



qldwater consolidated submission to DESBT

February 2021

waterskills
PARTNERSHIP



Industry Submission: Future Water Industry Training Needs

Background

The Queensland water industry is responsible for providing safe, secure, and sustainable urban water services to Queensland communities. This essential service employs almost 6,000 workers, with Water and Wastewater Treatment Operators and skilled networks personnel representing some of the most critical job roles within the industry. In many parts of Queensland, and nationally, there is a growing shortage of qualified operators with the issue more pronounced in regional areas.

As the Industry Skills Advisor for the urban water industry, **qldwater** conducts regular consultation with industry on workforce, skilling, and training issues, with the [Water Skills Partnership](#) the key vehicle for information sharing and feedback. The Water Skills Partnership includes most of the water and sewerage providers from across Queensland who work collaboratively to address skilling and training issues for the industry.

In August 2020, an online workshop involving Water Skills Partners was convened to discuss VET investment needs for the sector, considering current and future funding support to facilitate traineeships, upskilling, retraining and ongoing development.

The discussion was robust and provided some valuable insights captured in tabular form, considering a range of different employment market “segments”, e.g., school leavers, various categories of existing workers and potential accredited and non-accredited training needs. Participants were sent a subsequent survey aimed at refining responses and whilst the workshop was well-attended, only seven survey responses were received, which reflects challenges members have reported in relation to uncertain training budgets in response to COVID-19 impacts.

This paper has been informed by that consultation on 26 August, subsequent survey responses, and further discussion at a Water Skills Partners meeting on 11 December as well as ongoing, regular consultation via email and surveys. It poses a range of common skilling pathways and recommendations for future VET investment to support ongoing water industry training. We welcome any feedback or opportunity for discussion to the **qldwater** CEO, Dave Cameron on dcameron@qldwater.com.au or 07 3632 6854.

Water Industry Skilling Pathways

The National Water Training Package (NWP) is the main vocational training package used for the sector, with the Certificate III in Water Industry Operations the most widely utilised qualification and the generally accepted minimum standard for water/wastewater treatment operators. Previous workforce surveys conducted by **qldwater** have shown that 95% of water treatment plant operators and 76% of wastewater treatment operators hold a qualification from the National Water Training Package, with the Certificate III the most common qualification for 70% of operators. The Department of Regional Development, Manufacturing and Water is undertaking a study in 2021 as part of an investigation into minimum competency standards which may see more comprehensive data on qualifications.

Certificate II and III level water industry qualifications currently receive priority one funding under the User Choice program. This is particularly important for regional water service providers that are

challenged by limited training budgets and without this support may not be able to fund the required training to ensure those in high-risk job roles are appropriately trained and skilled.

Higher Level Skills subsidies apply to the Certificate IV in Water Industry Operations and Diploma of Water Industry Operations, although the subsidies are considered by employers to be quite low and feedback suggests this is a barrier to enrolments. Supervisory/management skills have been identified as a key skills gap for the industry and the higher-level qualifications, particularly the Certificate IV, are an important vehicle to move staff from operational roles into supervisory and manager level positions.

The industry is highly regulated with oversight by a number of state and commonwealth agencies and these authorities require staff to be appropriately qualified to operate the facilities for which they are responsible. However, there is currently no mandatory qualification or competency requirement for operators.

In response, the water industry has developed its own, national competency framework to ensure Operators have currency in the units of competency required to operate the water and/or wastewater treatment plants for which they are responsible. The Water Industry Operator Certification Framework: Drinking Water, Wastewater, Recycled Water 2018 seeks to improve water quality and safety through appropriate skilling and recognition of operators and matches qualifications and experience of operators to the types of plant they operate. There are a couple of typical pathways for operators to achieve Certification:

- A new operator undertaking a qualification (typically Certificate III in Water Industry Operations) for the first time will align their units with certification requirements, although analysis shows that typically more than 11 units of competency is required; or
- An existing operator with an older qualification will typically have anywhere from 2 to 12 gaps, requiring the operator to enrol in additional units from the NWP.

Upskilling to achieve Operator Certification is recognised by industry as a key skilling need. **qldwater** has coordinated a number of efforts to encourage the uptake of Operator Certification since 2016, and on average, participants have needed to complete between four to seven NWP units to show competency against the water and/or wastewater treatment processes they are responsible for. Water industry employers have typically shown good support for voluntary upskilling programs particularly when supported by additional funding. Most recently, the Queensland Department of Employment, Small Business and Training committed \$150,000 in 2017-18 to support gap training for 60 operators to achieve Certification.

