

Parques Shire Council

Fit for the Future Assessment of Water Supply and Sewerage



JUNE 2015

Parkes Shire Council

Fit for the Future

Assessment of Water Supply and Sewerage

HydroScience Consulting

A.B.N. 79 120 716 887

Email: hsc@hydroscience.com.au

Sydney Office

Level 1, 189 Kent Street

Sydney, NSW, 2000

Telephone: 02 9249 5100

Facsimile: 02 9251 4011

Byron Bay Office

6/64 Centennial Circuit

Byron Bay, NSW, 2481


Telephone: 02 6639 5600

Facsimile: 02 6680 9319

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Approved for Issue					
Issue	Author	Reviewer	Name	Signature	Date
2	AFR/HHA/ GAZ	AFR	Gidi Azar		26 June 2015

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1 Introduction

1.1 Background

In September 2014 the NSW Government's Office of Local Government (OLG) began rolling out its 1 billion dollar Fit for the Future program to strengthen NSW Local Councils. This program came about on the basis of recommendations from the Independent Local Government Review Panel (ILGPRP) regarding the attributes of a sustainable council.

As part of this program, NSW councils have been asked to submit a Fit for the Future improvement proposal by 30 June 2015. In submitting this proposal each Council will review its current situation and identify what they need to do to meet the attributes identified by the ILGPRP. The expected process for this is laid out in the OLG Fit for the Future - Guidance Material - Completing Template 2 (October 2014).

1.2 Parkes Water Supply and Sewerage

The water supply and sewerage businesses form a significant part of Parkes Shire Council's operations. Table 1 and Table 2 below show the relative importance of these businesses to Council, as reported in Parkes Shire Council's financial statements for the 2013/14 financial year.

Table 1: Water Supply and Sewerage Assets

Asset Class	Replacement Cost	Residual Value	Depreciation Expense
Water Supply (\$ million)	161	66	2.3
Sewerage (\$ million)	59	31	0.7
Total PSC Infrastructure (\$ million)	794	516	11
% Water Supply and Sewerage	28%	19%	27%

Table 2: Water Supply and Sewerage Income

Business	Income ¹
Water Supply (\$ million)	11.0
Sewerage (\$ million)	3.6
Total PSC Infrastructure (\$ million)	41.0
% Water Supply and Sewerage	36%

1. Excluding gain from asset disposal

Parkes Shire Council commissioned HydroScience to assess the Fit for the Future status of the water supply and sewerage business in recognition of the importance of these operations.

1.3 This Report

This report documents the assessment of Parkes Shire Council Fit for the Future status and improvement program. The assessment was carried out by HydroScience, working closely with Parkes Shire Council.

The review, including the report, is broken down into two main elements, as follows.

Current Performance Review of the current performance of the water supply and sewerage business. This includes compliance audit against requirements and guidelines.

Future Performance Review of the systems and plans Council has in place, and assessment of the likelihood of future compliance.

The report includes actions and recommendations identified as part of this assessment as important to ensure compliance adequate performance in the future. Combined these form Council's improvement program.

2 Current Performance

2.1 Scope

This section is an assessment of Parkes Shire Council (PSC) water supply and sewerage businesses current performance. The assessment was carried out against the following criteria:


- ☐ Fit for the Future criteria listed in the Council Improvement Program template issued by the NSW Government.
- ☐ The 19 best-practice management elements, defined by the NSW Government Best-Practice framework
- ☐ Integrated Planning and Reporting (IPR) requirements
- ☐ Performance assessment reports published by NSW Office of Water
- ☐ Financial indicators based on triple bottom line reports and from Council's financial statements.



The outcomes of this assessment are documented in this section.

2.2 Fit for the Future Template

In the OLG Template 2 - Council Improvement Proposal the Fit for the Future Section 2.4 applies to Water Utility Performance. A number of questions are asked, and the responses to the questions are summarised in Table 3

Table 3: Fit for the Future Template 2 Summary

No.	Question	Outcomes of this Review		Comments
1	Does your council currently achieve the requirements of the NSW Government Best Practice Management of Water Supply and Sewerage Framework?	Yes		With only one exception. Refer to Section 2.3.3
1A	If NO, please explain the factors that influence your performance against the Framework.	N/A		
2	How much is your council’s current (2013/14) water and sewerage infrastructure backlog?	There is no backlog of water supply and sewerage infrastructure ¹		The Strategic business plan shows no assets at Condition 5 (unserviceable) on a 1-5 scale. The only asset of condition 4 is the water treatment plant that is being upgraded. All other assets are condition 2 and 3

No.	Question	Outcomes of this Review		Comments
3	Identify any significant capital works (>\$1m) proposed for your council's water and sewer operations during the 2016-17 to 2019-20 period and any known grants or external funding to support these works: <ul style="list-style-type: none"> Proposed Works Timeframe & Cost Grants or external funding 	Council is planning to replace both the water treatment plant and the sewage treatment plant in the next two years		Council has 30 year capital works programs for water supply and sewerage, included in Appendix B
4	Does your council currently manage its water and sewerage operations on at least a break-even basis? (Yes or No)	Water Supply- Yes		
		Sewerage- Yes		
4a	If No, please explain the factors that influence your performance	N/A		
5	Identify some of your council's strategies to improve the performance of its water and sewer operations in the 2016-17 to 2019-20 period: <ul style="list-style-type: none"> Strategy Timeframe Anticipate Outcome 	Refer to Section xx		

2.3 Best-Practice Compliance

2.3.1 Scope and Methodology

Scope

This assessment was done as an external audit against the requirements of the Best-Practice Management framework.

We audited PSC Water Supply and Sewerage Services for compliance with Best-Practice Management for the year ended 30 June 2014. Andrew Fraser, Planning Manager of HydroScience, was the auditor.

The audit focussed on the 19 requirements listed in Table 4. For reference documents refer to Section 2.3.2.

Methodology

We have reviewed the documents and information provided by PSC for compliance against the requirements, documented in the Reference Documents listed in Section 2.3.2.

Where the requirement is to have a document (e.g. strategic business plan), we have reviewed the contents of the documents, their status, and their validity in terms of meeting the updated requirements.

Where appropriate we have also identified issues and actions identified in reports/ elements.

2.3.2 Reference Documents

The best-practice management (BPM) requirements are defined by the NSW Office of Water (NOW).

The best-practice management framework has been updated recently, with new guidelines and checklists superseding other requirements at various stages. We have audited the best-practice compliance of PSC's water supply and sewerage against the guidelines and other relevant documents that have been in operation in June 2014. These are listed below.

- ❑ Best-Practice Management of Water Supply and Sewerage Guidelines. NOW, 2007
- ❑ NSW Best-Practice Framework of Water Supply and Sewerage Framework. NOW (on Web site), May 2014.
- ❑ 2012-13 NSW Performance Monitoring Report - Appendix C: 2012-13 Best-Practice Management Implementation (listing the 19 elements)
- ❑ NSW Water and Sewerage Strategic Business Planning Guideline. NOW, 2011.
- ❑ Developer Charges Guidelines for Water Supply, Sewerage and Stormwater. NOW, December 2002.
- ❑ IWCM Generic Scope of Works. NOW 2008.



The following have become requirements after June 2014. These are relevant for PSC when updating any of the best-practice management documents.





- ❑ Water Supply and Sewerage Strategic Business Planning and Financial Planning Check List. NOW, July 2014.
- ❑ Integrated Water Cycle Management Check List. NOW, July 2014.
- ❑ Preparation and implementation of a NSW Health-compliant Drinking Water Management System (DWMS). This has become both a regulatory requirement and best-practice management requirement in September 2014.





2.3.3 Summary of Audit Outcomes


Table 4 summarises the outcomes of the audit. The table also shows the compliance as stated in the NSW 2012/13 Performance Monitoring Report.

Table 4: Best-Practice Management Summary

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit	Comments	
	Water Supply					
1	1	Strategic Business Plan and financial plan (incl. Health DWMS)	Yes	SBP		
				FP		Over 1 year old

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit		Comments
				DWMS		
	2 Pricing and Developer Charges					
2	2a	Full cost recovery minimal cross subsidies	Yes	Yes		2014 Operating Result \$4.7 M No cross subsidies
3	2b	Appropriate Residential Charges	Yes	Yes		Requirement for inclining block tariff removed
4	2c	Revenue for Residential Usage Charges >=75%			 	Council has reached 71% in 2014/15 and resolved to reach 75%
5	2d	Appropriate Non-Residential Charges	Yes	Yes		
6	2e	Development Servicing Plan with Commercial Developer Charges	Yes	Yes		2006 DSPs updated at CPI as advised by NOW. New DSPs commenced
7	3	Sound Water Conservation Plan Implemented	Yes	No		Yes when the new IWCM Strategy complete
8	4	Sound Drought Management Plan Implemented	Yes	Yes		Completed in 2014.
9	5	Complete performance Reporting by 15 September each year	Yes	Yes		2013/14 Draft reports received by PSC.

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit		Comments
10	6	Integrated Water Cycle Management Plan Commenced	Yes (Concept Study)	Yes		Issues Paper with NOW for comment.
Sewerage Services						
11	1	Strategic Business Plan and financial plan	Yes	SBP		
				FP		Over 1 year old
2 Pricing and Developer Charges (yes/No)						
12	2a	Full cost recovery minimal cross subsidies	Yes	Yes		<ul style="list-style-type: none"> 2014 Operating Result \$906K, No cross subsidy.
13	2b	Appropriate Residential Charges	Yes	Yes		
14	2c	Appropriate Non-Residential Charges	Yes	Yes		
15	2d	Appropriate Trade Waste Fees and Charges	Yes	Yes		
16	2e	Development Servicing Plan with Commercial Developer Charges	Yes	Yes		2006 DSPs updated at CPI as advised by NOW. New DSPs commenced
17	2f	Liquid Trade Waste regulation policy and approvals implemented	Yes	Yes		
18	3	Complete performance Reporting by 15 September each year	Yes	Yes		2013/14 Draft reports received by PSC.

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit		Comments
19	4	Integrated Water Cycle Management Plan Commenced	Yes (Concept Study)	Yes		Issues Paper with NOW for comment.

2.4 Integrated Planning and Reporting

While the best-practice management, addressed in 2.3.3, has been developed specifically for water supply and sewerage services, the integrated planning and reporting (IPR) framework applies to all Council's activities. The relevant requirements of IPR to the water supply and sewerage businesses, and the compliance, are summarised in Table 5.

Table 5: Integrated Planning and Reporting Compliance

Ref	Number	Requirement	Compliance in 2013/14 – Outcomes of this Audit		Comments
	Resourcing Strategy				
1	RS	Resourcing Strategy	Yes		Requires 4 yearly review in 2016, however IWCM or SBP may suffice
	Asset Management Plans (AMPs)				
2,2	Water Supply AMP	IPR Asset Management Policy, Strategy and Plan requirements	Yes		Requires 4 yearly review in 2016
3	Sewerage Services AMP	Ditto	Yes		Requires 4 yearly review in 2016

2.5 NSW Office of Water Reports

2.5.1 Introduction

The NSW Office of Water collects data and publishes annual reports on the performance of local water utilities in NSW. The data is used to generate two types of reports:

- ☐ Triple bottom line (TBL) reports for each individual local water utility (LWU)
- ☐ Performance assessment reports, for all LWUs

The latest available TBL reports and performance report are for 2013/14.

2.5.2 TBL Reports

Reports are prepared for water supply and for sewerage. They detail the performance of the LWU on 56 parameters for water supply and 57 parameters for sewerage. Rankings are given in quintiles and range from 1 (in the top 20% of LWUs) to 5 (in the bottom 20%). Two sets of rankings are given: for LWUs of similar size (3000 – 10,000 connections) and on a state-wide comparison.

Based on these reports, PSC performs well, with most parameters scored 3 and above. Only 8 parameters in the water supply report and 7 in the sewerage report are scored 5. On many parameters PSC achieved ranking of 1 and 2, which is better than median.

The TBL reports are included in Appendix C. Discussion on the financial indicators in the TBL reports is included in Section 2.6.

2.5.3 Performance Assessment Report

This section contains selected charts from the 2013/14 NSW Water Supply and Sewerage Performance Monitoring Report, showing the relative location of Parkes Shire Council among the 105 regional local water utilities (LWUs) in NSW.

The colours used in the graphs are based on the size of the LWU. The colour legend appears on the right. PSC is in Group 2.

COLOUR LEGEND	
Group 1	>10,000 properties
Group 2	3,001-10,000 properties
Group 3	1,501-3,000 properties
Group 4	200-1,500 properties
	Metropolitan utilities

Typical Residential Bill

The combined customer bill for water supply and sewerage is shown in Figure 1. PSC's customers enjoy relatively low bill, approximately in the lower quartile of water supply and sewerage customers in NSW

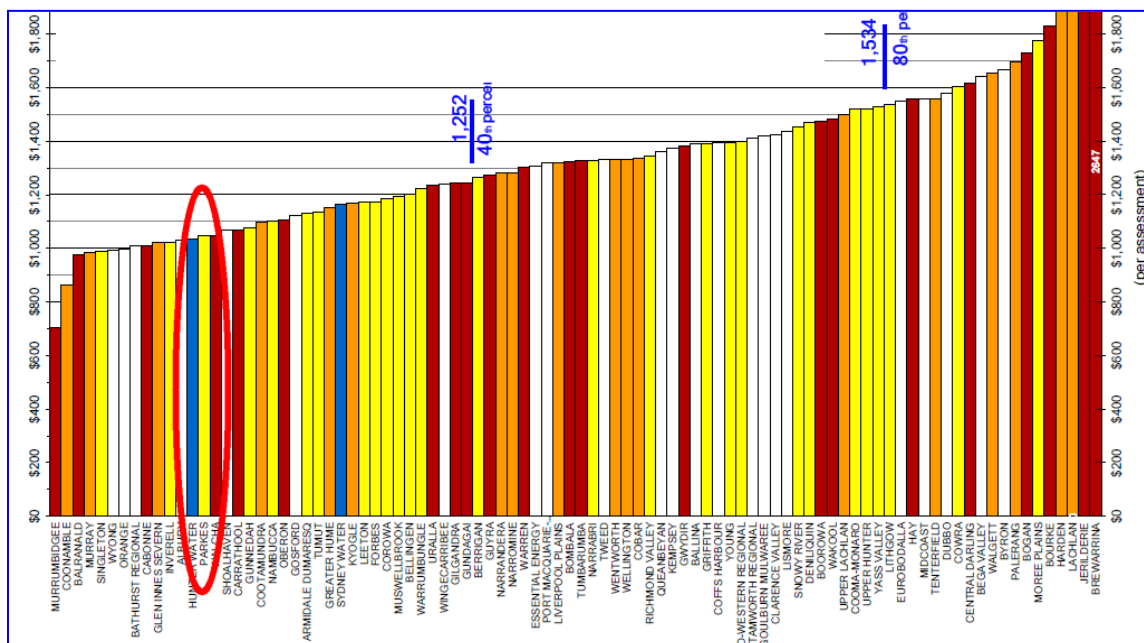


Figure 1: Typical Residential Bill Water Supply and Sewerage

Economic Real Rate of Return

Figure 2 shows a negative real rate of return (combined for both Water Supply and Sewerage Services). PSC performs well with IRRR of over 1%.

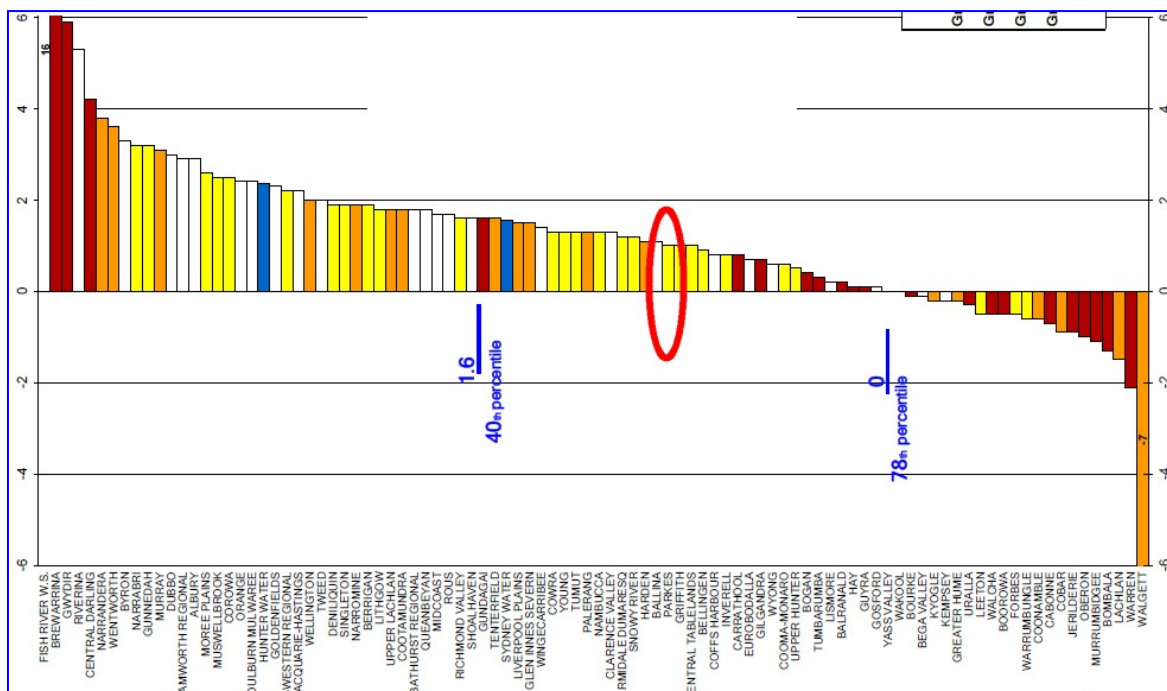


Figure 2: Economic Real Rate of Return for Water Supply and Sewerage

Operating Costs

The operation, maintenance and administration (OMA) costs per property of the water supply and Sewerage businesses are shown in Figure 3 and Figure 4 respectively. PSC operating costs are in the high range of LWUs for the water supply, reflecting the high cost of pumping, and below the median for sewerage.

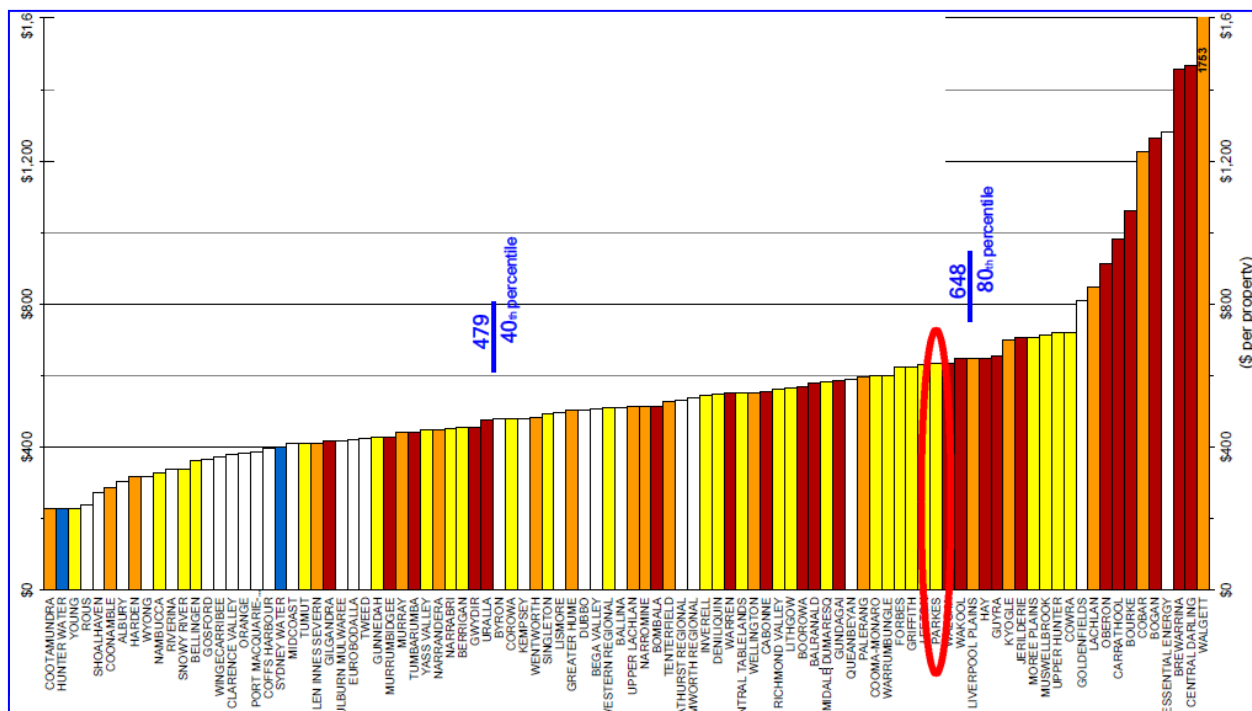


Figure 3: Water Supply OMA Costs per Property

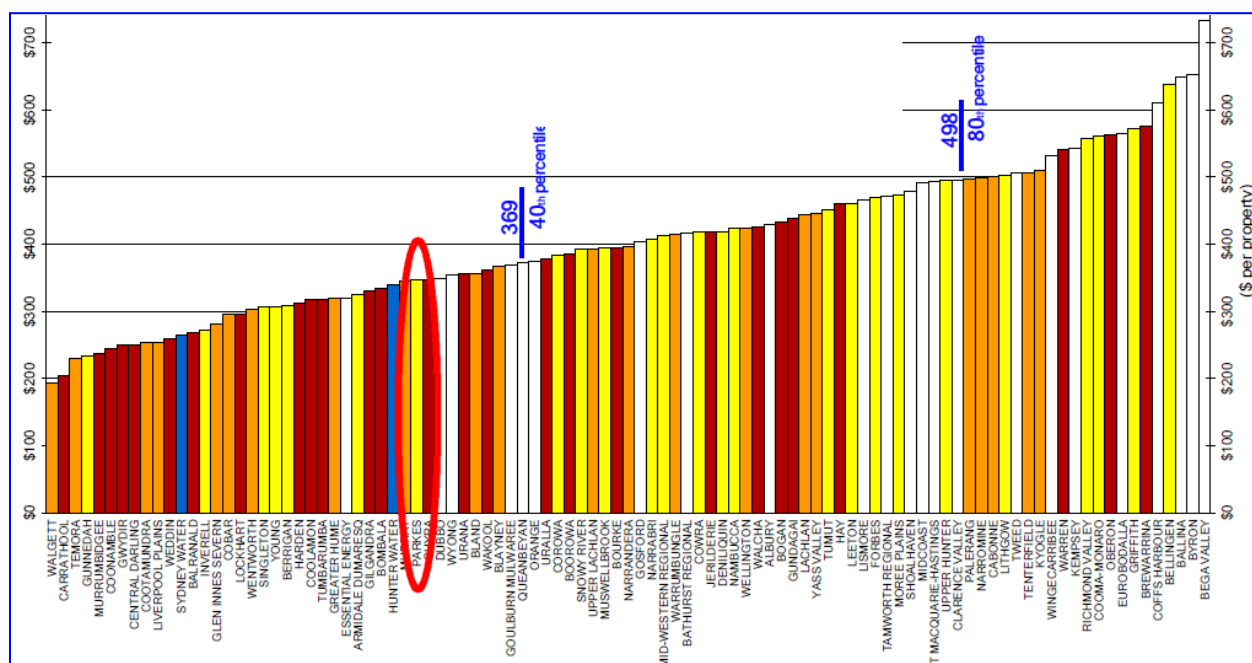


Figure 4: Sewerage OMA Costs per Property

Management Costs

The management costs per property of the water supply and Sewerage businesses are shown in Figure 5 and Figure 6 respectively. PSC management costs are in the mid-range of LWUs for both water supply and sewerage.

