

# CASE STUDY

## Central NSW Joint Organisation Water Operator Training Program

The Central NSW Joint Organisation Water Utilities Alliance is a voluntary collaboration between the Local Government Areas of Bathurst, Blayney, Cabonne, Cowra, Forbes, Lachlan, Oberon, Orange, Parkes, Weddin and Central Tablelands Water. It represents a population of over 157,000 people covering an area of more than 47,000sq kms with 62,950 water connections across the region. It includes 10 local water utilities and 1 water county council.

Since its inception in 2009 the Alliance has achieved cost savings, efficiencies and built capability in its members through joint procurement of regional contracts for asset management, auditing, benchmarking and performance improvement, operator training and strategic business, integrated water cycle, drought and demand management planning. Through the drought the Joint Organisation and its Alliance supported its members in emergency water management including network planning, water sharing arrangements, infrastructure prioritisation and advocacy.

While supporting the need for investment in water infrastructure, Alliance programming aims to optimise the operation of existing infrastructure through auditing and identification of low-cost, high impact operational improvements supported by operator training.

Recognised by the Productivity Commission, the aim of the Alliance is for Local Government to be recognised as national leaders in the delivery of secure and quality water supplies and sewerage services to grow Central NSW to 2059 and beyond.

### The Program

The CNSWJO water operators training program has been a decade in the making. Over the past 7 years the CNSWJO has identified the training needs of 46 Water Operators and 52 Wastewater Operators across 9 of its member Councils and sourced and co-ordinated the delivery of accredited training in the region for a total of 767 units of competency from the nationally accredited training system. In addition, the CNSWJO has sought training to the requirements of the National Certification Framework administered by the Water Industry Operators Association of Australia (WIOA).

CNSWJO Board policy has been for quality, accredited and WIOA certified training to demonstrate best practice compliance based delivery of safe, fit-for-purpose drinking water to their communities as well as wastewater management. Operator training has also been undertaken to:

- ✓ Demonstrate leadership and best practice
- ✓ Ensure each council has skilled staff
- ✓ Develop a process for workforce planning
- ✓ Develop a sound business case for funding applications.



*A trained and competent workforce is one of the cornerstones for a water utility in the reduction of risk to public health and the environment from their water, wastewater and recycled water operations.*

## Why WIOA Certified/Registered Training?

The WIOA certified training (now referred to as 'registered' training) is linked to the National Water Training Package (NWP) and provided the only clear pathway for the CNSWJO in identifying training gaps and units of training needed over the course of the project.

With multiple and increasing challenges in the water training sector in recent years, the WIOA registration system has been essential to mitigate risks to Councils in delivering local water utility (LWU) services to their communities. It provides:

- assurance to regulators, communities, and the users of drinking water and recycled water that Operators are competent to manage drinking water, wastewater and/or recycled water, as well as being capable of identifying and responding to drinking water, waste water and/or recycled water quality risks and incidents.
- puts structure around what operators are trained in to make sure it's suitable and provides a process for them to remain up-to-date with emerging issues and technology.
- enables better portability and career options for operators – national collaboration makes it easier to get jobs elsewhere within the industry.
- an internal learning structure to support organisations with workforce planning, and Learning and Development (L&D) plans.

The CNSWJO Alliance has been grateful for the assistance and support provided by WIOA and support the concept of registration with its associated benefits. See more here: <https://wioa.org.au/registration/registration-benefits/>



CNSWJO Water Operator WIOA Certification Day in Parkes, 30 October 2018

## What the CNSWJO Operators Training Program comprised:

### Round 1 - Water Operators

*46 water operators from 9 Councils in Central NSW, undertook training in 211 units of competency from the National Water Package.*

- Training built on participation by 4 CNSWJO member Councils in a pilot of the National Certification Framework by the Australian Water Association between 2013 to 2015.
- With the various other processes (see figure below) planning for this training took 6 years prior to delivery in 2018.
- Training, coordinated by CNSWJO was provided through TAFE NSW utilising the services of a third party trainer.
- 46 water operators commenced the training, with 43 operators completing the training.
- 19 water operators were registered under the National Certification Framework by WIOA at a ceremony in Parkes on 30 October 2018 complementing the training that had been completed.
- Limited access to an RTO approved by NSW Health to deliver fluoride training at the time impacted the eligibility of some operators to become registered by WIOA on 30 October 2018 (and fluoride is a mandatory unit required by WIOA for water operator registration).
- Part qualification funding (and some Smart & Skilled funding) was used during this project.

### Training Delivery comprised:

- 4 blocks of training over 4 months – each block 1 week including site visits.
- Training was delivered in 5 LGAs.
- Site visits were held at locations across the 9 participating Councils.
- A total of 211 units across 17 unique units of competency.
- Of the 43 operators who completed the training, 19 operators were registered under the WIOA National Certification Scheme for Water Treatment Operations.

