Tweed Shire Council — TBL Water Supply Performance — 2014-15

WATER SUPPLY SYSTEM - Tweed Shire Council serves a population of 79,000 (32,240 connected properties). Water is drawn from Tweed River to supply Murwillumbah, Tweed Heads and the Tweed Coast villages including Bogangar and Mooball. Council has 1 storage dam (total capacity 15000 ML). The water supply network comprises 3 conventional treatment works (100.8 ML/d), 41 service reservoirs (113 ML), 27 pumping stations, 101 ML/d delivery capacity into the distribution system, 193 km of transfer and trunk mains and 526 km of reticulation. 95% of water supplied is potable and 5% nonpotable (recycled).

PERFORMANCE - Tweed Shire Council achieved 100% implementation of the outcomes required by the NSW BPM Framework. The 2015-16 typical residential bill was $639 which was close to the statewide median of $593 (Indicator 14). The economic real rate of return was similar to the statewide median (indicator 43). The operating cost (OMA) per property was $419 which was close to the statewide median of $400 (Indicator 49). Water quality complaints were well above the statewide median of 3 (Indicator 25). Compliance was achieved for microbiological water quality (100% of the population, 3 of 3 zones compliant), chemical water quality and physical water quality. There were no failures of the chlorination system or the treatment system. Tweed Shire Council reported no water supply public health incidents. Current replacement cost of system assets was $661M ($18,700 per assessment). Cash and investments were $35.6M, debt was $65M and revenue was $29M (excluding capital works grants).

IMPLEMENTATION OF OUTCOMES REQUIRED BY THE NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK

(1) Complete Current Strategic Business Plan & Financial Plan	**YES**[12]	**(3) Sound water conservation implemented**	**YES**
(2) (2a) Pricing - Full Cost Recovery, without significant cross subsidies	Yes	**(4) Sound drought management implemented**	**YES**
(2b,2c) Pricing - Appropriate Residential Charges	Yes	**(5) Complete performance reporting (by 15 September)**	**YES**
(2d) Pricing - Appropriate Non-residential Charges	Yes	**(6) Integrated water cycle management strategy**	**YES**[12]
(2e) Pricing - DSP with Commercial Developer Charges	Yes	**IMPLEMENTATION OF ALL OUTCOMES**	**100%**