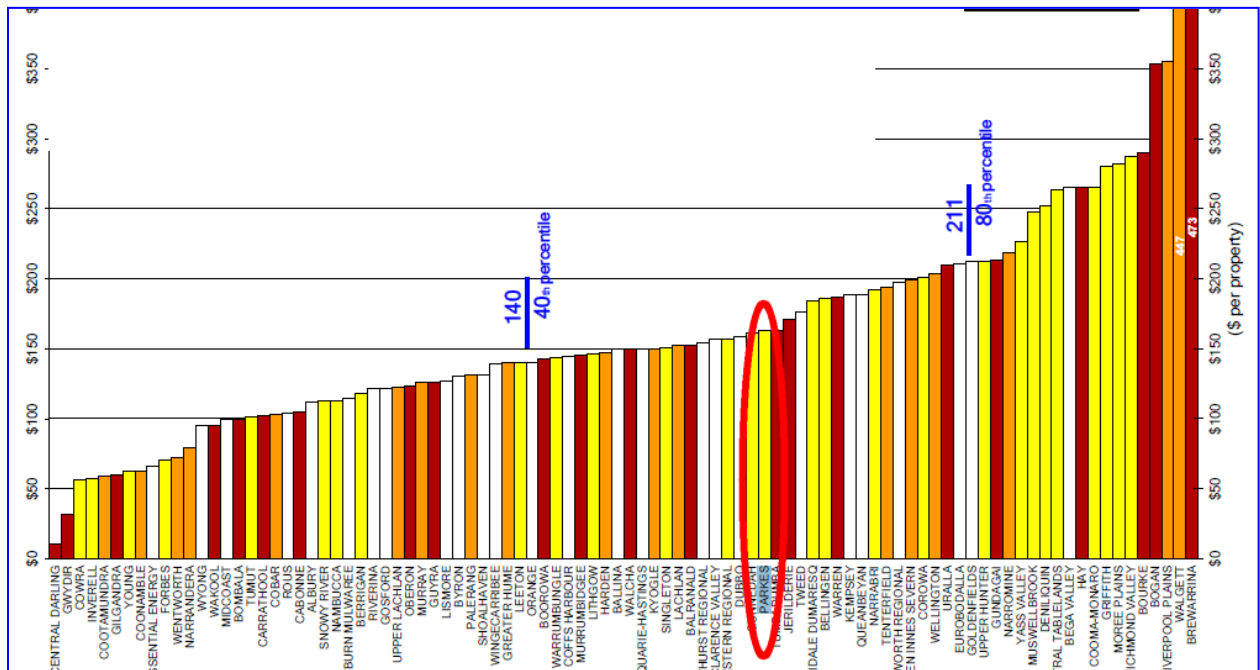


Figure 5: Water Supply Management Cost per Property

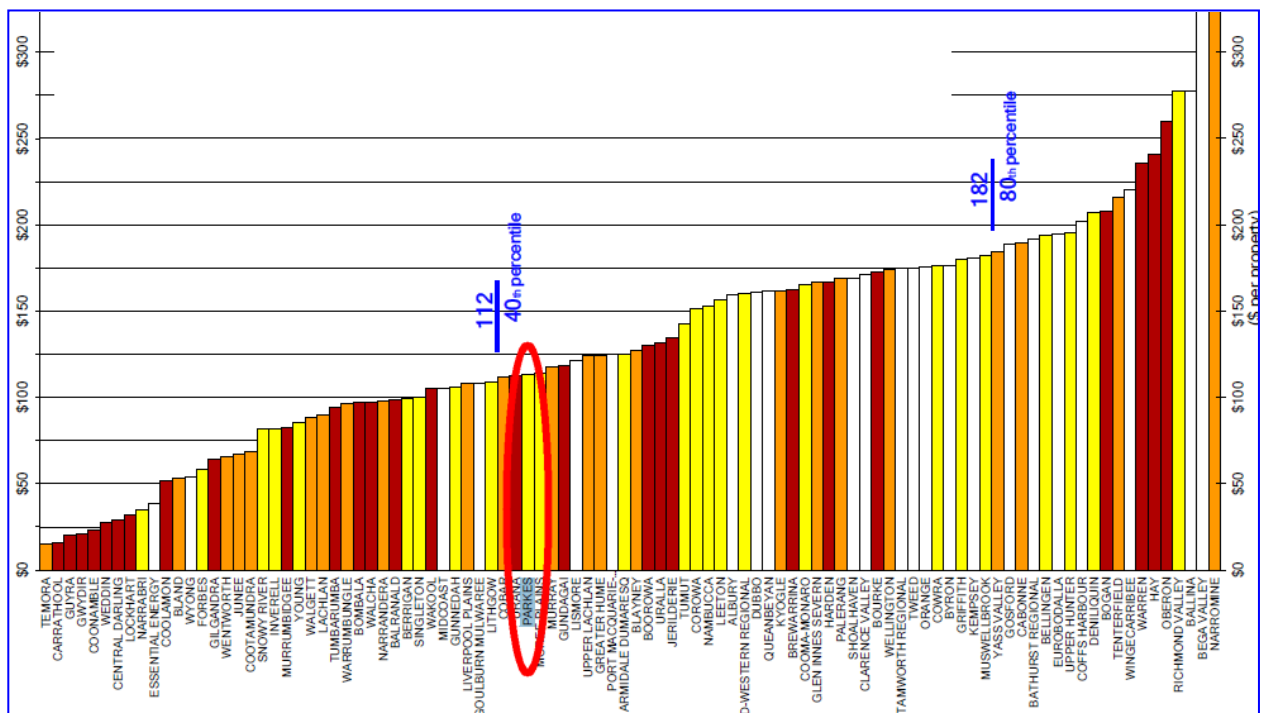


Figure 6: Sewerage Management Cost per Property

Developer Charges

The typical developer charges per equivalent tenement (ET) for the water supply and Sewerage services are shown in Figure 7 and Figure 8 respectively. The developer charges in PSC are at the high end for water supply and below median for sewerage, compared to other LWUs.

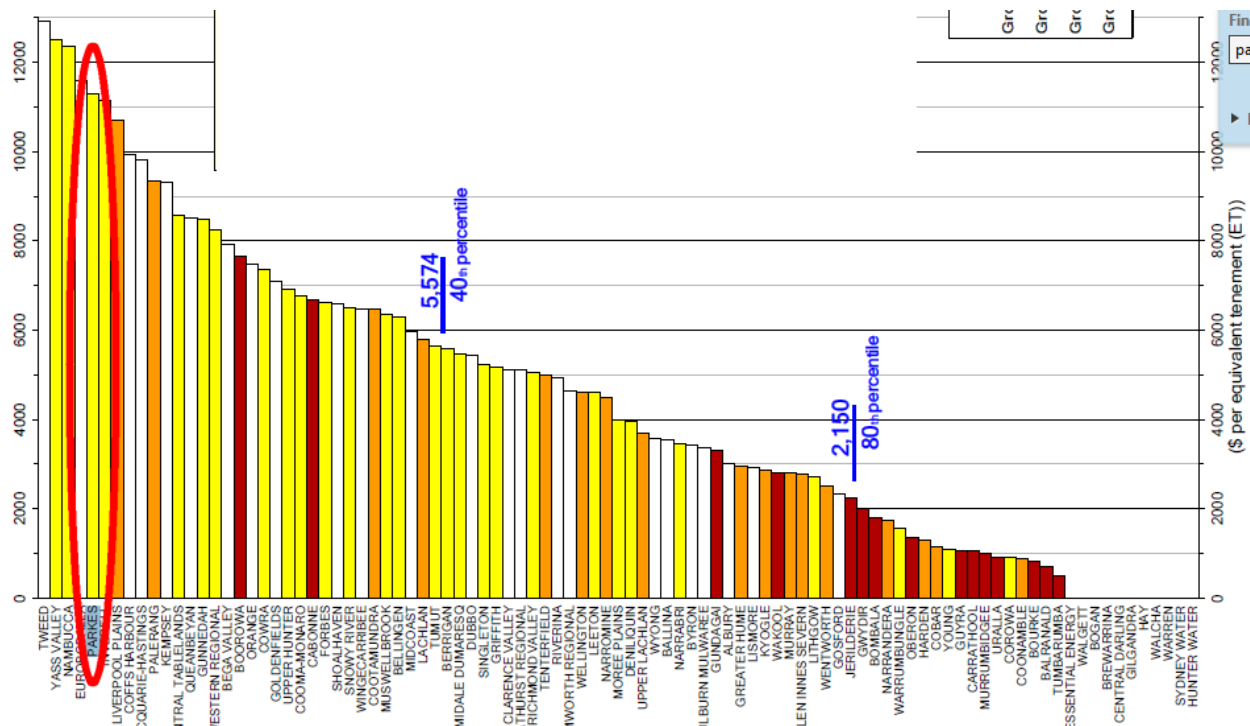


Figure 7: Water Supply Developer Charge per ET

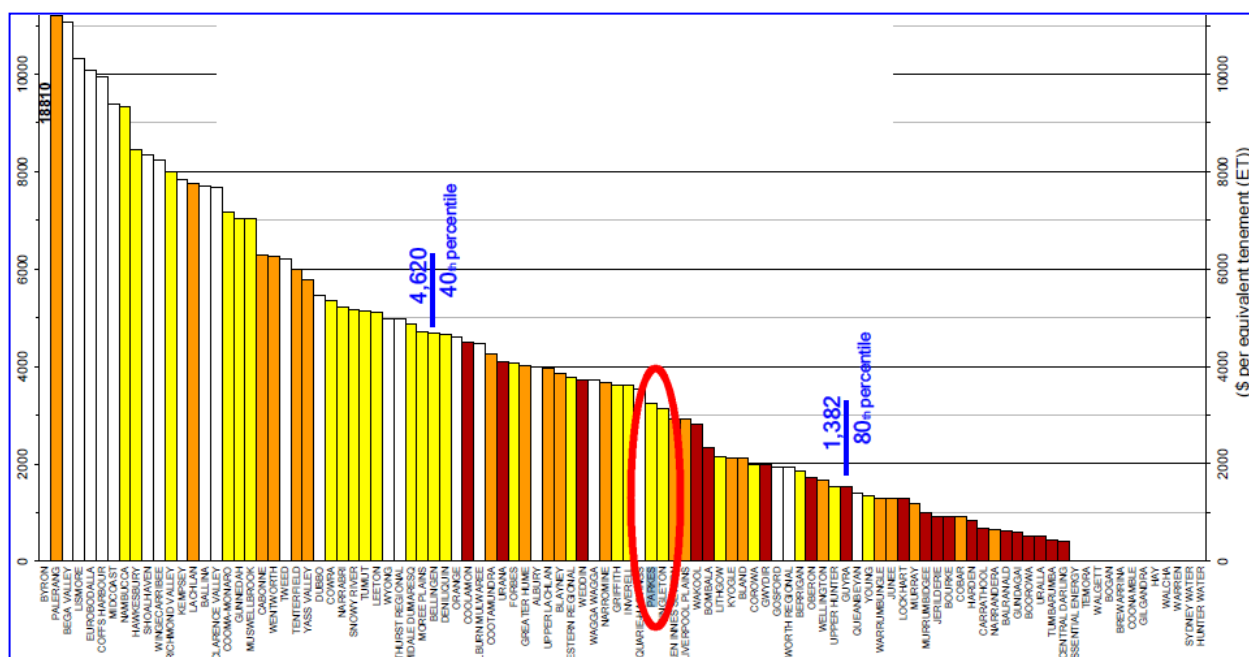


Figure 8: Sewerage Developer Charges per ET

2.6 Financial Indicators

As part of the performance assessment of LWUs, the NSW Office of Water prepares triple bottom line (TBL) reports for each LWU, detailing its performance in relation to other water utilities in the state.

The financial indicators for the 2013/14 financial year are shown in Table 6 and Table 7. In these tables, the rankings are in quintiles and range from 1 (in the top 20% of LWUs) to 5 (in the bottom 20%). As can be seen from these tables, PSC performance is comparable to other water utilities. In the group of 3000 – 10,000 connections, PSC has only one low ranking (5) ranking. The TBL reports are included in Appendix C.

Table 6: Water Fund Current Financial Position (From 2013/14 TBL Reports)

Financial Indicator	Parkes Result	Statewide Median	Ranking	
			Similar Size LWUs	All LWUs
Typical Residential Bill 2014/15 (\$/assessment)	623	582	3	2
Economic Real Rate of Return (%)	0.9	1.2	4	3
Operating Cost (OMA) per property (\$)	634	400	5	4
Management Cost per property (\$)	163	140	3	4
Residential Revenue from Usage Charges (% of residential bills)	66	73	3	3
Typical Developer Charge for 2014/15 (\$/ET)	11,300	5,500	1	1

Table 7: Sewerage Fund Current Financial Position (From 2013/14 TBL Reports)

Financial Indicator	Parkes Result	State-wide Median	Ranking	
			Similar Size LWUs	All LWUs
Typical Residential Bill 2014/15 (\$/assessment)	424	669	1	1
Economic Real Rate of Return (%)	1.4	1.5	3	3
Operating Cost (OMA) per property (\$)	346	430	2	2
Management Cost per property (\$)	114	161	2	3
Typical Developer Charge for 2014/15 (\$/ET)	3250	5100	4	3

Appendix A

Audit Notes

3 Water Supply – Audit notes

3.1 Strategic Business Plan and Financial Plan for Water and Sewerage

We reviewed PSC's 2014 SBP for Water Supply and Sewerage to ensure that it included the following components:

- ☐ Operating environment review
- ☐ Levels of service
- ☐ Service delivery
- ☐ Customer service plan
- ☐ Total asset management plan (including operation, maintenance and capital works)
- Work force plan

Financial plan

We reviewed the financial plans for water supply and sewerage to ensure that it covers a period of at least 20 years and it reports the lowest required stable typical residential bill (TRB).

We find that this SBP and Financial Plan were, at the time of their preparation, prepared in accordance with the then Best-Practice Management requirements.

We reviewed the updating requirements, as follows.

- ☐ The SBP was required to be updated every eight years (2014 Strategic Business Plan and Financial Plan Check List).
- ☐ The Financial Plan requires annual updating (2011 Strategic Business Plan Guidelines).

Councils February 2014 SBP for Water and Sewerage was compliant with the then 2011 SBP requirements.

Councils February 2014 Financial Plan was compliant, however is required to be updated annually and, as this was prepared in late February 2014 is now due for updating.

From conversations with Council staff we understand that NOW is currently reviewing PSC's IWCM Issues Paper. We note that if PSC, as currently is expected, completes its IWCM Strategy Study then the next stage will be to review the SBP within for 4 years. Council may, however decide to prepare one earlier.

NSW Health's guidelines for drinking water management systems (DWMS)

The July 2014 IWCM and Strategic Business Plan and Financial Plan Check Lists refer to the new need to comply with NSW Health's guidelines for drinking water management systems (DWMS) 2013 by developing and submitting a DWMS to Health by Sept 2014.

An initial version of PSC's DWMS was completed in April 2014 and this was provided to NSW Health. We understand that a final Dec 2014 version was produced that addressed NSW Health comments.

Council's DWMS is compliant.

A detailed water quality risk assessment was undertaken for the Parkes DWMS – Drinking Water Manual, Viridis Consultants for NSW Health, July 2014.

Issues and Actions

❑ Major Issues and Actions Identified from DWMS

The April 2015 Implementation report identifies the following major action outstanding (beyond procedural, monitoring and educational actions):

- **Issue:** work on specification for online chlorine dosing and monitoring with alarms for B-Section. **Action:** Council is in the process of replacing the water treatment plant. This will improve the water quality in Parkes – Peak Hill. Council is planning on-line monitoring of key water quality parameters in the B-Section.

The DWMS risk assessment identified the following unacceptable residual risks:

- **Issue:** for the Parkes-Peak Hill scheme, from bacteria, protozoa and disinfection by-products (DBPs). **Action:** Council is in the process of replacing the water treatment plant.
- **Issue:** for the B-section scheme from bacteria for the hazardous events of receiving out-of-spec water from Forbes Shire Council, underdosing of chlorine at re-chlorination, and backflow from rural customers. **Action:** Council is planning on-line monitoring of key water quality

❑ Major Issues and actions identified from SBP for Water and Sewerage

From the 2014 SBP Major Issues and actions identified, programmed but not complete

- **Issue:** Service provision to backlog and urban growth areas. **Action:** Council has in place a capital works program to address these issues (refer Appendix A).
- **Issue:** systematic rehabilitation and renewal of ageing assets. **Action:** Council has in place a capital works program including significant investment in asset renewal (refer Appendix A).
- **Issue:** Implementation of the recommendations made in the IWCM (then 2005), particularly with regards to water supply security. **Actions:** Council is in the process of updating the IWCM. Any actions arising from the new IWCM will be implemented.
- **Issue:** Key capital work outcomes Council plans to achieve over the next 10 years included below.

Table 3 – Key capital works outcomes

Action	Current Status
Endeavour Dam upgrade.	Project is now well underway.
Renewal and upgrade of river intake structure and raw water pump.	Project has commenced.
Renewal and upgrade of river intake structure and raw water pump.	Project is out for tender.
New clear water reservoirs with connection pipe works	Advise
New Sewage Treatment Plant for Parkes.	Project has commenced.
Construction of new mains to backlog areas	Advise

Action: Implement Capital Works Plan

- **Issue:** Significant increase to the TRB for sewerage services. **Action:** Implement the TRB increase over a number of years in order to reduce the impact on customers
- ❑ Major Issues and actions needed
 - **Issue:** Imminent NOW PSC IWCM Strategy review **Action:** Complete IWCM and implement actions.
 - **Issue:** Requirement to revise DWMS every 4 years **Action:** Prepare revised DWMS in 2018.

3.2 Pricing and Developer Charges

The following are the results of the audit.

a) 2a Full cost recovery minimal cross subsidies.

We reviewed the financial statements and find that PSC's water fund achieved cost recovery showing an operating result of \$4.7 M in 2014. There was no cross subsidy.

Council is compliant.

b) 2b Appropriate Residential Charges.

We reviewed the water supply charges and find that the two-part tariff complies with BPM requirements.

Council is compliant.

Note: Recent NOW pricing Information sheets states that the requirement for an inclining block tariff is. Council could consider removing inclining block.

c) 2c Revenue from Residential Usage Charges is at least 75% of residential income.

The element target is stated at 75% NOW's recent Pricing Information Sheet 3 indicates that 75% of revenue must come from usage charges for LWUs with greater than 4,000 connections. This applies as PSC had 5,880 connections in 2012-13.

In 2013/14 PSC did not achieve this parameter (performance was 66%). In the following year this ratio increased to 71% and Council resolved to achieve 75% in 2015/16. This information was submitted to the Minister for Primary Industries / Minister for Lands and Water, who, in a letter dated 3 June 2015, agreed to release a payment from the NSW Government that was pending achievement of the 75% rule.

Council will be compliant in 2015/16.

Issues and Actions identified

Issue: non-compliant Residential usage access ratio, Action: Adopt revised fee structure

d) 2d Appropriate Non-Residential Charges.

We reviewed PSC's 2014-15 Operational Plan and find that the non-residential charges are compliant with best-practice requirements. PSC's access charge increases as the square of the meter size.

Council is compliant.

e) 2e Development Servicing Plan (Water Supply and Sewerage Services) with Commercial Developer Charges.

We have reviewed the 2006 Draft DSP for Water and Sewerage. It is not clear if Council adopted the DSP however it would have met the 2002 DSP guidelines requirements.

This DSP would have been due for review after 6 years in 2012 and so is out of date.

NOW prepared draft 2012 DSP guidelines to supersede the 2002 guidelines but has not issued the final version.

Without of date DSPs NOW has authorised Councils to update the Developer charges at the CPI which PSC has done.

HydroScience has been commissioned by Centroc to prepare new DSP for Water and Sewerage for PSC.

NOW staff have indicated that the new DSP guidelines are expected to be confirmed in the next 6 months. If this is so it would be in time for PSC's DSP to be updated in a compliant manner.

Council is compliant. Council's commitment to updating the DSP ensures that it will continue to comply.

Issues and Actions identified

- ❑ Major Issues and actions needed
 - Issue: DSP requires update. Action: Complete DSP update Council has recently commissioned.

3.3 3 Sound Water Conservation Plan Implemented

Council staff were unable to provide an existing Parkes Demand Management Plan.

A demand projection report was prepared by MWH in 2005 as a component of the development of the IWCM. However this did not address all the requirements for a demand management plan and, being nine years old, would be out of date.

The 2014 IWCM and Strategic Business Plan and Financial Plan Check Lists removes the requirement for future stand-alone demand management plans subsuming them into the new IWCM/SBP process.

The July 2014 IWCM Strategy checklist requires the review and development (9B-F) of demand management options, thereby superseding and the required outcomes of a demand management plan and satisfying these requirements.

We understand that Council has recently provided a draft IWCM Issues Paper for NOW review. Included in this will be the demand analysis that would have been a major component of a water conservation plan (Topic 6). The outcome of this review is pending, however the requirements (see

Note 27 p14 of the checklist) cannot be completed until Topic 9 is addressed. This Topic cannot be completed until after the Issues Paper has been approved by NOW.

The draft IWCM Issues Paper states that Council does have demand management measures underway including:

- ☐ Permanent Water Conservation Measures (Level 1 Restrictions)
- ☐ On-going community education programs
- ☐ Increased usage charges offset by lower connection charges
- ☐ Active leak detection program
- ☐ Water mains renewal program

Council is not currently compliant; however with the progress expected in the next stage (after Issues Paper) on the IWCM Strategy (demand options) Council is expected to soon be compliant.

Issues and Actions identified

- ☐ Major Issues and actions identified
 - Issue: Council does not have a current Water Conservation Plan or implemented the actions identified from Topic 9 of the July Checklist, Action: Complete the IWCM

3.4 4 Sound Drought Management Plan Implemented

We reviewed PSC Drought Management Plan, January 2012. We find that that the plan meets the 2007 checklist requirements and PSC achieved compliance with this element. The Drought management Plan will need to be reviewed (Topic 6.6) when the SBP is next updated.

Parkes Drought Supply Actions

Parkes Shire is pursuing key drought actions in the SBP actions described above.

Issues and Actions identified

- ☐ Major Issues and actions identified
 - Issue: Council will need to review components of the drought management plan next time the SBP is updated. Action: Complete revised SBP within 4 years of completing IWCM Strategy.

3.5 5 Complete Performance Reporting by 15 September each year

We received an email from PSC containing draft TBL reports from NOW confirming that the reporting data required was provided to NOW before 15 September 2014. On this basis we find that PSC is compliant with this element.

Council is compliant.