The Water Industry Worker is another industry-developed competency framework that recognises the skills and training of employees within the civil construction and maintenance field and provides a formal pathway for career progression. Participants generally undertake either a Certificate II or III in Water Industry Operations with a specialisation in civil construction or networks and promotes the Certificate IV and Diploma to progress staff into supervisory roles.

Following feedback from Water Skills Partners in response to COVID-19 that there is a need to provide introductory level short courses to train back-up operators in the event of an emergency or staff shortages, **qldwater** developed a series of Foundation Skills Micro-Credentials and was granted \$70,000 in funding as part of the Department's Micro-credentialing Pilots Program. Whilst there was strong support from employers to develop the micro-credentials, the take-up of the courses has been slow. There are a number of reasons for this, including reduced training budgets post COVID-

19, timing of local council elections and staff changes. Water Skills Partners have indicated that their budget positions should be known in March 2021, at which time **qldwater** will survey employers to get a better understanding of the likely take-up of the micro-credentials.

If local council training budgets continue to be squeezed there will be an increasing need to develop mechanisms to support employers' ongoing upskilling of operational staff, with a particular focus on gap training/competency clusters and higher subsidies for the Certificate IV and Diploma. If the take up of micro-credentials continues to be low, **qldwater** would support the redirection of unspent funds to other higher priority industry skilling programs.

Future Skilling Priorities

Competency Clusters – Upskilling Existing Workers

qldwater has been successful in accessing two rounds of funding from the department to support "gap training" in the interests of progressing operator certification. This helped drive significant growth in uptake, which has significantly slowed since. Efforts to advocate for the inclusion of "skill sets" into the NWP (which would have potentially opened alternative funding sources) over several years have failed – largely because the federal VET packaging rules are too inflexible to allow for variability in the selection of units of competency – a critical need in meeting certification requirements. Original modelling for water treatment skill sets showed thousands of possible skill set combinations, and when tested (compared to actual gaps for intakes of operators), none of them worked.

Industry requires more flexible training options, particularly for treatment, to fill competency gaps or meet upskilling requirements. This is consistent with feedback from other industries and reflects a general shift towards take up of short-form credentials such as skillsets or micro-credentials.

Feedback from industry via the Water Skills Partnership suggests competency clusters could be an ideal vehicle for cross-skilling across water and wastewater treatment, e.g., dual certification of operators and has potential linkages to DRDMW (formerly DNRME) investigations into competency standards for Drinking Water Operators. The current full fee for service charged to provide this gap training has been cited by employers as a barrier to enrolments.

Recommendation:

Given the thousands of possible combinations of treatment processes across plants, it is difficult to have consistency in the units required by operators for upskilling, but industry has provided feedback that there are two possible approaches that would be of benefit, both assume a prerequisite Certificate III in Water Industry Operations (or equivalent from previous NWP releases) is held:

1. *Agree on a specified number of subsidised units of competency that operators are entitled to access for upskilling. Previous gap training exercises have indicated gaps of between three to six units for most operators, so setting a limit of say four subsidised units of competency in addition to the eleven units of competency completed in a Certificate III in Water Industry Operations would be of significant benefit to industry and ensure most operators are supported in achieving competency in the processes they operate; or*
2. *Develop competency clusters, based on process type with some ability to choose from electives within a cluster to reflect the different methods within that process, and setting an upper limit on the number of competencies allowable within a subsidised cluster. For*

example, there might be a “conventional water treatment” cluster for example with some basic sub-options, like discretely dealing with the two major chlorine types. This may mean that only a limited number of units can be defined in a cluster, so others would be full fee-for-service options.

Higher Level Skills for Supervisory Roles

The Certificate IV in Water Industry Operations and Diploma of Water Industry Operations are utilised as a key skilling vehicle to support experienced staff moving into supervisory and middle management roles.

Both qualifications currently attract Higher Level Skills funding but there is a significant gap between the funding offset and qualification price. Members have quoted up to \$9,000 for a Certificate IV less \$4,038 subsidy, and \$9,500 for Diploma less \$3,088 subsidy and employers have indicated that the gap between the qualification price and subsidy level are a barrier to driving enrolments.

Currently only one RTO delivers both qualifications, and enrolment numbers have been slow to recover following issues with the 2015 qualification and introduction of new (soundly developed) versions. A second RTO has recruited a former industry operator tasked with developing Diploma content, so the market will become marginally more competitive soon.

These issues combined make estimations of demand for the qualifications difficult, however a number of organisations have continued in progressing Certificate IV enrolments and anecdotally we are aware of strong interest in regional Queensland. There are a number of other existing initiatives the industry could continue to progress (e.g., regional skilling cohorts) to assist in making costs more manageable.