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

		NWI				LWU RESULT	RANKING >10,000 properties	RANKING All LWUs	MEDIANS Statewide	MEDIANS National
							Note 1	Note 2	Note 3	Note 4
						Col 1	Col 2	Col 3	Col 4	Col 5
UTILITY	CHARACTERISTICS	C1	1	**Population served:**	**79000**					
		C4	2	**Number of connected properties:**	**32240** Number of assessments: 35430					
			3	**Residential connected properties** (% of total)	%	95			92	
			4	**New residences connected to water supply** (%)	%	1.6	2	1	1.1	
		A3	5	**Properties served per kilometre of water main**	Prop/km	45			31	34
			6	**Rainfall** (% of median annual rainfall)	%	117	3	2	116	
		W11	7	**Total urban water supplied at master meters** (ML)	ML	9,170			7,000	9,060
			8	**Peak week to average consumption** (%)	%	152	4	3	141	
			9	**Renewals expenditure** (% of current replacement cost of system assets)	%	0.1	5	5	0.4	
			10	**Employees per 1000 properties**	per 1,000 prop	2.0	5	4	1.4	
SOCIAL	CHARGES & BILLS	P1		**Residential tariff structure for 2015-16:** inclining block; independent of land value; access charge $158.5						
		P1.3	12a	**Residential water usage charge for 2014-15 for usage <300 kL (c/kL)**	c/kL (2014-15)	245	2	1	213	185
			12	**Residential water usage charge for 2015-16 for usage <300 kL (c/kL)**	c/kL (2015-16)	270	2	1	226	
		P3	14a	**Typical residential bill for 2014-15** ($/assessment)	$ (2014-15)	584	4	2	566	589
			14	**Typical residential bill for 2015-16** ($/assessment)	$ (2015-16)	639	4	3	593	
			15	**Typical developer charge for 2015-16** ($/equivalent tenement)	$ (2015-16)	13,100	1	1	5,900	
		F4	16	**Residential revenue from usage charges** (% of residential bills)	%	75	1	2	72	66
		F5	17	**Revenue per property** - water ($/property)	$/prop	890	3	3	827	881
	HEALTH		18	**Water Supply Coverage** (% of Urban Population with reticulated WS)	% of population	99.7	2	1	99.5	
			18a	**Risk based Drinking Water Management System (DWMS)?**	Yes/No	Yes				
			19	**Physical compliance achieved? Note 10**	Yes/No	Yes	1	1		
			19a	**Chemical compliance achieved? Note10**	Yes/No	Yes	1	1		
		H4	19b	**% population with chemical compliance**	% of population	100	1	1	100	
			20	**Microbiological (E. coli) compliance achieved? Note 10**	Yes/No	Yes	1	1		
		H3	20a	**% population with microbiological compliance**	% of population	100	1	1	100	100
	SERVICE LEVELS	C9	25	**Water quality complaints per 1000 properties**	per 1,000 prop	5	4	4	3	2
		C10	26	**Water service complaints per 1000 properties**	per 1,000 prop	16	4	4	6	0.5
		C17	27	**Incidence of unplanned interruptions per 1000 properties**	per 1,000 prop	19	3	3	24	91
		C15	28	**Average duration of interruption** (min)	min	134	3	4	133	117
		A8	30	**Number of water main breaks per 100 km of water main**	per 100km	4	1	1	9	13
			31	**Drought water restrictions** (% of time)	% of time	0	1	1	0	
			32	**Total days lost** (%)	%	4.1	4	4	2.9	
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W12	33	**Average annual residential water supplied - STATEWIDE (**kL/property)	kL/prop	178	4	2	166	181
			33a	**Average annual residential water supplied - COASTAL LWUs** (kL/property)	kL/prop	178	5	4	150	
			33b	**Average annual residential water supplied - INLAND LWUs** (kL/property)	kL/prop				225	
		A10	34	**Real losses** (leakage) (L/service connection/day)	L/connection/day	60	2	2	60	76
			35	**Energy consumption per Megalitre** (kiloWatt hours)	kWh/ML	638	3	4	700	
			36	**Renewable energy consumption** (% of total energy consumption)	%				0	
		E12	36a	**Net greenhouse gas emissions - WS & Sge** (net tonnes CO2 equivalents per 1000 properties)	t CO2	410	3	4	410	393
ECONOMIC	FINANCE		42	**Current replacement cost per assessment** ($)	$/assessment	18,700	2	2	16,400	
		F17	43	**Economic real rate of return** - Water (%)	%	1.6	2	2	1.6	1.9
			44	**Return on assets** - Water (%)	%	0.9	4	3	1.0	
		F22	45	**Net Debt to equity** - WS & Sge (%)	%	0	2	2	-1	11
		F23	46	**Interest cover** - WS & Sge		3	1	1	4	2
			47	**Loan payment per property** - Water ($)	$/prop	180	2	1	69	
		F24	47b	**Net profit after tax** - WS & Sge ($'000)	$'000	6,520	2	1	2340	7120
	EFFICIENCY		48	**Operating cost (OMA) per 100km of main** ($'000)	$'000	1,880	5	5	1,320	
		F11	49	**Operating cost (OMA) per property ($/prop) Note 8**	$/prop	419	3	1	400	455
			50	**Operating cost (OMA) per kilolitre** (cents)	c/kL	147	4	4	129	
			51	**Management cost** ($/prop)	$/prop	185	4	4	141	
			52	**Treatment cost (**$/prop)	$/prop	80	4	2	58	
			53	**Pumping cost** ($/prop)	$/prop	36	4	2	31	
			54	**Energy cost** ($/prop)	$/prop	24	4	3	18	
			55	**Water main cost** ($/prop)	$/prop	32	1	1	74	
		F28	56	**Capital Expenditure** ($/prop)	$/prop	61	5	4	155	163

