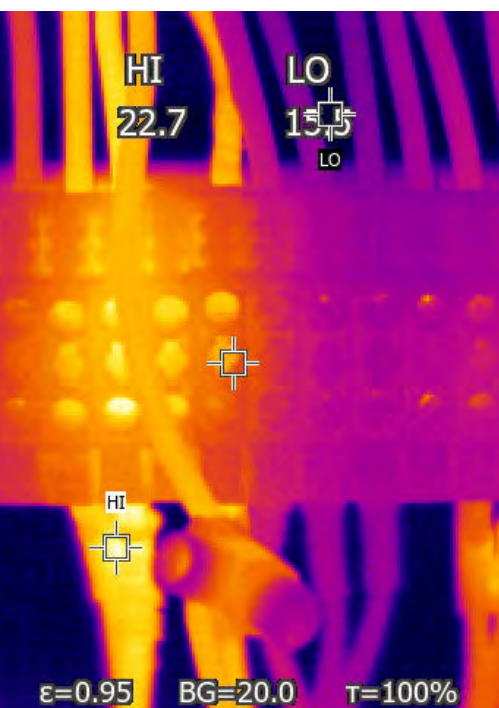


# hunterh<sub>2</sub>O



# OPERATIONS CAPABILITY

Hunter H<sub>2</sub>O Holdings Pty Limited



About us



We get excited about your toughest water and engineering challenges

100% Australian and employee-owned  
Water focused, internationally skilled and competitive.  
Our operations heritage fosters the trust and practical insight needed to deliver the right solution *the first time*.

Hunter H<sub>2</sub>O is one of the largest Australian specialist consulting firms in the water industry. We operate across a broad range of water industry project types within the following diverse set of clients and geographies: Regional Water Utilities, Metropolitan Water Authorities, International, Private Sector Clients and Government Agencies.

We employ over 100 water industry specialists and forecast continual growth through building a strong presence around our major city offices in Brisbane, Newcastle, Adelaide and our new office in Tamworth, NSW.

We work alongside our clients to integrate:

- Process expertise including both Water and Wastewater
- Design services (including civil, mechanical, electrical, hydraulic and chemical/process engineering)
- Planning (Australia and international)
- Digital SCADA & automation integration services
- Project management and operations support
- Asset Management
- Strategic Advisory expertise.

Our third-party certified health and safety, environment and quality management systems define the framework for consistent quality and safe operations during the successful delivery of projects.

Company Vision and Purpose

Water Together

OUR PURPOSE

Why We Exist!

Together we create the right water solutions to improve lives and support sustainable & healthy communities

OUR VALUES

Who We Are!

I care deeply  
I am inclusive  
I do what's right

OUR WAYS OF WORKING

How We Work!

We are customer connected  
We develop our people  
We are always improving  
We empower our people

Our vision of “Water Together” (Hunter H<sub>2</sub>O’s Vision and Purpose) has several meanings. Water is vital for the many communities we serve.

Our vision reflects:

- The importance we place on collaboration, diversity and teamwork in creating the right innovative solutions that drives value.
- It also reflects our strong desire to partner with our customers, constructors, universities and other professionals in ensuring healthy and sustainable communities.

Our purpose epitomises who we are at Hunter H<sub>2</sub>O. Our work in regional areas and in the Pacific is really about helping communities to ensure they have reliable and safe drinking water as well as sustainable management of wastewater. It also captures our desire to deliver smart and innovative water solutions for our customers.



# Ways of Working | Our People

Everything we have achieved is only possible because of our people – working together to achieve a common purpose. Our values – I care deeply, I am inclusive, and I do what’s right, underpin everything we do.

Our people bring talent, experience and passion to their fields and to our customers and as a company we are committed to our ways of working. This year, with the introduction of these Ways of Working, we have started to implement in line with the Strategy 2025 targeted initiatives across the organisation.

