

WATER SUPPLY SYSTEM - Tweed Shire Council serves a population of 78,400 (31,840 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, 100.8 ML/d delivery capacity into the distribution system, 193 km of transfer and trunk mains and 523 km of reticulation. The water supply is fully treated.

PERFORMANCE - Tweed Shire Council achieved 100% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$600 which was close to the statewide median of \$582 (Indicator 14). The economic real rate of return was 2.4% which was greater than the statewide median (Indicator 43). The operating cost (OMA) per property was \$423 which was close to the statewide median of \$400 (Indicator 49). Water quality complaints were 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 \$648M (\$18,500 per assessment). Cash and investments were \$21M, debt was \$66M and revenue was \$32M (excluding capital works grants).

## IMPLEMENTATION OF REQUIREMENTS OF NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK

(1) Complete Current Strategic Business Plan & Financial Plan	YES <sup>12</sup>	(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	YESC <sup>12</sup>
(2e) Pricing - DSP with Commercial Developer Charges	Yes		100%
		<b>IMPLEMENTATION OF ALL REQUIREMENTS</b>	

## TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

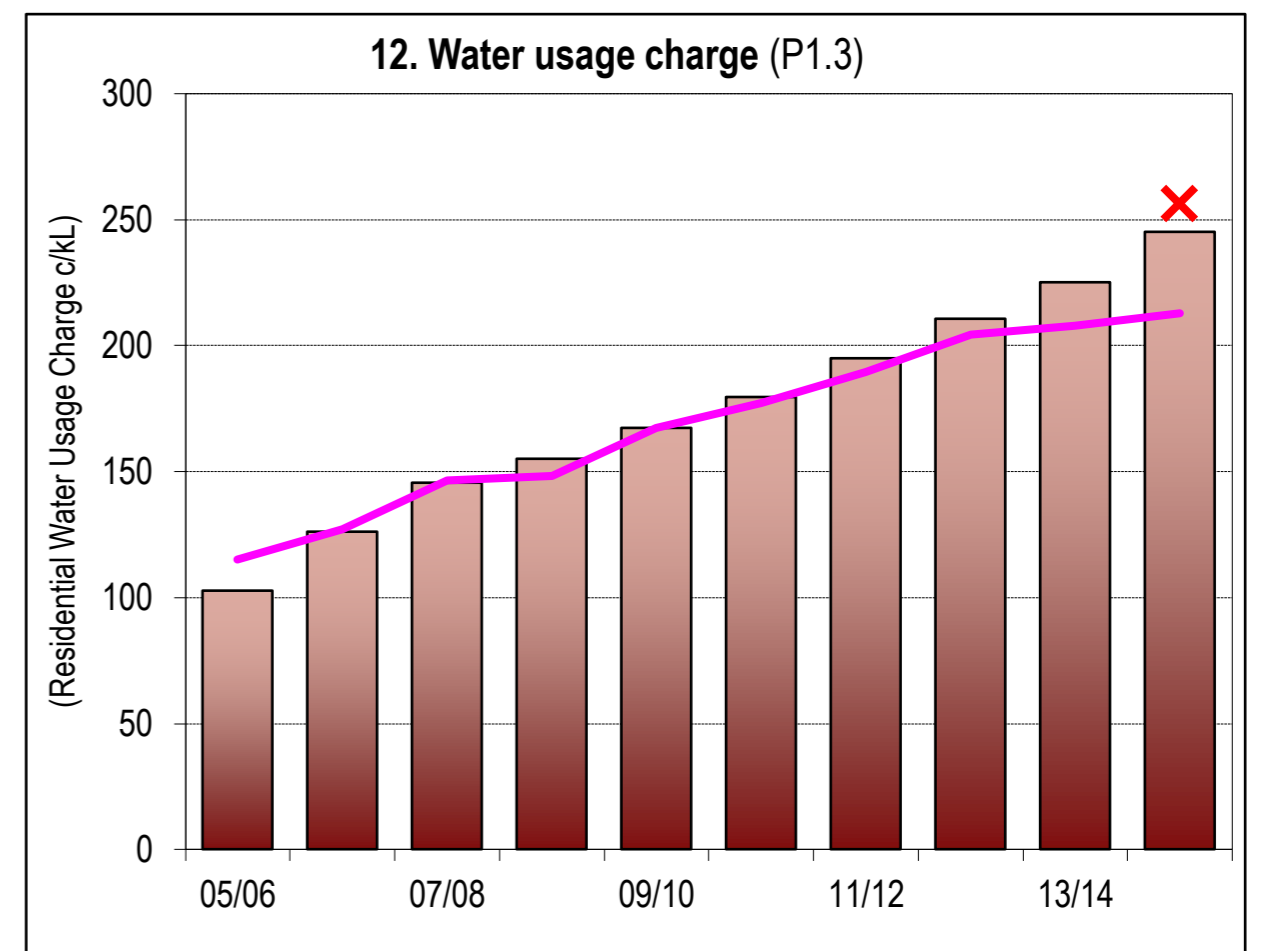
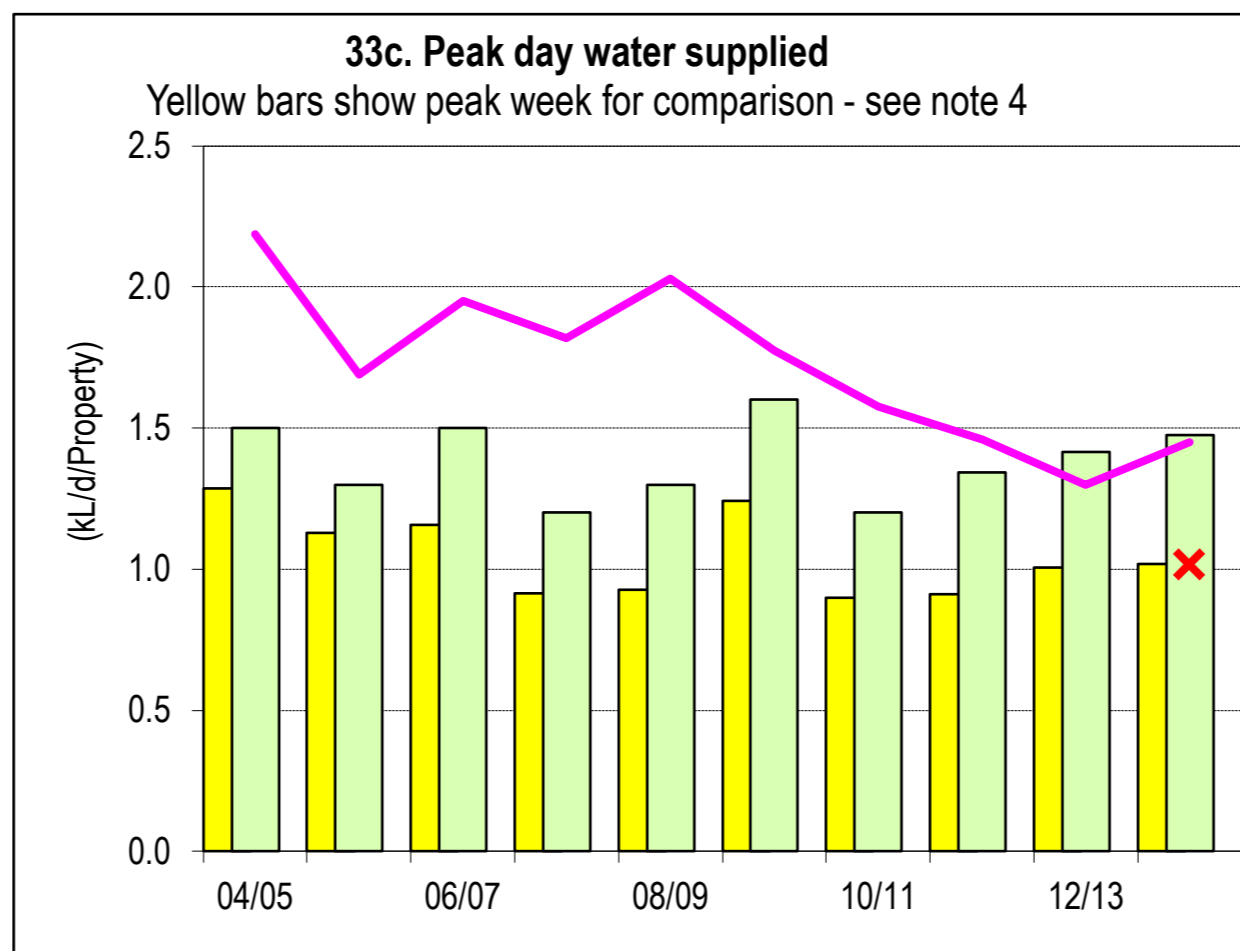
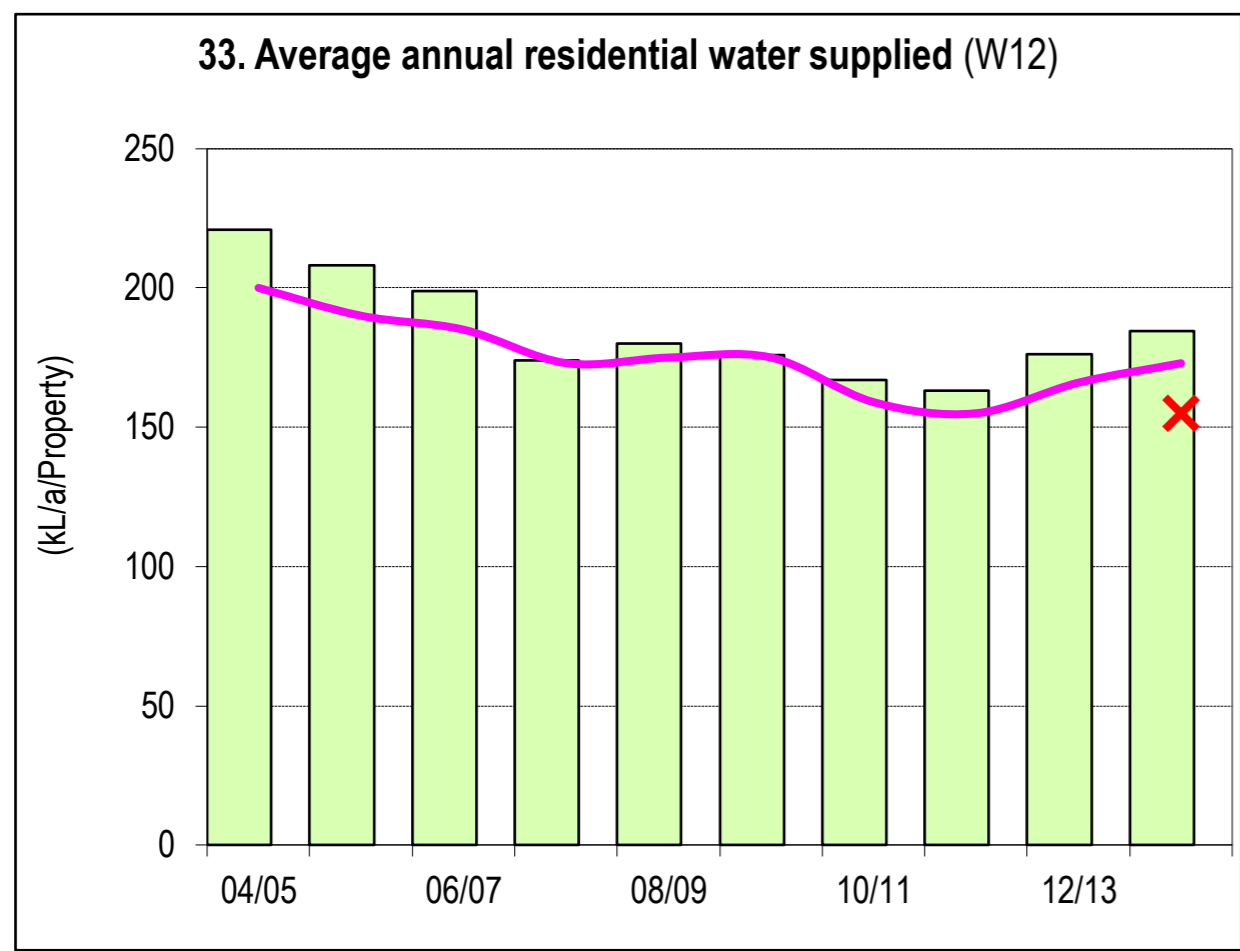
				LWU	RANKING		MEDIANS		
				RESULT	>10,000 properties	All LWUs	Statewide	National	
					Note 1	Note 2	Note 3	Note 4	
					Col 1	Col 2	Col 3	Col 4	Col 5
UTILITY	CHARACTERISTICS	C1	1 Population served: 78400						
		C4	2 Number of connected properties: 31840	Number of assessments: 34990					
			3 Residential connected properties (% of total)	%	95			91	
			4 New residences connected to water supply (%)	%	0.8	4	3	0.9	
		A3	5 Properties served per kilometre of water main	Prop/km	45			32	35
			6 Rainfall (% of median annual rainfall)	%	67	3	4	77	
		W11	7 Total urban water supplied at master meters (ML)	ML	9,770			6,800	10,280
			8 Peak week to average consumption (%)	%	129	2	1	152	
			9 Renewals expenditure (% of current replacement cost of system assets)	%	0.5	2	3	0.5	
			10 Employees per 1000 properties	per 1,000 prop	1.9	5	4	1.5	
SOCIAL	CHARGES & BILLS	P1	Residential tariff structure for 2014-15: inclining block; independent of land value; access charge \$148						
		P1.3	12a Residential water usage charge for 2013-14 for usage <300 kL (c/kL)	c/kL (2013-14)	225	2	1	208	185
			12 Residential water usage charge for 2014-15 for usage <300 kL (c/kL)	c/kL (2014-15)	245	2	1	213	
		P3	14a Typical residential bill for 2013-14 (\$/assessment)	\$/assessment (2013-14)	553	3	2	550	567
			14 Typical residential bill for 2014-15 (\$/assessment)	\$/assessment (2014-15)	600	4	2	582	
		15 Typical developer charge for 2014-15 (\$/equivalent tenement)	\$/assessment (2014-15)	12,900	1	1	5,500		
	F4	16 Residential revenue from usage charges (% of residential bills)	%	76	2	2	73	68	
	F5	17 Revenue per property - water (\$/property)	\$/prop	1020	2	2	795	849	
		18 Water Supply Coverage (% of Urban Population with reticulated WS)	% of population	99.7	2	1	99.6		
	HEALTH	H6	18a Risk based drinking water quality plan?	Yes					
		19 Physical compliance achieved? Note 10	Yes	1	1				
		19a Chemical compliance achieved? Note 10	Yes	1	1				
H4		19b % population with chemical compliance	%	100	1	1	100		
		20 Microbiological (E. coli) compliance achieved? Note 10	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	4	4	4	3	2	
	C10	26 Water service complaints per 1000 properties	per 1,000 prop	28	5	4	6	1	
	C17	27 Incidence of unplanned interruptions per 1000 properties	per 1,000 prop	50	3	4	50	96	
	C15	28 Average duration of interruption (min)	min	149	3	4	150	113	
	A8	30 Number of water main breaks per 100 km of water main	per 100km	8	2	2	10	13	
		31 Drought water restrictions (% of time)	% of time	0	1	1	0		
		32 Total days lost (%)	%	4.3	5	5	2.9		
		W12	33 Average annual residential water supplied - STATEWIDE (kL/property)	kL/prop	184	4	2	173	185
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	33a	Average annual residential water supplied - COASTAL LWUs (kL/property)	kL/prop	184	5	4	157	
		33b	Average annual residential water supplied - INLAND LWUs (kL/property)	kL/prop				263	
		A10	34 Real losses (leakage) (L/service connection/day)	L/connection/day	60	2	2	70	79
			35 Energy consumption per Megalitre (kiloWatt hours)	kWh	627	3	4	620	
	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	440	4	4	370	390		
ECONOMIC	FINANCE		42 Current replacement cost per assessment (\$)	\$/assessment	18,500	2	2	16,500	
		F17	43 Economic real rate of return - Water (%)	%	2.4	1	2	1.2	1.9
			44 Return on assets - Water (%)	%	1.7	3	2	1.1	
		F22	45 Net Debt to equity - WS&Sge (%)	%	2	2	2	1	11
		F23	46 Interest cover - WS&Sge		5	1	1	4	2
		47 Loan payment per property - Water (\$)	\$/prop	182	1	1	64		
	F24	47b Net profit after tax - WS & Sge (\$'000)	\$/prop	14,200	1	1	1180	5345	
	EFFICIENCY		48 Operating cost (OMA) per 100km of main (\$'000)	\$/prop	1,880	5	5	1,290	
		F11	49 Operating cost (OMA) per property (\$/prop) Note 8	\$/prop	423	3	2	400	439
			50 Operating cost (OMA) per kilolitre (cents)	c/kL	138	4	4	126	
		51 Management cost (\$/prop)	\$/prop	176	4	4	140		
		52 Treatment cost (\$/prop)	\$/prop	82	4	2	58		
	53 Pumping cost (\$/prop)	\$/prop	45	4	2	43			
	54 Energy cost (\$/prop)	\$/prop	37	4	3	25			
	55 Water main cost (\$/prop)	\$/prop	33	1	1	74			
F28	56 Capital Expenditure (\$/prop)	\$/prop	271	2	2	181	175		