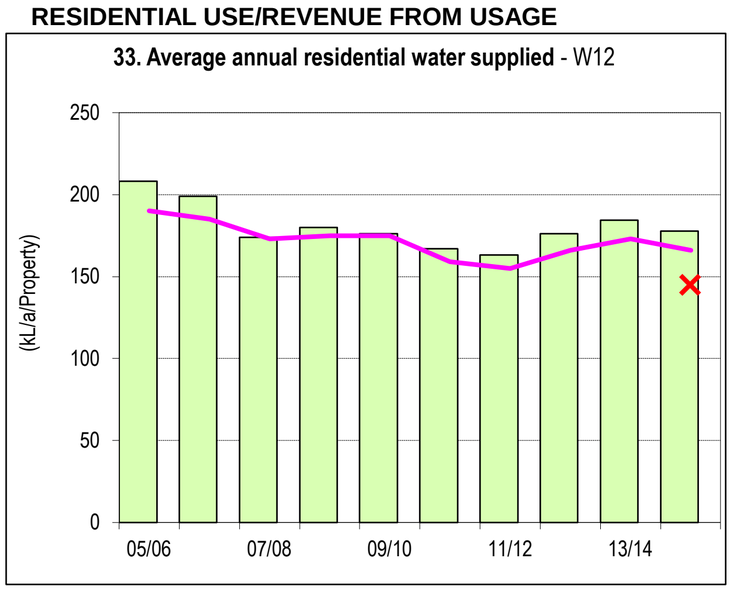
NOTES :

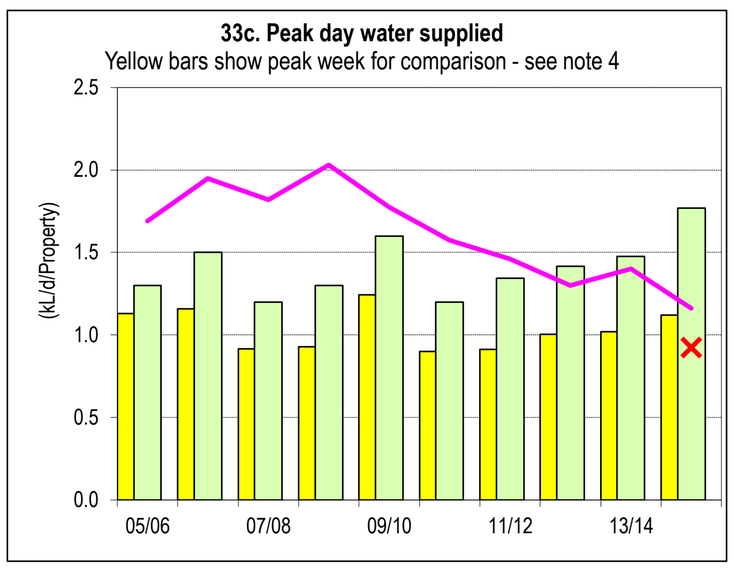
1 Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with >10,000 properties).
2 Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs).
3 Col 4 (Statewide Median) is on a % of connected properties basis- best reveals statewide performance (gives due weight to larger LWUs & reduces effect of smaller LWUs).
4 Col 5 (National Median) is the median value for the 76 utilities reporting water supply performance in the National Performance Report 2014-15 (www.bom.gov.au).
5 LWUs are required to annually review key projections & actions in the later of their IWCM Strategy and financial plan and their Strategic Business Plan and to annually 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan.
6 2015-16 Non-residential Tariff: Access Charge based on Meter Size*(40mm: $634), Two Part Tariff; Usage Charge 270c/kL.
7 Non-residential water supplied was 27% of potable water supplied excluding non-revenue water.
Non-residential revenue was 24% of annual rates and charges, indicating fair pricing of services between the residential and non-residential sectors.
8 The operating cost (OMA) per property was $419. Components were: management ($185), operation ($84), maintenance ($96), energy ($24) & chemical ($29).
9 Rehabilitations included 4.1% of water meters. Renewals expenditure was $66,000/100km of main.
10 Compliance with ADWG 2011 for drinking water quality is shown as "Yes" if compliance has been achieved (indicators 19, 19a & 20).
11 Tweed Shire Council has 5 fully qualified water treatment operators who meet the requirements of the National Certification Framework.
12 As Tweed Shire Council's strategic business plan and financial plan are over 4 years old, it needs to prepare a 30-year IWCM Strategy and financial plan in accordance with the July 2014 IWCM Check List (www.water.nsw.gov.au).

