TBL Water Supply Performance

WATER SUPPLY SYSTEM - Tweed Shire Council serves a population of 79,900 (32,580 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, 196 km of transfer and trunk mains and 524 km of reticulation. 93% of water supplied is potable and 7% nonpotable (recycled).

BPM IMPLEMENTATION - Tweed Shire Council achieved 100% implementation of the outcomes required by the NSW BPM Framework, however, Council needs to finish preparing the 30year IWCM Strategy, Financial Plan and Report in accordance with the July 2014 IWCM Check List (www.water.nsw.gov.au) to maintain 100% BPM Implementation.

PERFORMANCE - The 2016-17 typical residential bill was \$637 which was close to the statewide median of \$625 (Indicator 14). The economic real rate of return was similar to the statewide median (indicator 43). The operating cost (OMA) per property was \$420 which was close to the statewide median of \$440 (Indicator 49). Water quality complaints were above the statewide median of 3 (Indicator 25). Compliance with ADWG 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. Council has a riskbased Drinking Water Management System (DWMS) and had 0 days of water restrictions. Current replacement cost of system assets was \$672M (\$18,800 per assessment). Cash and investments were \$43.6M and revenue was \$31M (excluding capital works grants).

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

(1) Complete Current Strategic Business Plan & Financial Plan			(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*
(2e) Pricing -	DSP with Commercial Developer Charges	Yes	IMPLEMENTATION OF ALL OUTCOMES	100%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS			RESULT	RANKING		MEDIANS				
		NWI					Size Group 1	All LWUs	Statewide	National
		C1	1	Population served:79,900(Number of assessments: 35,810)		Col 1	Col 2	Col 3	Col 4	Col 5
		C4	2	Number of connected properties: Council is within Size Group 1: (>10,00	00 properties)	32,580				
UTILITY CHARACTERISTICS	S		3	Residential connected properties	% of total	95			91	
	STIC		4	New residences connected to water supply	%	1.3	3	2	1.0	
	ERI	A3	5	Properties served	prop/km	45			33	34
	ACT		6	Rainfall	% median annual rainfall	98	3	3	104	
	HAR	W11	7	Total urban water supplied at master meters	ML	9,100			6,900	9,770
	Ö		8	Peak week to average consumption	%	121	1	1	142	
			9	Renewals expenditure	% CRC	0.4	4	4	0.6	
			10	Employees	per 1,000 prop	2.0	5	4	1.5	
		P1		Residential tariff structure for 2016-17: inclining block; independent of lar	d value; access charge \$16	6.45				
	(0	P1.3	12a	Residential water usage charge for 2015-16 for usage <300 kL	c/kL (2015-16)	270	2	1	228	190
	& BILLS		12	Residential water usage charge for 2016-17 for usage <300 kL	c/kL (2016-17)	285	1	1	230	
	8 8 1	P3	14a	Typical residential bill for 2015-16	\$/assessment (2015-16)	604	3	2	601	623
	CHARGES		14	Typical residential bill for 2016-17	\$/assessment (2016-17)	637	4	2	625	
	HAF		15	Typical developer charge for 2016-17	\$/ET (2016-17)	13,390	1	1	5,600	
	0	F4	16	Residential revenue from usage charges	% residential bills	75	2	2	73	66
CIAL		F5	17	Revenue - Water	\$/prop	950	2	3	928	921
SOC I EVELS HEALTH	Ξ		18	Water Supply Coverage (% of Urban Population with reticulated WS)	% of population	99.7	2	1	99.2	
	ALT	H4		% population with chemical compliance	% of population	100	1	1	100	
	뽀	H3		% population with microbiological compliance	% of population	100	1	1	100	100
	S	C9		Water quality complaints	per 1,000 prop	4	4	4	3	2
	EVEI	C10		Water service complaints	per 1,000 prop	33	4	4	4	0.5
	C17 27 Incidence of unplanned i			Incidence of unplanned interruptions	per 1,000 prop	37	3	4	32	90
	NIC	A8		Number of water main breaks	per 100km main	8	2	2	9	13
	SERVICE		32	Total days lost	%	5.0	4	5	3.5	
		- W12		Average annual residential water supplied - STATEWIDE result	kL/prop	165	3	2	162	181
⁴ L	NATURAL RESOURCE MANAGEMENT		33a	Average annual residential water supplied - COASTAL LWUs	kL/prop	165	4	4	155	
NT/		A10	34	Real losses (leakage)	L/connection/day	90	4	3	70	76
ENVIRON- MENTAL	NAT RESC		35	Energy consumption	kWh/ML	597	3	4	660	
ше		E12	36a	Net greenhouse gas emissions - WS & Sge	t CO2 eq per 1,000 prop	450	4	4	390	402
				Current replacement cost	\$/assessment	18,800	3	2	17,400	
			Economic real rate of return - Water	φ/d33C33///e//t	2.2	3	3	2.3	2.8	
ECONOMIC	щ			Return on assets - Water	%	1.5	3	3	1.7	
	ANC	F22		Net Debt to equity - WS & Sge	%	-2	2	2	-3	7
	FIN	F23		Interest cover - WS & Sge		5	1	1	34	2
				Loan payment - Water	\$/prop	139	1	1	11	
		F24		Net profit after tax - WS & Sge	\$'000	8,780	2	1	3,800	9300
				Operating cost (OMA) per 100km of main	\$'000	1,900	5	5	1,120	
		F11		Operating cost (OMA) per property - Note 8	\$/prop	420	3	1	440	485
				Operating cost (OMA) per kilolitre	¢,prop c/kL	150	4	4	120	400
	ς			Management cost	\$/prop	190	5	4	120	
	IEN			Treatment cost	\$/prop \$/prop	75	4	4	59	
	EFIC			Pumping cost	\$/prop \$/prop	28	4	2	28	
	Ξ			Energy cost	\$/prop \$/prop	19	3	2	17	
				Water main cost	\$/prop \$/prop	38	3 1	1	71	
		F28		Capital Expenditure	\$/prop \$/prop	97	5	4	212	193
		120	50		φρισμ	31	5	4		135