In the 2012-13 TBL report Council was in the bottom quintile ranking (for 3,001 to 1000 connections councils) for performance against:

- ☐ 4 New residences connected to water supply (0%)
- ☐ 17 Revenue per property - water (\$1170/property)
- ☐ 34 Real losses (leakage) (130L/service connection/day)
- ☐ 36A Net greenhouse gas emissions - WS & Sge (30 net tonnes CO2 - equivalents per 1000 properties)

- ❑ 45 Net Debt to equity - water supply and sewerage (-30%)
- ❑ 49 Operating cost (OMA) per property (\$617/prop)
- ❑ 53 Pumping cost (\$214/prop)
- ❑ 55 Energy cost (\$173/prop)

Issues and Actions identified

- ❑ Major Issues and actions needed
 - Issue: Low ranking in TBL for above factors Action: Review causes of performance and address

3.6 6 Integrated Water Cycle Management Plan Commenced

PSC's existing 2005 IWCM is out of date. Council has commenced preparation of an updated IWCM and has provided a draft IWCM Issues Paper to NSW Office of Water.

Council is compliant.

Issues and Actions identified in draft Issues Paper submitted to NOW.

- ❑ Major Issues and actions identified, programmed but not complete

From the Draft Issues Paper the following major Issues/Actions have been identified

- Actions: From the Draft Issues Paper (p ix) several key infrastructure solutions from the 2005 IWCM are now in the advanced stages of planning and construction and are expected to commence in 2015 or 2016 for the following items:
 - The Lachlan River Intake
 - Modification of the existing raw water transfer network
 - 16 ML/day capacity Parkes Water Treatment Plant
 - 3 ML/day capacity Parkes Sewage Treatment Plant
- Action: In addition, a flood safety upgrade to Lake Endeavour Dam is underway although not identified in 2005. The draft IWCM states that a feasibility review of all adopted options (as modified) will be undertaken during the preparation of the Parkes IWCM Strategy 2015
- Issue: page xiv of the executive summary indicates that the water balance for PSC indicates that the typical yield of the combined water sources should be sufficient to satisfy demands assuming:
 - best practice demand management programs are fully implemented,
 - North Parkes Mine demands are contained to an average of 2500 ML/annum, and
 - High Security Licences are maintained at current levels.
- Issue: Parkes STP has condition odour, nutrient removal, recycled water and long-term capacity issues Action: The Parkes IWCM Strategy – 2015 Review will reconsider alternative recycled water solutions that seek to reduce demands for potable water or reduce loads of pollutants discharged from the STP in a cost effective way.

4 Sewerage – Audit Notes

4.1 1 Strategic Business Plan and Financial Plan

We reviewed the 2014 PSC Strategic Business Plan for Sewerage Services.

Our findings with regard to this element are similar to the finding in regards to the Strategic Business Plan for Water Supply. Please refer to Section 2.3.1.

4.2 2 Pricing and Developer Charges (Yes/No)

The following are the results of the audit.

a) 2a Full cost recovery minimal cross subsidies

We reviewed the financial statements and find that PSC complies with this requirement. Special Schedule 5 item 16 indicates that in 2014 the sewerage fund had operating results of \$906K and that there was no cross subsidy.

Council is compliant.

b) 2b Appropriate Residential Charges.

We reviewed the sewerage charges and find that the two-part tariff complies with BPM requirements.

Council is compliant.

c) 2c Appropriate Non-Residential Charges.

We reviewed PSC Fees and Charges and find that the non-residential charges are compliant with BPM requirements.

Council is compliant.

As with the water supply tariff, the access charge fully meets the requirement to increase proportionate to the square of the pipe size.

d) 2d Appropriate Trade Waste Fees and Charges.

We reviewed the trade waste charges and find that they are compliant with BPM requirements.

Council is compliant.

Page 48 of PSCs Operations Plan details TW pricing requirements. Council is compliant.

e) 2e Liquid Trade Waste Regulation Policy and Approvals.

We reviewed PSC Liquid Trade Waste Policy (2007) and find that PSC basically complies with this requirement to have an approved policy. Council has provided evidence of regulating trade waste dischargers and that approvals issued based on the policy are required.

New TW guidelines came out in 2009. Council should update the TW policy using the 2009 template in Appendix D.

Council is basically compliant however a review based on the 2009 guidelines is appropriate.

. Issues and Actions identified

❑ Major Issues and actions needed

- Issue: 2007 TW Policy needs to be reviewed based on 2009 TW guidelines. Action: Revise TW Policy.

f) 2f Development Servicing Plan with Commercial Developer Charges.

We reviewed the Developer Servicing Plan in Section 3.2.

4.3 3 Complete performance reporting by 15 September each year

We received an email from PSC containing draft TBL reports from NOW confirming that the reporting data required was provided to NOW before 15 September 2014.

Council is compliant.

In the 2102-13 TBL sewerage services report Council was in the bottom quintile ranking (for 3001 to 10,000 connection councils) for performance against:

- ☐ 14 Non-residential sewer usage charge (116c/kL)
- ☐ 15 Revenue per property - sewerage (\$610)
- ☐ 37a Sewer overflows (61 per 100 km of main)
- ☐ 56 Sewer main cost per property (\$128)
- ☐ 57 Capital Expenditure per property - Sewerage (\$110)

Issues and Actions identified

- ☐ Major Issues and actions needed
 - Issue: Low ranking in TBL for above factors Action: Review causes of performance and address

4.4 4 Integrated Water Cycle Management Plan Commenced

We reviewed the IWCM in the water section above.

5 IPR Review Notes

5.1 Resourcing Strategy and General 10 year Asset Management Plan

In relation to Fit for the Future water asset related issues the key IPR documents are the Resourcing Strategy and the Asset Management Plans for Water and Sewerage.

PSC has a current Resourcing Strategy (2012-2016) that is made up of:

- ❑ 10 year financial plan
- ❑ 4 year workforce plan
- ❑ 10 year asset management Strategy (2013-14 to 2022-2023) which includes:
 - Asset Policy
 - Asset Strategy
- ❑ 4 year financial forecast

Council is compliant with regard to IPR Resourcing Strategy and Water and Sewerage Asset Management Plans.

This is not only because its documents meet the Office of Local Government guidelines, but also because Council successfully obtained an IPART reviewed special rate rise based on these documents.

Table 8 provides a summary of the 10 year Asset Management Strategy relating to the water supply and sewerage related financial components:

Table 8: Financial Status of the Assets

Asset Class	Replacement Cost (\$000)	Residual Value (\$000)	Depreciable Amount (\$000)	Depreciated Replacement Cost (\$000)	Depreciation Expense (\$000)
Water	\$ 178,993	\$ 9,671	\$ 169,322	\$ 79,532	\$ 2,595
Sewerage	\$ 54,507	\$ 9,671	\$ 169,322	\$ 79,532	\$ 2,595
All Council Asset Classes (incl. water, sewerage, transport, buildings etc.)	\$760,741	\$256,965	\$503,775	\$491,904	\$8,754

Source: Table 2 in Councils 2012 10 Year Asset Management Strategy (2013-14 to 2022-2023)

At 2012 Water and Sewerage Assets represented 31% of Councils asset replacement value.

Note: s15 of the 2011 SBP Guidelines states that the SBP may replace the water and sewerage components of the Resourcing Strategy.

5.2 Sewerage Asset Management Plan (AMP) - 2013

This Asset Management plan is considered compliant.

This Asset Management Plan is supported by a 'Core' infrastructure Risk Management Plan.

For this and the Water Supply Asset Management Plan the Infrastructure Risk Management Plan identifies critical risks under "Extreme" and "High" categories. Extreme - requiring immediate corrective action AND High' – requiring prioritised corrective action.

Issues and Actions identified

- ❑ Major Issues and Actions planned (Table 5.2: Critical Risks and Treatment Plans)
 - **Issue:** Risk Ranking H - Parkes Sewer Treatment Works (STW) The existing trickling filter plant of the STW is unable to produce effluent to meet EPA and other standards. **Action:** Construct new STW components as necessary to replace aged structural, electrical and mechanical components of STW (\$18.5M). Status: Project commenced.
 - **Issue:** Risk Ranking H/M – Over 1500 buried sewer pipes, total length exceeding 76km. are Earthenware with pipe diameter 150mm. Council's CCTV surveys (2012) showed root infiltration and collapse inside some pipes. Further deterioration can cause complete pipe failure. **Action:** Undertake renewal or replacement as necessary. Phase out program for renewal or replacement of critical pipes.
 - **Issue:** Risk Ranking H/M - Around 100 buried pipes of (non EW) identified with condition grading 4 or above. Council's CCTV surveys (2012) showed root infiltration and collapse inside some pipes. These can cause severe under performance. Further deterioration can cause complete pipe failure. **Action:** Undertake renewal or replacement as necessary. Phased out program for renewal or replacement of critical pipes.

5.3 Water Supply Asset Management Plan (AMP) - 2013

This plan is laid out in a similar fashion to the Sewerage Asset Management Plan (AMP) - and is considered compliant.

This Asset Management Plan is supported by a 'Core' infrastructure Risk Management Plan. The Infrastructure Risk Management Plan identifies critical risks under "Extreme" and "High" categories. Extreme - requiring immediate corrective action AND High' – requiring prioritised corrective action.

Issues and Actions identified

- ❑ Major Issues and Actions planned (Table 5.2: Critical Risks and Treatment Plans)
 - **Issue:** Risk Ranking M - Parkes WTP has ability to treat only 25 to 35% of treatment capacity potentially causing Inability to meet compliance as required with Australian Drinking Water Regulations. **Action:** Significant upgrade to existing treatment plant or construct a new WTP - Second option of construction of a new WTP is currently being planned (\$22M). Status: Project commenced.
 - **Issue:** Risk Ranking H -Lake Endeavour Dam Spillway of the dam wall is assessed to have a HIGH'C' Flood Consequence Category (FCC) rating of NSW Dams Safety Committee. It is estimated that the existing spillway is capable of handling only approximately 40% of this peak inflow (AEP of 1 in 1,250) before embankment is at the point of being overtopped. **Action:** Designs, proposals and funding for flood security upgrading and dam strengthening completed. Construction works expected to commence shortly (\$8.5M). Status: Project is well under way.

Appendix B

30 Years Capital Works Programs

Water Supply 30 years Capital Works Program

						1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	Backlog (improved LOS)	Growth	Renewals	Check	Total estimate	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39	2039/40	2040/41	2041/42	2042/43
Augmentation																																				
Survey,Investigation & Design - Council Funded	20%	0%	80%	100%	-																															
Endeavour Dam Upgrade to 0.7 PMF(50%)	20%	0%	80%	100%	8,500,000	500,000	5,000,000	3,000,000																												
Dams Transfer Upgrade(50%)	20%	0%	80%	100%	718,075					718,075																										
Demand Measure Implementation																																				
Active Leak Detection	0%	0%	100%	100%	450,000				20,000					20,000				350,000						20,000					20,000				20,000			
Recycled Water Main																																				
New Ring Main (50% Federal Grant)	20%	80%	0%	100%	2,961,250			2,220,938	740,313																											
Engineering Works (50% Federal Grant)	20%	80%	0%	100%	3,424,750			1,712,375	1,712,375																											
Chlorination - (50% Federal Grant)	20%	80%	0%	100%	270,375			135,188	135,188																											
Reservoir 19ML (50% Federal Grant)	20%	80%	0%	100%	3,358,058			1,679,029	1,679,029																											
Storage																																				
New Storage Reservoir	20%	80%	0%	100%	6,190,000				1,493,500	1,493,500					1,601,500	1,601,500																				
Connection Pipework	20%	80%	0%	100%	481,530				118,965	118,965					121,800	121,800																				
Water Sources																																				
River Intake Structure	20%	20%	60%	100%	3,477,600			1,738,800	1,738,800																											
Raw Water Pump	20%	20%	60%	100%	1,050,000			525,000	525,000																											
Water Treatment																																				
Survey,Investigation & Design - Council Funded	40%	40%	20%	100%	300,000	100,000	200,000																													
Water Treatment Plant (New) - Construction (70%)	40%	40%	20%	100%	22,500,000			500,000	11,000,000	11,000,000																										
Other																																				
New Services	20%	80%	0%	100%	728,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500		
Backflow Prevention & Meterage	20%	0%	80%	100%	62,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000		
New Mains Construction - Reticulation	80%	20%	0%	100%	1,328,000						1,328,000																									
Mains Re-construction - Reticulation	20%	0%	80%	100%	2,725,000			272,500			272,500			272,500			272,500			272,500			272,500			272,500			272,500			272,500			272,500	
Mains Re-construction - Supply	20%	0%	80%	100%	4,959,380	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980	159,980		
Albert St Cottage	0%	0%	100%	100%	210,000				10,000																											
Electronic Meter Reading System	20%	0%	80%	100%	44,056									44,056																						
Minor Capital Items	40%	0%	60%	100%	179,676	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796	5,796		
North Parkes Booster Pump	20%	60%	20%	100%	154,500		154,500																													
Peak Hill Booster Pumps/Pumping Station	20%	60%	20%	100%	56,000		35,000	21,000																												
B Section Pipeline - Future Upgrade	20%	80%	0%	100%	729,000	95,000			94,000			93,000			91,000		89,000			89,000						89,000					89,000					
Bore - Refurbishment	40%	40%	20%	100%	484,284											484,284																				
Connect Bore # 5 to Reservoir	40%	60%	0%	100%	150,000		150,000																													
Cathodic Pro Trundle Res	20%	20%	80%	100%	22,000	22,000																														
Treatment Plant - Paint Interior/Exterior	20%	0%	80%	100%	89,270		13,135				15,227					15,227						15,227				15,227				15,227						
Treatment Plant - Safety Upgrade	20%	0%	80%	100%	56,808		8,358				9,690					9,690						9,690				9,690				9,690						
Gravity Main Renewals	20%	0%	80%	100%	950,000						450,000			500,000																						
Hydraulic Analysis	20%	0%	80%	100%	71,500		8,500			10,500				10,500						10,500														10,500		
Production of Development Specifications	20%	80%	0%	100%	40,000		15,000	25,000																												
Reservoirs - Painting	0%	0%	100%	100%	420,000																															
Safety - Davits, quadrailing, procedure	20%	0%	80%	100%	67,500	7,500	140,000	7,500				7,500								7,500							140,000			7,500						
Sec 64 Review	20%	80%	0%	100%	218,000		20,000			22,000				22,000						7,500					22,000					60,000				22,000		
Telemetry	40%	40%	20%	100%	175,000				35,000					35,000						50,000																
Testing Equipment	20%	0%	80%	100%	80,000				10,000					10,000			10,000																			
Vehicle and Plant Replacement	20%	0%	80%	100%	6,395,956	133,373	75,527	229,437	42,308	105,395	118,082	136,273	87,760	295,346	50,518	136,360	70,342	121,557	100,493	318,610	164,391	113,041	358,393	184,918	127,156	403,143	208,007	143,033	453,481	233,980	160,893	510,105	263,195	180,982	573,799	
Top Valley Weather Station	0%	100%	0%	100%	15,000						15,000																									
CCTV Installation	80%	20%	0%	100%	60,000		60,000																													
Other Renewals	0%	0%	100%	100%	12,148,126	229,819	238,513	250,000	275,000	300,000	250,000	250,000	250,000	307,133	318,147	329,492	341,177	353,212	365,608	378,377	391,528	395,443	399,397	403,391	407,425	423,722	440,671	458,298	476,630	495,695	515,523	536,144	557,589	579,893	603,089	
Total					86,301,193	1,278,968	6,309,809	12,508,042	19,820,753	13,959,711	2,159,858	1,167,966	529,036	1,630,311	2,451,741	2,387,928	1,040,212	1,249,329	1,057,377	1,228,763	881,195	724,677	1,221,566	817,085	758,357	1,290,641	1,138,871	800,107	1,413,887	1,151,450	867,691	1,542,441	1,146,061	972,151	1,673,163	1,122,047
Backlog (improved LOS)	20,202,205					230,989	1,293,418	2,552,768	6,111,310	4,933,101	1,179,931	181,752	56,966	261,795	434,878	412,846	112,966	277,239	59,513	171,236	106,093	67,006	165,593	79,898	71,346	174,543	119,799	69,521	184,611	102,310	71,593	202,419	125,853	75,611	215,174	
Growth	25,523,704					139,200	342,500	5,302,183	9,664,255	5,726,372	284,400	108,200	18,800	18,800	1,501,840	1,397,440	18,800	283,714	18,800	58,800	104,000	18,800	18,800	18,800	36,400	18,800										

Sewerage 30 years capital works program

	Backlog (Improve LOS)	Growth	Renewals	Check	Total estimate	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mains Construction	20%	40%	40%	100%	4,588,929	88,929	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	
Minor Items Plant	20%	20%	60%	100%	241,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	7,800	
Pipe Investigation/Reline	20%	20%	60%	100%	1,178,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	38,000	
Retiulation Model	40%	40%	20%	100%	150,000																															
Vehicle and Equipment Replacement	20%	0%	80%	100%	854,939	32,460		58,419	-	-	-	38,759	67,724	-	63,529	-	-	124,790	-	-	41,650		35,286			128,560		38,950	46,580			131,652			46,580	
Other Renewals	20%	0%	80%	100%	2,694,414	84,414	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	87,000	
Mains Cleaning Equipment with Camera	20%	20%	60%	100%	194,500		4,500		-	-	-	-	-	85,000	-	-	-	-	-	-			105,000													
Mains Construction (Major Works)	80%	20%	0%	100%	4,873,071	-	1,025,000	1,238,000	-	-	-	-	-	-	1,557,967	1,052,104	-	-	-	-	-															
Mono Pump Peak Hill/Comm/Sub Mixer	20%	0%	80%	100%	114,000	-	-	19,000	-	-	-	-	19,000	-	-	-	-	19,000	-	-	-		19,000													
Parkes Treatment Plant Construction (New) (70%)	30%	60%	10%	100%	18,500,000		6,000,000	12,500,000	-	-	-	-	-	-	-	-	-	-	-	-																
Parkes Treatment Plant Investigation (New)	30%	60%	10%	100%	500,000	500,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Pumping Investigation	20%	80%	0%	100%	191,243	-	-	-	-	-	89,975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Lazer Level	20%	20%	60%	100%	12,299	-	12,299	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Replace Toyota SDK 4 Skid Steer	20%	20%	60%	100%	140,218	-	-	-	-	-	-	-	-	-	70,109	-	-	-	-	-	-	-	-	-	70,109	-										
Wind Monitor (Alternate Energy)	20%	80%	0%	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Telemetry	20%	60%	20%	100%	73,000	-	10,000	-	28,000	-	35,000																									
Total					34,306,413	751,603	7,334,599	14,098,219	340,800	282,800	407,775	321,559	369,524	397,800	2,075,673	1,334,904	282,800	426,590	312,800	282,800	324,450	282,800	337,086	417,800	352,909	411,360	282,800	340,750	359,380	282,800	282,800	414,452	301,800	282,800	282,800	329,380
Backlog (Improve LOS)					11,715,125	200,321	2,681,920	4,812,444	74,160	56,560	81,555	64,312	73,905	85,560	1,349,915	898,243	56,560	85,318	68,560	56,560	64,890	56,560	67,417	89,560	70,582	82,272	56,560	68,150	77,876	56,560	56,560	82,890	60,360	56,560	56,560	65,876
Growth					14,820,344	344,732	3,883,520	7,816,760	97,960	69,160	162,140	69,160	69,160	98,160	475,790	279,581	69,160	69,160	81,160	69,160	69,160	69,160	69,160	102,160	83,182	69,160	69,160	69,160	81,160	69,160	69,160	69,160	69,160	69,160	69,160	69,160
Renewals					7,770,944	206,551	769,159	1,469,015	168,680	157,080	164,080	188,087	226,459	214,080	249,969	157,080	157,080	272,112	163,080	157,080	190,400	157,080	200,509	226,080	199,145	259,928	157,080	203,440	200,344	157,080	157,080	262,402	172,280	157,080	157,080	194,344
34,306,413						751,603	7,334,599	14,098,219	340,800	282,800	407,775	321,559	369,524	397,800	2,075,673	1,334,904	282,800	426,590	312,800	282,800	324,450	282,800	337,086	417,800	352,909	411,360	282,800	340,750	359,380	282,800	282,800	414,452	301,800	282,800	282,800	329,380

Appendix C

TBL Reports

WATER SUPPLY SYSTEM - Parkes Shire Council serves a population of 14,000 (5,940 connected properties). Water is drawn from Billabong Creek, Beargamil Creek and 5 bores (26 ML/d) to supply Parkes and Peak Hill. 8% of supply is a bulk purchase from Forbes Council. Council has 2 dams with a total capacity of 2,700 ML. The water supply network comprises 1 pressure sand filter treatment works (8.6ML/d), 14 service reservoirs (42 ML), 12 pumping stations, 8.6 ML/d delivery capacity into the distribution system, 343 km of transfer and trunk mains and 188 km of reticulation.

