

Introduction



Technical Officer Development Program (TODP) objectives:

A succession planning pathway for Technical Officer roles; a recruitment, development and reward and recognition framework

Recognition of competency for existing Technical officers; recognition of competencies, development needs and contemporary qualification.

We believe CWW's needs and objectives are symptomatic of the broader water industry and we invite broader industry participation in the program.

Victoria University seeks strategic positioning as a workforce development consultant in education to business

CWW Tech Officer stats



44 Technical Officers = 16% of CWW's workforce

19 in Engineering, 18 in Recycling and Development and 7 in Service Sustainability Departments

Male, age 44.5 years, service 11.4 years

38 Collective Agreement, 6 individual agreement

8 of the 33 CWW business critical roles

Turnover low

Recent recruitment internally from customer service and externally from trade and contractor backgrounds.

CWW “Tech Officers”

Trade Waste Consultant

Connections and Metering Officer

Land Development Officer

Auditors: Construction Compliance Officers
and Metering Officers

Asset Information officer

Design Officer

Water/Sewer Operations Officer.

CWW workforce profile



CWW Job Families by age distribution

Age Distribution	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	Sum
Accountant	0	0	2	1	3	3	2	1	0	0	0	12
Clerical	0	6	3	4	11	5	10	6	4	0	0	49
Communications	0	0	7	1	2	0	0	0	0	0	0	10
Customer Service	0	6	7	8	9	9	3	0	2	0	0	44
Economics	0	0	1	2	0	0	0	0	1	0	0	4
Engineer	0	9	15	10	7	3	5	5	5	3	0	62
Environmental Science	0	3	2	6	0	1	1	0	0	0	0	13
HR	0	0	1	1	0	1	0	0	0	0	0	3
Info Systems	0	0	4	6	3	4	4	1	0	0	0	22
Legal/risk	0	0	0	1	1	0	2	2	0	0	0	6
Operator	0	0	0	0	0	1	1	0	0	0	0	2
Technical	0	1	1	4	10	12	7	3	4	1	1	44
Sum	0	25	43	44	46	39	35	18	16	4	1	271
%	0.00	0.09	0.16	0.16	0.17	0.14	0.13	0.07	0.06	0.01	0.00	1.00



CWW workforce profile

Job family demographics and turnover

Job Family	Mean Age	Low Age	Median Age	High Age	Mean LOS	Median LOS	EBA	Contract	Turnover '06-07	% Turnover '06-07
Accountant	41.0	28.3	40.7	54.8	9.4	4.4	4	8	0	0.00
Clerical	41.6	21.3	41.3	60.5	8.7	7.2	47	2	5	0.10
Communications	30.7	25.9	29.8	37.2	2.3	2.1	8	2	4	0.40
Customer Service	36.8	24.0	36.0	59.0	7.8	5.9	40	4	0	0.00
Economics	38.4	27.6	34.4	57.1	3.7	3.0	1	3	1	0.25
Engineer	38.1	22.3	34.9	61.4	5.4	2.2	35	26	9	0.15
Environmental Science	31.9	24.8	31.2	49.5	4.1	1.2	13	0	2	0.15
HR	35.0	28.0	35.0	42.1	1.2	1.1	1	2	1	0.33
Info Systems	38.6	26.7	37.8	50.9	10.6	3.6	14	8	2	0.09
Legal/risk	45.8	35.5	50.1	53.4	11.1	4.4	1	4	0	0.00
Operator	46.4	43.9		48.8	2.4		2	0	0	0.00
Technical	44.6	24.7	44.5	67.2	11.4	5.7	38	6	1	0.02
Sum or average	39.1	27.8	37.8	53.5	6.5	3.7	204	65	25	0.09