## Culture of Inclusiveness and Diversity

“I am inclusive” is one of our key values. To support this value, we have developed a Diversity and Inclusion Policy over the past twelve months. This Policy is designed to provide a strong framework in order to achieve a diverse and inclusive workplace. The objectives of this Policy include:

- Celebrating and enhancing our diversity and inclusiveness
- A focus on creating a professional development plan that enables staff to reach their full potential
- Recruiting and promoting without bias
- Supporting flexible work arrangements across all of our employees

In support of this policy we have been concentrating on developing a culture based on inclusive leadership, ensuring staff feel supported and improving the engagement across the whole organisation.

## Graduate Development

We are investing in nurturing the next generation of Hunter H<sub>2</sub>O. Hunter H<sub>2</sub>O has sponsored a number of our graduates to participate in the Engineers Australia Graduate Program as a key part of the broader development of a professional development and mentoring program.


## High-Performance Culture

Empowering our people to develop is part of the way we work at Hunter H<sub>2</sub>O. Our new performance management framework, “Our Plan” links our strategic pillars and values to employee performance. The key features of this new framework include:

- Focused on behavioural based outcomes
- Frequent feedback and check-ins
- Coaching and mentoring
- Recognition and acknowledgement
- Capability and skill development


All of these features help in creating a strong performance and customer centric culture which all employees want to be part of.

## Our Ways of working:




### WE WORK AS ONE TEAM

- We connect the right people for the job
- We collaborate to create the right solutions
- We encourage and recognise excellence and we celebrate achievements.




### WE ARE CUSTOMER CONNECTED

- We put the customer “front of mind” in everything that we do
- We seek solutions that drive value for our customers and the communities that they serve
- We deliver services that are timely, efficient and meet the needs of the customer.




### WE DEVELOP OUR PEOPLE SO THAT THEY CAN BE THE BEST THEY CAN

- We support mentoring and development programs
- We provide constructive feedback
- We provide exposure to the right work experiences.



### WE EMPOWER OUR PEOPLE

- We dedicate time for creativity and problem solving
- We have courage to try things out
- We value solutions and innovations that make our communities more sustainable.



### WE ARE ALWAYS IMPROVING

- We have a commercial mindset in how we work
- We actively engage our customers to seek feedback on our service delivery and identify opportunities for improvement
- We dedicate time to reflect and learn from our experiences.

# Our Purpose

Our most significant impact comes from the work we do every day supporting our customers across Australia and the Pacific. Our skills and knowledge and how we share this is our biggest asset. The project highlights detailed in the following pages describe some of the work that we undertake that supports our purpose.

“Together we create the right water solutions to improve lives and support sustainable and healthy communities”.


Our new Sustainability Policy developed this year recognises the importance of the United Nations Sustainable Development Goals and strives to meet the intent in whatever way we can.