## NOTES:

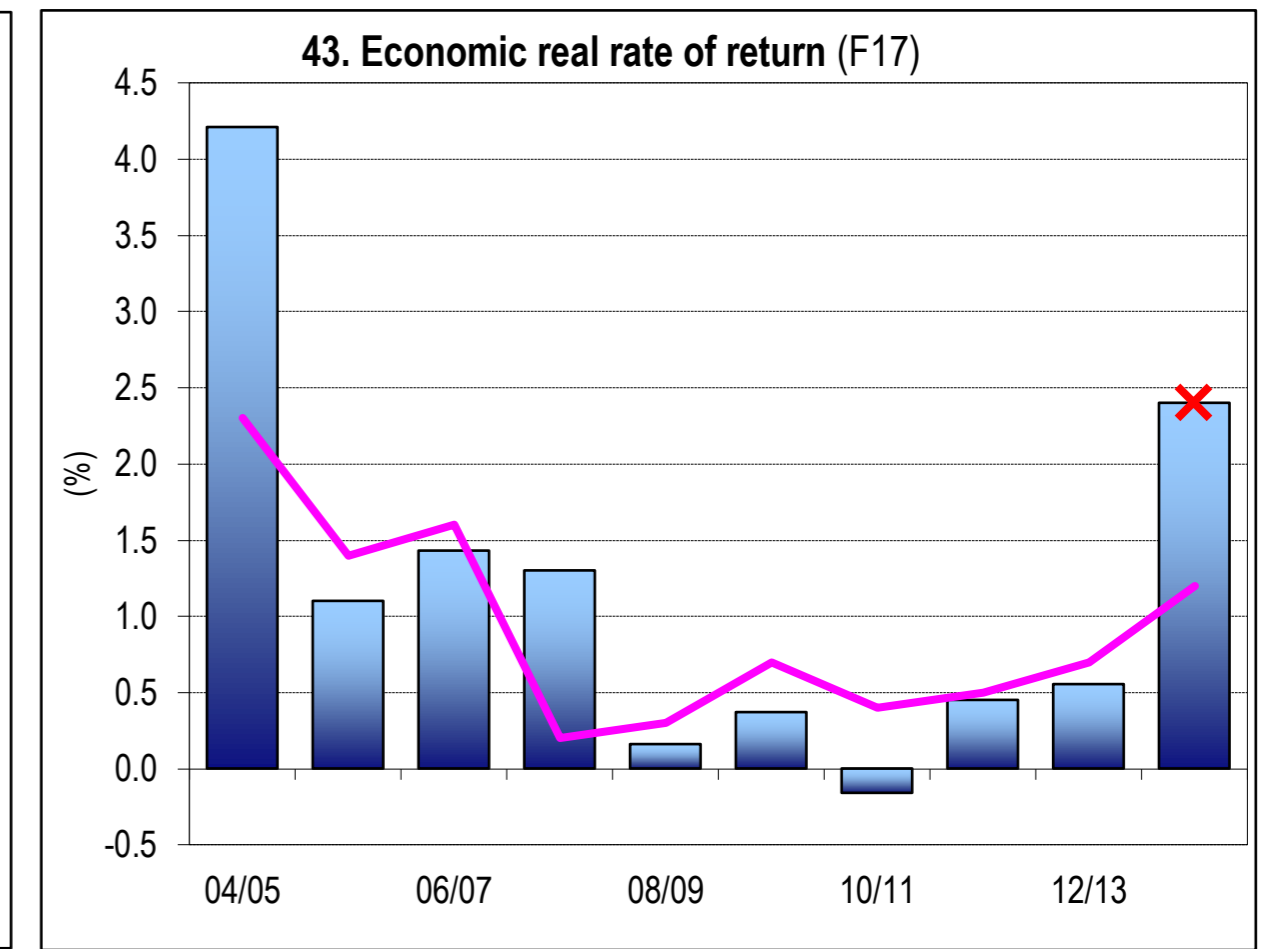
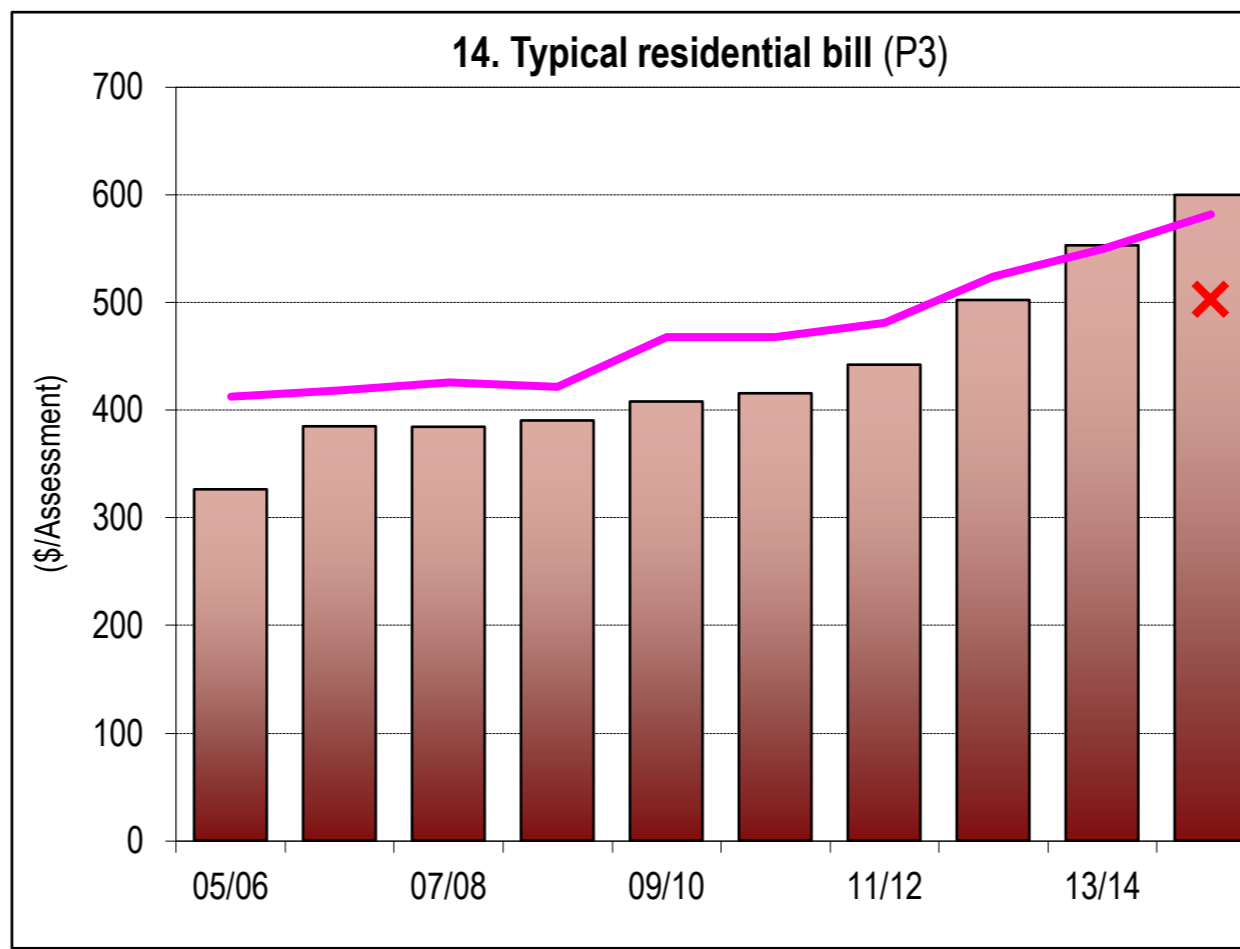
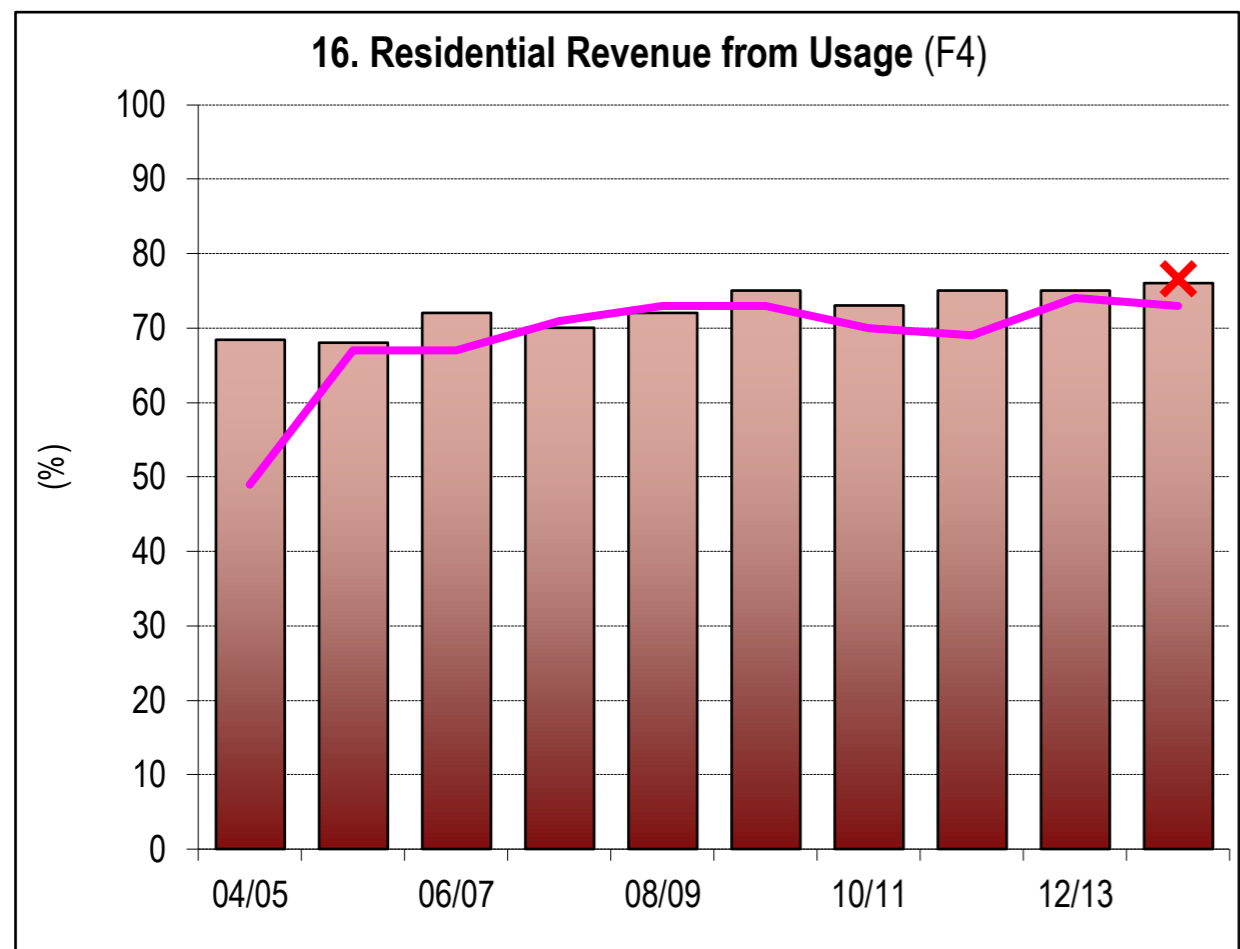
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with >10,000 properties).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs).
- Col 4 (Statewide 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 67 utilities reporting water supply performance in the National Performance Report 2013-14 ([www.bom.gov.au](http://www.bom.gov.au)).
- 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.
- 2014-15 Non-residential Tariff: Access Charge based on Meter Size\*(40mm: \$592), Two Part Tariff; Usage Charge 245c/kL.
- Non-residential water supplied was 29% of potable water supplied excluding non-revenue water.  
Non-residential revenue was 25% of annual rates and charges, indicating fair pricing of services between the residential and non-residential sectors.
- The operating cost (OMA) per property was \$423. Components were: management (\$176), operation (\$80), maintenance (\$97), energy (\$37) & chemical (\$32).
- Rehabilitations included 0.08% of service connections and 3.5% of water meters. Renewals expenditure was \$493,000/100km of main.
- Compliance with ADWG 2011 for drinking water quality is shown as "Yes" if compliance has been achieved (indicators 19, 19a & 20).
- Tweed Shire Council has 4 fully qualified water treatment operators who meet the requirements of the National Certification Framework.
- 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](http://www.water.nsw.gov.au)).

(Results shown for 10 years together with 2013-14 Statewide Median and Top 20%)

