



## The Future of Wetlands for Waterway Protection

**Mr Simon Roberts**<sup>1</sup>, Mr Jarrod Luxton<sup>1</sup>, Dr Dale Browne<sup>1</sup>, Mr Gary Walsh<sup>1</sup>, Dr Peter Breen<sup>1</sup>, Mr Hugh Duncan<sup>2</sup>, Prof Tim Fletcher<sup>2</sup>, **Ms Sarah Watkins**<sup>3</sup>

<sup>1</sup>E2Designlab, <sup>2</sup>The Waterway Ecosystem Research Group, Faculty of Science, The University of Melbourne, <sup>3</sup>Melbourne Water

### **Biography:**

*Simon has expertise in strategy, design, policy, law and communication. A creative thinker, he is passionate about interdisciplinary urban design, Water Sensitive Urban Design and Integrated Water Management. Simon is also the former President of AWA Young Water Professional Committee (Vic).*

Urbanisation, population growth and climate change are placing existing water sources under increasing strain and creating significant environmental degradation of receiving waters. Constructed wetlands provide an opportunity to address these issues through stormwater treatment, fit-for-purpose water supply, peak flow attenuation and the provision of wildlife habitat and amenity. While traditionally focusing on treatment, wetlands can potentially reduce stormwater excess volumes to rebalance hydrology through evapotranspiration, infiltration and stormwater harvesting. This presentation explores design modifications to significantly and cost effectively increase stormwater volume reductions for waterway protection as well as increase stormwater harvesting yields. With the support of real time data collection and management, these design modifications have the potential to revolutionise approaches to waterway protection and stormwater harvesting.