


AUSTRALIAN
WATER
ASSOCIATION
**NSW
WATER
AWARDS**

The NSW Awards are proudly sponsored by: 

2018 Finalists

Program Innovation Award



CRC for Low Carbon Living: Beneficial Reuse of Biosolids, Sydney Water (UNSW, SA Water, SUEZ, Hunter Water and University of South Australia)

This project is entitled “beneficial reuse of biosolids from wastewater treatment operations” and is a part of the CRC for low carbon living. This is a collaborative project between members of the water industry as well as academic partners. These partners include members from Sydney Water, Suez, UNSW, and the University of South Australia.



Parkes Integrated Water Cycle Program, Parkes Shire Council

Parkes Shire Council's Integrated Water Cycle Program takes a quadruple-bottom-line approach to improving water servicing to the Parkes community. Based around an evolving Strategy developed in close consultation with the community, the 15-year program has comprised a broad suite of activities, ranging from community awareness campaigns to large infrastructure renewal projects.



System Blueprints Program, Sydney Water (AAJV: AECOM-Aurecon Joint Venture Sydney, ENSureJV: GHD-Jacobs Joint Venture Sydney)

Sydney Water has developed an innovative program of System Blueprints which promotes optimised investment decisions, environmental outcomes and improved customer services. Sydney Water's innovative program is mature and transferable, and through an integrated team approach with its consulting partners, has led to an uplift in asset planning across the industry.

Research Innovation Award



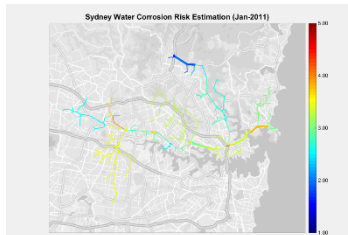
A new molecular test for the detection of toxic cyanobacteria, The University of Newcastle and the University of New South Wales

Brett Neilan is a specialist in toxic cyanobacterial genetics. His research has had a major impact on global water quality and has been translated into several diagnostic tests for harmful algae. His contributions to science have been recognised by three Eureka prizes and the NSW Scientist of the Year award.



Catchment Needs Assessment Framework Project, The University of Technology Sydney (Crown Land and Water)

The Catchment Needs Assessment Framework project was an interdisciplinary research project that combined the emerging field of socio- hydrology with advanced analytics, machine learning and data visualisation to deliver a world first government technology solution of its type for NSW Crown Land and Water to enhance water resource management.



Success in Data Analytics – Sydney Water and Data61 Collaboration, Data61, CSIRO and Sydney Water Corporation

Sydney Water and Data61 are collaboratively researching advanced analytics approaches to solving water industry challenges. Through years of effort, the innovative data analytic approaches they developed have successfully achieved better services for customers and have delivered world class network performance.

Infrastructure Project Innovation Award



Burwood Beach Wastewater Treatment Works UV disinfection system, Aurecon, Hunter Water and Abergeldie Complex Infrastructure

The Burwood Beach Wastewater Treatment Works UV disinfection system was installed by Hunter Water, Aurecon and Abergeldie Complex Infrastructure. The unique arrangement of UV lamps makes it the first large scale application of its kind in Australia. After six months in operation the system has met all of its environmental, economical and social project objectives.

Googong Township Integrated Water Cycle, Stantec



In 2006 MWH, now Stantec, was engaged by Googong Township to deliver the wet infrastructure for Googong. In response to the Millennium Drought the town had to be more resilient to variable water supply, so Stantec conceptualised the Integrated Water Cycle and developed a state-of-the-art water recycling plant to achieve 60% potable water savings.

Parkes Integrated Water Infrastructure Renewal Project, Parkes Shire Council

Parkes Shire Council is a progressive regional organisation that embraces innovation and continuous improvement. The Parkes Integrated Water Infrastructure Renewal Project is a once-in-a-lifetime investment delivering new water and sewage treatment plants, a step-change in water recycling capability, and augmenting existing infrastructure in a whole-of-water-cycle package of works.

Student Water Prize



Investigating the Bioaccumulation of Micropollutants within Biota Living in Reclaimed Water
Ashley Terechovs, Shoalhaven Water & University of Wollongong

Ashley's study focuses on the challenges associated with water reuse in the agricultural industry, especially in regards to micropollutant contamination. This is the first study to investigate a fish species living in reclaimed water and provides insights into contamination in an innovative way. The results of this study can also assist to improve the Australian Guidelines for Water Recycling (AGWR).

Ashley Terechovs graduated with honours from a bachelor of civil and environmental engineering at the University of Wollongong. She is currently employed by Shoalhaven Water and completed her undergraduate thesis during her employment as trainee engineer.

Ashley's career objective is to continue to strive for innovation within the water industry and endeavour to provide solutions to the challenges in environmental and civil engineering.



Measuring spatial influence of recycled water in Cockle Creek using stable nitrogen isotopes
David Workman, Univeristy of Newcastle

David's study used stable isotopes of nitrogen derived from mangrove leaves and pneumatophore epiphyte to measure spatial influence of communities within a creek where recycled water was in use nearby.

A father of two adult boys that make him very proud, old as a student but young at heart, David has just completed 7 years of study, and is embarking on a path to a career in the water sector, focussing on its interaction with our marine and estuarine environments.



ROBUST SENSOR TECHNOLOGIES COMBINED WITH SMART PREDICTIVE ANALYTICS FOR MODELLING CONCRETE CORROSION IN SEWERS
Karthick Thiyagarajan, University of Technology Sydney

Karthick's research vision lies at the intersection of sensor technologies, predictive analytics and mechatronics. He has an interest in developing robust sensing methods, diagnostic tools and predictive models for critical infrastructures and employs a combination of machine learning techniques to achieve this vision.

