



Intellectual Capital for Communities in the Knowledge Economy Nations, Regions, Cities and Emerging Communities



WORLD BANK INSTITUTE
Promoting knowledge and learning for a better world

World Conference on Intellectual Capital for Communities
- Fourth Edition -



Building Intellectual Capital on Water Management in a Desert Environment

**Presentation by
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NT Department of Primary Industry Fisheries and
Mines**

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SOLAR
CITY

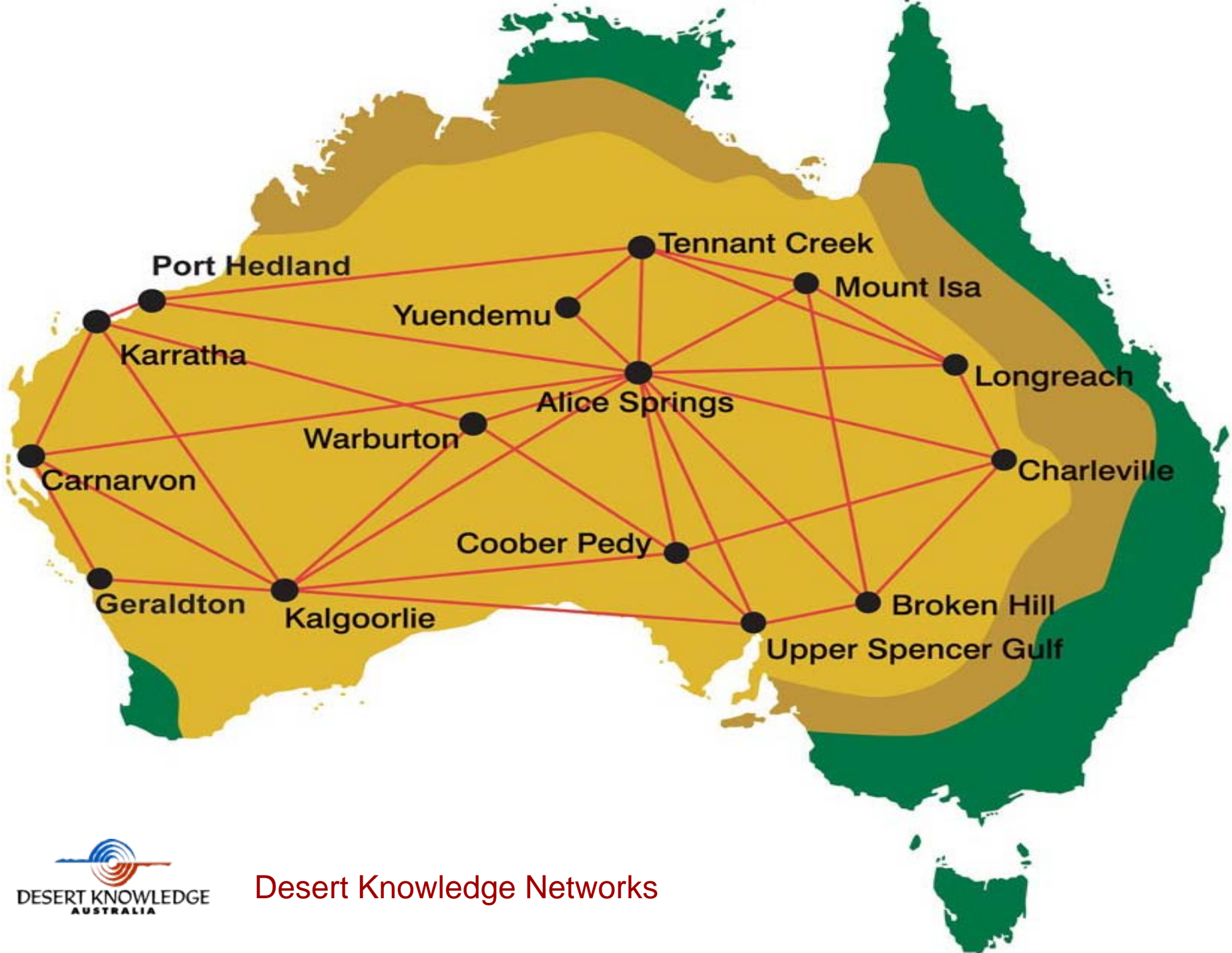


Alice Springs
Australia's Solar Centre



Desert Knowledge Movement





Idea

Desert know-how

+ Desert ideas

+ Desert innovation

= Desert knowledge

(Formal & informal; Indigenous & non-Indigenous; existing & required/potential)

The Context



The Alice Springs Water Reuse Scheme is a part of the Urban Water Management Strategy, which seeks to identify and evaluate options for the development of water supply and waste management systems into the 21st century.

