

## **DESALN8 Pty Ltd**

### **A specialist company developing and commercializing novel *in situ* desalination (ISD) technology.**

Desaln8 Pty Ltd, utilizing ISD technology, provides a water service by extracting freshwater from brackish groundwater for a range of uses, including drinking water, irrigation, industrial and mining supplies. It uses novel down-hole technology. This system is designed to be economic and environmentally friendly.

#### **Background:**

97% of the world's water is brackish, saline or otherwise of poor quality. Surface water makes up less than 0.1% of all freshwater, which emphasises the need to conserve this valuable resource. Brackish, salty groundwater, however, potentially provides a resource which until recently has not been considered for water supplies. ISD technology utilizes this resource to augment existing water supplies or to provide a high quality supply where none existed previously. *ISD* provides a distributed supply of water (multiple water wells), as opposed to centralised supply of water. It also distributes (lessens) environmental impacts through regional application, and its unique design capability of returning water from the system to deeper groundwater.

#### **Why use *ISD*?:**

- Development of agriculture, industry and communities often restricted by availability of water of a suitable quality
- ISD technology can provide a supply where only water of poor quality is available
- Desaln8 can work with developers, industry and the community to ensure a supply of fresh water to an appropriate standard of quality
- ISD uses a whole-of-system approach to pump feed water to the down-hole system, to extract high quality freshwater and return residual poor quality water back into groundwater in one unique operation
- Environmental impacts of ISD are minimal, as returned water of up to twice the salinity of natural (feed) groundwater is in many cases within the range of groundwater salinities lower in the source aquifer where water is returned.

### ***ISD* addresses**

- Water shortages due to prolonged drought
- Absence of potable or other high quality supplies
- Protection of, or improvement of environmental quality of ecosystems and land-use systems.
- Sustainable developments, sustainable communities, environmental protection

### **Desaln8 provides**

- Feasibility studies for supply of water for given requirements
- Preliminary investigations of suitable aquifer systems and pilot studies to assess *ISD* performance criteria
- Water supply to agreed specifications
- Ongoing maintenance of *ISD* systems

**[www.desaln8.com](http://www.desaln8.com)**