Irrigation New Zealand: Addendum to Irrigation New Zealand Case Study

Background

Irrigation New Zealand (IrrigationNZ) has been actively working to establish robust training and development pathways for irrigation professionals across the country. Water management through efficient irrigation practices is increasingly important in New Zealand's agricultural and horticultural sectors, requiring skilled professionals who understand both technical systems and environmental considerations.

The initial case study explored the existing training landscape for irrigation workers and identified gaps between industry needs and available educational pathways.

This short follow-up to the case study examines the progress made since the original research was published. It documents current initiatives underway and outlines future plans to further support irrigation training and career development in New Zealand.

Initial Findings and Challenges

The original case study revealed that IrrigationNZ has been working towards designing and developing industry-specific programmes and to establish formal training pathways. However, due to the sector's relatively small size compared to other food and fibre industries, it often struggled to gain traction within the broader Vocational Education and Training (VET) system, which has itself been undergoing significant reforms.

Four primary challenges were identified through the research:

Firstly, the sector struggled with a career framework aligned with New Zealand Qualifications Authority (NZQA) standards, particularly for entry-level workers. Without these formal pathways, potential workers lacked clarity about how to enter the industry or progress once employed.

Secondly, attracting a diverse workforce presented ongoing difficulties. The sector particularly struggled to appeal to young people and school-leavers who might otherwise consider irrigation as a career option.

Thirdly, balancing regulatory compliance with practical sector needs. The irrigation sector relies on close working relationships with regional councils and other regulatory authorities to ensure that training programmes are up to date with current compliance requirements and can adapt to any regulatory changes.

Finally, finding appropriate placement within the VET system proved challenging. The irrigation sector spans multiple industries including agriculture, horticulture, and infrastructure, making it difficult to situate within existing educational structures.

Recommendations and Sector Response

To address these challenges, the initial case study proposed several recommendations, including developing a structured career and training framework aligned with NZQA standards, establishing both formal and informal apprenticeship pathways, expediting recognition of Australian qualifications for New Zealand contexts, enhancing industry promotion,

strengthening collaboration with regulatory bodies, advocating for appropriate placement within standard-setting bodies, and developing strategies for worker retention.

The case study generated positive feedback from across the wider food and fibre sector. Key organisations including Primary ITO and Hanga Aro Rau (the lead Workforce Development Council for Irrigation) confirmed that it accurately portrayed the current training landscape and workforce challenges. They acknowledged that the study correctly captured the sector's general sentiment towards training needs and challenges.

Furthermore, they noted that work to address many of the identified challenges had been in the pipeline and underway, with changes close to being implemented.

Qualification Framework Development

Since the publication of the original case study, progress has been made in developing a comprehensive qualifications pathway for the irrigation sector.

The new qualification framework has been structured to provide clear progression through Levels 3, 4, and beyond to more specialised qualifications, allowing learners to build their skills and knowledge. This structured approach addresses one of the key findings from the original research—the need for clear career pathways that offer progression opportunities.

Currently, six new qualifications exist within this framework, including three newly developed micro-credentials that were launched in January 2025. These micro-credentials provide flexible, targeted learning opportunities that can be completed alongside work commitments, making them particularly valuable for an industry where many workers are already employed but seeking to upskill.

The development of these qualifications has been a collaborative effort involving multiple organisations. The existing six qualifications were developed in collaboration with Muka Tangata Work Development Council, while the new Level 3 and 4 pathway involves both Muka Tangata and Hanga Aro Rau Work Development Councils, reflecting the cross-sectoral nature of irrigation work and addressing recommendation #4 from the original report.

The framework continues to undergo review and refinement, with particular focus on Certificate Level 3 and Level 4 development. These levels are especially important as they provide an entry and progression points for many workers entering the irrigation sector.

Finally, progress has been made in adapting the Australian units of competency to meet New Zealand standards and requirements, though this cross-jurisdictional work has taken longer than initially anticipated due to organisational changes in both countries.

Delivery Model and Partnerships

The approach to delivering these new qualifications reflects a long-standing industry partnership between Primary ITO and IrrigationNZ. This collaborative model leverages the strengths of both organisations to ensure the training meets both educational standards and practical industry needs.

