The 2018 Queensland Urban Water Industry

Workforce Composition Snapshot Report

The Queensland water industry is responsible for providing safe, secure and sustainable urban water services to 4.9 million constituents. The industry comprises over 70 water service providers directly providing water and sewerage services to Queensland's communities, has an asset base worth almost $40 billion and employs just over 6,000 workers. The workforce typically comprises water operators (civil, treatment and dams with some irrigation), engineers, trades, trade waste, paraprofessionals, science/technical professionals, management and business support functions and providers include large distribution retail entities, bulk water supply statutory authorities, councils (including 17 indigenous councils), and water boards along with a range of supporting service providers.

The sector's workforce faces complex challenges including ageing, issues attracting and retaining staff, competition from other industries (particularly resource industries) and general skills and labour shortages. It is highly dispersed and very diverse with different key drivers in each region. More than 50% of Queensland's 370 water supply schemes service communities of fewer than 500 people (Statewide Water Information Management System, 2018).

Trends towards increasing technology, community expectations, outsourcing contracts and legislative reform emphasise the need to address workforce challenges and ensure water industry personnel are appropriately skilled and experienced to provide quality drinking water and manage sewerage systems to protect public and environmental health.

Contents

is a business unit of the Institute of Public Works Engineering Australasia Queensland (IPWEAQ) and an initiative of the Institute of Public Works Engineering Australasia Queensland, Local Government Association of QLD, Local Government Managers Australia and the Australian Water Association.

This document can be referenced as the 'Queensland Urban Water Industry Workforce Snapshot Report 2018'

1. Overview & Summary

1.1 Snapshot Report Background

Since 2010, ***qldwater*** has produced biennial Workforce Composition Snapshot Reports to track trends in skills and training issues with data gathered from a representative sample of Queensland urban water and sewerage service providers and a range of other sources.

The 2018 Snapshot Report is the fifth iteration of the Queensland Urban Water Industry Workforce Composition Snapshot Report. While responding organisations have differed for each reporting period and there may be variability in some results, the sample has consistently maintained a good cross-section of responding utilities of different size and geographic variation.

There are no current national studies which attempt to capture this information, and feedback from industry and government stakeholders has been very positive since the process commenced. While limited in scope, it provides important information to support broad industry workforce planning and investment.

qldwater, through the Water Skills Partnership, intends to continue to improve and publish the report on a two-yearly basis.

1.2 The Queensland Water Skills Partnership

The Queensland Water Directorate, or ***qldwater***, is a business unit of the Institute of Public Works Engineering Australasia Queensland (IPWEAQ) and is the central advisory and advocacy body within Queensland's urban water industry. Members include the majority of councils, other local and some state government-owned water and sewerage service providers, and affiliates.

qldwater facilitates the Queensland Water Skills Partnership, the only industry-led skills program for the Queensland water industry, and a national leader in strategic water skills development and advocacy. The members of the Partnership range from small local Councils to very large Council-owned distribution/retail entities and state-owned bulk entities and there are currently 50 subscribers with broad representation from across the State. Members for the 2018/19 financial year are detailed at the back of this publication.

The Partnership performs a number of functions including securing skills and training funding for industry, producing reports and workforce planning documentation, coordinating industry-wide skills/workforce development projects, piloting training initiatives, information sharing and collaboration opportunities and representation for Queensland on numerous national industry skills committees. A group of senior representatives from across the state sets the strategic direction for the Water Skills Partnership.

2017-2018 Water Skills Partnership Projects

- A small contract to provide water industry advice on vocational education and training-related activities to the Department of Employment, Small Business and Training (DESBT). The Department has been very proactive in seeking opportunities to support the industry, through targeted investment, strategic planning, and assistance with national Vocational Education and Training (VET) issues.
- Support of second chance training for Operator Certification.
- The first Water Skills Forum held in February 2018 to discuss critical workforce and skilling issues for the Queensland water industry. The forums are now held annually.
- A report to Jobs Queensland about the skilling and training needs for the water industry over the next 3-5 years.
- Submissions to State and Federal Government reviews of the Vocational Education and Training (VET) Sector.
- Representation on the Technical Advisory Committee for the Diploma of Water Industry Operations and assistance to industry to prepare for its implementation.
- Representation on the Water Industry Reference Committee that oversees the training package.
- Development of the Aqua Card, an online training course for people working on or around water infrastructure. It provides a simple overview of what contaminants are, the risks they pose, how they can enter a drinking water system and the responsibilities of those working on infrastructure to reduce that risk.
- Secretariat and Chair roles for the Water Industry Operator Certification Taskforce (previously the Water Industry Skills Taskforce).
- Regional Hub Training – coordination of collaborative training arrangements.
- Regular Water Skills Partnership and Water Industry Worker Technical Reference Group meetings.
- Ongoing partnerships with key agencies and organisations, such as the Water Industry Operators Association of Australia.

1.3 Key differences among the last five Snapshot Reports

Key differences among the 2018, 2016, 2014, 2012 and 2010 Snapshots of note are:

The data collection template for 2018 was modified to include additional indicators as requested by members of the Water Skills Partnership. Almost 70% of respondents included responses to the new indicators.

The final report data analysis including graphs have focussed on job categories rather than individual job roles, to assist with comparisons against previous Snapshot Reports.

There have been some changes to the participating organisations for each report, however there is reasonable consistency in the overall participant profile (particularly diversity - organisation size/ total number of employees) and overall the number of participating organisations has increased from previous reports. 2018 participants are noted under section 1.4.

1.4 Methodology

The data gathering stage for this report used a modified version of the 2016 Snapshot Report data collection instrument. The data collection instrument was distributed (via Excel format) to Water Service Providers including bulk water entities and known private providers across the state to collect information on job roles, number of employees, age, gender, qualifications held and outsourcing arrangements. A total of 16 responses were received from small, medium and large local government providers, SEQ local government owned entities and bulk water providers. The responses received represent 3373 employees reflecting just over 50% of the Queensland water industry workforce.

The organisations that responded to the survey in 2018 were:

- Banana Shire Council
- Barcaldine Regional Council*
- Barcoo Shire Council*
- Burdekin Shire Council*
- Carpentaria Shire Council*
- Central Highlands Regional Council
- Cook Shire Council*
- City of Gold Coast
- Goondiwindi Regional Council*
- Logan City Council
- Mackay Regional Council
- North Burnett Regional Council
- Seqwater
- Unitywater
- Queensland Urban Utilities
- Winton Shire Council*

***New in 2018**

2. Size and Scope of the Qld Water Industry

The Queensland water industry provides safe, secure and sustainable urban water services to 4.9 million constituents. The industry comprises over 70 water service providers directly providing water and sewerage services to Queensland's communities, has an asset base worth almost $40 billion and employs just over 6,000 workers.

2.1 Queensland Urban Water Industry Employers

As of November 2018 in Queensland there were 75 water service providers excluding small private schemes. This figure has slightly changed across the reports due to various sector reforms. These organisations constitute the scope of this report.

66 are local governments outside South-East Queensland (SEQ), 17 of these utilities are indigenous councils including two Torres Strait Island councils and 15 Aboriginal councils.

The water distribution/sewage collection and retail services for eight SEQ local government areas are managed by two statutory authorities, owned by the relevant councils.

The remaining three SEQ councils are directly responsible for water distribution/sewage collection and retail services.

There are also two very large, state-owned entities responsible for bulk water supply and transport (along with treatment in SEQ and limited other areas of the state) and an additional two state-owned commercialised statutory authorities (Water Boards) operating in Mount Isa and Gladstone.

Some of these organisations outsource part of their day to day operations to private companies. As in previous years, in 2018 approaches were made to companies providing contract services to water service providers (e.g. treatment operations) to gather data, however no responses were received. New indicators in this report sought to understand current outsourcing arrangements and any plans for future changes to current practices, however useful data remains a challenge to gather.

2.2 Total Size of the Queensland Urban Water Industry

It is estimated there are 6,153 people employed in the Queensland Urban Water Industry. The Queensland Government collects employee numbers for most Queensland service providers (reported through the Statewide Water Information Management system), excluding bulk water and state-owned water boards. Published employee data is used for these providers and the number of employees working in private organisations has been estimated based on what is known about current outsourcing arrangements and previous data collected. The 'employees' indicator (QG1.20) is relatively new for all reporting entities and it is expected that reported numbers may be an underestimate due to how the indicator definition is likely interpreted.