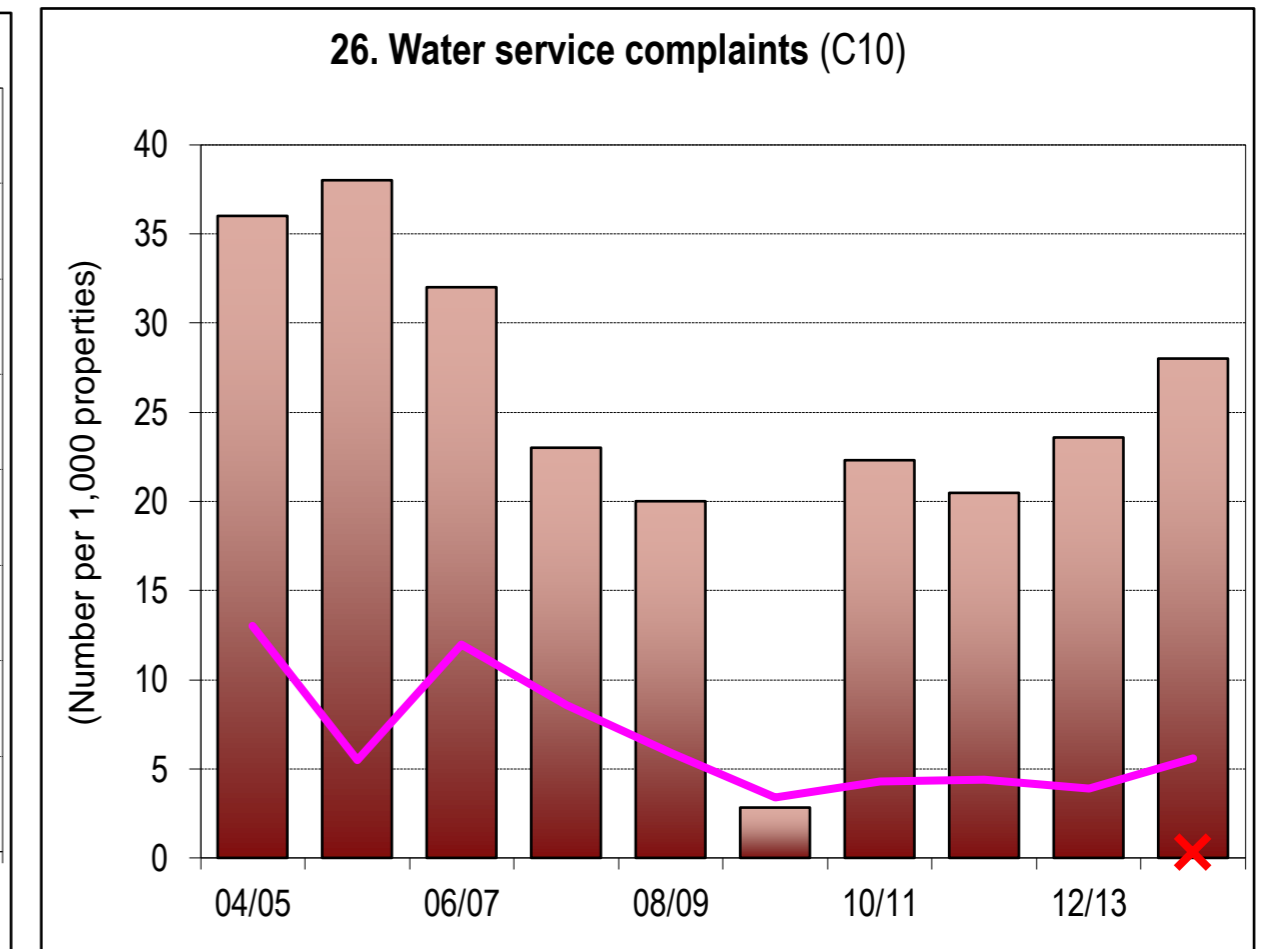
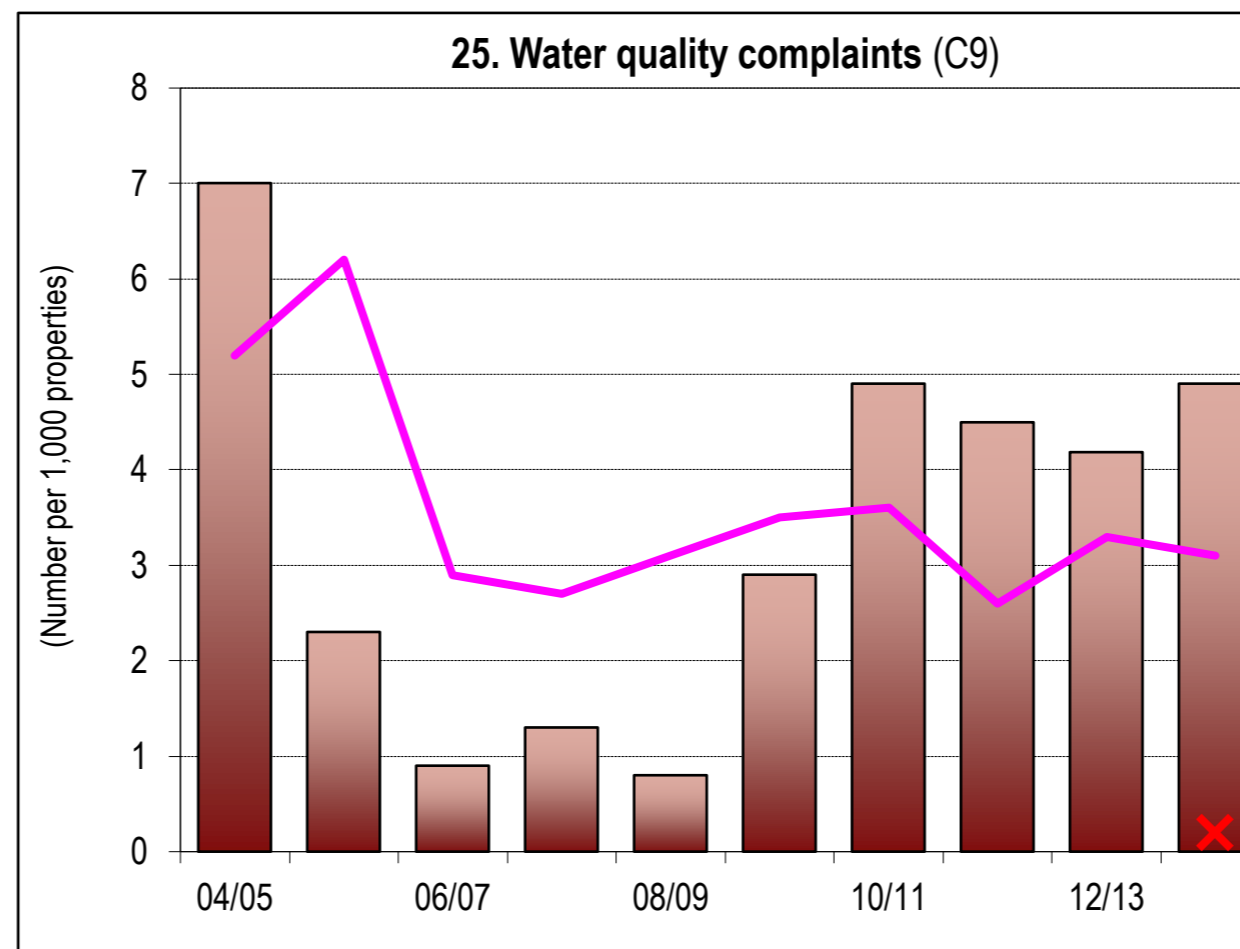
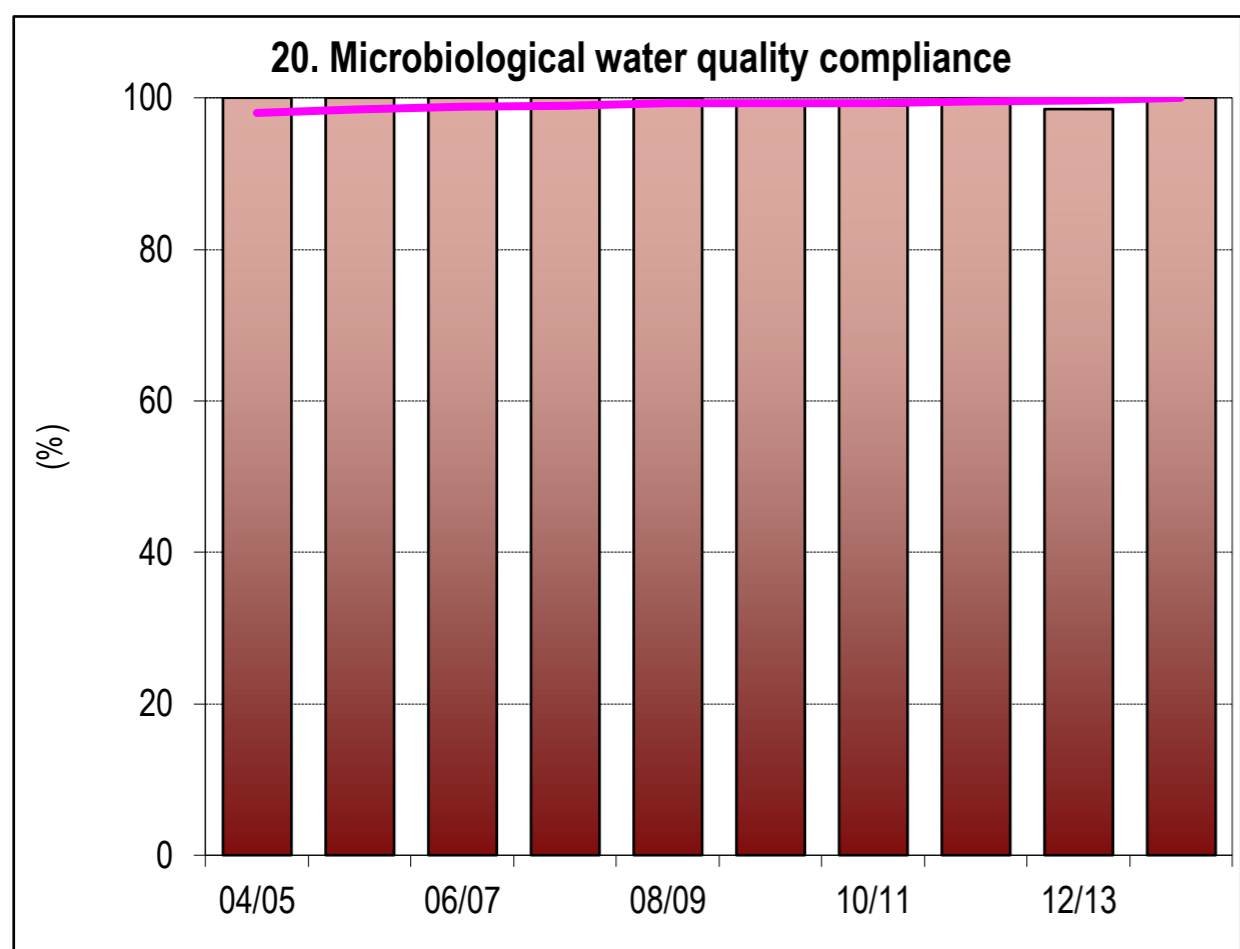
**RESIDENTIAL USE/REVENUE FROM USAGE**



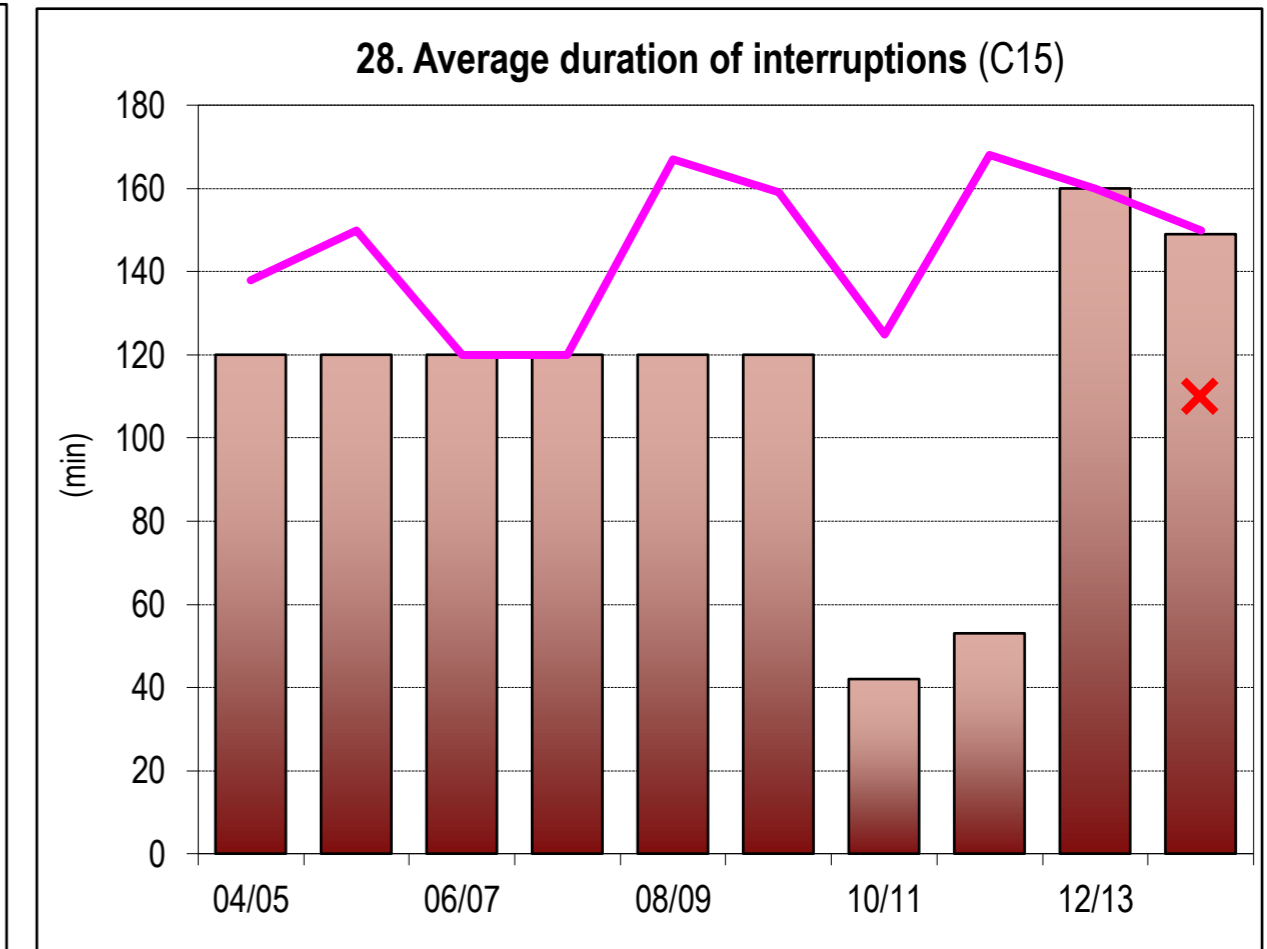
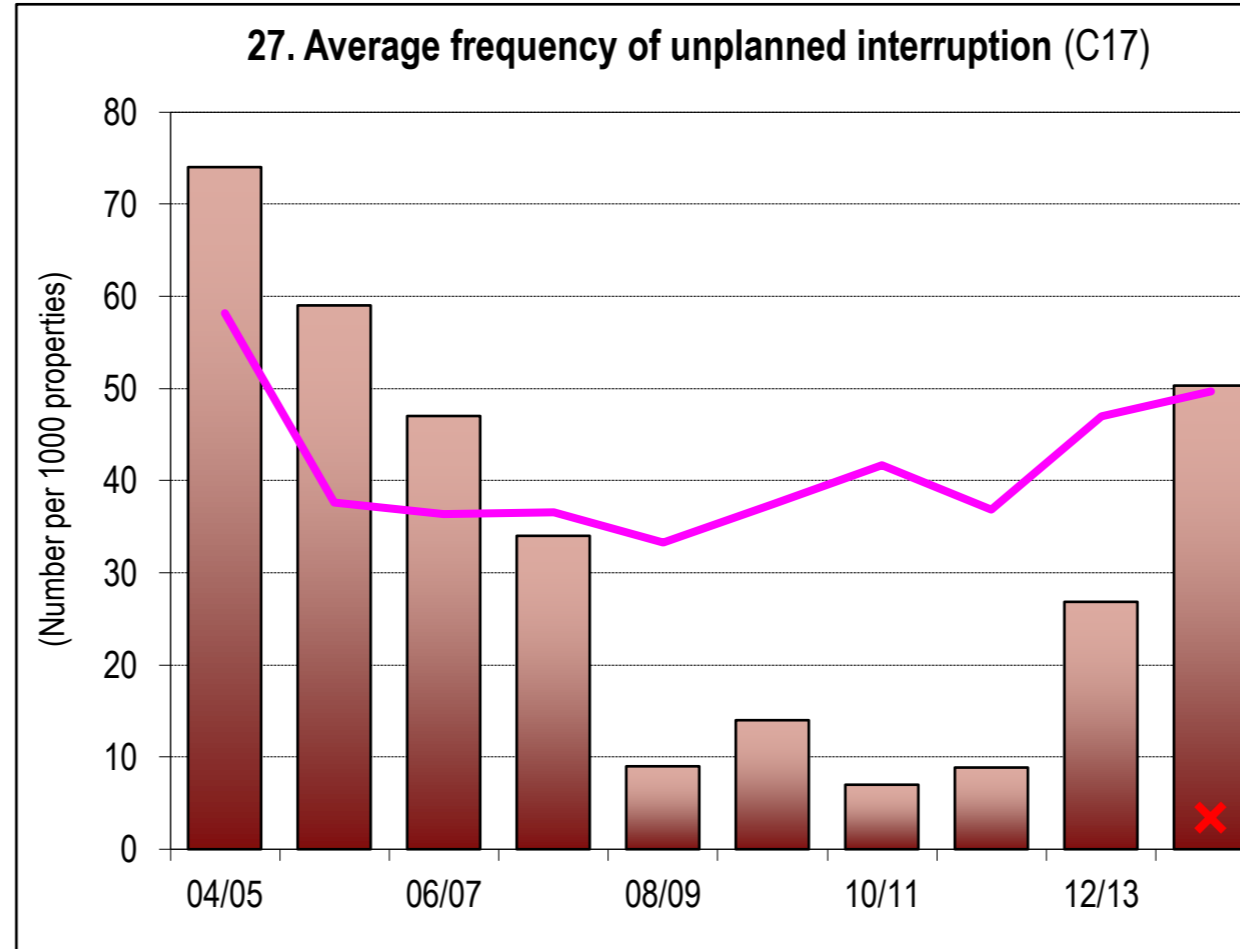
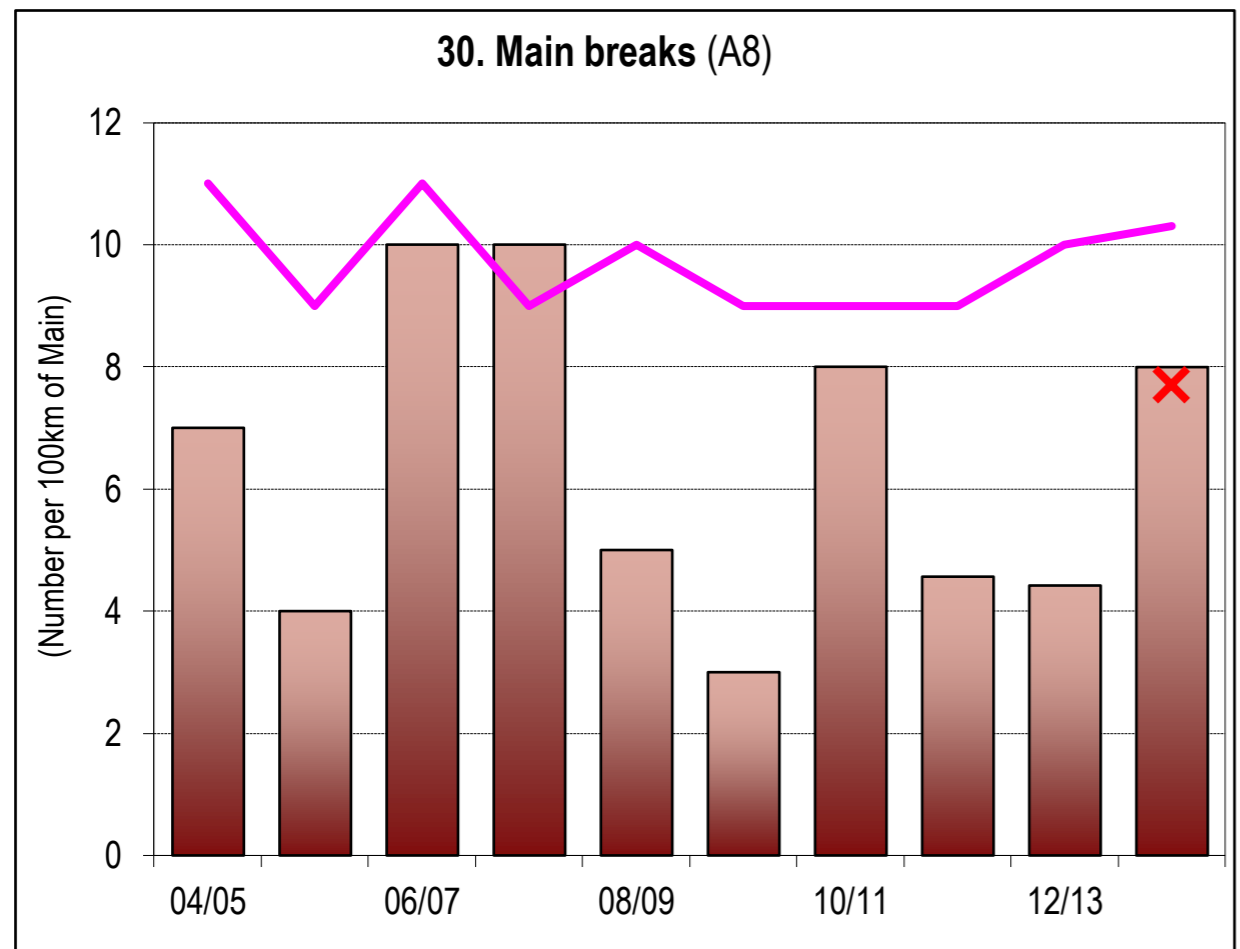
**COST RECOVERY**



