

# Greater Hume Shire Council

## Fit for the Future

### Assessment of Water Supply and Sewerage



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# Greater Humes Shire Council

## Fit for the Future

## Assessment of Water Supply and Sewerage

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# Summary and Recommendations

## Summary

HydroScience carried out an independent review of the Fit for the Future status of Greater Hume Shire Council's Water Supply and Sewerage Services.

The review was done as two elements.

## Current Performance

This element consisted of a review of the current performance of the Water Supply and Sewerage Services against a number of requirements including the Fit for the Future template, the Best-Practice Management requirements, the Integrated Planning and Reporting (IPR) framework, performance against other local water utilities and financial indicators.

The results of this review indicated that the Water Supply and Sewerage Services largely comply with the requirements, with some non-compliance mainly related to documents requiring updating.

The Water Supply Services show negative operating results. The main reason is the high cost of purchase of water from Albury City Council.

The performance Sewerage Services has been improving, and a positive operating result was achieved in 2013/14. Council expects positive operating results in the long term.

In most other parameters GHSC water and sewerage businesses perform well in comparison to other local water utilities in NSW.

## Future Performance

This element identified issues that Council will need to address in order to ensure continuing sustainability and acceptable performance. These have been collected from Council's existing planning documents, and the current assessment.

A number of recommendations are included in this section, some originate from Councils existing planning documents and others are the outcomes of this review.

## Recommendations

HydroScience recommends that, with respect to the water supply and sewerage businesses, Greater Hume Shire Council:

1. Implement the recommendations listed in Section 3 of this report
2. Carry out an annual review of implementing the recommendations to ensure that Council remain Fit for the Future.

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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). Introduction

## 1.2 Greater Humes Water Supply and Sewerage

Greater Hume Shire Council (GHSC) is a general purpose Council, with responsibility for delivery of and Sewerage Services to urban populations across the shire. GHSC provides Water Supply Services in Culcairn, Jindera and villages in the south of the shire. Water to Henty, Holbrook and villages in the north and east of the shire is supplied by Riverina Water.

The Water Supply and Sewerage Services form a significant part of Greater Hume Shire Council's operations. The Water Supply and Sewerage assets represent approximately 15% of all Council's assets (Source: Asset Management Strategy 2012). The income from the Water Supply and Sewerage Services is shown in Table 1.

**Table 1: Water Supply and Sewerage Income**

Business	Income
Water Supply (\$'000)	1,469
Sewerage (\$'000)	1,461
Total GHSC Infrastructure (\$'000)	29,808
% Water Supply and Sewerage	10%

Source: 2013/14 financial statements

GHSC commissioned HydroScience to assess the Fit for the Future of the Water Supply and Sewerage Services in recognition of the importance of these operations.

### 1.3 This Report

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

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

<b>Current Performance</b>	Review of the current performance of the Water Supply and Sewerage Services. This includes compliance audit against requirements and guidelines.
<b>Future Performance</b>	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. These form Council's improvement program.

## 2 Current Performance

### 2.1 Scope

This section is assessment of GHSC's Water Supply and Sewerage Services. 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 response to the questions is summarised in Table 2

**Table 2: 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?	Mostly comply with some exceptions		Refer to Section 02.3
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?	No backlog. Only 2% of the assets are in Condition 5 (very poor). Renewals of these are funded.		Investment in renewals in the 30 year capital works program is: Water supply: \$2.7 M, Sewerage: \$4.8 M



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"> <li>Proposed Works</li> <li>Timeframe &amp; Cost</li> <li>Grants or external funding</li> </ul>	Water supply: Nil Sewerage: Jindera sewage treatment plant and reuse scheme. Time: 2020, Estimated cost: \$4.2 M. Council intends to apply for funding.	Council has 30 year capital works programs for water supply and sewerage, included in Appendix A.
4	Does your council currently manage its water and sewerage operations on at least a break-even basis? (Yes or No)		Op. results
			20142013
		Water Supply	 (\$130k) (\$30k)
		Sewerage	 \$109k (\$119k)
4a	If No, please explain the factors that influence your performance	Water supply: High cost of water purchased from Albury City Council (ACC)	GHSC is trying to mitigate the cost: Negotiation with ACC; developing own water sources, thus reducing the dependency on water purchase
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"> <li>Strategy</li> <li>Timeframe</li> <li>Anticipate Outcome</li> </ul>	Refer to Section 3.	

## 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 GHSC's 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 3. For reference documents refer to Section 2.3.2.

#### Methodology

We have reviewed the documents and information provided by GHSC 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 GHSC's Water Supply and Sewerage Services 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 GHSC 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 3 summarises the outcomes of the audit. The table also shows the compliance as stated in the NSW 2012/13 Performance Monitoring Report.

**Table 3: 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 4 years old
				DWMS	 Draft, Feb 14
	2 Pricing and Developer Charges				
2	2a	Full cost recovery minimal cross subsidies	Yes	No	 Op. Result (\$123,000) No cross subsidies
3	2b	Appropriate Residential Charges	Yes	Yes	 Requirement for inclining block tariff removed
4	2c	Revenue for Residential Usage Charges >=75%	Yes	Yes* (NOW's rating for 70-75%)	 2014 was 72%.
5	2d	Appropriate Non-Residential Charges	Yes	No	 Access charge is not based on square of meter diameter
6	2e	Development Servicing Plan with Commercial Developer Charges	Yes	Yes	 Compliance with DSP guidelines not checked
7	3	Sound Water Conservation Plan Implemented	Yes	Yes	 Commenced 2014.

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit		Comments
8	4	Sound Drought Management Plan Implemented	Yes	Yes		Completed in 2014.
9	5	Complete performance Reporting by 15 Sep.	Yes	Yes		Advised by GHSC.
10	6	Integrated Water Cycle Management Plan Commenced	Yes C (completed)	Yes		Need for update may be subject to new guidelines
<b>Sewerage Services</b>						
11	1	Strategic Business Plan and financial plan	Yes	No		Over 4 years old
2 Pricing and Developer Charges (yes/No)						
12	2a	Full cost recovery minimal cross subsidies	Yes	Yes		Op. Result \$109,000 No cross subsidies
13	2b	Appropriate Residential Charges	Yes	Yes		
14	2c	Appropriate Non-Residential Charges	Yes	No		Access Charge is not based on square of meter diameter
15	2d	Appropriate Trade Waste Fees and Charges	Yes	Yes		
16	2e	Development Servicing Plan with Commercial Developer Charges	Yes	Yes		Compliance with DSP guidelines not checked

No. 1 to 19	Element Number	Requirement	Compliance in NOW 2012/13 Performance Monitoring Report	Compliance in 2013/14 – Outcomes of this Audit		Comments
17	2f	Liquid Trade Waste regulation policy and approvals implemented	Yes	Yes		
18	3	Complete performance Reporting by 15 Sep.	Yes	Yes		Advised by GHSC.
19	4	Integrated Water Cycle Management Plan Commenced	Yes C (completed)	Yes		Need for update may be subject to new guidelines

## 2.4 Integrated Planning and Reporting

While the best-practice management, addressed in Section 2.3, 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 4.

**Table 4: 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	Water Supply AMP	IPR Asset Management Policy, Strategy and Plan requirements	Yes		Covers all assets including water supply
3	Sewerage Services AMP	Ditto	Yes		Covers all assets including sewerage

## 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 are for 2013/14, and performance reports for 2012/13.

### 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 (1500 – 3000 connections) and on a state-wide comparison.

On these reports, GHSC performs well. In the water supply report only six parameters ranked 5 (in the 1500 – 3000 connections group). The sewerage reports shows only one parameter with ranking of 5. On many parameters GHSC achieved ranking of 1 and 2, which is better than median.

