureau of Meteorology, 'Monitoring Australia's Changing Climate', (Viewed 21 February 2011 at 12:56pm) <a href="http://www.bom.gov.au/climate/change/docs/FactSheet3.pdf">http://www.bom.gov.au/climate/change/docs/FactSheet3.pdf</a>>.

<sup>&</sup>lt;sup>2</sup> Australian Bureau of Statistics, Water Account Australia 2004–05, National Information and Referral Service, Canberra.

<sup>&</sup>lt;sup>3</sup>Allconnex water, 'Frequently asked questions', (Viewed 21 February 2011 at 12:58pm) < http://www.allconnex.com.au/SiteCollectionDocuments/FAQ%20-%20Class%20A%20plus%20recycled%20water.pdf>.

<sup>&</sup>lt;sup>4</sup> This estimate is based on a current Australian population of approximately 22,559,141 people = 0.072442208681616 ML per person per year = 0.000198471804607 ML per person per day = 198 litres per person per day. 1,634,234 ML per year = 1634234000 KL and therefore \$1.60/KL x 1634234000 = \$2.614.774.400 = \$2.6 billion.