NOTES :

Col 2 rankings are on a % of LWUs basis - best reveals performance compared to LWUs in a similar Size Group (ie. Result in Col 1 is compared with LWUs in Size Group 1).

2 Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all NSW LWUs (ie. Result in Col 1 is compared with all NSW LWUs).

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).

Col 5 (National Median) is the median value for the 75 utilities reporting water supply performance in the National Performance Report 2015-16 (www.bom.gov.au).

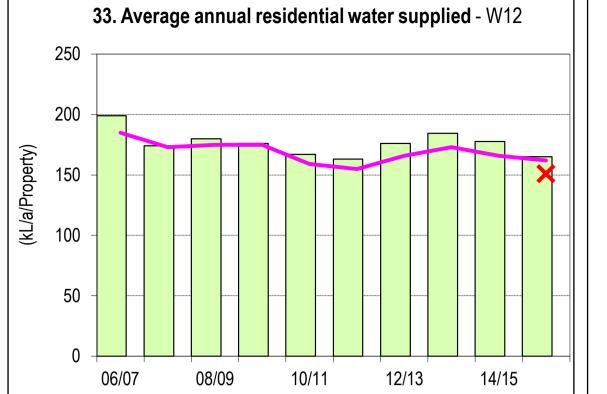
5 LWUs are required to annually review key projections & actions in the later of their IWCM Strategy and financial plan and their Strategic Business Plan and to annually