The TBL reports are included in Appendix B. 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 2012/13 NSW Water Supply and Sewerage Performance Monitoring Report, showing the relative location of GHSC 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. GHSC is in Group 3.

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. GHSC customers enjoy relatively low bill, approximately in the lower quartile of water supply and sewerage customers in NSW

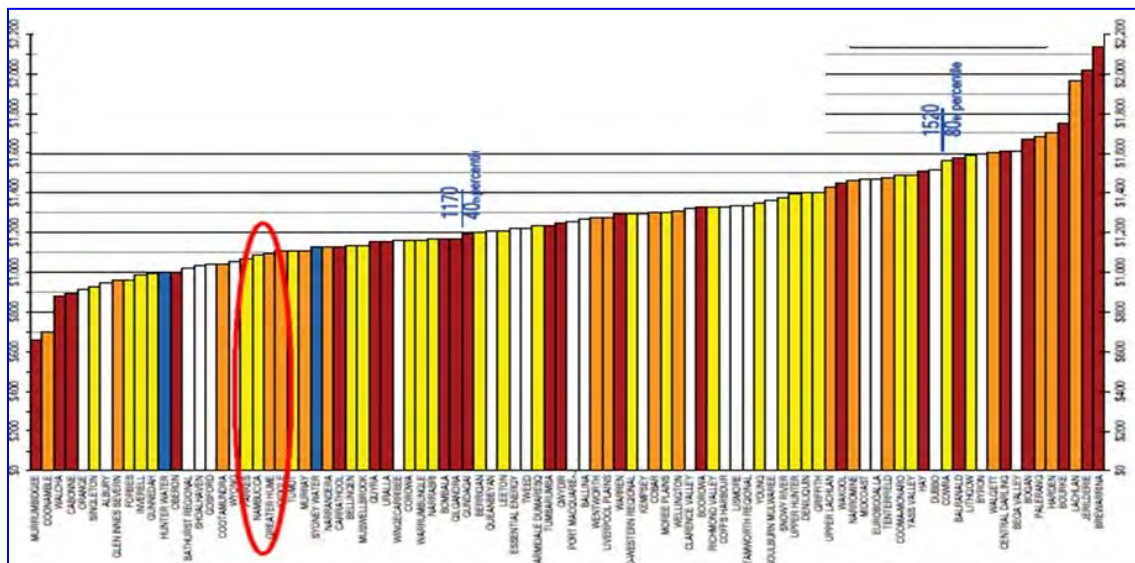


Figure 1: Typical Residential Bill Water Supply and Sewerage

### Economic Real Rate of Return

Figure 2 shows a negative real rate of return (combined for both Water Supply and Sewerage Services). In 2013/14, Sewerage Services achieve a positive ERRR. The negative rate puts GHSC at the lower end of LWUs in NSW.

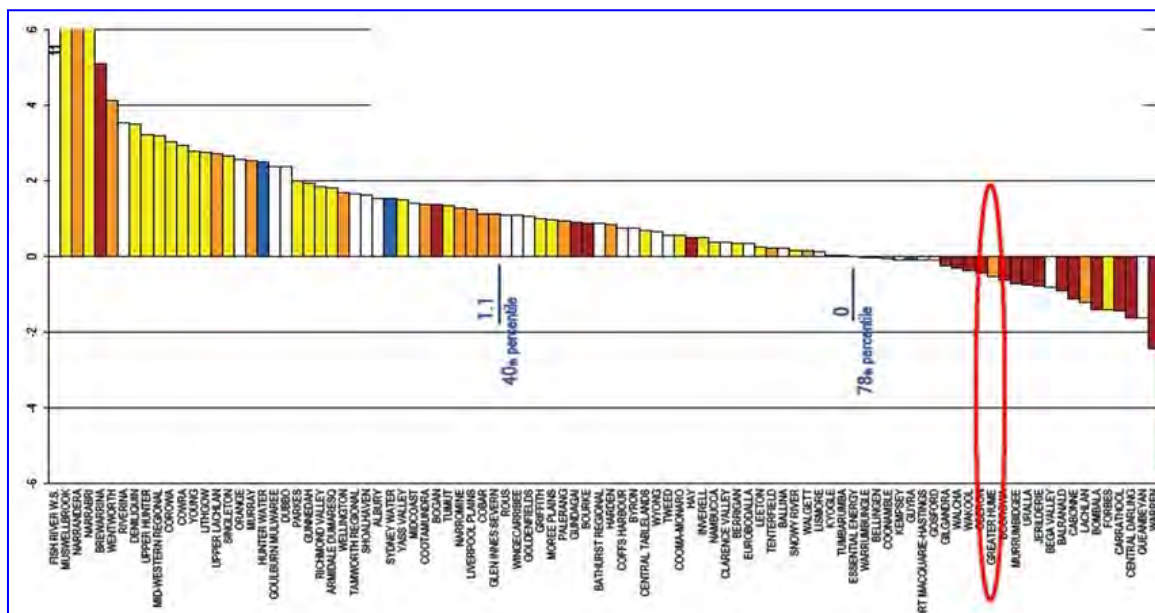
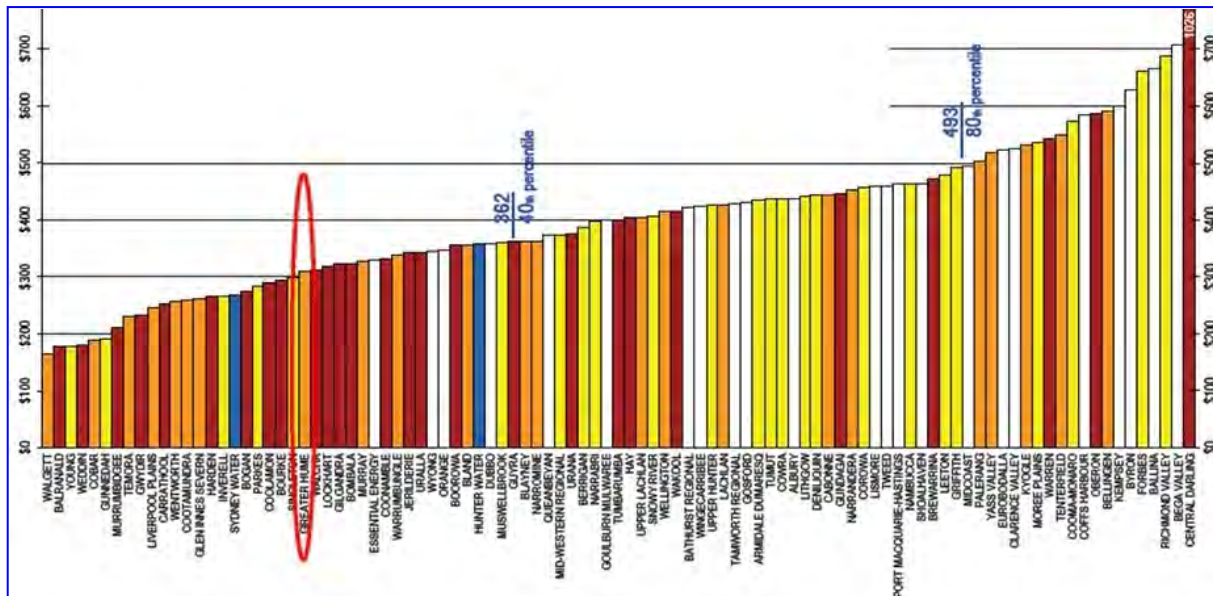