Source: <http://www.un.org/sustainabledevelopment/news/communications-material/>




# Strategic Operations Expertise:




Lisa Procter  
Principal Process/  
Operations Engineer




Alan Thornton  
Principal Engineer



Peter Dennis  
Managing Director




Dean Taylor  
Operations and  
Maintenance Specialist




Ben Parcell  
Operationsd and  
Maintenance Specialist


## Operations Support:




Paul Thompson  
Manager - Process and  
Operations




Anthony Blair  
Senior Process Engineer




Ken Newton  
Operations Specialist




Dr Craig Jakubowski  
Principal Process  
Engineer




Nicole Holmes  
Manager - Strategic  
Advisory




David Longmuir  
Senior Automation and  
Telemetry Officer




Evan Jack  
Senior Process Engineer




Clara Laydon  
Senior Process Engineer




Daniel Ballinger  
Network Operations  
Engineer



Damon Emerson  
Process and Network  
Operations Engineer



Michael Carter  
Senior Process Engineer

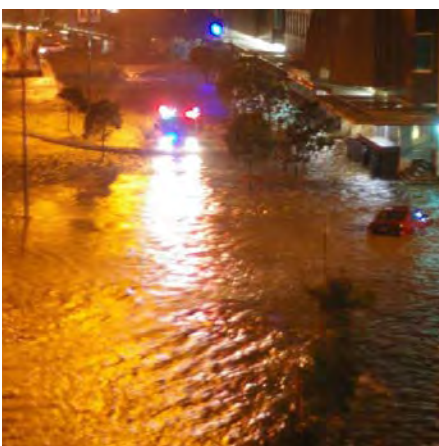


Bec Crosby  
Network Operations  
Engineer

# Strategic Operations and Maintenance Advisory Experience

Hunter H<sub>2</sub>O worked closely with Central Coast Council to project manage and deliver a number of key activities required to establish a 24 hour, 7 day a week Water Operations Centre. The amalgamation of Gosford and Wyong Councils created the opportunity to more effectively and efficiently manage water asset issues that impact on customers and the environment such as water outages and sewer overflows, etc. In particular it was identified that there could be improvements made to the way that after hours issues and incidents were managed.

Hunter H<sub>2</sub>O facilitated stakeholder workshops, developed required documentation and assisted with aligning previously separate processes into organisation wide arrangements. Training packages for new Systems Controller roles were developed as well as the Water Operations Centre Manual and Knowledge-based documents. Prior to the amalgamation, each Council had different organisational structures and culture, so significant collaboration was required during workshops and other forums to determine a common approach moving forward for the organisation.



Management of Operational Infrastructure During Severe Weather Events

In 2007 and again 2015 the Hunter Region experienced a severe storm event that resulted in strong winds and torrential rains and the region being declared a national disaster area. Hunter H<sub>2</sub>O staff were involved in coordinating the emergency response to multiple operational and maintenance problems at the Hunter's water and wastewater supply and treatment assets. Dean Taylor was one of the key Incident Controllers and Lisa Procter was also involved in the response which included resource coordination, prioritising failed equipment repair, organising emergency generator hire and connection, alternate wet weather arrangements for biosolids storage, additional equipment maintenance, additional screenings and grit collection and removal.



Maintenance Delivery Strategy Hunter Water Corporation, NSW

Hunter H<sub>2</sub>O supported Hunter Water through its extensive experience in maintenance delivery strategy development from both client and delivery perspectives.

Our current nominated Operations Support and Maintenance team includes former senior operations and maintenance managers who were at the forefront of the development and implementation of strategies such as;

- Development of multi-skilled crews
- Blending inhouse and contactor workforces;
- The implementation of field computing and GPS for the operations workforce;
- Development of asset replacement decision making tools within the GIS system; and
- A 'First responder' model for customer response to improve customer satisfaction and operational efficiency.



## Operations Support

We offer our clients the security and convenience of a single, dependable point of contact for total water industry requirements with an unmatched depth of experience and breadth of expertise.



### *Our capabilities cover every aspect of water and wastewater engineering...*

- *Troubleshooting for process optimisation to improve water quality and reduce costs,*
- *Emergency response/disaster recovery to maintain water quality and reduce non-compliance,*
- *Storing your plant O&M manuals online to improve operational efficiency and resilience,*
- *Management of operational data for developing compliance spreadsheets and performance monitoring and reporting.*

#### **Port Waratah Coal Services Operations Contract,** New South Wales, Australia

Hunter H<sub>2</sub>O is responsible for the operation of Port Waratah Coal Services Carrington wastewater treatment plant. We undertake regular surveillance visits and inter-process testing on-site and off-site. An important part of the Contract arrangement is to provide optimisation recommendations and assist Port Waratah to troubleshoot process and equipment issues. Our highly skilled operations staff also have been advising Port Waratah on upgrade requirements for the plant to ensure it meets its Environment Protection Licence limits.

#### **Gloucester Chlorine Overdose,** MidCoast Water, NSW

In March 2015 a chlorine overdose occurred in the Gloucester town water supply. MidCoast Water (MCW) engaged Hunter H<sub>2</sub>O to provide an independent review to determine the cause of the incident, review MCW's response to the incident and provide recommendations for improvements. Within 24 hours of being engaged, experienced process specialists from Hunter H<sub>2</sub>O were onsite and working with MidCoast Water to determine the cause of the incident and to ensure the chlorine system was isolated. The review identified siphoning of sodium hypochlorite into the clear water tank as the cause of the overdose. Recommendations provided to MidCoast Water lead to modifications to the dosing equipment, HACCP training for staff and the development of new operational and management procedures.