PERFORMANCE - Parkes Shire Council achieved 90% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$623 which was close to 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 \$634 which was well above the statewide median of \$400 (Indicator 49). Water quality complaints were similar 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. Parkes Shire Council reported no water supply public health incidents. Current replacement cost of system assets was \$161M (\$25,800 per assessment). Cash and investments were \$34M, debt was nil and revenue was \$6.8M (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	YESC ¹²
(2e) Pricing - DSP with Commercial Developer Charges	Yes	IMPLEMENTATION OF ALL REQUIREMENTS	90%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

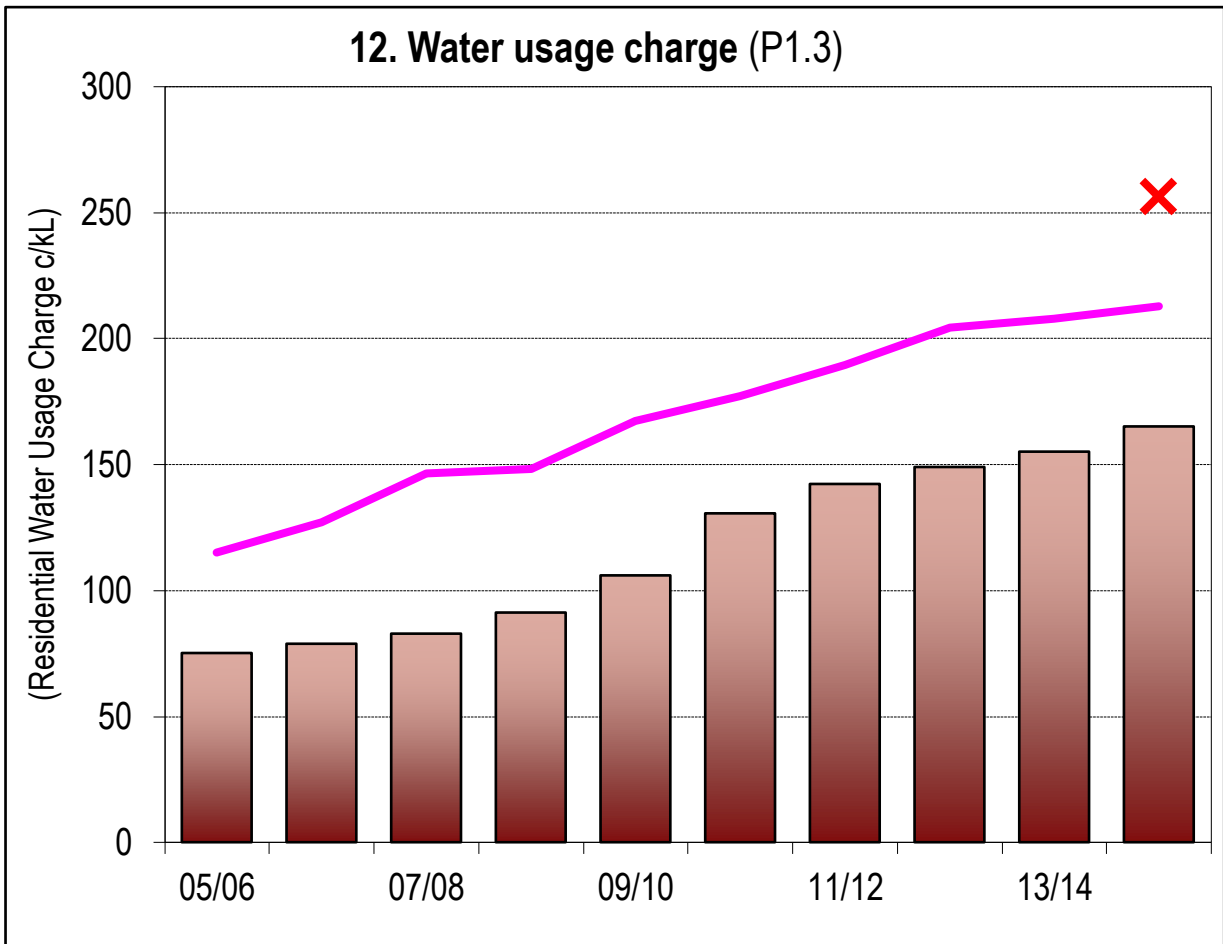
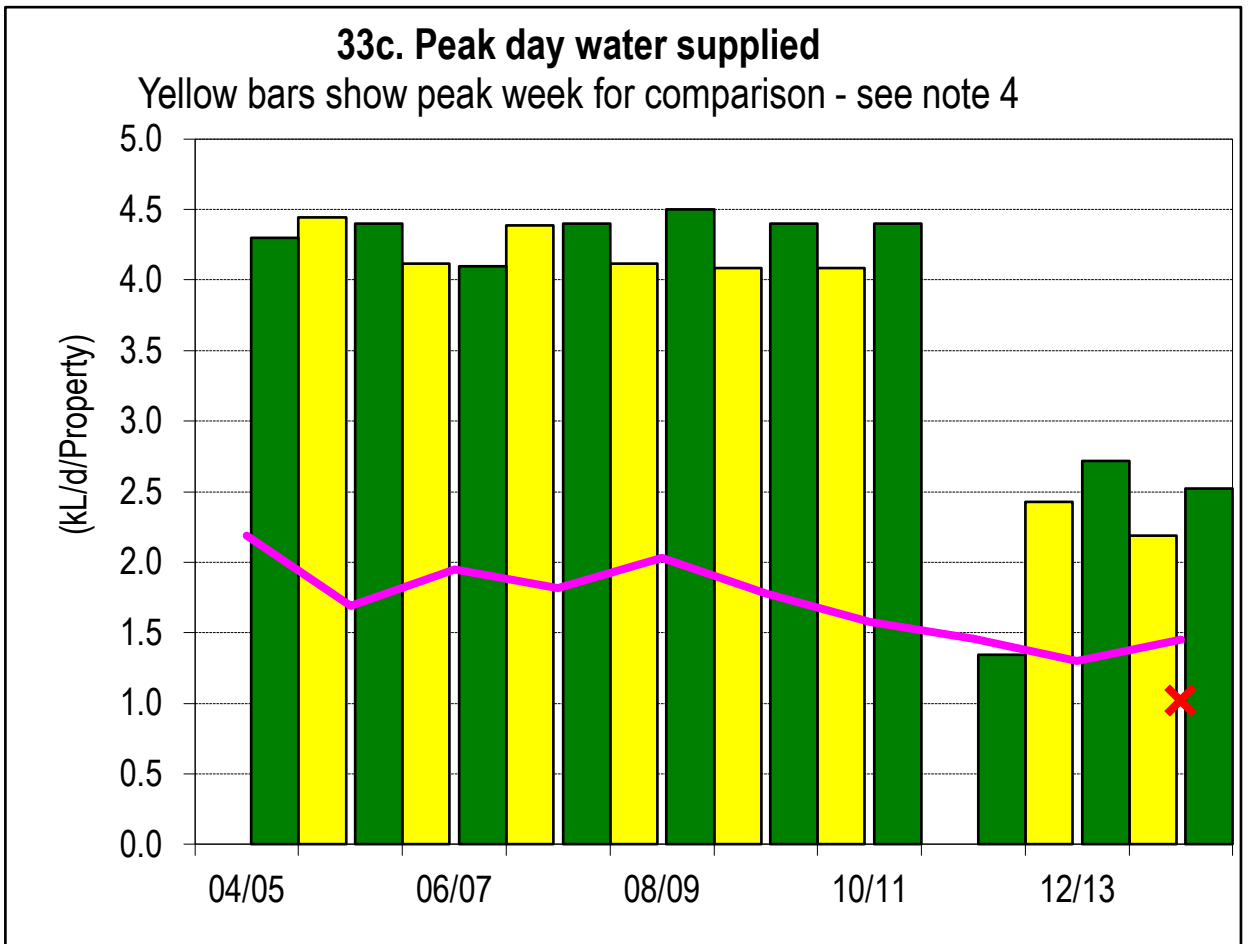
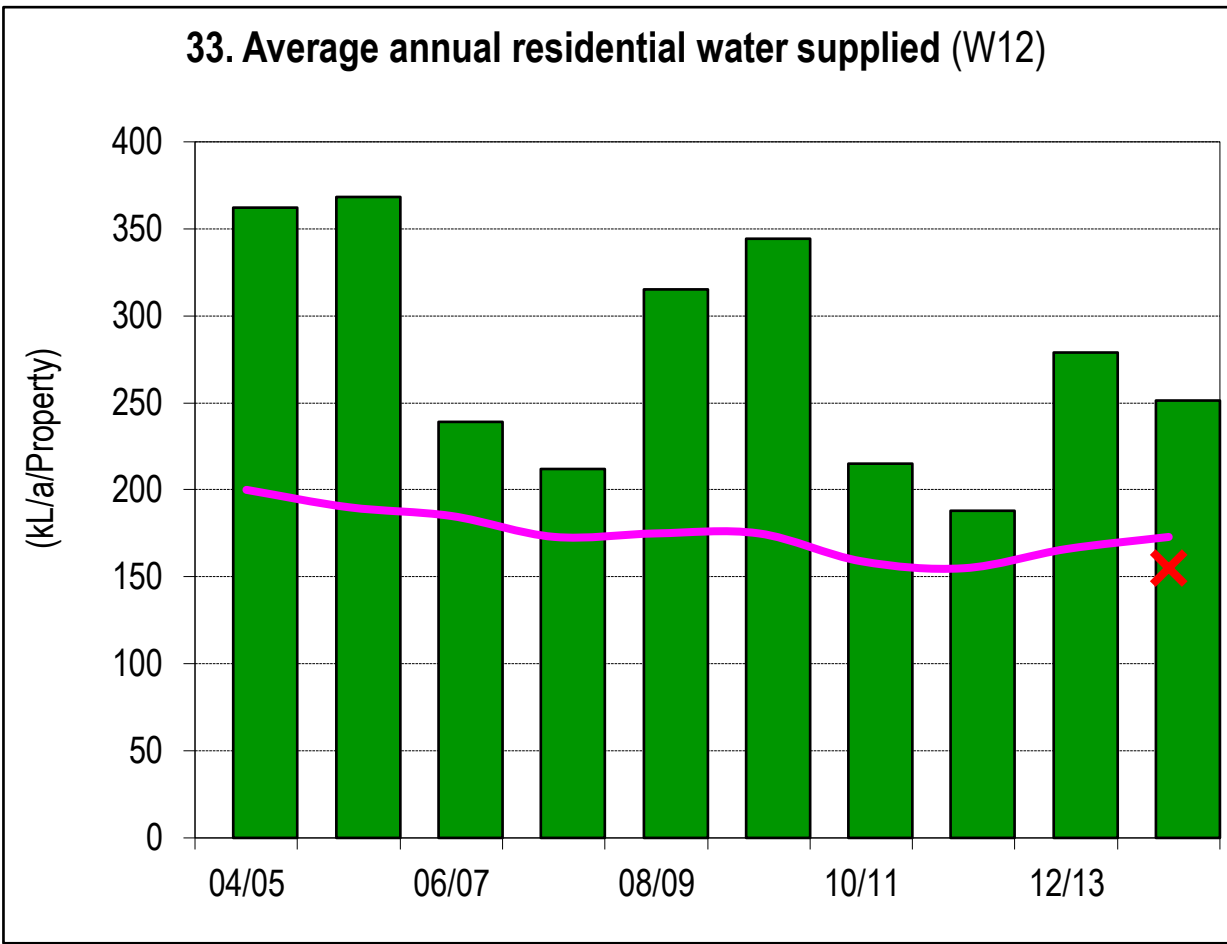
SAMPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS						LWU	RANKING		MEDIANS			
NWI No.						RESULT	3,001 to 10,000	All LWUs	Statewide	National		
							Note 1	Note 2	Note 3	Note 4		
							Col 1	Col 2	Col 3	Col 4	Col 5	
UTILITY	CHARACTERISTICS	C1	1	Population served:	14000							
		C4	2	Number of connected properties:	5940	Number of assessments: 6250						
			3	Residential connected properties (% of total)			%	89			91	
			4	New residences connected to water supply (%)			%	1.0	2	2	0.9	
		A3	5	Properties served per kilometre of water main		Prop/km		13			32	35
			6	Rainfall (% of median annual rainfall)			%	116	1	1	77	
		W11	7	Total urban water supplied at master meters (ML)		ML		4,520			6,800	10,280
			8	Peak week to average consumption (%)			%	199	3	4	152	
			9	Renewals expenditure (% of current replacement cost of system assets)			%	1.1	1	1	0.5	
			10	Employees per 1000 properties		per 1,000 prop		1.7	4	3	1.5	
SOCIAL	CHARGES & BILLS	P1		Residential tariff structure for 2014-15: inclining block; independent of land value; access charge \$215								
		P1.3	12a	Residential water usage charge for 2013-14 for usage <400 kL (c/kL)	c/kL (2013-14)		155	3	3	208	185	
			12	Residential water usage charge for 2014-15 for usage <400 kL (c/kL)	c/kL (2014-15)		165	3	3	213		
		P3	14a	Typical residential bill for 2013-14 (\$/assessment)	\$ (2013-14)		608	3	3	550	567	
			14	Typical residential bill for 2014-15 (\$/assessment)	\$ (2014-15)		623	3	2	582		
			15	Typical developer charge for 2014-15 (\$/equivalent tenement)	\$ (2014-15)		11,300	1	1	5,500		
		F4	16	Residential revenue from usage charges (% of residential bills)	%		66	3	3	73	68	
		F5	17	Revenue per property - water (\$/property)	\$/prop		1140	1	1	795	849	
		HEALTH		18	Water Supply Coverage (% of Urban Population with reticulated WS)	% of population		94.6	4	4	99.6	
			H6	18a	Risk based drinking water quality plan?			Yes				
			19	Physical compliance achieved? Note 10			Yes	1	1			
			19a	Chemical compliance achieved? Note10			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		2	3	3	3	2
		C10	26	Water service complaints per 1000 properties	per 1,000 prop		42	4	5	6	1	
		C17	27	Incidence of unplanned interruptions per 1000 properties	per 1,000 prop		2	1	1	50	96	
		C15	28	Average duration of interruption (min)	min		120	3	2	150	113	
		A8	30	Number of water main breaks per 100 km of water main	per 100km		20	3	4	10	13	
			31	Drought water restrictions (% of time)	% of time		100	5	5	0		
			32	Total days lost (%)	%		0.0	1	1	2.9		
ENVIRONMENTAL		NATURAL RESOURCE MANAGEMENT	W12	33	Average annual residential water supplied - STATEWIDE (kL/property)	kL/prop		251	3	3	173	185
	33a			Average annual residential water supplied - COASTAL LWUs (kL/property)	kL/prop					157		
	33b			Average annual residential water supplied - INLAND LWUs (kL/property)	kL/prop		251	3	3	263		
	A10		34	Real losses (leakage) (L/service connection/day)	L/connection/day		170	5	5	70	79	
			35	Energy consumption per Megalitre (kiloWatt hours)	kWh		640	5	4	620		
			36	Renewable energy consumption (% of total energy consumption)	%		0	1	1	0		
E12	36a	Net greenhouse gas emissions - WS & Sge (net tonnes CO2 - equivalents per 1000 properties)	t CO2		920	5	5	370	390			
ECONOMIC	FINANCE		42	Current replacement cost per assessment (\$)	\$		25,800	1	1	16,500		
		F17	43	Economic real rate of return - Water (%)	%		0.9	4	3	1.2	1.9	
			44	Return on assets - Water (%)	%		3.5	2	1	1.1		
		F22	45	Net Debt to equity - WS&Sge (%)	%		-31	5	5	1	11	
		F23	46	Interest cover - WS&Sge			>100	1	1	4	2	
			47	Loan payment per property - Water (\$)	\$		0	4	4	64		
		F24	47b	Net profit after tax - WS & Sge (\$'000)	\$'000		3,140	1	1	1180	5345	
		EFFICIENCY		48	Operating cost (OMA) per 100km of main (\$'000)	\$'000		757	1	1	1,290	
	F11		49	Operating cost (OMA) per property (\$/prop) Note 8	\$/prop		634	5	4	400	439	
			50	Operating cost (OMA) per kilolitre (cents)	c/kL		75	2	1	126		
			51	Management cost (\$/prop)	\$/prop		163	3	4	140		
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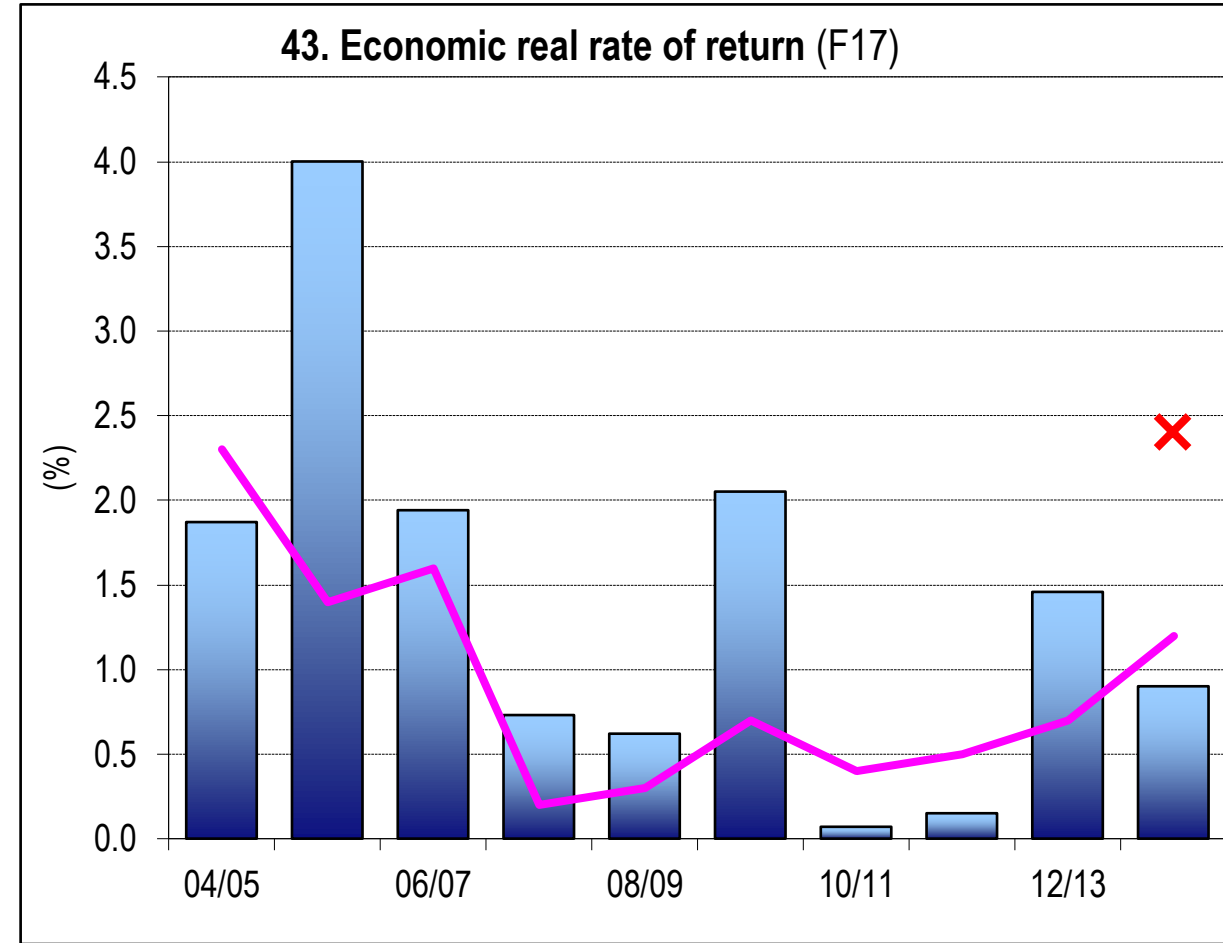
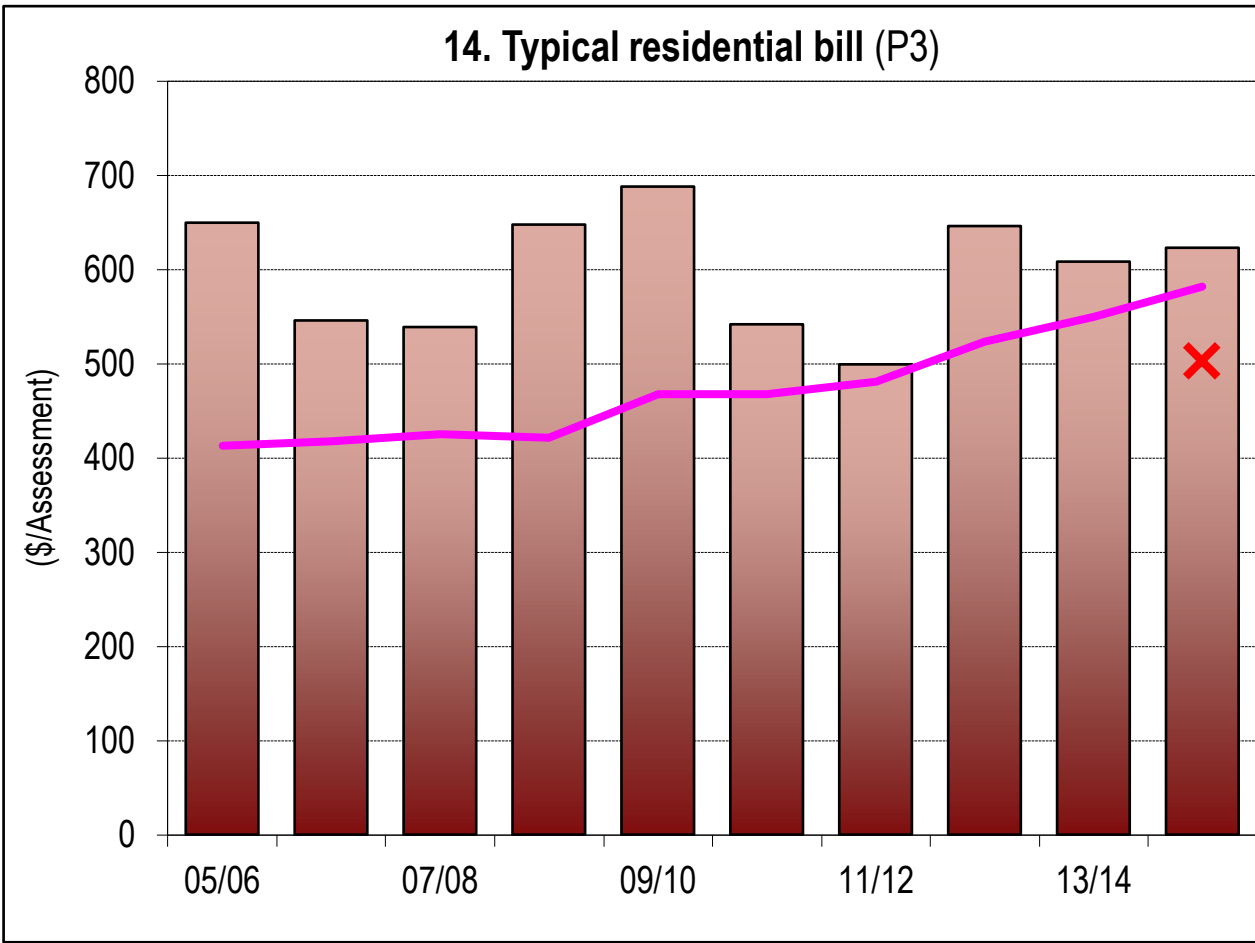
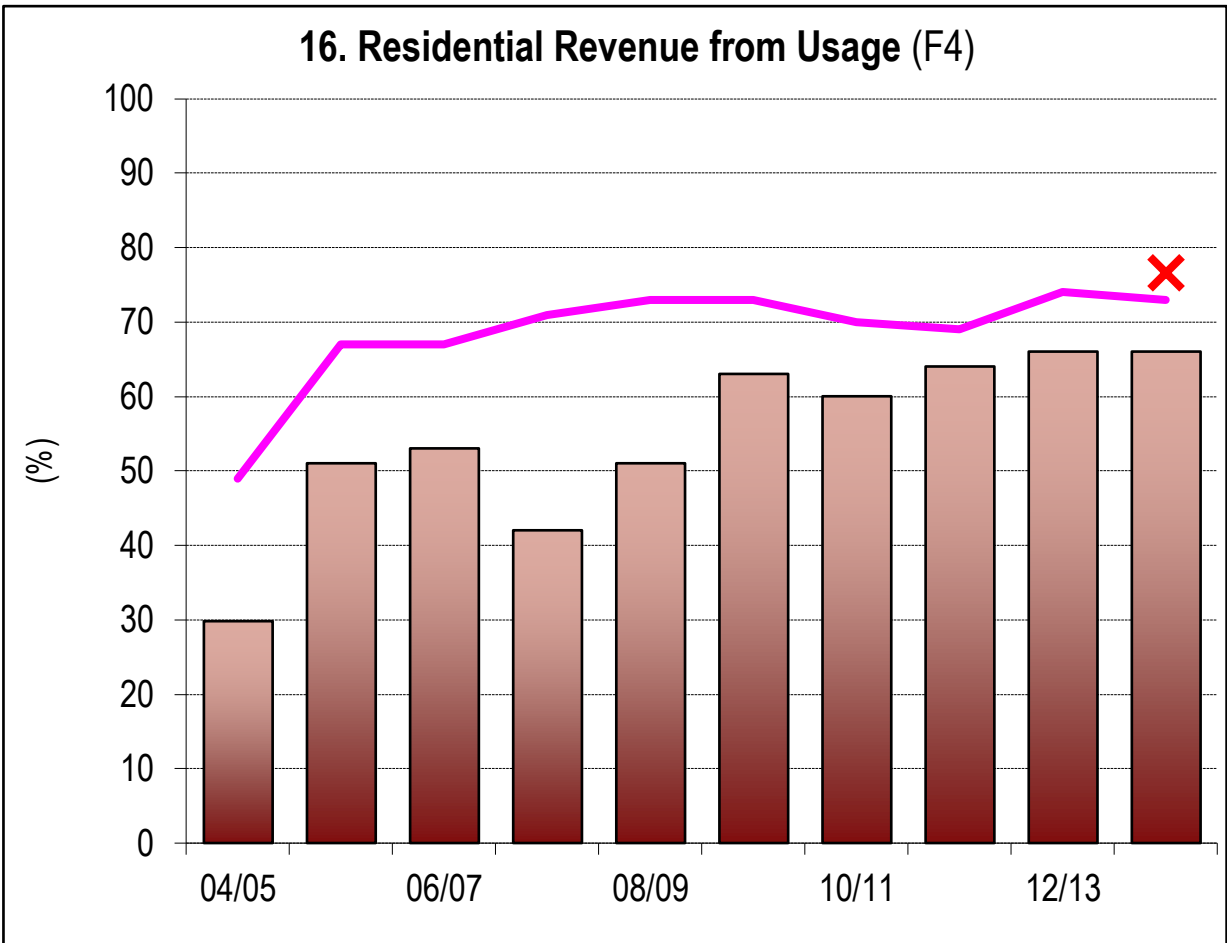
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- LWUs are required to annually review key projections & actions in the later of their IWCN Strategy and financial plan and their Strategic Business Plan and to annually 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan.
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- Non-residential water supplied was 32% of potable water supplied excluding non-revenue water.
Non-residential revenue was 35% of annual rates and charges, indicating fair pricing of services between the residential and non-residential sectors.
However, high rainfall in 2013-14 (116% of the median (Indicator 6)) affected residential water use (10% reduction) and reduced the residential revenue from usage charges (graph 16).
- Operating cost (OMA) per property was \$634, including \$46 for bulk supply. Other components were: management (\$163), operation (\$119), maintenance (\$117), energy (\$157) & chemical
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- Compliance with ADWG 2011 for drinking water quality is shown as "Yes" if compliance has been achieved (indicators 19, 19a & 20).
- Parkes Shire Council has 2 fully qualified water treatment operators who meet the requirements of the National Certification Framework.
- As Council's IWCN Strategy is over 6 years old, it will need to prepare a new 30-year IWCN Strategy, financial plan and report in accordance with the July 2014 IWCN Check List (www.water.nsw.gov.au).
- BPM Framework - Council needs to implement Appropriate Residential Charges (75% from usage charges) (2c).

