



ICE WaRM Seminar Series

In Search of Sustainable Yield: Beyond Myth and Mystery with Socio-technical Groundwater Management

The International Centre of Excellence in Water Resources Management (ICE WaRM) is proud to host Suzanne Pierce as the keynote speaker at a free seminar. Suzanne is in South Australia as part of the ICE WaRM Visits and Exchanges Programme.

WHEN Wednesday July 7th 2010, 4pm

WHERE SA Water
VS 1, SA Water Learning Centre
250 Victoria Square, Adelaide

Registration is essential.

RSVP before 1st July:

Email: reception@icewarm.com.au

Phone: 08 82 365 200

Summary

Groundwater is a critical and strategic resource for economies and communities the world over. Sustainable yield is a technical term defined by groundwater scientists to delineate the volume of available water from an aquifer resource. Since the term first appeared in the scientific literature, the concept has been referred to as mythic, mysterious, and even occult. The haze surrounding this quantity of water may be due to the fact that the very definition of sustainable yield incorporates science-based considerations with non-scientific and socially derived components.

From a hydrogeological perspective the best approach for understanding a groundwater system is to measure and model aquifer performance, yet cognitive sciences show that people tend to make decisions based on perceptions rather than measured variables or information alone. Approaches that integrate social aspects and concerns together with computer-based models of groundwater can cross the chasm between science and society.

Groundwater resource science is transitioning toward the emerging field of Integrated Water Resource Management (IWRM). IWRM engages groups in collaborative decision making with the use of science-based information and simulation models. These collaborative processes meld the use of scientific information with citizen participation and technical decision support systems, creating a socio-technical approach.



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Dr. Suzanne A. Pierce is a Research Assistant Professor with the Center for International Energy and Environmental Policy of the Jackson School of Geosciences from The University of Texas at Austin. A trained hydrogeologist with a focus on transdisciplinary approaches, her research integrates earth resource problems with decision processes to generate tractable, transparent, and adaptive management and policy solutions.

In early work, Dr. Pierce established a multi-stakeholder decision support system for determining sustainable aquifer yield to aid real-world regional groundwater management planning efforts in central Texas. In addition, Dr. Pierce has worked in the international metals mining industry and engaged in systems analysis for the United States national laboratories system for energy-water interdependencies.

Currently she is researching science-based perceptions of risk in geothermal energy development for the Tatio Geysers Basin of Chile and collaborating with cognitive modelers to develop a hydroinformatic system for water allocation in the Middle Rio Grande Basin of New Mexico.

Dr. Pierce has built a record of research achievement in environmental and groundwater resources management, energy-water interdependencies, and collaborative systems modeling. To date her work has garnered recognition at the local, regional, and national levels. Dr. Pierce has begun collaborating with the National Centre for Groundwater Research and Training through support from the ICE WaRM Liaison programme.

PROGRAMME

4:00pm	Introduction to ICE WaRM
4:10pm	"In Search of Sustainable Yield: Moving beyond Myth and Mystery by using Socio-technical Integration for Groundwater Management", Suzanne Pierce
4:45pm- 5:15pm	Refreshments and Discussion
