A selection of publications

A career that has included academic, commercial and policy advisory positions has resulted in partial recording of the publication record of Dr Coombes. This is particular relevant for the last seven years of employment as a managing director of a consulting company and as a government chief scientist. Nevertheless, Google Scholar has recorded at least 152 publications, 1,495 Citations, h-index of 20 and 10-index of 37 which demonstrates high impact publications. The following Figure 1 also demonstrates increasing impact of publications.

![Figure 1: Cumulative citations of publications](image)

Note that the partial record in MS Academic Search indicates 41 publications with 237 citations and the recent joining of Researchgate has already recorded 115 publications, 450 citations, 2610 views and 260 downloads which also indicates high impact publications.

Ten influential publications by Dr Peter Coombes

Coombes Peter John, Argue J R, Kuczera George Alfred, 'Figtree Place: a case study in water sensitive urban development (WSUD)', *Urban Water*, 1 (4) 335-343 (2000). Cited in 104 other publications. This investigation outlines the design, approval processes and monitored performance of an icon urban renewal project for Water Sensitive Urban Development.


Lower Hunter and Central Coast water supply systems and associated economics that is based on "big data" inputs.

Coombes Peter John. Rainwater tanks revisited: new opportunities for urban water cycle management. PhD Thesis at completed at University of Newcastle Australia (2002). Cited in 64 other publications. This thesis developed and demonstrated integrated systems analysis of water supplies systems for Newcastle and the Central Coast regions of New South Wales and associated systems economic methods.


Coombes Peter John, Barry M E, 'The effect of selection of time steps and average assumptions on the continuous simulation of rainwater harvesting strategies', Water Science and Technology, 55 125-133 (2007). Cited in 24 other publications. It is commonplace to analyse the performance of local scale measures including rainwater tanks using average assumptions in simulations at monthly or annual time steps. This investigation highlights that a range of current approximations used in analysis of local scale water strategies produces substantial differences in performance.

Coombes Peter John. Energy and economic impacts of rainwater tanks on the operation of regional water systems. Australian Journal of Water Resources. 11 (2) 177-191 (2007). Cited in 9 other publications. This investigation included Systems Analysis of 14 water supply systems throughout New South Wales to develop physical and economic relationships for impacts of local scale solutions on regional water supplies.

Peter John Coombes and Michael Barry. The relative efficiency of water supply catchments and rainwater tanks in cities subject to variable climate and the potential for climate change. Australian Journal of Water Resources (2008). Cited in 15 other publications. This study has analysed the relative efficiencies of runoff into dams supplying Brisbane, Melbourne, Perth and Sydney, and of rainwater harvesting in those cities. It is shown that both respond differently to drought and climate change forcing, with decentralised solutions demonstrating greater resilience to changing climate.

Shah Vikaskumar, Dunstan Richard Hugh, Geary Phillip Milton, Coombes Peter John, Roberts Timothy Kilgour, Rothkirch Tony Brian, ‘Comparisons of water quality parameters from diverse catchments during dry periods and following rain events’, Water Research, 41 3655-3666 (2007). Cited in 31 other publications. In this study, 12 catchments sites located along the north coast of New South Wales in Australia were grouped into the four categories of septic, cattle, sewage treatment plant (STP) and forested sites via cluster analysis of observations based on their land use patterns.

Coombes Peter John, Kuczera George Alfred, 'Integrated Urban Water Cycle Management: Moving Towards Systems Understanding', 2nd National Conference On Water Sensitive Urban Design, Brisbane Convention Centre, Brisbane (2002). Cited by 31 other publications. This publication utilises integrated systems analysis techniques to highlight that the water industry is operating in a "sub-optimal" operating and policy domain. A range of principles of development of Systems Analysis and policy solutions for integrated water cycle management are presented.

### Journal Articles


**Chapter in Book**


**Conference Publications**


Coombes P.J., Insights into Household Water Use Behaviours Throughout South East Queensland During Drought. 34th Hydrology and Water Resources Symposium, Sydney, NSW (2012)

Coombes P.J., Integrated Systems Analysis to Create Evidence Based Policies for Water Cycle Reform in Greater Melbourne. 34th Hydrology and Water Resources Symposium, Sydney, NSW (2012)


Geary Phillip Milton, Lucas Steven Andrew, Shah Vikaskumar, Dunstan Richard Hugh, Coombes Peter John, ‘Contaminant transport in surface and groundwaters from wastewater systems in a coastal


Thyer Mark Andrew, Hardy Matthew James, Coombes Peter John, Patterson C, ‘The impact of end-use dynamics on urban water system design criteria’, *Rainwater and Urban Design Conference 2007, Sydney* (2007)


Evans Craig Andrew, Coombes Peter John, Dunstan Richard Hugh, Harrison Tracey Lee, 'Identifying the Main Influences on the Microbial Composition of Roof Harvested Rainwater and the Implications for Water Quality', *Book of Proceedings - 7th International Conference on Urban Drainage Modelling and the 4th International Conference on Water Sensitive Urban Design (7UDM + 4WSUD)*, Grand Hyatt Melbourne, Australia (2006)


Coombes Peter John, Kozarovsky P, ‘Development of a regional model to understand the hydrological and economic benefits of rainwater tanks across New South Wales’, The 29th Hydrology and Water Resources Symposium, Engineers Australia, Canberra, Australia (2005)