Vic Uni Research

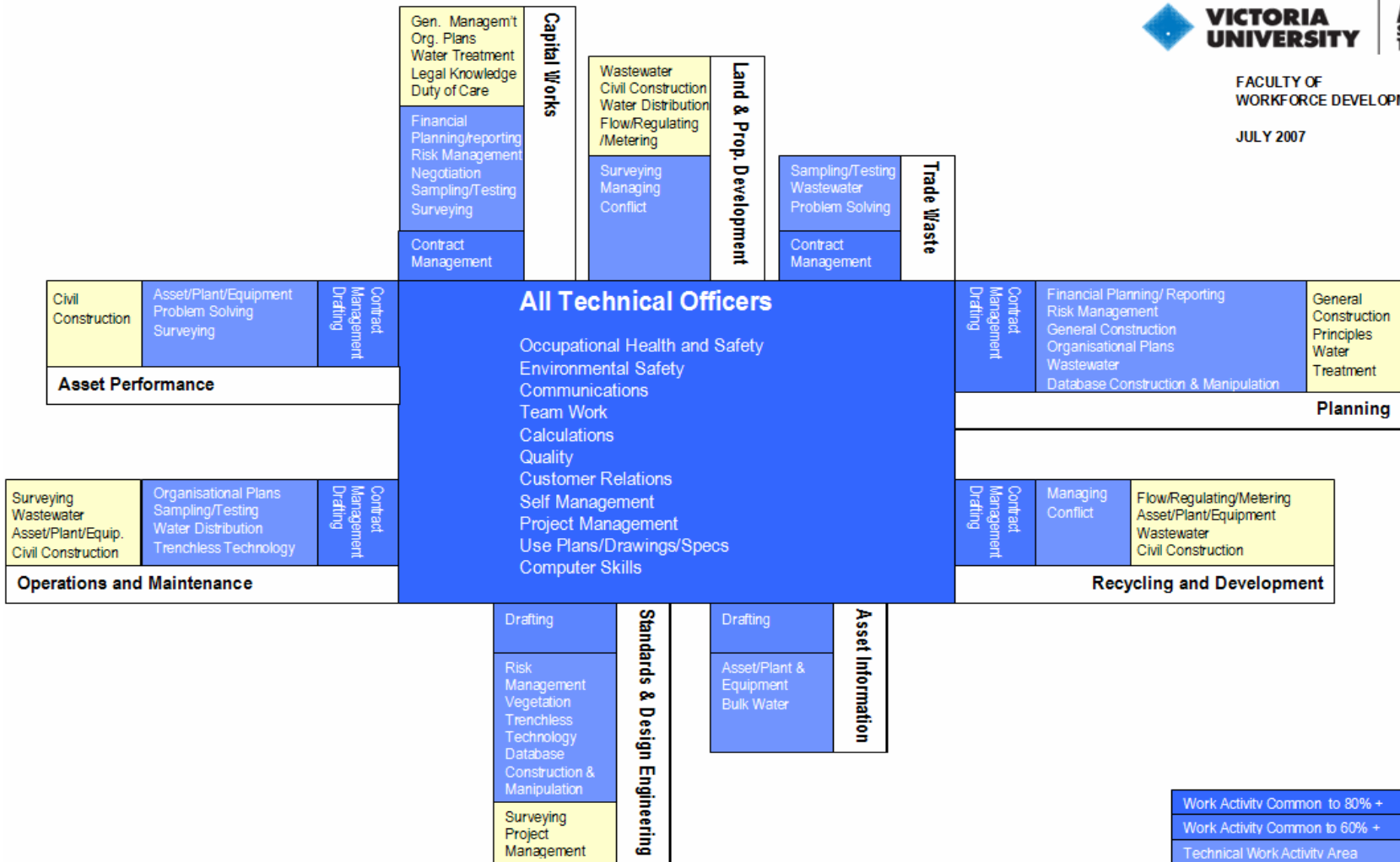
The key findings indicate that:

Technical Officer roles map well to Australian Qualification levels (AQF):

A new Technical Officer would be AQF 4 (Certificate 4) and an experienced Technical Officer at AQF 5 (Diploma).

There are significant common activity areas (11) as well as areas of specialist expertise and areas of underpinning knowledge required across roles in nine CWW sections.

