

SEWERAGE SYSTEM - Byron Shire Council serves a population of 20,500 (10,920 connected properties) and has 4 sewage treatment works providing secondary and tertiary treatment. The system comprises 57,000 EP treatment capacity (Intermittent Extended Aeration (Activated Sludge), Biological Nutrient Removal and Membrane Biological Reduction), 82 pumping stations (66 ML/d), 76 km of rising mains and 208 km of gravity trunk mains and reticulation. 11% of effluent was recycled (Indicator 27) and the treated effluent is discharged to land and river. Byron Shire Council has 4 Pollution Incident Response Management Plans (PIRMPs) for their sewage treatment works.

BPM IMPLEMENTATION - Byron Shire Council achieved 100% implementation of the outcomes required by the NSW BPM Framework, however, Council needs to prepare a 30-year 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 - Residential growth for 2015-16 was 2.4% which is higher than the statewide median. The 2016-17 typical residential bill was \$1149 which was well above the statewide median of \$718 (Indicator 12). The economic real rate of return was 6% which was greater than the statewide median (Indicator 46). The operating cost per property (OMA) was \$662 which was well above the statewide median of \$470 (Indicator 50). Sewage odour complaints were above the statewide median of 0.9 (Indicator 21). Byron Council reported no public health incidents. 1 of 4 sewage treatment works were compliant at all times. Council did not comply with the SS, P & Faecal Coliforms requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$206M (\$18,100 per assessment), cash and investments were \$15M and revenue was \$19.2M (excluding capital works grants).

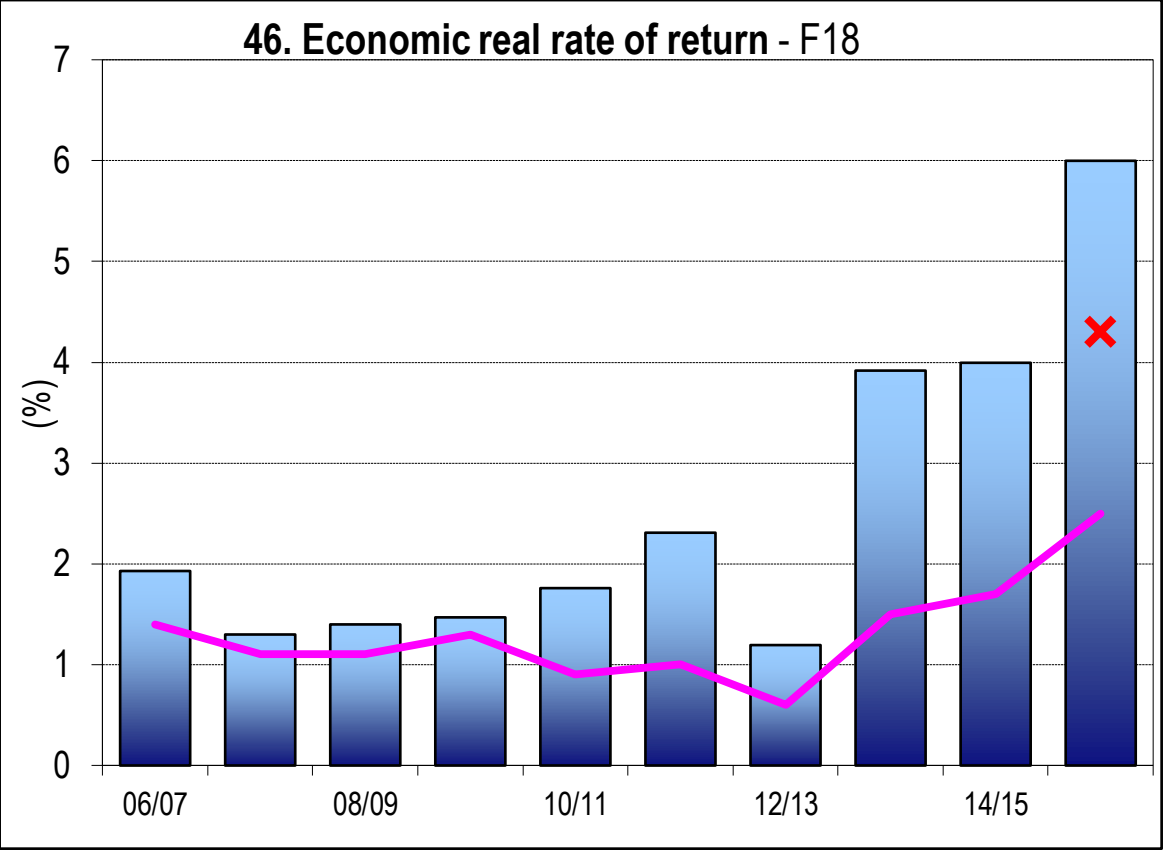
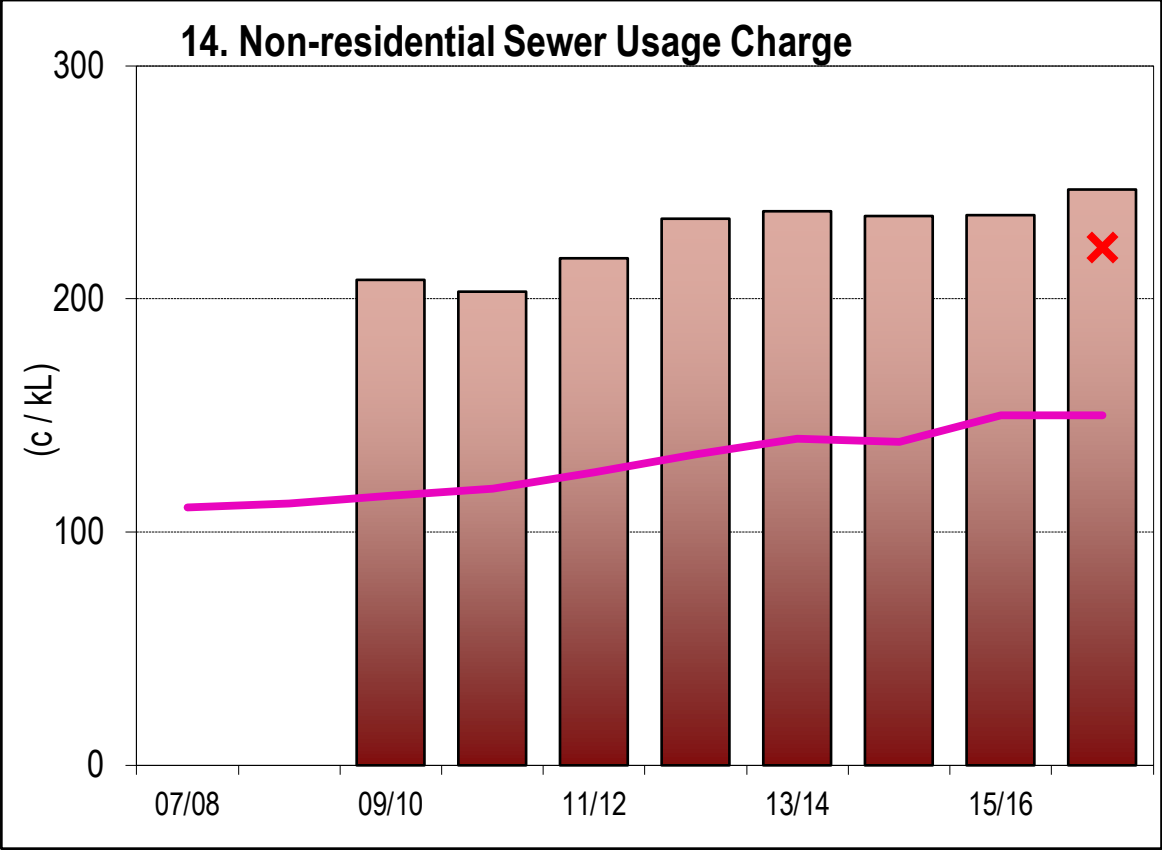
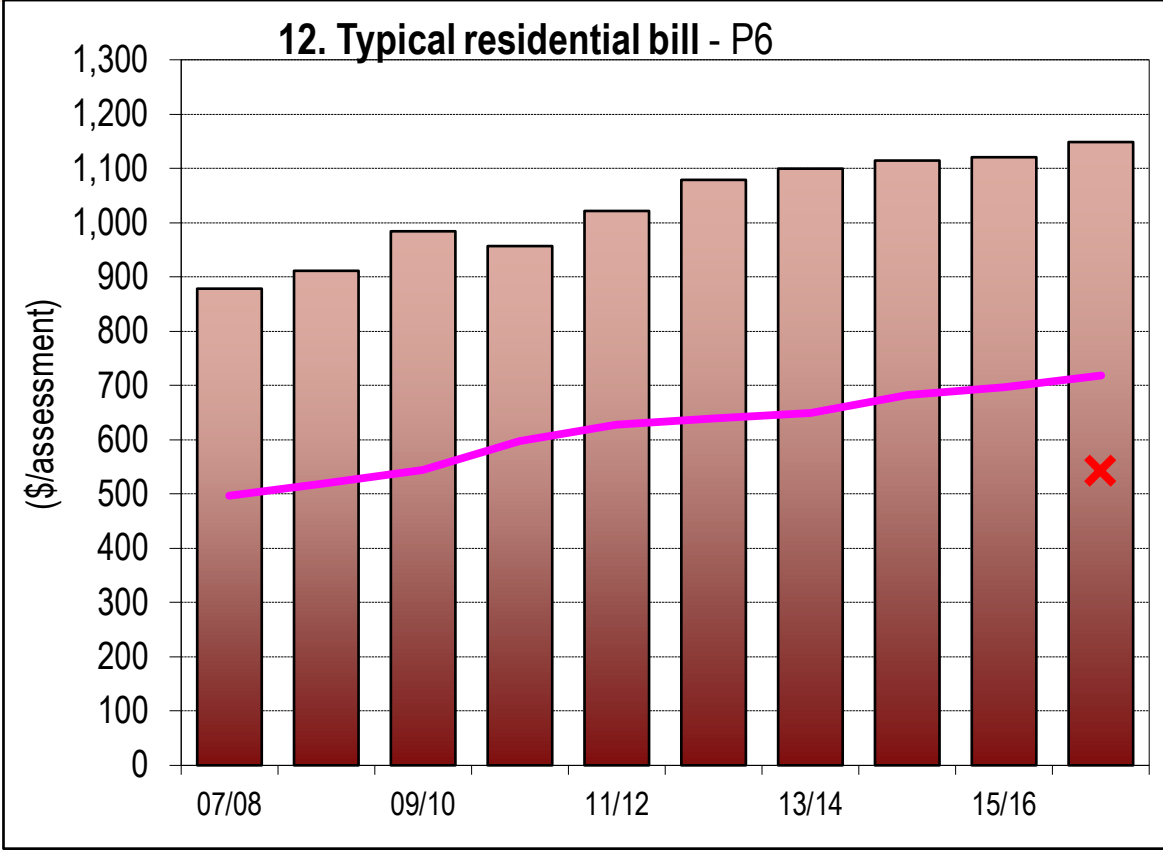
IMPLEMENTATION OF OUTCOMES REQUIRED BY THE NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK				