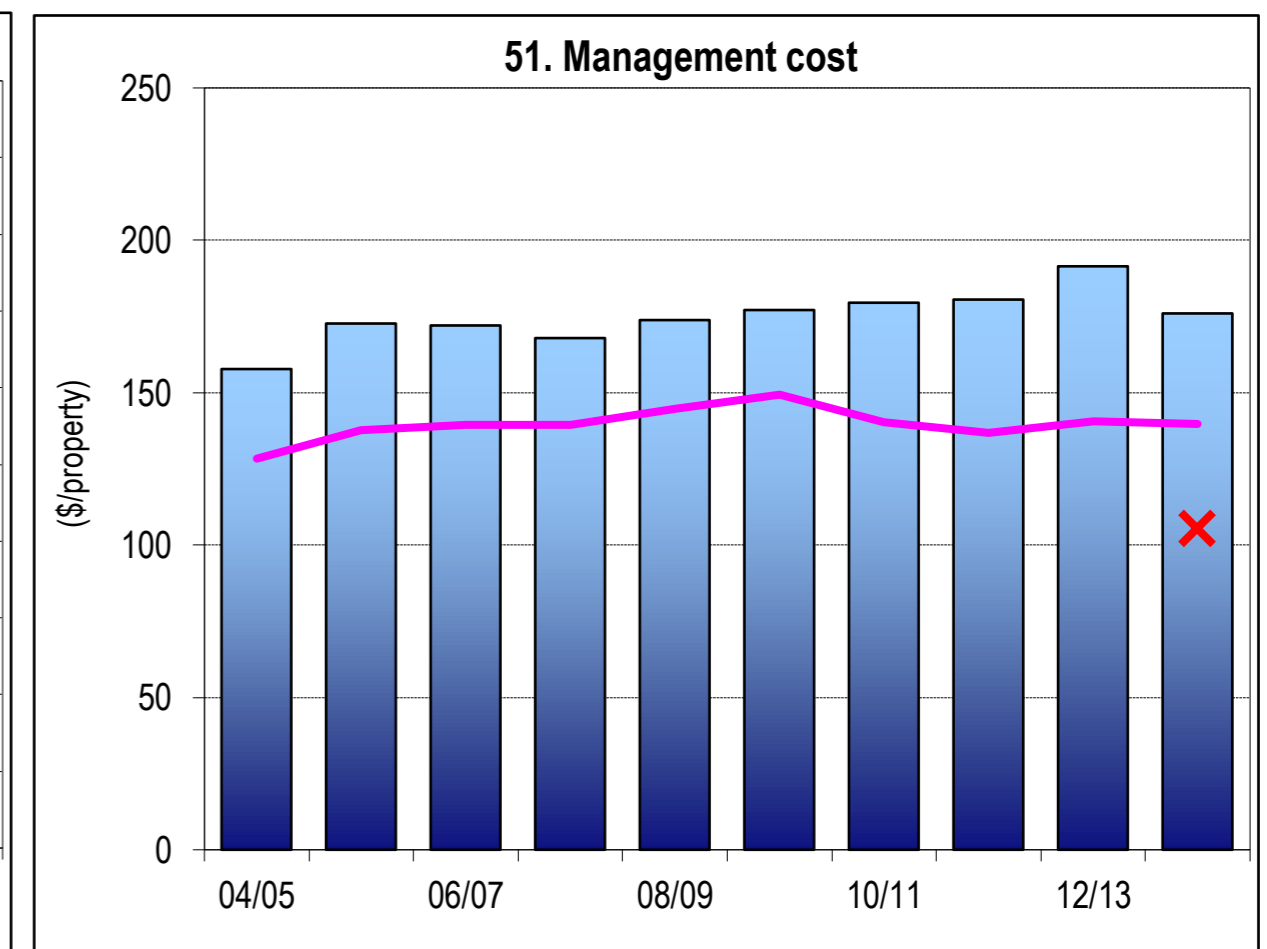
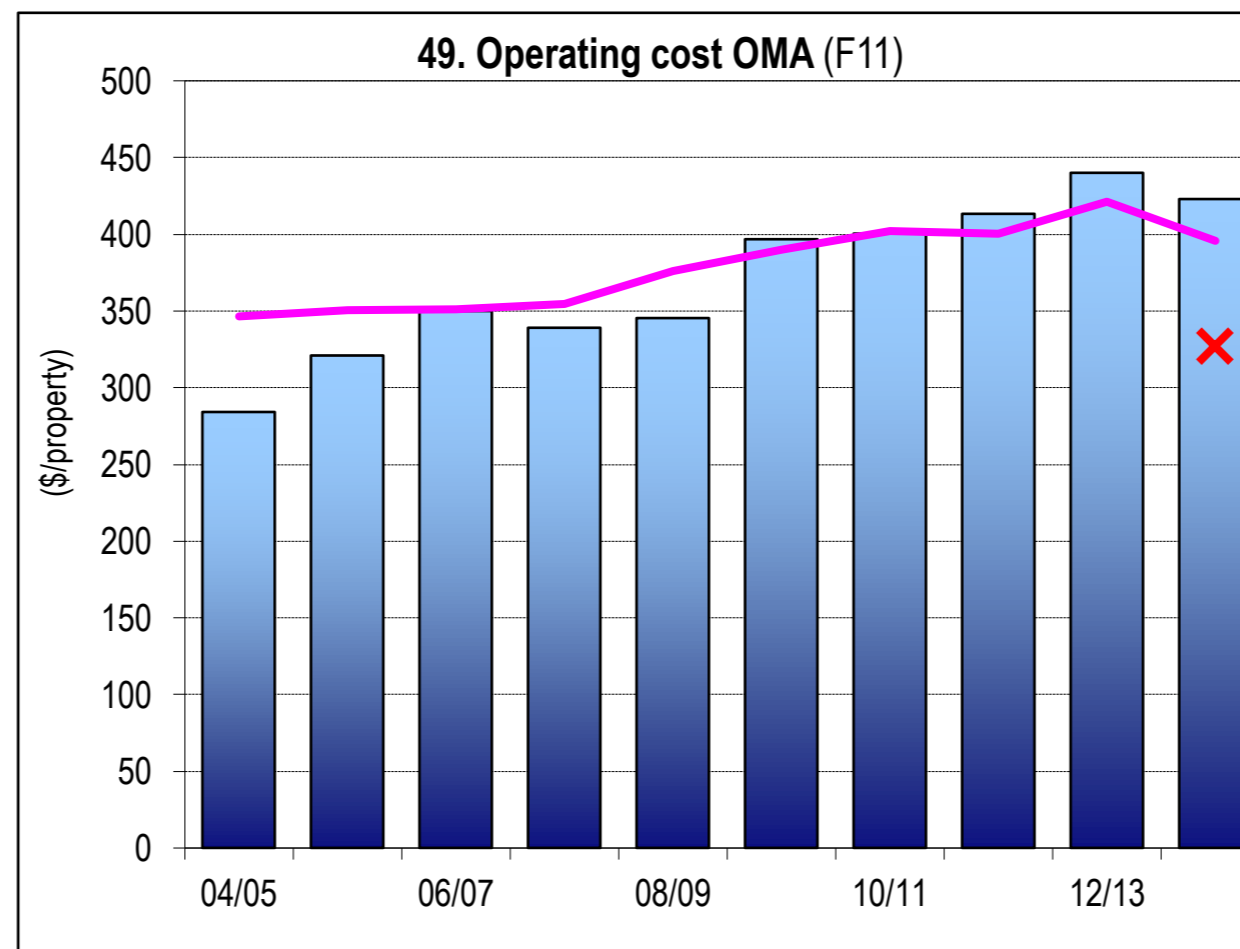
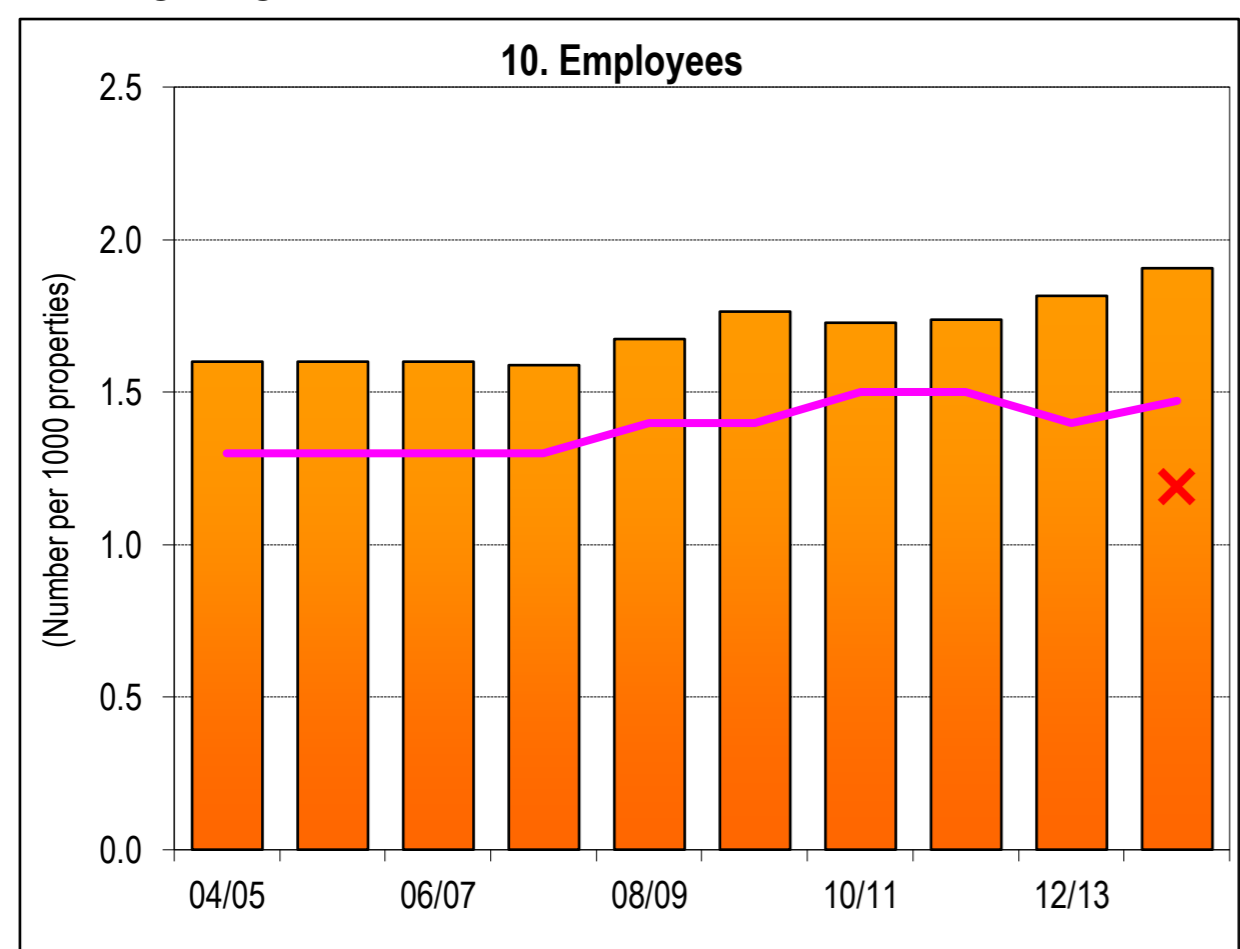
**WATER QUALITY/CUSTOMER SERVICE**



**RELIABILITY**



**EFFICIENCY**



**NOTES:**

- Costs are in Jan 2014\$ except for graphs 12 and 14, which are in Jan 2015\$.
- 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/NRMCC Australian Drinking Water Guidelines (ADWG) and for 2011-12 to 2013-14 compliance was on the basis of the 2011 ADWG.
- Indicators 33 and 33c - Green shading of bars shows % of time Drought Water Restrictions applied in each year:
- 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 2013-14 X

0 - 30% 30-50% >50% of time

# Tweed Shire Council Water Supply – Action Plan Page 1

## Summary

In 2013-14, Tweed Shire Council implemented all the water supply requirements of the *NSW Best-Practice Management Framework* and its performance has been [to be completed by Council].

Key actions from Council's Strategic Business Plan:

- Insert achievements for Key Action 1 here for Tweed Shire Council
- Insert achievements for Key Action 2 here for Tweed Shire Council

INDICATOR		RESULT <sup>2</sup>		COMMENT/DRIVERS	ACTION
	<b>Best-Practice Management Framework</b>	Implemented all the Best-Practice Requirements <sup>1</sup>	Very good	Implementation of the requirements demonstrates effectiveness and sustainability of water supply business. 100% implementation is required for eligibility to pay an 'efficiency dividend'.	Prepare a new 30-year IWCM Strategy, Financial Plan & Report in accordance with the July 2014 IWCM Check List ( <a href="http://www.water.nsw.gov.au">www.water.nsw.gov.au</a> ) as the existing Strategic Business Plan is over 4 years old.
<b>CHARACTERISTICS</b>					
5	Connected property density	45 per km of main Highest ranking (1, 1)		A connected property density below 30 can significantly increase the cost per property of providing services, as will also a high number of small discrete water supply schemes.	
9	Renewals expenditure	0.5% High ranking (2, 3)	Good	Adequate funds must be programmed for works outlined in the Asset Management Plan – page 3 of the 2013-14 NSW Performance Monitoring Report.	<b>FOR INDICATORS 9 to 56</b> Where ranking is low, investigate reasons including past performance and trends, develop remedial action plan and summarise in this column.
10	Employees	1.9 per 1,000 props Lowest ranking (5, 4)	May require review		
<b>SOCIAL - CHARGES</b>					
12	Residential water usage charge	245 c/kL High ranking (2, 1)	Good	Benefits of strong pricing signals are shown on page 5 of the 2013-14 NSW Performance Monitoring Report.	
13	Residential access charges	\$148 per assessment Highest ranking (1, 1)	Good		See 16.
14	Typical residential bill <sup>3</sup> (TRB)	\$600 per assessment Low ranking (4, 2)	Good	TRB should be consistent with projection in the financial plan. Drivers – OMA Management Cost and Capital Expenditure.	See 43.
15	Typical developer charges	\$12900 per ET Highest ranking (1, 1)	Good		
16	Residential revenue from usage charges	76% of residential bills High ranking (2, 2)	Good	≥ 75% of residential revenue should be generated through usage charges.	
<b>SOCIAL – HEALTH</b>					
19	Physical quality compliance	Yes Highest ranking (1, 1)	Very good		
19	Chemical quality compliance	Yes Highest ranking (1, 1)	Very good		
20	Microbiological compliance <sup>4</sup>	Yes Highest ranking (1, 1)	Very good	Critical indicator. LWUs should annually review their DWMS in accordance with NSW guidelines <sup>4</sup> .	

1. Council needs to annually 'roll forward', review and update its 30-year total asset management plan (TAMP) and 30-year financial plan, review Council's TBL Performance Report and prepare an **Action Plan** to Council. The Action Plan is to include any actions identified in Council's annual review of its DWMS (Indicator 20) and any section 61 Reports from the NSW Office of Water. Refer to pages 27, 28, 107 and 111 of the 2013-14 NSW Water Supply and Sewerage Performance Monitoring Report.
2. The ranking relative to similar size LWUs is shown first (Col. 2 of TBL Report) followed by the ranking relative to all LWUs (Col. 3 of TBL Report).
3. Review and comparison of the 2014-15 **Typical Residential Bill (Indicator 14)** with the projection in the later of your IWCM Strategy and financial plan and your Strategic Business Plan is **mandatory**.  
In addition, if both indicators 43 and 44 are negative, you must report your proposed 2015-16 typical residential bill to achieve full cost recovery.
4. **Microbiological compliance (Indicator 20)** is a **high priority** for each NSW LWU. Corrective action for non-compliance (≤97%), or any 'boil water alerts' must be reported in your Action Plan. Refer to pages 7, 8 and 28 of the 2013-14 NSW Water Supply and Sewerage Performance Monitoring Report ([www.water.nsw.gov.au](http://www.water.nsw.gov.au)) and NSW Guidelines for drinking water quality management systems, NSW Health and NSW Office of Water, 2013.

## Tweed Shire Council Water Supply – Action Plan Page 2

INDICATOR		RESULT		COMMENT/DRIVERS	ACTION
<b>SOCIAL – LEVELS OF SERVICE</b>					
25	Water quality complaints	4.9 per 1,000 props Low ranking (4, 4)	May require review	Critical indicator of customer service.	
26	Service complaints	28.2 per 1,000 props Lowest ranking (5, 4)	May require review	Key indicator of customer service.	
27	Average frequency of unplanned interruptions	50 per 1,000 props Median ranking (3, 4)	Satisfactory	Key indicator of customer service, condition of network and effectiveness of operation.	
30	Number of main breaks	8 per 100km of main High ranking (2, 2)	Good	Drivers – condition and age of water mains, ground conditions.	
32	Total Days Lost	4.3% Lowest ranking (5, 5)	May require review		
<b>ENVIRONMENTAL</b>					
33	Average annual residential water supplied	184 kL per prop Low ranking (4, 2)		Drivers – available water supply, climate, location (Inland or coastal), pricing signals (Indicator 3), restrictions.	
34	Real losses (leakage)	60 L/c/d High ranking (2, 2)	Good	Loss reduction is important where an LWU is facing drought water restrictions or the need to augment its water supply system.	
<b>ECONOMIC</b>					
43	Economic Real Rate of Return (ERRR)	2.4% Highest ranking (1, 2)	Good	Reflects the rate of return generated from operating activities (excluding interest income and grants). An ERRR or ROA of $\geq 0\%$ is required for full cost recovery.	
44	Return on assets (ROA)	1.7% Median ranking (3, 2)		See 43.	
45	Net debt to equity	2% High ranking (2, 2)	Good	LWUs facing significant capital investment are encouraged to make greater use of borrowings – page 14 of the 2013-14 NSW Performance Monitoring Report.	
46	Interest cover	5 Highest ranking (1, 1)	Very good	Drivers – in general, an interest cover $> 2$ is satisfactory.	
47	Loan payment	\$182 per prop Highest ranking (1, 1)	Very good	The component of TRB required to meet debt payments. Drivers – expenditure on capital works, short term loans.	
49	Operating cost (OMA)	\$423 per prop Median ranking (3, 2)	Satisfactory	Prime indicator of the financial performance of an LWU. Drivers – development density, level of treatment, management cost, topography, number of discrete schemes and economies of scale.	Review components carefully to ensure efficient operating cost.
51	Management cost	\$176 per prop Low ranking (4, 4)	May require review	Typically about 40% of the OMA. Drivers – No. of employees. No. of small discrete water schemes.	
52	Treatment cost	\$82 per prop Low ranking (4, 2)	May require review	Drivers – type and quality of water source. Size of treatment works	
53	Pumping cost	\$45 per prop Low ranking (4, 2)	May require review	Drivers – topography, development density and location of water source.	
55	Water main cost	\$33 per prop Highest ranking (1, 1)	Very good	Drivers – age and condition of mains. Ground conditions. Development density.	
56	Capital expenditure	\$271 per prop High ranking (2, 2)	Good	An indicator of the level of investment in the business. Drivers – age and condition of assets, asset life cycle and water source.	