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

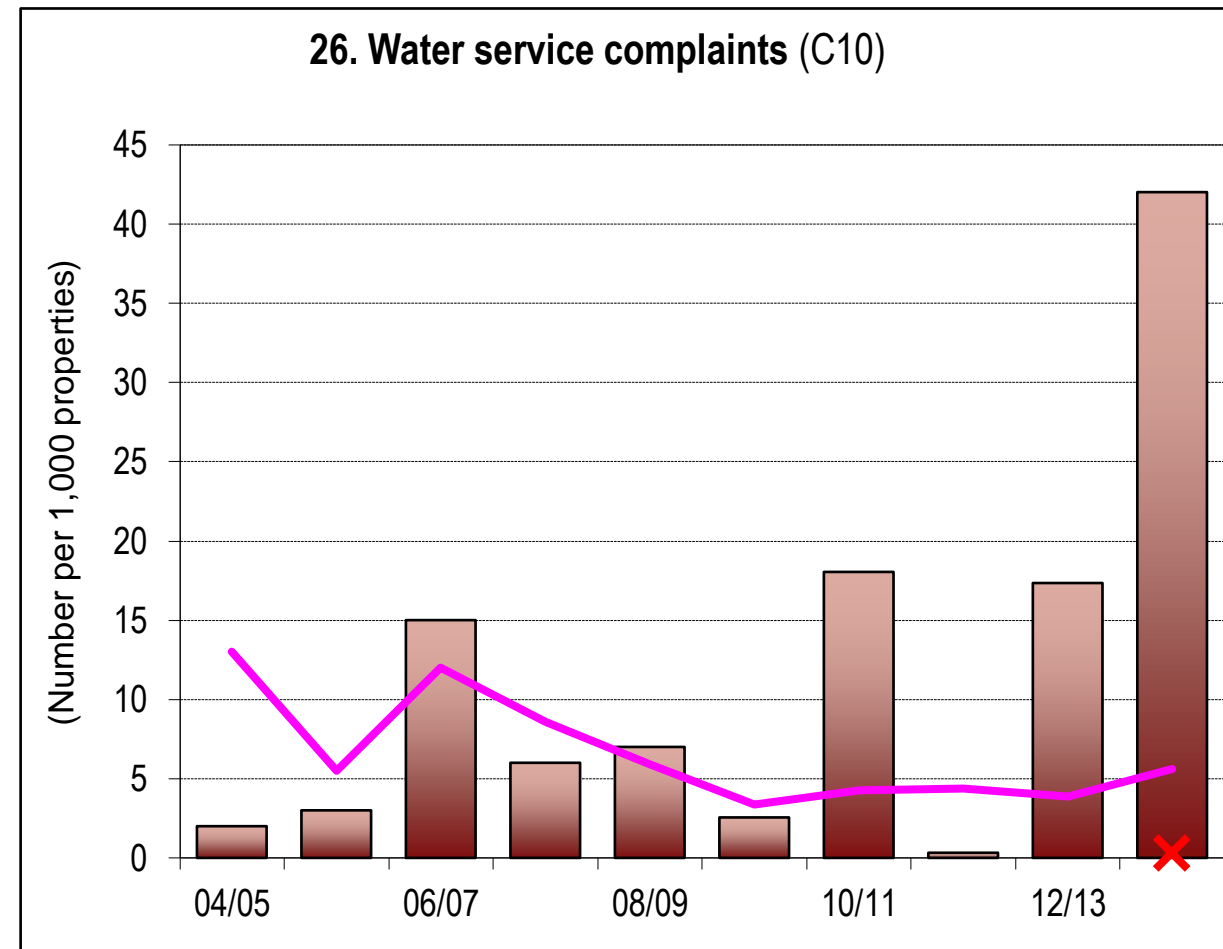
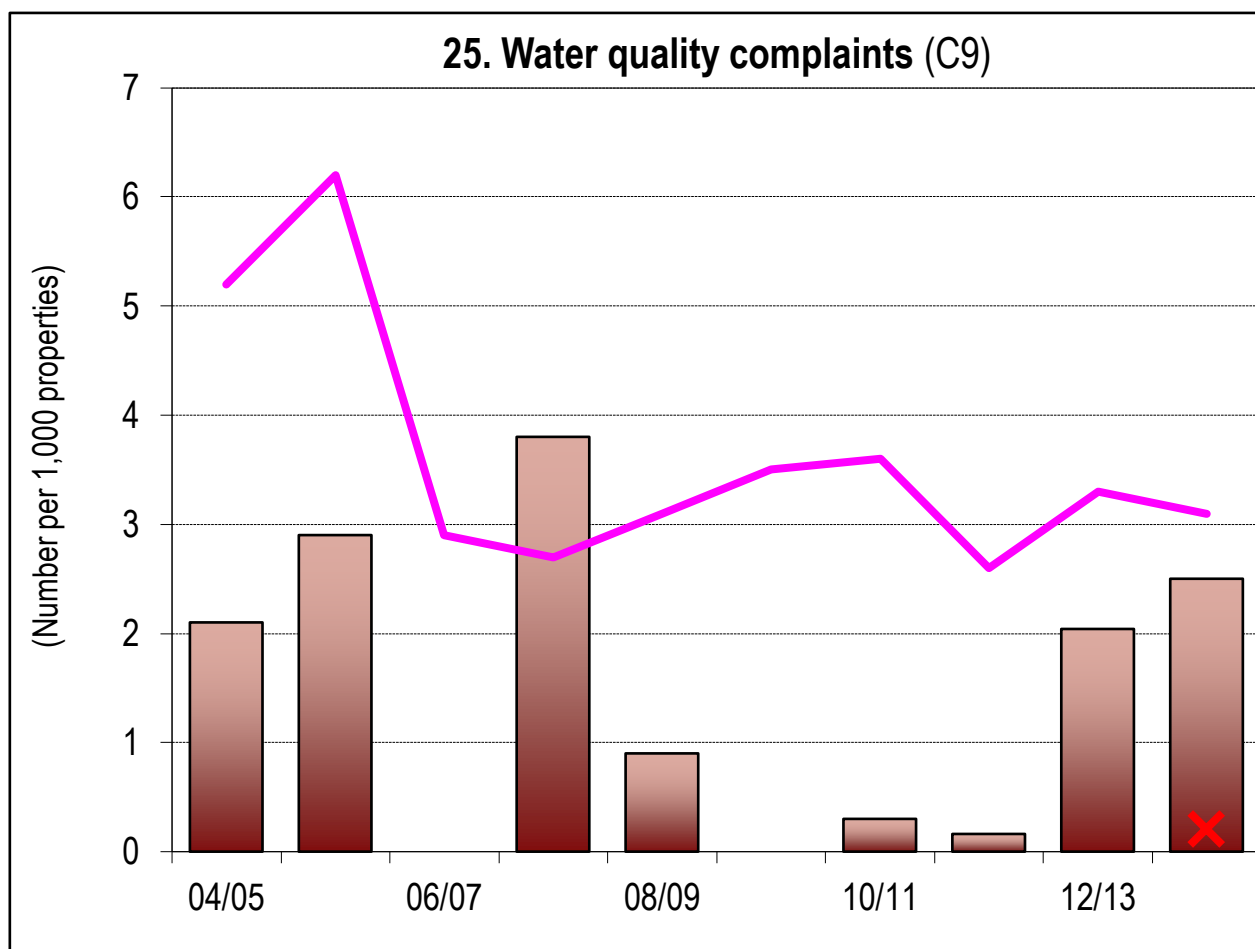
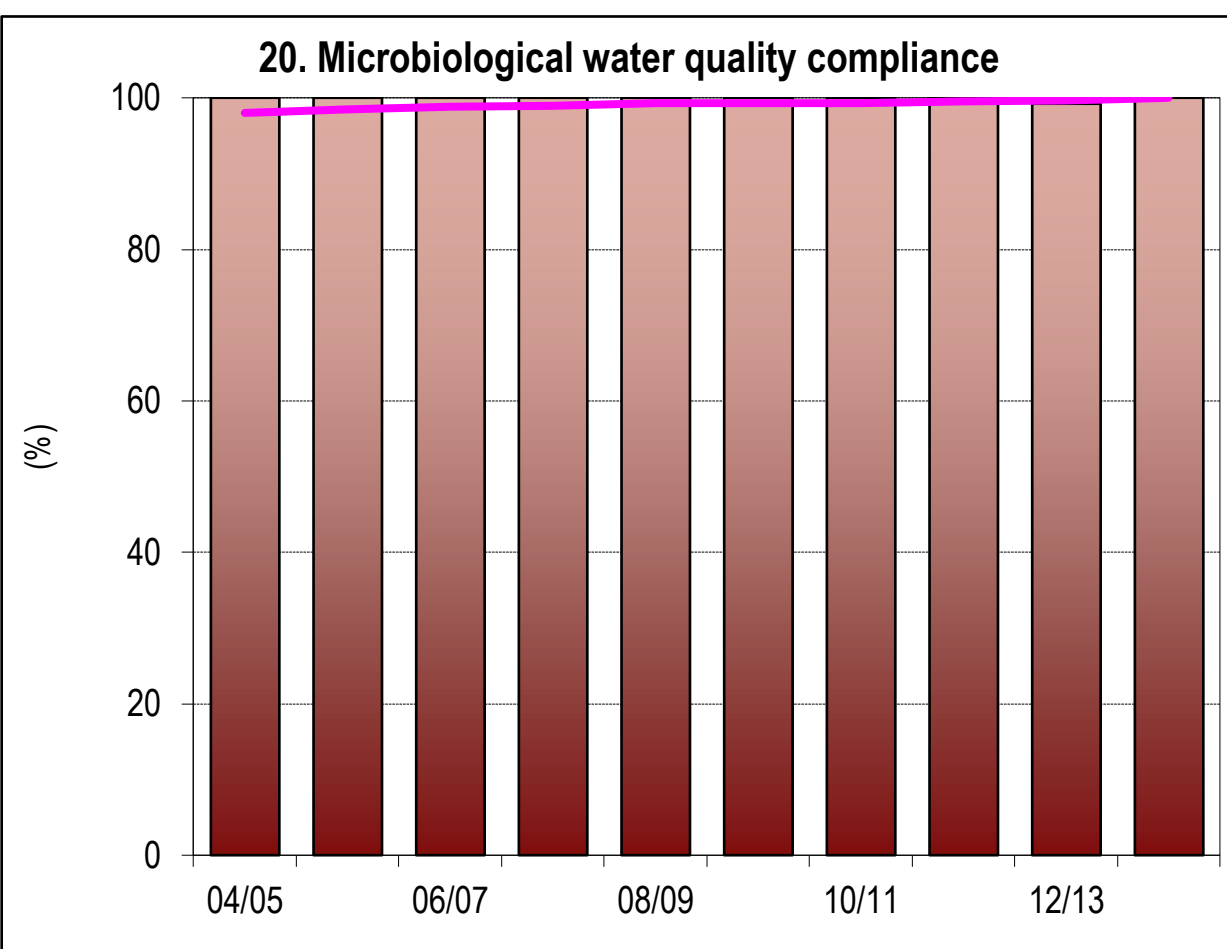
RESIDENTIAL USE/REVENUE FROM USAGE



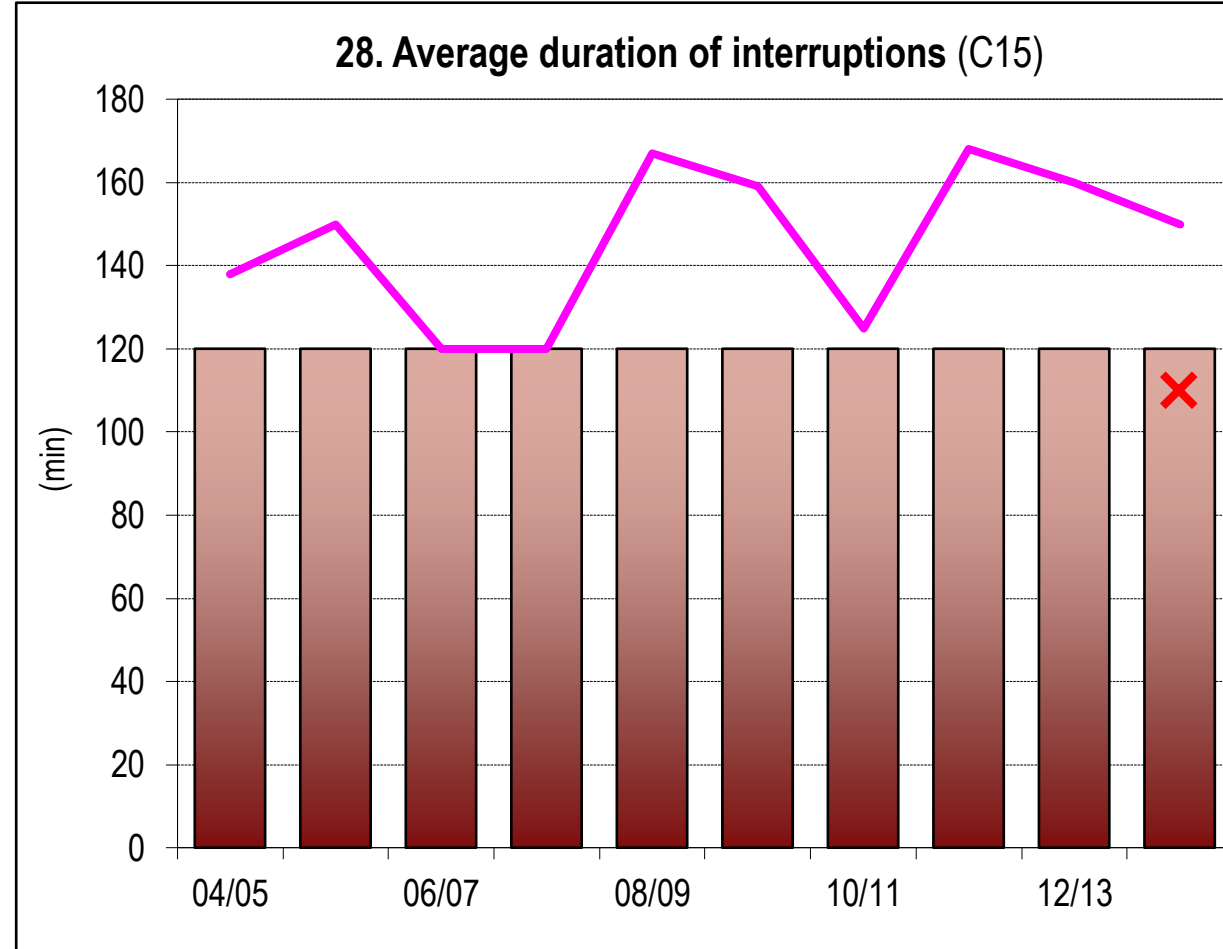
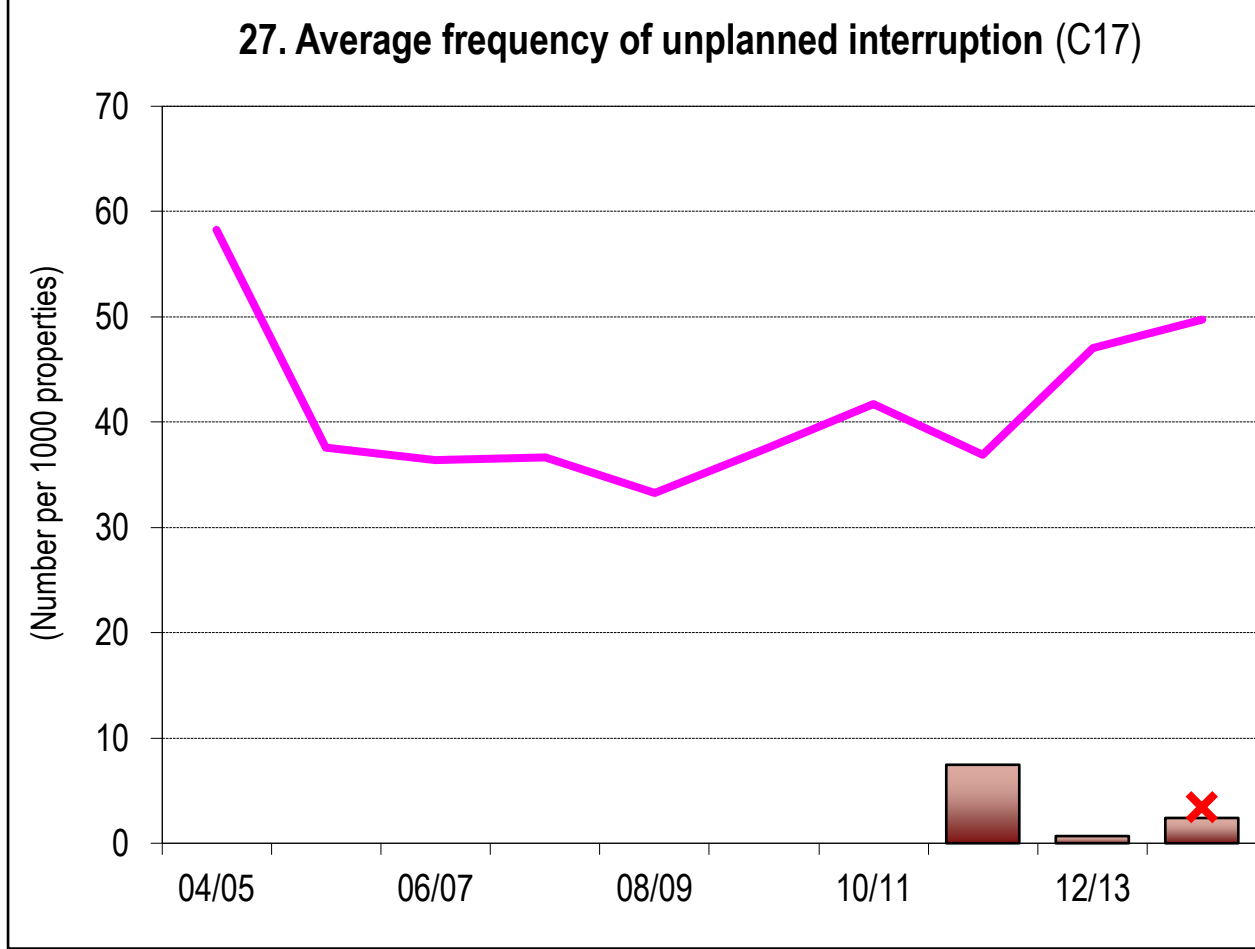
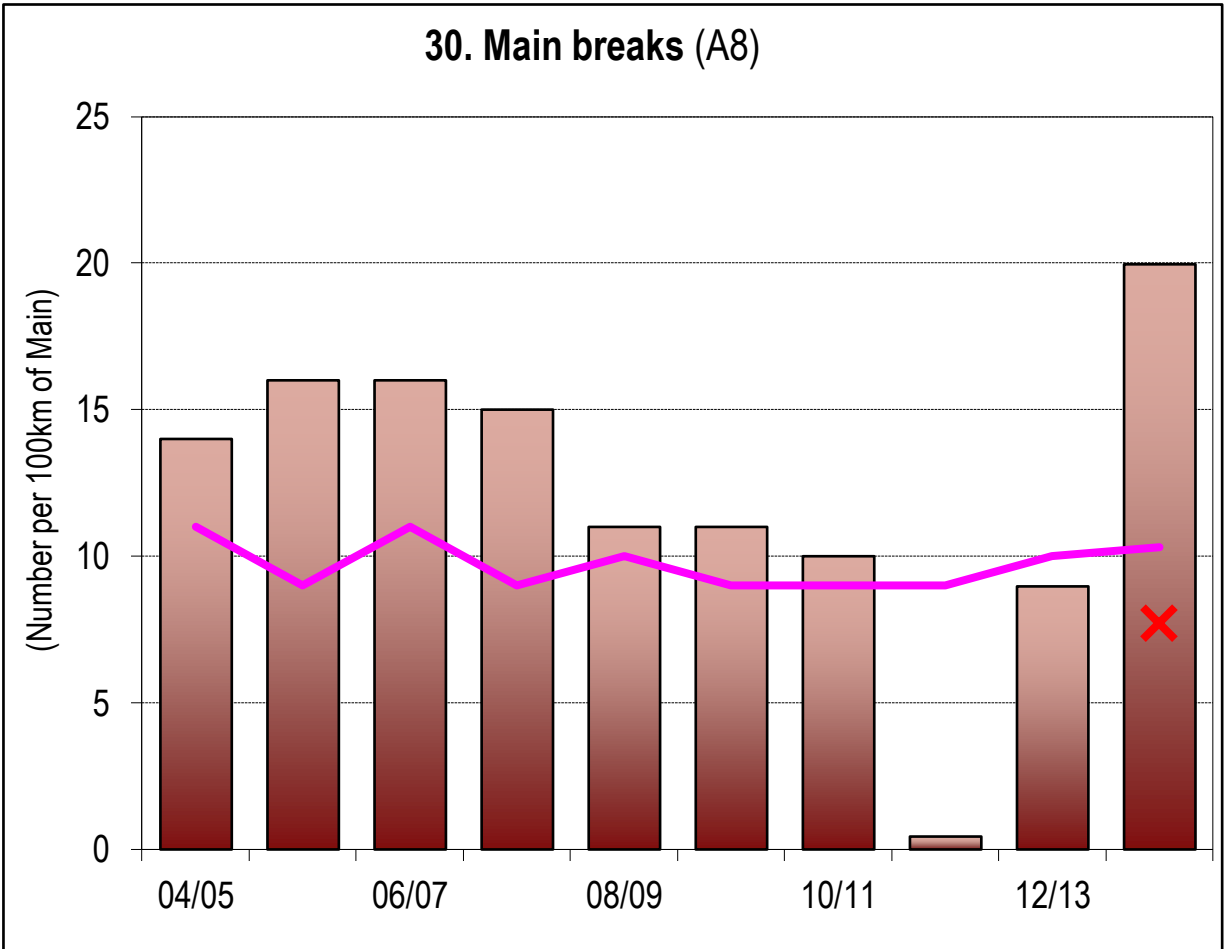
COST RECOVERY