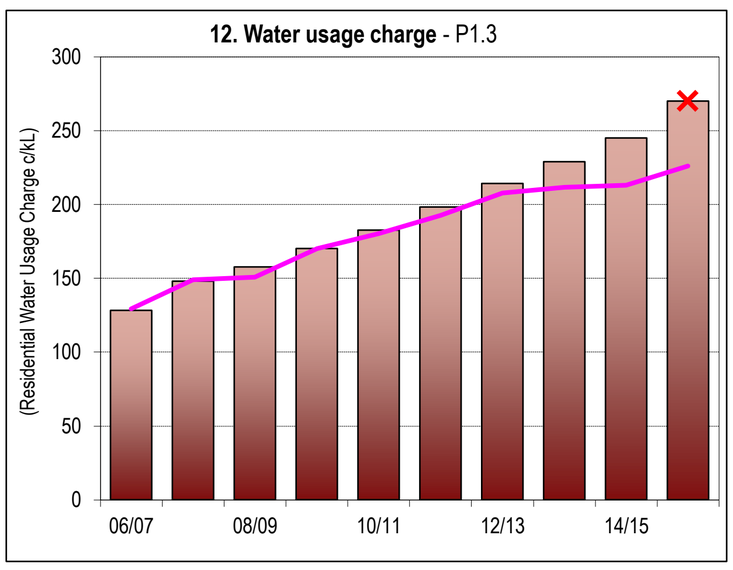
Tweed Shire Council — TBL Water Supply Performance (page 2) — 2014-15

(Results shown for 10 years together with Statewide Median and 2014-15 Top 20%)