Figure 2: Economic Real Rate of Return

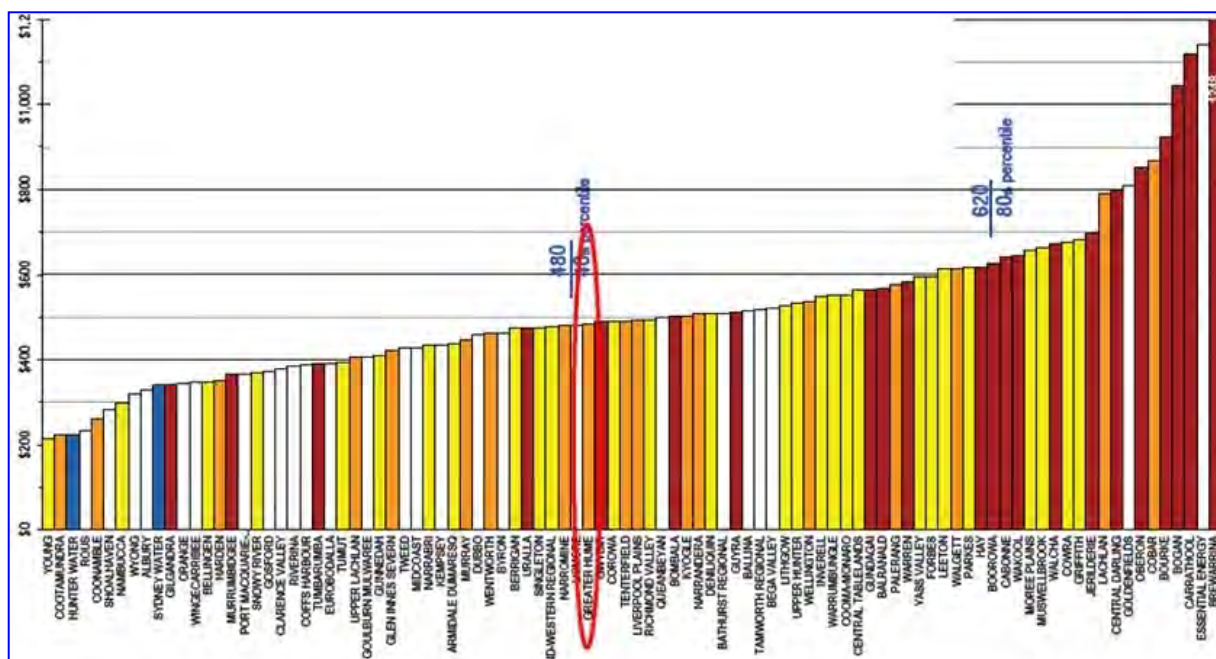


## Operating Costs

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. GHSC operating costs are in the mid-range of LWUs for the water supply, and at low end 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. GHSC operating costs are in the mid-range of LWUs for water supply, and at the low end for sewerage.

