

## Distinguished Lecturer Series

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**Dr. Glen Walker**

### Climate Change and Australian Groundwater: Current State of Knowledge and Future Responses

#### Abstract

The climate shift in south-western Western Australia and the Millennium Drought has highlighted the need to better understand how water resources will be affected by changing climate across Australia. Australia has long experience with managing water resources in a variable climate. This, together with the Water Reform has meant that Australia is well placed, compared to other countries, to meet the challenges to groundwater management. While the uncertainties associated with the predictions of global climate models can be large, there can be significant risks to groundwater users, groundwater-dependent ecosystems, coastal aquifers and baseflow, without adaptation to changing climate. These risks are higher for systems that are already stressed from consumptive use and management options are being 'hedged' while the timing and magnitude of climate shifts become clearer. This talk will provide an overview of the results from recent projects around Australia with learnings about recharge and discharge processes and associated management and recommendations made with respect to knowledge gaps and approaches to addressing climate change.

#### Dr Glen Walker

Glen Walker has conducted groundwater and salinity research for over 30 years with CSIRO in Adelaide. Specific research interests included recharge and discharge, vegetation and salinity, catchment modelling for salinity management, groundwater-surface water interactions and climate impacts on groundwater. He also led the groundwater component of the Murray-Darling Basin Sustainable Yields project and is a recipient of WE Woods Award for National Excellence in Salinity Research. Since his retirement from CSIRO in 2014, Glen has been consulting with his company, Grounded in Water, and is a member of the Independent Scientific Expert Committee for Coal Seam Gas and Large Coal Mining Development.



Dr. Glen Walker

#### 2017 Tour Dates

**Adelaide:** Thurs, 5th October  
**Canberra:** Tues 10th October  
**Melbourne:** Tues, 17th October  
**Darwin:** Thurs, 26th October  
**Sydney:** Tues, 31st October  
**Brisbane:** Wed, 1st November  
**Perth:** Thurs, 9th November

#### RSVP is essential

To register please visit:  
<http://www.groundwater.com.au/events/1114>

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