

# WATER AND WATER RE-USE

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## 1) ***Background to Water Re-use***

### **WATER RE-USE (NEW WATER)**

- Ecologically sustainable development relies on innovative uses of existing resources. Recent drought conditions have increased the need to rethink the re-use of wastewater.
- Wastewater from both domestic and industrial sources represents a guaranteed water supply and recent studies indicate that this resource is currently under-utilised.
- An investigation of opportunities for wastewater re-use in the SA Murray-Darling Basin commenced in 2005 to help shape and accelerate investment in the region's wastewater re-use programs.
- This "New Water" project supports three major objectives:
  - a. match wastewater supply, from both domestic and industrial sources, with beneficial uses
  - b. maximize beneficial re-use of wastewater
  - c. reduce the demand for raw or mains water
- Given the current severe drought conditions and an increasing awareness of over allocation of water resources within the Murray Darling Basin, the potential uses of recycled wastewater now appear even more attractive to businesses as an alternative to raw water from the River Murray. <http://www.samdbnrm.sa.gov.au/Home/tabid/226/Default.aspx>
- The New Water Project has identified a number of sources of significant volumes of water that may have the potential to offer relief to irrigators in the short term as an alternative water source and/or provide a sustainable guaranteed water resource for businesses with the vision to permanently switch to re-cycled wastewater.

## 2) ***Regional Development / Expansion Potential***

- Priority wastewater reuse projects identified for the Murraylands: (total megalitres 2410 ML)
  - Big River Pork and Dairy Farmers wastewater re-use application subject to feasibility study – 530ML
  - T&R Pastoral Pty Ltd abattoir wastewater reuse subject to a feasibility study – 768 ML
  - Murray Bridge CWMS wastewater reuse subject to successful negotiations with Thames Water – 970 ML (CWMS = Community Wastewater Management Systems)
  - Taillem Bend CWMS and industrial waste water reuse – 100ML
  - Pinnaroo CMWS reuse for golf course – 45ML

- Wastewater Technologies - <http://www.ebcrc.com.au/bioprocesses.htm>