(1) Complete current strategic business plan & financial plan	YES	(2e) Pricing - DSP with commercial developer charges	Yes	
(2) (2a) Pricing - Full Cost Recovery without significant cross subsidies	Yes	(2f) Pricing - Liquid trade waste approvals & policy	Yes	
(2b) Pricing - Appropriate Residential Charges	Yes	(3) Complete performance reporting (by 15 September)	YES	
(2c) Pricing - Appropriate Non-Residential Charges	Yes	(4) Integrated water cycle management strategy	YES*	
(2d) Pricing - Appropriate Trade Waste Fees and Charges	Yes	IMPLEMENTATION OF ALL OUTCOMES	100%	

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS						RESULT	RANKING		MEDIANS		
	NWI	No.					Size Group 1	All LWUs	Statewide	National	
UTILITY	CHARACTERISTICS	C5	1	Population served: 20,500	(Number of assessments: 11,370)	Col 1	Col 2	Col 3	Col 4	Col 5	
		C8	2	Number of connected properties:	Council is within Size Group 1: (>10,000 properties)	10,920					
		C6	3	Residential connected properties	No.	9,360					
			4	New residences connected to sewerage	%	2.4	1	1	1.2		
		A6	5	Properties served	prop/km main	38			38	40	
		W18	6	Volume of sewage collected	ML	3,264			4,900	5,610	
			7	Renewals expenditure	% CRC	0.6	2	3	0.5		
			8	Employees	per 1,000 prop	1.8	3	3	1.7		
SOCIAL	CHARGES & BILLS	P4	Description of residential tariff structure for 2016-17: access charge/prop with 185 c/kL usage charge ; independent of land value								
		P6	12a	Typical residential bill for 2015-16	(access charge of \$802)	\$/assessment (2015-16)	1121	5	5	697	703
			12	Typical residential bill for 2016-17	(access charge of \$850)	\$/assessment (2016-17)	1149	5	5	718	
			13	Typical developer charge for 2016-17		\$/ET (2016-17)	9,990	1	1	4,700	
			14	Non-residential sewer usage charge for 2016-17		c/kL (2016-17)	247	2	1	159	
		F6	15	Revenue - Sge		\$/prop	1,760	1	1	1,095	1032
	HEALTH		16	Sewerage Coverage (% of Urban Population with Reticulated Sge Service)		% of population	99.6	1	1	97.8	