SEWERAGE SYSTEM - Tweed Shire Council serves a population of 76,200 (30,370 connected properties) and has 8 sewage treatment works providing advanced secondary, tertiary and advanced tertiary treatment. The system comprises 134,550 EP treatment capacity (Intermittent and Continuous Extended Aeration (Activated Sludge), Biological Nutrient Removal and Tricking Filter), 185 pumping stations (77 ML/d), 173 km of rising mains and 527 km of gravity trunk mains and reticulation. 9% of effluent was recycled (Indicator 27) and the treated effluent is discharged to land and river.

PERFORMANCE - Residential growth for 2013-14 was 1.4% which is higher than the statewide median. Tweed Shire Council achieved 100% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$732 which was above the statewide median of \$669 (Indicator 12). The economic real rate of return was similar to the statewide median (indicator 46). The operating cost per property (OMA) was \$505 which was above the statewide median of \$430 (Indicator 50). Sewage odour complaints were above the statewide median of 1 (Indicator 21). Tweed Council reported 2 Category 2 (limited impact) environmental incidents and 2 Category 2 (limited impact) public health incidents. Council did not comply with the SS, Ammonia requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$800M (\$24,000 per assessment), cash and investments were \$56M, debt was \$36M and revenue was \$35.7M (excluding capital works grants).

## IMPLEMENTATION OF REQUIREMENTS OF NSW BEST-PRACTICE MANAGEMENT (BPM) FRAMEWORK

(1) Complete current strategic business plan & financial plan	YES <sup>11</sup>	(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	YESC <sup>11</sup>
(2d) Pricing - Appropriate Trade Waste Fees and Charges	Yes	IMPLEMENTATION OF ALL REQUIREMENTS	100%

## TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

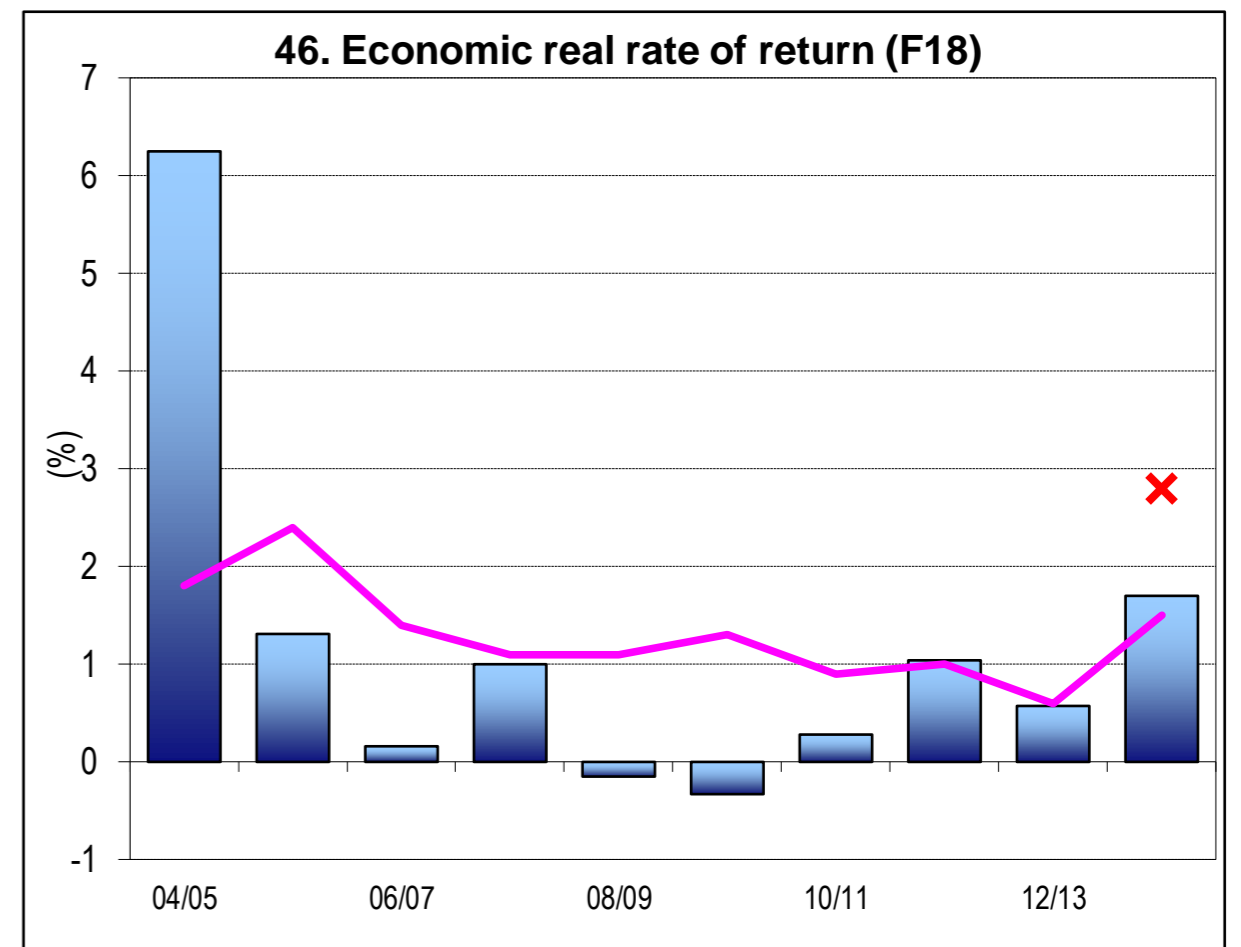
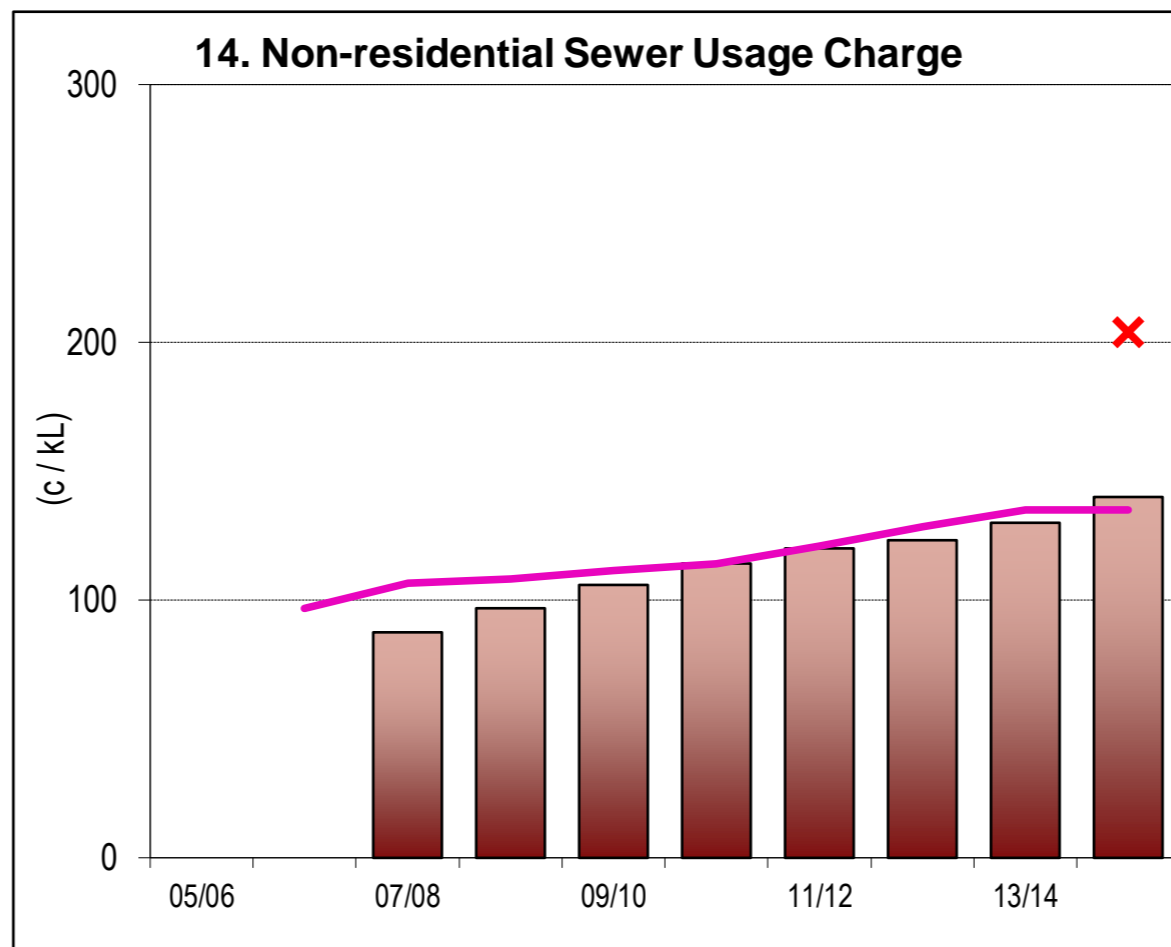
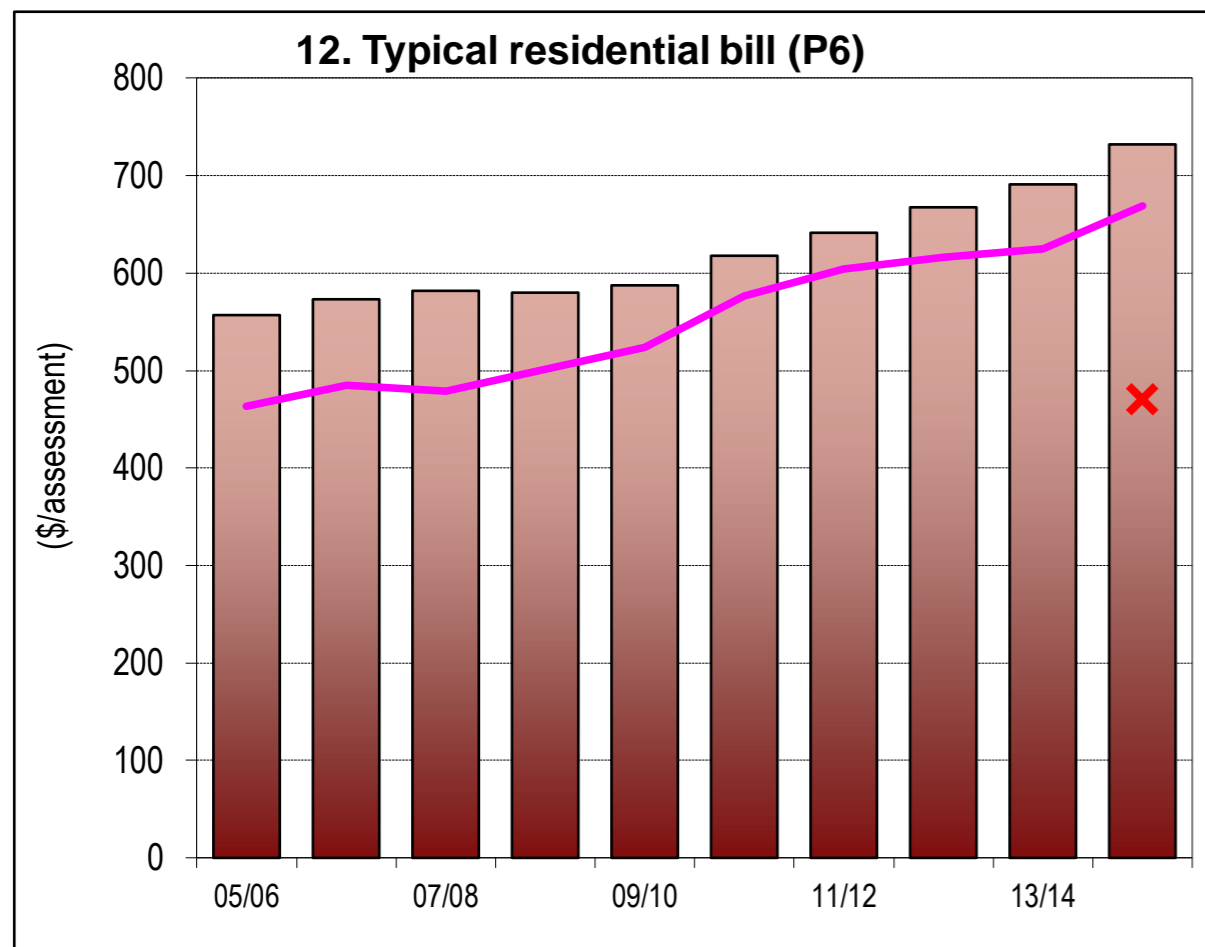
	NWI	No.			LWU RESULT	RANKING			MEDIANS		
						>10,000 properties	All LWUs	Statewide	National		
					Col 1	Col 2	Col 3	Col 4	Col 5		
UTILITY	CHARACTERISTICS	C5	1	Population served: 76,200							
		C8	2	Number of connected properties: 30,370	Number of assessments: 33,370						
		C6	3	Number of residential connected properties: 29,410							
		A6	4	New residences connected to sewerage (%)		1.4	3	1	1.0		
		W18	5	Properties served per kilometre of main		43			38	41	
			6	Volume of sewage collected (ML)		6,704			4,600	5,723	
			7	Renewals expenditure (% of current replacement cost of system assets)		0.4	4	4	0.5		
			8	Employees per 1000 properties		2.3	5	4	1.6		
SOCIAL	CHARGES & BILLS	P4		Description of residential tariff structure: access charge/prop; independent of land value							
		P4.1	11a	Residential access charge for 2013-14 (\$/assessment)	\$ 2013-14	691	2	4	625	573	
			11	Residential access charge for 2014-15 (\$/assessment)	\$ 2014-15	732	3	4	669		
		P6	12a	Typical residential bill for 2013-14 (\$/assessment)	\$ 2013-14	691	2	4	625	683	
			12	Typical residential bill for 2014-15 (\$/assessment)	\$ 2014-15	732	3	4	669		
			13	Typical developer charge for 2014-15 (\$/equivalent tenement)	\$ 2014-15	6,200	3	2	5,100		
			14	Non-residential sewer usage charge (c/kL)	c/kL	140	3	3	136		
		F6	15	Revenue per property - Sge (\$)	\$	1180	1	1	846	938	
			16	Sewerage Coverage (% of Urban Population with Reticulated Sge Service)	%	99.0	2	1	97.9		
		E3	17	Percent of sewage treated to a tertiary level (%)	%	98	3	3	98	91	
		E4	18	Percent of sewage volume treated that was compliant (%)	%	83	4	4	100	100	
		E5	19	Number of sewage treatment works compliant at all times		4 of 8					
			21	Odour complaints per 1000 properties	per 1,000 prop	1.3	3	4	1.0		
		C11	22	Service complaints - sewerage per 1000 properties	per 1,000 prop	7	3	2	8	1	
		C16	23a	Average sewerage interruption (minutes)	min	130	5	5	109	105	
		25	Total days lost (%)	%	3.8	4	5	2.9			
	ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W19	26	Volume of sewage collected per property (kL)	kL	221	3	4	221	204
			W26	26a	Total recycled water supplied (ML)	ML	600	3	1	630	1,638
			W27	27	Recycled water (% of effluent recycled)	%	9	4	4	12	17
E8			28	Biosolids reuse (%)	%	87	4	2	100	100	
			30	Energy consumption - sewerage (kWh/ML)	kWh	1,351	5	5	770		
			31	Renewable energy consumption (% of total energy consumption)	%	0	1	1	0		
		E12	32	Net greenhouse gas emissions - WS & Sge (net tonnes CO2 equivalents per 1000 properties)		440	4	4	370	390	
			33	90 <sup>th</sup> Percentile licence limits for effluent discharge: BOD 15 mg/L; SS 20 mg/L; Total N 10 mg/L; Total P 5 mg/L							
			34	Compliance with BOD in licence (%)	%	100	1	1	100		
			35	Compliance with SS in licence (%)	%	93	5	4	100		
		A14	36	Sewer main breaks and chokes (per 100 km of main)	per 100km main	1	1	1	37	20	
		37a	Sewer overflows (per 100 km of main)	per 100km main	7	2	4	13			
	E13	37b	Sewer overflows reported to environmental regulator (per 100km of main)		1.6	4	5	0.8	0.4		
		39	Non res & trade waste % of total sge volume	%	26	2	2	21			
ECONOMIC	FINANCE		43	Revenue from non-residential plus trade waste charges (% of total revenue)	%	16	3	4	18		
			44	Revenue from trade waste charges (% of total revenue)	%	8.7	1	1	2.0		
		F18	46	Economic real rate of return - Sge (%)	%	1.7	3	2	1.5	2.6	
			46a	Return on assets - Sge (%)	%	1.5	3	2	1.3		
			48a	Loan payment per property - Sge (\$)	\$	206	2	1	90		
		F24	48b	Net profit after tax - WS & Sge (\$'000)	\$'000	14,200	1	1	1180	5,345	
			49	Operating cost (OMA) per 100 km of main (\$'000)	\$'000	2,200	5	5	1,730		
		F12	50	Operating cost (OMA) per property (\$) (Note 9)	\$	505	4	5	430	405	
			51	Operating cost (OMA) per kL (cents)	c/kL	229	4	4	206		
			52	Management cost per property (\$)	\$	175	3	4	161		
			53	Treatment cost per property (\$)	\$	172	3	4	155		
			54	Pumping cost per property (\$)	\$	101	4	5	68		
			55	Energy cost per property (\$)	\$	72	5	5	42		
		56	Sewer main cost per property (\$)	\$	43	2	3	47			
	F29	57	Capital Expenditure per property - Sewerage (\$)	\$	150	4	2	193	227		