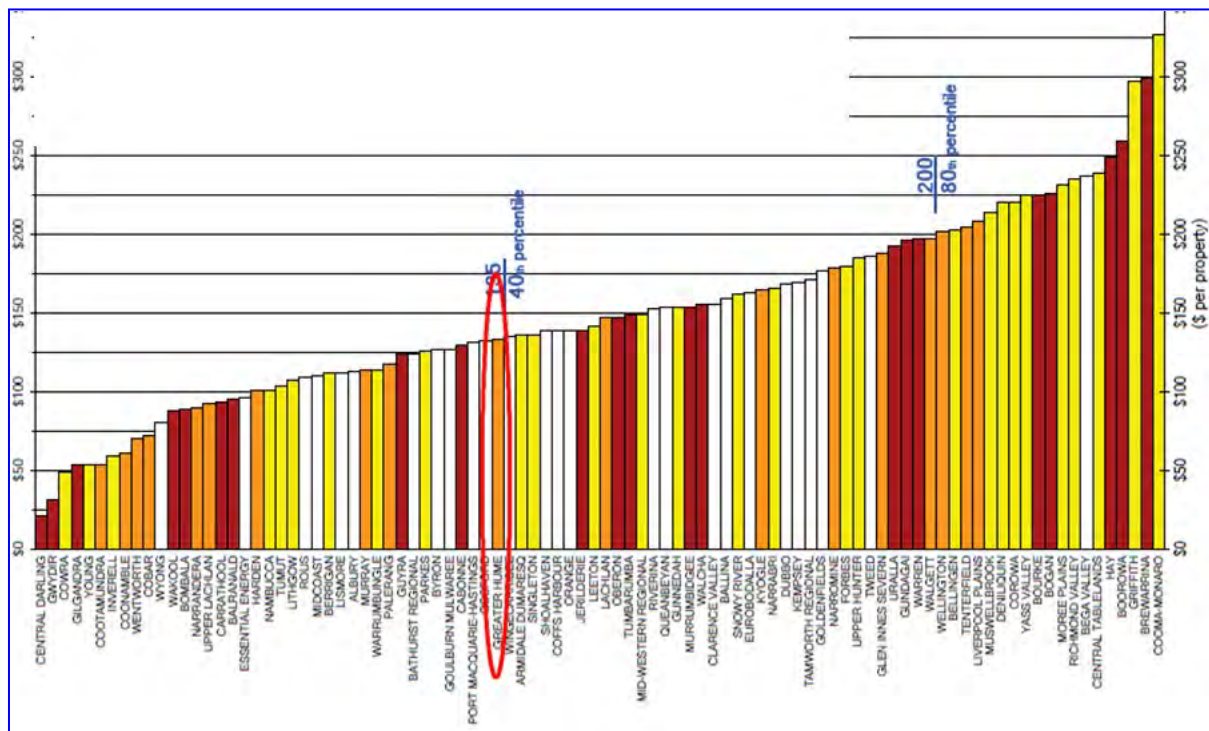


Figure 6: Water Supply Management Costs per Property

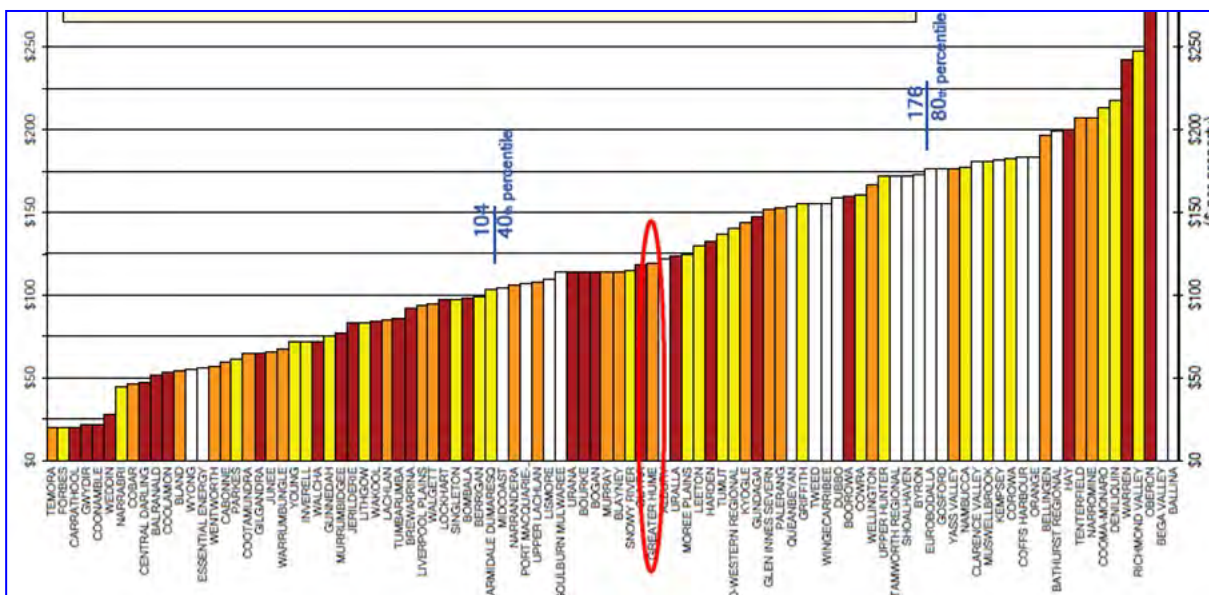
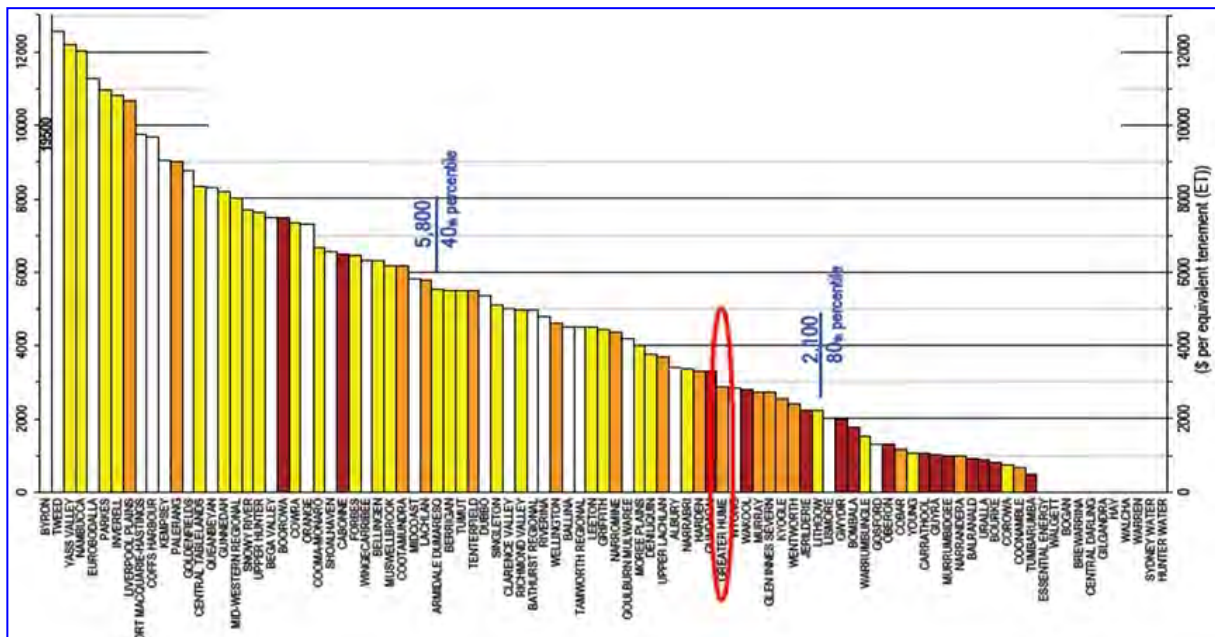


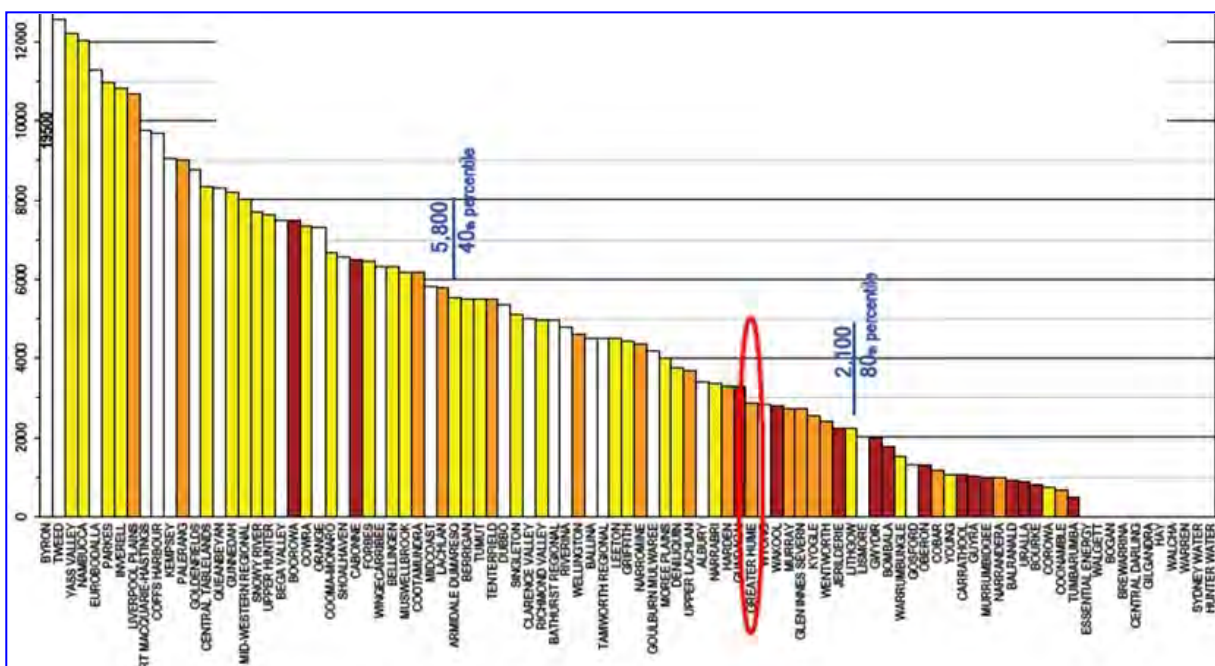
Figure 5: Sewerage Management Costs per Property

## 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 GHSC are at the low end, 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 5 and Table 6. 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, GHSC performance is comparable to other water utilities. In the group of 1500-3000 connections, GHSC has no low ranking (5) ranking on any parameters. With the exception of economic real rate of return (rank of 4), GHSC ranked 3 (mid-range) and better on the financial indicators. The TBL reports are included in Appendix B.

**Table 5: Water Supply Financial Indicators (From 2013/14 TBL Reports)**

Financial Indicator	GHSC Result	State-wide Median	Ranking	
			LWUs with 1500 – 3000 connections	All LWUs
Typical Residential Bill for 2014/15 (\$)	664	582	2	3
Economic Real Rate of Return (%)	-0.8	1.2	4	5
OMA cost per property ( \$ )	503	400	2	3
Management Cost per property (\$)	140	140	3	2
Residential Revenue from Usage Charges (% of residential bills)	60	73	3	4
Typical Developer Charge for 2014/15 (\$/ET)	3,000	5,500	3	4

**Table 6: Sewerage Current Financial Indicators (From 2013/14 TBL Reports)**

Financial Indicator	GHSC Result	State-wide Median	Ranking	
			LWUs with 1500 – 3000 connections	All LWUs
Typical Residential Bill for 2014/15 (\$)	489	669	3	2
Economic Real Rate of Return (%)	0.1	1.5	4	4
OMA per property ( \$ )	318	430	2	2
Management Cost per property (\$)	125	161	3	3
Typical Developer Charge for 2014/15 (\$/ET)	4,020	5,100	2	3

## 3 Future Performance

### 3.1 Introduction

The future performance was assessed in three sections:

- ❑ Issues and actions. HydroScience reviewed GHSC planning documents for water supply and sewerage, and identified major issues. Council's response to these issues was evaluated, and where appropriate required actions were recorded.
- ❑ System asset projections. Assessment of the future condition of the assets based on capital works program and depreciation.
- ❑ Financial projections. Council's future financial position was assessed based on the long term financial plans.

