

# HYDSOC SA Technical meeting

Thursday, 28<sup>th</sup> March 2019,  
Charles Hawker Centre, Waite Campus

## Securing low flows in the Mount Lofty Ranges

Presented by guest speakers:

**Kumar Savadamuthu**

Principal Hydrologist, Department for Environment and Water

**Ben Taylor**

Senior Environmental Engineer, Water Technology

Preceded by a presentation from the 2018 winners of the Ian Laing Prize:

**Is the Installation of Mini Hydropower Turbines in  
Water Transmission System Pipelines Cost Effective?**

Amber Smith and Anthony Cox



Hydrological Society  
of South Australia Inc.

### Agenda

5.00 pm – Nibbles and Drinks  
Meet the Speaker

5:45 pm– Presentations  
and questions

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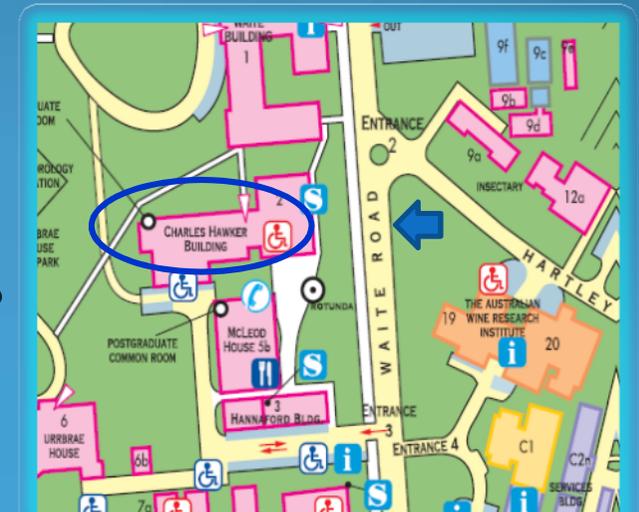
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### Location

Charles Hawker Centre  
Waite Road, Urrbrae  
Opposite to gate 2



Hydrological Society of SA Inc.

Technical Meeting Thursday 28<sup>th</sup> March 2019

Adelaide University Charles Hawker Centre, Waite Rd, Urrbrae

## **Topic: Securing Low Flows in the Mount Lofty Ranges**

### **Kumar Savadamuthu, Principal Hydrologist, Department for Environment and Water**

Kumar Savadamuthu is an engineering hydrologist with around three decades of professional experience in water management in public and private sector, in Australia and overseas. In his current role as a Principal Hydrologist with DEW, he has played a critical technical role in the conceptualisation, design and implementation of Water Allocation Plans (WAPs), including the ones for the eastern and western Mount Lofty Ranges (MLR). WAPs aim at enabling sustainable future development of water resources. However, to reduce the risk of existing development on the health of existing water dependent ecosystems, while ensuring water availability for productive purposes, returning low flows from some existing on-stream dams and watercourse extractions has been identified as a key action. Kumar will provide an overview of the status of devices and mechanisms currently used in returning low flows across catchments in the MLR.

### **Ben Taylor, Senior Environmental Engineer, Water Technology**

Ben has been an engineer with Water Technology and previously Australian Water Environments for 10 years. He has a wide range of experience including watercourse stabilisation works, water resource management, regional hydrology, and urban drainage design. One of the challenges with implementing LFBs is that every site is different. This presents design challenges to solve the problem for how to divert low flows around a dam to continue along the watercourse. Ben will present some examples from the design and construction of LFBs that has occurred over the past 2 years.

## **Is the Installation of Mini Hydropower Turbines in Water Transmission System Pipelines Cost Effective?**

### **Amber Smith and Anthony Cox**

Amber and Anthony graduated from the School of Civil, Environmental and Mining Engineering, University of Adelaide in 2018, and are the winners of the Ian Laing Prize for 2018. They will present their research project on the feasibility of mini hydropower through an exploration of whether the benefits from energy generation outweigh the upfront expenditure of installation.