The 2016 Snapshot Report showed there were 5,975 people employed in the Queensland water industry and in previous reports, ***qldwater*** conservatively estimated the total size of the industry to be 5,500 employees excluding an average vacancy rate of up to 10% and excluding contractors. The number of employees working in private and other organisations has been estimated based on known outsourcing arrangements and the (limited) data from the survey on outsourced roles.

The following table summarises the number of employees working in each of the larger organisations making up the broader Queensland Water Industry.

Table 1: Size of major employers in the Queensland Urban Water Industry

Business	Estimated Size of the Workforce
Total SEQ local government-owned employers (3 council service providers, Queensland Urban Utilities, Unitywater)	2,730 employees
Local Government service providers outside SEQ	2,311 employees
Bulk water providers	1,156 employees
Private and other organisations	200 employees*
Gladstone and Mt Isa state-owned water boards	116 employees
TOTAL	6,153 (including vacancies)

***This estimate includes operations employees only not capital project employees.**

In Queensland, there appears to be a strong correlation between size of the operations workforce and the number of water connections across the local government-owned utilities (Figure 1).

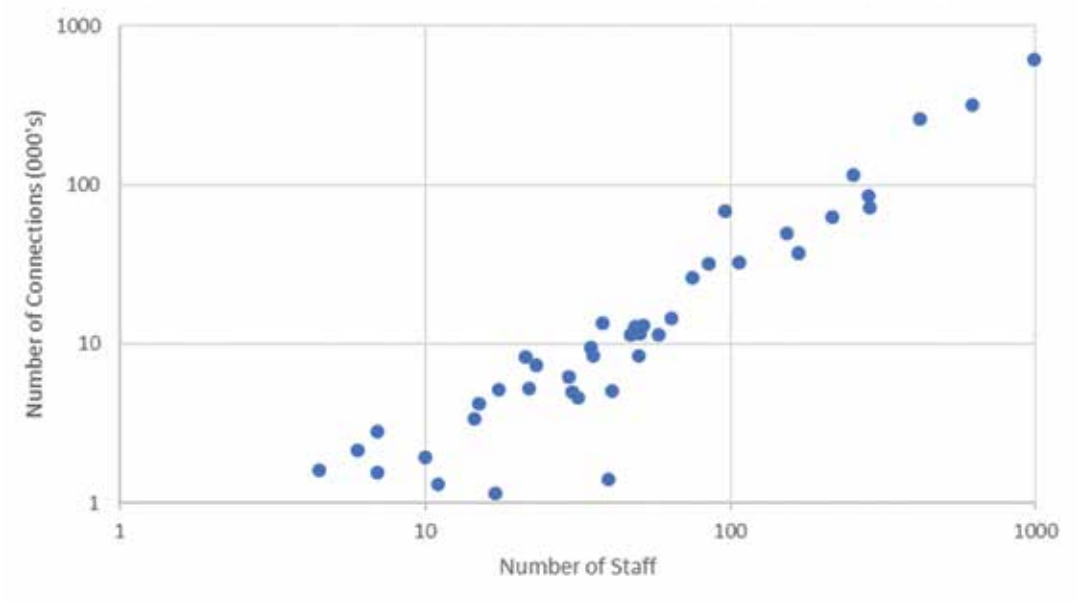

Figure 1: Number of operations staff by number of water connections (000s).

2.3 Queensland Water and Sewerage Schemes

Figure 2a shows the grouped property connections by local government area in Queensland as well as the water supply scheme locations. Figure 2b shows sewage treatment plants and population served. These maps clearly demonstrate the significant diversity in density of Queensland communities and large geographic separation which contribute to the challenge of providing services. As a result, financial sustainability is an issue for many service providers, as is sourcing skilled staff and delivering face to face training for technical and operations roles.