### 3.2 Issues and Actions

No.	Document / Requirement	Issues	Recommended Actions
<b>1</b>	<b>Strategic Business Plan (Water &amp; Sewerage), Financial Plan and Drinking Water Management System</b>		
1.1	SBP& FP	Plans complied when prepared, but are out of date	Update SBP and FP. (If IWCM needs to be updated, SBP is not required)
1.2	SBP& FP	GHSC did not comply with 100% of the environmental licences and PRP requirements	Operate and maintain the systems in accordance with the sewerage operation and maintenance procedures
1.3	SBP&FP	Operating rules and procedures are not in place	Develop operating rules and procedures
1.4	SBP&FP	Lack of capacity in Jindera STP. Capital works program includes new Jindera STP in 2020.	Implement as per capital works program
1.5	SBP&FP, DWMS	Insufficient residual chlorine level in villages distribution system	Monitor residual chlorine levels and implement chlorine booster stations as required
1.6	SBP&FP	Significant increase to the TRB for water supply	Implement the TRB increase over a number of years in order to reduce the impact on customers
1.7	SBP&FP	Prepare updated financial plans annually	program financial plan updates (See 1.1)
1.8	SBP&FP, Draft IWCM Strategy	Imminent Office of Water GHSC IWCM Strategy review	Prepare revised SBP by 2019 and/or address NOW comments before finalizing IWCM.

No.	Document / Requirement	Issues	Recommended Actions
1.8	DWMS	Requirement to revise DWMS every 4 years	Prepare revised DWMS in 2018
<b>2</b>	<b>Pricing and Developer Charges</b>		
2.1	2a Full cost recovery , minimal cross subsidies	Water fund not achieving cost recovery (2014 Water fund loss \$123K)	Review expenditure, in particular the cost of bulk water from Albury Review price path (Refer also to Section <b>Error! Reference source not found.</b> 3.4)
2.2	2d(Water) Appropriate Non-Residential Charges	Non-residential Water access charge does not increase at the square of the meter size	Implement revised non-residential access charge tariff structure that better addresses best-practice pricing
2.3	2c (Sewerage) Appropriate Non-Residential Charges	Non-residential Sewerage access charge does not increase at the square of the pipe size	Amend non-residential charges or adopt a reasoned position that Council does not intend to comply
2.4	2e DSP	DSP is current	Update by 2019
2.5	2f Sewerage – Liquid Trade Waste policy & approvals	Register of Trade Waste agreements not identified at this stage	Assess implementation of TW policy
<b>3</b>	<b>Sound Water Conservation Plan Implemented</b>		
3.1	Demand Management Plan	Implementation of Potential Water Conservation Measures Implementation Plan including: Conservation Pricing Community Education Residential Washing Machine Rebate BASIX – Fixture Efficiency with Rainwater Use National Water Efficiency Labelling Scheme Residential Shower Retrofit	Implement demand measures

No.	Document / Requirement	Issues	Recommended Actions
<b>4</b>	<b>Drought Management Plan</b>		
4.1	Drought Management Plan	Impact of Albury City Council drought restrictions	Council will also investigate and if appropriate develop alternative bore supplies for villages
4.2	Drought Management Plan	Culcairn Bore drought supply security	further develop the bore supply at Culcairn by increasing bore depth
<b>5</b>	<b>Performance Reporting</b>		
5.1	Water Supply Triple Bottom Line(TBL) report	<p>In the 2012-13 TBL report Council was in the bottom quintile ranking (for 1501 to 3000 connection councils) for performance against:</p> <ul style="list-style-type: none"> <li>• 8 Peak week to average consumption (237%)</li> <li>• 36a net greenhouse emissions (350 net tonnes CO<sub>2</sub>/property-equivalent per 1000 properties)</li> <li>• 43 Economic rate of return (Water - 0.4%)</li> <li>• 46 Interest cover WS &amp; Sge (0)</li> <li>• 47b Net profit after tax WS &amp; Sge (\$-150,000)</li> </ul>	Review causes of low ranking in performance and address
5.2	Sewerage Services Triple Bottom Line(TBL) report	<p>In the 2102-13 TBL sewerage services report Council was in the bottom quintile ranking (for 1501 to 3000 connection councils) for performance against:</p> <ul style="list-style-type: none"> <li>• 15 Revenue per property (\$440)</li> <li>• 46 Economic real rate of return (-0.6%)</li> <li>• 46a Return on assets (-0.4 %)</li> </ul>	Review causes of low ranking in performance and address
<b>6</b>	<b>Integrated Water Cycle Management Plan for Water and Sewerage</b>		
6.1	Draft IWCW Strategy	Prepared 4 years ago, new guidelines may require updating.	Clarify with NOW if updating is required, and commence updating if appropriate.



No.	Document / Requirement	Issues	Recommended Actions
<b>7</b>	<b>Integrated Planning and Reporting</b>		
7.1	Resourcing Strategy	Requires 4 yearly Update	Update in 2016
7.2	Water Supply and Sewerage Services Asset Management Plans	The existing AMPs do not include: <ul style="list-style-type: none"> <li>• Asset Management Policy</li> <li>• Asset Management Strategy</li> </ul>	Review Asset Management Plans for Water and Sewerage and update to address IPR guidelines Update in 2016

### 3.3 System Asset Projections

In this section, HydroScience checked that the renewal estimates the condition of the existing system assets, based on depreciation and the projection of renewal investment in the capital works program.

The outcomes are summarised in Table 7.

**Table 7: Existing System Assets Projection**

No	Item	Water Supply	Sewerage
1	2014 Replacement Cost \$'000 <sup>1</sup>	32,058	45,871
2	2014 Written Down Cost \$'000 <sup>1</sup>	21,232	30,666
3	Value of WDC (2 ÷ 1)	66%	67%
4	Annual Depreciation \$'000 <sup>1</sup>	368	495
5	Forecast depreciation over 30 years \$'000 (4 * 30)	11,040	14,850
6	30 year renewal Program \$'000 <sup>2</sup>	2,672	4,760
7	Forecast written down cost in 30 years \$'000	12,864	20,576
8	Forecast value in 30 years	40%	45%

Sources:

1. Special Schedules 2013/14
2. Capital Works Program 2015

Notes:

1. The table assumes that new assets built over the next 30 years will not require renewal
2. The calculation assumes that the depreciation and the written down values are true representation of the assets conditions.

Based on information provided by GHSC, the renewal investment included in the capital works program is not sufficient to meet the depreciation charges predicted over the next 30 years. Asset condition need to be carefully monitored at 5 yearly intervals as included in Council's Fit for the Future Improvement Action Plan to ensure that existing assets are maintained in their current condition.