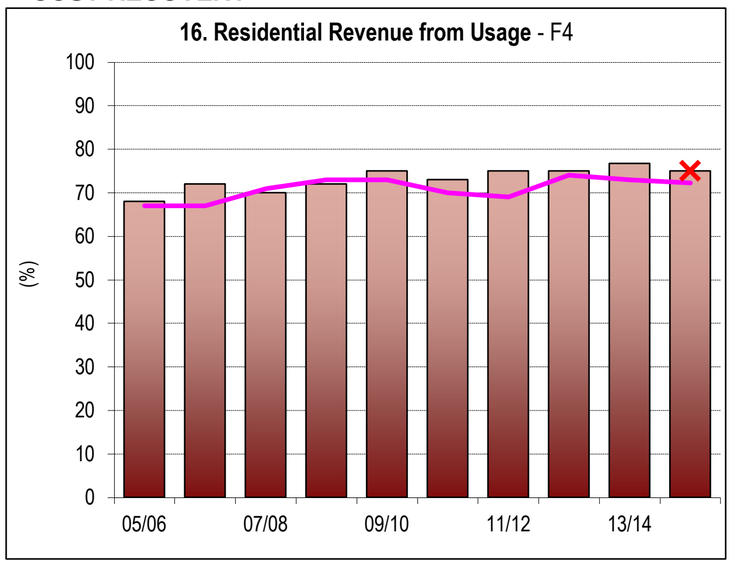
RESIDENTIAL USE/REVENUE FROM USAGE

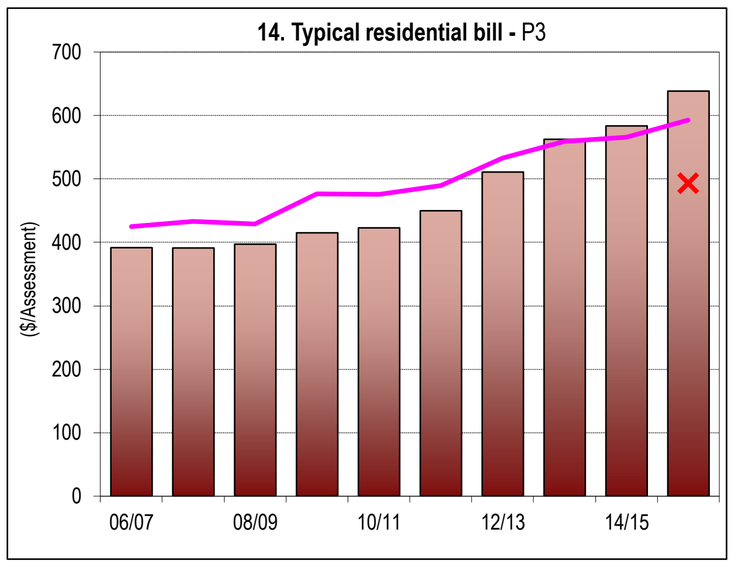


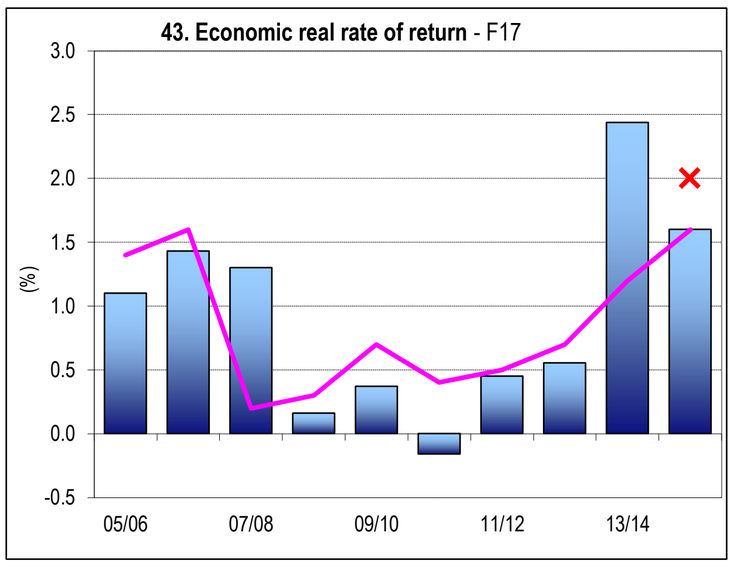




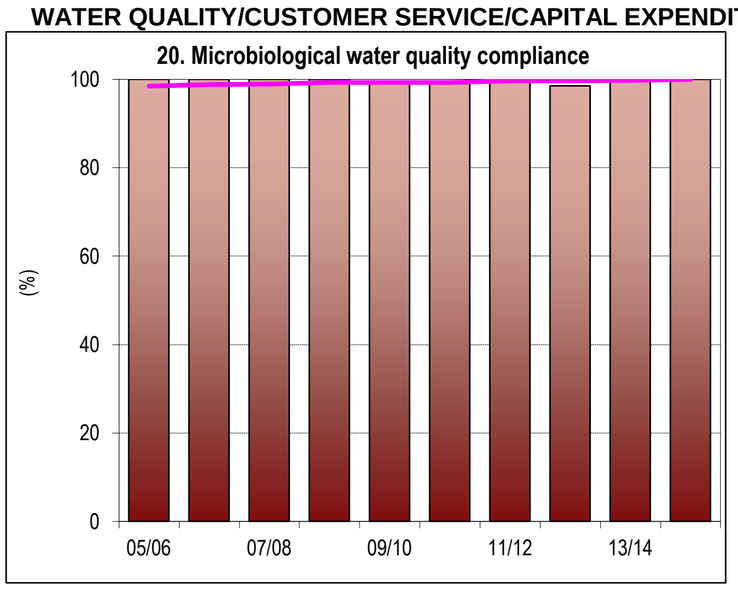
COST RECOVERY

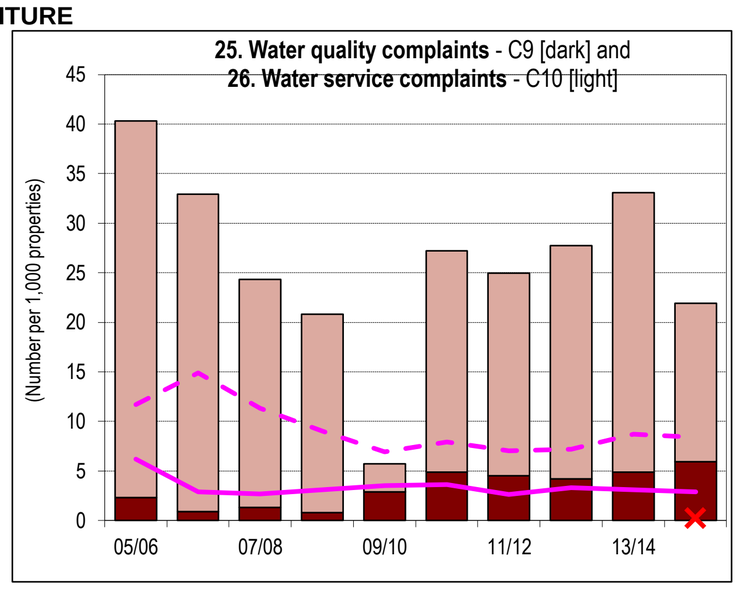


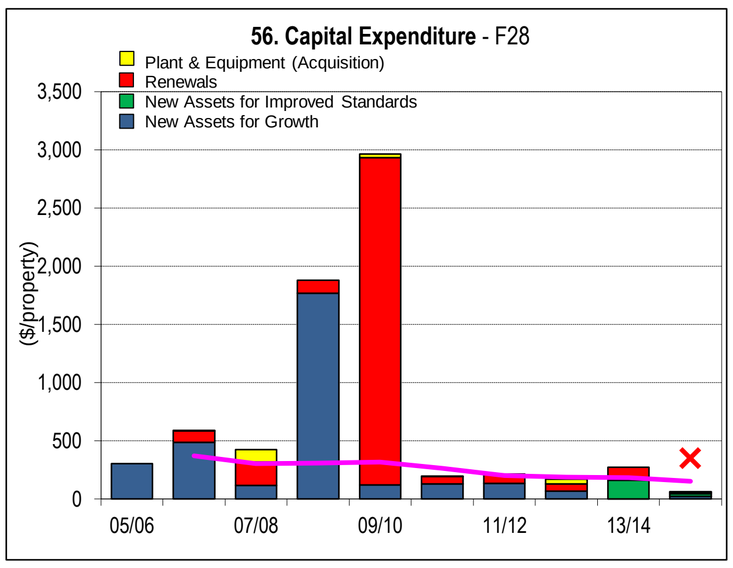




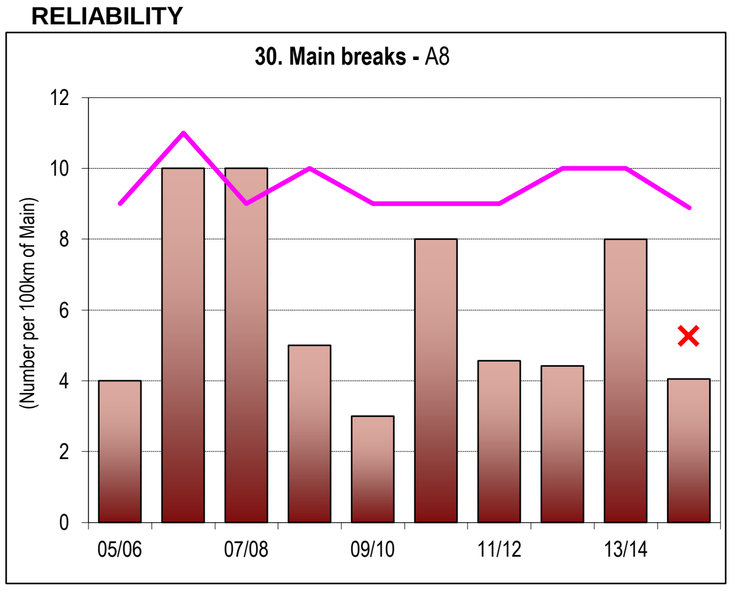