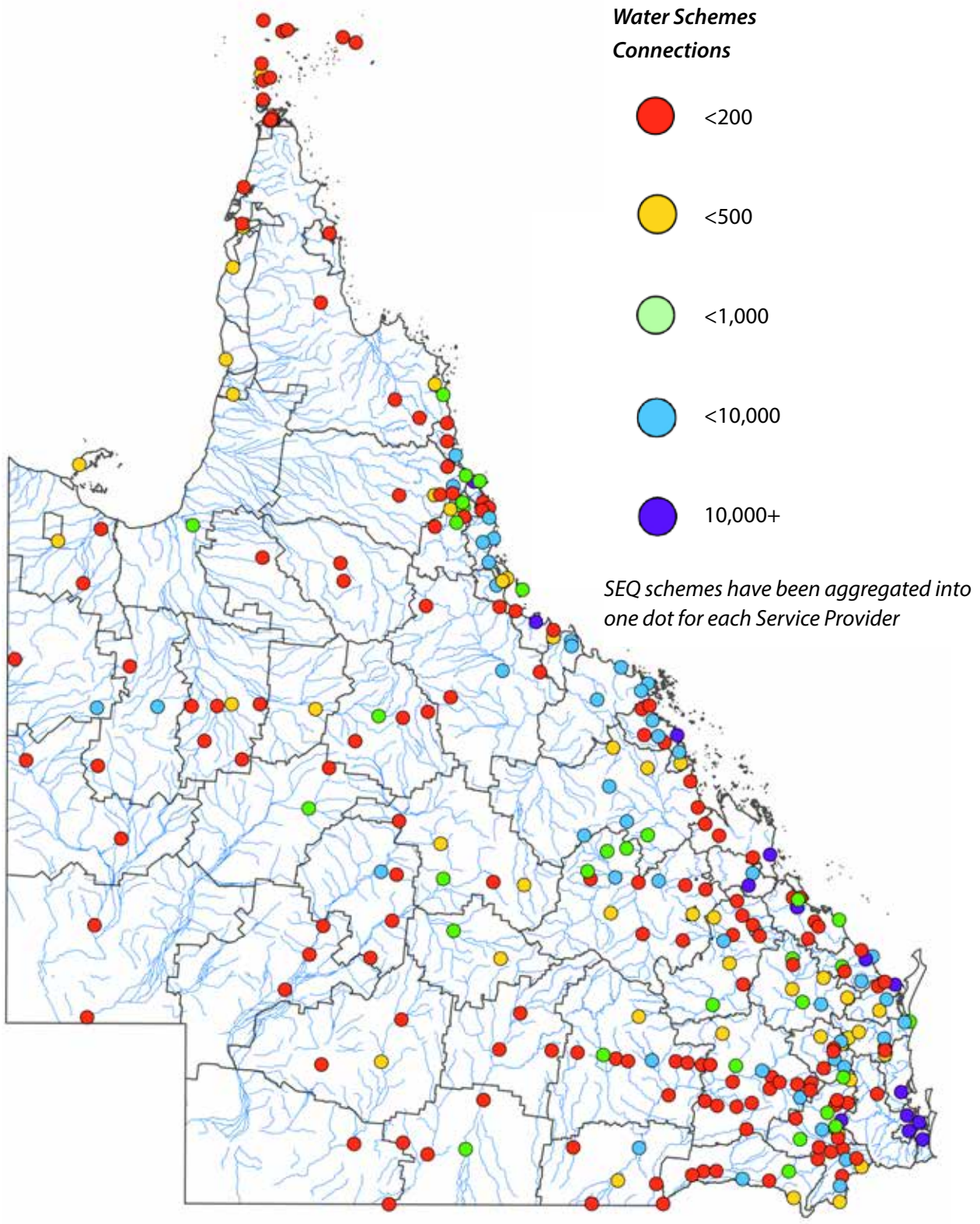

Figure 2a: Queensland Water Schemes

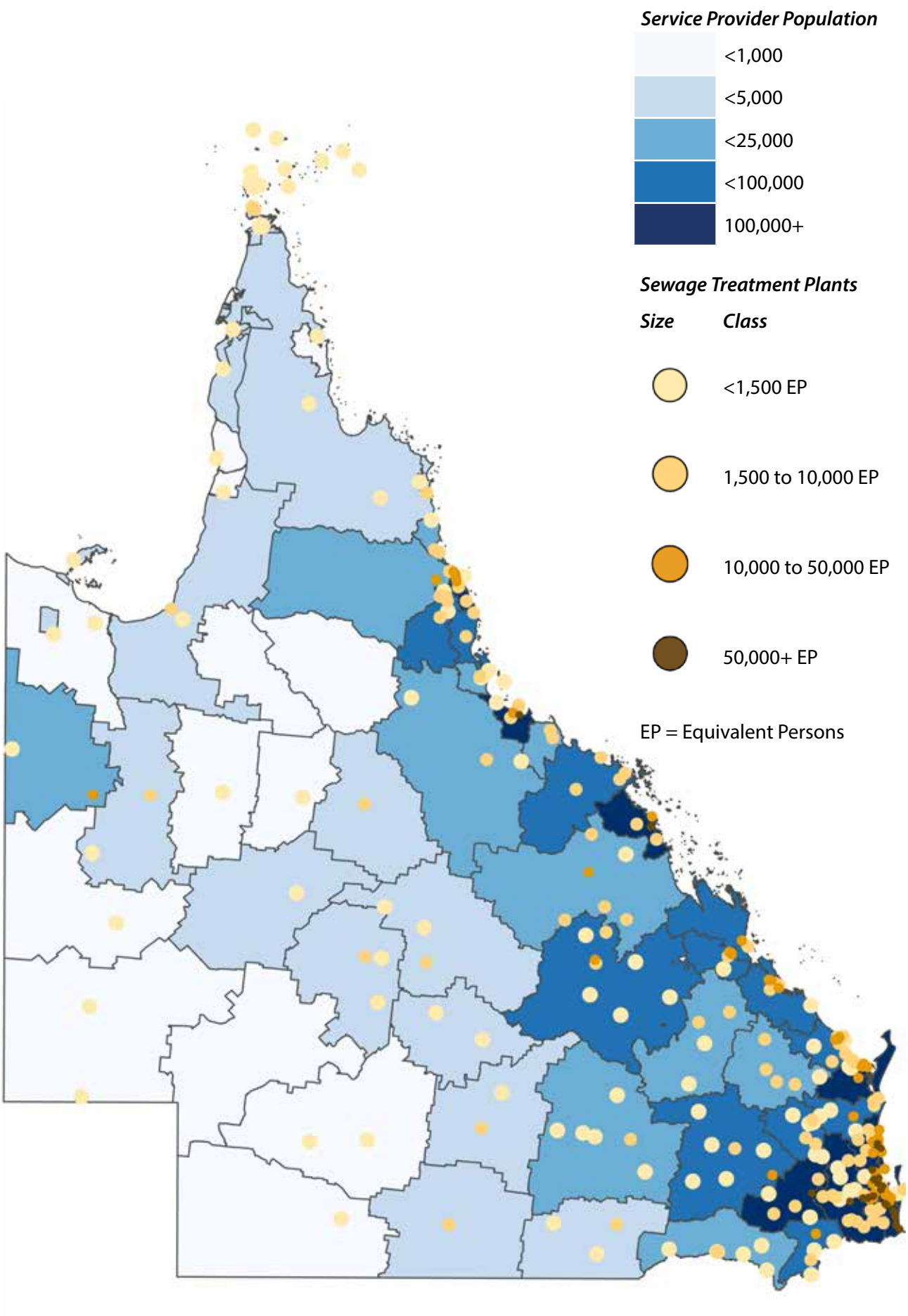

Figure 2b: Queensland Sewage Treatment Plant locations by Local Government Area

3. Workforce Statistics & Trends

3.1 Job Families and trends

Figure 3 represents the proportion of the workforce employed within each Job Family in 2018. For 2018, the largest job role category was Business Support (35%). This figure includes all support functions (outside of the other job role categories) such as finance, human resources, communications and IT professionals and also includes an estimate of full-time equivalent staff for local government Water Service Providers that access these services through departments within a larger council structure. This figure has increased from 2016 (up from 29%).

While analysis of the data reflects a range of potential issues, the most likely contributor to the change is a difference in approach in classifying job roles among some of the larger utilities from the 2016 to the 2018 report. Some have reported significant recruitment in temporary roles over this two year period, including large scale IT and other projects.

The next largest combined job role category, at 28%, is the Water Operations job roles which includes Water Operations – Civil (16%), Water Operations – Treatment (10%) and Water Operations – Dam (2%). This figure is down slightly from 29% in 2016.

In 2018, Engineers made up 11% of the workforce, just slightly lower than 12% in 2016. Raw data shows a significant decrease in Civil Construction and Maintenance roles since 2016, which anecdotal information would suggest is likely a reflection of changes to classification approaches, some downsizing, and some outsourcing in larger utilities.

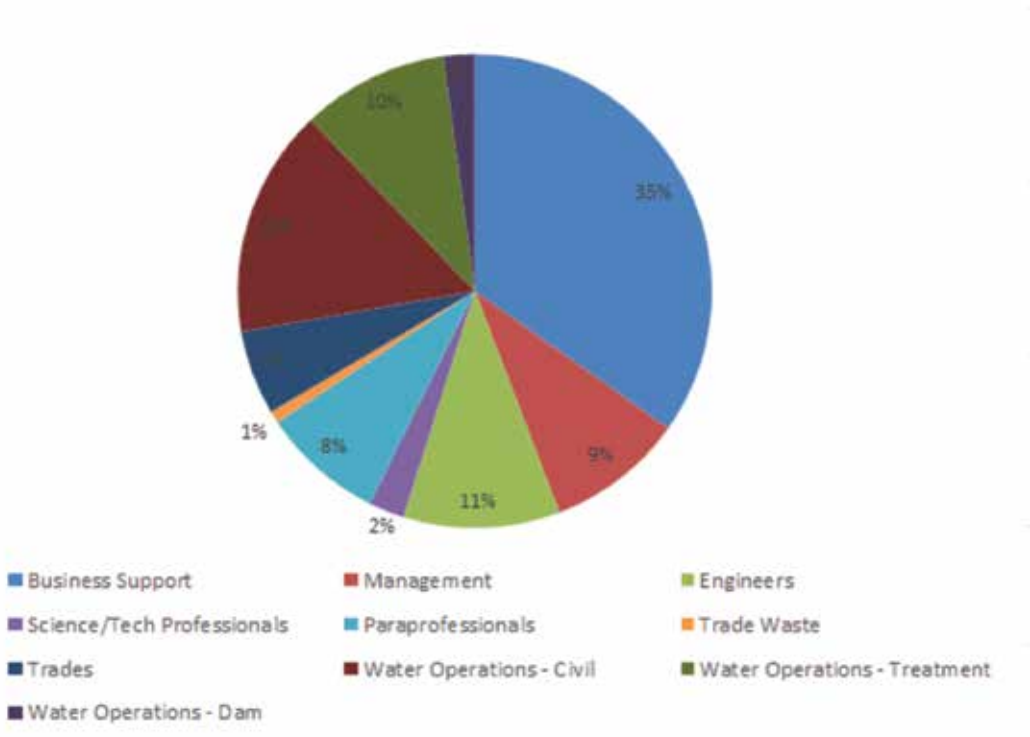

Figure 3: Job Family Categories 2018

Figure 4 provides an analysis of the proportion of employees employed within each Job Family Category across the 2010, 2012, 2014, 2016 and 2018 Snapshot Reports, respectively. This data demonstrates likely changes to workforce composition, subject to potential inconsistencies in data reporting (and differences in participating organisations) identified above.

The data for the civil operations and trade roles appear to indicate a downward trend which is represented in more detail in Figure 5. Employees in Civil Operations roles have been declining over time with this role representing 26% of the workforce in 2012, 20% in 2014, 18% in 2016 and 16% in 2018. Those in Trades roles have also been declining with trades representing 19% of the workforce in 2010 and just 6% in 2018.

Anecdotal feedback suggests large scale workforce changes with at least one large employer. There is an increase in treatment operations roles, likely skewed by significant categorisation changes from one of the larger employers.

Of all trends apparent in the figure, a decline in trades roles in favour of outsourcing is supported by feedback from some of the largest employers, in particular greater contracting of civil, plumbing, and mechanical and electrical maintenance activities.

One larger employer described a large amount of organisational change across a range of roles. Another had assumed responsibility for a new function (waste management) resulting in significant increases to reported staff numbers.