Recommended Actions	Monitor asset conditions and update renewal program at 5 yearly intervals.
	Update the financial plan and the long-term price path

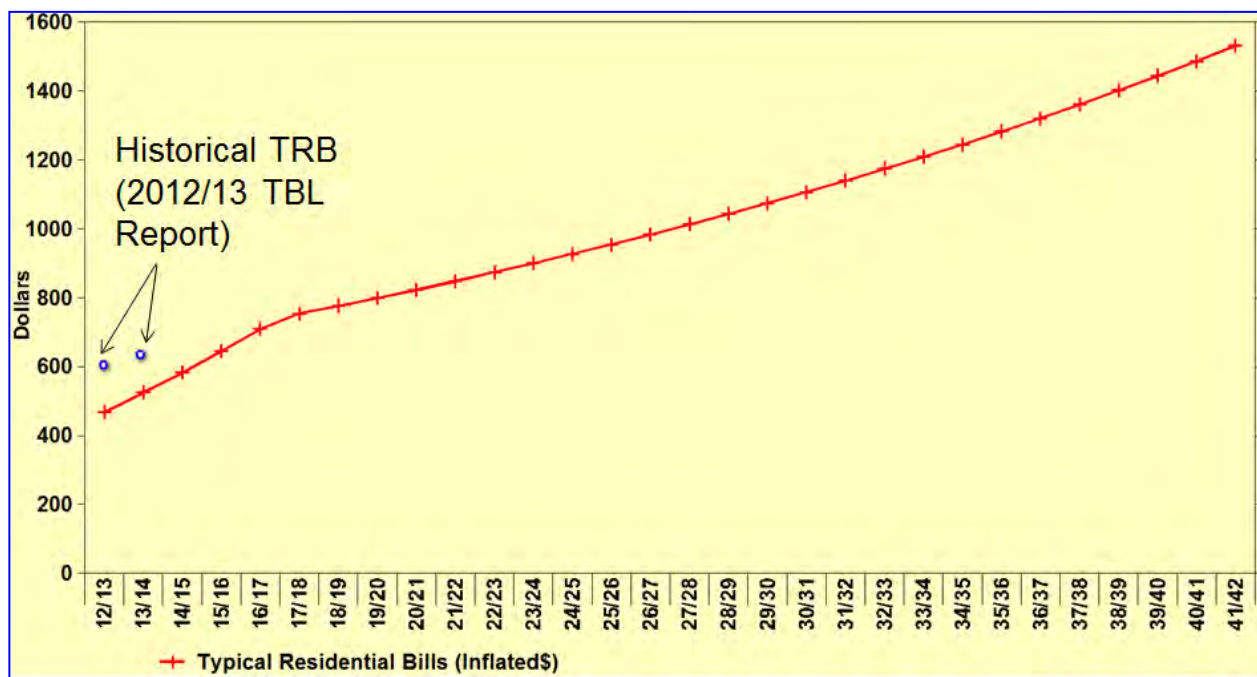
### 3.4 Financial Projections

#### 3.4.1 Water Supply and Sewerage Financial Plans

As part of its Strategic Business Plan, GHSC prepared long-term financial plans for Water Supply and Sewerage Services in 2012. These plans included a 30 year price path and financial projections.

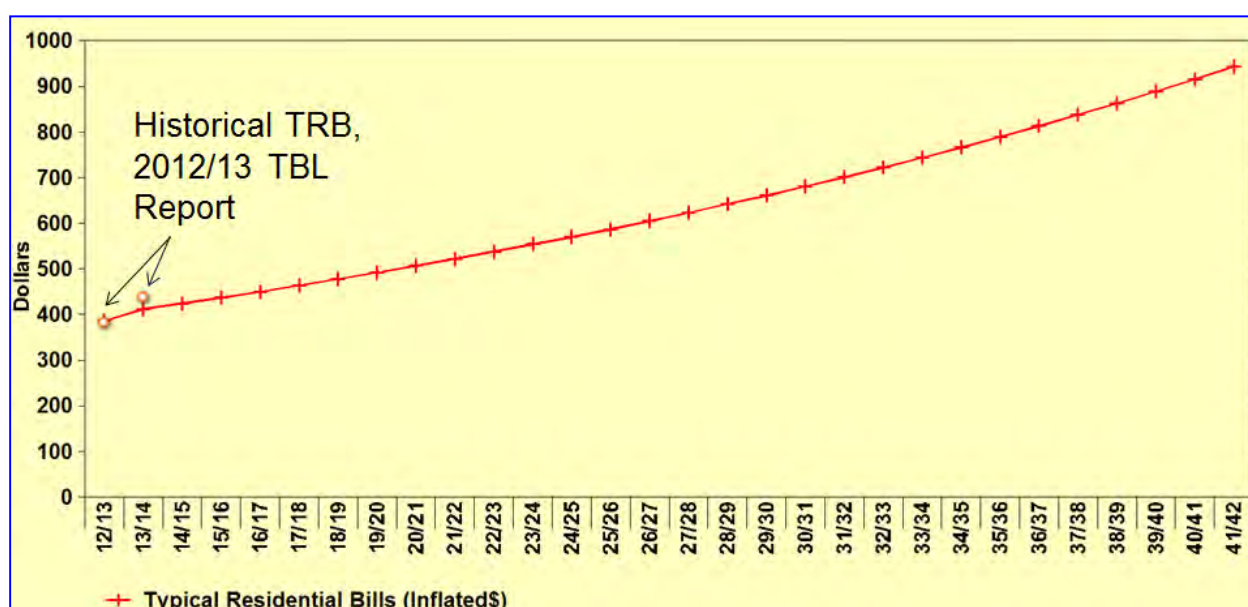
The projected price paths in 2012 are shown in Figure 9 and Figure 10, together with the actual typical residential bill (TRB) in the last two years. The comparison shows that:

- ❑ Water supply: The actual TRB was higher than the projected price path, yet the water supply fund is under stress, with negative operating results in the last two years.
- ❑ Sewerage: The actual TRB was as projected in 2012, and the sewerage fund is performing well, with positive operating results in 2014.



**Figure 9: Water Supply Price Path**





**Figure 10: Sewerage Price Path**

The projected expenses in the 2012 water supply financial plan for 2013/14 were compared with the actual performance in 2013/14, and the results are summarised in Table 8.

**Table 8: Water Supply Forecasts vs Actual Expenses (2013/14 \$'000)**

No	Item	Projections in 2012 Fin. Plan	Actual	Actual to Projection
1	Management expenses	272	257	-15
2	Operation expenses	44	55	+11
3	Maintenance expenses	171	186	+15
4	Energy costs	84	83	-1
6	Chemical costs	8	8	-
7	Purchase of water	517	627	+110
8	Depreciation	333	368	+35
9	Other expenses	34	8	-26
10	Total	1,463	1,592	+129

As shown from this comparison, the actual operating expenses were 121,000 (8%) higher than the projections, with most of the increase in the purchase of water from Albury City Council.

When comparing the projected and actual cash transactions (i.e. without depreciation), the total of all the costs that are within the control of GHSC were \$16,000 below the projections, while the cost of purchasing water increased by \$110,000.

It is obvious that the cost of water from Albury City is a major reason for the poor performance of the water supply fund, and the increase in this cost accounts for the loss in the water supply fund in 2013/14, of \$123,000.

Recommended Actions	Update the financial plan, with focus on the water supply fund, using updated cost projections.
	Continue to seek solutions to the high cost of purchase of water

### 3.4.2 Council Financial Projections

GHSC produced 10 year financial plans for the water supply and sewerage, starting 2015/16. These plans indicate that the water supply fund will achieve positive operating result from 2017/18 onwards, and the sewerage fund will have positive operating results for the for the entire period.

Based on the Long Term Financial Plans provided by Council, Sewerage Services income indexed to CPI (2.5%) will be sufficient to fund the capital works over this period. In relation to the Water Supply Services, if Council is unable to develop solutions to the high cost of water purchase then user charges will need to continue to increase at a rate higher than CPI in the short term.