Under this partnership arrangement, Primary ITO manages the programme development, compliance requirements, and moderation processes. This ensures the qualifications meet all necessary NZQA standards and maintain educational integrity. IrrigationNZ takes responsibility

for delivering the programme nationwide, providing sector-specific expertise and assisting with the development of practical resources that reflect current industry practice.

This division of responsibilities plays to the strengths of each organisation while ensuring a consistent, high-quality learning experience for students regardless of their location within New Zealand.

Several delivery options are currently under consideration for the Level 3 and 4 qualifications. This includes packaging the qualifications to form a complex New Zealand Apprenticeship. This would provide a structured pathway combining on-job and off-job learning components, creating a holistic training experience that connects theoretical knowledge with the technical skills needed for irrigation systems.

In parallel, there are plans to offer Level 3 and Level 4 as stand-alone qualifications. This flexible approach recognises that learners come with different needs and prior experiences, allowing them to enter the framework at the most appropriate point for their individual circumstances.

The implementation of this framework has required coordination between multiple organisations, including educational bodies, industry representatives, and workforce development councils. Though complex, this work is well advanced with completion expected within the current year.

Future Outlook and Initiatives

Looking ahead, the irrigation sector in New Zealand is well positioned to benefit from these developments in its training suite. With six qualifications now established, including the three new micro-credentials, a clear career pathway is forming that provides logical progression through various qualification levels.

As the new qualifications are implemented, the sector will be better placed to attract more diverse talent. The clarity of career progression opportunities is particularly important for young people entering the workforce, who often seek clear pathways for advancement when choosing career options.

To support sector growth and address the historical challenges with visibility and recruitment, Primary ITO and Irrigation New Zealand are planning a coordinated marketing campaign for 2025. This initiative will include social media promotion specifically designed to raise the profile of irrigation careers and highlight the sophisticated technology and environmental stewardship aspects of modern irrigation work.

This marketing approach recognises that one of the sector's persistent challenges has been its relatively low profile compared to other agricultural career paths. By actively promoting the technological aspects of irrigation work and its importance to sustainable farming practices, the campaign will aim to reposition irrigation careers to appeal to young people seeking meaningful work.

Collaborative Approach

The progress made thus far demonstrates the value of collaboration between industry bodies, educational providers, and regulatory organisations. By working together, these stakeholders have begun to address the challenges identified in the original case study while respecting the unique position of the irrigation sector within New Zealand's broader landscape.

The ongoing partnership between Irrigation NZ, Primary ITO, and the WDCs has created a coordinated approach to workforce development for the benefit of the sector. This collaboration ensures that training programmes respond to genuine industry needs while meeting necessary regulatory requirements.

By establishing professional pathways with clear career progression opportunities, the sector is addressing one of its fundamental challenges—attracting and retaining skilled workers. The framework now taking shape will help position irrigation as a profession rather than just a job, elevating its appeal to potential workers.

Conclusion

The developments outlined in this case study represent significant progress for the irrigation sector in New Zealand. By addressing the challenges identified in the original research through collaborative, structured approaches to qualification development and delivery, the sector is building a stronger foundation for its future workforce.

It is worth noting however, that despite progress in qualification development with WDCs and provider support, limited funding still constrains course development and resource creation for programme delivery.

While work remains to be done, particularly in terms of raising the profile of irrigation careers and fully implementing the new qualification framework, the direction is promising. The coordinated efforts of industry bodies, educational providers, and workforce development councils demonstrate a shared commitment to developing a skilled, professional irrigation workforce capable of meeting the complex water management challenges of modern agriculture.

As these initiatives are implemented, they will contribute not only to the irrigation sector's growth and sustainability but also to broader goals around efficient water use and environmental stewardship in New Zealand's primary industries.

Appendix One: New Qualifications and Micro credentials

New Qualifications

New Zealand Certification in Irrigation Installation (Level 3)

New Zealand Certificate in Irrigation Engineering (Level 4)

Microcredentials

Irrigation – Full pipe water measurement device installation and commission (Level 5) 5 credits

Irrigation – Full pipe water measurement device verification (Level 5) 5 credits

Irrigation – Water measurement telemetry system installation and commission (Level 5) 5 credits