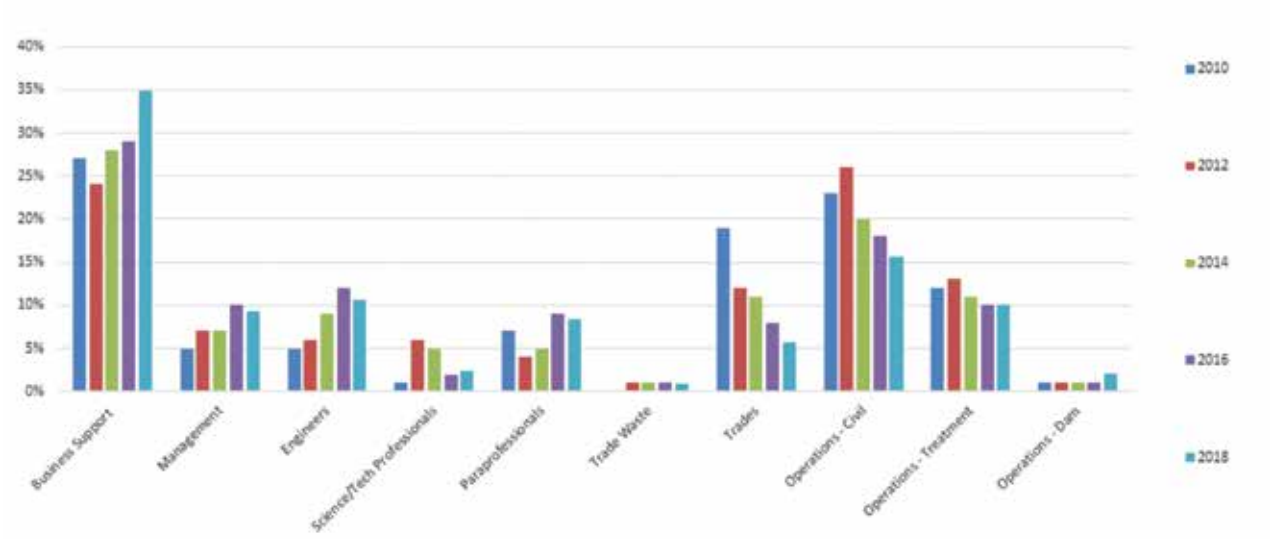

Figure 4: Job Family Category Trends 2010 – 2018

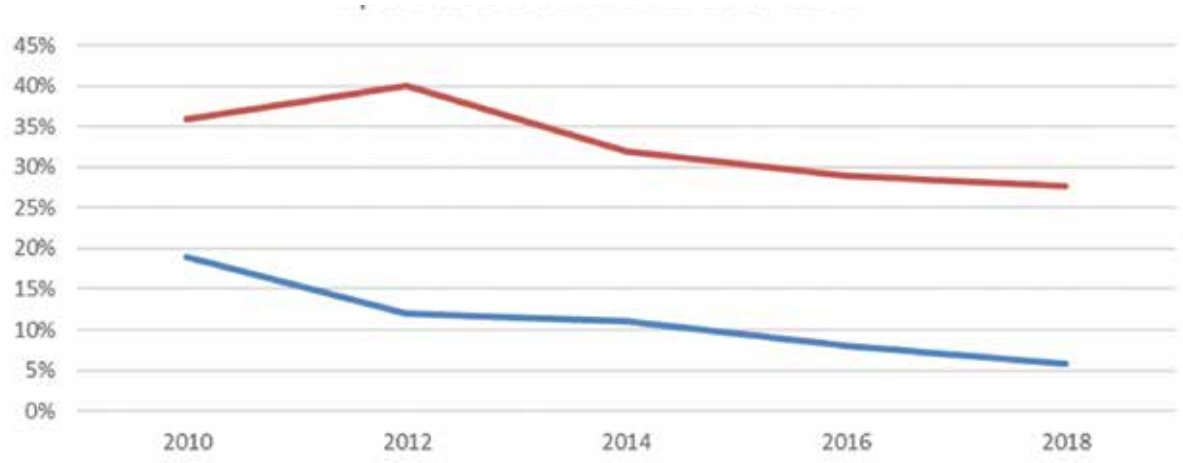

Figure 5: Operations Staff Trends 2010 - 2018

Overall, the confidence in the job family categorisation data is low to medium.

There are differences in participating organisations between 2010 and 2018, and different individual respondents responsible for preparing data. Where these factors are consistent for reporting organisations, material increases in the proportion of business support roles and trade roles are apparent.

Council service providers on the whole tend to report greater workforce stability. There remain significant differences between a council and a standalone entity, and Job Families like business support are more likely to include estimates for a council – reflecting in part a service shared with other council functions.

3.2 Age Profile

The 2018 data demonstrate some trends in the ageing profile of the industry, and confidence in data reported is higher than Job Family categorisation. **Figure 6** outlines the age profiles across the five Snapshot reports from 2010 to 2018. The increase in the over 60 age category and reduction in the 51-60 age group is likely to be a reflection of those that have moved from the 51-60 age group to over 60 years since the last report. This, coupled with the decrease in the 41-50 year age group could indicate that the ageing profile of the workforce is a more significant issue with more mature workers moving into the over 60+ age group and closer to retirement.

This issue is likely to be exacerbated by the slight decrease in the proportion of staff 30 years and under, pointing to declining recruitment into entry-level roles.

This is consistent with anecdotal feedback, and data reported in the 2018 Local Government Workforce and Future Skills Report published by the Local Government Association of Queensland that shows declining participation across the council workforce from those under 30 years of age and increases in those aged over 50. (Local Government Association of Queensland, 2018).

This same report also shows that Queensland local councils see their top two technical and trade skill shortage occupations are wastewater and water treatment operators. More information and analysis of these shortages is explored later in this report.

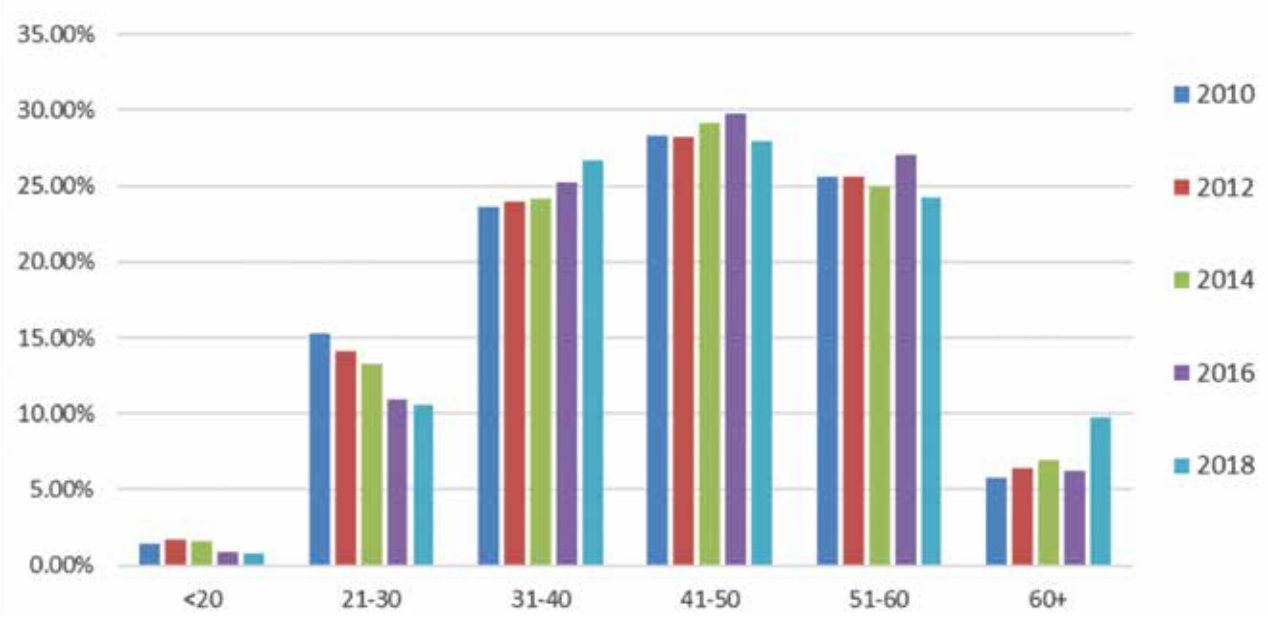

Figure 6: Age profile of Queensland Water Industry - comparison of 2010, 2012, 2014, 2016 and 2018 Snapshot Reports

3.3 Age Profile and Job Role Category

Figure 7 represents the different job role categories in the water industry broken into age categories.