		E3	17	Percent of sewage treated to a tertiary level		%	100	2	2	95	85
			18	Percent of sewage volume treated that was compliant		%	94	3	3	100	
	SERVICE LEVELS		21	Odour complaints		per 1,000 prop	1.0	4	4	0.9	
		C11	22	Service complaints - Sge		per 1,000 prop	1.0	1	1	5	1
		C16	23a	Average sewerage interruption		min	60	1	1	108	101
						%	0.3	2	2	3.5	
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W19	26	Volume of sewage collected		kL/prop	299	5	5	234	202
		W26	26a	Total recycled water supplied		ML	370	4	2	740	1,580
		W27	27	Recycled water		% of effluent	11	3	3	11	17
		E8	28	Biosolids reuse		%	100	1	1	100	90
			30	Energy consumption (1% renewable)		kWh/ML	1,088	4	5	810	
		E12	32	Net greenhouse gas emissions - WS & Sge		t CO2 eq per 1,000 prop	170	1	1	390	402
	ENVIRONMENTAL PERFORMANCE		33	90 th Percentile licence limits for effluent discharge:		BOD 10 mg/L; SS 15 mg/L; Total N 10 mg/L; Total P 0.5 mg/L					
			34	Compliance with BOD in licence		%	100	1	1	100	