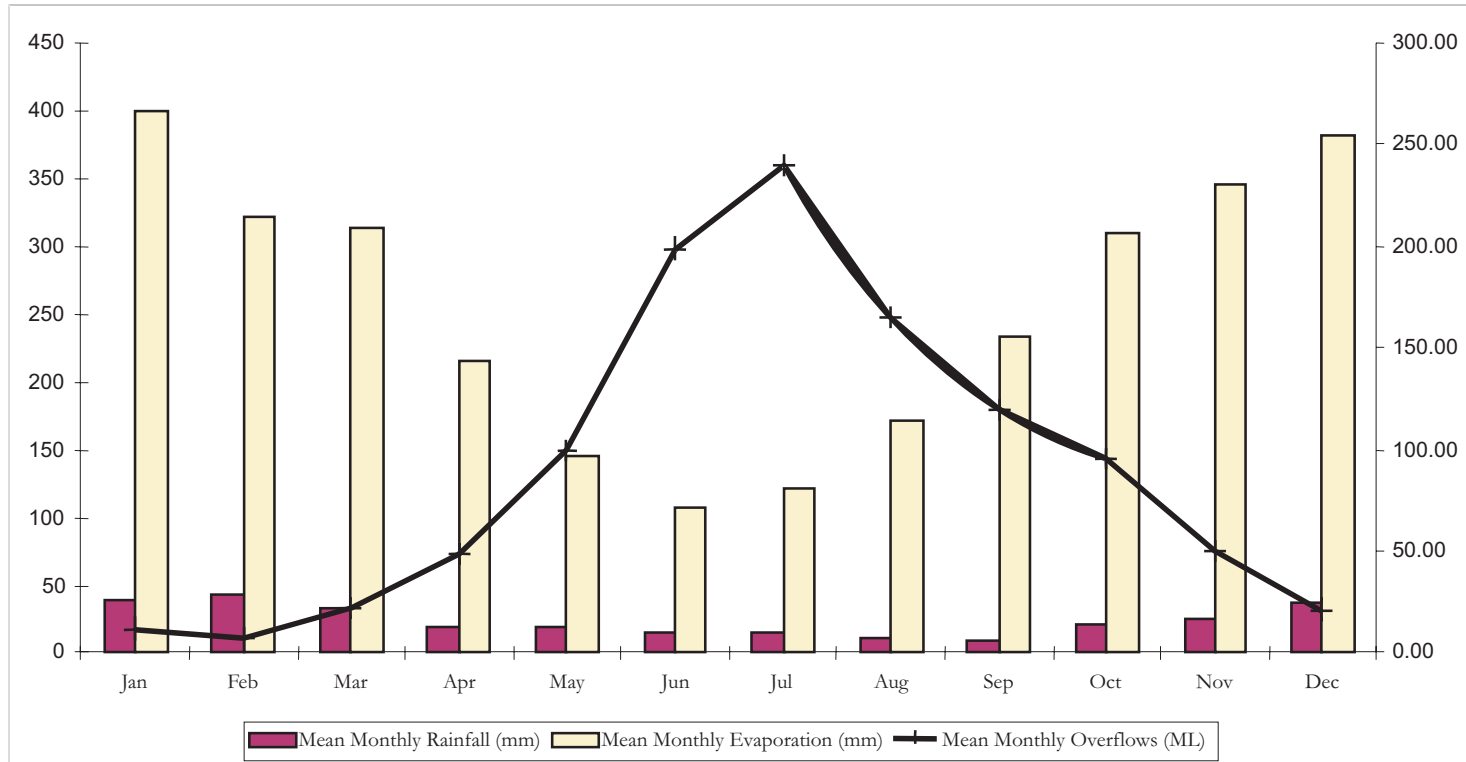
The Project

- **Identify and develop a system to store and reuse waste water from a desert community of 30 000 people (plus 500,000 visitors) in order to:**
 - **Reduce pressure on potable water supplies**
 - **Reduce impacts of waste water discharge**
 - **Create economic, social and environmental benefits from a current liability**