## NOTES :

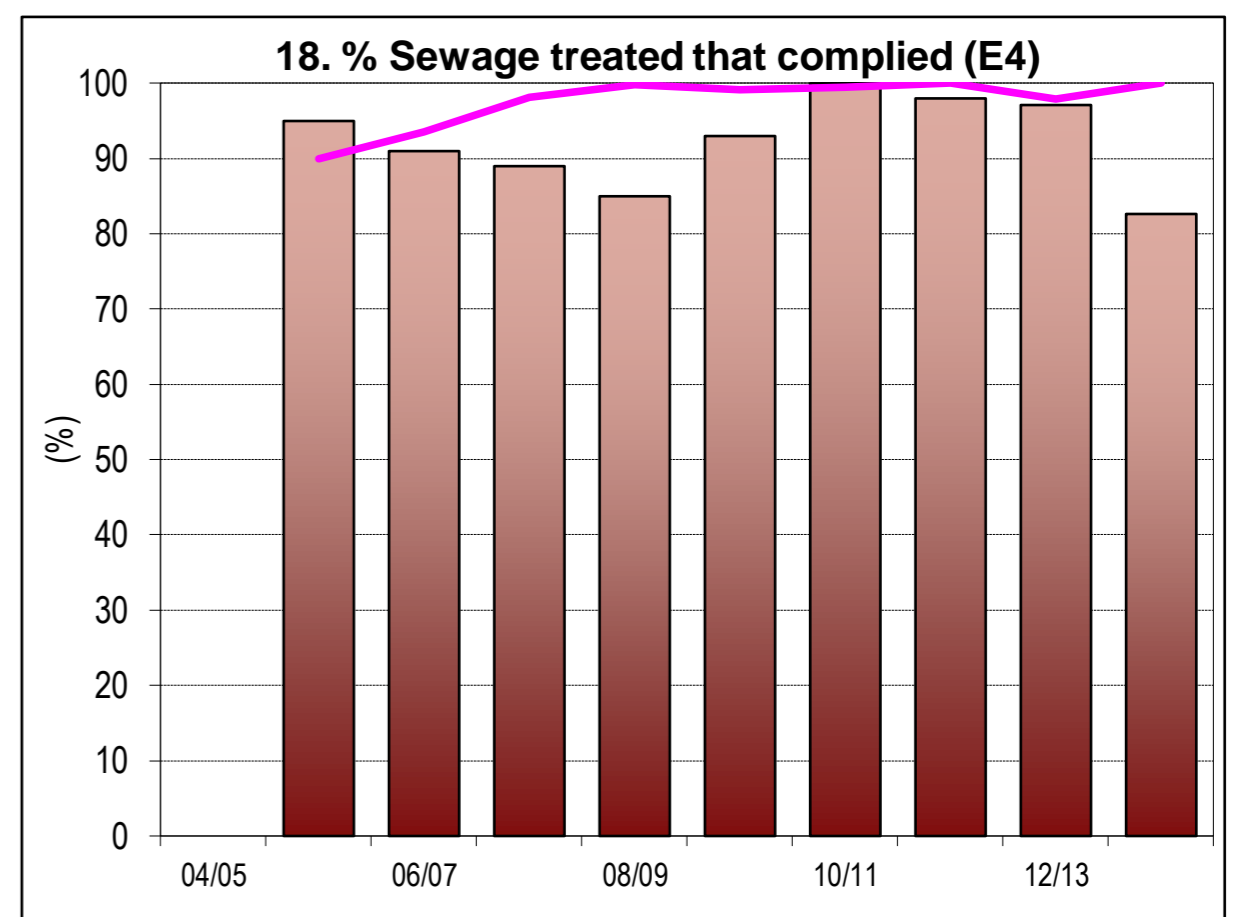
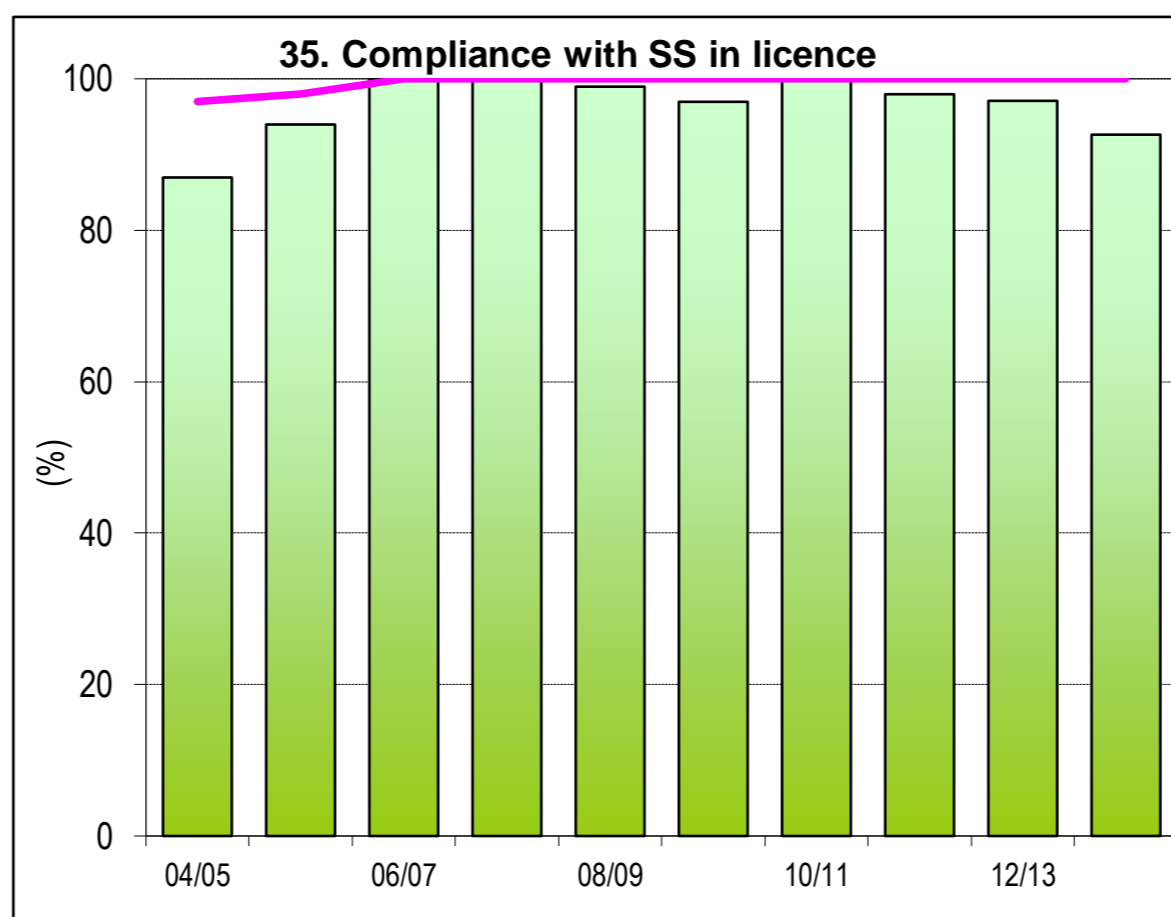
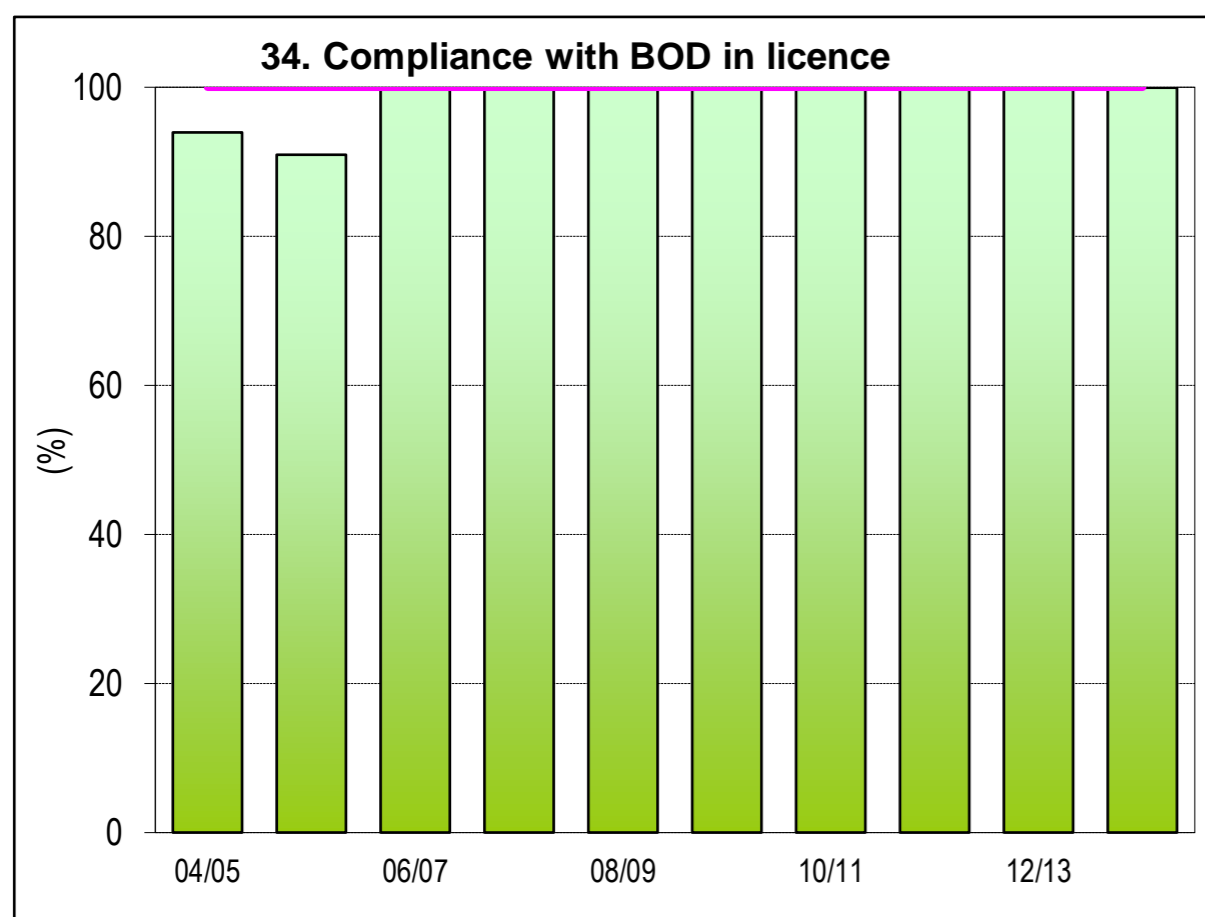
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with >10,000 properties).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs). - see attachment.
- 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 66 utilities reporting sewerage performance in the National Performance Report 2013-14 ([www.bom.gov.au](http://www.bom.gov.au)).
- 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.
- Non-residential access charge - \$732, proportional to square of size of service connection. No usage charge.
- Non-residential and trade waste volume was 26% of total sewage collected.  
Non-residential revenue was 16% 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 100%.
- Operating cost (OMA)/property was \$505. Components were: management (\$175), operation (\$91), maintenance (\$124), energy (\$72), chemical (\$18) & effluent/biosolids (\$26).
- Tweed Shire Council rehabilitations included 0.4% of its sewerage mains. Renewals expenditure was \$414,000/100km of main.
- 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](http://www.water.nsw.gov.au)).

(Results shown for 10 years together with 2013-14 Statewide Median and Top 20%)

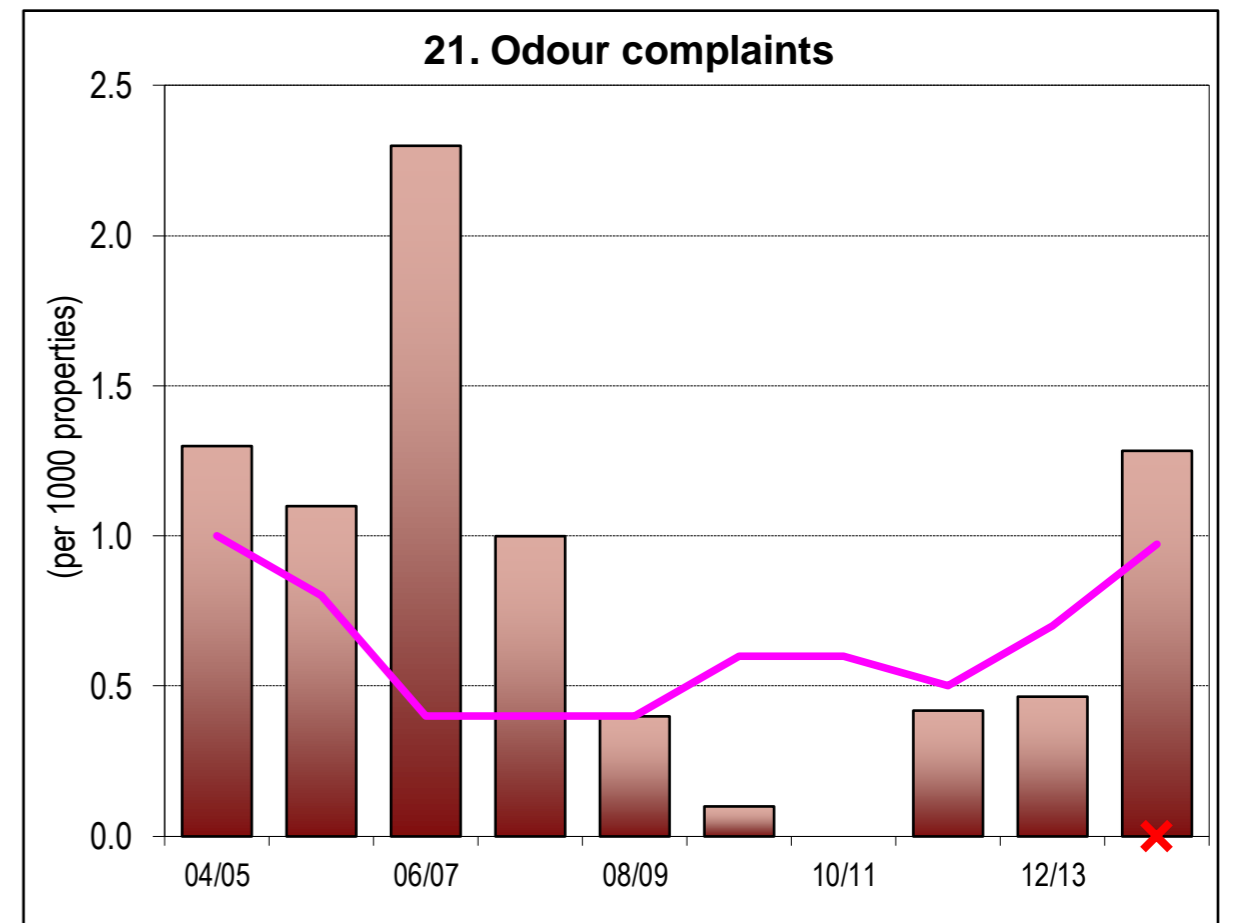
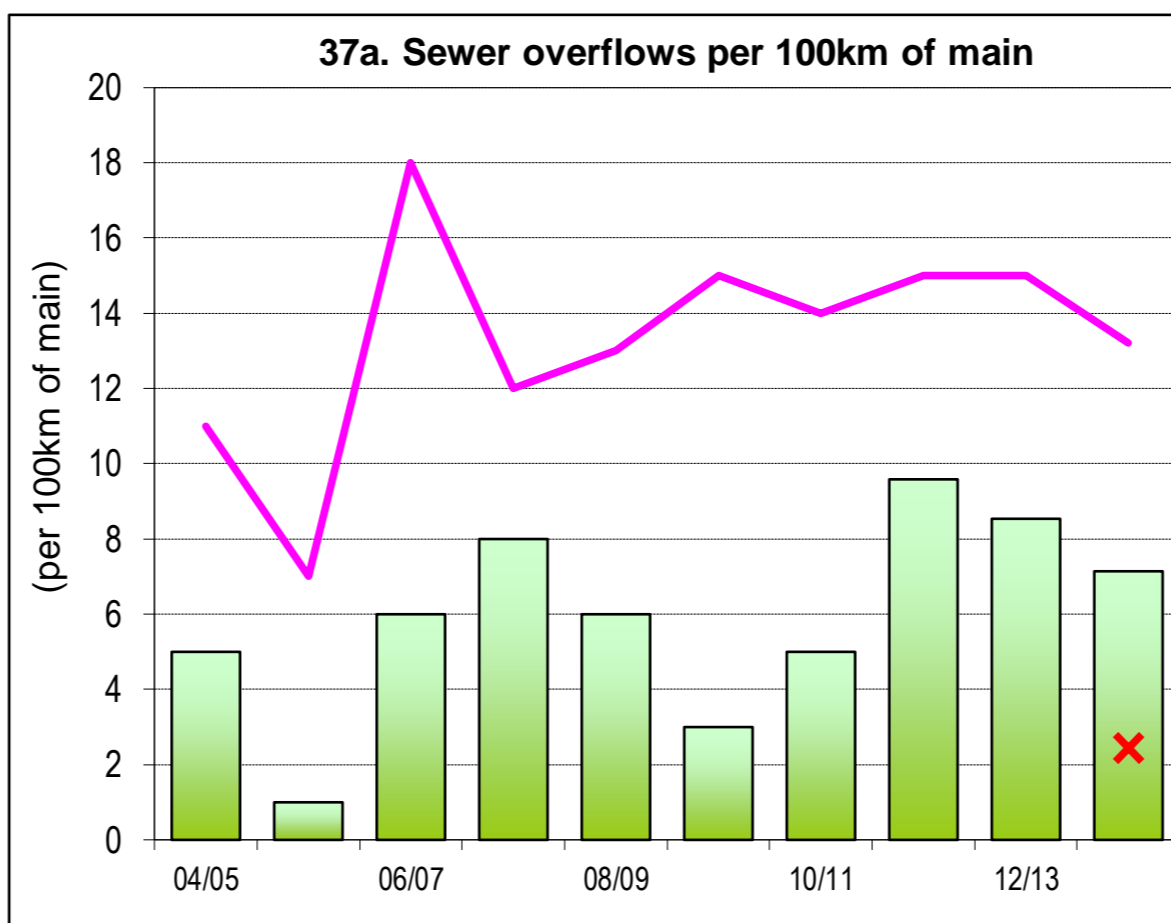
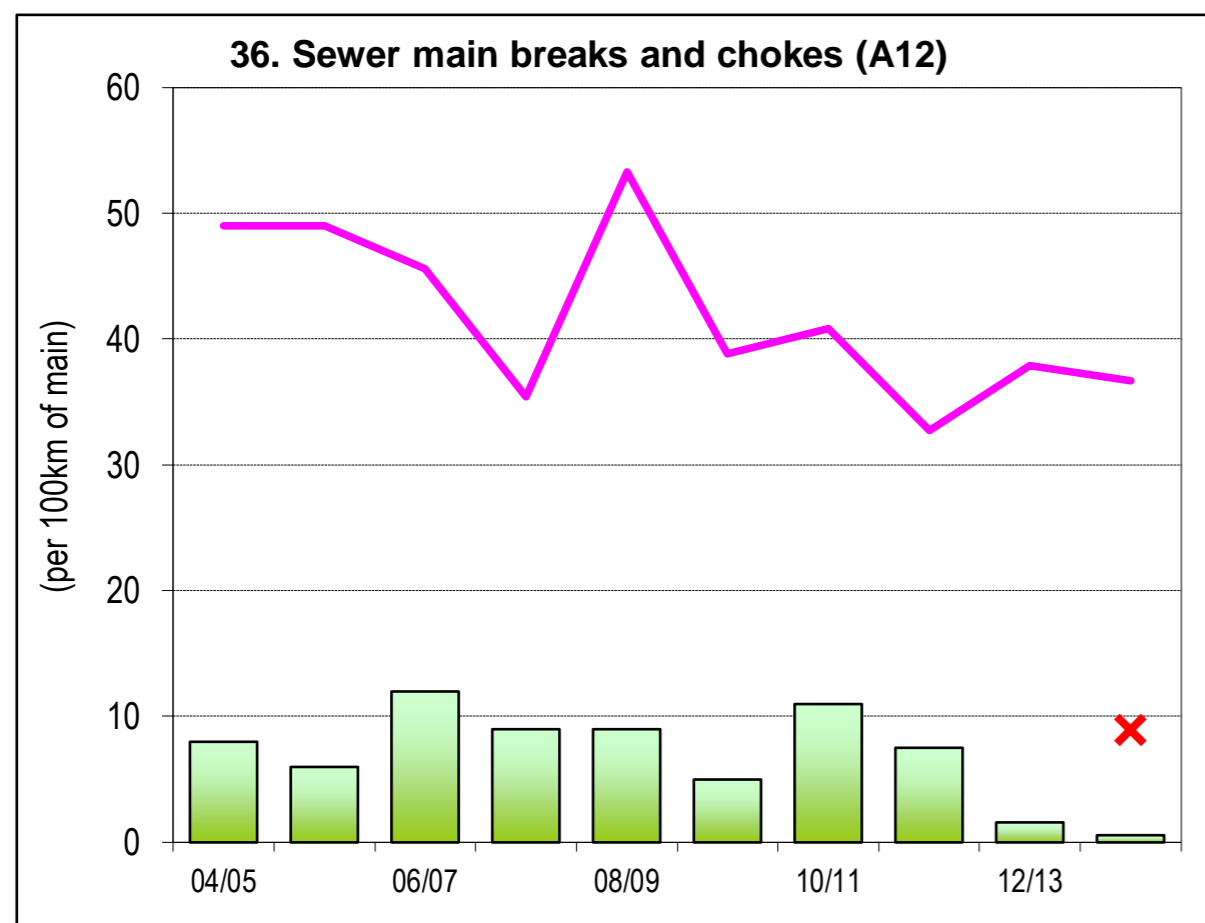
**COST RECOVERY**



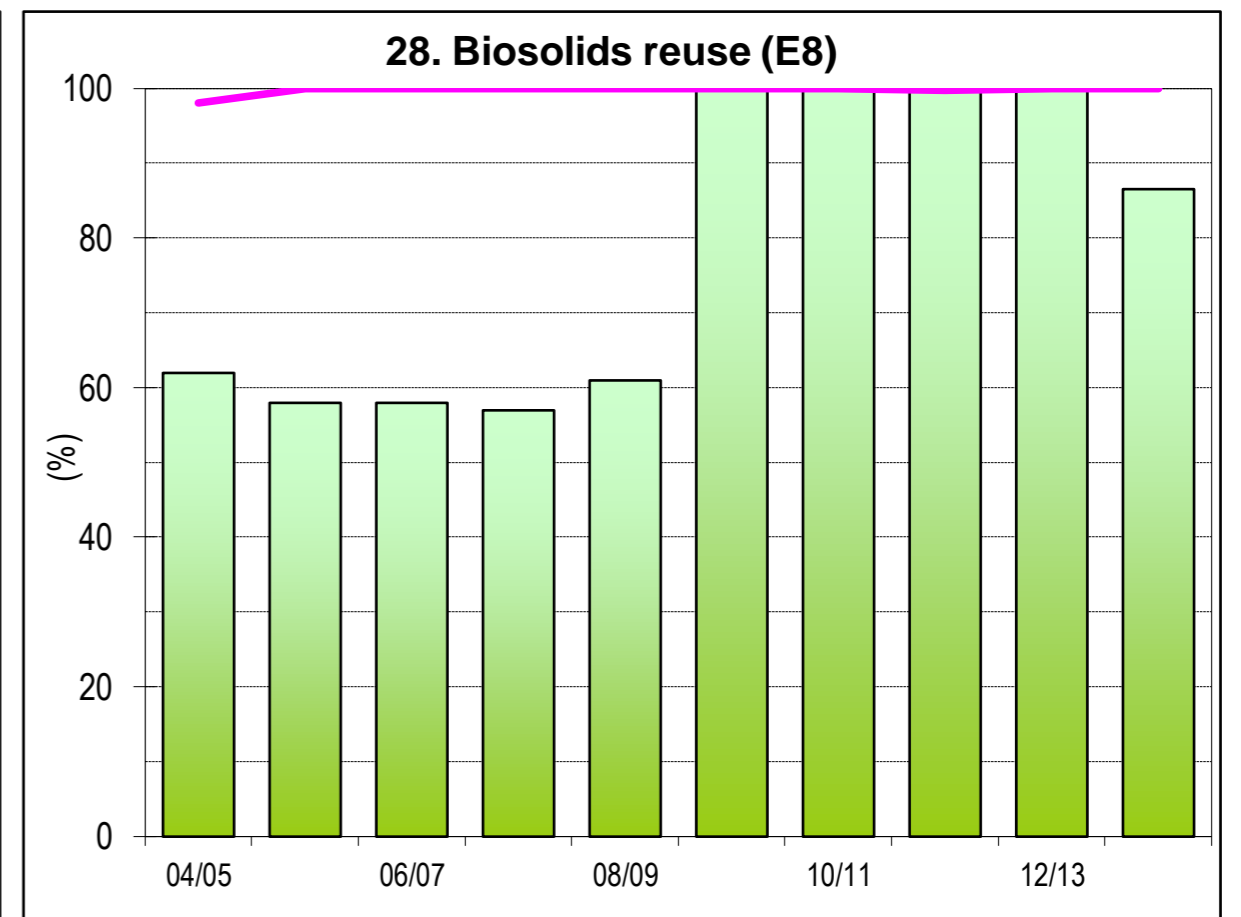
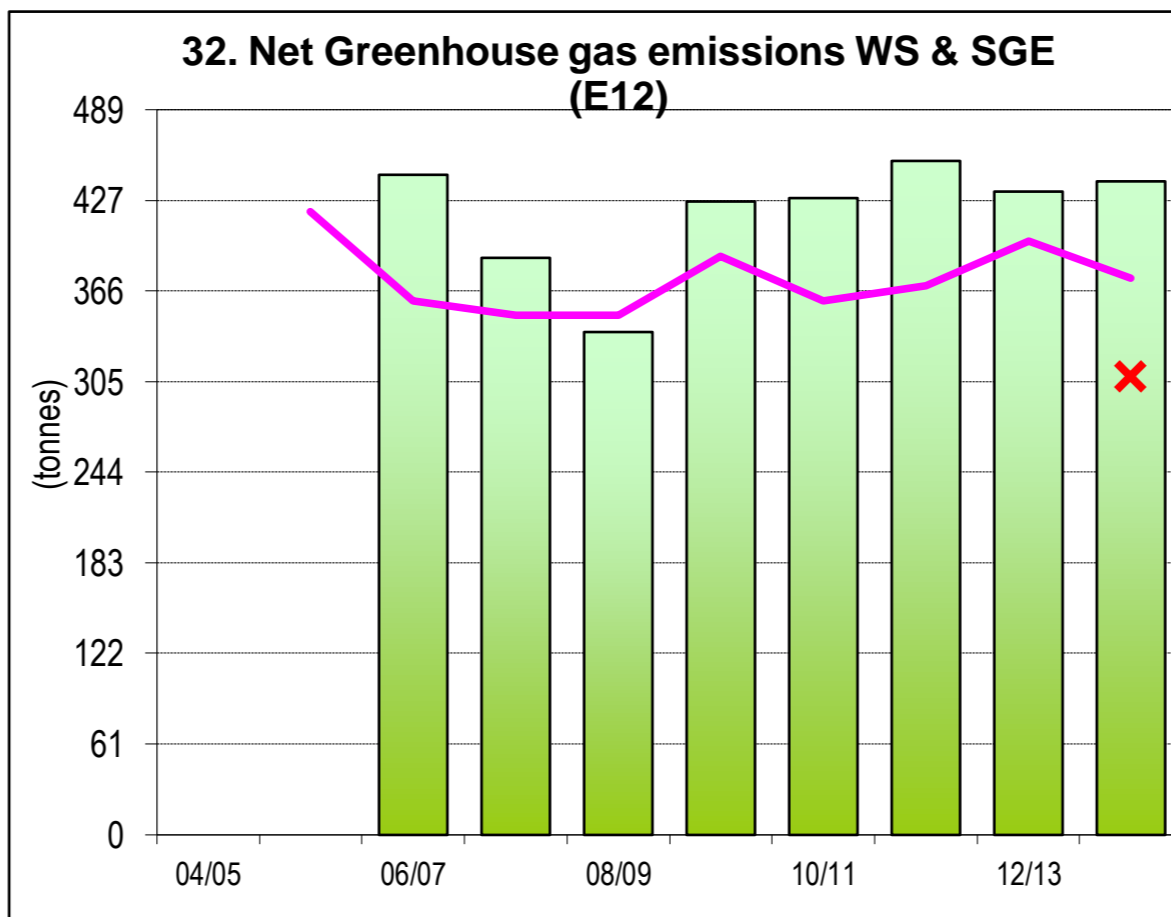
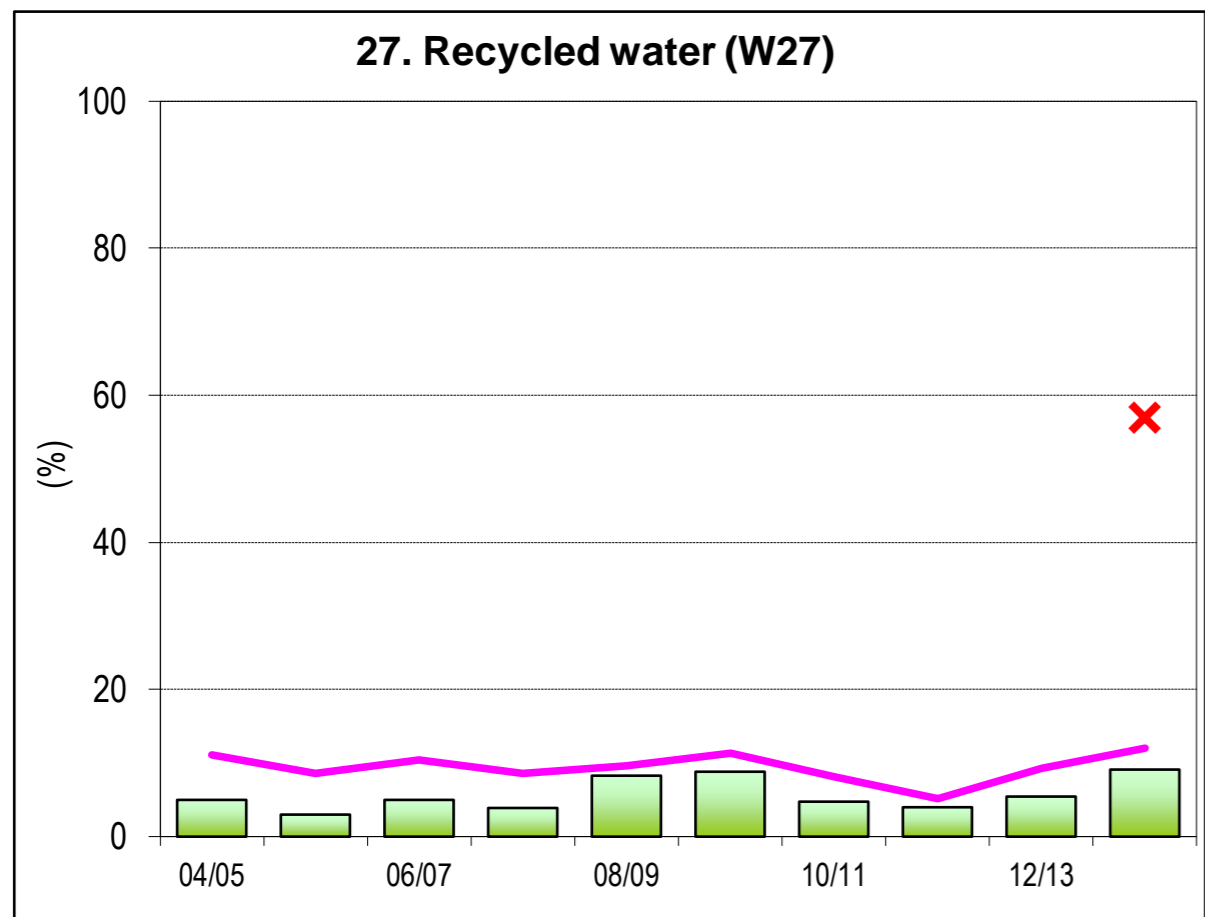
**COMPLIANCE**



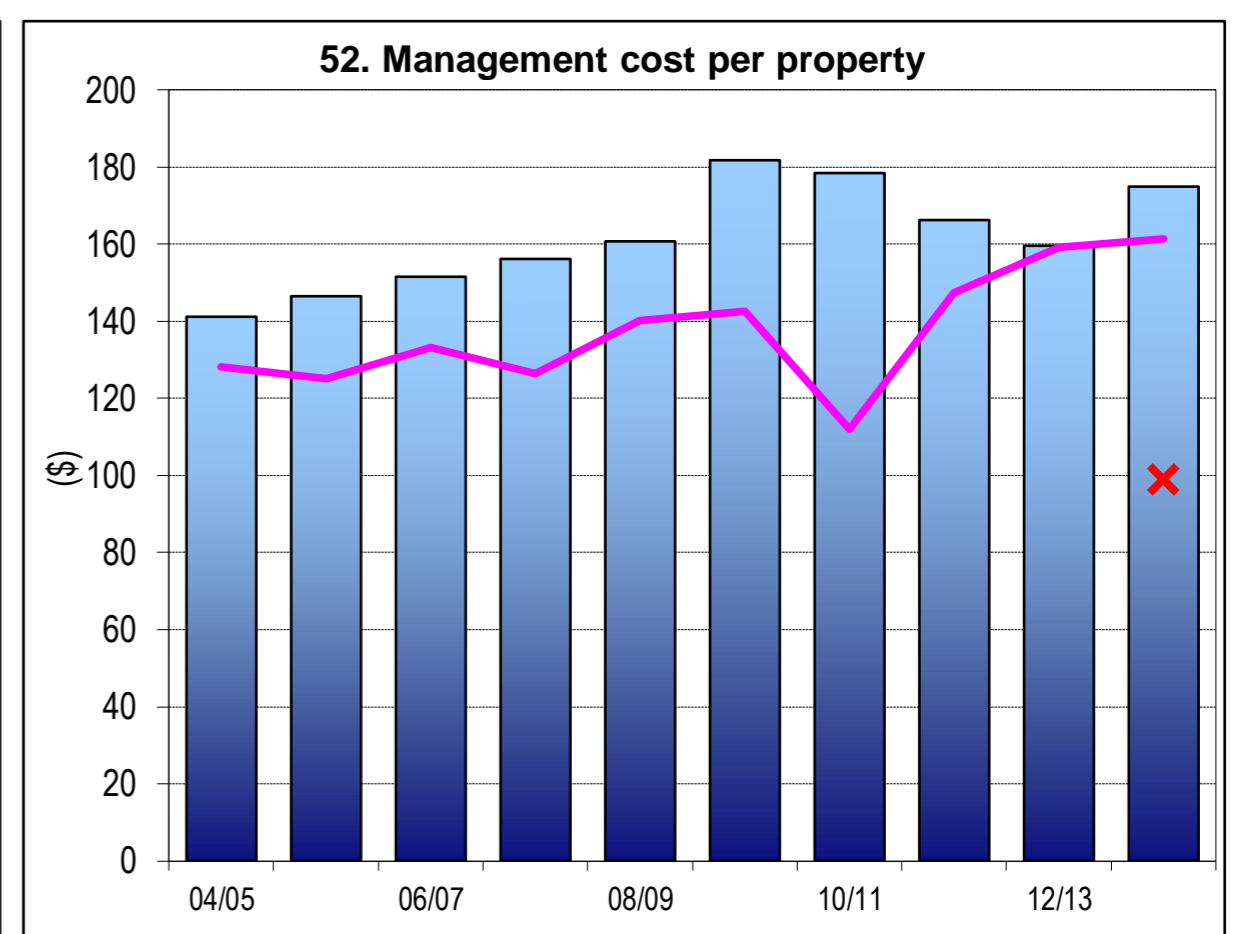
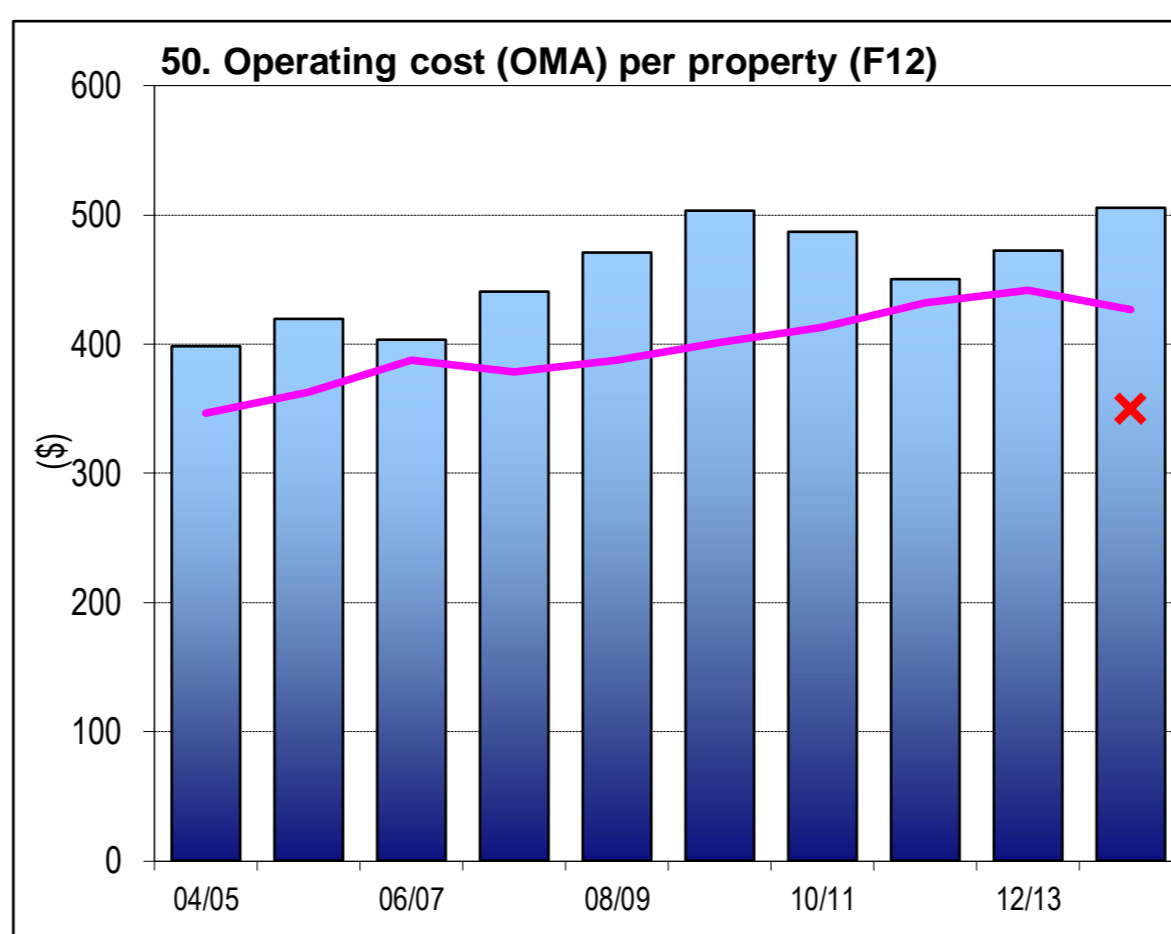
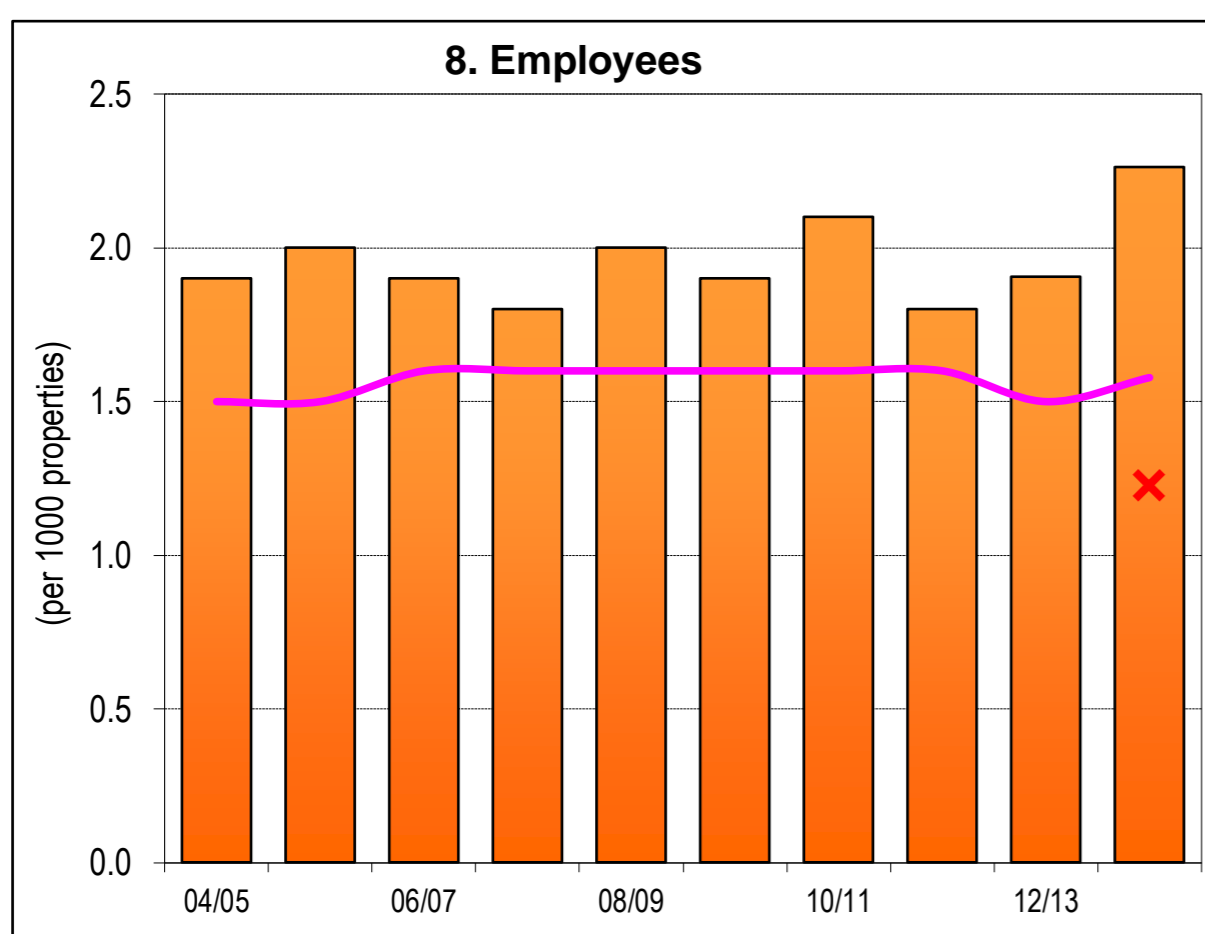
**CUSTOMER SERVICE/RELIABILITY**



**ENVIRONMENT**



**EFFICIENCY**



**NOTES:**

1. Costs are in Jan 2014\$ except for graphs 12 and 14, which are in Jan 2015\$.

**LEGEND**  
 State Median for all years ———  
 Top 20% for 2013-14 X

# Tweed Shire Council Sewerage – Action Plan Page 1

## Summary

In 2013-14, Tweed Shire Council implemented all the sewerage requirements of the NSW Best-Practice Management Framework and its performance has been [to be completed by Council].

Key actions from Council's Strategic Business Plan:

- Insert achievements for Key Action 1 here for Tweed Shire Council
- Insert achievements for Key Action 2 here for Tweed Shire Council

INDICATOR		RESULT <sup>2</sup>		COMMENT/DRIVERS	ACTION
	<b>Best-Practice Management Framework</b>	Implemented all the Best Practice Requirements <sup>1</sup>	Very good	Implementation demonstrates effectiveness and sustainability of water supply and sewerage business. 100% implementation is required for eligibility to pay an 'efficiency dividend'.	Prepare a new 30-year IWCM Strategy, Financial Plan & Report in accordance with the July 2014 IWCM Check List ( <a href="http://www.water.nsw.gov.au">www.water.nsw.gov.au</a> ) as the existing Strategic Business Plan is over 4 years old.
<b>CHARACTERISTICS</b>					
5	Connected property density	43 per km of main	Higher than the statewide median of 38	A connected property density below about 30 can significantly increase the cost per property of providing services.	
7	Renewals expenditure	0.4% Low ranking (4, 4)	May require review	Adequate funds must be programmed for works outlined in the Asset Management Plan – page 3 of the 2013-14 NSW Performance Monitoring Report.	<b>FOR INDICATORS 7 to 57</b> Where ranking is low, investigate reasons including past performance and trends, develop remedial action plan and summarise in this column.
8	Employees	2.3 per 1,000 props Lowest ranking (5, 4)	May require review		
<b>SOCIAL – CHARGES</b>					
12	Typical residential bill <sup>3</sup> (TRB)	\$732 per assessment Median ranking (3, 4)		TRB should be consistent with projection in the financial plan. Drivers – OMA Management Cost and Capital Expenditure.	
13	Typical Developer Charges	\$6200 per ET Median ranking (3, 2)	Good		
14	Non-residential sewer usage charge	140c/kL Median ranking (3, 3)	Satisfactory		
<b>SOCIAL - HEALTH</b>					
16	Sewerage coverage	99% High ranking (2, 1)	Good		
17	Percent sewage treated to tertiary level	98% Median ranking (3, 3)	Satisfactory		
18	Percent of sewage volume that complied	83% Low ranking (4, 4)	May require review	Key indicator of compliance with regulator.	
19	Sewage treatment works compliant at all times	4 of 8		Key indicator of compliance with regulator.	
<b>SOCIAL – LEVELS OF SERVICE</b>					
21	Odour Complaints	1.3 per 1,000 props Median ranking (3, 4)	Satisfactory	Critical indicator of customer service and operation of treatment works.	
22	Service complaints	7 per 1,000 props Median ranking (3, 2)	Satisfactory	Key indicator of customer service.	
23 a	Average Duration of Interruption	130 minutes Lowest ranking (5, 5)	May require review	Key indicator of customer service, condition of network and effectiveness of operation.	
25	Total Days Lost	3.8% Low ranking (4, 5)	May require review		

1. Council needs to annually 'roll forward', review and update its 30-year total asset management plan (TAMP) and 30-year financial plan, review Council's TBL Performance Report and prepare an **Action Plan** to Council. The Action Plan is to include any actions identified in Council's annual review of its DWMS (Indicator 20) and any section 61 Reports from the NSW Office of Water. Refer to pages 27, 28, 107 and 111 of the 2013-14 NSW Water Supply and Sewerage Performance Monitoring Report.

## Tweed Shire Council Sewerage – Action Plan Page 2

INDICATOR		RESULT		COMMENT/DRIVERS	ACTION
<b>ENVIRONMENTAL</b>					
26	Volume of sewage collected per property	221 kL Median ranking (3, 4)		Compare sewage collected to water supplied.	
27	Percentage effluent recycled	9% Low ranking (4, 4)	May require review	Key environmental indicator. Drivers – availability of potable water, demand, proximity to customers, environment.	
28	Biosolids reuse	87% Low ranking (4, 2)	May require review	Key environmental indicator.	
32	Net Greenhouse gas emissions (WS & Sge)	440 t CO2/1000 props Low ranking (4, 4)	May require review	Drivers – gravity vs pumped networks, topography, extent of treatment.	
34	Compliance with BOD in licence	100% Highest ranking (1, 1)	Very good	Key indicator of compliance with regulator requirements.	
35	Compliance with SS in licence	93% Lowest ranking (5, 4)	May require review	Drivers – algae in maturation ponds, impact of drought.	
36	Sewer main breaks and chokes	1 per 100km of main Highest ranking (1, 1)	Very good	Drivers – condition and age of assets, ground conditions.	
37 a	Sewer overflows to the environment	7 per 100km of main High ranking (2, 4)	Good	Drivers – condition of assets, wet weather and flooding.	
39	Non-residential percentage of sewage collected	26% High ranking (2, 2)		For non-residential, compare % of sewage collected to indicator 43 (% of revenue).	
<b>ECONOMIC</b>					
43	Non-residential revenue	16% Median ranking (3, 4)	Satisfactory	See 39 above.	
46	Economic Real Rate of Return (ERRR)	1.7% Median ranking (3, 2)	Satisfactory	Reflects the rate of return generated from operating activities (excluding interest income and grants). An ERRR or ROA of ≥ 0% is required for full cost recovery.	
46 a	Return on assets	1.5% Median ranking (3, 2)		See 46.	
47	Net debt to equity	2% High ranking (2, 2)	Good	LWUs facing significant capital investment are encouraged to make greater use of borrowings – page 14 of the 2013-14 NSW Performance Monitoring Report.	
48	Interest cover	5 Highest ranking (1, 1)	Very good	Drivers – in general, an interest cover of > 2 is satisfactory.	
48 a	Loan payment	\$206 per prop High ranking (2, 1)	Good	The component of TRB required to meet debt payments. Drivers – expenditure on capital works, short term loans.	
50	Operating cost (OMA)	\$505 per prop Low ranking (4, 5)	May require review	Prime indicator of the financial performance of an LWU. Drivers – development density, level of treatment, management cost, topography, number of discrete schemes and economies of scale.	Review carefully to ensure efficient operating cost.
52	Management cost	\$175 per prop Median ranking (3, 4)	Satisfactory	Drivers – number of discrete schemes, number of employees. Typically about 40% of OMA.	
53	Treatment cost	\$172 per prop Median ranking (3, 4)	Satisfactory	Drivers – type and level of treatment, economies of scale.	
54	Pumping cost	\$101 per prop Low ranking (4, 5)	May require review	Drivers – topography, development density, effluent recycling.	
56	Sewer main cost	\$43 per prop High ranking (2, 3)	Good	Drivers – topography, development density, effluent recycling.	
57	Capital expenditure	\$150 per prop Low ranking (4, 2)		An indicator of the level of investment in the business. Drivers – age and condition of assets, asset life cycle.	

2. The ranking relative to similar size LWUs is shown first (Col. 2 of TBL Report) followed by the ranking relative to all LWUs (Col. 3 of TBL Report).
3. Review and comparison of the 2014-15 **Typical Residential Bill (Indicator 12)** with the projection in your Strategic Business Plan is **mandatory**.  
In addition, if both indicators 46 and 46a are negative, you must report your proposed 2015-16 typical residential bill to achieve full cost recovery.