#### **Pumping Operation Strategies,**

Inverell Shire Council, New South Wales, Australia

The Hunter H<sub>2</sub>O team identified that there would be direct financial benefits to Inverell Shire Council by shifting raw water pump operation times to lower cost electricity tariffs. Hunter H<sub>2</sub>O worked closely with Inverell Shire Council operations staff and analysed electrical energy usage, energy accounts, raw water flows, water treatment plant operations, and reservoir capacities to develop practical and manageable solutions to pumping operation strategies, including creation of enhanced SCADA interfaces and custom designed RTU outstation controls, to reduce Inverell's electricity bills by up to 15% without compromising the delivery of treated water to the district.

#### **Ulan Operations Support,**

Glencore Coal, Mudgee, New South Wales, Australia

Hunter H<sub>2</sub>O is regularly engaged by Glencore Ulan Surface Operations, to provide operational and technical assistance to the Water Management Team responsible for operating and maintaining three water treatment facilities across the mining complex. The combined treated water capacity across the complex equates to 30ML/d discharge to the environment. The membrane based treatment processes encompass micro-filtration through to reverse osmosis and various pre-treatment processes such as potassium permanganate and DMI-65 coated media. Hunter H<sub>2</sub>O offers site and project supervision for the operations team as well as technical support and process troubleshooting services for Glencore. We have also relieved Glencore personnel during periods of extended leave to ensure the mine continues to safely dewater its underground workings while maintaining environmental compliance.



#### **Data Gatherer Upgrade, Water NSW,** New South Wales, Australia

Hunter H<sub>2</sub>O's Electrical and SCADA team was engaged by WaterNSW to assist in the verification of the operational data and status of recently commissioned flow metering equipment for over 600 regional installations. Our automation team recognised that this task involved significant repetitive work so developed an automated system to undertake the data collection, analysis and reporting back to the client. This quickly identified sites that required additional attention allowing the client to focus their maintenance resources.



2018-2019 Ongoing Projects



Rural Automation Renewals  
WaterNSW, NSW.



Navakai Wastewater Treatment Plant Detailed Design  
Water Authority of Fiji, Fiji.



Port Moresby Water and Wastewater Master Plan  
WaterPNG, PNG.



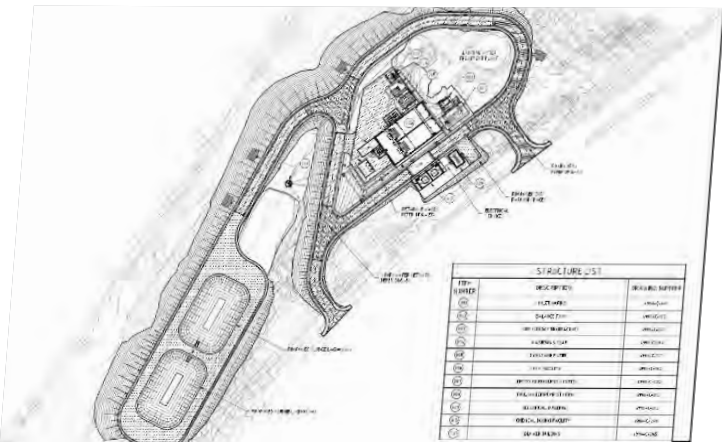
Freshwater Creek Water Treatment Plant Filter Upgrade  
Cairns Regional Council, QLD.



Hunter River Estuary Wastewater Masterplan  
Hunter Water Corporation, NSW.



Queanbeyan Sewage Treatment Plant Upgrade  
Queanbeyan-Palerang Regional Council, NSW.