Process of Intellectual Capital Development in Water Management

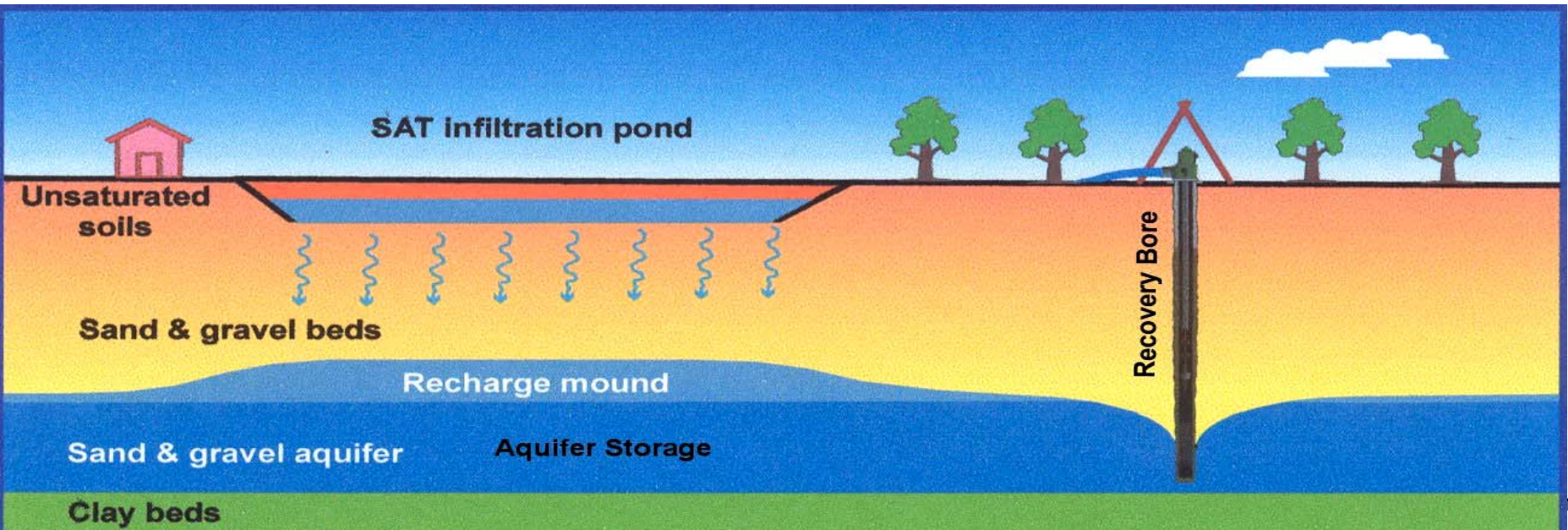
- **Identifying sources of information which address the particular local situation**
- **Assessing knowledge from global sources on water management**
- **Negotiating with indigenous people to incorporate their intellectual property within a framework of locally adapted knowledge**
- **Developing local expertise relevant to communities by integrating elements of water management relevant to the environment**
- **Rights of access to knowledge and sharing of outcomes**
- **Appropriately acknowledging and valuing knowledge sources**

Water in an arid environment



Soil-Aquifer Treatment?

- **Soil-aquifer treatment or geopurification involves infiltrating storm or waste water through the soil to the aquifer below and is a form of artificial recharge.**



Key Project Elements

- **Site selection**
- **Surveys of archaeology, flora and fauna**
- **Hydrogeological investigation**
- **Research into Soil Aquifer Treatment**
- **Compilation of a Geographic Information System**
- **Development of infrastructure and process for water quality improvement including a Dissolved Air Flotation treatment facility**
- **Construction of pipeline and infiltration basins**
- **Statutory Approvals including Public Environment Review, Aboriginal Areas Protection Authority Certificate, Health Approval, Groundwater recharge and extraction licence**