### Round 2 - Wastewater Operators

*52 wastewater operators from 9 Councils in Central NSW undertook 556 units of competency from the National Water Package to obtain Certificate III Water Industry Treatment – Wastewater (NWP30315).*

- The program required 18-24 months of preparation by CNSWJO, TAFE North Coast and Council staff prior to training commencing in October 2020.
- Training, coordinated by CNSWJO was provided through TAFE NSW utilising the services of third party trainers.
- In late January 2021, after delivering 214 of the units in the region, the trainers advised that they were no longer in a position to deliver the remaining units in the project.

- With a very 'thin' training sector for regional water training, TAFE NSW- North Coast sourced a replacement trainer. Based in Brisbane but registered in NSW with TAFE (through their Albury campus), he was able to travel to the region to deliver the remaining units. The trainer also provided virtual support to the operators on regular occasions whilst they were completing their assessments.

Training Delivery comprised:

- Smart and Skilled funding for 51 out of 52 enrolments (one operator was not eligible).
- 7 blocks of training over 8 months were delivered in 2 regional locations with some units delivered multiple times due to the volume of students.
- 566 units delivered across 20 unique units of competency.
- Of the 52 operators enrolled, 46 operators completed this training project in November 2021. Each of these 46 operators have been awarded the Certificate III Water Industry Treatment – Wastewater.
- Councils who will be pursuing registration for their Wastewater Operators under the WIOA National Certification Framework are currently working on the administrative process.

Round 3 – Reticulation, Recycled Water and other units

*Round 3 of the project is in the scoping phase. Its planning and delivery will be dependent on the availability of RTOs and suitable trainers.*



Orange City Council Wastewater Operators & Supervisors with their Certificate III in Wastewater Treatment and National Water Framework registrations- December 2021

## Barriers & Constraints

During the course of the training program multiple and complex issues have had to be resolved in order to deliver fit-for-purpose training in the region. The CNSWJO Training team worked tirelessly demonstrating high levels of problem solving skills to overcome the barriers and constraints as they were confronted. These included:

- *No clear expectation of what training is essential to Local Water Utilities or clear pathway to attaining it.*  
For the CNSWJO training, the WIOA Certification (Registration) Framework offered a clear pathway including the identification of National Water Package (NWP) units required by Operators to operate the treatment plant at their specific LWU.
- *Lack of training coordination with multiple stakeholders in the water training sector with respect to funding, training and policy.*  
Given the complexity of water training funding and frameworks and the number of barriers, it becomes just 'too hard,' particularly for under resourced Councils, to find a pathway through to certified training. Stakeholders included Councils' Local Water Utilities, WIOA, TAFE NSW, State Training Services, NSW Health, Australian Skills Quality Authority and the Industry Reference Committee.
- *Fragmented training sector.*  
With training privatised via the RTO model and Federal support brokered through various agencies and programs, navigability is an issue. This generates a growing cadre of 'information sharing' rather than doing what is required to ensure those with training needs get the training that they need. Pressing forward on an email is not brokering training.
- *A lack of registered training organisations (RTOs) and quality trainers offering water operations training.*  
This also led to limited places in specialised units including for the Fluoride Operators ticket due to lack of RTOs. The CNSWJO resolved this issue with the assistance of our trainer who negotiated with NSW Health to develop and pilot new training materials for fluoride with the CNSWJO Water Operator trainees.
- *A lack of training materials.*  
Where TAFE NSW rely on third party trainers, training resources are developed by individual trainers who own the intellectual property on these.
- *Ongoing issues with NSW TAFE resourcing and structure, including internal disputes between TAFE regions and inconsistent advice.*  
The CNSWJO is grateful for the commitment and 'can do' attitude of staff at the North Coast TAFE who went above and beyond to assist us to negotiate this difficult and complex training program resolving issues as they arose.
- *Previous training delivered through State agencies not accredited requiring it to be re-done to meet accreditation. For example, training in Drinking Water Sampling delivered though NSW Health.*  
In addition, DPIE Water training, for example Water Treatment and Wastewater Treatment Operations Part 1 & 2, while generally considered to be good training for Operators, results in a certificate of completion not accreditation. As a result, it is not recognised by WIOA for certification/registration under the National Certification Framework. This relates to the lack of clear expectation of what training is essential to LWU and the reliance on the WIOA process by the CNSWJO as the only clear pathway to determining the training needs of its Operators at the time.

- *Lack of clarity regarding funding for vocational training.*  
For the most part, TAFE NSW- North Coast assisted the CNSWJO to navigate funding where Water Treatment Operators who were funded for training for Water Treatment were not eligible for funding for training in Wastewater Operations. Given the shortage of Operators and difficulties in recruiting in regional areas, many Operators are required to work across both Water and Wastewater Treatment Operations. This is particularly the case as the Covid pandemic places strain on Council's operations.
- *Ongoing changes to the National Water Package.*  
This created the issue of TAFE NSW not always having the new NWP units on scope.
- *Costs and logistics associated with training delivery in region*  
Due to the costs and resourcing issues associated with taking Operators out of their workplaces for training, the region committed to training delivered in the region. See details below.