The Water and Wastewater Operator category has the highest proportion of employees 30 years and under (19%) followed by Engineering Professionals (13%) then Trades and Engineering Paraprofessionals (both 12%).

The Operational Manager – Water category had the lowest number of employees under 30 (1%) which would be expected given the experience required to move into a management-level position. This job role also had a high proportion of employees aged over 50 (48%).

The Trade Waste Officer category has the highest percentage of employees over 50 across the categories for 2018 at 60%, but data for this small cohort is again potentially skewed by categorisation changes by larger employers. The ageing profile for Engineer Professionals is supported by anecdotal feedback.

A large number of wastewater/water treatment supervisors fall within the over 50 years age categories (47%). This is in line with previous reports but down slightly from the 2016 report (57%). As noted in previous reports, the large number of employees in this age category may indicate a longer lead time for employees to become skilled in the technical aspects of a water/wastewater treatment operator role before moving into a supervisory-level role.

The number of employees aged over 51 years in the Civil Construction and Maintenance - Water and Wastewater category remained relatively high at 39% which is consistent with previous reports.

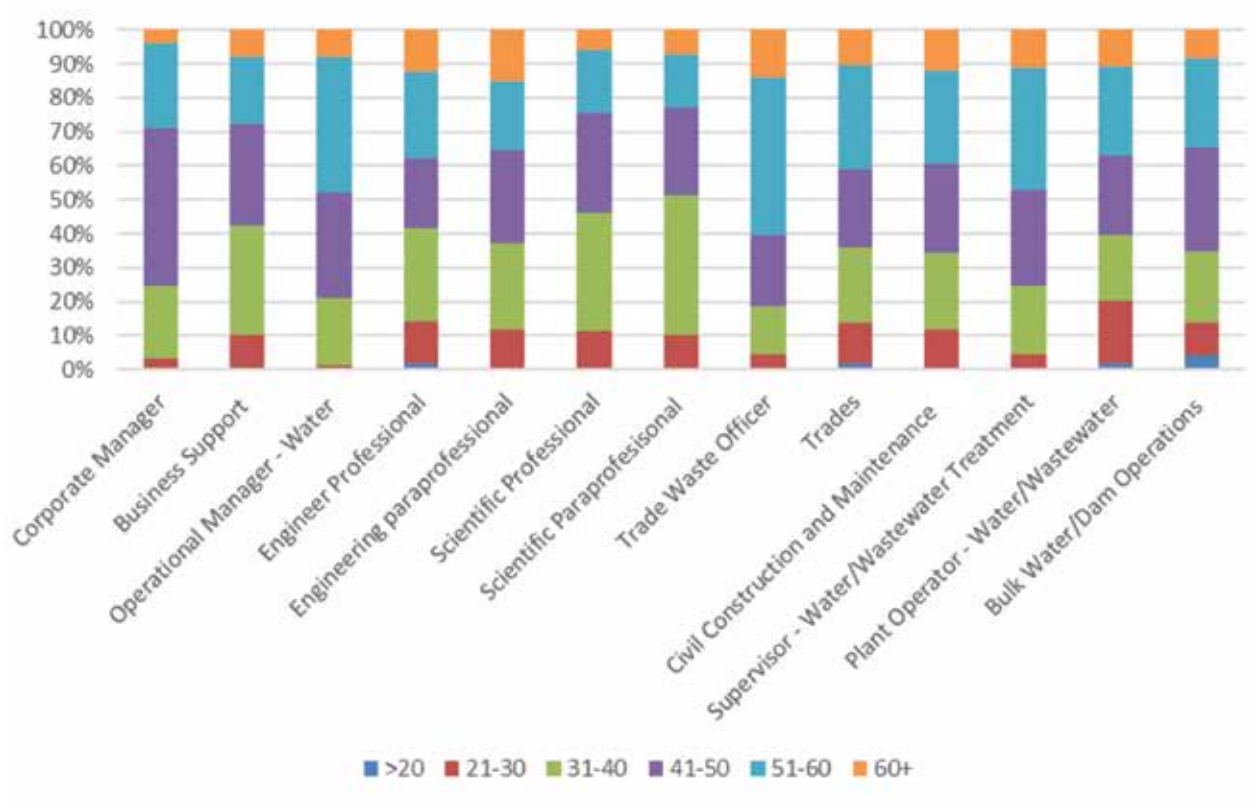

Figure 7: Age profile by job role category

Specialised occupations

– a more detailed consideration of key occupations

From the 2012 Snapshot Report onwards, Water Skills Partnership representatives were asked to consider a range of measurements for identifying 'key occupations' for which reported data might identify trends including skilling risks. A key occupation might not be the most senior in an organisation, but one which typically requires a combination of qualifications and a significant amount of on-the-job experience to effectively perform a role.

For 2018, the concerns with Job Role classifications in the reported data have made analysis of these roles extremely difficult. The authors regret that as a result, we are unable to provide confident commentary on observed trends for this report. However, Water Skills Partners and ***qldwater*** member organisations have been concerned about a growing shortage of qualified operators.

Anecdotally it has been reported it is increasingly difficult to recruit experienced water and wastewater operators. A council in Central Queensland reported five concurrent vacancies within its water business with particular difficulty in attracting suitable staff to fill the roles. The vacancies were a result of:

- retirement
- higher salary in the mining sector
- promotion to a higher-level role that had been vacant for more than one year
- resignation for being overlooked for a promotion
- a move to another Council nearby.

Previous Snapshot Reports have suggested an ageing trend for the Queensland water workforce with a declining proportion of participants under the age of 30 and increases in the proportion of workers over the age of 51.

The 2018 data appears to support a continuation of this trend and potentially points to a worsening of the ageing issue. An increase in the number of employees in the over 60 age category (10% of the workforce in 2018 compared with 6% in 2016) and decline in the 41-50 and 51-60 age groups (52% in 2018 down from 57% in 2016) suggests that more mature workers have moved into the over 60+ age group and closer to retirement or left the industry prior to retirement.

The ageing profile of the workforce is evident in water and wastewater treatment plant operator job roles, with an increasing number of operators aged over 60 years (11% in 2018 compared with 8.5% in 2016). The proportion of operators aged over 51 years has remained high with 37% of operators aged over 51 years in 2018, similar to figures in previous years with 39.5% in 2016, 37% in 2014 and 38.5% in 2012. The proportion of operators under the age of 30 remains low at 20% (up slightly from 18% in 2016).

This is consistent with data published in the 2018 Local Government Workforce and Future Skills Report that shows Queensland councils identified Wastewater and Water Treatment Operators as their top two skills shortages with 28.3% of councils reporting a shortage of Wastewater Treatment Operators. 13.2% reported that as a result of the shortage, they have been forced to recruit less skilled applicants and 35.8% have flagged the job role as a future shortage. Similarly, 22.6% of councils reported a shortage of Water Treatment Operators with 9.4% having recruited less skilled applicants and 30.2% highlighting the job role as a future shortage.

The shortage of operators appears not just isolated to Queensland water service providers. The Water Industry Reference Committee's Skills Forecast for 2019 published by Australian Industry Standards reports Water and Wastewater Treatment Operators at the top of the list of skills shortages for the water industry nationally, ahead of Maintenance, Engineers and Water Quality Managers (Australian Industry Standards, 2019).

Reasons identified for the shortage include:

- Low salaries/wages
- Competition from other organisations
- Geographic location of vacancies
- Ageing workforce
- Poor image of the industry and roles.

Council water and sewerage employees, including those employed in the southern part of SEQ, are not as clearly identified as part of the water industry as for discrete entities like Queensland Urban Utilities, Unitywater and Seqwater, and participate in enterprise arrangements along with other Council service staff. This can act to limit the potential for incentive structures making Councils less competitive with other industries within a region, reportedly making attraction and retention more challenging. Furthermore, salary data gathered for this report shows significant variation in the salaries for operators across the state. From the eight organisations that provided salary data for the 2018 report, the highest salary for a Wastewater Treatment Plant Operator was reported as $75,000 with the lowest at $40,000. The figures are similar for Drinking Water Operators with the highest salary reported as $70,000 and the lowest again at $40,000.