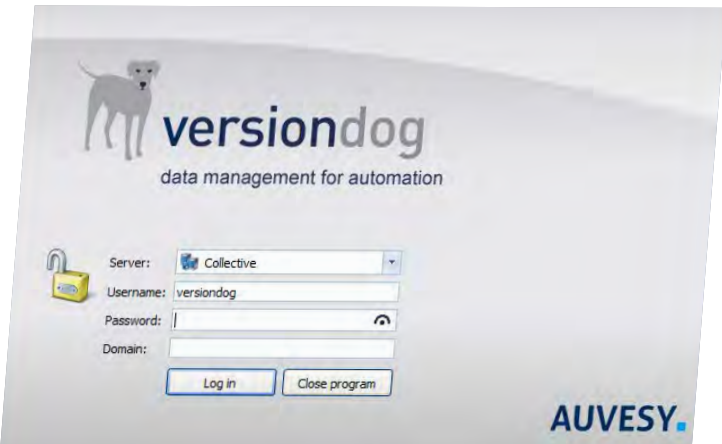
Augmentation Adaminaby & Bombala WWTP  
Snowy Monaro Regional Council, NSW.



Hunter Water To Singleton Council Potable Interconnection  
Hunter Water Corporation, NSW.



Manton Reservoir Water Treatment Plant Concept Design  
NT Power and Water, NT



SCADA Version Control VersionDog implementation  
SA Water, SA.



Goulburn WWTP Construction Supervision  
Goulburn Mulwaree Council, NSW.



Grahamstown UV and Chlorination Upgrade  
Hunter Water Corporation, NSW.



## Awards: IPWEA NSW Innovation

### Belmont and Cessnock WWTP Inlet works Rehabilitation Innovation award in water/sewer category.

Hunter Water and Hunter H<sub>2</sub>O worked in partnership together and with local civil and mechanical contractors to design and deliver a critical upgrade to wastewater treatment plants at Belmont and Cessnock. The project faced significant implementation challenges as flows into each plant could not be shut down for more than 2-4 hours at a time (during the middle of the night).

The team developed a range of innovations during the planning and design stages. Hydraulic modelling, 3D modelling and investigation of new coating technologies and application techniques was undertaken to develop strategies for staged implementation of bypass pipework and concrete remediation. The construction phase was planned in 17 shutdowns, each of which were planned within 15 minute increments. Numerous operational teams were deployed across each catchment for simultaneous isolation with SMS technologies used to ensure lockouts and safe access for contractors.

The resulting works will extend the life of assets which are critical to the operation of wastewater services for the equivalent of 150,000 households. The planning approach using remediation has saved the community millions of dollars in deferral of new assets and was delivered safely, on time and under budget. We are incredibly proud of the commitment of our project team members!



## Awards: Australian Engineering Excellence

### Parkes integrated Water Infrastructure Renewal Program

The Parkes Integrated Water Infrastructure Renewal Program has been recognised for raising the benchmark of Australian engineering standards, winning the Energy, Water and Resources Project category at the NSW 2018 Australian Excellence in Engineering Awards.

The \$100m capital works program includes the Lake Endeavour Dam Safety Upgrades, the Lachlan River Pump Station and Bore 8 refurbishments, as well as the major infrastructure construction that delivered Parkes a new Water Treatment Plant, Sewage Treatment Plant and the Advanced Water Recycling Facility, and ancillary infrastructure augmentations.

The Hunter H<sub>2</sub>O team worked hard collaborating with our construction partners John Holland and Maddocks to deliver state-of-the-art treatment plants and strengthen the entire Parkes Shire water network.





## Organisational achievements

Hunter H<sub>2</sub>O has demonstrated our continued success in surpassing expectation on industry projects. We have earned some of the industry's most coveted Awards:

- » 2018 IPWEA NSW Award for Excellence in Innovation Water/Sewer Category: Belmont and Cessnock Inlet Works Rehabilitation
- » 2018 Winner Australian Engineering Excellence Awards: Parkes Integrated Water Infrastructure Renewal Program.
- » 2018 Australian Water Association National winner "Best e-Journal Paper" in honour of Guy Parker. "Understanding Naegleria Fowleri: a different type of pathogen, an increasing climate change threat.
- » 2018-2019 Hunter H<sub>2</sub>O announced as Schneider Master Alliance Partner with *Master Integrator Status*.
- » 2017 Queensland Water Awards (Australian Water Association) Infrastructure Project Innovation with Aquatec Maxcon and South Burnett Regional Council.
- » 2016 Institute of Public Works Engineering Australia Awards for Innovation and Excellence for Kingaroy Wastewater Treatment Plant Upgrade Project with Aquatec Maxcon and South Burnett Regional Council.
- » 2015 Newcastle Engineering Excellence Award for Newstan Clean Water Plant and Water Management Scheme
- » 2015 Highly Commended Award Newcastle Engineering Excellence Awards
- » 2014 Engineers Australia Northern Division Engineering Excellence Award for Most Outstanding Project Award with NT Power and Water Corporation: Ludmilla Wastewater Treatment Plan Upgrade
- » 2012 Project Management Achievement Award Queensland: Townsville Wastewater Upgrade with Townsville City Council
- » 2012 Institute of Public Works Engineering Australia Queensland Division Inc Excellence Award for the Water Category over \$10M: Townsville Wastewater Upgrade with Townsville City Council
- » 2012 Engineers Australia Engineering Excellence Award High Commendation for Project Infrastructure over \$50M: Townsville Wastewater Upgrade with Townsville City Council

- » 2012 IAPP Queensland Public Sector Excellence Award: High Commendation: Townsville Wastewater Upgrade with Townsville City Council
- » 2011 Engineers Australia Queensland Division Townsville Region Engineering and Resources Excellence Award Project of the Year Winner: Townsville Wastewater Upgrade with Townsville City Council
- » 2010 Engineers Australia Engineering Excellence Award: Bray Park Water Treatment Plant Detail Design and Construction
- » 2010 Institute of Public Works Engineering Australia Awards High Commendation: Bray Park Water Treatment Plant Detail Design and Construction
- » 2010 Engineers Australia Engineering, Infrastructure Excellence in Regional Communities Excellence Award
- » 2007 Engineering Excellence Awards Engineers Australia Newcastle: High Commendation for Detail Design and Construction of Cessnock Wastewater Treatment Works Upgrade for Hunter Water Corporation with John Holland Group and NSW Department of Commerce.

*In 2018 Hunter H<sub>2</sub>O achieved Master Integrator Status with Schneider*



## Business Management

We are Quality Certified to ISO9001, Work Health & Safety Certified to AS4801 and Environmental Management System certified to AS 14001.

The Quality Management, Safety Management and Environmental Management System's registration scope covers the provision of Engineering Consulting Services in the water industry and associated fields, including planning, environmental, survey, design, construction, project management, commissioning, and operational services.

Hunter H<sub>2</sub>O is committed to providing its clients with products and services that are produced to a high quality and meet the client's needs.



Hunter H<sub>2</sub>O's safety objective is to have no harm at work and Hunter H<sub>2</sub>O's environmental vision is to minimise our environmental footprint by working in a responsible manner.

Each of these systems are prominent in the project planning for each project and as such a project plan is developed to ensure the process meets the management system requirements and therefore the final product meets the requirements of our customer.

Our recent statistics are outlined in the table below.

### Record of LTIs from 2014-2019

Performance Measure	Year 18/19	Year 17/18	Year 16/17	Year 15/16	Year 14/15
Number of near misses reported	7	7	1	2	
Number of LTI's	0	0	0	0	0
Number of MTI's	1	0	1	3	2
Number of FAI's	2	0	0	4	2
Number of Fatalities	0	0	0	0	0
LTIFR	0	0	0	0	0
TRIFR	6.75	0	6.3	18.4	13.3
Number of days lost	0	0	0	0	0
Number of hours worked	148041	155224	157669	162678	150827
Number of Prohibitive /Improvement Notices issued by any statutory body	0	0	0	0	0
Number of Prohibitive /Improvement Notices pending by any statutory body	0	0	0	0	0
Number of Prosecutions by regulator	0	0	0	0	0
Number of Prosecutions / proceedings pending by any statutory body	0	0	0	0	0