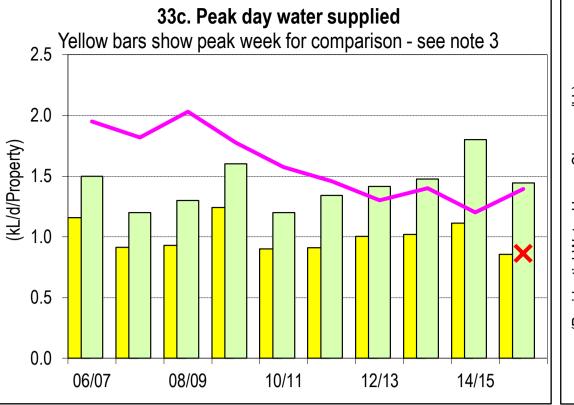
- 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan. 2016-17 Non-res tariff: Access Chg based on Meter Size*(40mm: \$665.80), Two Part: Usage Chg 285c/kL. 6
- 7 Non-residential water supplied was 29% of potable water supplied (excluding non-revenue water).
 - Non-residential revenue was 25% of annual rates and charges. This indicates fair pricing of services between the residential and non-residential sectors.
- Operating cost (OMA/ property) was \$420. Components were: management (\$190), operation (\$86), maintenance (\$98), energy (\$19) & chemical (\$25). 8
- Rehabilitations included 0.3% of water mains, 0.41% of service connections and 3.9% of water meters. Renewals expenditure was \$334,000/100km of main. 9
- 10 Tweed Shire Council has 5 fully qualified water treatment operators who meet the requirements of the National Certification Framework.

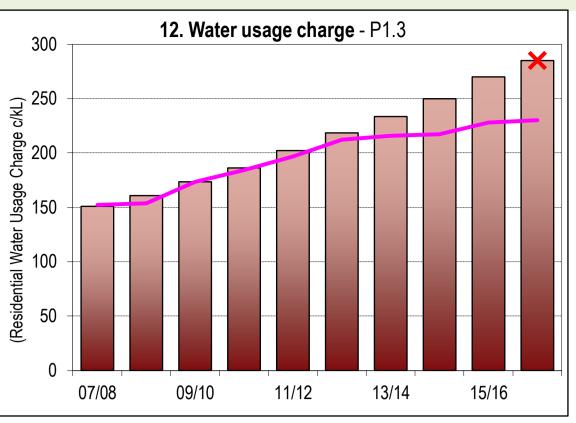
TBL Water Supply Performance (page 2)

(Results shown for 10 years together with Statewide Median and 2015-16 Top 20%)