# Appendix A

## 30 Years Capital Works Programs

## Water Supply 30 years Capital Works Program

Revised 15/4/2015

Financial year ending

Current  
F/Y  
1

Revised 15/4/2015

							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					
Culcairn Water Supply Scheme						Improve LOS	Growth	Renewals	Check	Total estimate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Watermain Replacement								100%	100%	1,530,000	50000	30000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000
Watermain Extension/Loop Mains						75%	25%		100%	40,000		10000																													
Reservoir Black St Upgrade									100%	147,000	147000																														
Water Meter Replacement (25 yrs.)									100%	120,000	10000	10000																													
Replacement Bore for bore 1									100%	29,500	29500																														
New Variable Speed Drive & Switch Gear for Bore 1 Replacement									100%	13,200	13200																														
1 x Filling station displays & software upgrade						25%		75%	100%	4,000	4000																														
Old Artesian well condition assessment report & disconnect water main from main supply									100%	10,000	10000																														
Investigate pressure system for Culcairn WS						100%			100%	30,000	30000																														
New meter readers for new water billing software									100%	2,000	2000																														
Culcairn WTP- replace chlorine dosing shed									100%	7,000		7000																													
Culcairn -drink station						100%			100%	5,000		5000																													
Water Treatment Plant Building Upgrade						25%		75%	100%	10,000	10000																														
Bore 2 - install security fence						100%			100%	5,000		5000																													
Culcairn recreation ground upgrade water mains & irrigation wiring						25%		75%	100%	20,000		20000																													
Bore 2 Pump replacement (2011 - 6 yrs.)									100%	60,000							12000																								
Lift Pump Replacement (2004 - 25 yrs.)									100%	13,000																															
Aerator tower Replacement (30 yrs.)									100%	70,000																															
Chlorine Dosing Pump (2007 - 8 yrs.)									100%	16,000	4000							4000											70000												
Switch Board Upgrade (2006 - 20 yrs.)						100%			100%	30,000													30000																		
Telemetry						100%			100%	30,000						30000																									
Steel Reservoir Painting									100%	70,000																															
Water Service Replacement in conjunction with water main replacement									100%	320,000	20000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	
										-																															
										-																															
										-																															
Sub Total										\$2,581,700	\$329,700	\$97,000	\$82,000	\$70,000	\$80,000	\$100,000	\$80,000	\$70,000	\$76,000	\$60,000	\$130,000	\$90,000	\$80,000	\$85,000	\$80,000	\$84,000	\$130,000	\$80,000	\$60,000	\$60,000	\$72,000	\$60,000	\$70,000	\$70,000	\$74,000	\$70,000	\$82,000	\$70,000	\$70,000	\$70,000	
Villages Water Supply Scheme																																									
Loop Main Bungowannah Road						75%	25%		100%	18000	18000																														
Flow Meter Jindera Gap PS						100%			100%	15000	15000																														
Logger for Dights Forest Road Meter						100%			100%	6000	6000																														
4 x Filling stations displays & software upgrade						25%		75%	100%	18000	18000																														
Hueske Rd contribution to upgrade WM to 150mm X 1130m						25%	75%		100%	40000	40000																														
Goulburn St Jindera water main replacement 100mm x 220m									100%	25,000	25000																														
Ortlip Rd Glenellen water main replacement 50mm to 100mm x 340m							25%	75%	100%	25,000	25000																														
New meter readers for new water billing software									100%	4,000	4000																														
VWS Pump 1 replacement (1994 - 25 yrs.)									100%	25,000					25000																										
VWS Pump 2 replacement (2002 - 25 yrs.)									100%	25,000													25000																		
Switch Board Jindera Gap Upgrade (2006 - 20 yrs.)						50%		50%	100%	30,000												30000																			
telemetry						100%			100%	100,000						100000																									
Luthers Road Loop Main (to Colonial Drive)						75%	25%		100%	150,000	150000																														
Molkenlin Loop Main						75%	25%		100%	80,000			80000																												
Other Watermain Extension/Loop Mains/Replacements						50%	25%	25%	100%	95,000		45000			50000																										
Investigate Chlorine Dosing System						100%			100%	20,000	20000																														
Chlorine Booster Station Jindera Gap Reservoir						100%			100%	60,000	60000																														
Chlorine Booster Station Other Reservoir (3)						100%			100%	40,000			40000																												
Cut in New Valves (trunk Mains)						100%			100%	25,000		25000																													
VWS reservoirs - replace faded water level indicators on all reservoirs						100%						5000																													
Water Meter Replacement (25 yrs.)								100%	100%	170,000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000																					
Upgrade Access Covers VWS PS (OH&S)								100%	100%	30,000		30000																													
5 - VWS Reservoir Upgrades/Replacements Roofs (1983-50yrs)									100%	100,000																															
VWS PS Building Upgrade (1983-35yrs)						25%		75%	100%	5,000				5000																											
Other Minor Works										-																															
Little Brock Reservoir Repair Horizontal Cracking									100%	25,000	25000																														
										-																															
										-																															
Sub Total										\$1,131,000	\$416,000	\$115,000	\$130,000	\$75,000	\$85,000	\$110,000	\$10,000	\$10,000	\$10,000	\$10,000	\$0	\$30,000	\$25,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Total Improved LOS										673,750	275000	75000	100000	8750	25000	137500	0	7500	0	0	0	45000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Growth										132,000	78250	13750	20000	2500	12500	2500	0	2500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Renewals										2,671,950	392450	123250	92000	73750	107500	70000	70000	70000	86000	70000	130000	75000	85000	60000	85000	60000	64000	130000	160000	60000	72000	60000	70000	70000	84000	80000	92000	80000	80000	80000	
Total										\$3,477,700	\$745,700	\$212,000	\$212,000	\$85,000	\$145,000	\$210,000	\$70,000	\$80,000	\$86,000	\$70,000	\$130,000	\$120,000	\$85,000	\$60,000	\$85,000	\$60,000	\$64,000	\$130													

### Sewerage 30 years capital works program

Financial year ending **Current F/Y**

Projects Cost >\$1M highlighted in Red

	Improve LOS	Growth	Renewals	Check	Total estimate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	
Burrumbuttock Sewerage Scheme																																				
Densludge tanks	100%			100%	50000				10000						10000						10000						10000						10000			
Install underground power at STW	100%			100%	35000	35000																														
Install new pump & controls at STW	100%			100%	10000		10000																													
Pump Replacement			100%	100%	10000																10000															
					0																															
					\$105,000	\$105,000	\$10,000	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0
Culcairn Sewerage Scheme																																				
Replace PLC & Switch Board Upgrade (2011-20yrs)	25%	25%	50%	100%	40000																	40000														
Air Stones upgrade STW pasveer channel		25%	75%	100%	50000		50000																													
Sewer Main Relining/Replacement (1971-60yrs)			100%	100%	727500	7500		20000	20000													40000	40000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000	50000		
Switchboard Upgrade/Replacement (SPS 1,2,3,4,5,6) 2011-30yrs	50%		50%	100%	60000																												60000			
Culcairn STW - overhaul gearbox on rotor 1			100%	100%	6000		6000																													
SPS 1,2,3,4,5,6 Backflow Prevention	100%			100%	13000	13000																														
Upgrade SPS valve pit lids to comply with WHS			100%	100%	15000																															
Replace tanks on aerators STW pasveer channel			100%	100%	25000			25000																												
STP Overhaul/Renewals (1971-50yrs)			100%	100%	294000							294000																								
SPS Pump Replacement PS No 1 - Pump 1 (1991-25yrs)			100%	100%	30000		15000																										15000			
SPS Pump Replacement PS No 1 - Pump 2 (1991-25yrs)			100%	100%	30000		15000																										15000			
SPS Pump Replacement PS No 2 - Pump 1 (1991-25yrs) B/F 2012			100%	100%	12500																															
SPS Pump Replacement PS No 2 - Pump 2 (1991-25yrs) B/F 2012			100%	1																																

