

iah Australian National Chapter NSW Branch



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Tuesday 22 July 2014 5:30 pm for 6 pm start

Dubbo Zoo Conference Centre

For late arrivals, please phone Katarina David on 0412 080 360 for access

IAH NSW proudly presents a talk by **Prof Andy Baker**, Director, Connected Waters Initiative Research Centre, UNSW

Groundwater research stories from the Central West NSW

This talk will present research results from the UNSW research team working in Central West NSW. The research utilises bore hole transects and bore fields in the Wellington region, funded through the Groundwater Education Investment Fund.

At the Wellington Caves, the caves have been used as a 'hydrological observatory'. Using artificial rainfall events to generate infiltration and recharge, a better understanding of the soil and karst system was gained. The results of long-term monitoring (2010 and ongoing) and infiltration experiments in the summers of 2013 and 2014 are presented.

At a slightly larger scale, the relationship between water level in the Bell River and adjacent alluvial and karst aquifers has been investigated. Using a combination of bore and cave water level monitoring at Wellington from 2010, the reported results provide improvements in our understanding of surface water – groundwater interactions in the catchment.

Comparison of Macquarie River and alluvial groundwater levels demonstrates the importance of large dam releases on the alluvial groundwater system. In the fractured rock aquifer, the use of in-situ fluorescence probes and drawdown experiments was undertaken to investigate the effect of groundwater abstraction on dissolved organic carbon fluxes.

IAH NSW Branch – 2014 Committee

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