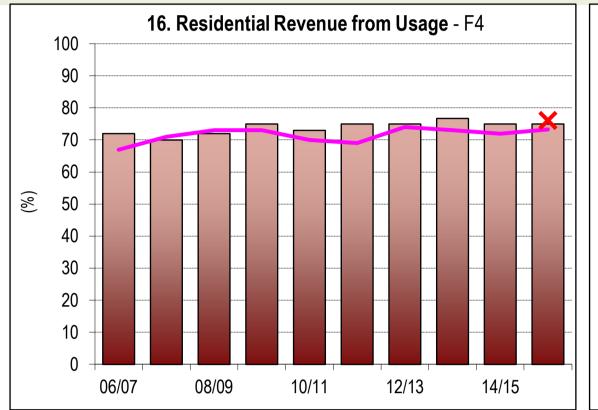
RESIDENTIAL USE/REVENUE FROM USAGE

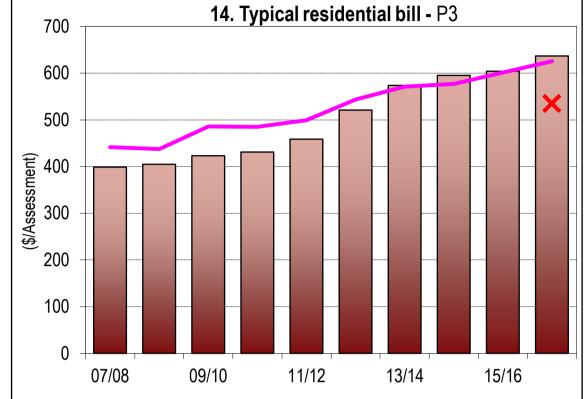


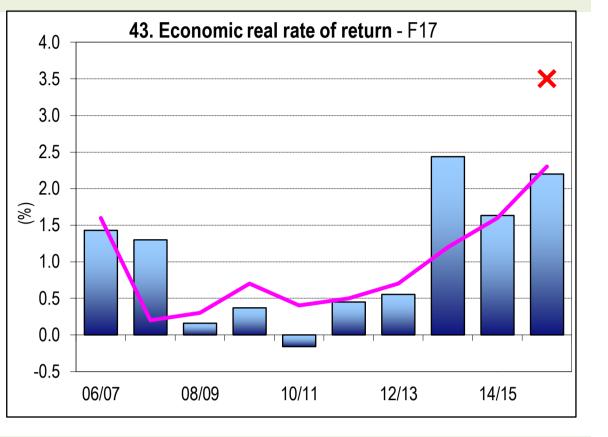




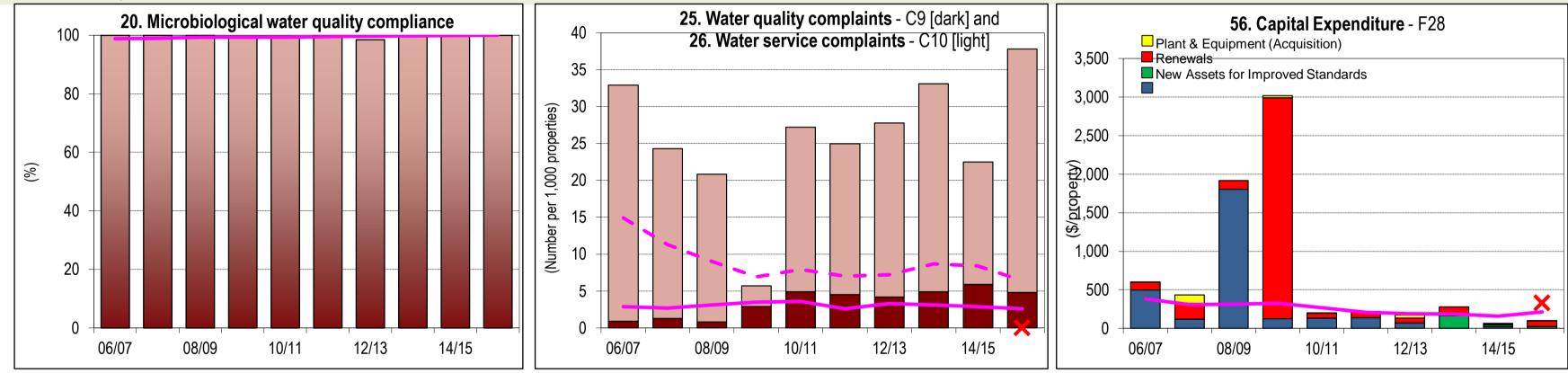
COST RECOVERY

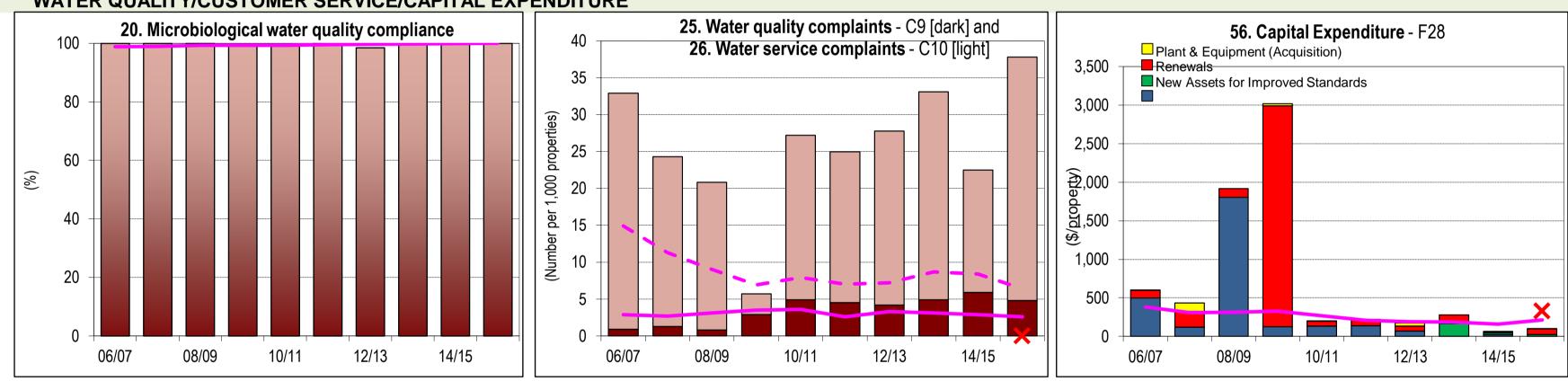


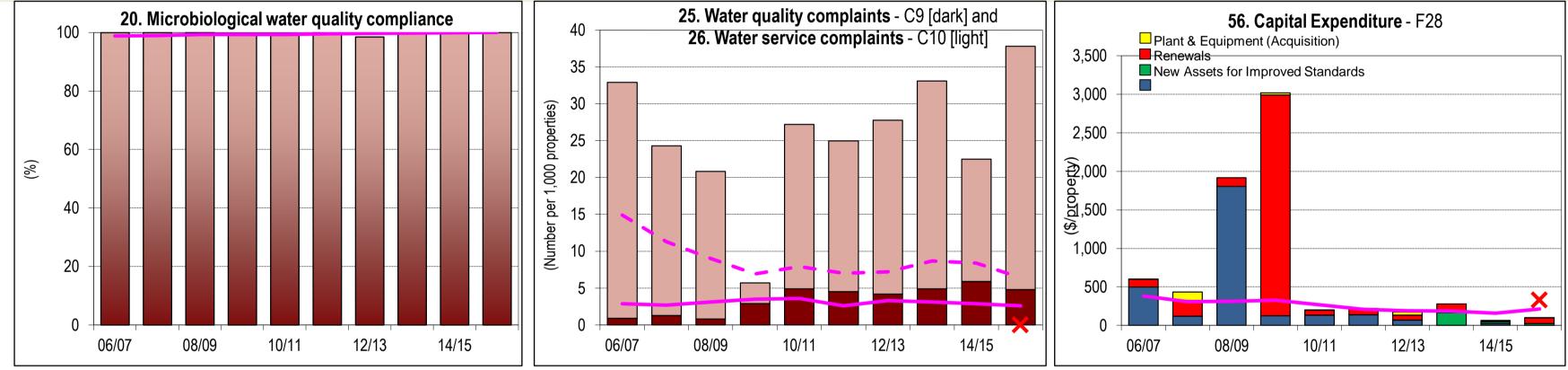




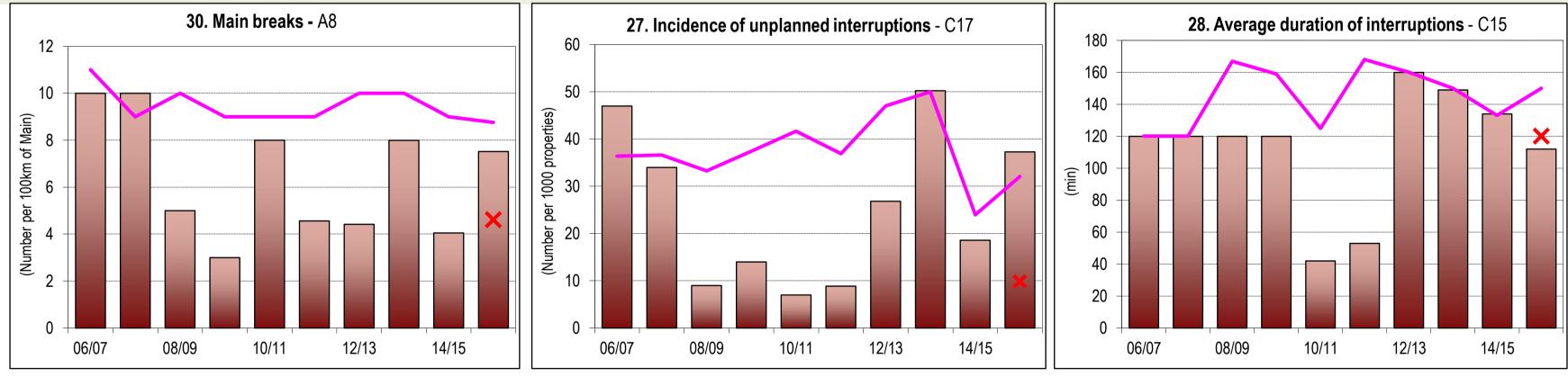
WATER QUALITY/CUSTOMER SERVICE/CAPITAL EXPENDITURE