Community Engagement

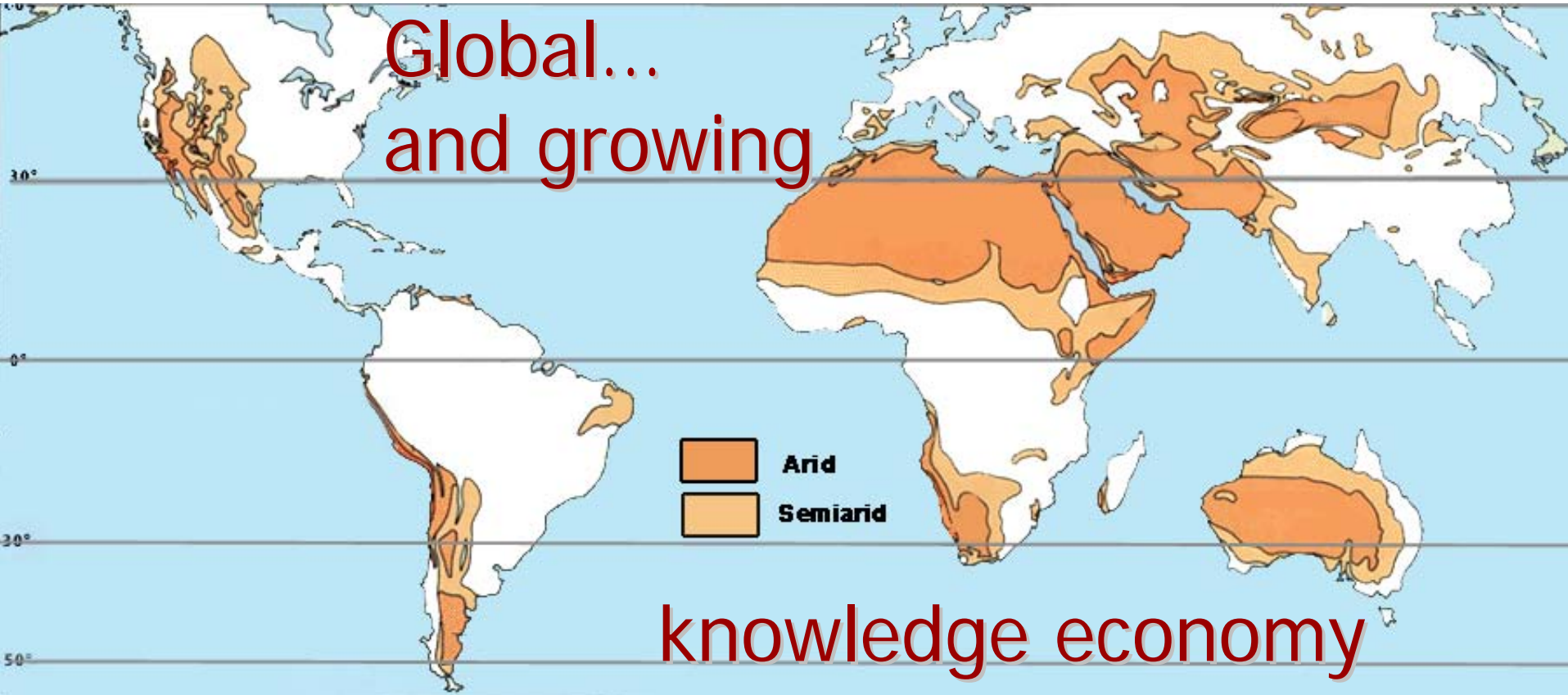
- **Site visits and briefings**
- **Regular public displays**
- **Consultation with traditional owners**
- **Presentations**
- **Mail outs**
- **Open line to project manager**
- **Fact sheets**
- **Website**



Community Ownership Approach to Intellectual Property Rights

- **Incorporating Intellectual Capital into regional best practice and national guidelines for managed aquifer recovery and reuse for agriculture rather than patenting**
- **Intellectual Property from this project consists of expertise developed in regional project teams which can be applied to other projects efficiently and effectively**
- **Acknowledge and address specific Intellectual Property ownership rights**
- **The outcome is public availability of knowledge while building local capacity**

Opportunity...



One billion people

1/3 earth's land surface

Australia 11% of world desert

Other Complementary Projects



Desert Knowledge Precinct Solar Demonstration Facility

- **Initially 12 companies comparing a large number of technologies**
- **Project managed by the Centre for Appropriate Technology**
- **Scheduled completion end 2008**

Linked to Alice
Springs Solar City

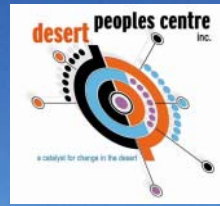
Acknowledging Water Reuse in the Alice Project Partners

- **A joint initiative of the Northern Territory Power and Water Corporation and the Department of Primary Industry, Fisheries and Mines with expert assistance from:**
 - **Department of Natural Resources Environment and the Arts**
 - **Department of Planning and Infrastructure**
 - **Department of Health & Community Services**
 - **CSIRO**
- **Power and Water has invested more than A\$11 million and NT Government has made a significant contribution**



Business and Innovation Centre

Headquarters



Developing Desert Directions: Rethinking the Future

Monday, 3 - Thursday, 6 November 2008
Alice Springs Convention Centre
93 Barrett Drive
Alice Springs, Northern Territory 0870

Critical Dates

Abstract Submission Deadline:	Friday, 13 June 2008
Submission Notification:	Friday, 1 August 2008
Early Bird Registration Deadline:	Friday, 19 September 2008
Accommodation Booking Deadline:	Wednesday, 1 October 2008

2008

Desert Knowledge Symposium and Business Showcase

www.desertknowledge2008.com



Where to find more information

- www.desertknowledge.com.au
- http://www.powerwater.com.au/aboutus/water_reuse.htm
- [**http://www.nt.gov.au/dpifm/**](http://www.nt.gov.au/dpifm/)
- **Phil Anning +61 (0) 8 8951 8100**