As an industry we acknowledge the generous support of the state towards our sector and appreciate the challenges of balancing investment priorities across industries qualifications. We note however that the final report by the Productivity Commission into the National Agreement for Skills and Workforce Development echoes the views of Queensland employers in relation to subsidies for higher level skills, quoting that “very few Diploma/Advanced Diploma courses obtain subsidies above \$5000 in Western Australia or Queensland, while more than half do so in the ACT, Victoria and New South Wales.” The report further discusses the significant return on investment from these subsidies.

Recommendation:

Water industry employers have requested that the Higher-Level Skills funding levels for these qualifications be increased to support future enrolments. Employers were supportive of a model that would further reward the establishment of regional cohorts with some sort of % loading on subsidies where cohorts are established. Consideration would need to be given to ensure that small/remote employers are not disadvantaged by a cohort model, but where it is feasible, candidates would benefit significantly from participating in a mentoring/networking model. In summary, it is difficult to propose a model which is likely to be acceptable without further discussion, but our skills partners believe an increased offset would lead to significant benefits.

Foundation Skills Micro-Credentials

qldwater has been successful in receiving a DESBT grant for \$70,000 towards the costs of micro-credentials to be completed by the end of 2021. Uptake has been slow and there is a risk that the

allocation may not be fully used. The impacts of COVID on training budgets are clearly a factor, and fully funded Certificate II and III traineeships may be preferred.

Recommendation:

Water Skills Partners have advised they are likely to have greater certainty of their training budgets in March 2021. qldwater will seek feedback at that time regarding likely enrolments in the micro-credentials and consult with the Department to discuss future use of the courses. There is potential for the short courses to be used as an alternative entry pathway to the Certificate II, prior to a traineeship being commenced; but also to divert any unused portion of this allocation to one of the other priorities identified in this case.

Other early career traineeships etc

qldwater has developed a “fact sheet” targeted at employer HR divisions and decision to highlight the ageing workforce of the water industry and the need to target new entrants and young people into water industry roles, along with a growing body of career resources.

While there are some exceptions, employers have indicated they are typically unable to offer permanent roles to any trainees who show promise, unless there is a vacant FTE position available on completion of a traineeship and this has led to slow take-up of opportunities to recruit trainees. A lack of mentoring skills in the workplace to supervise trainees has also been quoted as a barrier.

The industry has limited examples of employing school-based traineeships and whilst the outcomes have been positive where they have been undertaken, they have occurred in large SEQ utilities which have quoted that significant HR support and effort was required to deal with a number of employment challenges, including payroll issues and onsite safety concerns.

There is, however, support from employers to continue looking for options to increase employment of trainees, including school-based trainees, particularly in regional areas.

Recommendation:

Water Skills Partners are keen to support a trial project of school-based or school leaver traineeships to use as a demonstration and hear more from/ partner with other industries which have been particularly successful with schools’ engagement programs.

Certificate II in Water Industry Operations

Negotiated to be priority one User Choice several years ago and utilised as the entry level qualification in a number of locations.

Recommendation:

The Certificate II in Water Industry Operations to continue to be recognised as a Priority 1 qualification under the User Choice Program. Based on some change in views from members over time about which qualification is most useful for entry level training and some moving straight to the Certificate III, we will continue to seek input from industry about future demand, note changes and report to DESBT. Recent data provided by the department shows a decline in enrolments over the last 3 years, but across the Certificate II and III it is difficult to predict trends when the qualifications are still relatively new, and with 2020 COVID impacts.

Certificate III in Water Industry Operations

The Certificate III in Water Industry Operations is the **core qualification** for the water industry, and this is unlikely to change. It receives Priority 1 funding under the User Choice Program and this allows councils with limited training budgets to ensure those in high-risk operational roles are appropriately trained and skilled.

A recent revision of the qualification saw the merge of the Certificate III in Water Industry Operations, Certificate III in Water Industry Treatment and Certificate III in Water Industry Irrigation into one qualification, the Certificate III in Water Industry Operations. In the past, some employers have accessed User Choice funding to support operators to complete a second Certificate III where their first Certificate III no longer reflects their current job role or their role has changed significantly, but still fits within package competencies, e.g., moving from networks to treatment, or water to wastewater treatment, or trades (e.g., plumbing) to treatment/ networks.

Noting that User Choice will currently not fund the same qualification twice, **qldwater** is seeking input from employers to determine whether any options need to be considered to re-evaluate eligibility criteria to provide opportunities for second qualifications to be funded under User Choice. Competency clusters may provide an alternative solution to support these particular upskilling needs.

Recommendation:

*As the core qualification for the industry, the Certificate III in Water Industry Operations should continue to be recognised as a Priority 1 qualification under the User Choice Program. **qldwater** will keep a watching brief on any eligibility concerns from industry and report to DESBT.*