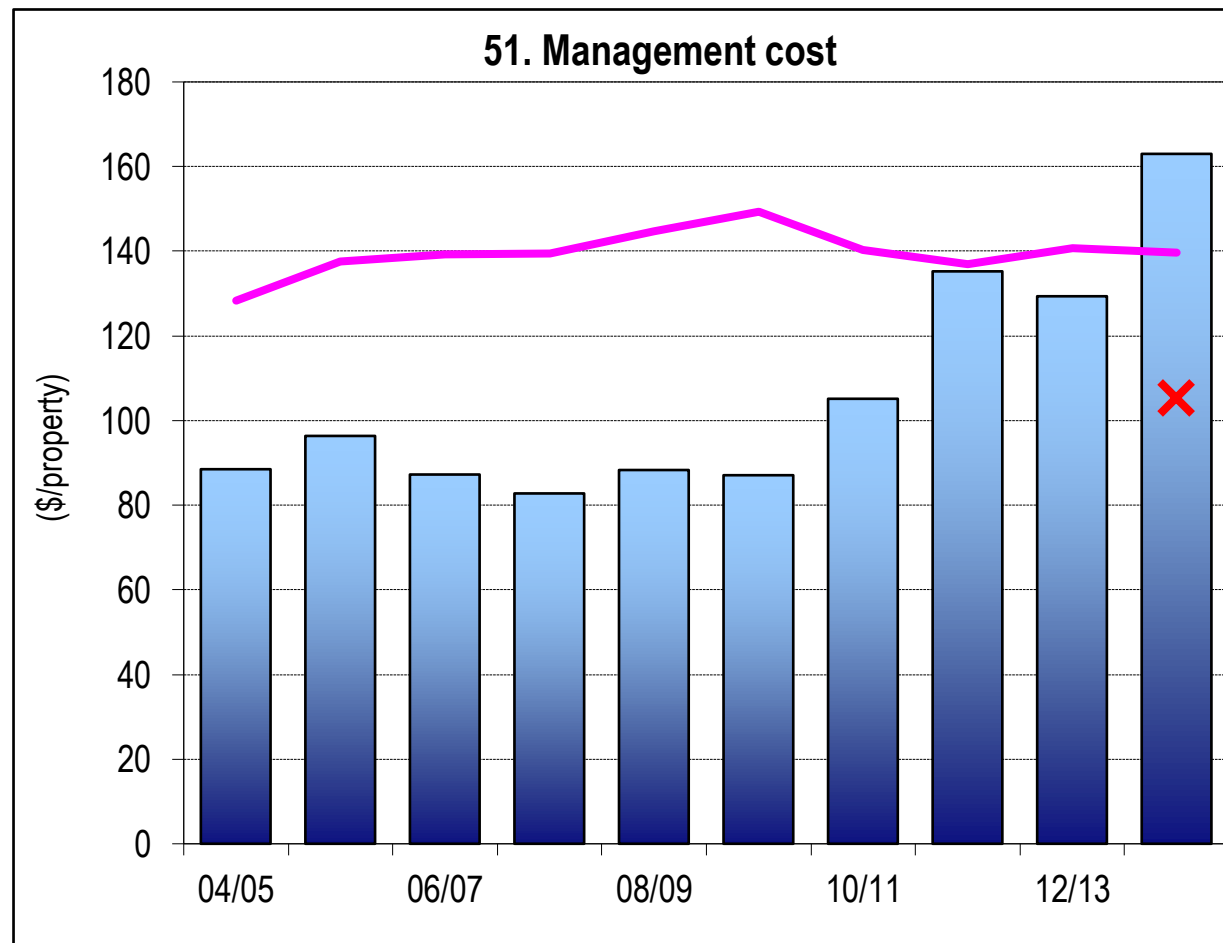
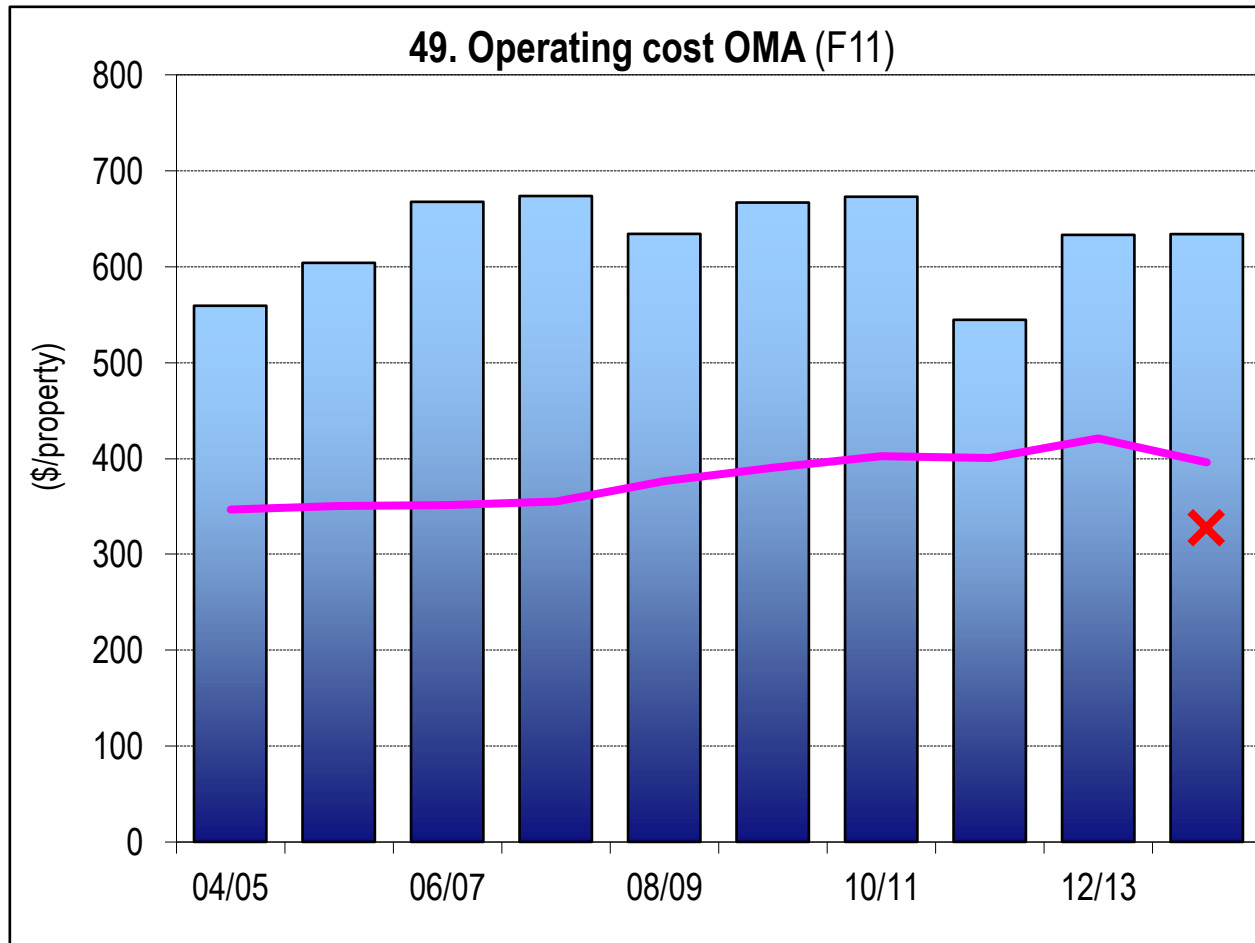
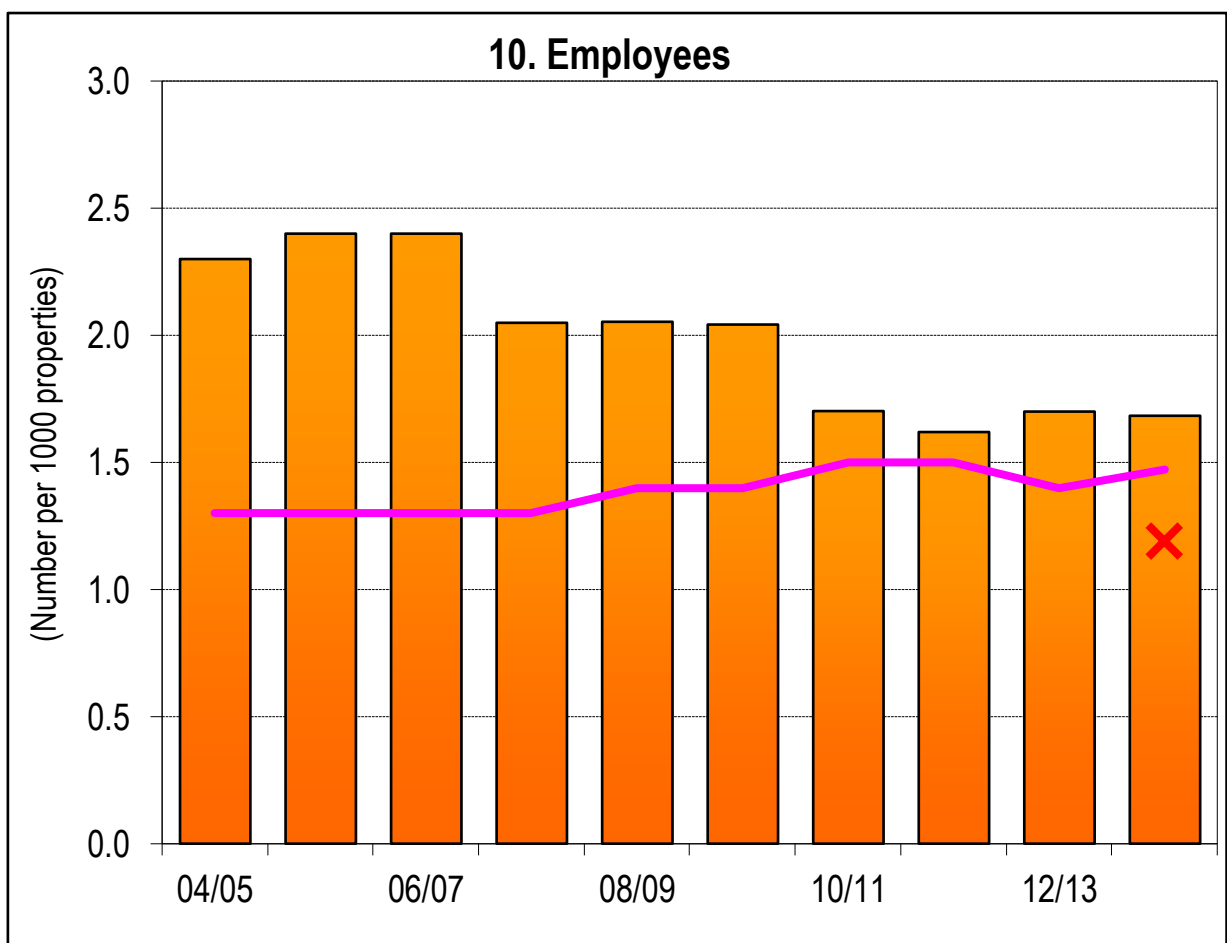
WATER QUALITY/CUSTOMER SERVICE



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

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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	YESC ¹²
(2e) Pricing - DSP with Commercial Developer Charges	Yes	IMPLEMENTATION OF ALL REQUIREMENTS	90%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