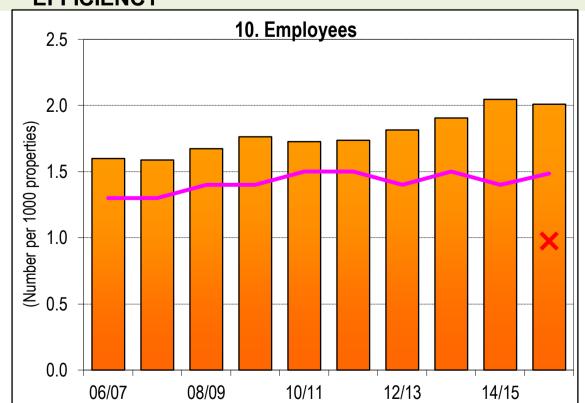


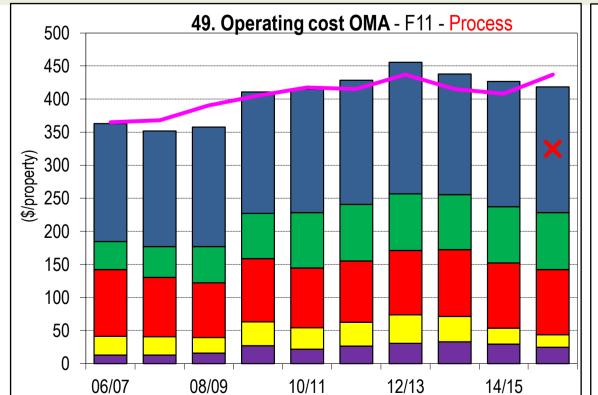


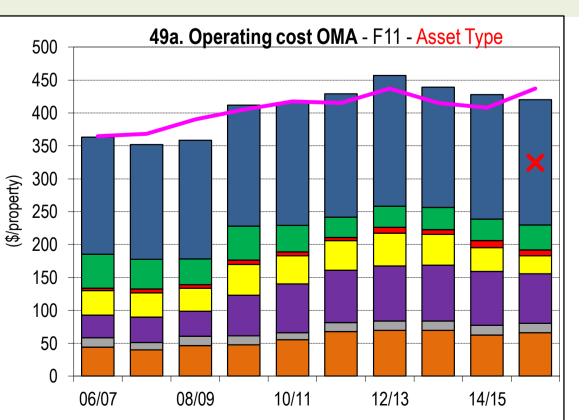












Management Mains Pump Stations Reservoirs Treatment Dams/Weirs Other

NOTES:

- 1 Costs are in Jan 2016\$ except for graphs 12 and 14, which are in Jan 2017\$.
- 2 Microbiological water quality compliance up to 2010-11 was on the basis of 2004 NHMRC/NRMMC Australian
 - Drinking Water Guidelines (ADWG) and for 2011-12 to 2015-16 compliance was on the basis of the 2011 ADWG.
- ³ Indicator 33c Yellow bars show Peak Week Water Supplied for comparison with Peak Day Water Supplied shown in green.
- 4 Indicators 33 and 33c Green shading of bars shows % of time Drought Water Restrictions applied in each year:



