



Attachment 6

Council Improvement Proposal – Water Utility Performance May 2015

25 June 2015

Queanbeyan Fit for the Future

**TEMPLATE 2: COUNCIL IMPROVEMENT
PROPOSAL
WATER UTILITY PERFORMANCE**

May 2015

Document Status

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Fit for the Future

Template 2: Council Improvement Proposal for Water Utility Performance

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Document Control

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1 Introduction

1.1 Overview and Background

The NSW Government's Best Practice Management of Water Supply and Sewerage Framework identify a suite of strategies to encourage the effective and efficient delivery of water supply and sewerage services. These documented strategies will assist water utilities manage urban water services collectively, therefore streamlining planning and service delivery processes, while remaining financial viable.

The Queanbeyan City Council follows and implements the NSW Government's Best Practise Management of Water Supply and Sewerage Framework and set Guidelines.

The Integrated Water Cycle Management (IWCM) is a framework to help identify potential water management issues and to develop appropriate strategies to properly manage social, environmental and economic impacts.

Further,

The NSW Government's "Fit for the Future" reforms aim to improve the strength and effectiveness of local government in providing services and infrastructure that communities need.

This therefore presents the ideal opportunity to align and encompass similarities between the two processes (IWCM and Fit for the Future) by developing a single set of strategies that serves and satisfies the requirements of both.

Council will be embarking on the IWCM journey to develop strategies to better align Council's Water and Sewerage Business during the 2015/2016 financial years.

1.2 Water, Sewer and Recycled Water Networks

1.2.1 Potable Water

Queanbeyan receives its potable water from Icon Water (previously known as ACTEW Water), which is located in the ACT. Water is treated and supplied to Queanbeyan via the Bendora/ Cotter Scheme at the Mt Stromlo Water Treatment Plant, or from the Googong Water Treatment Plant, located in NSW. A bulk water transfer main exists between the Mt Stromlo and Googong Water Treatment Plants.

Drinking water received from Icon Water is usually of high quality and complies with the Australian Drinking Water Guidelines. Service Level and Pricing Agreements are in place between Queanbeyan City Council and Icon Water.

Three metered water supply off-takes for Queanbeyan exist along this transfer main. The length of the potable water reticulation network in Queanbeyan is approximately 287km with a total number of 13 service reservoirs. Currently, the average day demand for Queanbeyan City is approximately 10ML per day.

Googong is a new residential estate development located approximately 5km south of Queanbeyan. A new metered water supply offtake was constructed near the Googong Water Treatment Plant to supply water to the Googong Township. Infrastructure will be gifted to Council after completion of construction and commissioning activities by the developer.

Water is pumped to two interim reservoirs from a bulk water pump station near Offtake 3. This temporary water service reservoir will be replaced with permanent reservoirs in future. Currently, the average daily water abstraction is approximately 71KL per day. Water demand at Googong will be increasing as population and construction activities increases. The length of the water reticulation network is approximately 7.3km with one interim service reservoir. Services will be increased and upgraded as the population increase over time.

Googong will have a third pipe system in future where recycled effluent is pumped to a recycled water service reservoir for reticulation. Currently potable water is being reticulated through this reservoir until the recycling facility is commissioned and proved (towards the end of 2015).

1.2.2 Recycled Water

Queanbeyan City does not currently have a recycled scheme in operation

Googong Township will have a sewage treatment facility with the capacity to treat residential sewage up to an indirect potable use standard. It is estimated that construction of the first two phases (Stages AB) of the facility will be completed in July 2015 where after process commissioning and process proving will commence. It is estimated that approximately 1ML/d will be treated during the initial stages. Stages C and D will follow as the population increase over time. Ultimately, the plant will have a treatment capacity to treat up to 18,850 EP

Recycled water will be pumped to a recycled water service reservoir from where it will be reticulated through a separate (purple 3rd pipe) reticulation network. Recycled water will be plumbed into houses for toilet flushing and watering of gardens. Recycled water will be metered at the recycling plant, service reservoirs and at house connections. Infrastructure will be gifted to Council after completion of construction and commissioning activities by the developer.

The length of the water reticulation network is approximately 7.5km with one interim service reservoir. Services will be increased and upgraded as the population increase over time.

1.2.3 Sewer Collection

Queanbeyan City collects sewage in NSW through a gravity and pumped collection network and treats and disposes of its sewage in the ACT. The length of the sewerage collection network in Queanbeyan City is approximately 326.8km with 15 sewage pumping stations.

Googong currently have two sewage pumping stations which will be pumped to the water recycling facility. Sewage in Googong is currently collected in a wet well and transported to the ACT for disposal under current project approvals. The length of the sewage collection network is approximately 8.3km.

1.3 Sewage Treatment and Disposal

1.3.1 Queanbeyan Sewage Treatment Plant

The Queanbeyan Sewage Treatment Plant (STP) was constructed in the mid-1930s and treats Queanbeyan's effluent prior to discharge into the Molonglo River. While maintenance and works are regularly undertaken on the STP, the plant is no longer fit-for-purpose. A significant works program is required to address issues including structural failure, equipment obsolescence and maintenance issues, as well as refining the process train.

GHD Pty Ltd (GHD) has been engaged by Queanbeyan City Council (QCC) as the Project Manager/Technical Advisor (PMTA) for the Queanbeyan Sewage Treatment Plant (STP) Upgrade Project.

The STP has been upgraded a number of times in its eighty-five year lifespan, with its most recent upgrade occurring in the mid-1980s and is now reaching the end of its effective service life. The STP requires significant work to address operational issues such as structural failure, equipment obsolescence and maintenance issues, as well as rationalising the process train. The existing Queanbeyan STP probably has about 6 to 7 years effective service life left before its condition or ability to meet increasing regulatory requirements presents a major risk to QCC.

The design capacity of the sewage treatment plant is 11ML/day (approximately 40,000 EP). Currently it is slightly below design capacity and requires augmentation to cater for further growth in Queanbeyan.

1.3.2 Googong Water Recycling Plant

The Googong Water Recycling Plant is currently under construction for Stages AB. Construction will be completed in July/ August 2015 where after process commissioning and proving will commence. The Stage AB plant will have a treatment capacity of 1ML/d.

2 Water Utility Performance

2.1 Compliance with NSW Government Best Practise Management of Water Supply and Sewerage Framework

The Queanbeyan City Council currently complies with the framework. There are currently six criteria to which Council complies with, namely:

- Strategic Business Planning - **YES**;
- Pricing (Developer Charges, Liquid Trade Waste Policy and Approvals) - **YES**;
- Water Conservation - **YES**;
- Drought Management - **YES**;
- Performance Reporting - **YES**; and
- Integrated Water Cycle Management - **YES**.

The latest Triple Bottom Line (TBL) report from the Department of Primary Industries - Office of Water (2013/14 TBL Reports) indicates that QCC has 90% implementation of all requirements for Water Supply and 100% implementation for all requirements for Sewerage.

The outstanding item on the Triple Bottom Line Water Supply Performance report to achieve 100% compliance is to implement appropriate residential charges. Currently the Best Practice Management Framework suggests that Council needs to implement Appropriate Residential Charges (75% from usage charges).

Currently, Strategic Business Plans and the IWCM are older than 4 years, and require review and update if required. Council has allocated funds to update the IWCM Strategy in 2015/16.

Council is also in the process in reviewing and updating its Pricing Strategy (to implement appropriate residential Charges) and Development Servicing Plans to align with the Best Practice Framework.

Please refer to Attachment A for the Water and Sewerage 2013/14 TBL reports.

2.2 Backlogs

The water reticulation and sewage collection system within Queanbeyan City is an aged system, and while it still performs within its hydraulic capacity most of the time, structural do occur from time to time. Council is in the process of reviewing and updating its Asset Management Plans, which would provide strategies and prioritisation in terms of asset renewal, asset replacement, funding sources, and the like, while maintaining expected levels of service.

Funding of asset renewal and replacement programs remains a concern and Council is currently reviewing its pricing strategies to align it with the Best Practice Framework.

Council, especially the water and sewerage, is continually reviewing its Workforce Plan to ensure that Council is up to date with current requirements within the water and sewerage sector, and to attract suitable candidates to fulfil these requirements.

The following budgeted backlogs, in approximate dollar value, exist for Water and Sewerage for 2013/14:

- Water
 - Water (main replacements and other works): \$300,000
- Sewerage
 - Sewerage renewals: \$2,000,000.

Council is currently busy with projects to clear these backlogs.

2.3 Capital Works Programme

The following capital works from 2016/17 to 2019/20 are presented in Table 1

Proposed Works	Estimated Timeframe	Approximate Cost	Funding Source
Water (works greater than \$1,000,000)			
Jerrabomberra Reservoir Rehabilitation	2015/2016 (project to be brought forward)	\$2,000,000	Reserve Funding
Sewerage (works greater than \$1,000,000)			
Sewerage Treatment Plant Upgrade	2014 to 2020/21	\$100,000,000	Reserve Funding Grants – To be investigated External Funding –To be investigated Developer Contributions – To be investigated.
Sewer Mains Rehabilitation	2016/17 to 2020/21	\$7,800,000	Reserve Funding
Please note that there are a number of projects <\$1,000,000 would give a cumulative amount exceeding \$1,000,000 if combined.			

Table 1: Proposed Capital Works from 2016/17 to 2019/20

2.4 Operational Performance

The latest NSW Office of Water Triple Bottom Line Reporting for Water and Sewerage (2013/14) indicates that Council has full cost recovery for both water and sewerage.

The outstanding item on the Triple Bottom Line Water Supply Performance report to achieve 100% compliance is to implement appropriate residential charges. Currently the Best Practice Management Framework suggests that Council needs to implement Appropriate Residential Charges (75% from usage charges).

2.5 Improvement Strategies

The following Water and Sewerage operations improvement strategies are proposed for the period from 2016/17 to 2019/20 and are presented in Table 2.

Strategy	Timeframe	Anticipated outcome
Integrated Water Cycle Management Strategy and implementation	2015/16 onwards	Water and Sewerage business aligned with Best Practise Frameworks

Strategic Business Plans for Water and Sewerage	Every 4 years	Water and Sewerage business aligned with Best Practise Frameworks
Implement Water Supply and Sewerage Action Plan as per Department of Primary Industries – Office of Water requirements.	2015/2016 onwards	Water and Sewerage business aligned with Best Practise Frameworks.
Drinking Water Quality Management	2015/16 onwards	Improved understanding and management of drinking water quality and risks in reticulation networks
Recycled Water Quality Management	2015/16 onwards	Improved understanding and management of recycled water quality and risks in reticulation networks
Water loss and reticulation improvements	2015/16 onwards	Improved water accounting. Improved pressure management therefore potentially resulting in increased asset life. Improved Pricing Strategy and cost recovery.
Trade Waste Management	2015/16 onwards	Improved management of trade waste and associated trade waste risks and cost recovery.
Workforce Management and Training	ongoing	Investment and capacity building in workforce to improve level of service. Building capacity within region.
Water and Sewerage Communication Strategy	2015/16	Improved communication with stakeholders and the community
Water and Sewerage regional approach/collaboration and business development	2016/17 onwards	Facilitate and assist neighbouring councils and water businesses in: <ul style="list-style-type: none"> • Procurement of goods and services • Design and Construction Standards • Resource and capacity building. • Supply and delivery of services.

Table 2 Water and Sewerage Operations Improvement Strategies

SEWERAGE SYSTEM - Queanbeyan City Council serves a population of 38,400 (16,670 connected properties) and has 1 sewage treatment works providing advanced secondary treatment. The system comprises 34,500 EP treatment capacity (Continuous Extended Aeration (Activated Sludge) and Trickling Filter), 15 pumping stations (69 ML/d), 4 km of rising mains and 323 km of gravity trunk mains and reticulation. 1% of effluent was recycled (Indicator 27) and the treated effluent is discharged to land and river. Queanbeyan City Council has a Pollution Incident Response Management Plan (PIRMPs) for their sewage treatment works.

PERFORMANCE - Residential growth for 2013-14 was 1.5% which is higher than the statewide median. Queanbeyan City Council achieved 100% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$470 which was much less than the statewide median of \$669 (Indicator 12). The economic real rate of return was 2.6% which was greater than the statewide median (Indicator 46). The operating cost per property (OMA) was \$372 which was less than the statewide median of \$430 (Indicator 50). Sewage odour complaints were less than the statewide median of 1 (Indicator 21). Queanbeyan Council reported 3 Category 2 (limited impact) environmental incidents and 1 Category 2 (limited impact) public health incidents. Council complied with the requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$236M (\$14,600 per assessment), cash and investments were \$39M, debt was nil and revenue was \$12.6M (excluding capital works grants).

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

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

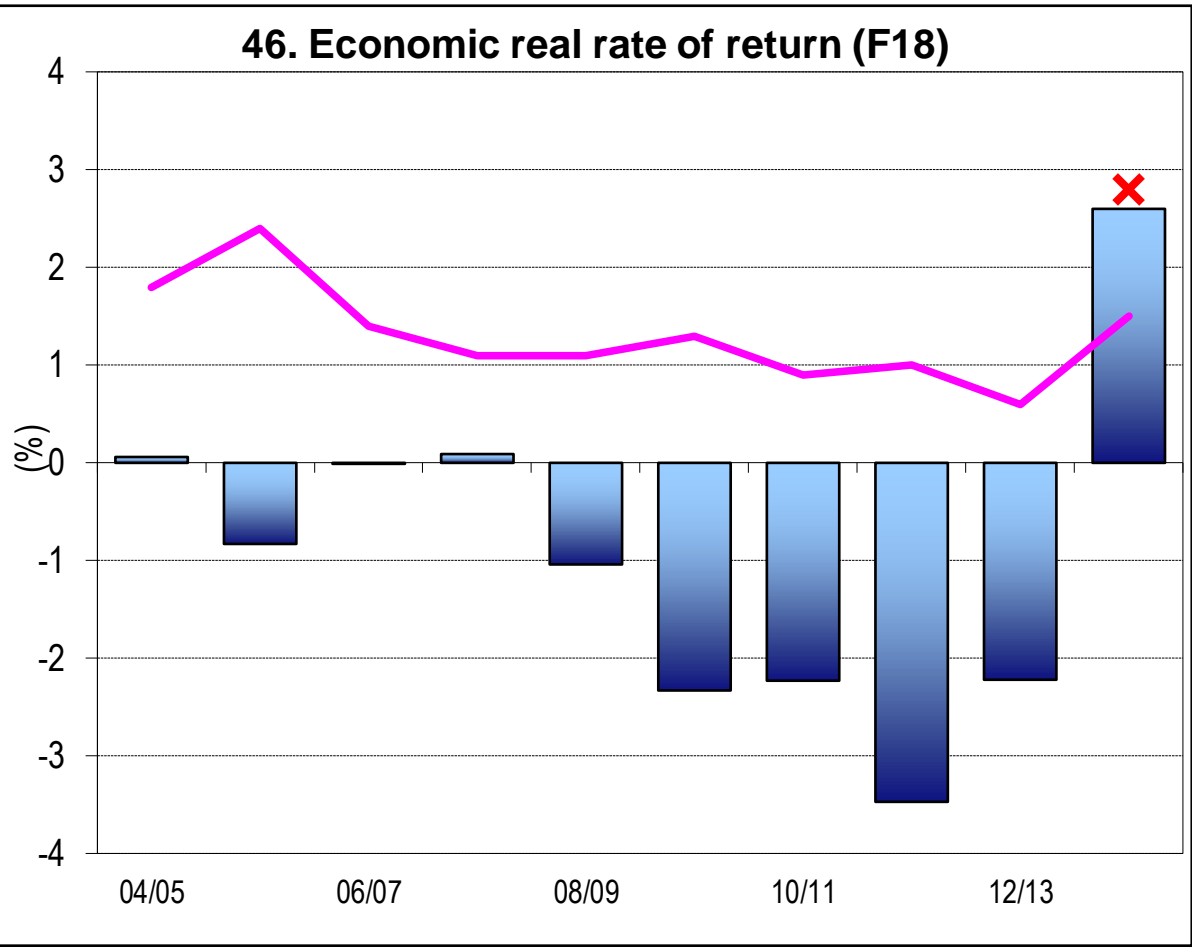
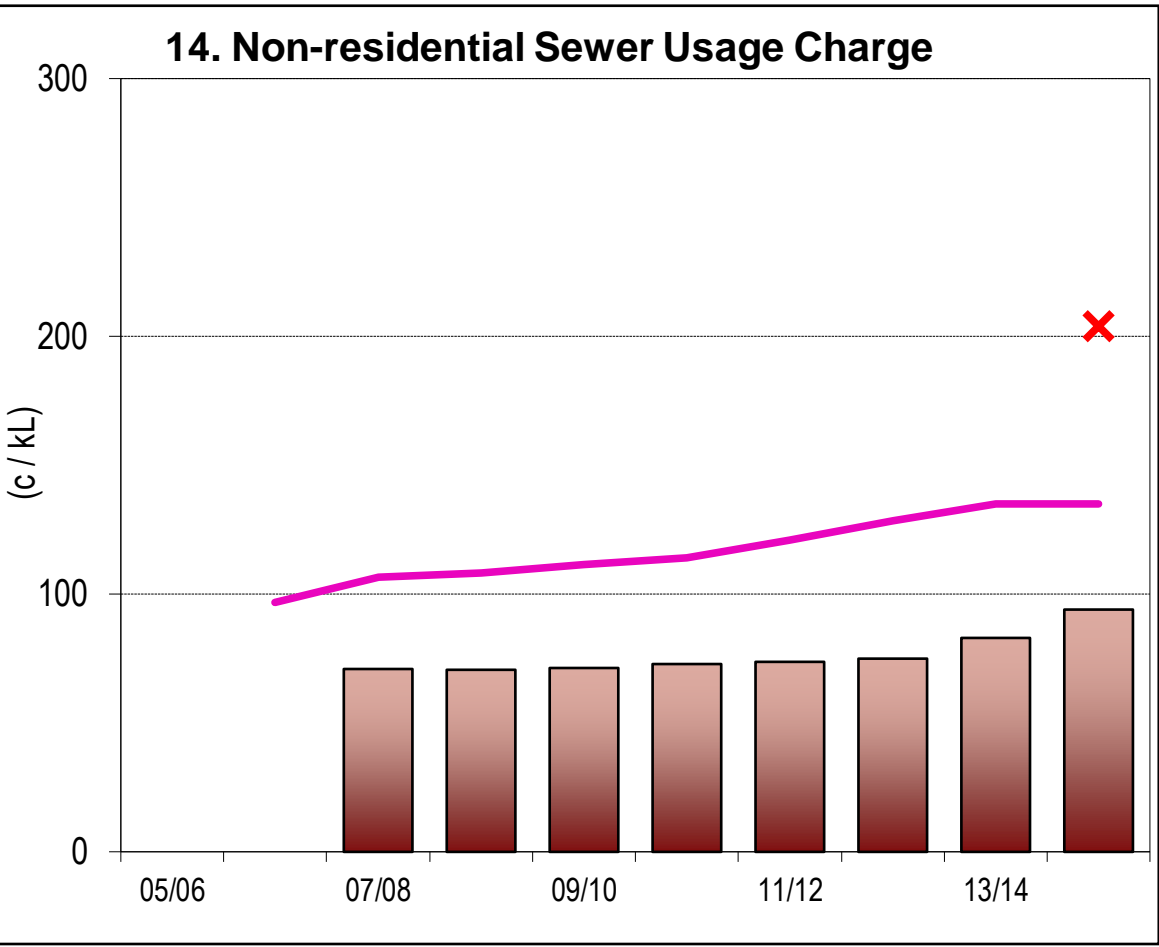
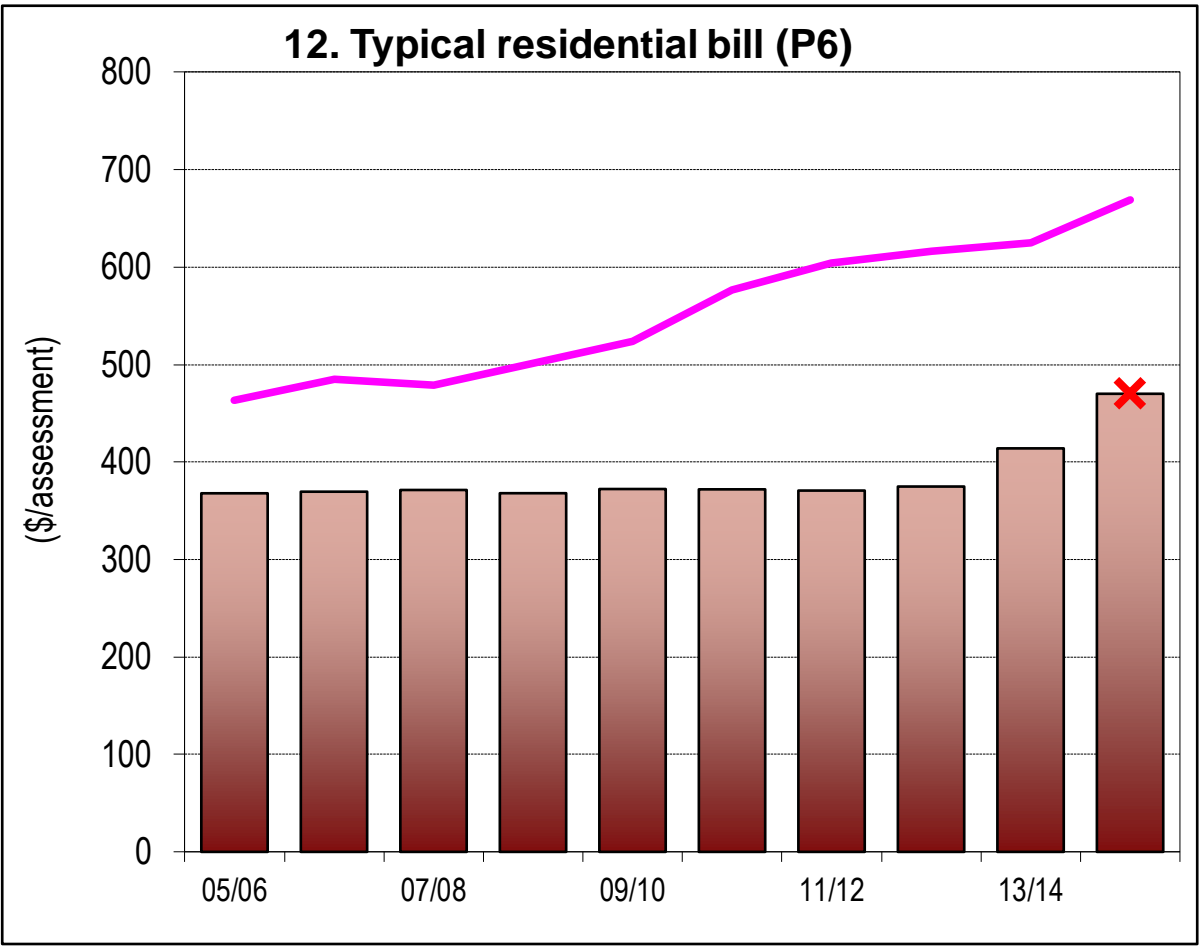
TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

		NWI	No.			LWU	RANKING		MEDIANS	
UTILITY	CHARACTERISTICS	C5	1	Population served: 38,400		RESULT	>10,000 properties	All LWUs	Statewide	National
		C8	2	Number of connected properties: 16,670	Number of assessments: 16,180		Note 1	Note 2	Note 3	Note 4
		C6	3	Number of residential connected properties: 15,580		Col 1	Col 2	Col 3	Col 4	Col 5
		A6	4	New residences connected to sewerage (%)		%				
		W18	5	Properties served per kilometre of main		Prop/km				
			6	Volume of sewage collected (ML)		ML				
			7	Renewals expenditure (% of current replacement cost of system assets)		%				
			8	Employees per 1000 properties	per 1,000 prop					
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	414	1	1	625	573
			11	Residential access charge for 2014-15 (\$/assessment)	\$ 2014-15	470	1	2	669	
		P6	12a	Typical residential bill for 2013-14 (\$/assessment)	\$ 2013-14	414	1	1	625	683
			12	Typical residential bill for 2014-15 (\$/assessment)	\$ 2014-15	470	1	2	669	
			13	Typical developer charge for 2014-15 (\$/equivalent tenement)	\$ 2014-15	1,390	5	4	5,100	
	HEALTH		14	Non-residential sewer usage charge (c/kL)	c/kL	94	5	5	136	
		F6	15	Revenue per property - Sge (\$)	\$	760	4	2	846	938
			16	Sewerage Coverage (% of Urban Population with Reticulated Sge Service)	%	99.5	1	1	97.9	
		E3	17	Percent of sewage treated to a tertiary level (%)	%	100	1	1	98	91
		E4	18	Percent of sewage volume treated that was compliant (%)	%	100	1	1	100	100
	SERVICE LEVELS		19	Number of sewage treatment works compliant at all times		1 of 1				
			21	Odour complaints per 1000 properties	per 1,000 prop	0.0	1	1	1.0	
		C11	22	Service complaints - sewerage per 1000 properties	per 1,000 prop	11	3	3	8	1
		C16	23a	Average sewerage interruption (minutes)	min	120	3	4	109	105
			25	Total days lost (%)	%	0.2	2	3	2.9	
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W19	26	Volume of sewage collected per property (kL)	kL	216	3	3	221	204
		W26	26a	Total recycled water supplied (ML)	ML	40	5	4	630	1,638
		W27	27	Recycled water (% of effluent recycled)	%	1	5	4	12	17
		E8	28	Biosolids reuse (%)	%				100	100
			30	Energy consumption - sewerage (kWh/ML)	kWh	627	1	3	770	
			31	Renewable energy consumption (% of total energy consumption)	%	0	1	1	0	
	ENVIRONMENTAL PERFORMANCE	E12	32	Net greenhouse gas emissions - WS & Sge (net tonnes CO2 equivalents per 1000 properties)		170	1	1	370	390
			33	90 th Percentile licence limits for effluent discharge:						
			34	Compliance with BOD in licence (%)	%	100	1	1	100	
			35	Compliance with SS in licence (%)	%	100	1	1	100	
		A14	36	Sewer main breaks and chokes (per 100 km of main)	per 100km main	55	4	4	37	20
			37a	Sewer overflows (per 100 km of main)	per 100km main	43	5	5	13	
		E13	37b	Sewer overflows reported to environmental regulator (per 100km of main)		0.9	3	4	0.8	0.4
			39	Non res & trade waste % of total sge volume	%	16	4	3	21	
ECONOMIC	FINANCE		43	Revenue from non-residential plus trade waste charges (% of total revenue)	%	14	4	4	18	
			44	Revenue from trade waste charges (% of total revenue)	%	0.4	5	3	2.0	
		F18	46	Economic real rate of return - Sge (%)	%	2.6	2	1	1.5	2.6
			46a	Return on assets - Sge (%)	%	3.6	1	1	1.3	
			48a	Loan payment per property - Sge (\$)	\$				90	
		F24	48b	Net profit after tax - WS & Sge (\$'000)	\$'000	4,720	2	1	1180	5,345
	EFFICIENCY		49	Operating cost (OMA) per 100 km of main (\$'000)	\$'000	1,900	4	5	1,730	
		F12	50	Operating cost (OMA) per property (\$) (Note 9)	\$	372	1	2	430	405
			51	Operating cost (OMA) per kL (cents)	c/kL	172	2	2	206	
			52	Management cost per property (\$)	\$	161	2	4	161	
			53	Treatment cost per property (\$)	\$	122	1	2	155	
			54	Pumping cost per property (\$)	\$	25	1	1	68	
			55	Energy cost per property (\$)	\$	24	1	2	42	
			56	Sewer main cost per property (\$)	\$	61	4	4	47	
		F29	57	Capital Expenditure per property - Sewerage (\$)	\$	300	2	1	193	227

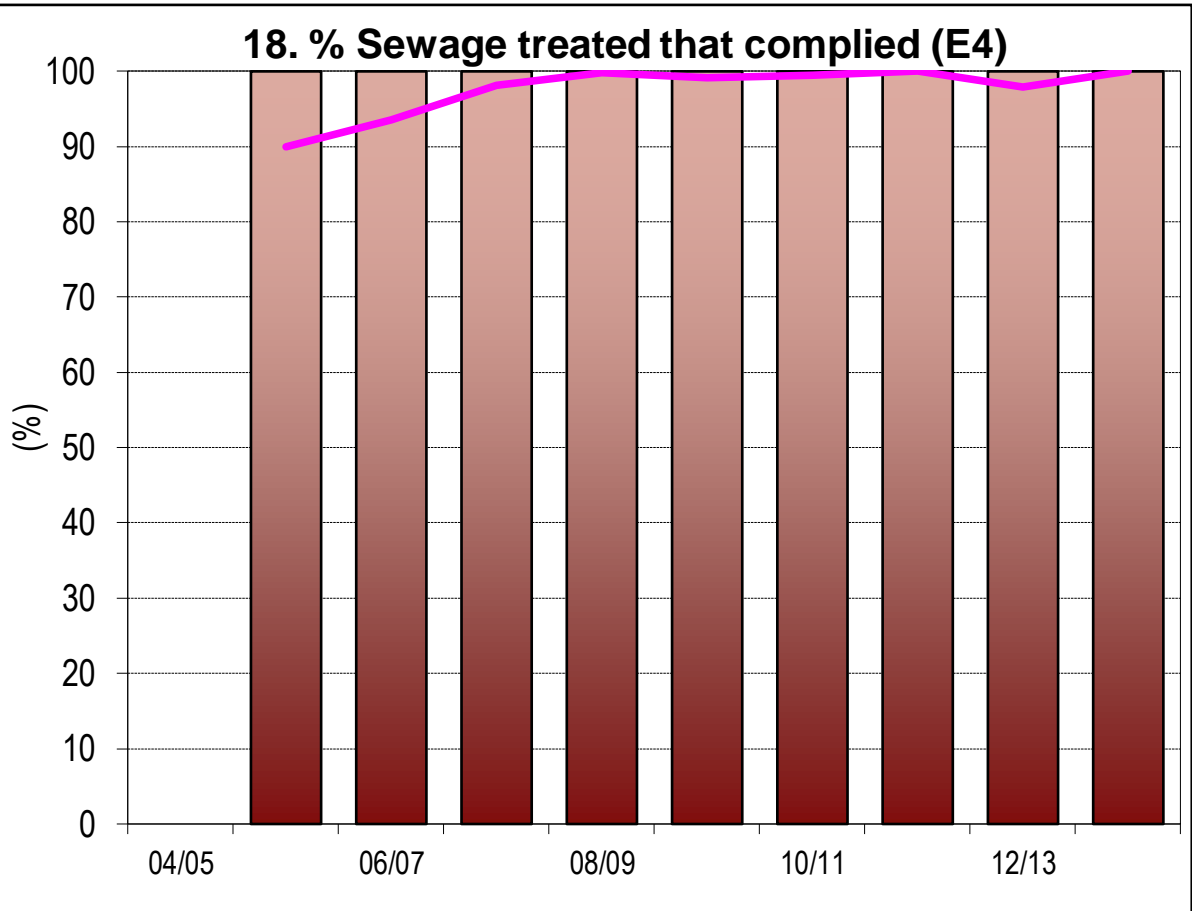
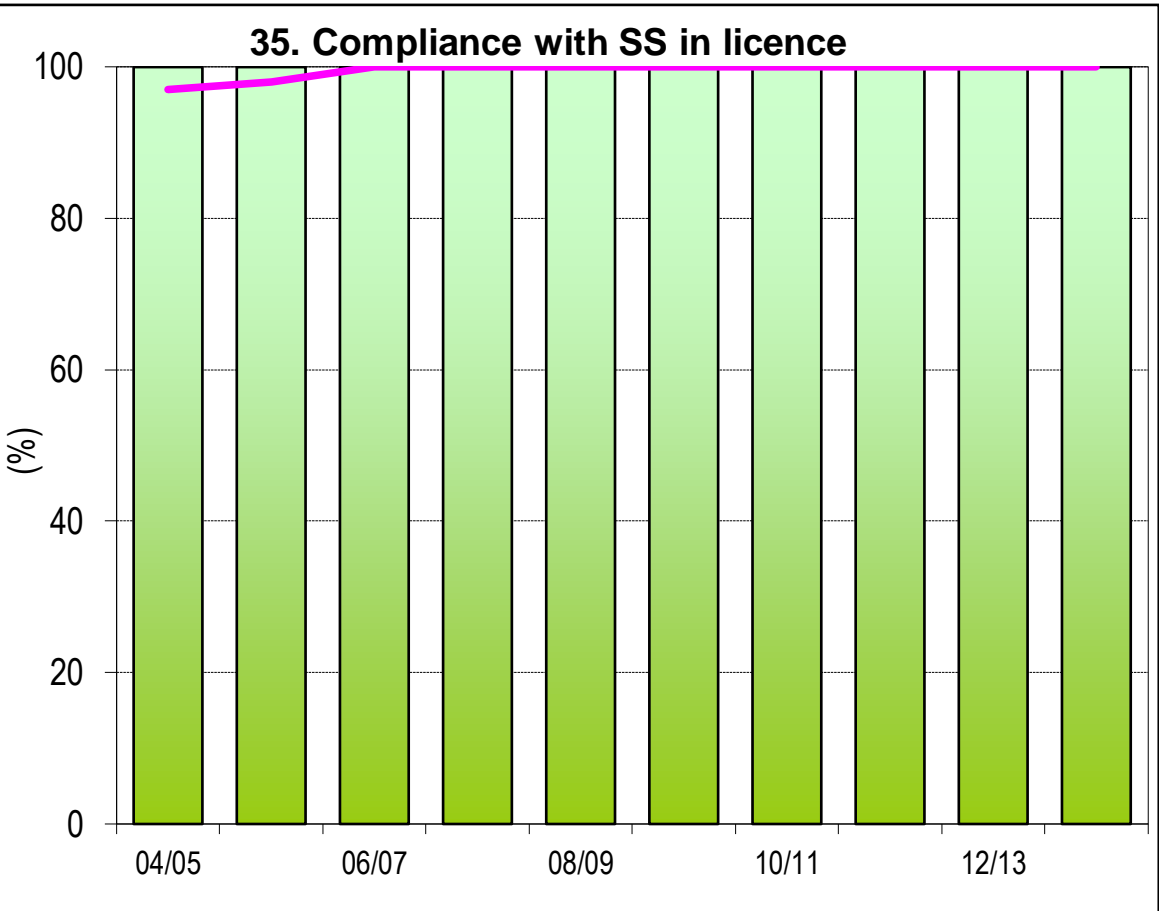
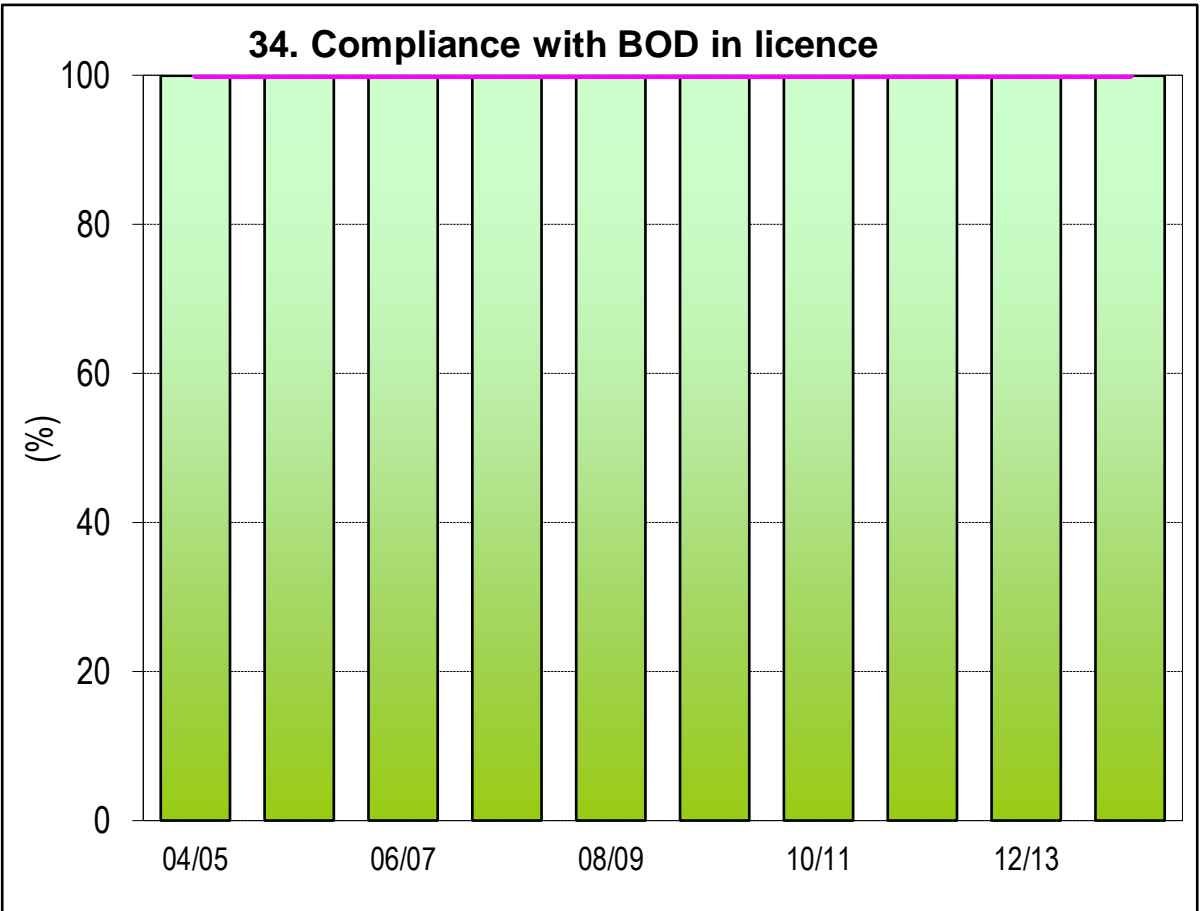
- NOTES :
- 1 Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with >10,000 properties).
 - 2 Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs). - see attachment.
 - 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 66 utilities reporting sewerage performance in the National Performance Report 2013-14 (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 Non-residential access charge - \$381, proportional to square of size of service connection. Sewer usage charge - 94 c/kL.
 - 7 Non-residential and trade waste volume was 16% of total sewage collected.
Non-residential revenue was 14% of revenue from access, usage & trade waste charges, indicating fair pricing of services between the residential and non-residential sectors.
 - 8 Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
 - 9 Operating cost (OMA)/property was \$372. Components were: management (\$161), operation (\$113), maintenance (\$36), energy (\$24), chemical (\$28) & effluent/biosolids (\$10).
 - 10 Renewals expenditure was \$389,000/100km of main.
 - 11 As Queanbeyan City 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).

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

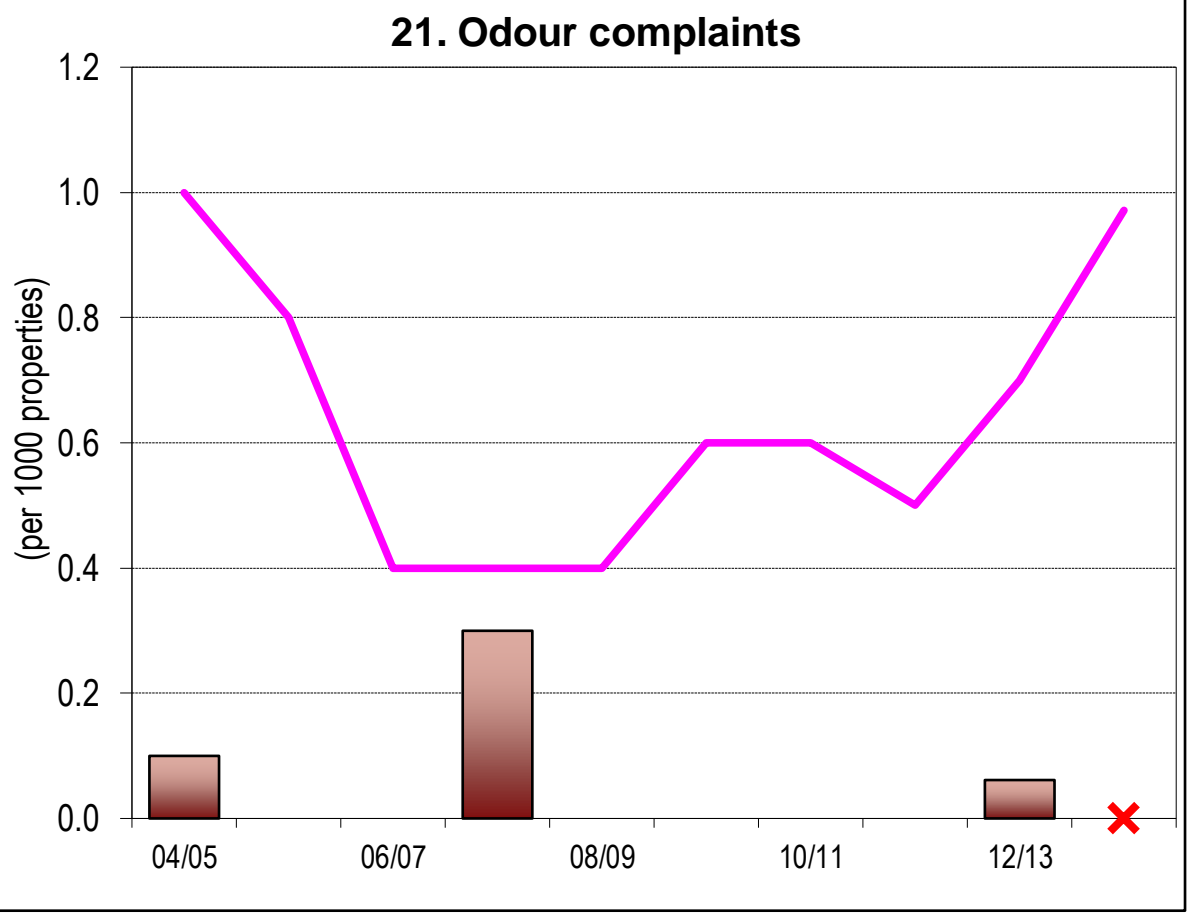
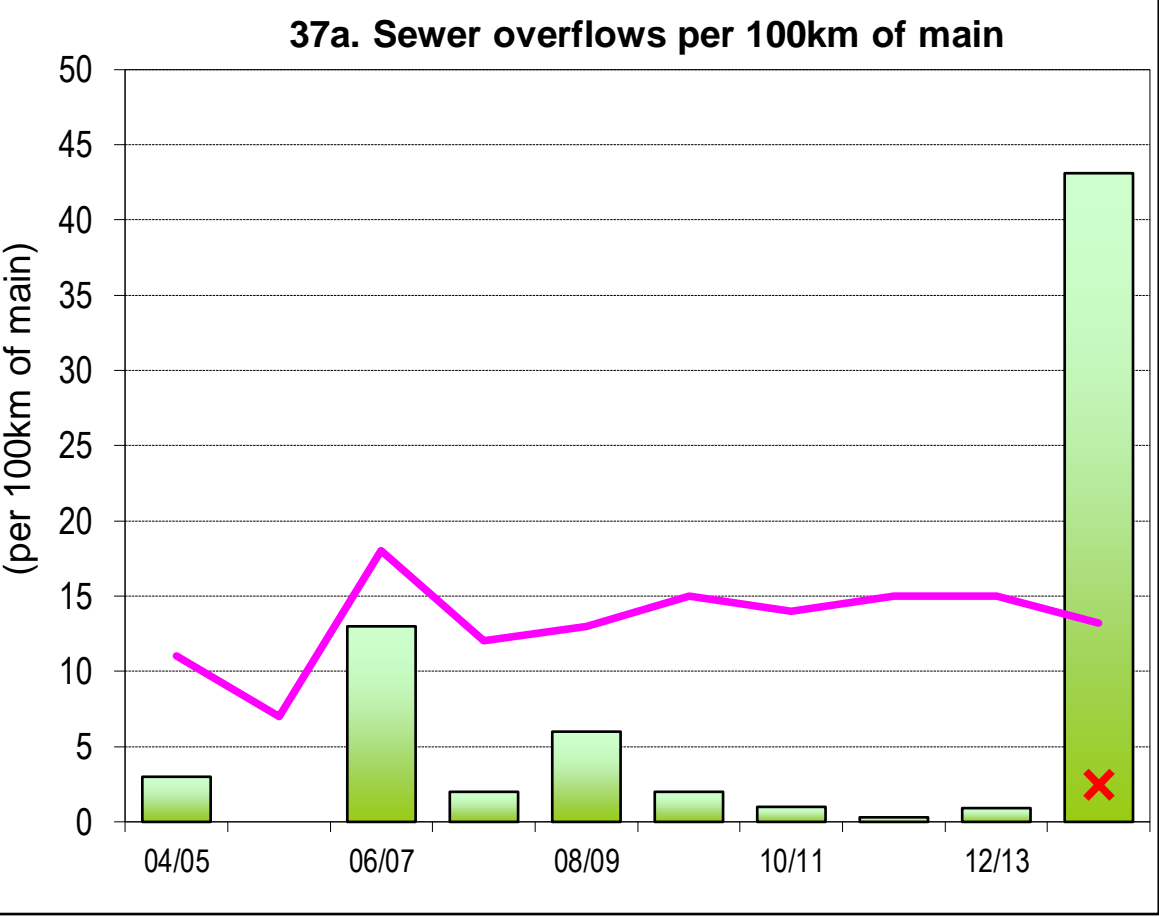
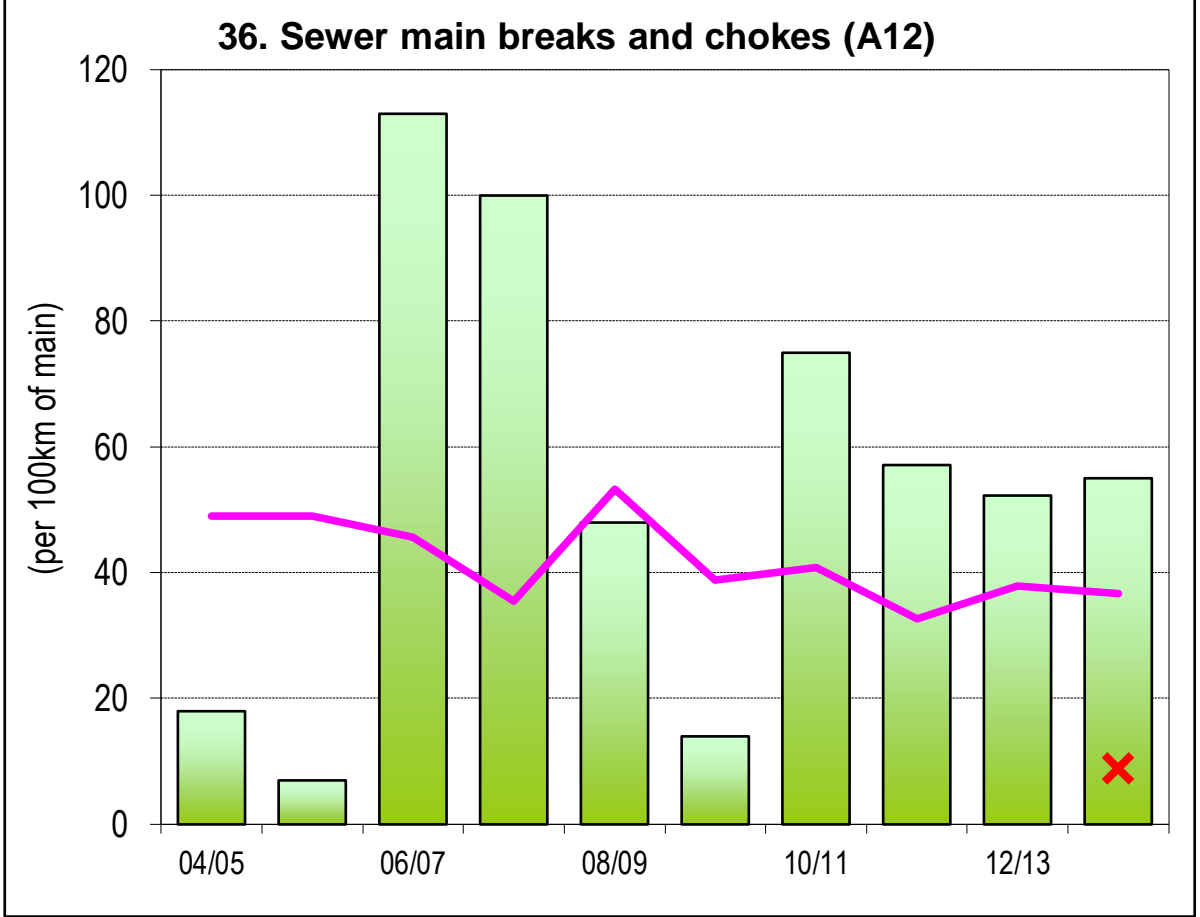
COST RECOVERY



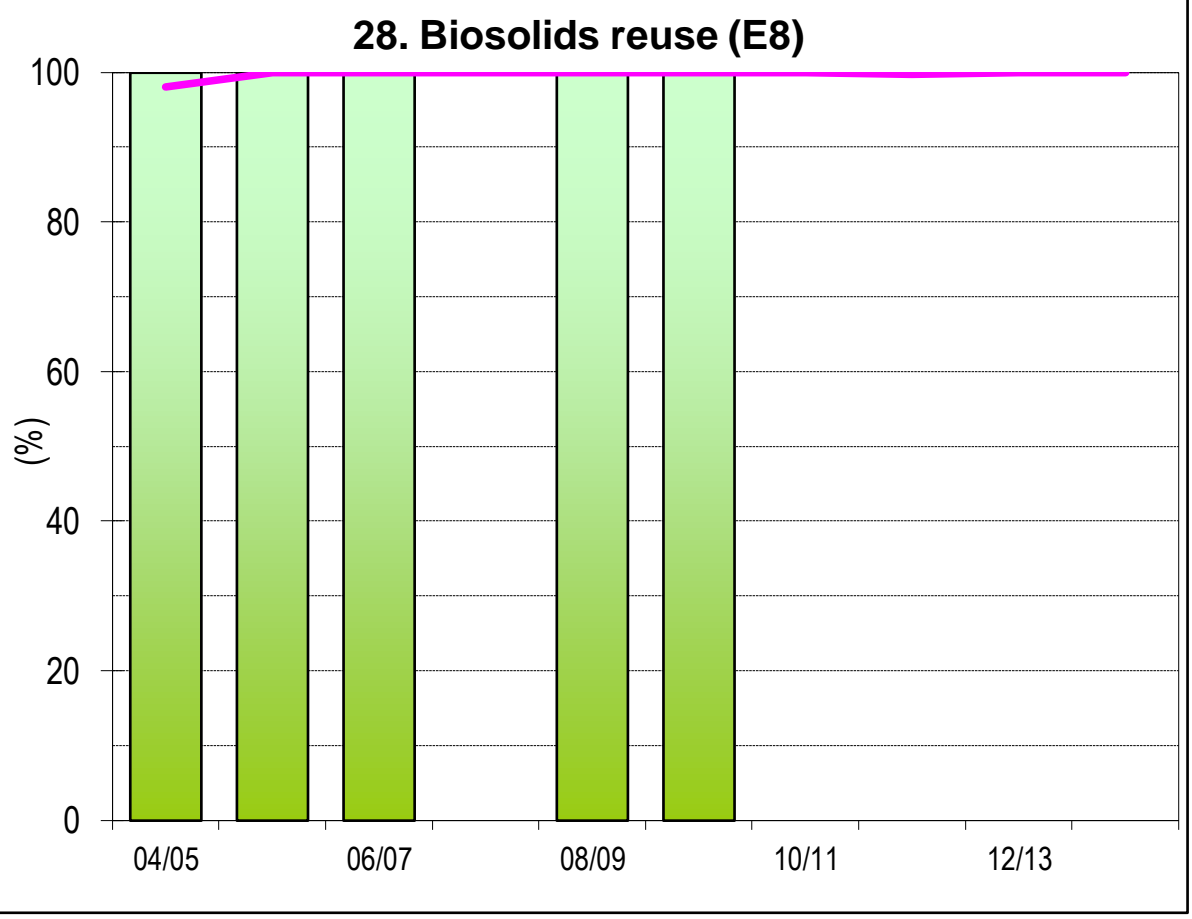
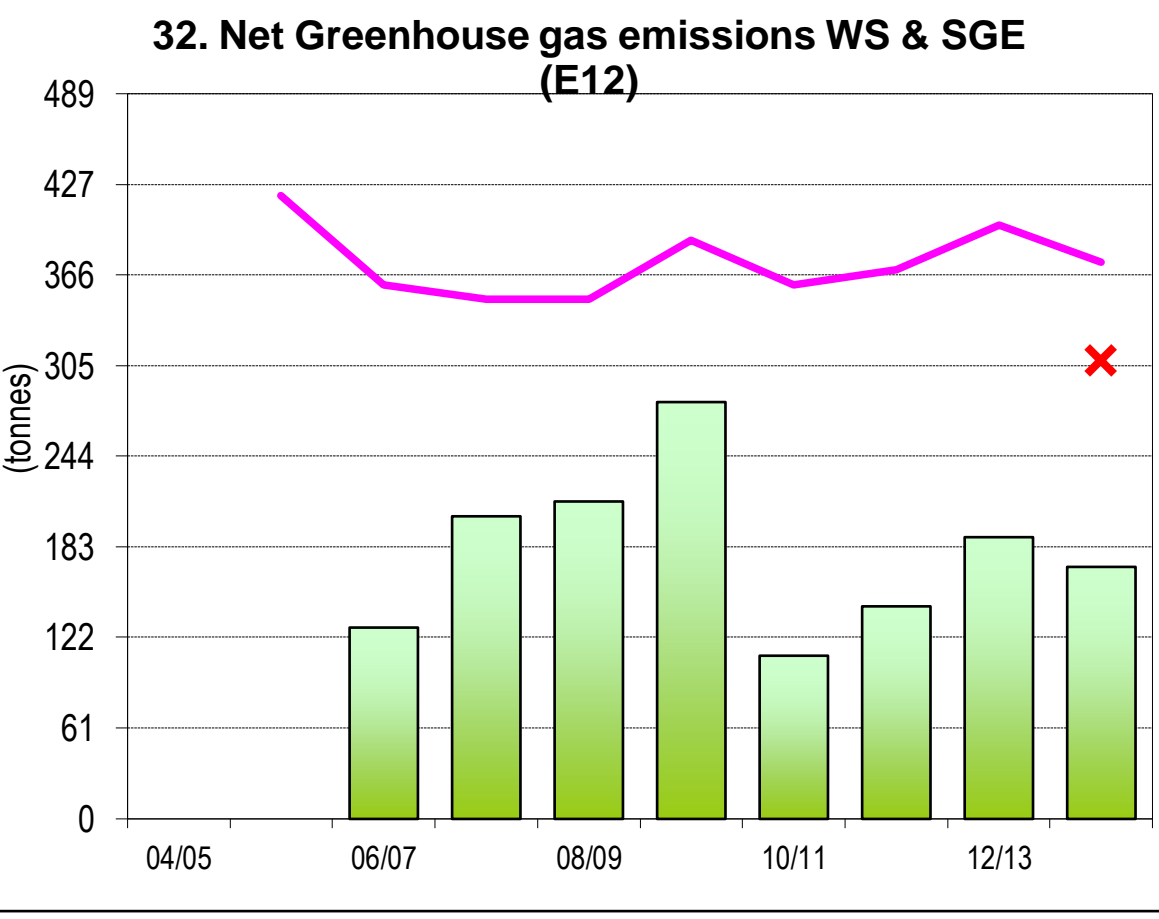
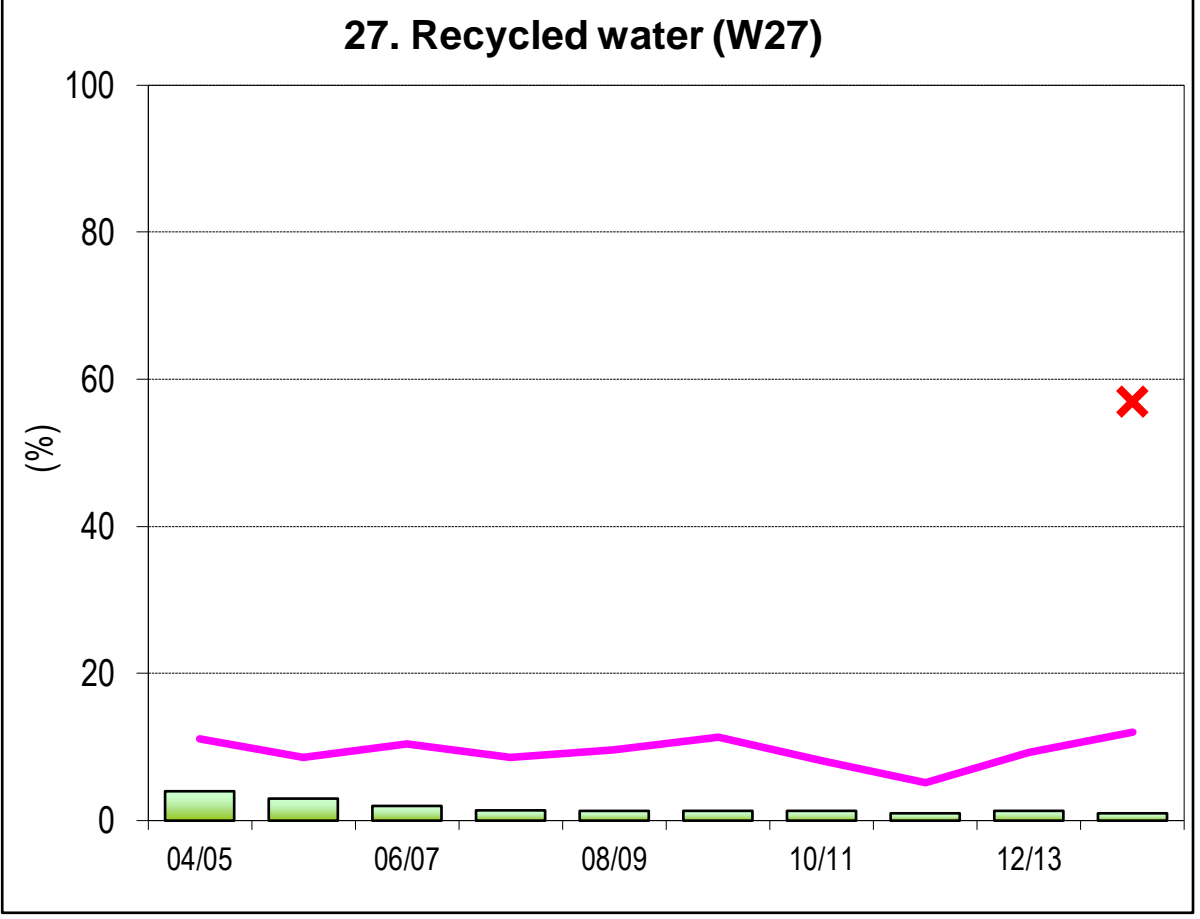
COMPLIANCE



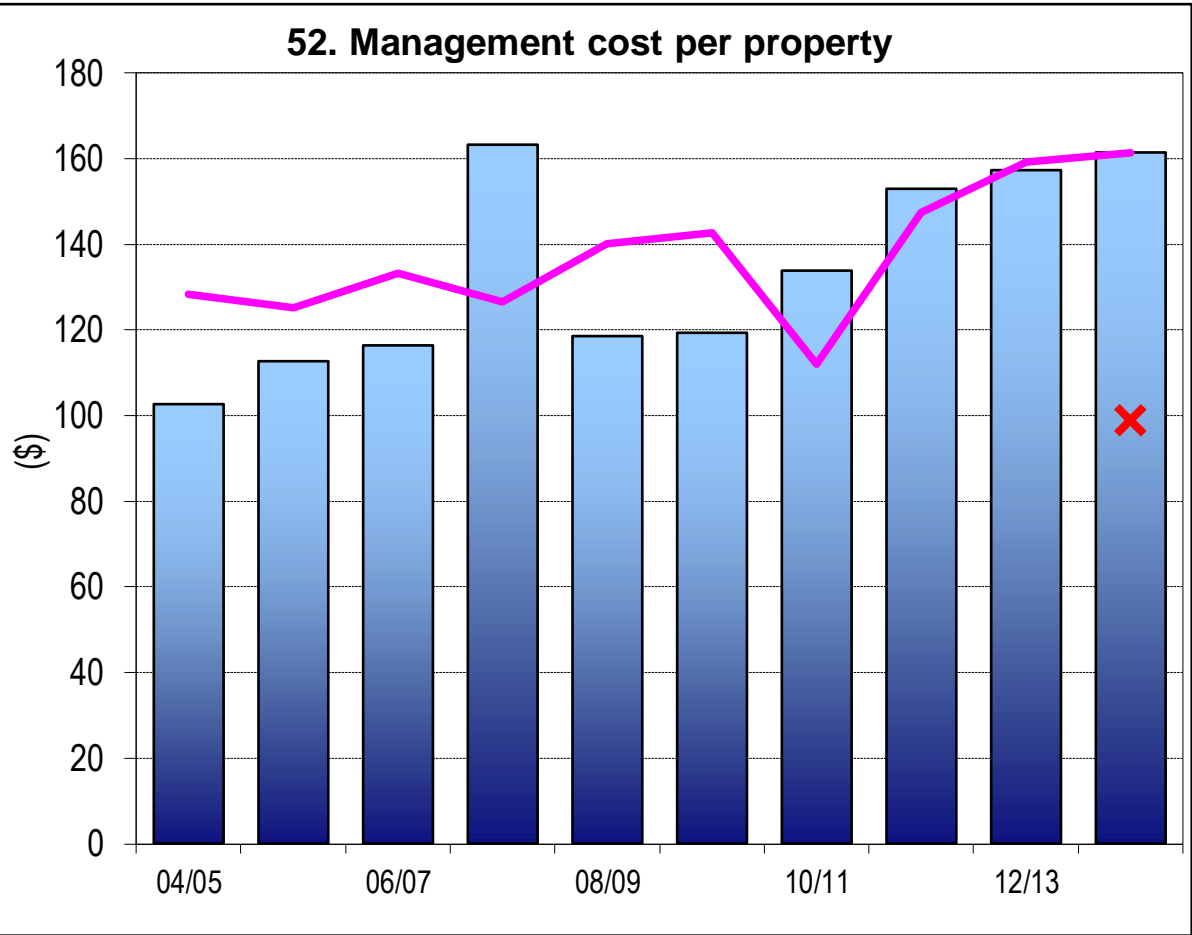
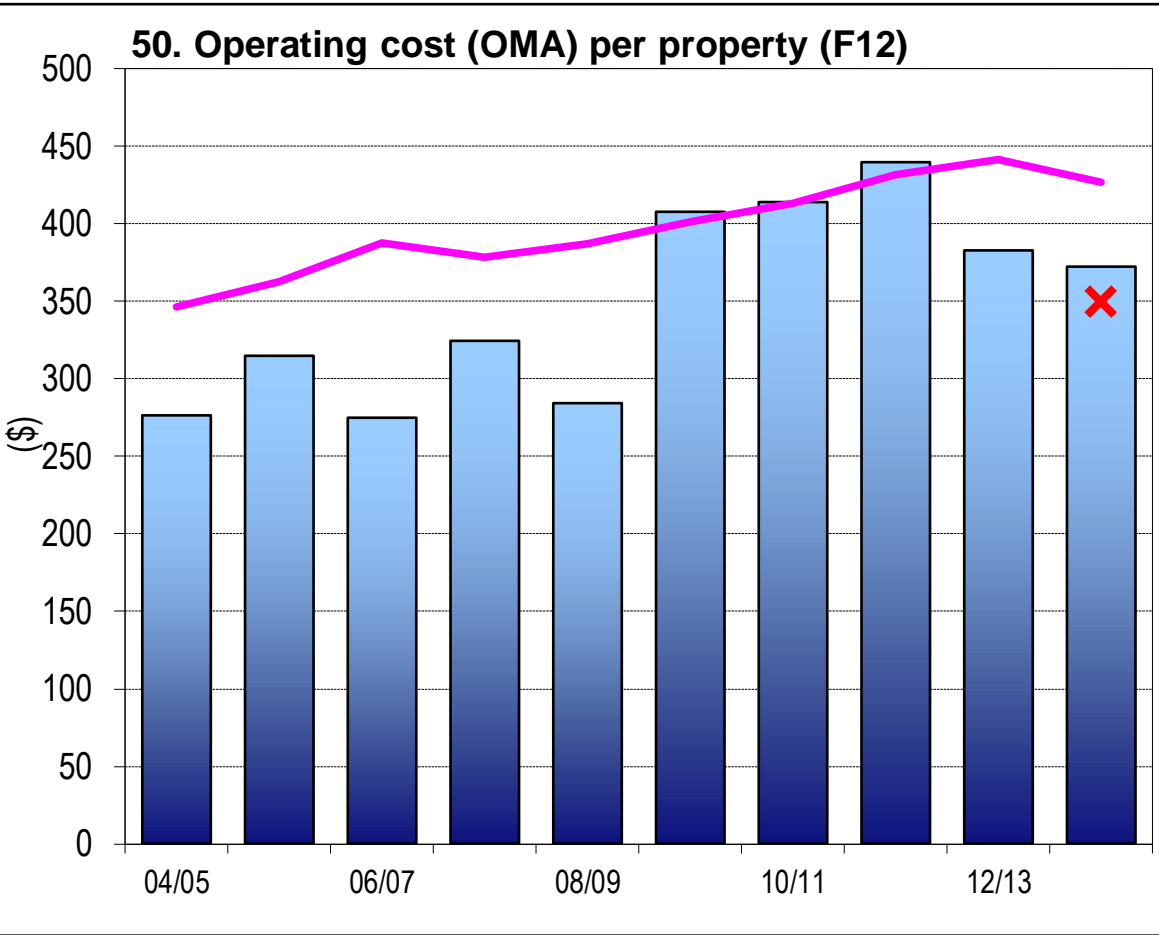
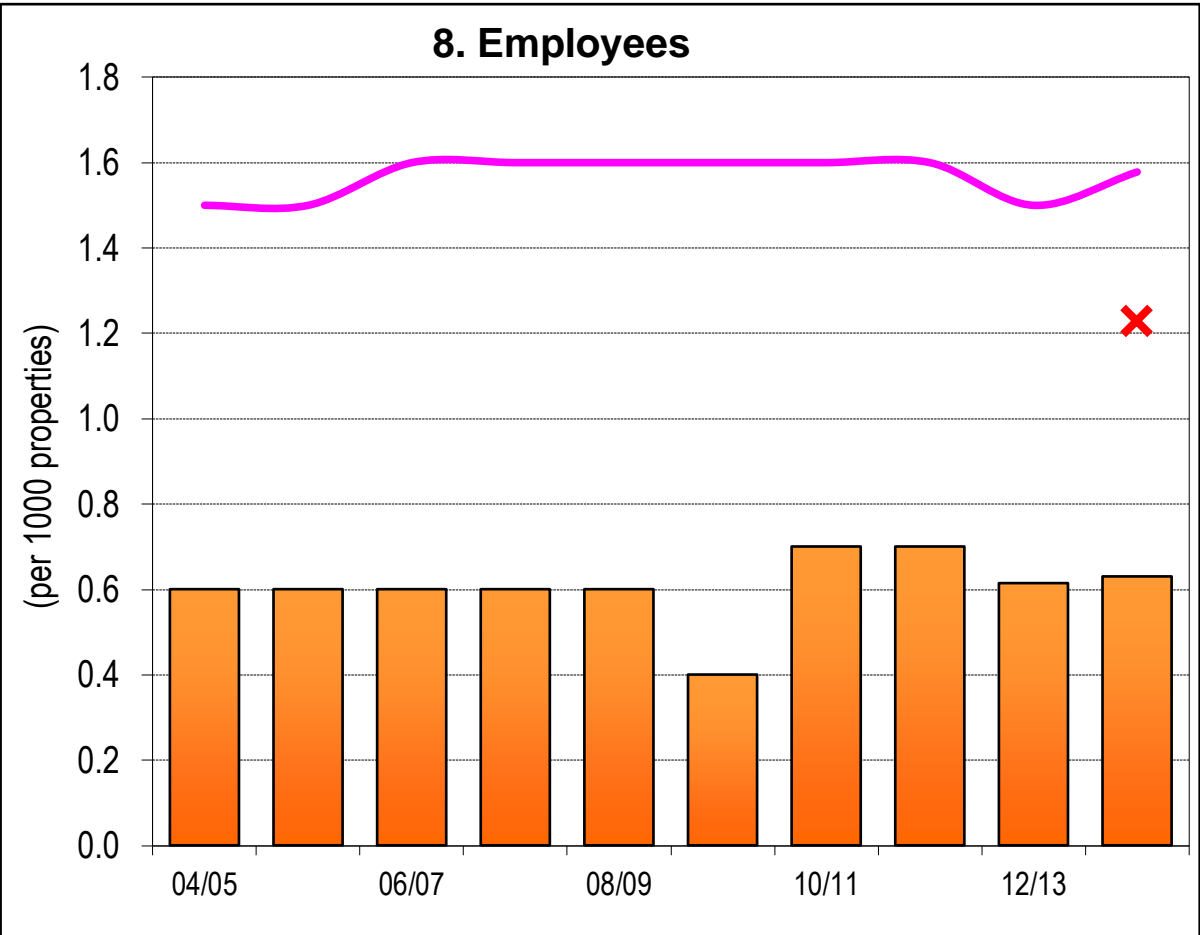
CUSTOMER SERVICE/RELIABILITY



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

WATER SUPPLY SYSTEM - Queanbeyan City Council serves a population of 38,500 (16,410 connected properties). Queanbeyan is a reticulator with 98% of supply provided as a fully treated bulk water supply by ACT Electricity and Water (ACTEW). The water supply network comprises 13 service reservoirs (60 ML) and 4 pumping stations, 44 km of transfer and trunk mains and 239 km of reticulation.

PERFORMANCE - Queanbeyan City Council achieved 90% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$893 which was well above the statewide median of \$582 (Indicator 14). The economic real rate of return was 0.9% which was less than the statewide median (Indicator 43). The operating cost (OMA) per property was \$589 which was well above the statewide median of \$400 (Indicator 49). Water quality complaints were negligible compared to the statewide median of 3 (Indicator 25). Compliance was achieved for microbiological water quality (100% of the population, 1 of 1 zones compliant), chemical water quality and physical water quality. There were no failures of the chlorination system or the treatment system. Queanbeyan City Council reported 4 Category 2 environmental incidents (limited impact). Current replacement cost of system assets was \$159M (\$10,000 per assessment). Cash and investments were \$10M, debt was nil and revenue was \$19M (excluding capital works grants).

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

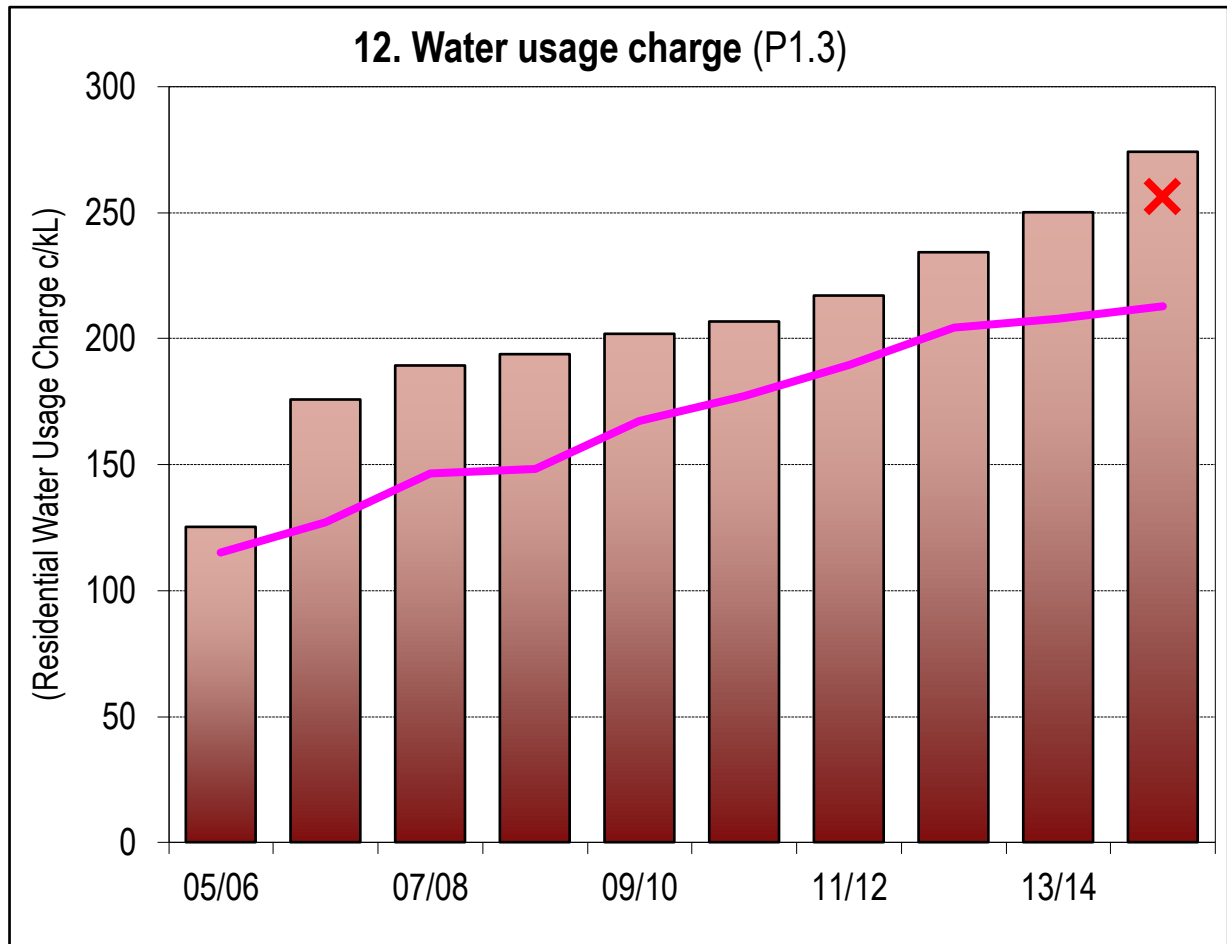
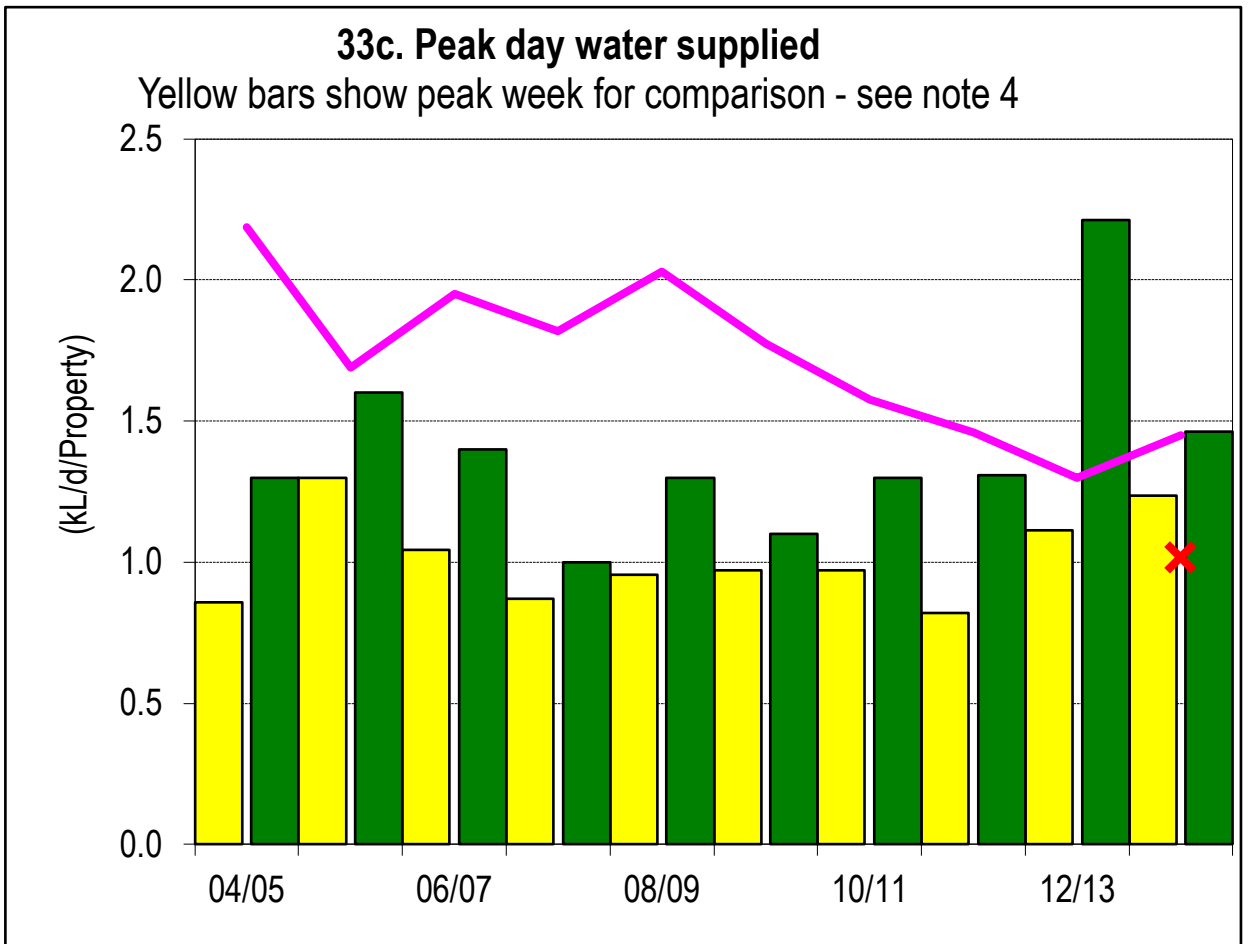
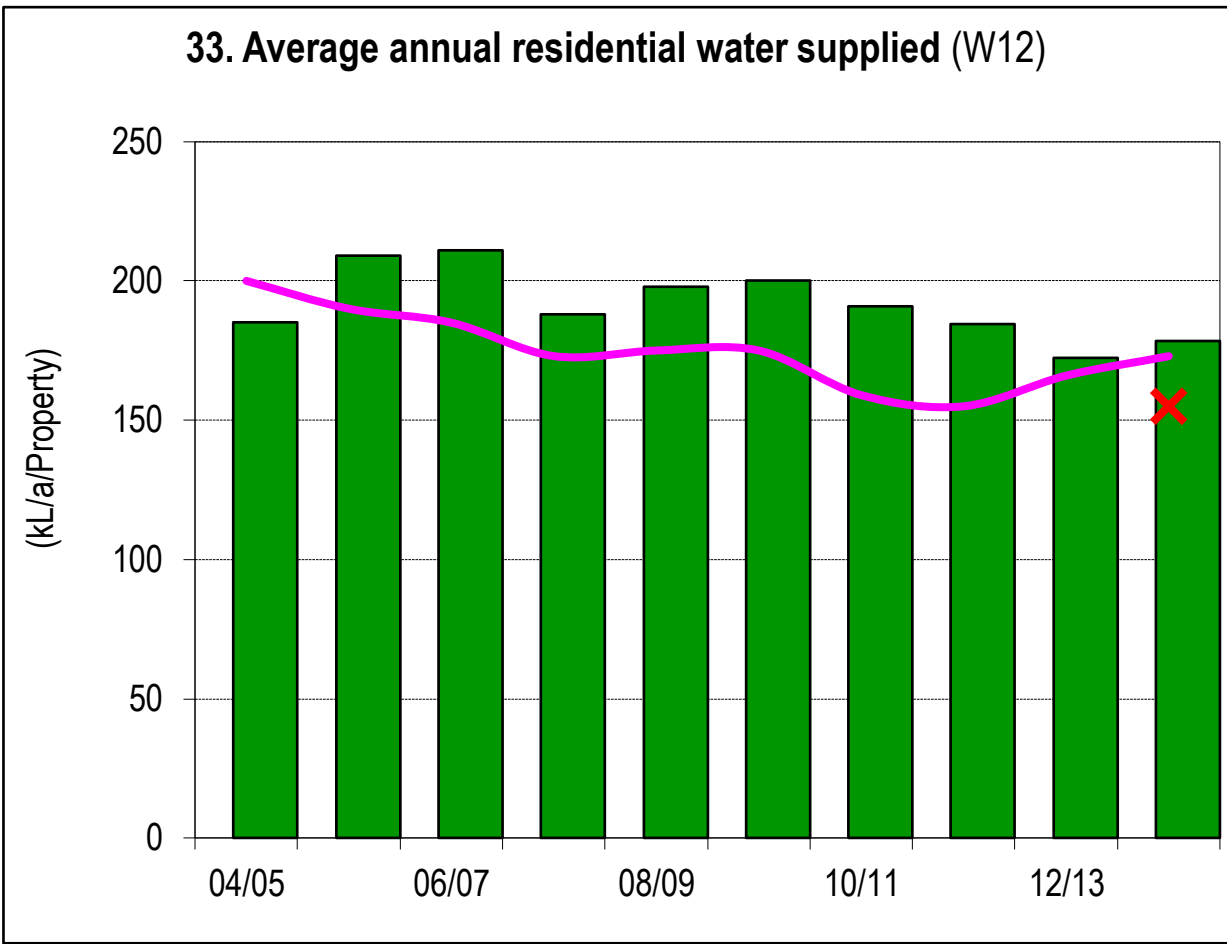
(1) Complete Current Strategic Business Plan & Financial Plan	YES ¹²	(3) Sound water conservation implemented	YES
(2) (2a) Pricing - Full Cost Recovery, without significant cross subsidies	Yes ¹³	(4) Sound drought management implemented	YES
(2b,2c) Pricing - Appropriate Residential Charges		(5) Complete 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 REQUIREMENTS	90%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

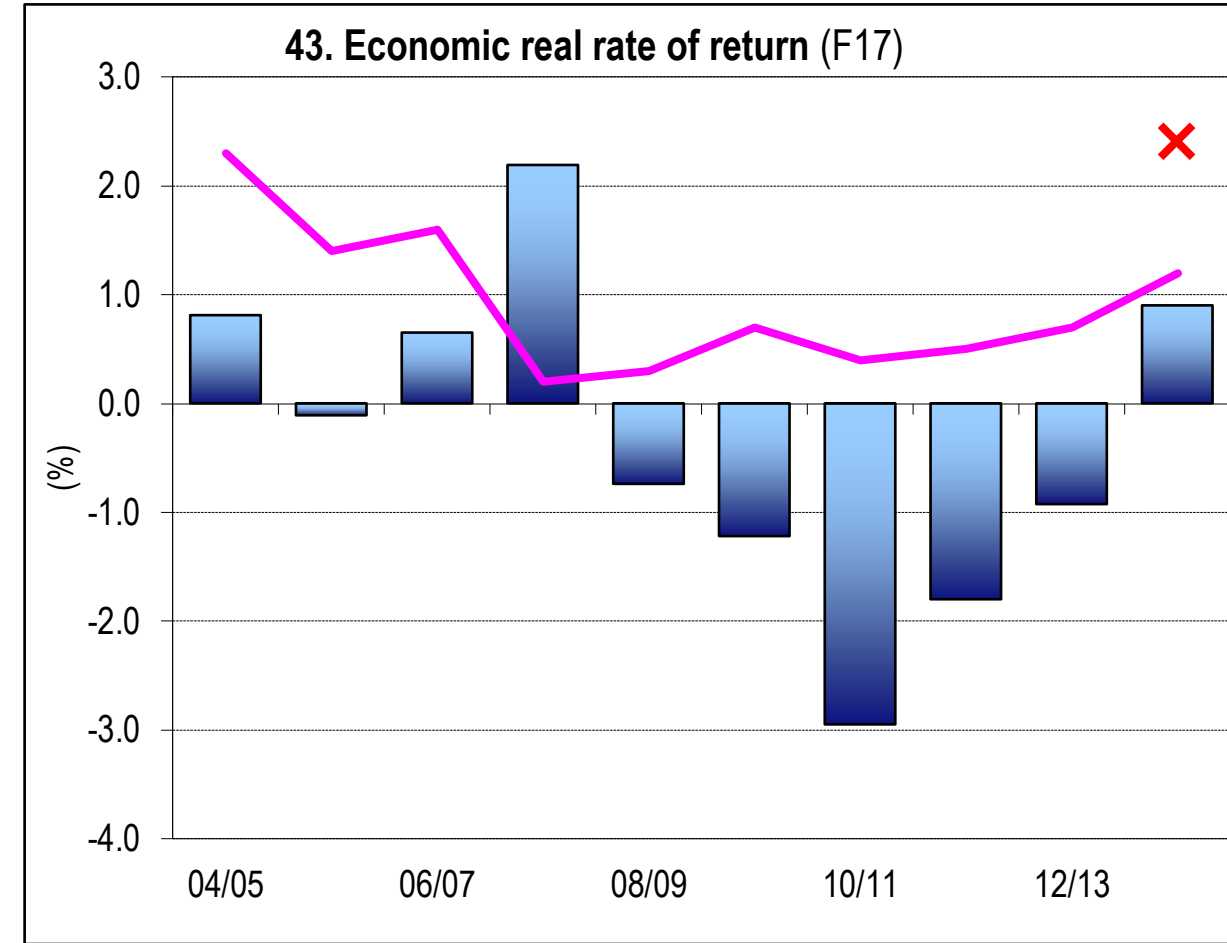
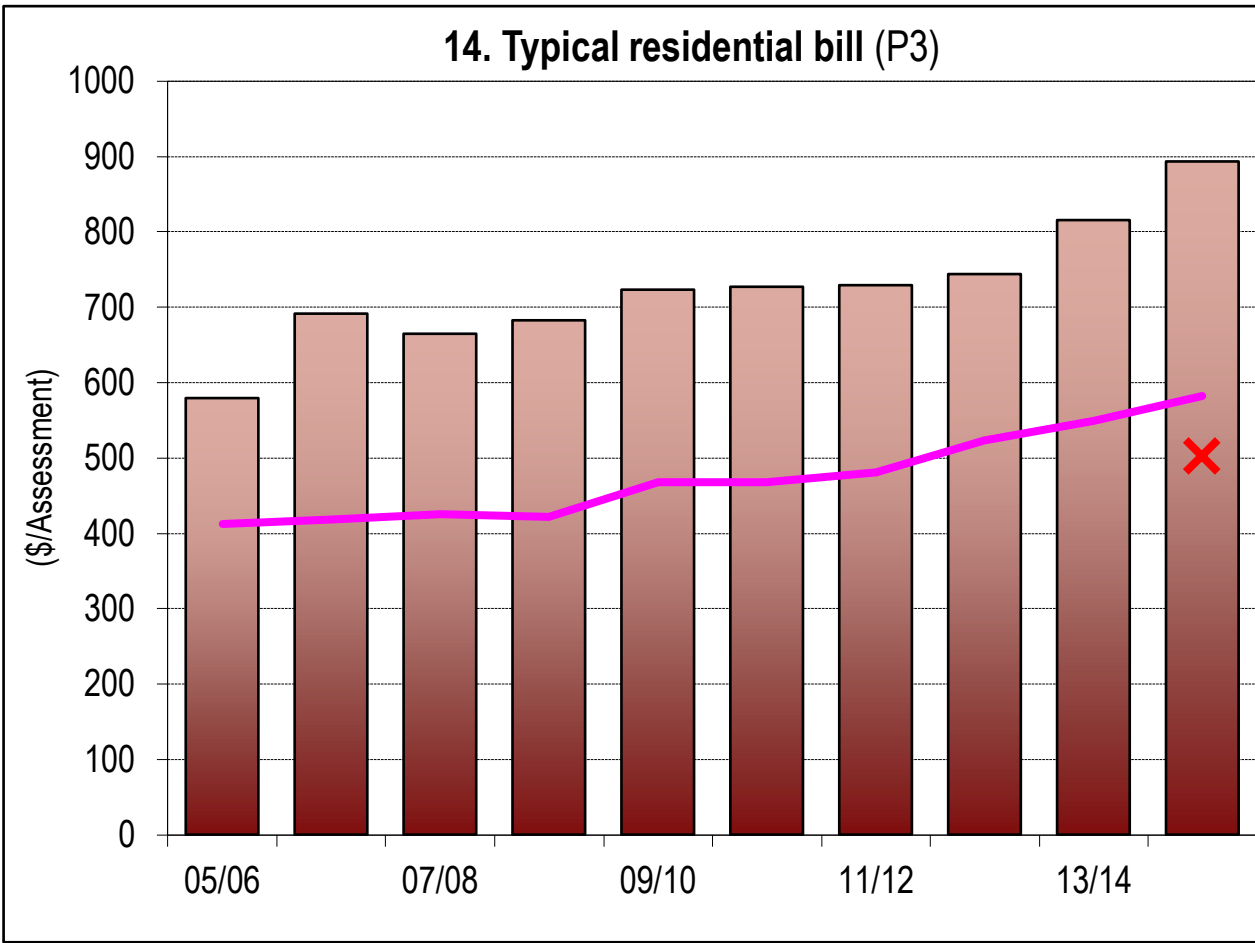
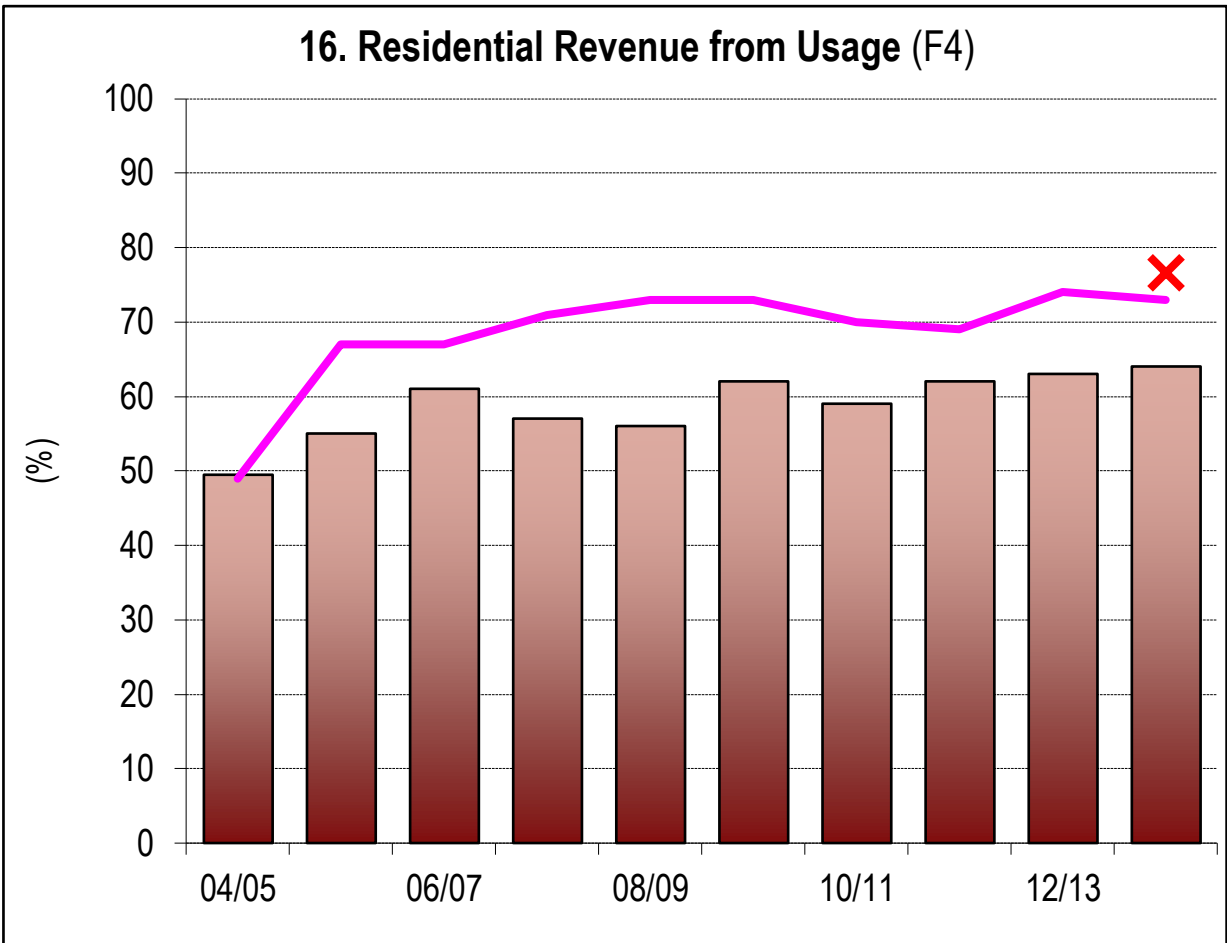
TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS						LWU	RANKING		MEDIANS	
						RESULT	>10,000 properties	All LWUs	Statewide	National
NW1 No.							Note 1	Note 2	Note 3	Note 4
							Col 2	Col 3	Col 4	Col 5

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

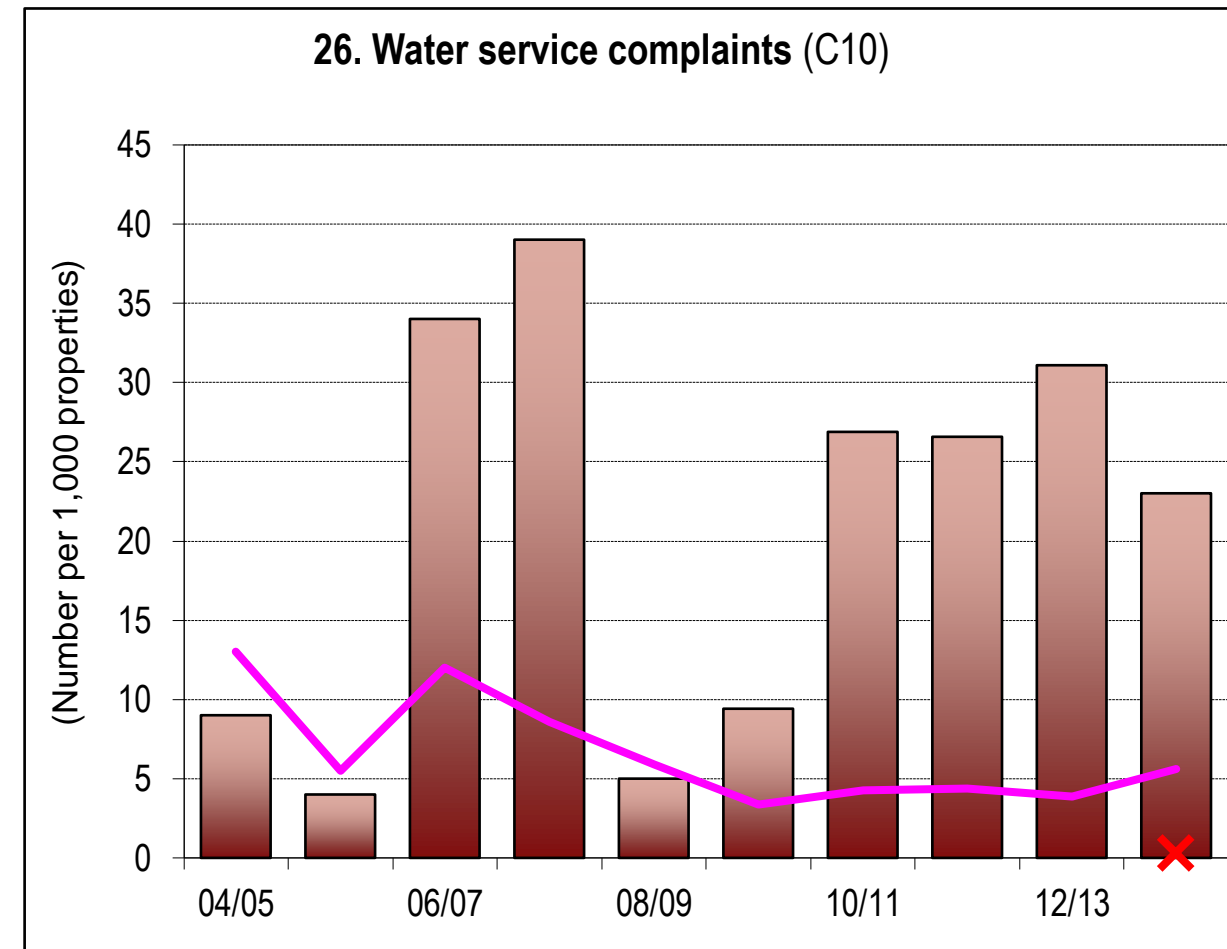
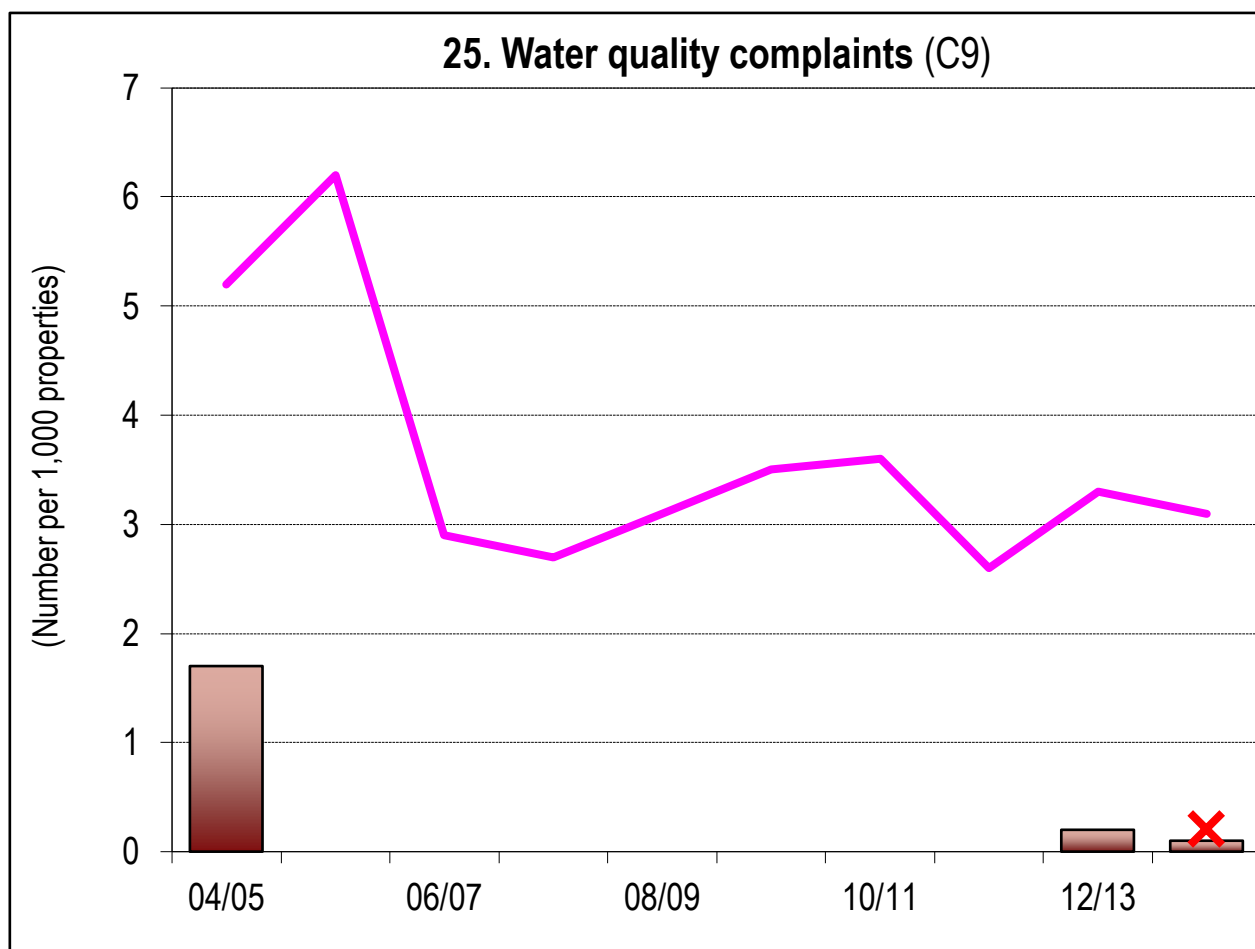
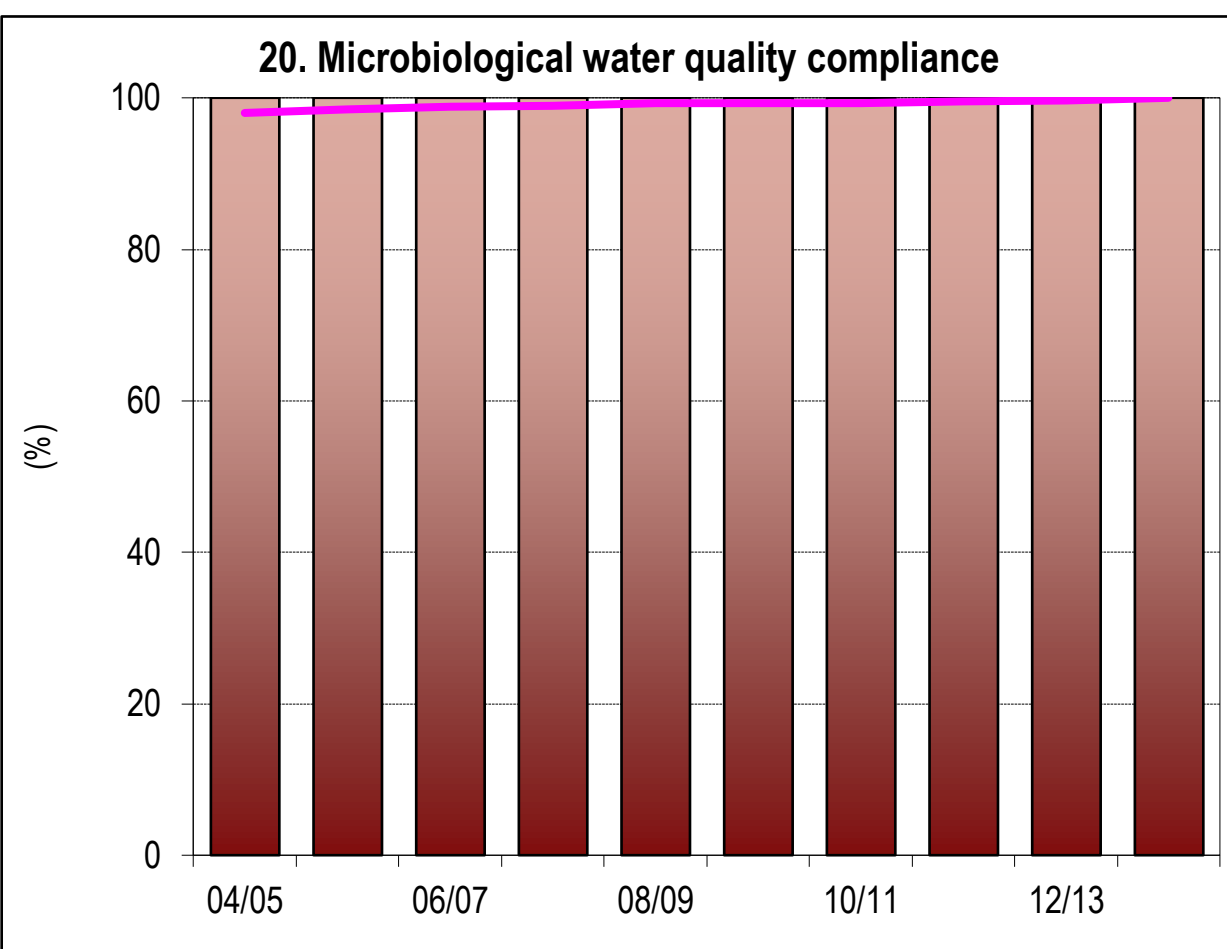
RESIDENTIAL USE/REVENUE FROM USAGE



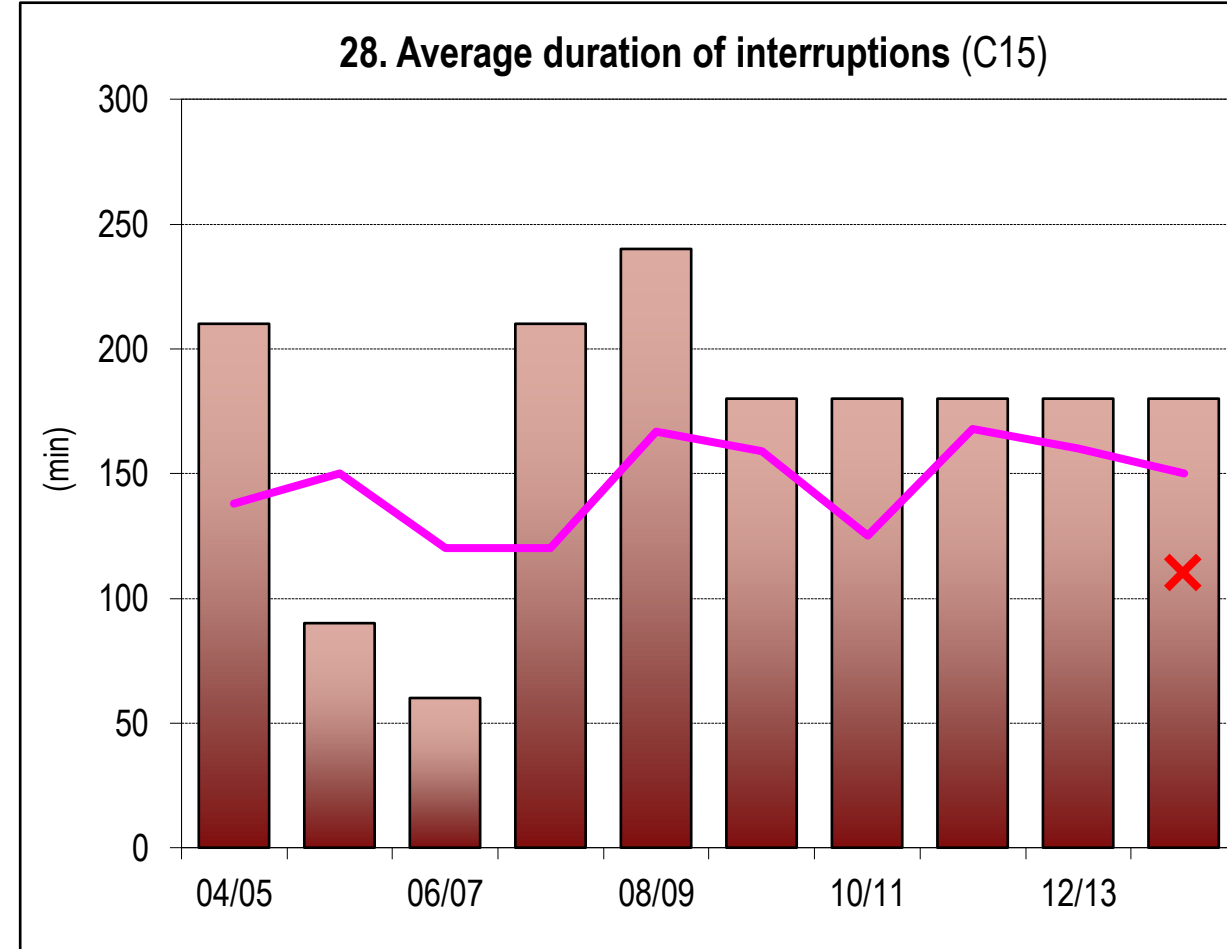
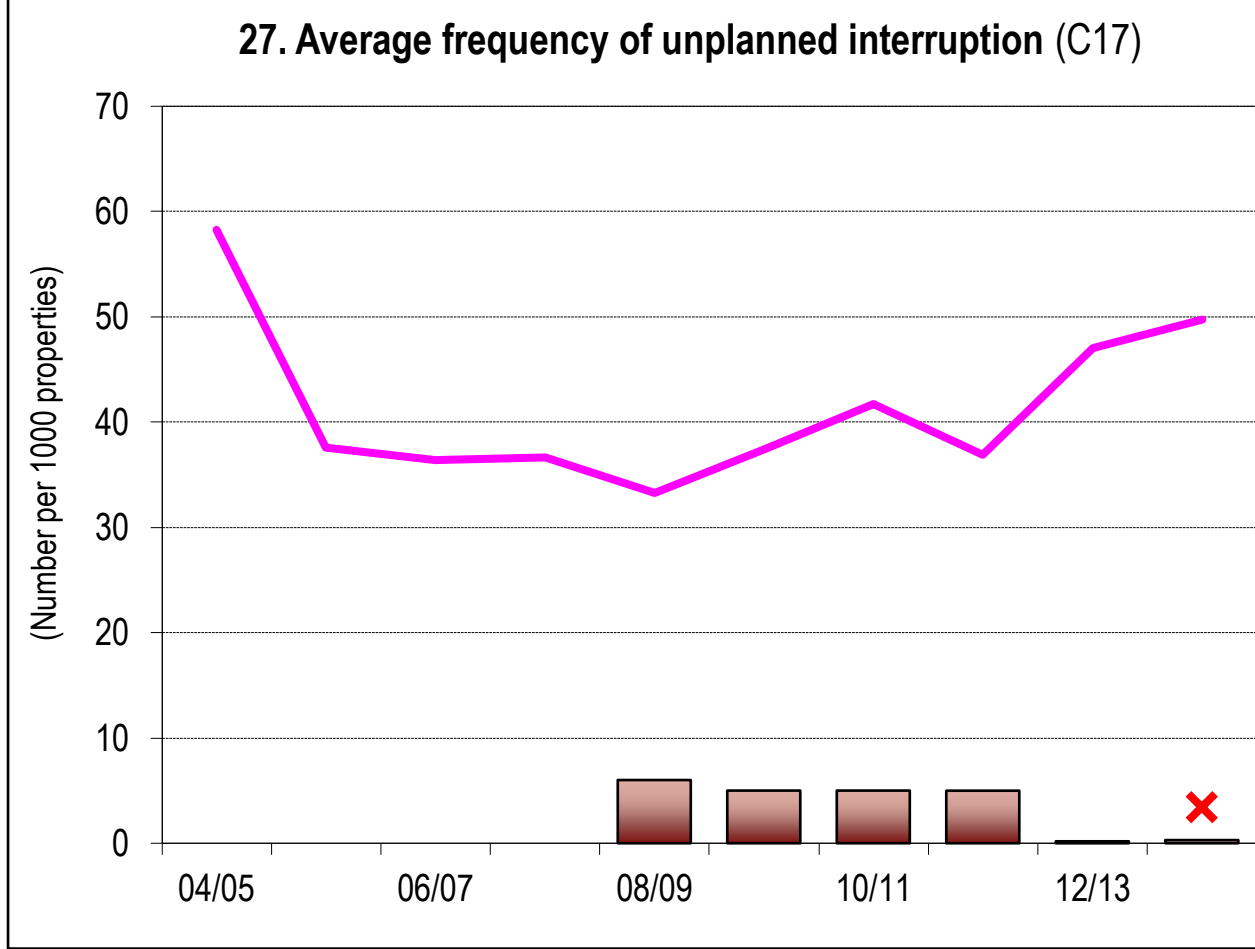
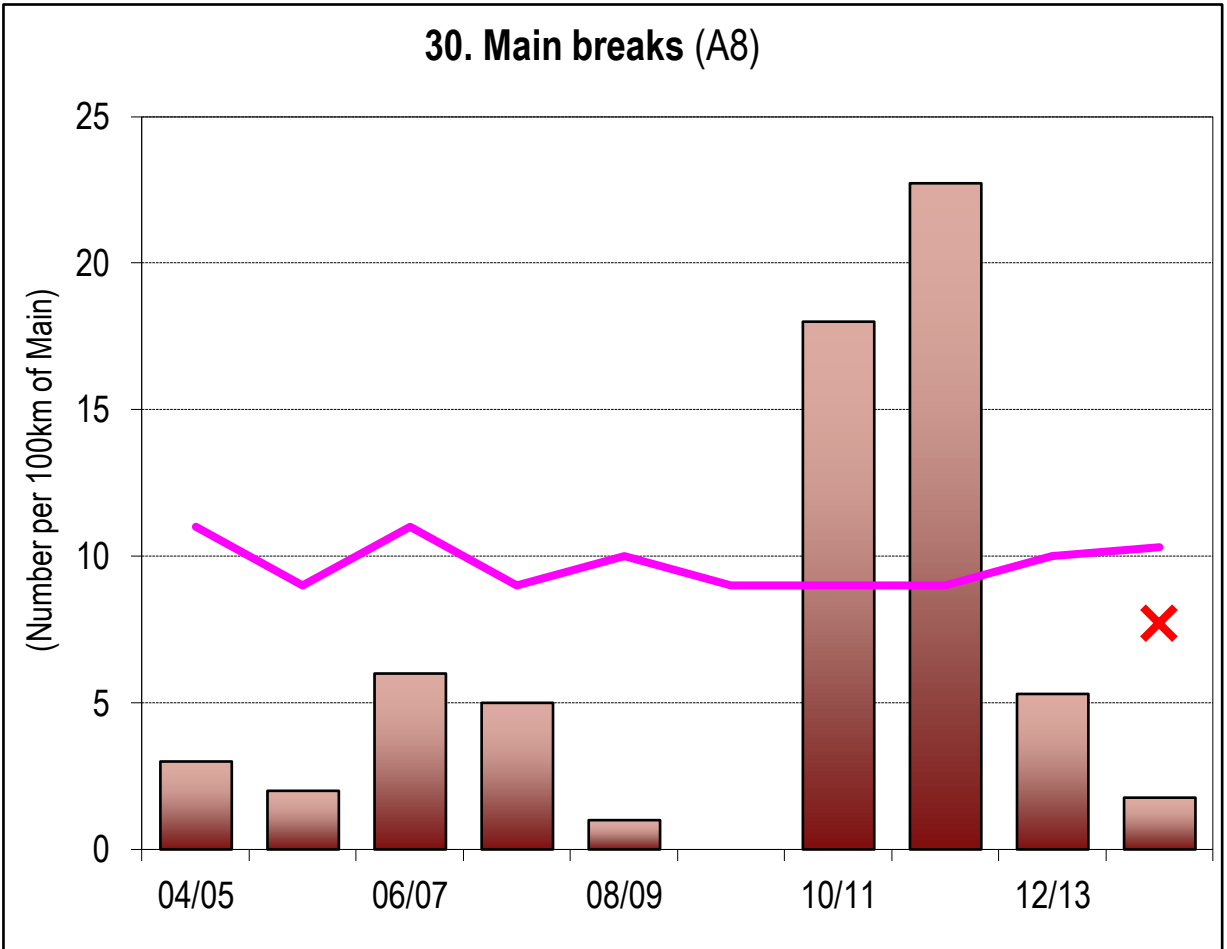
COST RECOVERY



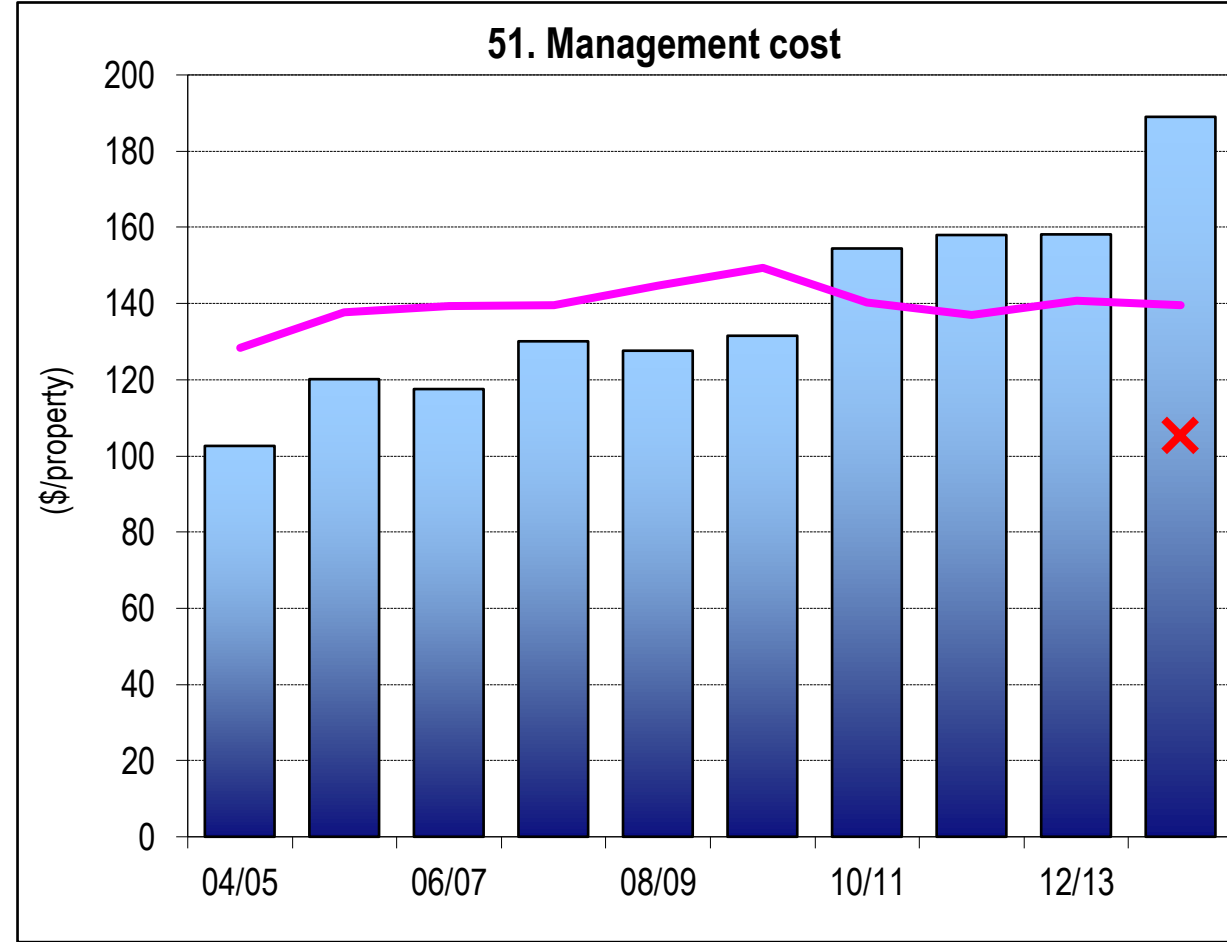
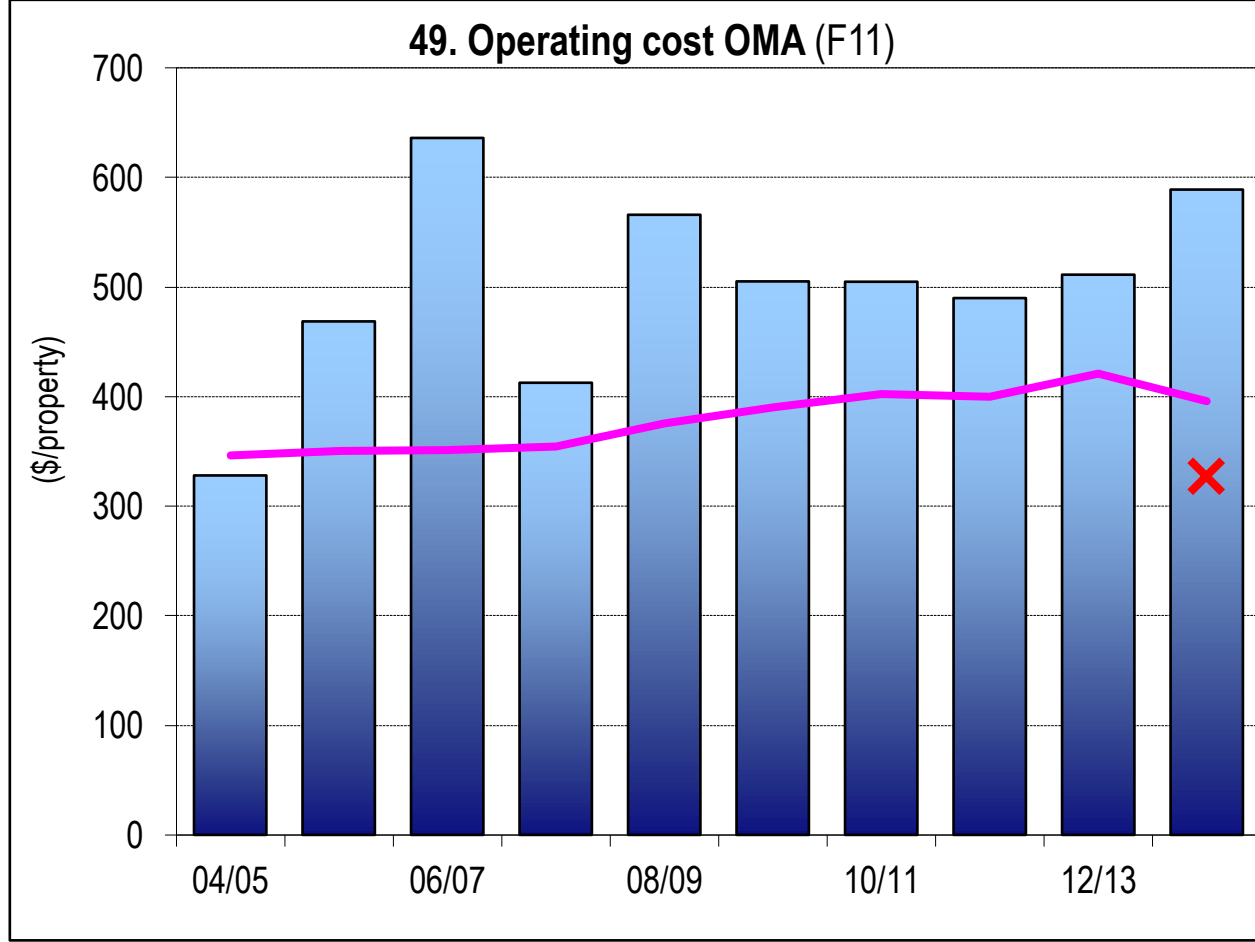
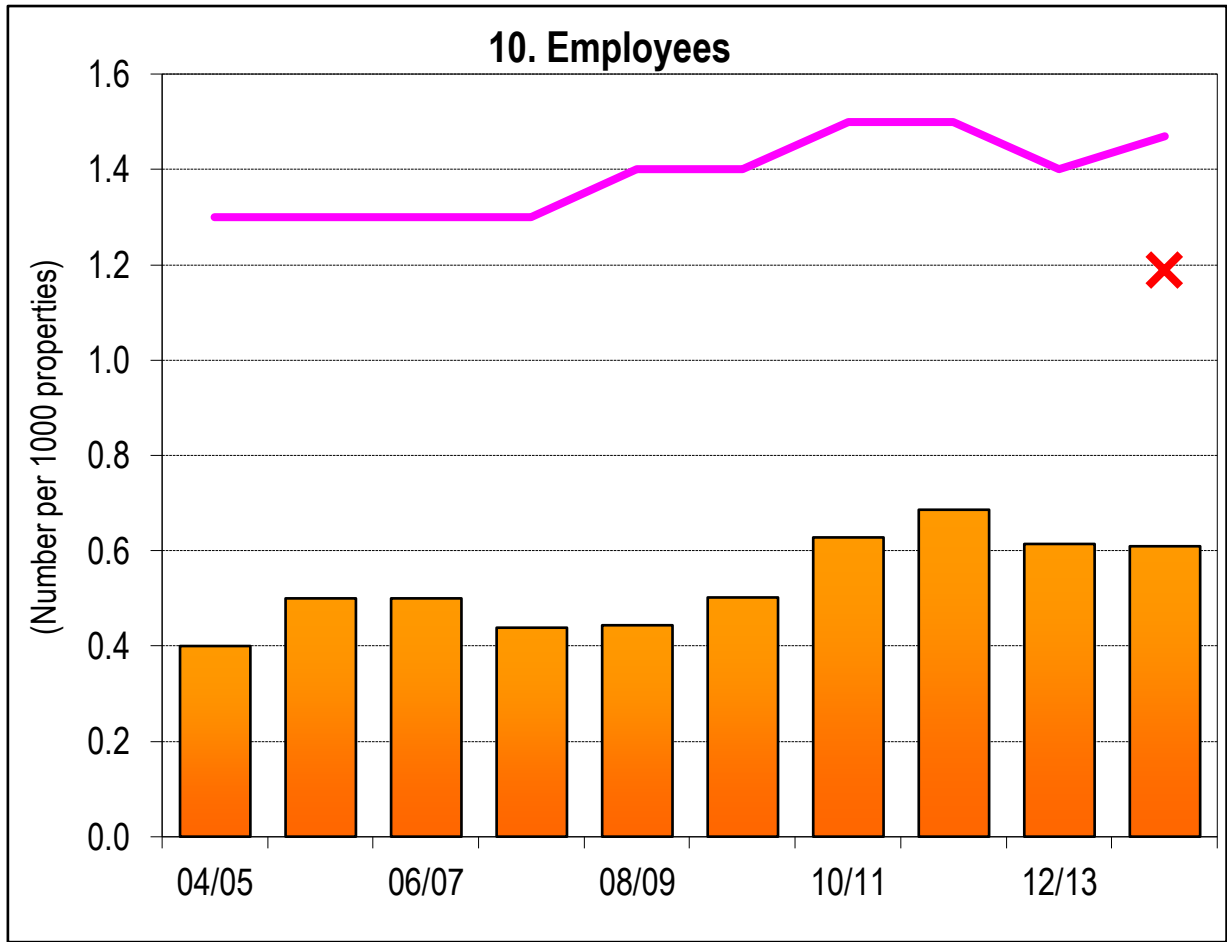
WATER QUALITY/CUSTOMER SERVICE



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/NRMMC 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