Karthick's Ph.D. aims to innovate current sewer corrosion monitoring practices. His research delivers a new smart sensing and analytic platform for providing information-rich sparse data to the analytical models for more accurately predicting the rate of concrete sewer corrosion. His sensors have potential to revolutionize the way utilities protect sewer assets.

"Overall, my research reduces uncertainties in corrosion prediction; improves chemical dosing strategies and saves capital expenditure on sewer pipe rehabilitation".

Kamal Fernando Mentoring Award



Annalisa Contos, Principal, Atom Consulting

Annalisa is a passionate water professional who's mentoring activities have spanned more than two decades. Her mentoring activities have ranged from undergraduates looking to enter the industry, mid career professionals to senior professionals considering establishing their own business. Annalisa is an outstanding mentor and leader who has made an impressive contribution across the water industry.



Saravanamuth Vigneswaran, Director, Centre for Technologies in Water and Wastewater, The University of Technology Sydney

Professor Vigi has provided high quality mentoring to his students, water professionals and colleagues for over 27 years. Because of his passion for water, and his empathetic heart he has been able to nurture and foster water professionals technical and professional skills, by being able to bring out the best in people. Through his dedication he has always ensured those in need of guidance and assistance, receive the support required to achieve in their chosen area of interest.



Bruce Murray, Managing Director, City Water Technology

Bruce has over 30 years of engineering experience, principally in the fields of water and wastewater treatment. Bruce is renowned as a water treatment specialist and has been employed as an independent expert or to provide technical evidence on many occasions. Bruce is the Managing Director of City Water Technology and has been since 1990.

Young Water Professional of the Year

Award Category Sponsor:



Ana Barradinhas, Professional Engineer - Water & Wastewater, AECOM

Ana is an environmental engineer with over 4 years of professional experience in the water & wastewater industry. She has international experience, having begun her career in the UK where she gained skills in water network risk assessment and operations. Since joining AECOM, she has been involved in water and wastewater infrastructure planning and design, condition assessment, asset solution and maintenance for both public and private sector clients.

Ana strives to empower young women and understands the importance of inclusion and diversity. Ana is helping to secure a better future with her passion for the water sector.



Casey Magee, Senior Process Engineer, GHD

Casey is a passionate water engineer, with a proven talent for connecting people and fostering positive and productive teams. As a wastewater process engineer she has helped shape planning and design decisions for municipal treatment plants across Australia. She has continually stepped outside her professional role to broaden her perspective and share her passion with the wider water sector, especially through the Australian

Water Association's Young Water Professionals and Engineers Without Borders.

Casey believes that engineering communication and human-centred approaches are key to effectively engaging with the complex challenges faced by the water industry in Australia and worldwide. For this reason she is on a constant learning curve to extend her abilities as a communicator, facilitator and mentor.



Kathy Thomas, Project Engineer, UGL

Kathy is a dynamic project engineer who has sought to deliver water infrastructure projects she is passionate about, and give back to the community through information sharing and research. Kathy has always strived to contribute to the water sector throughout her career.

Whilst working as an Undergraduate at the Water Corporation, Kathy developed the initial environmental risk matrix of wastewater effluent, which was used as a baseline model for a statewide approach to assessing environmental risk.

Kathy was involved in a community development meeting in Geraldton to discuss solutions to saline intrusion, and helped develop a solution involving water recharge and water reduction.

Kathy has delivered multiple water projects, including a Dam, a weir and fish lock, and is currently involved in a large wastewater treatment upgrade to allow for agricultural reuse.

Water Professional of the Year

Award Category Sponsor:



Daniel Lambert, Australasia Water Leader, Arup

Daniel has delivered industry leading projects such as the Future of Water, undertaken key industry roles, locally and internationally, mentored and supported the development of water professionals and actively promoted the industry in the media and through schools and universities. His expertise is in the area of water and sanitation, and he has used his skills to deliver both commercial projects which set new benchmarks for industry as well as tirelessly working in the pro-bono engineering sector for under privileged communities across the globe. Daniel has been instrumental in the advancement of a significant number of engineers within the water sector and engineering broadly through his active involvement in both formal and informal mentoring programs.



Steven Linforth, Executive Director – Water, Jacobs

Steve Linforth has over 35 years' experience in water engineering with a long history of working collaboratively on major projects across Australia and New Zealand to achieve success for all participants. He is the Executive Director, Sales for Water for Jacobs in the Asia Pacific region. Steve is currently the Designated Project Executive responsible for the detail design of the Broken Hill Water Pipeline in New South Wales. Other projects on which he has a leadership role include the \$870M Central Interceptor tunnel for Watercare in New Zealand. He has been Jacobs Alliance Leadership representative on the recently commissioned East Rockingham Wastewater Treatment Plant. This \$82M project recently won

the 2016 Australian Business Award for Project Management. He was Project Director for the design of the \$1000M Sydney Desalination Project. As leader of the Jacobs Water business in Australia, Steve was a strong supporter of an investment by the firm in the World Water Monitoring Day™ (WWMD) initiative. WWMD was an international outreach program that built public awareness about and involvement in protecting water resources around the world.



Tom Mosquera, Senior Delivery Manager, Stantec

Tom is an experienced business manager, project director and engineer with extensive experience in the water and infrastructure sector. He has worked for 30 years across government, commercial and NGO sectors in four continents. Tom has worked on WASH projects in the Congo and Central African Republic, and emergency water supply projects in central Australia.

Tom's career achievements includes, mentoring and coaching staff, implementation of the Lower and Lakes EIA scheme and the Environmental Impact assessment for the SA Water Desalination Project.