At the Council level issues included:

- *Navigating the silos of activity across Council's Water and Human Resources teams.*  
A vast amount of communication to both areas of Council was needed to ensure that everyone involved had the most current information. With many changes during the course of the program, it was imperative that the CNSWJO maintained clear and consistent communication with Council staff.
- *Lack of administrative resources to support the program.*  
The program was coordinated at a regional level to ensure efficiencies. With so much complexity and change in the water training space, a central coordination point is the most effective way to administer the program. CNSWJO has an FTE of 5 and the resources required to administer this program was approx. 0.5 FTE for 2 years.
- *Human Resources records did not always include evidence of qualifications including certificates of attainment and transcripts.*  
Council's employment records were sometimes missing certificates of attainment, particularly when qualifications may have been attained prior to the Operator's employment at Council.

A positive outcome of this project has been the identification and inclusion of training requirements on position descriptions for Supervisors, Operators, and relief Operators. In addition, HR records for Water and Wastewater Operations staff have been updated to include current transcripts. These are essential for workforce development planning and Council's risk management for the health and safety of Operators and the community.

- *Workforce Development Plans required under NSW Office of Local Government's Integrated Planning & Reporting Framework lack detail regarding Council's Water and Wastewater workforce*  
Refer to comments above.
- *Timeframe for program delivery and ongoing personnel changes in the water teams.*  
Due to the size of the program, delivery was challenging as explained above, and required the coordination of 52 operators from 9 councils who all had other work and personal commitments to work around. Clear communication and advance notice of course dates is vital.
- *Resourcing of administrative processes required at the Council end including for the WIOA certification/registration process and the required Continued Professional Development.*
- *Support needed within Council to assist Operators to complete assessments, particularly given the skill shortages and pressures through the covid pandemic on Local Water Utility operations.*

Given these barriers water training has been a difficult space to work in.

While it was tempting at times to not proceed, the risks to Councils and community health and safety of not having Water and Wastewater Operators appropriately trained are too great. This is particularly the case during drought and floods when water quality can be compromised and in the midst of a global pandemic when risks to workforce capacity must be optimally managed.

## Enablers

*This program would not have been possible without the commitment to quality compliance based training of Water and Wastewater Operators by the CNSWJO Board, the sponsoring General Managers, the Water Utilities Alliance, Council's Human Resources and Water Operations teams, a dedicated regional training team and, of course, the Operators themselves.*

- *Dedicated coordination resource*

The benefits of a Joint Organisation and a dedicated regional training team able to coordinate training requirements and delivery for its member Councils and the associated cost savings and efficiencies in procurement and project management, have been no more evident than through this program.

- *Willing collaborators*

A collaborative working relationship with TAFE North Coast, WIOA and NSW Health, as well as the trainers procured for the program has been critical.

- *Training in region*

Due to the costs and resourcing issues associated with taking operators out of their workplaces for training, the region committed to training delivered in the region.

The benefits of training delivered in the region at neighbouring Local Water Utilities cannot be underestimated. Aside from the costs savings and resourcing issues of taking Operators out of their workplaces for training, it has fostered collaboration, knowledge sharing and mentoring opportunities between Operators. This has been of enormous value during the drought and covid pandemic, in the commissioning of new treatment plants and processes and in planning for water and wastewater treatment solutions. It is the basis of the success of the collaborative CNSWJO Water Utilities Alliance.

- *Tailored procurement*

CNSWJO has decades of delivery in procurement and leveraged its requirements into a tailored procurement approach. There is significant value to all stakeholders including funding entities to leveraging place based, aggregated procurement. This includes:

- ✓ Cost savings from aggregation
- ✓ Efficiencies for funding and training entities of dealing with one JO instead of 11 LWUs
- ✓ Efficiencies for LWUs of having the process, often tortuous, managed by the JO
- ✓ Value to all stakeholders of effective training tailored to meet the needs at an individual level.

*There is value to all stakeholders in the water training framework in the co-ordination role undertaken by Joint Organisations.*

*At this time, water utilities are the only stakeholder in the water training space that recognise the value of Joint Organisations with funding.*

Round 1 for Water Operators, the CNSWJO put out an Expression of Interest for registered training organisations (RTOs) willing to deliver training in the region. In Round 1, many of the Operators already had Certificate III in Water Treatment but needed specific units to meet certification requirements.

Key requirements for RTOs were:

- ✓ appropriately experienced and qualified trainers /assessors
- ✓ high quality training and assessment resources in each of the units
- ✓ training delivered on-site at one or more council's workplaces
- ✓ rigorous, positive, practical and achievable recognised prior learning (RPL) focus on providing the necessary training to achieve competency
- ✓ ability to deliver training in line with funding framework



CNSWJO Operators WIOA Interest Day – Tour of Parkes Wastewater Treatment Plant- October 2018

*CNSWJO acknowledges the collaboration and support provided by TAFE NSW North Coast, our trainers, the team at WIOA and NSW Health. Without this and the tenacity and dedication of the CNSWJO training team- the program would not have succeeded.*

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## Water Operator Training Program Delivery Timeline

