



Request for Funding

Funding is sought for the project detailed in the Project Brief below. To indicate your funding contribution complete the form at the end of this document.

Project Brief

Full Title	Water Operations Technical Competency Benchmark
Short Title	Technical Competency
Industry Need	<p>The Value of Operator Competency Project was a WaterRA member-funded initiative to communicate the value and benefits of an appropriately trained and competent frontline operator workforce. The final report provided:</p> <ol style="list-style-type: none"> 1. A literature review of documented water quality safety incidents, focusing on the level of frontline operator training and competency that contributed to the cause or assisted with intervention and recovery. 2. A national survey to gain insight into how Australian water industry organisations currently provide operator training and competency. 3. A review and comparison with other industry training and competency requirements 4. Case study of the Seqwater Operations Development Program. 5. A review of international water industry practices. 6. A review of how prepared the Australian water industry is for the future, particularly ensuring operator competency to work with new technology and to facilitate increasing automation. <p>A key finding from the final project report was: 'The current governance approach to technical competency in the Australian water industry does not guarantee the implementation of L&D programs, that deliver the necessary competency required to undertake frontline operator roles.'</p> <p>The report made the following recommendations:</p> <ol style="list-style-type: none"> 1. Regulators review frontline operator training and competency provision, using agreed minimum competency benchmarks. 2. Targeted communication campaign to improve understanding of frontline operator competency requirements across the industry. 3. Industry to drive a nationally consistent governance approach to the provision of frontline operator training and competency; either via mandated operator certification under the WIOCF or by defined minimum competency standards for frontline operator roles. <p>The ADWG framework follows a preventive management approach that encompasses all steps in production from catchment to consumer. The AGWR provides a similar framework for the management of recycled water. Element 7 of the framework covers Employee Awareness and Training and includes the following guidance for Drinking Water:</p> <ol style="list-style-type: none"> 1. Employees and contractors must be appropriately skilled and trained in the management and operation of water supply systems, as their actions can have a major impact on drinking water quality and public health. 2. Employees should have a sound knowledge base from which to make effective operational decisions. 3. This requires training in the methods and skills required to perform their tasks efficiently and competently, as well as knowledge and understanding of the impact their activities can have on water quality.



	<ol style="list-style-type: none"> 4. Training needs should be identified, and adequate resources made available to support appropriate programs. 5. Where possible, accredited training programs and certification of operators should be employed. <p>Currently there is no consistent national approach to meet the requirements of the guidelines and this has resulted in inconsistent approaches by utilities to operator training and competency.</p> <p>The National Water Training Package provides qualifications and units of competence however there is no requirement for utilities to use the package for training and some utilities use unaccredited training or do not provide any formal training. Accredited training has also been challenging for regional and remote communities due to the suitability, cost, and availability.</p> <p>In 2008 the Water Industry Skills Taskforce (WIST) was established to concentrate on developing approaches aimed at addressing a growing skills shortage in the Australian water industry. The task force identified the need for operators to be trained in the process units that they operated. A Certification Framework for Operators within Drinking Water Systems (2016) was developed through a thorough industry consultation process undertaken in 2011.</p> <p>In 2018, WIST was disbanded, with a new group, the Water Industry Operator Certification Taskforce (WIOCT) formed to manage the Framework. The Water Industry Operators Association of Australia (WIOA) was then appointed as national Certifying Body and has developed Acuario, a web accessible solution to administer the national scheme: Water Industry Operator Certification Framework 2018: Drinking Water, Wastewater, Recycled Water. In July 2021 the Framework underwent a name change to the Water Industry Operator Registration Framework 2021: Drinking Water, Wastewater, Recycled Water. The purpose of the name change was to avoid the confusion between a certificate qualification and the certification process.</p> <p>WIOA have also developed The Technical Competency Handbook: Knowledge, skills and competency development for water industry operations staff, WIOA 2019. This was developed to assist water utilities to develop processes and practices designed to deliver a technically competent water industry operational workforce.</p>
Objectives	<p>This project proposes to bring industry and regulators together, to develop minimum standards for technical competency that facilitates a more consistent approach towards technical competency and the implementation of Learning and Development (L&D) programs for frontline water industry operations.</p> <ol style="list-style-type: none"> 1. Develop a nationally recognised technical competency benchmark that includes the alignment of training to roles and responsibilities and the water quality risks managed. 2. Benchmark to include technical competencies from Catchment to Consumer consistent with the ADWG and AGWR approach 3. Benchmark to be sufficiently flexible so that it can be implemented effectively regardless of location or size of the water utility, including remote communities. 4. Integrate accredited training and certification into the guidance including minimum competency requirements. 5. Provide awareness training for the industry to improve the current understanding of frontline operator competency requirements.
Deliverables	<ol style="list-style-type: none"> 1. Identify and review current national L&D programs. 2. Develop a Technical Competency Benchmark that facilitates a consistent approach towards evaluation and implementation of competency, including:



	<ol style="list-style-type: none"> a. Identification of roles, process mapping, training needs analysis, and knowledge and skills requirements b. Nationally Accredited training c. National Registration d. Maintenance of knowledge & skills <ol style="list-style-type: none"> 3. Develop template tools for water utilities to develop and implement benchmark requirements. 4. Develop tools for water utilities to self-audit and a version for regulators to provide to auditors. 5. Trial tools in a regional and remote utility 6. Develop a knowledge sharing program for the water industry and regulators. (Include collaboration with Industry associations eg. WSAA, WIOA, Vicwater, Qldwater, NSW Water Directorate)
Benefits	<ol style="list-style-type: none"> 1. Nationally recognised benchmark for ensuring operator competency. 2. Support the National Water Training package, Training Providers and National Registration Scheme. 3. Provide a benchmark for utilities to self-audit and for auditors to assess Element 7 of the Framework. 4. Support utilities to ensure schemes are operated safely and minimise health and environmental risks. 5. Support operations in regional and remote communities
Stakeholders	<ol style="list-style-type: none"> 1. Previous stakeholders from Value of Operator Competency project (WIOA, qldwater, Seqwater, Veolia, Coliban Water SA water, DH Vic) 2. State regulation and policy agencies 3. Water directorates, industry associations (e.g. NSW water directorate, Vicwater) 4. Global Partners (e.g. Canadian Water network, American Water Works Association)
Knowledge Transfer	<ol style="list-style-type: none"> 1. Collaboration with WSAA, AWA and WIOA to share outcomes. 2. Fact sheets 3. Report and tools available to water industry 4. Workshops for Industry and Government Agencies
Research Approach	<p>Research approach to be used:</p> <p>Invited tenders</p>
Funding	
Budget Estimate	\$120,000
Funding Model	Funding shared between state and territory agencies and utilities
Contributions	<ul style="list-style-type: none"> • Agencies (\$60K) - \$8-10K each • Utilities (\$60K) – 6-10 partners at \$8-10K each
Potential Funding Partners	see stakeholders
Timeframes	<input type="checkbox"/> <6 months <input checked="" type="checkbox"/> 6-18 months <input type="checkbox"/> >18 months Envisaged Start Date: April 2022



Indicative Funding

Project Title:

Organisation:

Organisation representative name:

Date:

Cash funding Commitment \$

Inkind Contribution (estimate) \$

Financial Year/s:

Return to: marty.hancock@waterra.com.au