Recent member polls by ***qldwater*** have highlighted the following skilling issues as posing the greatest risks to organisations in Queensland:

- Capability
- Age
- Attraction
- Training
- Operator Shortage
- Workforce Planning

A specific query about the severity of the shortage of water and wastewater treatment operators showed that 77% of members felt that the shortage of operators was either extreme or impending. There were some differences in the responses from SEQ and in a regional centre. Just over 60% of members in a regional Queensland centre identified the shortage as extreme with a further 17% agreeing the shortage was impending but in SEQ these were directly reversed, with 17% stating the shortage was extreme and 60% agreeing that the shortage was impending and likely to create significant service difficulties in the next few years. This reflects the exacerbated challenge of recruitment and retention in regional Queensland, particularly in resource-rich areas where competition with resource companies for skills is commonplace.

Members were also asked what they believed would have the greatest impact on addressing the shortage. Higher salaries were identified as likely to have the most impact, followed by training and career pathways, community water literacy, governance and certification. Portability of qualifications/skills was raised as important, with the Water Industry Worker program an example of where this is working well in addition to Operator Certification.

It is clear from ***qldwater***'s data and that of other organisations that there is a significant challenge for the industry when it comes to recruitment and retention of water and wastewater treatment operators. More analysis is required to better understand the contributors to the operator shortage and to look for long-term solutions. Further work is planned for 2019/20.

3.4 Gender Profile

Figure 8 shows the proportion of male and female employees and how it has changed over time.

With the exception of 2012, reported data shows a gradual increase in the proportion of women participating in the water industry with women representing 30% of the workforce in 2018 compared with 22% in 2010.

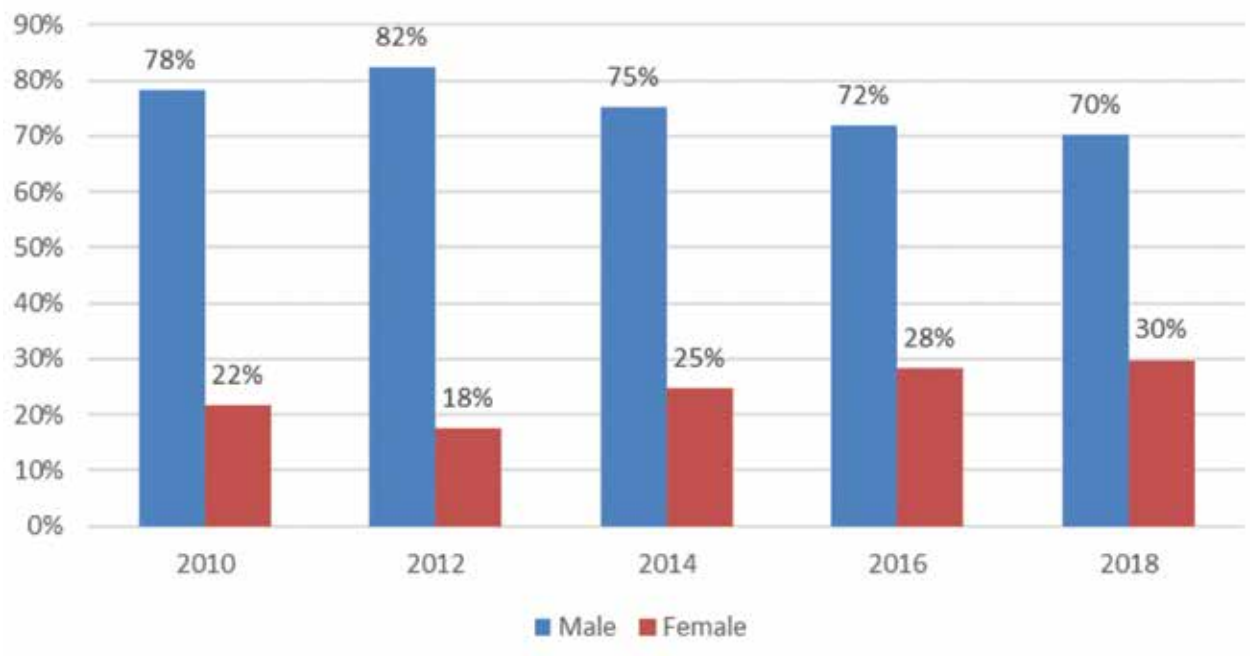

Figure 8: Comparison of 2010, 2012, 2014, 2016 and 2018 gender data.

Figures 9a and 9b compare the gender statistics of the 2010, 2012, 2014 2016 and 2018 Snapshot report data by job category. The 2018 data again supports previous report conclusions that the water industry is male-dominated with males continuing to represent the majority of the workforce. However, at 70% for 2018, this figure is down slightly from the 2016 figure of 72% and the 2014 figure of 75%.

Since 2012 there has been a steady increase in the proportion of women in Management roles and since 2014, an increase of women in Professional Engineering roles.

At the same time there has been a decrease in the proportion of women in Business Support categories, with a sharper decrease between 2016 and 2018. Since 2014 there has also been a gradual decline in the proportion of women in Paraprofessional Engineering roles. The proportion of women in Science/ technical Paraprofessional roles had been declining from 2010 to 2016 but experienced an upward spike from 2016 to 2018.

There were significant spikes in the proportion of women in Operators and Trades roles from 2016 to 2018. A number of utilities report having pursued targeted campaigns to attract and retain female talent in recent years, which may have contributed to this result.

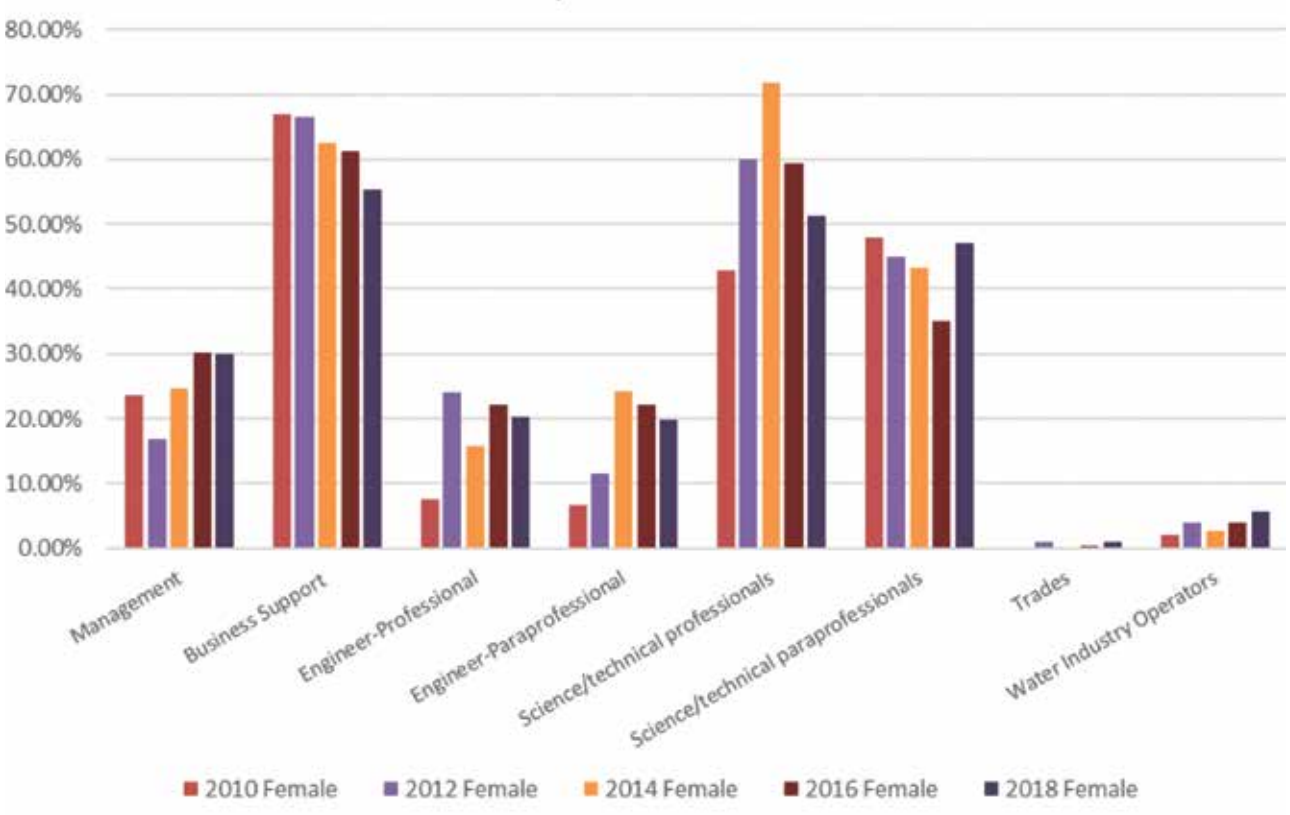

Figure 9a: Number of females in each job family as a % of total – comparison of 2010, 2012, 2014, 2016 and 2018 data.