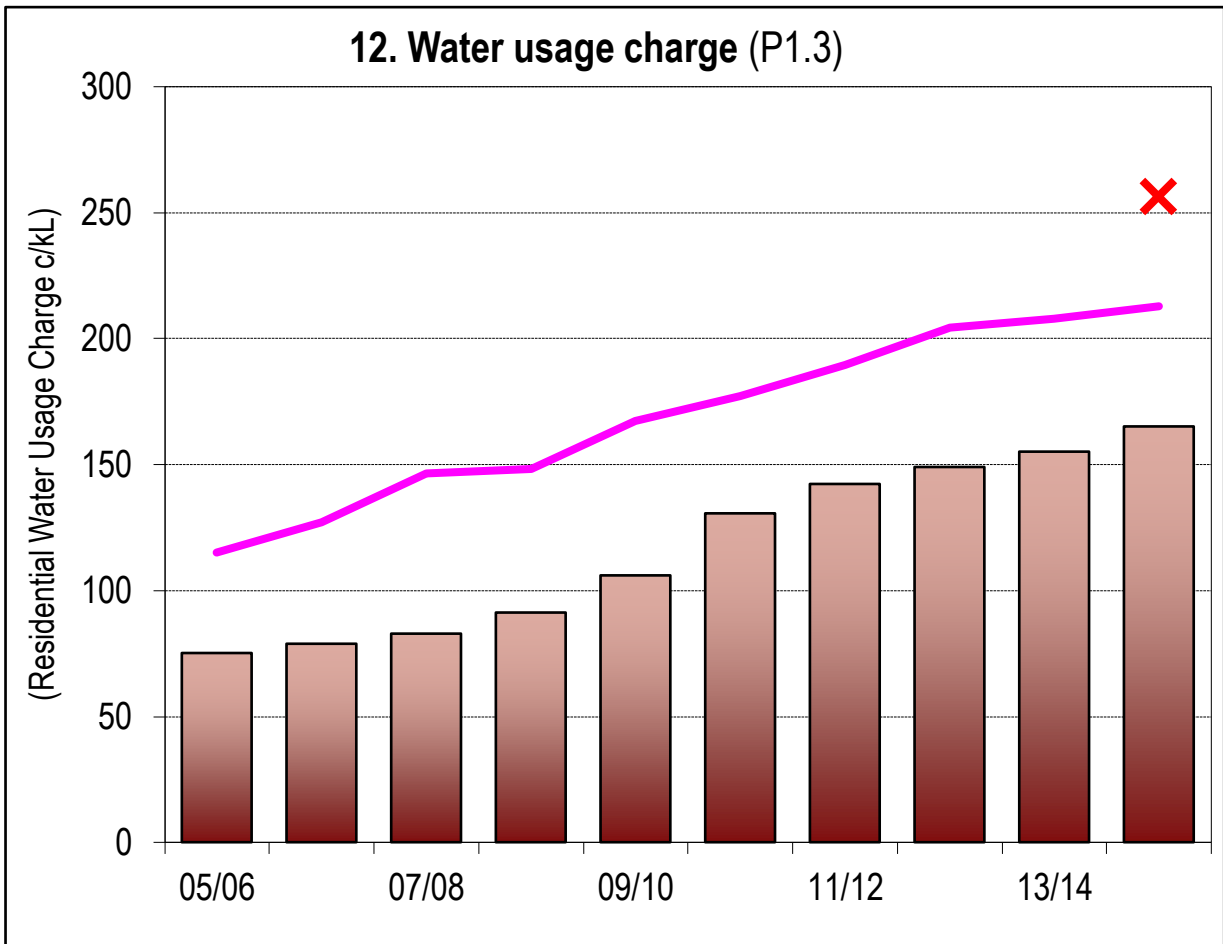
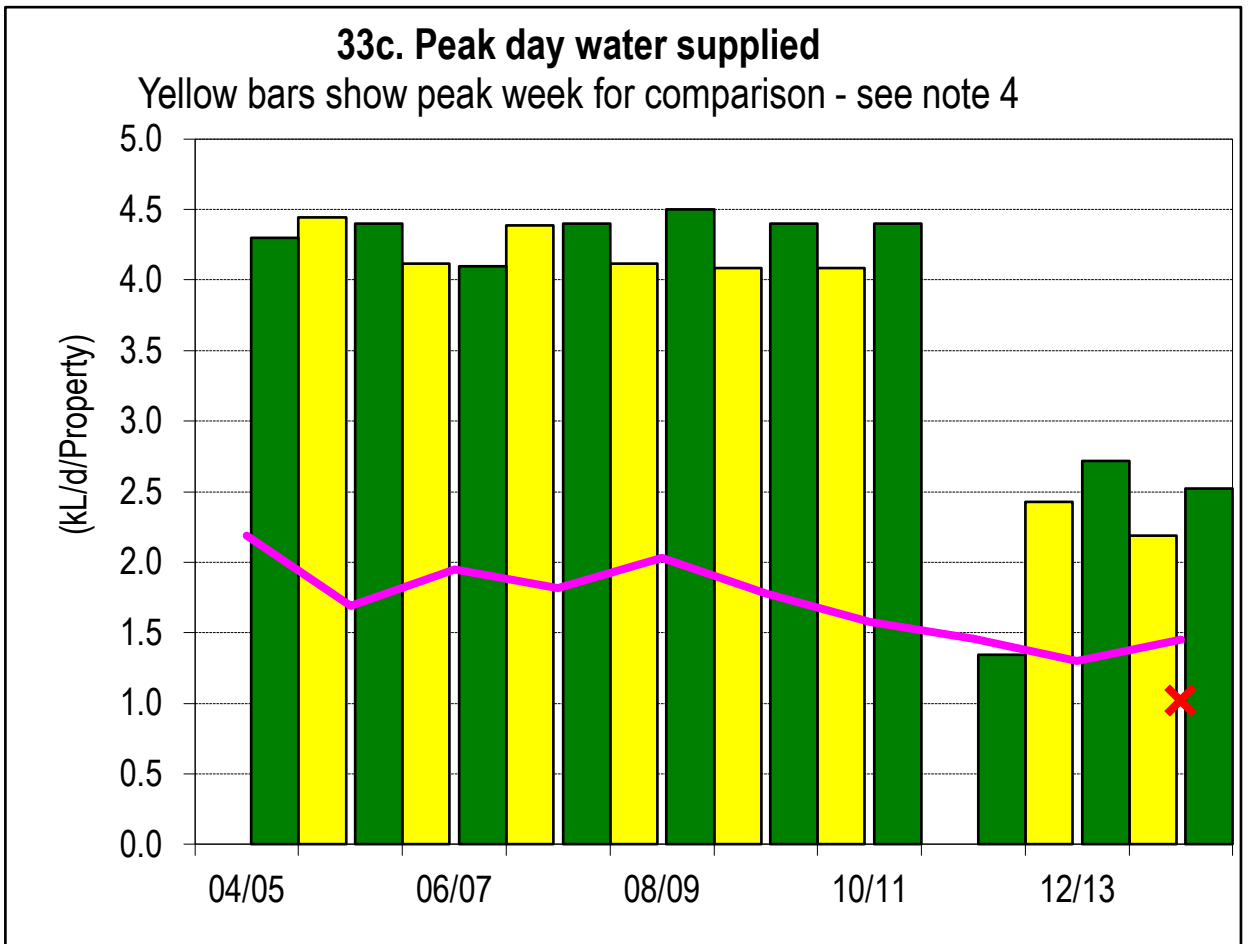
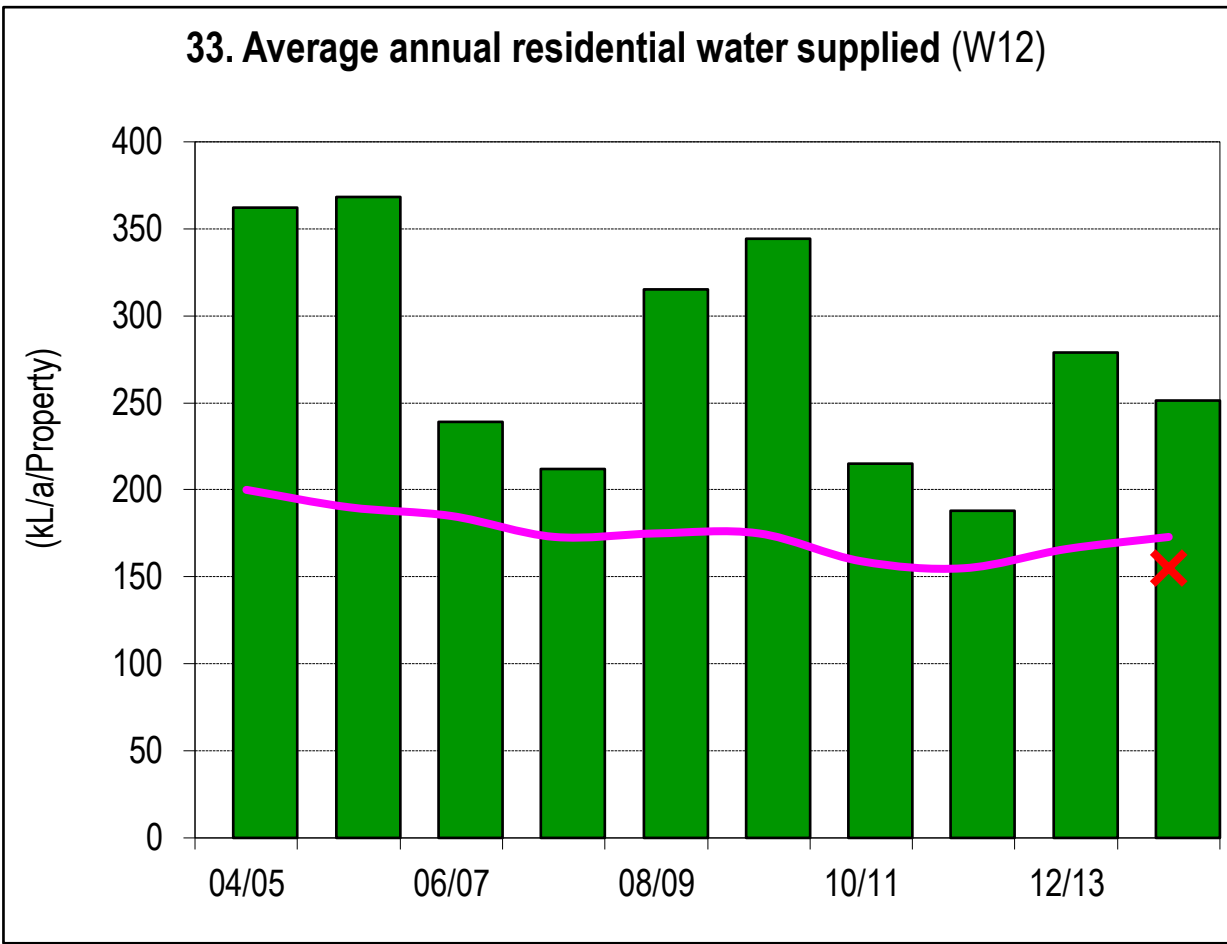
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							Col 1	Col 2	Col 3	Col 4	Col 5
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			4	New residences connected to water supply (%)		%	1.0	2	2	0.9	
		A3	5	Properties served per kilometre of water main		Prop/km	13			32	35
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		W11	7	Total urban water supplied at master meters (ML)		ML	4,520			6,800	10,280
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	HEALTH		18	Water Supply Coverage (% of Urban Population with reticulated WS)	% of population	94.6	4	4	99.6		
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			19	Physical compliance achieved? Note 10		Yes	1	1			
			19a	Chemical compliance achieved? Note10		Yes	1	1			
		H4	19b	% population with chemical compliance		100	1	1	100		
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	SERVICE LEVELS	H3	20a	% population with microbiological compliance	% of population	100	1	1	100	100	
		C9	25	Water quality complaints per 1000 properties	per 1,000 prop	2	3	3	3	2	
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			31	Drought water restrictions (% of time)	% of time	100	5	5	0		
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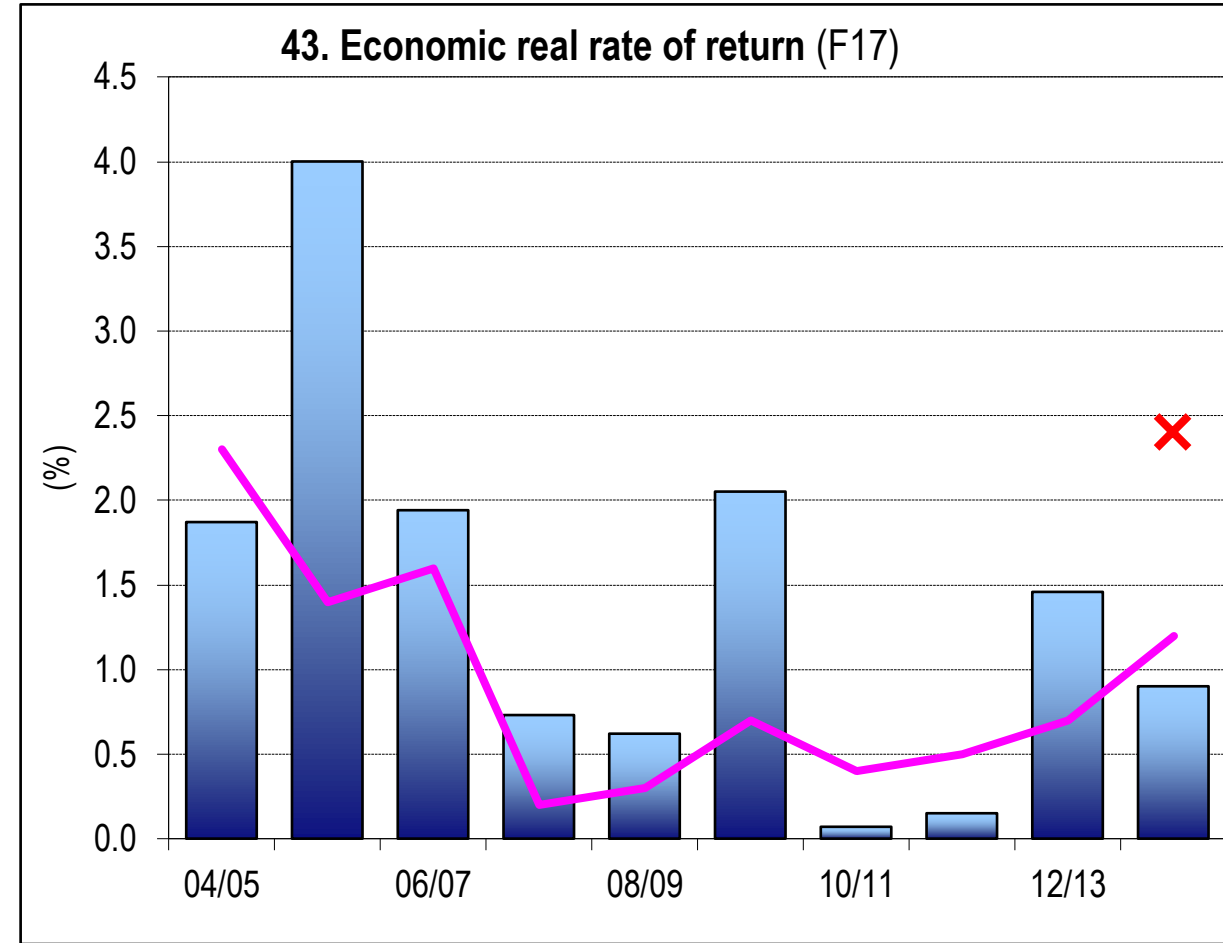
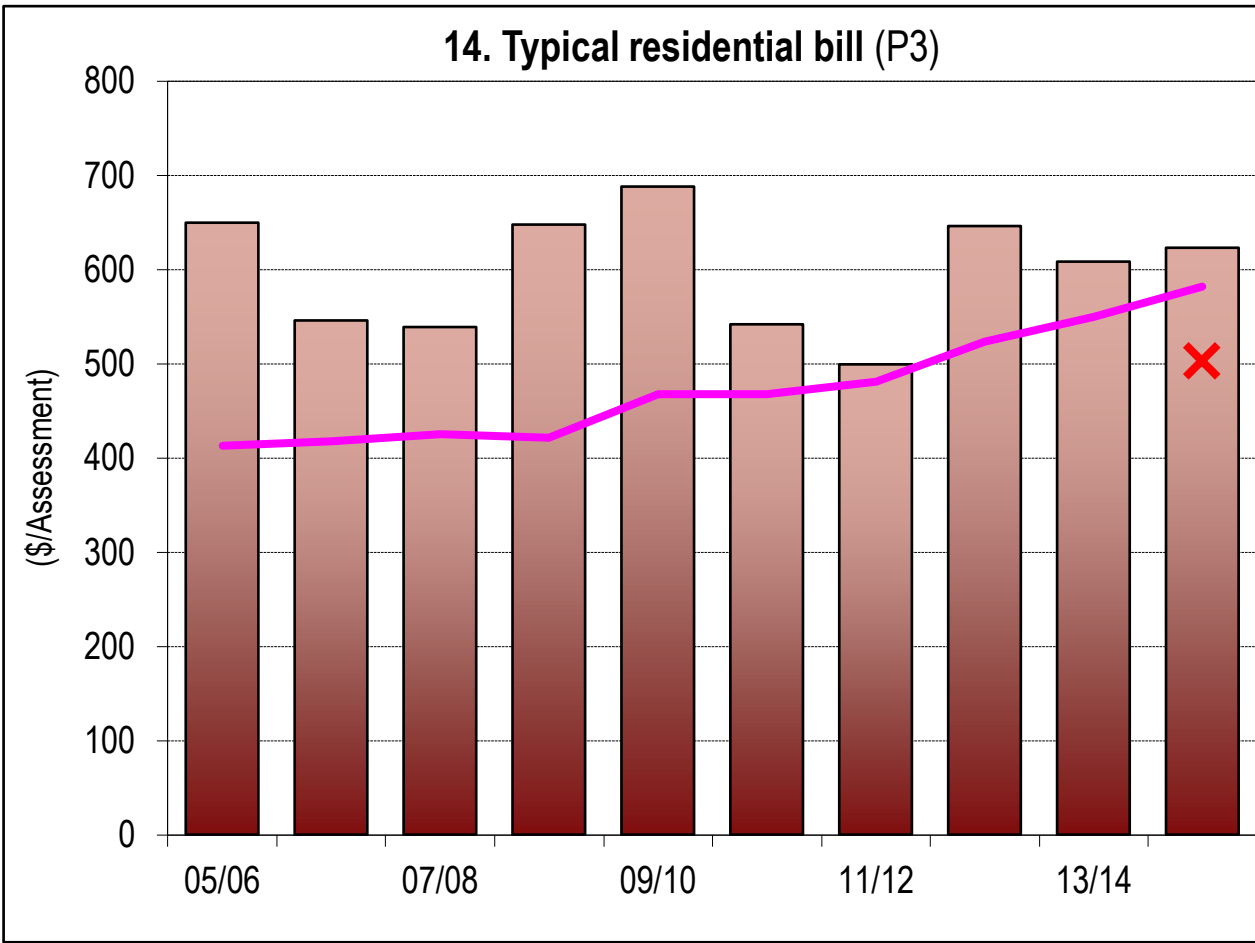
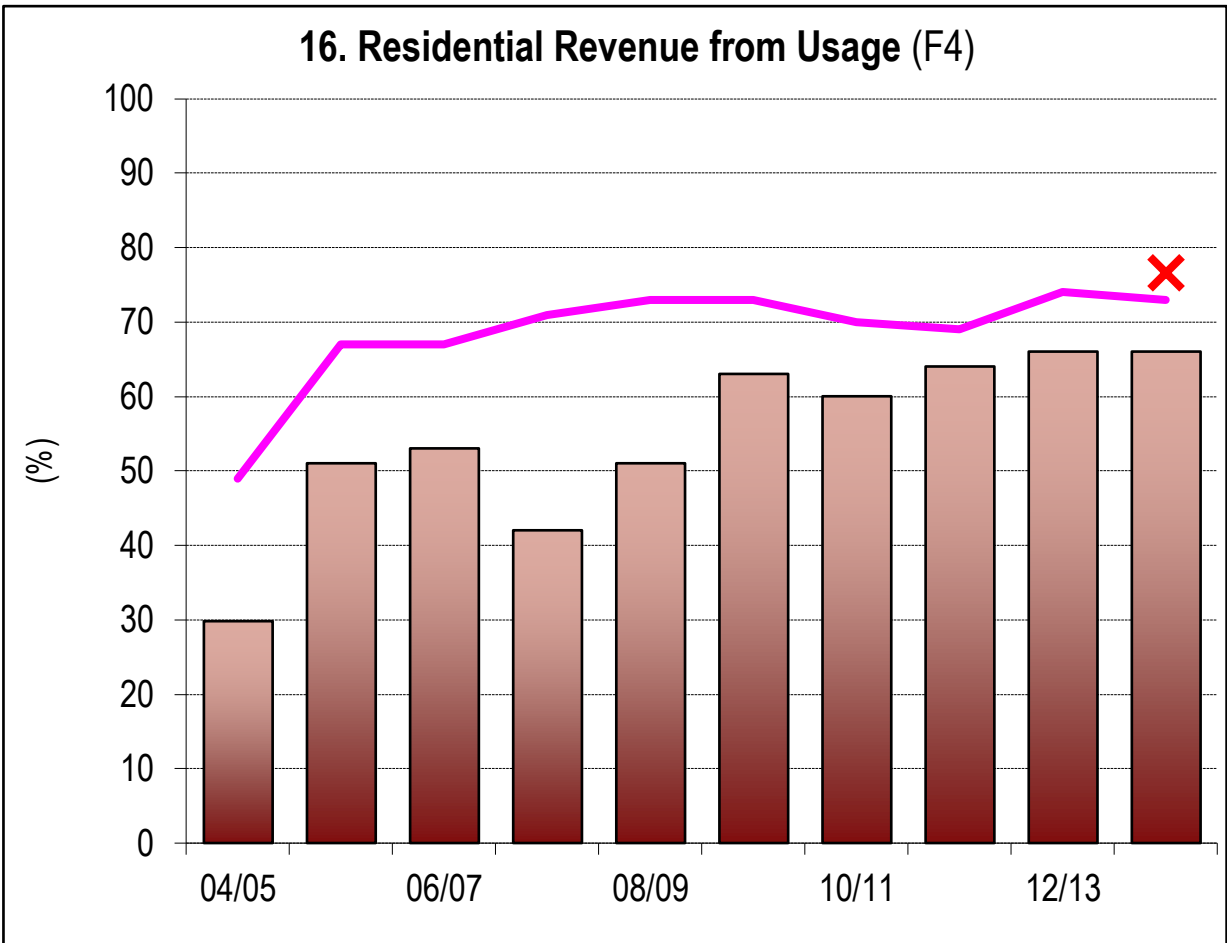
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- BPM Framework - Council needs to implement Appropriate Residential Charges (75% from usage charges) (2c).

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

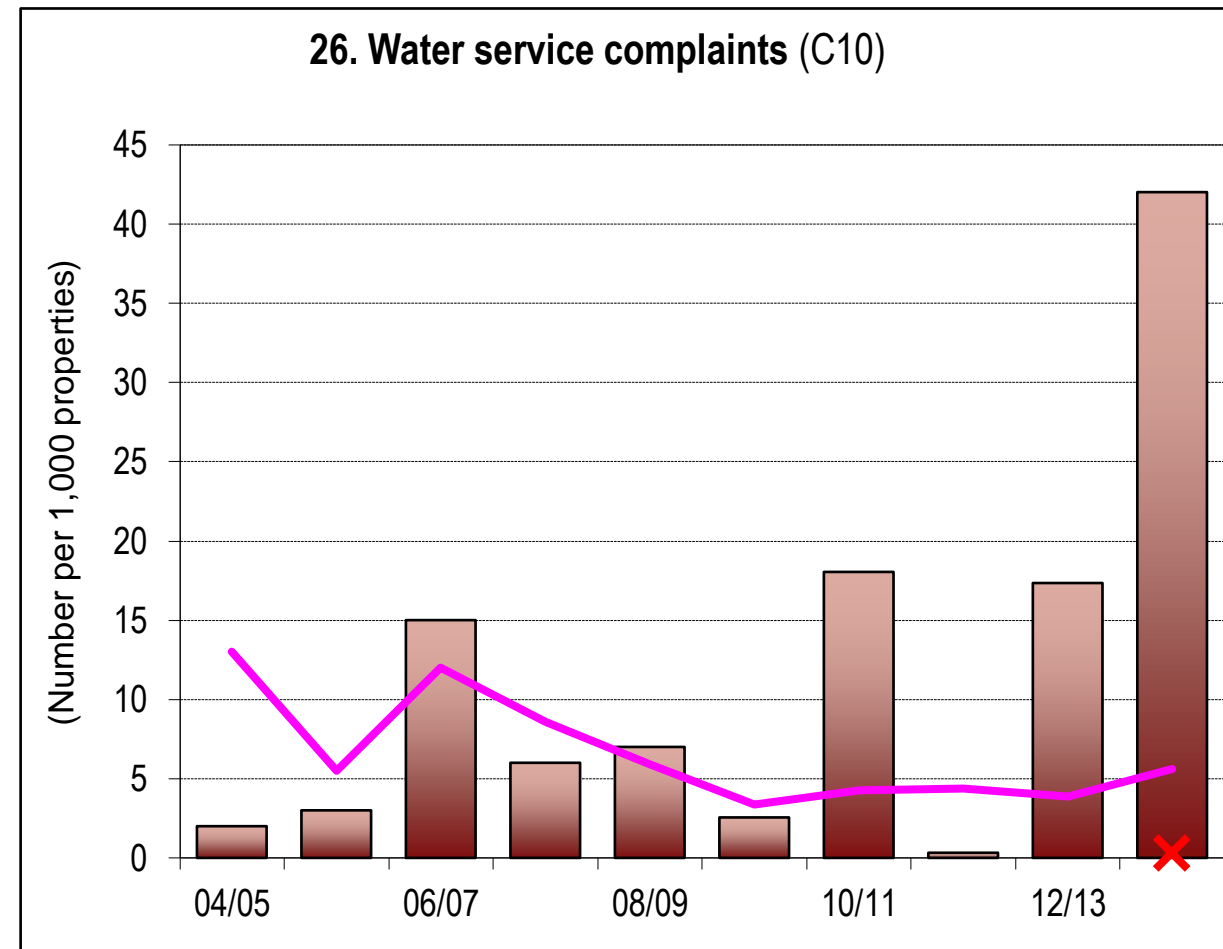
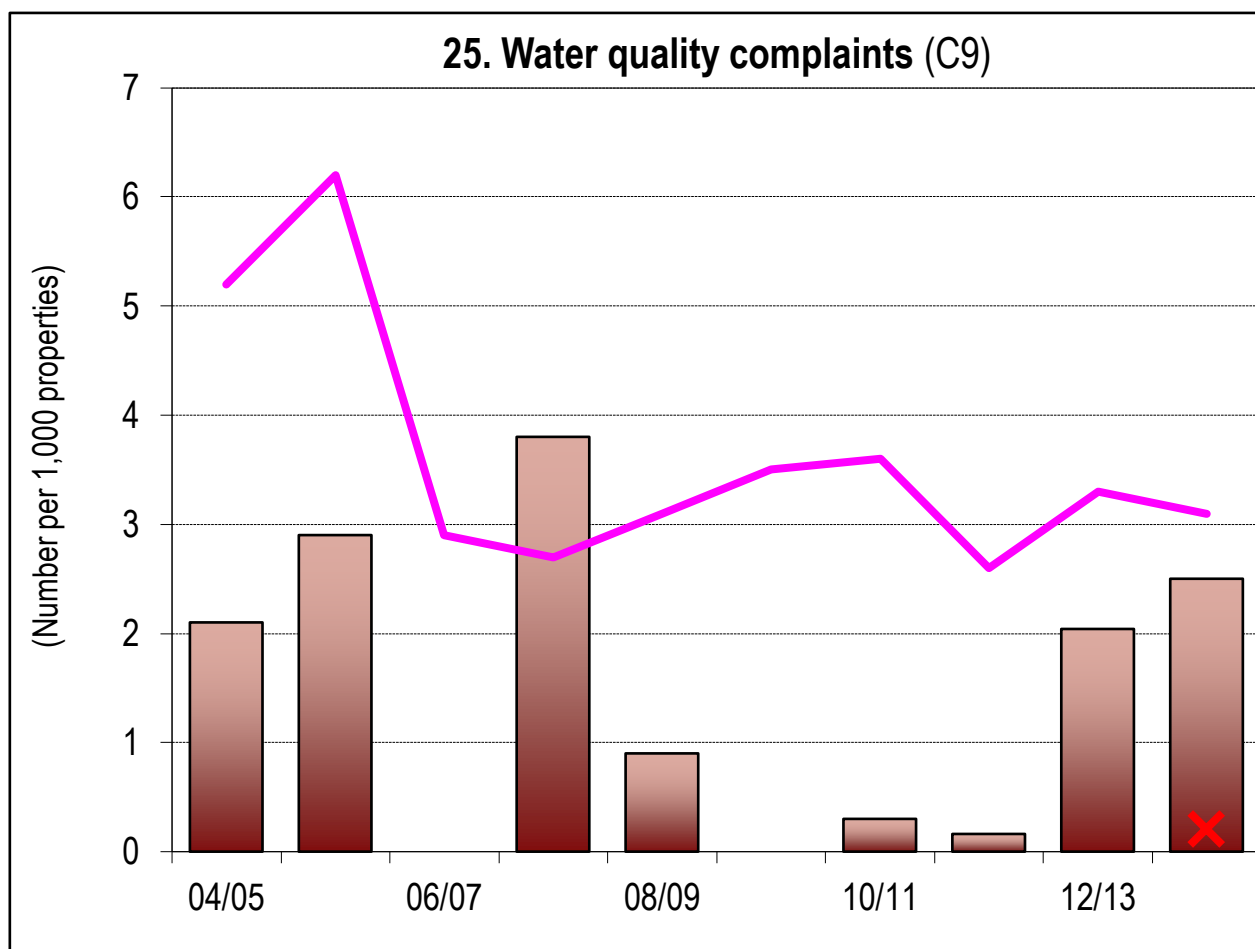
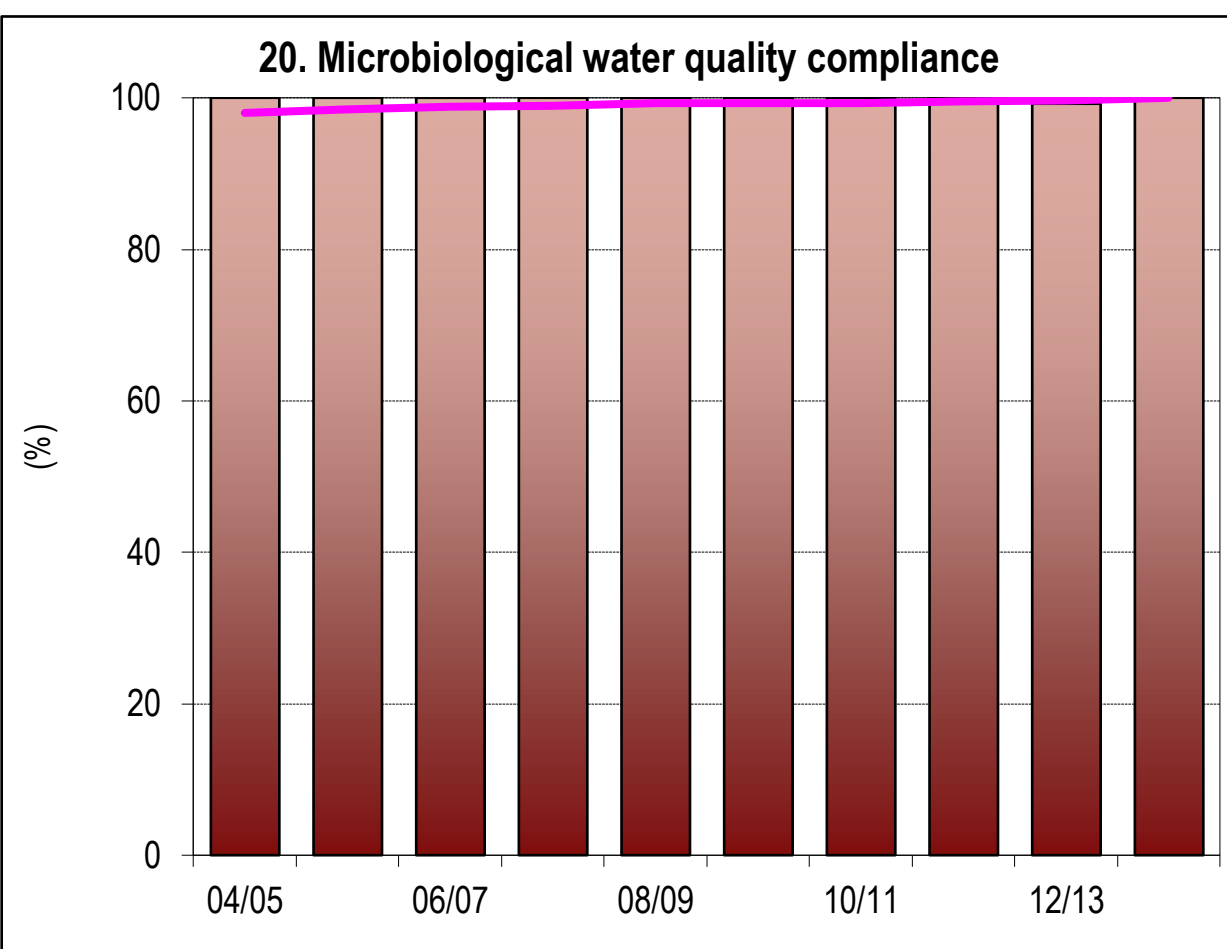
RESIDENTIAL USE/REVENUE FROM USAGE