WATER QUALITY/CUSTOMER SERVICE/CAPITAL EXPENDITURE

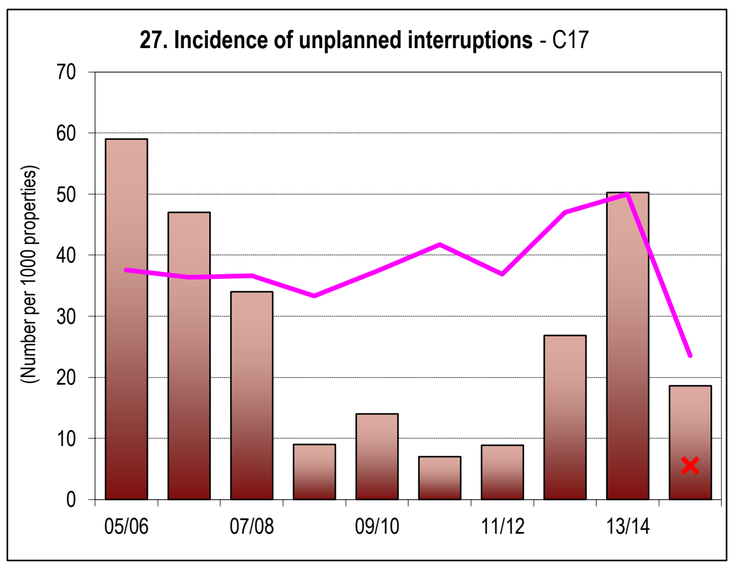


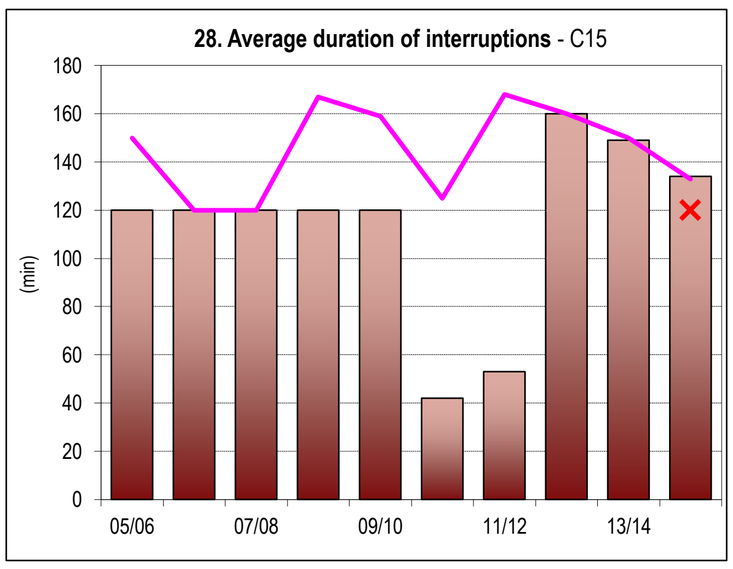




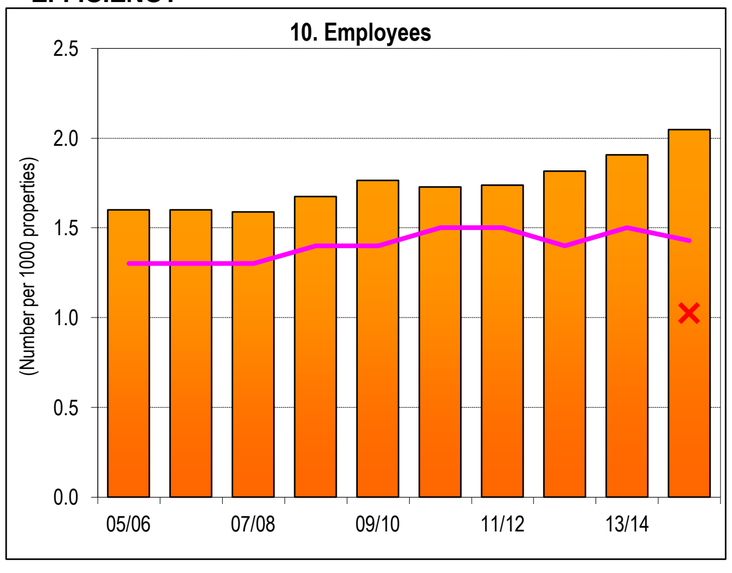
RELIABILITY

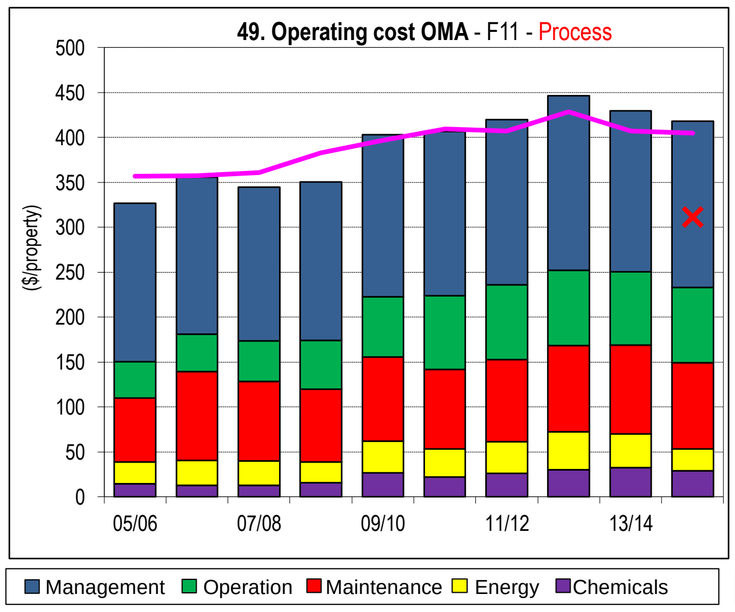


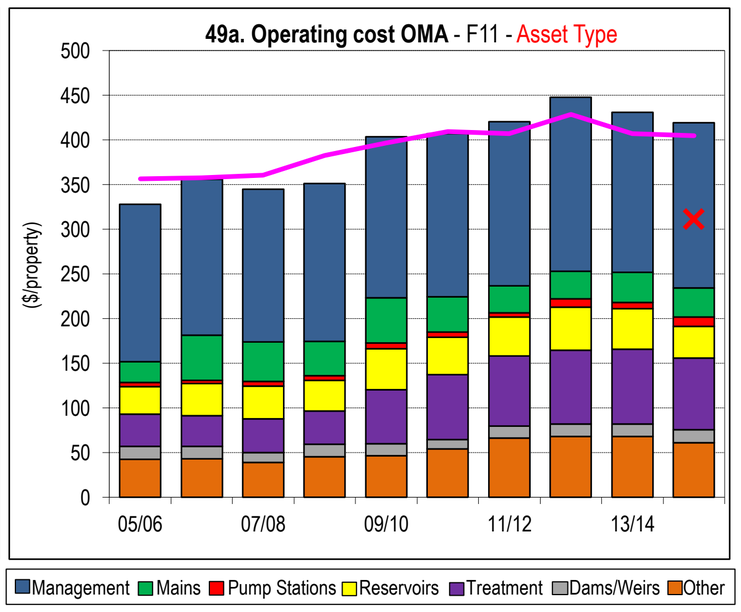




EFFICIENCY







NOTES:

1. Costs are in Jan 2015$ except for graphs 12 and 14, which are in Jan 2016$.
2. Microbiological water quality compliance 1999-00 to 2003-04 was on the basis of 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines for E. coli; from 2004-05 to 2010-11 compliance was on the basis of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines (ADWG) and for 2011-12 to 2014-15 compliance was on the basis of the 2011 ADWG.
3. Indicators 33 and 33c - Green shading of bars shows % of time Drought Water Restrictions applied in each year: 0 - 30% | 30-50% | >50% of time
4. Indicator 33c - Yellow bars show Peak Week Water Supplied for comparison with Peak Day Water Supplied shown in green.

LEGEND

State Median for all years

Top 20% for 2014-15