

MEETING THE WATER INDUSTRY'S FUTURE TRAINING NEEDS.....CAN OUR TRAINING SYSTEM COPE?



Paper Presented by:

Jennifer James

Author:

Jennifer James, *Executive Officer,*

NSW Public Sector Industry Training Advisory Body



*8th Annual WIOA
NSW Water Industry Operations Conference and Exhibition
PCYC in Orange,
1 to 3 April, 2014*

MEETING THE WATER INDUSTRY'S FUTURE TRAINING NEEDS.....CAN OUR TRAINING SYSTEM COPE?

Jennifer James, *Executive Officer*, NSW Public Sector Industry Training Advisory Body

ABSTRACT

This paper provides an overview of the purpose, methodology, key findings and recommendations of recently completed national research which explores the future demand for vocational education and training (VET) by employers in the water industry and the capacity of the training system to respond to that demand.

The research was driven by the need to ensure that our training system can cope with the anticipated demand for training and skills recognition arising from the introduction of national *Certification of Operators within Drinking Water Treatment Systems*, an initiative currently being piloted in NSW and Queensland.

The research is based on comprehensive data from state and local government water utilities and private sector employers and from Registered Training Organisations (RTOs) currently offering training from the Water Training Package (NWP07). It finds that there is likely to be sufficient capacity in the training system to meet most of the anticipated training need, however there are inefficiencies and inflexibilities within the system that inhibit delivery and which impact on access to and quality of training, in particular.

1.0 INTRODUCTION

The water industry and the vocational education and training system (VET) have critical roles to play in minimising risks to public health that an insufficiently trained workforce poses to Australian communities. With the pending introduction of the *National Certification Framework for Operators within Drinking Water Treatment Systems*, the industry recognised it was timely to undertake an assessment of the training system's capacity to meet future training needs of the water industry.

In December 2012 funding was given to the Water Services Association of Australia (WSAA) by the Commonwealth Government to conduct research on the training needs and training capacity of the water industry in Australia. This research was one component of a broader Urban Water Industry Workforce Development Project and it was conducted by the NSW Public Sector ITAB and the Australian Water Association on behalf of WSAA.

The purpose of the research was to:

- Identify industry training needs over the short and medium term
- Identify trainer capacity in the system to meet those needs
- Establish a national Water Training and Assessment Network (WTAN), building on the success of the NSW pilot program
- Develop strategies to ensure that 80% of industry training needs can be addressed by the training system

The methodology used to identify employer training needs and RTO training capacity included:

- Desktop research on existing reports on training needs and RTO capacity

- Development of questionnaires for employers and RTOs that were distributed and completed electronically between August – November 2013
- Three workshops and one teleconference with industry and RTOs to discuss the findings and explore potential strategies to address the issues raised through the research

The findings are based on the collation of the largest and most representative training data ever gathered from water utilities and vocational education and training providers nationally. Ninety-three (93) employer responses were received, of which 56% (51) were local government water utilities, 24% were state-owned water utilities and 20% (18) were private sector companies.

In terms of training provider data, survey responses were received from 37 Registered Training Organisations (RTOs), representing 88% of the total market. The NSW Office of Water (NOW) also contributed to the research as NOW is a significant provider of training to the water industry in NSW. As some of the NOW courses are aligned to the VET system through a partnership arrangement with TAFE NSW, it was important that the training capacity of this organisation was captured.

2.0 DISCUSSION

The following sections summarise the key findings from the research with employers and RTOs.