Feedback from participants suggested broad knowledge was desirable. Implicit is the notion of a rotation scheme for competency development across work areas.



Work Activity Common to 80% +	LEGEND
Work Activity Common to 60% +	
Technical Work Activity Area	
Underpinning Knowledge Required	

Vic Uni Research

A clear educational progression was identified in aligning technical competencies to existing qualifications

ACCREDITED QUALIFICATIONS

CAREER
PROGRESSION

↑ Diploma of Project Management

Diploma of Engineering Technology

SKILL SETS

↑

Certificate IV in Civil Construction

INITIAL CORE
TRAINING

↑

Certificate III Water Industry Operations

PRE- ENTRY
TRAINING

↑

Certificate II Water Industry Operations

Recognition trial



A recognition of competencies trial was conducted

Three Land and Property Development Officers, each at different career stages and backgrounds.

Findings indicated fit within the qualification framework summarised above and suggested a flexible approach be developed in a TODP, featuring:

- Competency recognition
- Initial core education and training
- Specialist skill set acquisition
- Customised training plan.

CWW TODP Design



(Mirror the engineering TDP)

CWW TODP Purpose

To provide a structured development and career path for technical personnel

To address the shortage of suitably trained and experienced technical personnel available

To position CWW as a preferred employer for technical personnel

To provide CWW with a better trained and flexible technical personnel that will allow CWW to meet its service obligations

To assist Technical Officers as “engineering technologists” to attain recognized status of Engineers Australia

TODP Methodology



Accelerated learning program to increase their knowledge and experience of the urban water industry.

This will be gained through experience, education and training, and recognition.

The methodology will be flexible to the extent that it will cater for:

- Cadetships, comprising formal education with employment for employees with little or no relevant competency
- Existing employees, with a range of competency levels.

Rotation experience



At least five different areas of technical work.

Specific project assignments to complement their rotation experience. Project performance will be assessed and accredited towards competency.

Compulsory for new employees commencing employment with CWW as Technical Officers and is expected to take an average of 5 years to complete for new entrants without prior competency.

Apply the learnings from the education and training course work to real technical applications through the prescribed projects of the rotation scheme.

Competencies and education



Competencies will be mapped to measure the outcomes from the rotation scheme.

Portfolio of evidence of competencies

The components of education and training are technical

Provided through course work at a suitable educational institute

Assessment is expected to be by formal exams, projects and assignments consistent with contemporary academic requirements.

Tools



The ability to use tools, materials and technology will be recognised through the competencies gained and certificates awarded.

- Computer modeling packages (water and sewer)
- Australian Standards (on line)
- WSAA Codes of Practice and other guidelines
- Various quality documents and specifications Design and Construction Contracts
- Various CWW and other computer packages – GIS, SCADA, MS Project etc.

Recognition



The recognition element takes three forms:

Recognition of Prior Learning (RPL) for rotations undertaken, competencies gained, projects completed, training passed (Certificates)

Reward structures

Engineers Australia Professional Development Program

CWW pay up to \$550 of the Annual Membership Fee

Remuneration



The CWW classification structure will need to be adjusted

The present Collective Agreement incorporates new classification structures for the TDP rotation engineers and Treatment Plant Operators at Altona Treatment Plant.

Incremental progression to recognise attainment of competency and qualification, in addition to annual across the board increases.

Current CWW Technical officers are paid from level 1 to 5 in the CWW classification structure from \$47,209 to \$81,313. The median and modal classification level and salary is \$61,576.

Govt Funding



Potential funding includes:

State government \$1,300 training completion bonus to employee

Commonwealth government \$1,500 commencement of training payment to employer for each Certificate 3 or 4;

Additional \$750 payment for trainees aged over 45.

TODP Management



The TODP will be managed by a committee of nine comprising

the General Managers Recycling and Development,
Engineering and Service Sustainability

the Manager People Strategy and Development

TODP Panel comprising a TODP Coordinator and an appointed
representative from each department.

The TODP management committee is chaired by the GM
Recycling and Development and will meet on an as-needed
basis.