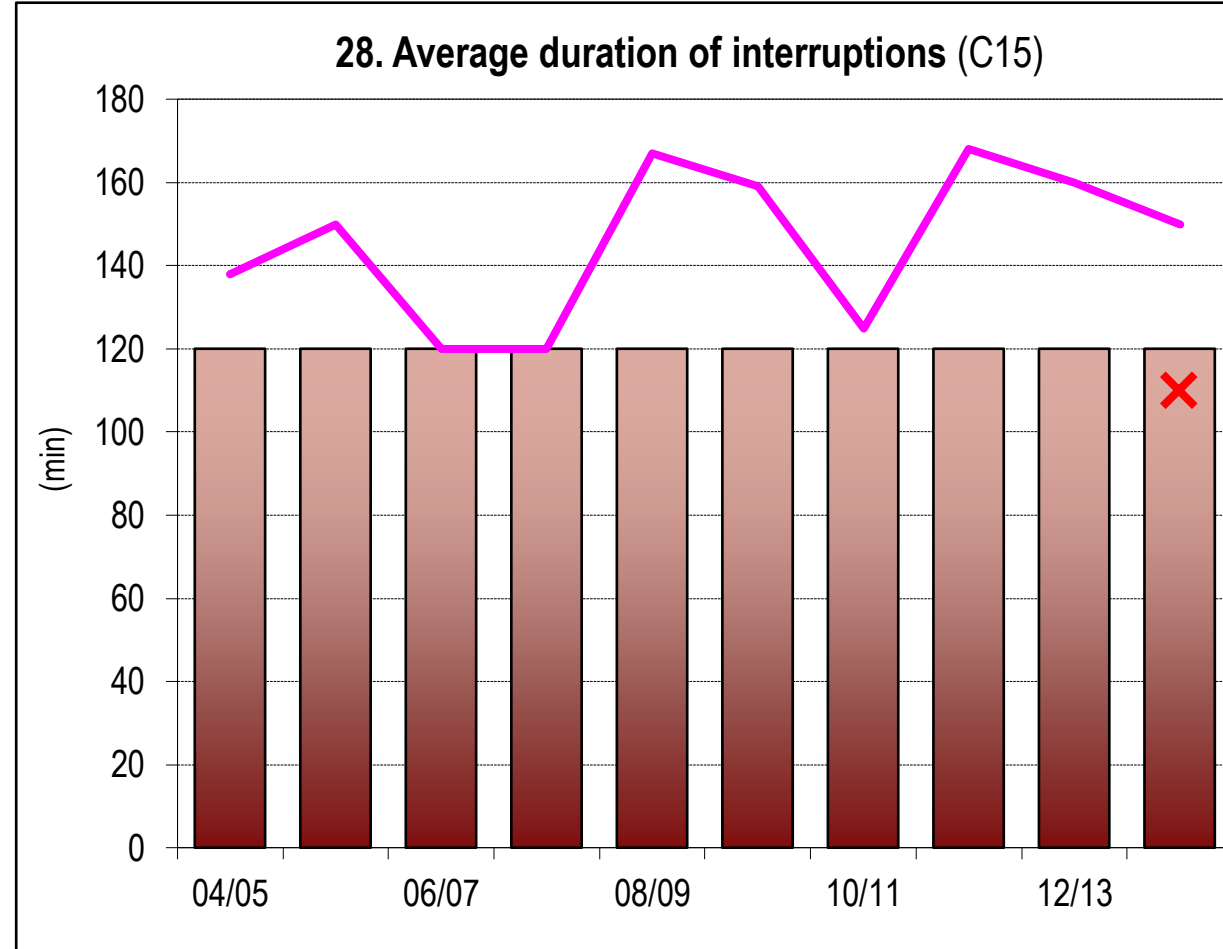
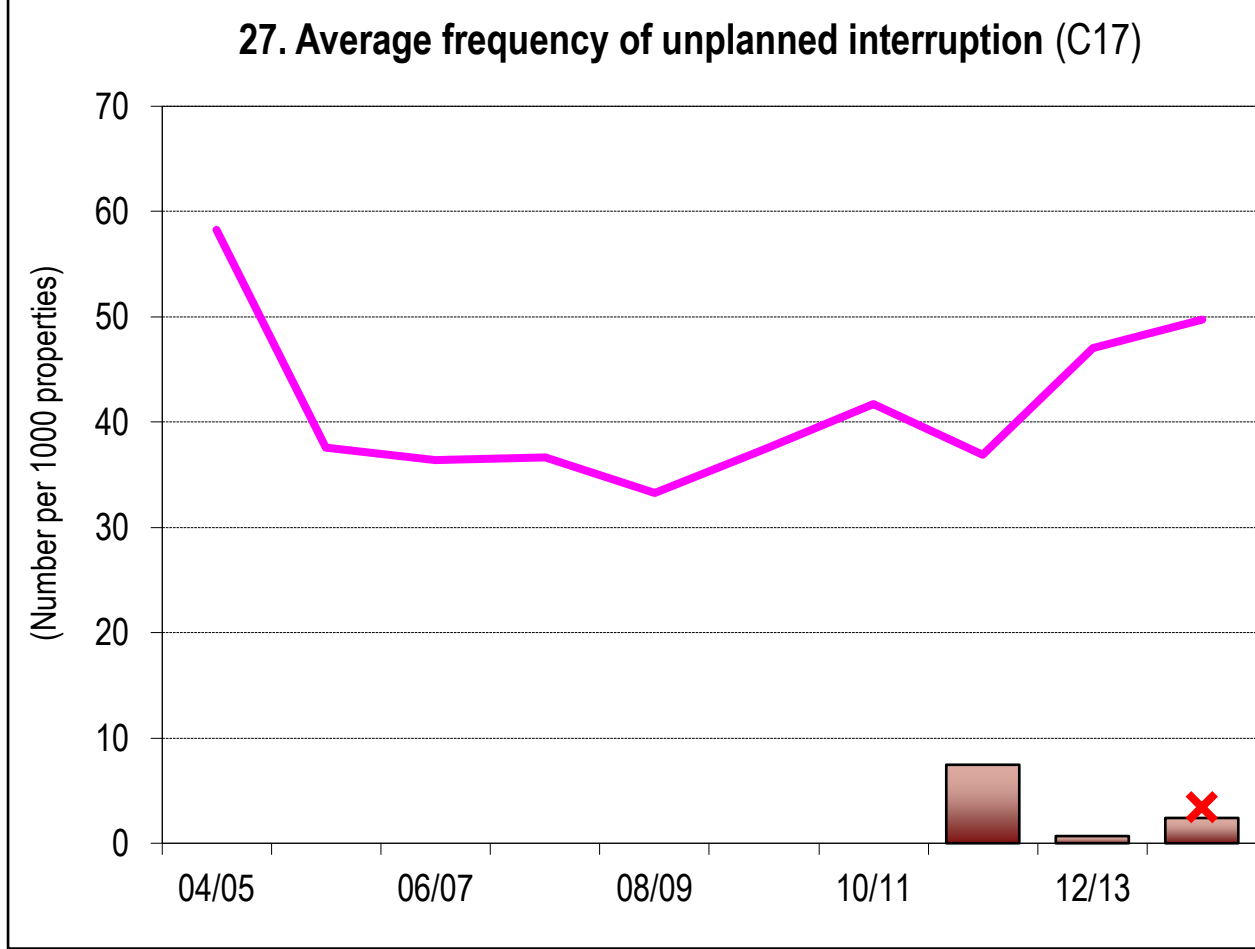
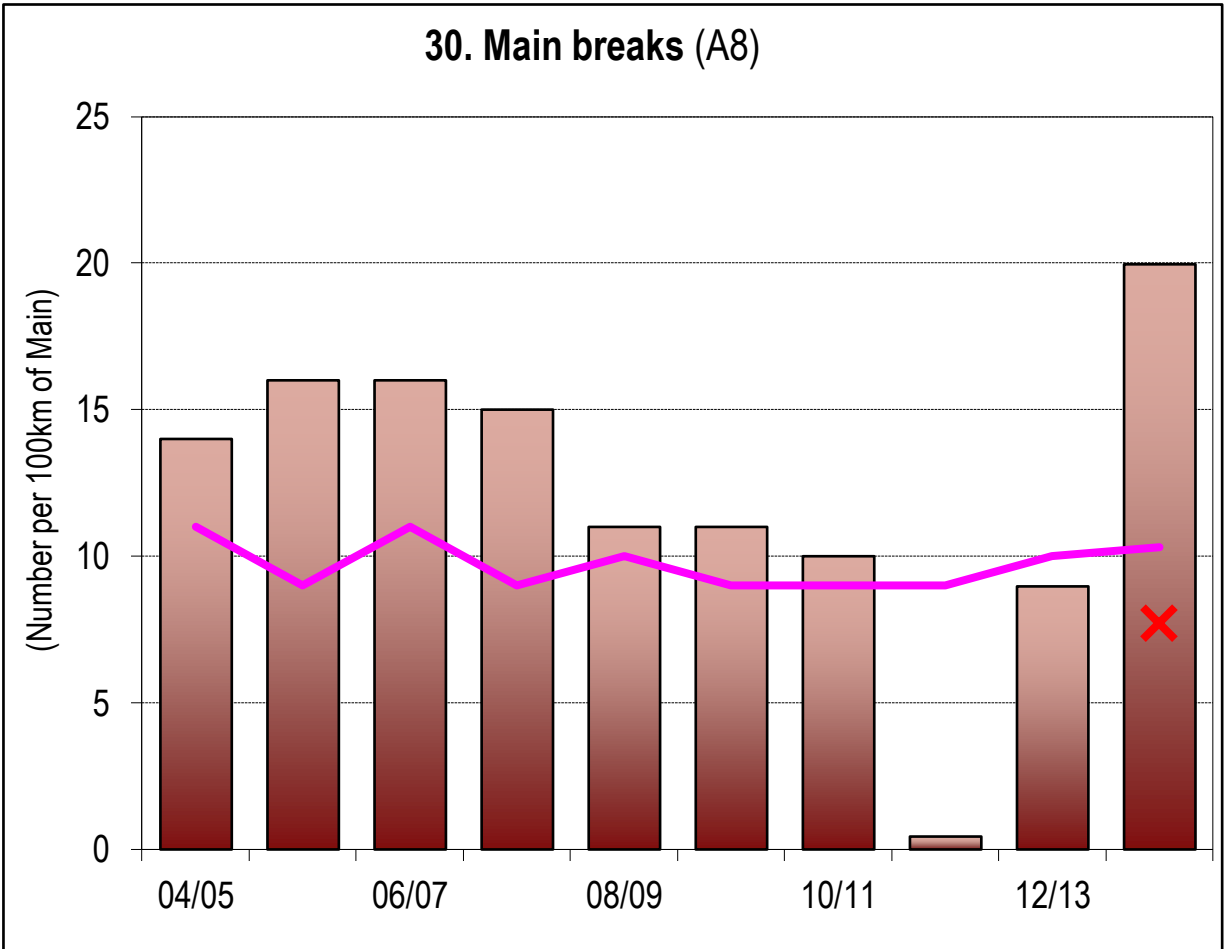
COST RECOVERY



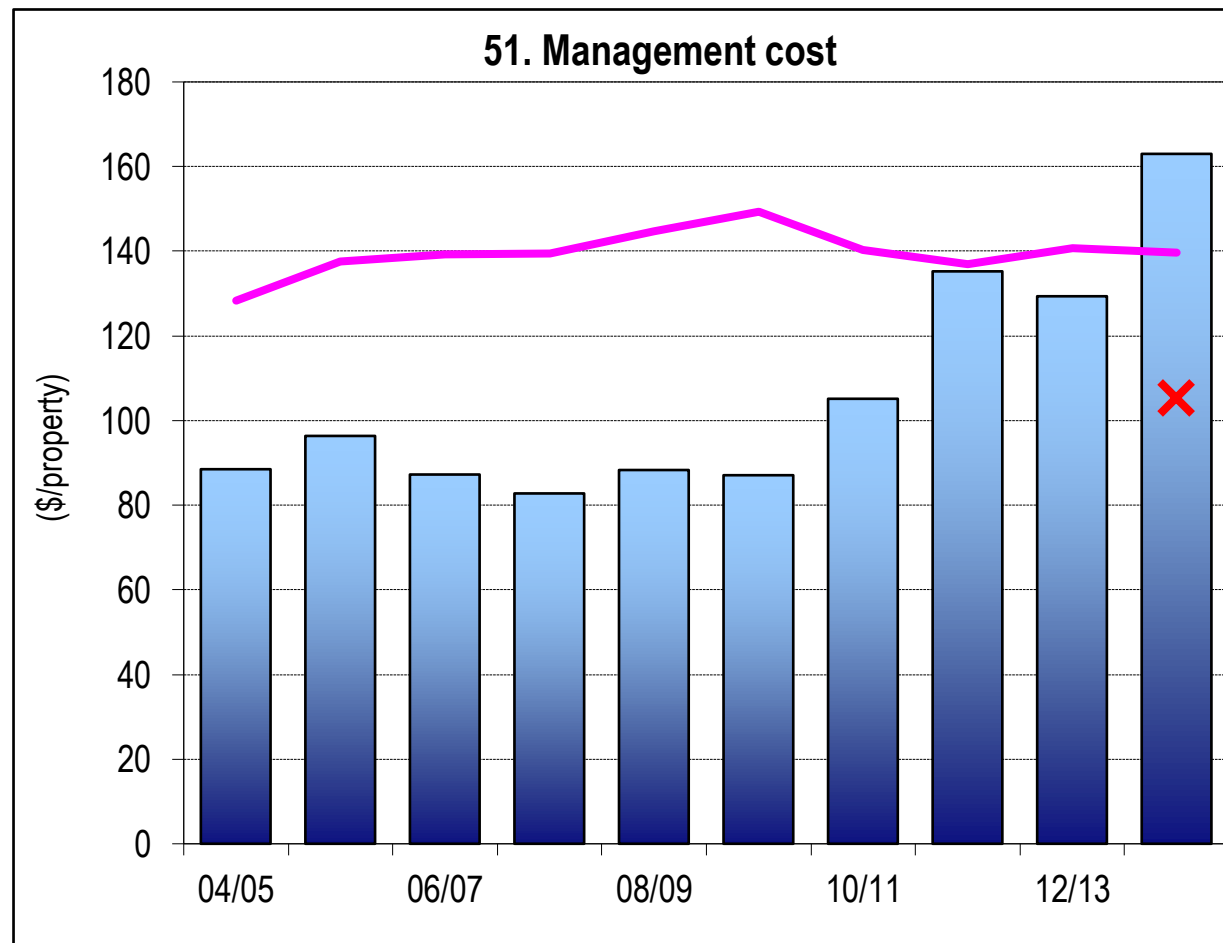
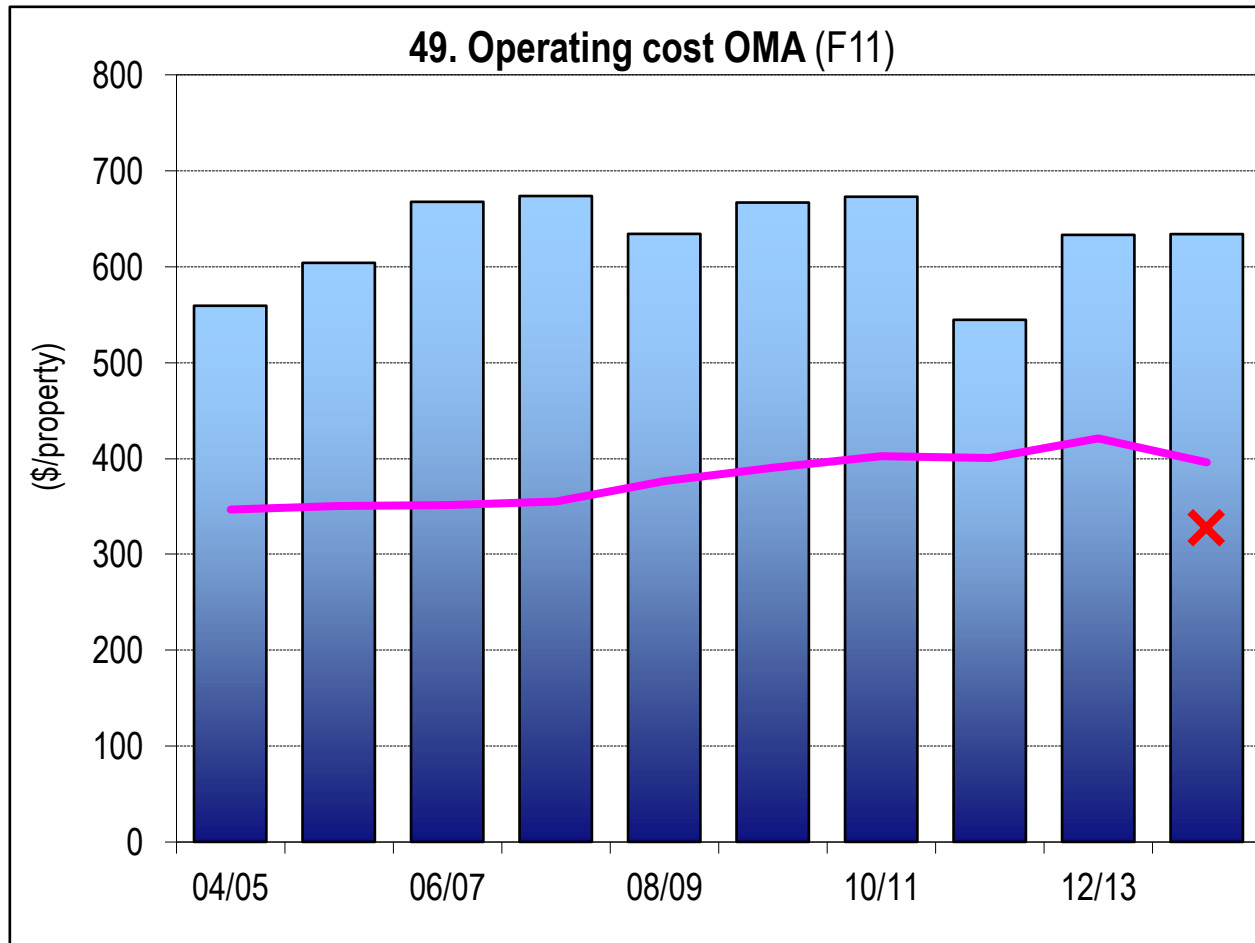
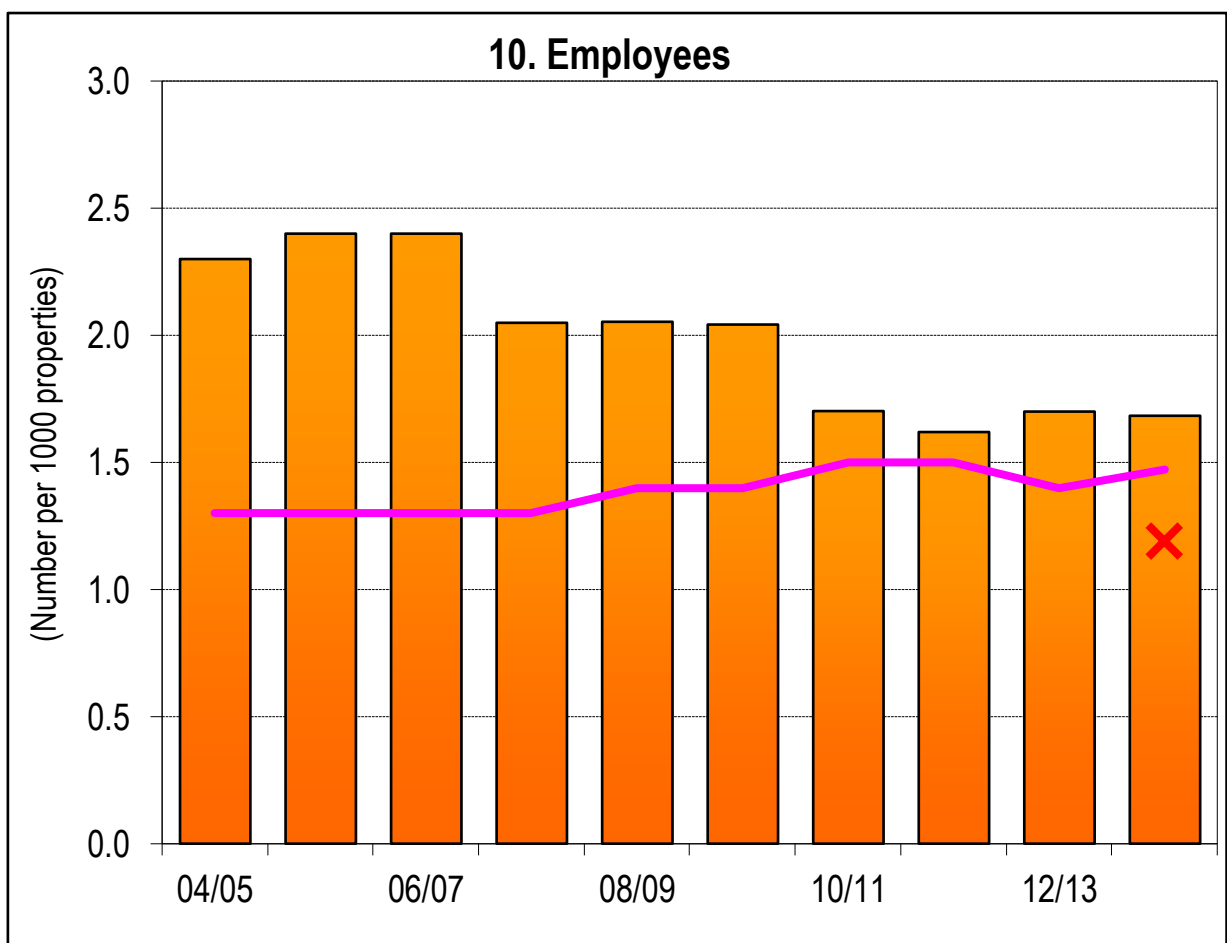
WATER QUALITY/CUSTOMER SERVICE



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

Sydney

Level 1

189 Kent Street

Sydney, NSW, 2000

Tel: 02 9249 5100

Fax: 02 9251 4011

Email: hsc@hydroscience.net.au

Byron Bay

Unit 6

64 Centennial Circuit

Byron Bay, NSW, 2481

Tel: 02 6639 5600

Fax: 02 6680 9319

Based in Sydney and Byron Bay, HydroScience is an Australian consultancy dedicated to serving the water industry in Australia.

HydroScience provides planning and design services to public and private sector clients throughout Australia. We are committed to developing strong client relationships that become the foundation for understanding our clients' needs and exceeding their expectations.