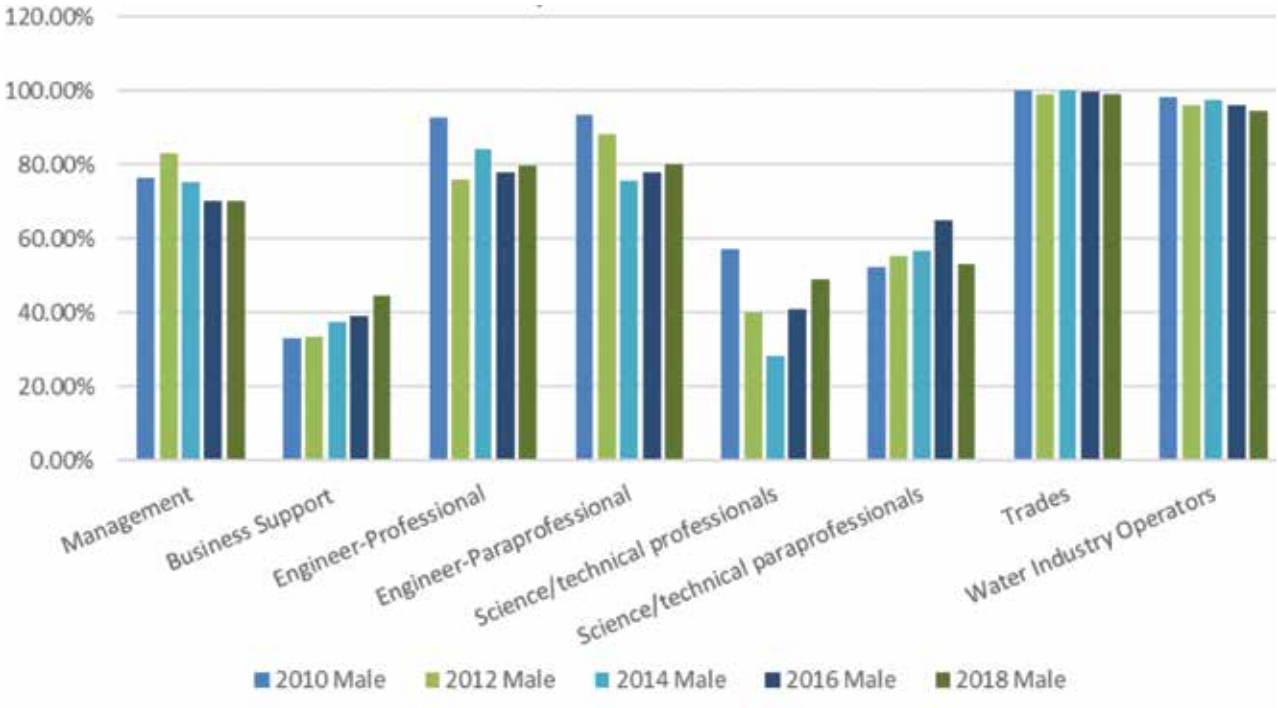

Figure 9b: Number of males in each job family as a % of total – comparison of 2010, 2012, 2014, 2016 and 2018 data.

The Water Services Association of Australia reported in 2017 that urban water utilities in Australia have 'significantly lifted their focus on inclusion and diversity in recent years, in response to growing recognition that diverse workforces make better decisions, improve innovation, and deliver better outcomes for the community' (Water Services Association of Australia, 2017). This trend is particularly evident in some southern states, with Victoria utilities in particular having diversity targets mandated.

3.5 Job Categories and Qualification Levels

Figure 10 compares the highest level of qualification achieved for each of the job categories surveyed. The results in this figure represent a much smaller subset of the total suvey responses (n=736) as not all respondents were able to source qualifications data.

As would be expected, the majority of employees in professional roles such as Engineers, Managers and Science/Technical Professionals hold a Bachelor Degree in 2018 which is consistent with the results from the 2016 report.

The percentage of Water Industry Operators – Civil, with no qualifications has reduced from 44% in 2016 to 31% in 2018. This may be a result of differences in reporting between the two years or may reflect an increasing commitment to training in formal qualifications for Water Industry Operators, which is consistent with industry feedback.

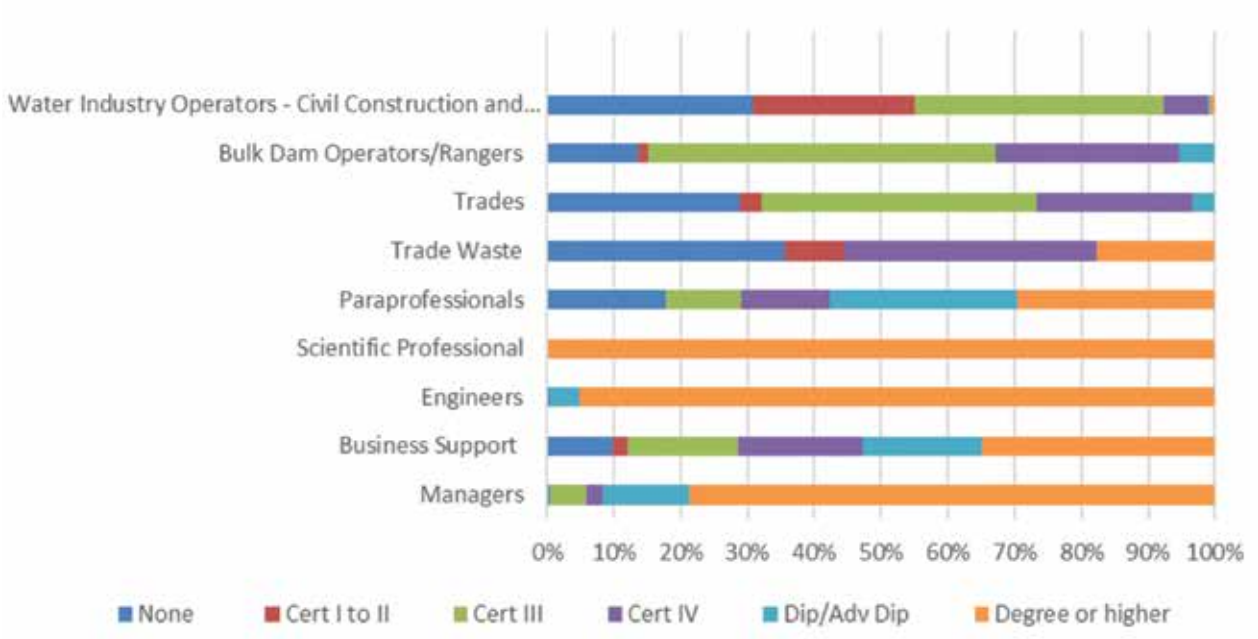

Figure 10: Highest qualifications held by Job Category

Figure 11 shows all qualifications attained by water and wastewater treatment plant operators and supervisors. Respondents were asked to include qualifications held from recent (post 2001) versions of the National Water Training package (NWP) only. Results in this figure represent a much smaller subset of the total survey responses (n=239) and include data provided by organisations that didn't provide responses to the full data survey.