			35	Compliance with SS in licence		%	98	5	4	100	
		A14	36	Sewer main breaks and chokes		per 100km main	21	2	2	38	20
			37a	Sewer overflows		per 100km main	2	1	3	14	
		E13	37b	Sewer overflows reported to environmental regulator		per 100km main	2.5	4	5	0.9	0.8
			39	Non residential & trade waste sewage volume		% of sewage	25	3	2	20	
ECONOMIC	FINANCE		43	Revenue from non-residential & trade waste charges		% of revenue	25	2	2	19	
			44	Revenue from trade waste charges		% of revenue	2.0	2	2	1.0	
		F18	46	Economic real rate of return - Sge		%	6.0	1	1	2.5	2.9
			46a	Return on assets - Sge		%	3.6	1	1	1.8	
			48a	Loan payment - Sge		\$/prop	347	1	1	83	
	EFFICIENCY		49	Operating cost (OMA) per 100 km of main		\$'000	2,550	5	5	1,700	
		F12	50	Operating cost (OMA) per property - Note 9		\$/prop	662	5	5	470	429
			51	Operating cost (OMA) per kL		c/kL	221	4	4	208	
			52	Management cost		\$/prop	158	2	3	164	
			53	Treatment cost		\$/prop	268	5	5	159	
			54	Pumping cost		\$/prop	117	5	5	59	
			55	Energy cost		\$/prop	64	5	5	34	
			56	Sewer main cost		\$/prop	103	5	5	51	
		F29	57	Capital Expenditure		\$/prop	110	5	4	186	212

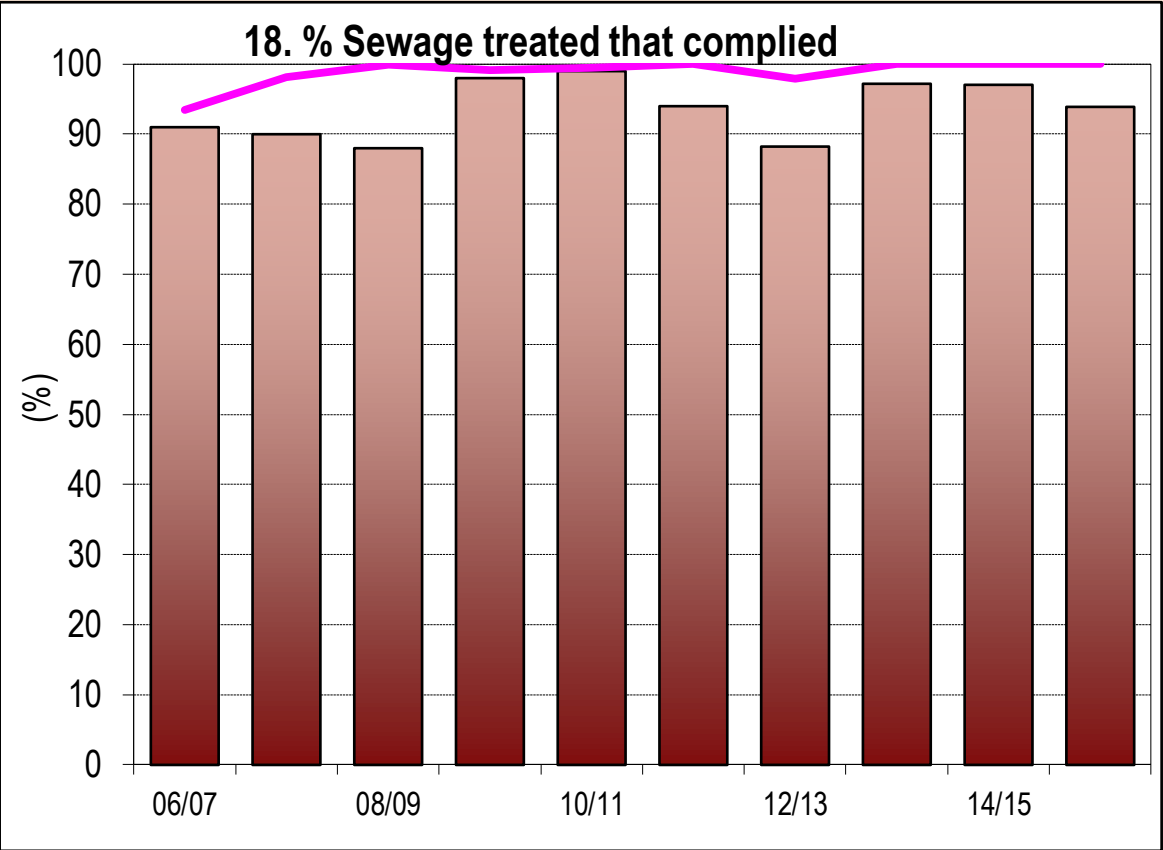
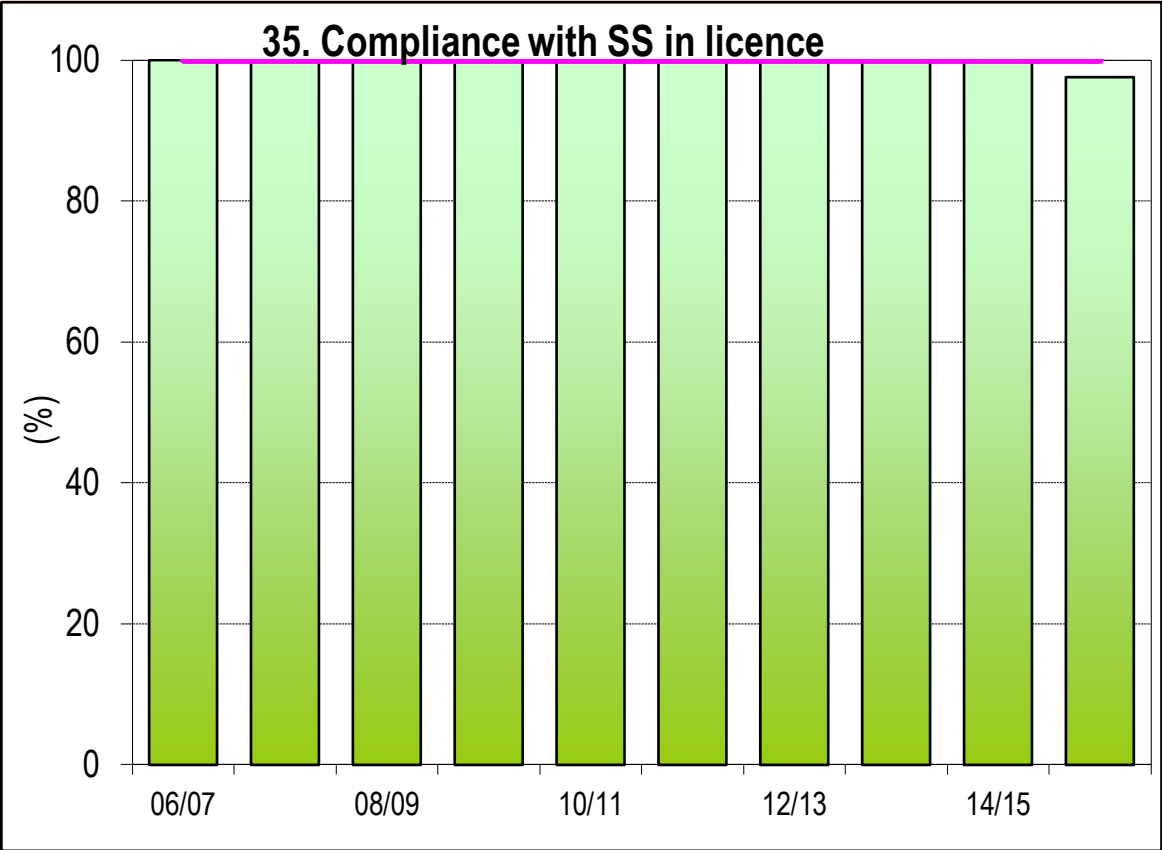
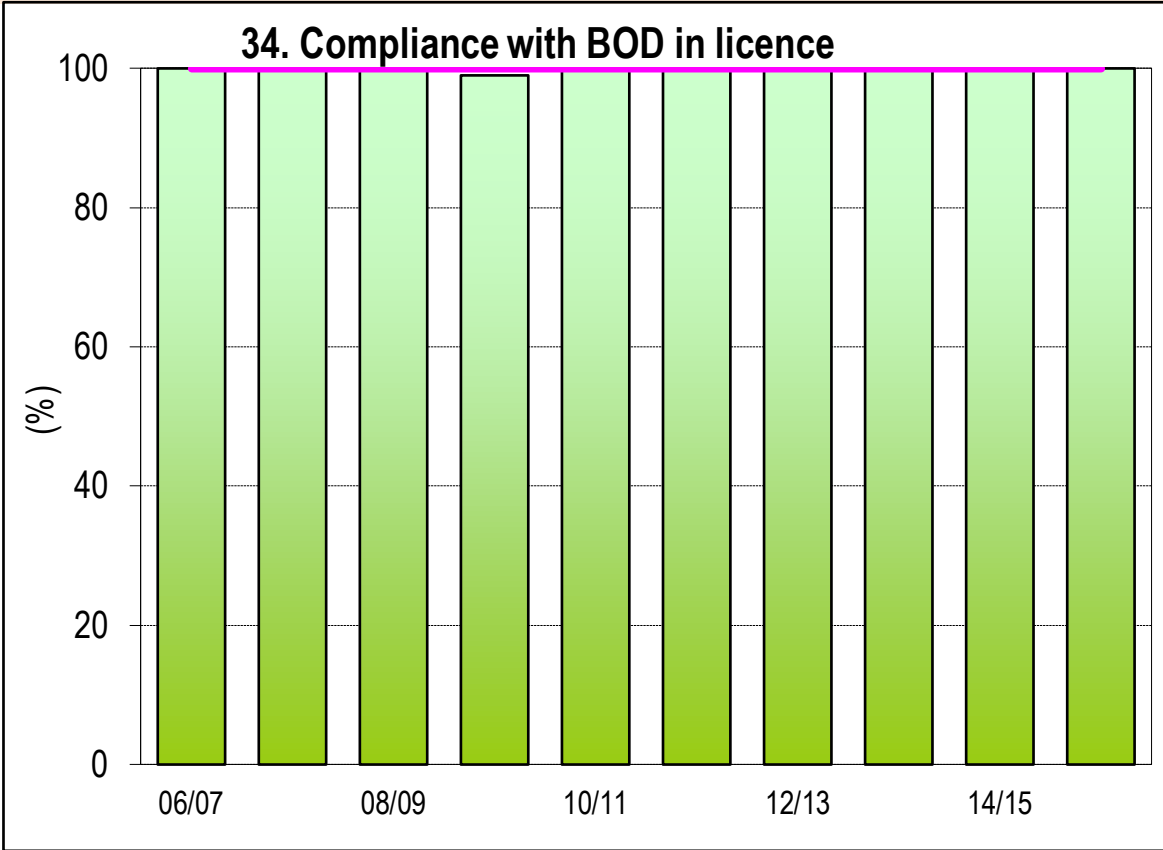
- NOTES :
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Result in Col 1 is compared with LWUs in Size Group 1).
 - Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all NSW LWUs (ie. Result in Col 1 is compared with 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 74 utilities reporting sewerage performance in the National Performance Report 2015-16 (www.bom.gov.au).
 - LWUs are required to annually review key projections and 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.
 - Non-residential access charge - \$819, proportional to square of size of service connection. Sewer usage charge - 247 c/kL.
 - Non-residential and trade waste volume was 25% of total sewage collected.