2.1 Key Findings from Employers

- The majority (78.5%) of water utilities and private sector organisations surveyed use the national Water Training Package (NWP07).
- Approximately 60% of employers access some form of government funding for NWP07 delivery. Any reduction in government funding is likely to have a significant impact on the uptake of training by the water industry.
- Employers anticipate demand for training from the NWP07 to increase over the next three years, particularly in units of competency and Certificates II, III and IV. Increases will be greatest in water treatment, wastewater treatment, distribution (networks), construction and maintenance and trade waste.
- Employers have created a strong internal training capability by supporting their staff to undertake Cert IV TAE qualifications or skills sets. This training capability could be better utilised by the industry and RTOs to address skills development.
- Industry's preference is for nationally recognised, face-to-face training delivery at the workplace; unaccredited and unassessed training is least preferred.
- Areas that need to be addressed to improve training and assessment services include: provision of funding, access to training, quality of training and assessment services, clarity around Certification, consistency in service provision, coordination of training services and training package responsiveness.

2.2 Key Findings from Registered Training Organisations (RTOs)

- Most (89.5%) of RTOs surveyed had delivered training from NWP07 in the previous 12 months, indicating industry's widespread use of the existing RTO network.
- There are at least 159 trainers and assessors employed by RTOs to deliver NWP07, of which 56.6% are full-time. As the average RTO full-time trainer workforce is 2.5 and part-time workforce is 2.4, the relatively small workforce in each RTO may partly explain problems with access reported by industry. It also highlights the importance of succession planning within RTOs.
- Less than one-third of RTOs are able to offer all elective units within a NWP07 stream. This is likely to be a major reason why employers are reporting difficulties in accessing the training they need.
- Cost of training (delivery and staff replacement) plus employer uncertainty about the benefits of national qualifications are considered by RTOs to be the major impediments to take-up of NWP07.
- RTO anticipation of future increases in demand for training and assessment closely aligned with industry perceptions, although industry predicted greater use of Certificate II qualifications than RTOs.
- There will be minimal change over the next 12 months in the number of RTOs offering each of the NWP07 qualifications/units (assuming no new RTOs enter the market).
- RTOs are most likely to build their capacity and capability by employing more part time/casual trainers and assessors and developing industry partnerships where more training and assessment is undertaken in the workplace.
- RTOs suggest that improvements to the quality of training and assessment services from NWP07 can be achieved through professional development, networks, resource development, funding and training package improvements.

2.3 Inefficiencies and Inflexibilities Impeding the Training System

Whilst the research revealed sufficient capacity in the VET system (both within Registered Training Organisations and industry enterprises) to likely meet future demand, there is a disconnect between the potential supply of training (as indicated by the scope of registration of the 46 RTOs in the system) and the training that industry can access in practice. It is apparent there are inefficiencies and inflexibilities that impede utilisation of VET by industry. Ongoing problems primarily relate to:

- Cost of training (includes capacity or preparedness of industry to pay for training, particularly the face-to-face mode preferred by employers)
- Access to training (exacerbated by higher costs associated with delivery to a thin market and gaps in the human and training resources of RTOs who are often limited in the range of electives they can provide)
- Quality of training and assessment services
- Under-utilised partnership arrangements between employers (who often have experienced staff with TAE qualifications and/or skill sets) and RTOs.
- Gaps in the National Water Training Package

These weaknesses in the system require further intervention to prevent the gaps between training demand and supply widening.

The report proposes a series of strategies that can be adopted and implemented by a range of key organisations in industry to ensure its current and future VET requirements are met.

2.4 Feasibility of Establishing a National Water Training and Assessment Network (WTAN)

A Water Training and Assessment Network (WTAN) has been operating successfully in NSW since 2010 with over 300 members from state and local government water utilities, government departments, private sector organisations and RTOs servicing the industry in NSW. Its focus has been on increasing the number of trainers and assessors in the industry, improving communication between RTOs and industry and on providing professional development to trainers and assessors.

Based on the experience of the NSW WTAN and responses from employers and RTOs in the surveys, four core functions of a national WTAN were identified:

1. To facilitate information dissemination and information exchange about:

- NWP07 review, development and implementation
- Changes to funding programs (national and state)
- Industry research, trends, events

Network meetings, webinars, online chat rooms and newsletters could be used to communicate with stakeholders.

2. To provide professional development for trainers and assessors

Examples of professional development activities might include:

- Developing effective assessment strategies
- Customising training materials
- Independent validation of assessment

3. To establish a database of trainers to increase RTO access to appropriate trainers

4. To broker training on a regional level

Participants in the consultative workshops/teleconference had varying views about the need for a national WTAN. In NSW and states where the numbers of RTOs and industry organisations were small (WA, SA, ACT), support was expressed for involvement in a national Water Training and Assessment Network. In states such as Victoria and Queensland which have active industry bodies (VicWater and Queensland Water Directorate) coordinating and/or brokering training activity, the need for a national network was not so apparent.

Issues concerning the management and funding of such a network were discussed but not resolved during these consultations. Options considered were:

- The adoption of the network as a subscription based service run by an national body such as the Australian Water Association

- Utilising a franchising approach whereby management and coordination of network activities is undertaken at a state level by existing organisations (e.g. VicWater, NSW Public Sector ITAB, and Queensland Water Directorate). However such a model is not workable for all states and territories and there would need to be some central point of coordination to ensure that the smaller states and territories are included in network information and activities.

Sourcing funding for the network was also noted as a major issues, particularly for organisations who cannot subsume this role into existing operational funds. In such cases, income would need to be sourced from network members on an organisational and/or individual basis.

Given the lack of comprehensive support for a national WTAN and concerns about the financial feasibility of establishing and operating a self-funded network, the report proposes that the four key functions identified for a national WTAN be devolved to the various national and state based industry bodies that currently have responsibility for addressing the training needs of their members.

3.0 CONCLUSION

The research conducted with water industry organisations and RTOs on VET training need and training capacity has confirmed increased utilisation of vocational education and training, despite service delivery problems. These relate primarily to the cost of training, quality of training, access to training, under-utilised training partnerships between employers and RTOs and gaps in the national Water Training Package (including training and assessment resources).

The report proposes 20 strategies that can be implemented by the industry to help address the above inefficiencies. Of these, 6 have been identified as most critical and are listed as recommendations to be actioned by the responsible parties. These recommendations are:

1. The Water Industry Skills Taskforce (WIST) to actively lobby Governments to ensure that funding is made available for vocational skills development in the water industry.
2. The Australian Water Association develop the specifications for a national database of trainers and assessors for the purpose of improving access to trainers and assessors by RTOs and enterprises. It is proposed that a new section be included in the AWA's yearly printed publication (and soon to be digital version) of The Australian Water Directory.
3. Case studies and good practice guidelines that are based on models of successful enterprise and RTO partnerships in the water industry be developed and promoted through national and state associations and training bodies.
4. The Water Industry Training Package development process undertaken by Government Skills Australia incorporate comprehensive industry and RTO consultation.

5. State based water industry associations and Industry Training Advisory Bodies continue to provide opportunities for professional development of trainers and assessors and brokering of training services.
6. To assist the industry achieve quality training outcomes, the Water Industry's recently developed suite of RPL Tools for water treatment units be extensively promoted to RTOs and employers, including its adaptability to other streams within the industry.

4.0 ACKNOWLEDGEMENTS

The following individuals and organisations are to be acknowledged for their contribution to this project

- Commonwealth Department of Industry (funding body)
- Peter Gee (Project Manager) – Water Services Association of Australia (WSAA)
- Petra Kelly (Project Consultant) – Australian Water Association
- Jennifer James (Project Consultant) – NSW Public Sector ITAB
- Neil Hooley (Water Corp), Denise Black (SA Water), Silvia Mazur (Sydney Water), Paul O'Brien (VicWater), Michelle Hill (Qld Water Directorate), Andrew Francis (Parkes Shire Council) - Project Steering Committee Members

5.0 REFERENCES

Australian Water Association and NSW Public Sector ITAB, **Training Needs and Training Capacity of the Water Industry in Australia**, Final Report on research conducted for Stage 4 of the Urban Water Industry Workforce Development Project, February 2014.