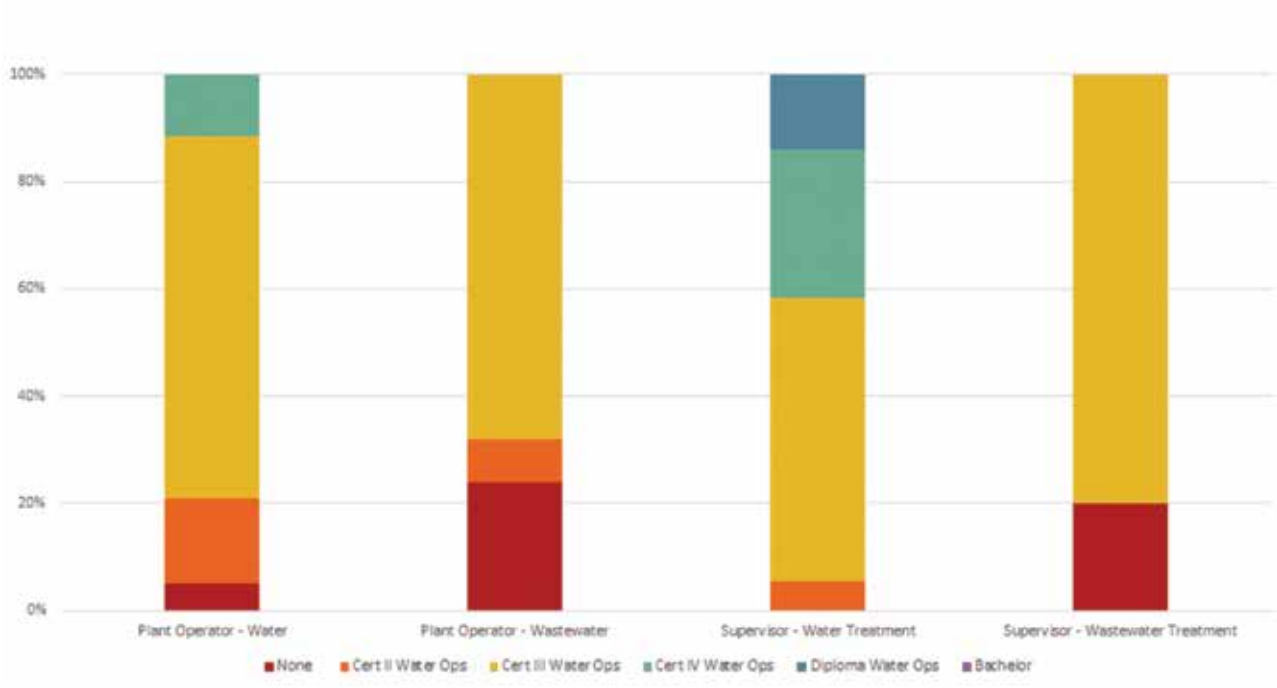

Figure 11: NWP qualifications held by water/wastewater treatment operations employees.

The 2018 results (Figure 11) show that all water treatment plant supervisors held a qualification from NWP that was attained post 2001. This has increased from 2016 when 77.4% of water treatment plant supervisors were reported as having a post-2001 NWP qualification but this may also reflect a data reporting issue. The most commonly held qualification for water treatment plant supervisors was the Certificate III in Water Operations (53%).

For wastewater treatment plant supervisors, 20% did not hold a recent qualification from NWP with the remainder (80%) holding a Certificate III Water Operations.

The data shows that a greater proportion of wastewater treatment plant operators (24%) did not hold a recent NWP qualification than water treatment plant operators (5%).

These results are generally in line with previous assumptions and data recorded on the number of water operators in Queensland with post-2011 NWP qualifications. Assuming that this data could be extrapolated to the wider Queensland industry, approximately 80% of water treament plant operators and supervisors hold qualifications that can be assessed against the Water Industry Operator Certification Framework: Drinking Water, Wastewater and Recycled Water 2018. However, based on the results of recent Certification initiatives, it is understood that the majority of operators that hold an existing NWP qualification would still need to complete between three to six additional units of competency (as relevant to the treament processes that they operate) in order to meet the criteria for becoming a Certified Operator.

3.6 Outsourced roles

In 2018, reporting organisations were asked to provide details of their current outsourcing arrangements. Of the 16 organisations that provided data for the 2018 report, 12 provided details of key workforce functions and indicated whether they were currently performed in-house or outsourced. The survey also requested information about whether the current arrangements are likely to change in three years from now.

Questions were asked across six areas of operation:

- Capital Works Design
- Capital Works Delivery
- General Oversight/Project Management
- Operations
- Planned Maintenance
- Reactive Maintenance

With specific details of insourcing/outsourcing arrangements requested for each of the following business functions:

- Raw Water Source and Supply
- Drinking Water Treatment
- Drinking Water Network Management/Operations
- Drinking Water Network Maintenance
- Sewerage Network Management/Operations
- Sewerage Network Maintenance
- Sewage Treatment
- Recycle/reuse

A scale of fully insourced, majority insourced, equally in-sourced and out-sourced, majority out-sourced and fully out-sourced was provided.

Of the responses received, there is both increased in-sourcing and out-sourcing planned for capital works design. There is a very small amount of increased out-sourcing planned for capital works delivery. There is increased in-sourcing planned for general oversight/ project management (2 respondents).

There was no consistent trend for general operations or reactive maintenance but there is an amount of increased in-sourcing planned for planned maintenance.

Noting the small sample size, there is no clear trend towards increased outsourcing from the responses received. If anything, the data reflect planned increased in-sourcing.

4. Conclusion

The fifth iteration of this Snapshot has supported a number of potential trends in the industry such as an ageing employee profile and continued male-domination of the workforce. Previous reports had suggested an increasing outsourcing trend and attempts were made in this report to capture data to support those assertions. However, there are clear challenges in capturing this data and consideration will need to be given in future reports as to whether to continue seeking this information or to simplify data capture further to improve responses.

qldwater's ongoing roles with the national Water Industry Reference Committee and Water Industry Operator Certification Taskforce are aimed at ensuring that all work undertaken complements and enhances other industry workforce studies.

References

- Australian Industry Standards. (2019). Water Industry Skills Forecast 2019. Melbourne: Australian Industry Standards.
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- Queensland Water Directorate. (2018). Statewide Water Information Management System. Queensland: Queensland Water Directorate.
- Water Services Association of Australia. (2017). Tapping the Power of Inclusion and Diversity in Urban Water. Melbourne: Water Services Association of Australia.

Queensland Water Skills Partnership Subscribers 2018/19

- Balonne Shire Council
- Banana Shire Council
- Barcaldine Regional Council
- Barcoo Shire Council
- Boulia Council
- Bulloo Shire Council
- Bundaberg Regional Council
- Burdekin Shire Council
- Burke Shire Council
- Cairns Regional Council
- Carpentaria Shire Council
- Cassowary Coast Regional Council
- Central Highlands Regional Council
- Charters Towers Regional Council
- Cook Shire Council
- Croydon Shire Council
- Diamantina Regional Council
- Douglas Shire Council
- Etheridge Shire Council
- Fraser Coast Regional Council (Wide Bay Water and Waste Services)
- Gladstone Area Water Board
- Gladstone Regional Council
- Gold Coast City Council
- Goondiwindi Regional Council
- Gympie Regional Council
- Hinchinbrook Regional Council
- Logan City Council
- Longreach Regional Council
- Mackay Regional Council
- Maranoa Regional Council
- Mareeba Shire Council
- McKinlay Shire Council
- Mornington Shire Council
- Mount Isa City Council
- North Burnett Regional Council
- Paroo Shire Council
- Queensland Urban Utilities
- Redland City Council
- Richmond Regional Council
- Rockhampton Regional Council
- Seqwater
- South Burnett Regional Council
- Southern Downs Regional Council
- Tablelands Regional Council
- Toowoomba Regional Council
- Townsville City Council
- Unitywater
- Whitsunday Regional Council
- Winton Shire Council
- Woorabinda Aboriginal Shire Council

About *qldwater*

The Queensland Water Directorate (***qldwater***) is the central advisory and advocacy body within Queensland's urban water industry and represents members from Local Government and other water service providers across Queensland.

The Directorate actively promotes collaboration and development across the industry. One major area of focus for ***qldwater*** has been to help identify and understand as well as guide the development of industry-wide strategies to aid the industry's significant skill development, attraction and retention challenges across the state.

qldwater will continue to work with industry to further develop its workforce and improve and retain valuable skills unique to the industry.

Further information about this and other programs is available at **www.qldwater.com.au**.

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