Non-residential revenue was 25% of revenue from access, usage & trade waste charges, indicating fair pricing of services between the residential and non-residential sectors.
 - Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 99%.
 - Operating cost (OMA)/property was \$662. Components were: management (\$158), operation (\$259), maintenance (\$130), energy (\$64), chemical (\$39) & effluent/biosolids (\$12).
 - Renewals expenditure was \$429,000/100km of main.
 - Council has 6 fully qualified wastewater treatment operators who meet the NSW Certification requirements.

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

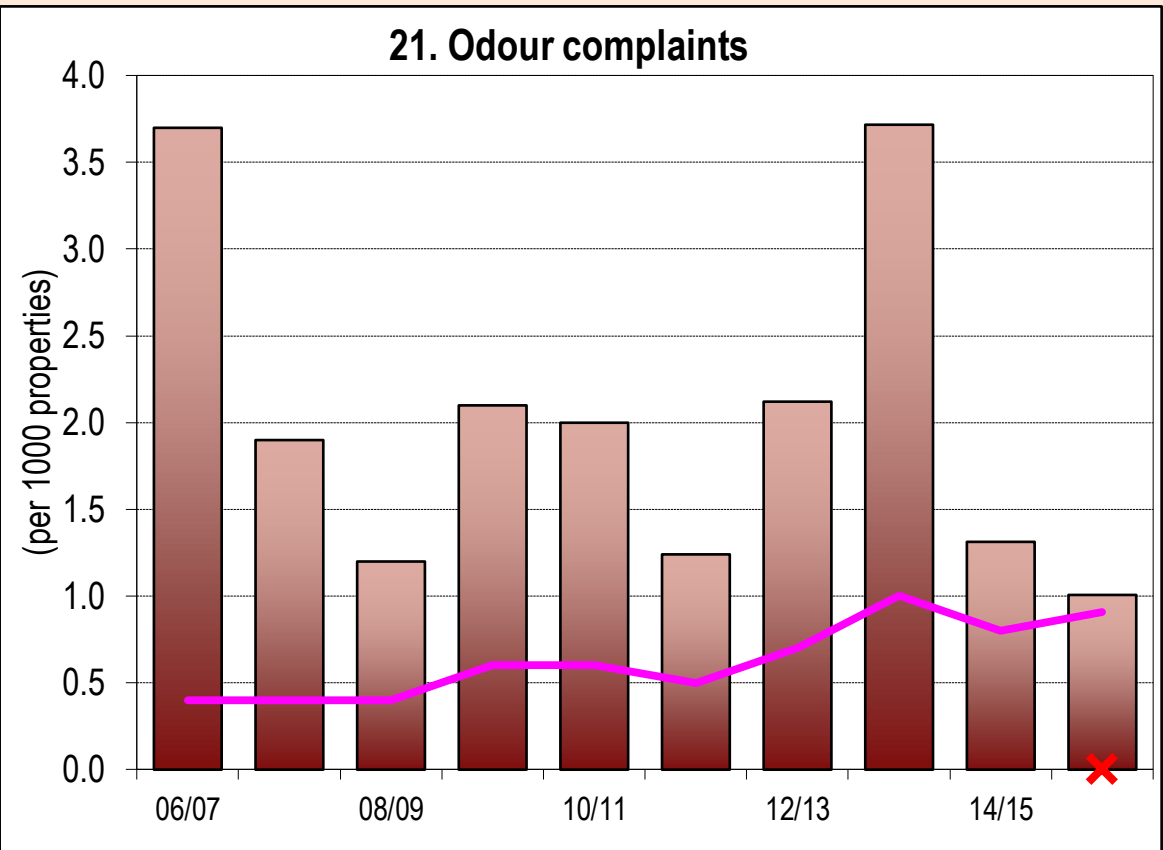
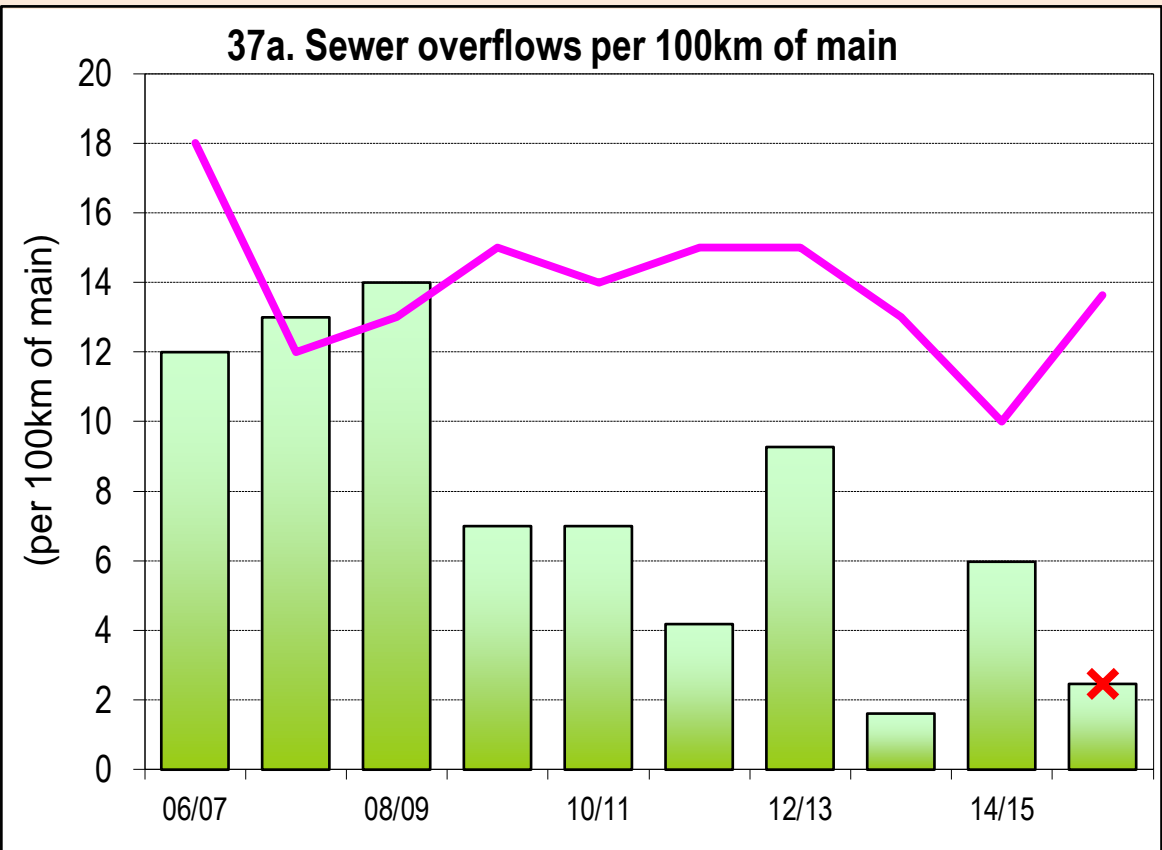
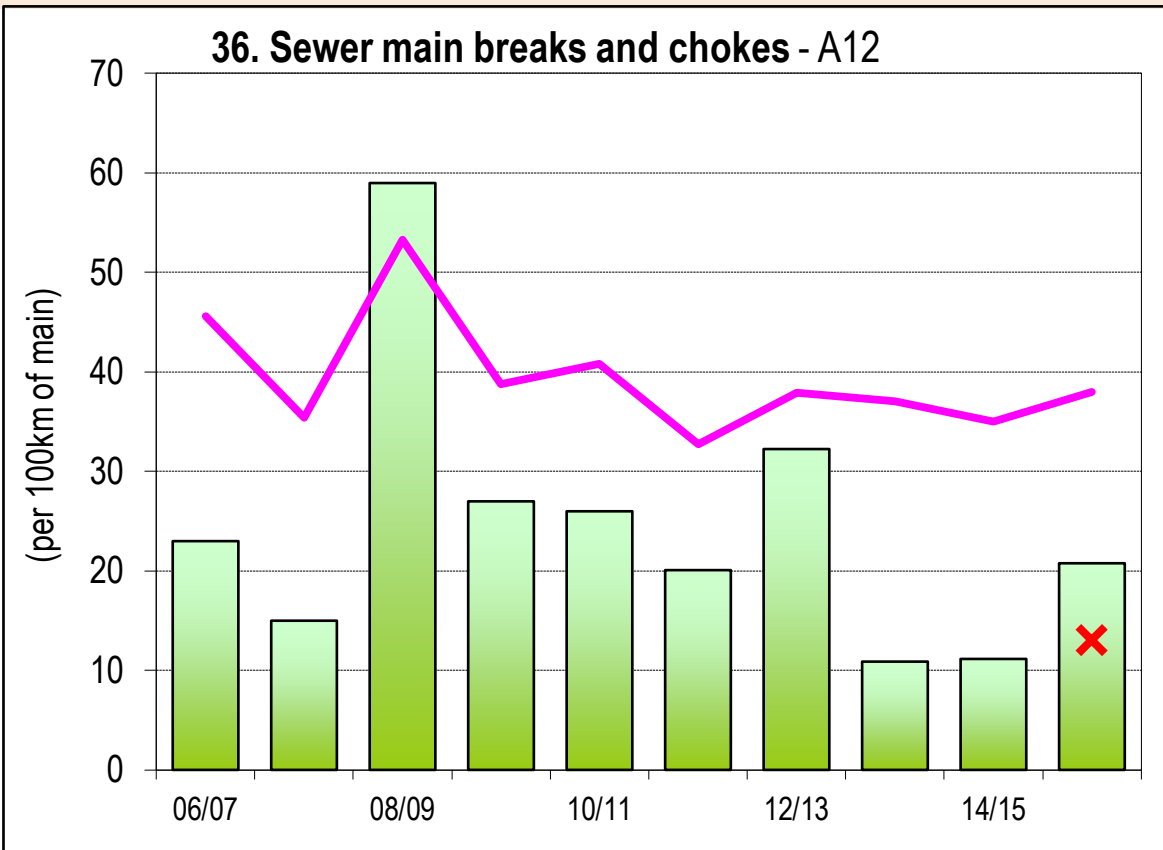
COST RECOVERY



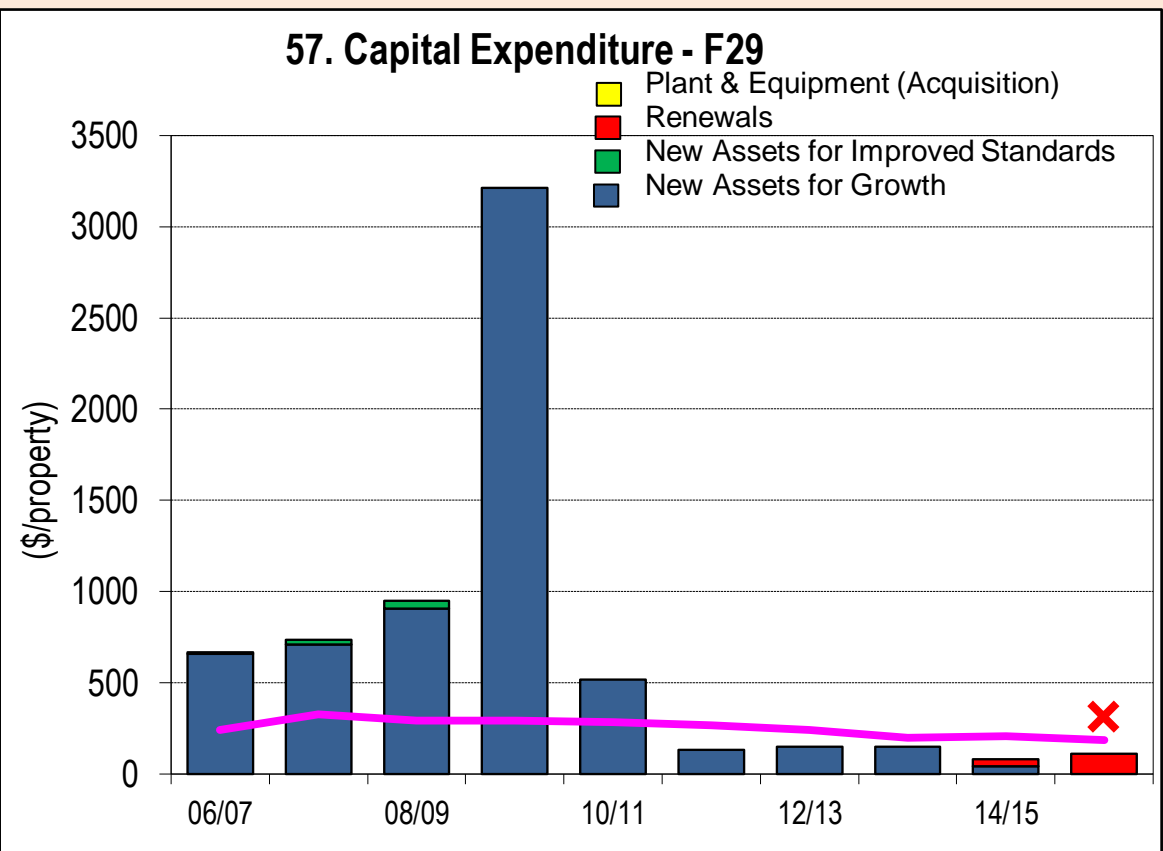
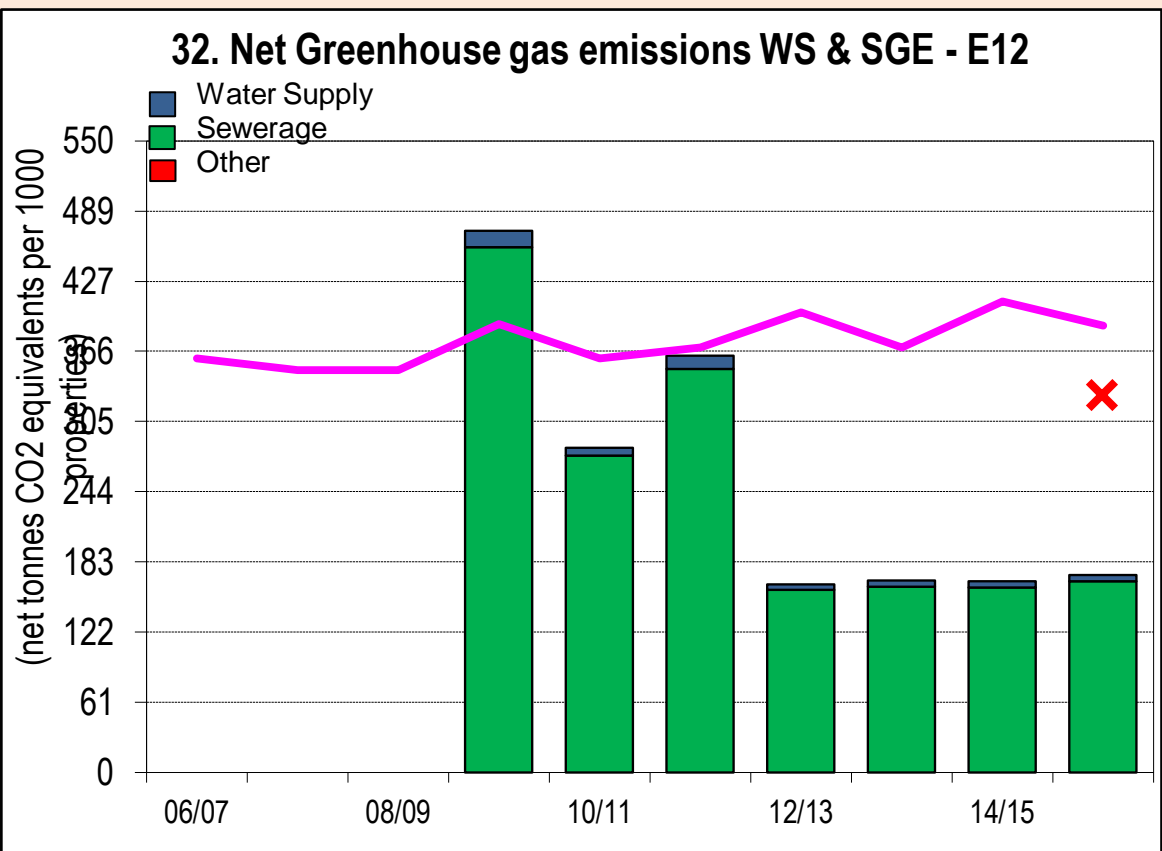
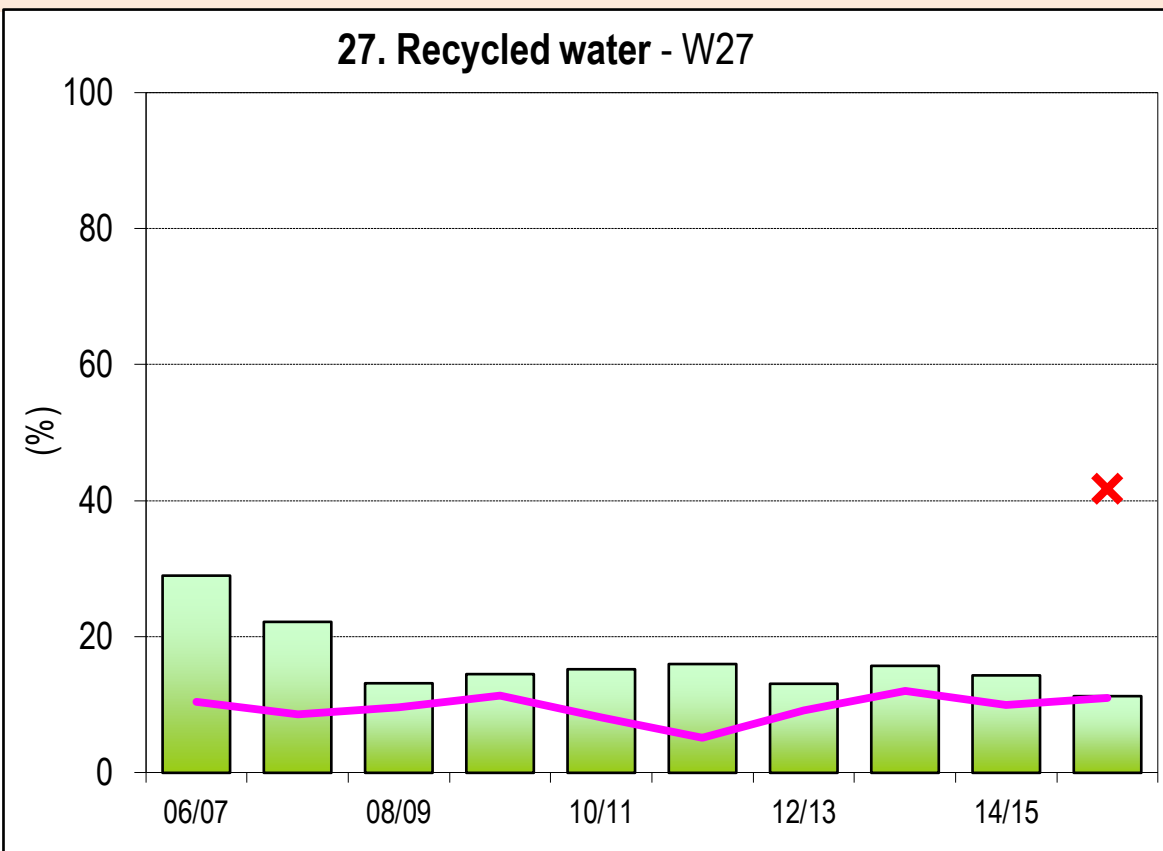
COMPLIANCE



CUSTOMER SERVICE/RELIABILITY



ENVIRONMENT



EFFICIENCY

