

**17 August 2010**

**Time:** 5:00pm for 5:30pm start

**Venue:**

Hawken Auditorium  
Engineering House  
447 Upper Edward St  
Brisbane

**Cost:**

Members	\$15
Non Members	\$20
Students	\$10

*Please register to assist catering*

**Speakers:**

**Rachelle Willis**

Rachelle Willis is an Infrastructure Planning Engineer with Allconnex Water (formally Gold Coast Water) who has recently completed her ARC sponsored industry based PhD with the organisation on the topic of her presentation. Rachelle has published numerous papers and has presented at national and international conferences. Accolades received include IWA Best Paper Presented by a Young Water Professional and IWA Best Poster. Her undergraduate degree in Environmental Engineering (first class honours) resulted in the receipt of a Smart Women Smart State Award.

**Cara Beal**

Cara Beal is a Research Fellow with the Smart Water Research Centre at Griffith University. She has over 15 years experience in the water and wastewater industry as a consultant, government scientist and university researcher. Her areas of interest include sustainable urban water management, alternative water supplies, decentralised water/wastewater systems and soil conservation. Cara has an undergraduate honours degree in Environmental Science and a PhD in soil based wastewater treatment systems for which her thesis won the Qld ASSSI Excellence in Soil Science Award. Cara has published in several national and international journals and presented at numerous conferences. She is the past recipient of the CRC Young Water Scientist of the Year Award and AWA Michael Flynn (Best Poster) Award.

**Anna Hollingsworth**

Anna Hollingsworth is a Senior Infrastructure Planning Officer/Researcher with Allconnex Water. Anna has a Bachelor of Science with first class honours. As Project Manager of a number of planning projects, Anna is focused on ensuring sustainability is embedded into water services planning. Anna has been instrumental to numerous innovative water research projects and is heavily involved with the Australia Water Association and International Water Association.

## 3 Innovative Water Research projects

This session will disseminate the results of three innovative research collaboration projects undertaken with Allconnex Water, Griffith University and the Urban Water Security Research Alliance.

**Rachelle Willis**, will present a summary of the major findings from her 3.5 year end use research portfolio. The **Gold Coast Watersaver End Use study** involved data collected in residential homes in both dual and single reticulated supply regions on the Gold Coast. Details of the domestic end use consumption for Gold Coast residents and the end use water savings attributed to dual reticulated recycled water supply will be presented. Diurnal patterns of consumption in single and dual reticulated regions, the effect of water conservation and environmental attitudes on end use water consumption and the effect of alarming visual display monitors affecting shower end use water and energy conservation will be discussed. Details of industry application of results will conclude the presentation.

**Cara Beal** will be presenting results from a desktop study of **potable water reductions from internally plumbed rainwater tanks in SEQ** which she undertook while working with the Department of Environment and Resource Management and CSIRO. The study forms one component of the Urban Water Security Research Alliance Decentralised Systems project. The study aimed to estimate a range of savings from internally plumbed rainwater tanks installed in new residential developments as part of the requirements under the revised Queensland Development Code in January 2007. Results will be presented from four regions around SEQ using a method developed from historical council water billing data. The variation in mains water savings between and within regions will be discussed. Estimated mains reductions will be compared with modelled reductions using two predictive methods. The presentation will conclude with recommendations for Stage 2 of the analysis and a progress overview of Stage 2.

**Anna Hollingsworth**, will present the results of the **Gold Coast Seaway SmartRelease Project**, a collaboration between Allconnex Water, DHI Water and Environment and the Griffith Centre for Coastal Management. The project aimed to optimise the existing recycled water release system from the Gold Coast City's largest wastewater treatment plant, Coombabah, to the Gold Coast Seaway to minimise impacts to receiving water quality. The project involved an intensive water quality and current monitoring program, detailed hydrodynamic and advection dispersion modelling and the development of a sophisticated Decision Support System which links complex monitoring data, computational modelling and real-time analysis of meteorological, oceanographic and tidal conditions to ensure a best practice, sustainable recycled water release system.

The session will conclude with an open forum discussion.

Please join us for a few drinks and light supper after the presentation. The presentation will count as one hour towards your CPD.



**For catering purposes please register by 12pm on 13 August 2010**

(Event Code - LA20100817)

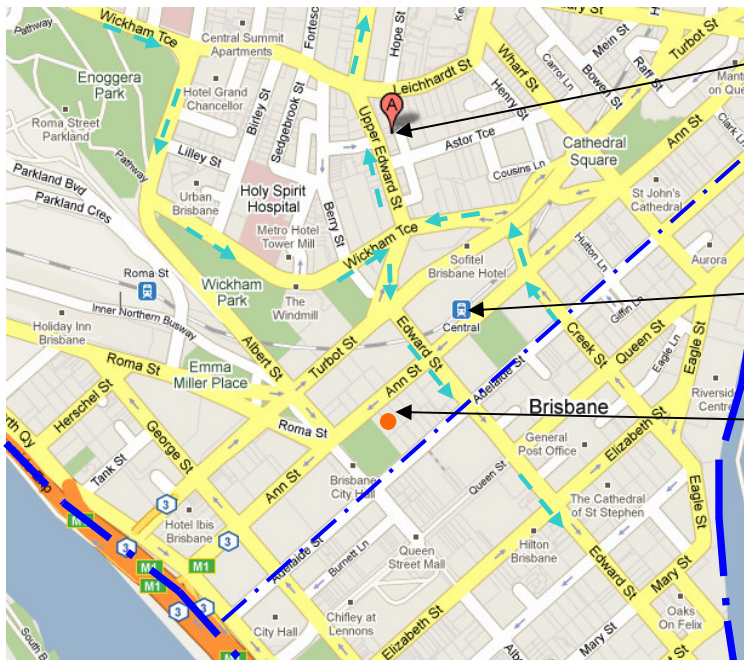
**To register:**

Please register online at

[http://www.engineersaustralia.org.au/events/event-detail.cfm?obj\\_uuid=5425A466-AA13-DB3F-38B5-D05B77F58A27](http://www.engineersaustralia.org.au/events/event-detail.cfm?obj_uuid=5425A466-AA13-DB3F-38B5-D05B77F58A27)

Please telephone Qld Division on (07) 3832 3749 for any registration enquiries.

**SSEE encourages you to travel by public transport.**



**Engineering House**  
447 Upper Edward St

**Spring Hill Loop bus**  
every 10 minutes until 6pm

**Central Train Station**

**Citycat**

**Transport Information Centre**

**Pedestrian - Cycle way**

For more information go to <http://www.translink.com.au/> or visit the **Transport Information Centre** at King George Square station, Ann Street Concourse.

**Visit the Engineers Australia website at:**

<http://www.engineersaustralia.org.au/>