Revised 15/4/2015					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	
Burrumbullock Sewerage Scheme	Improve LOS	Growth	Renewals	Check	Total estimate	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Jindera Sewerage Scheme																																			
Install New Inlet Works (screening & fencing)	100%			100%	110000	110000																													
Distribution pit modifications at STW ponds			100%	100%	15000	15000																													
Stock proof fence replacement western side STW			100%	100%	8000	8000																													
Extend sewer main to Jindera Preschool		100%		100%	15000	15000																													
Supply & install MH Adjacent Jindera Preschool		100%		100%	4000		4000																												
Jindera STW - replace irrigation valves on evaporation ponds			100%	100%	10000		10000																												
Option 4-Build New 1700 EP Activated Sludge Plant/Effluent Reuse Scheme	25%	75%		100%	4,175,000						4175000																								
SPS Pump Replacement PS No 1 - Pump 1 (2014-25yrs)			100%	100%	18000																														
SPS Pump Replacement PS No 1 - Pump 2 (2014-25yrs)			100%	100%	18000																														
SPS Pump Replacement PS No 2 - Pump 1 (2014-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 2 - Pump 2 (2014-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 3 - Pump 1 (1995-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 3 - Pump 2 (1995-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 3 - Pump 2 (1995-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 4 - Pump 1 (1995-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 4 - Pump 2 (1995-25yrs)			100%	100%	6000																														
SPS Pump Replacement PS No 5 - Pump 1 (2006-15yrs)			100%	100%	6000								3000														3000								
SPS Pump Replacement PS No 5 - Pump 2 (2006-15yrs)			100%	100%	6000								3000														3000								
SPS Pump Replacement PS No 6 - Pump 1 (2011-15yrs)			100%	100%	6000													3000															3000		
SPS Pump Replacement PS No 6 - Pump 2 (2011-15yrs)			100%	100%	6000													3000															3000		
Switchboard Upgrade/Replacement (SPS 1,2,3,4) 1986-40yrs	50%		50%	100%	40000													40000																	
Switchboard Upgrade/Replacement (SPS 5,6) 2006/2011-30yrs	50%		50%	100%	20000																														
Telemetry	100%			100%	40000						40000																	10000					10000		
Other Minor Works					0																														
					0																														
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# Appendix B

## Triple Bottom Line (TBL) reports

**WATER SUPPLY SYSTEM** - Greater Hume Shire Council serves a population of 4,800 (1,840 connected properties). Greater Hume Shire Council is mostly a reticulator serving the Hume Villages with a fully treated bulk supply provided by Albury City Council and from 2 bores (4ML/d) which provides potable water supply for Culcairn. The water supply network comprises 1 aerator and chlorinator for Culcairn (2.7 ML/d), 7 service reservoirs (6 ML), 2 pumping stations, 7.2 ML/d delivery capacity into the distribution system, 80 km of transfer and trunk mains and 72 km of reticulation. The water supply is partly treated (Culcairn) and partly unfiltered (chlorinated).

**PERFORMANCE** - Greater Hume Shire Council achieved 100% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$664 which was above the statewide median of \$582 (Indicator 14). However, the economic real rate of return was negative (Indicator 43). The operating cost (OMA) per property was \$503 which was 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, 2 of 2 zones compliant), chemical water quality and physical water quality. There were no failures of the chlorination system or the treatment system. Greater Hume Shire Council reported no water supply public health incidents. Current replacement cost of system assets was \$32M (\$16,500 per assessment). Cash and investments were \$1M, debt was nil and revenue was \$1.4M (excluding capital works grants).

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

<b>(1) Complete Current Strategic Business Plan &amp; Financial Plan</b>		<b>YES</b>	<b>(3) Sound water conservation implemented</b>		<b>YES</b>
<b>(2) (2a) Pricing</b> - Full Cost Recovery, without significant cross subsidies		Yes	<b>(4) Sound drought management implemented</b>		<b>YES</b>
<b>(2b,2c) Pricing</b> - Appropriate Residential Charges		Yes	<b>(5) Complete performance reporting (by 15 September)</b>		<b>YES</b>
<b>(2d) Pricing</b> - Appropriate Non-residential Charges		Yes	<b>(6) Integrated water cycle management strategy</b>		<b>YES</b>
<b>(2e) Pricing</b> - DSP with Commercial Developer Charges		Yes	<b>IMPLEMENTATION OF ALL REQUIREMENTS</b>		<b>100%</b>

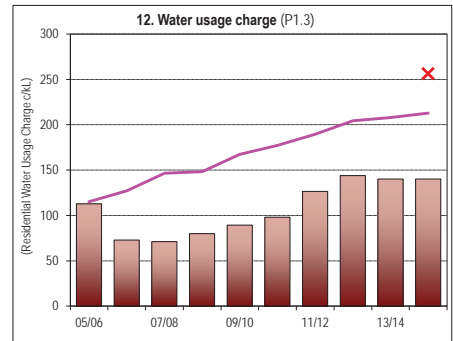
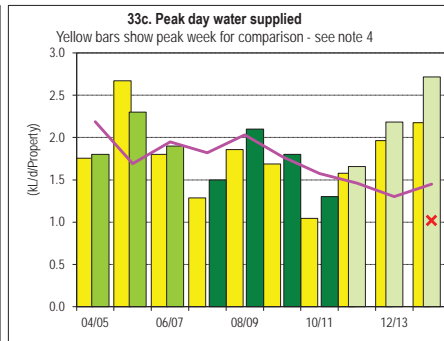
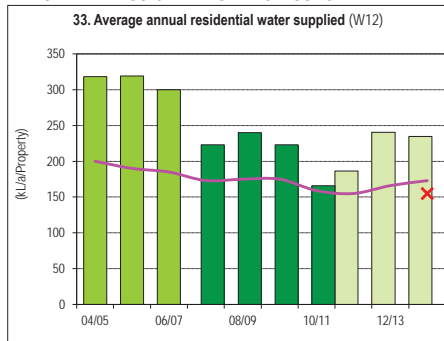
TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS										LWU RESULT	RANKING		MEDIAN	
NW1 No.											1,501 to 3,000	All LWUs	Statewide	National
										Note 1	Note 2	Note 3	Note 4	
										Col 2	Col 3	Col 4	Col 5	

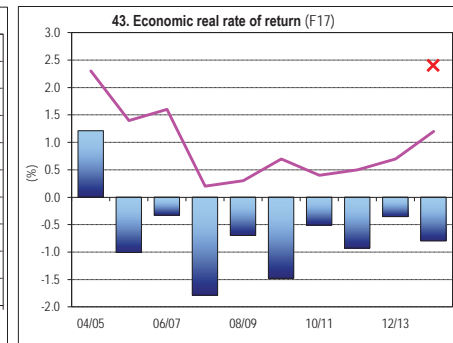
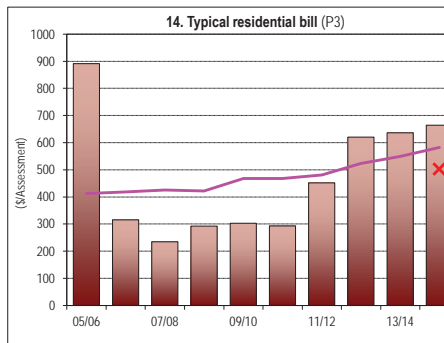
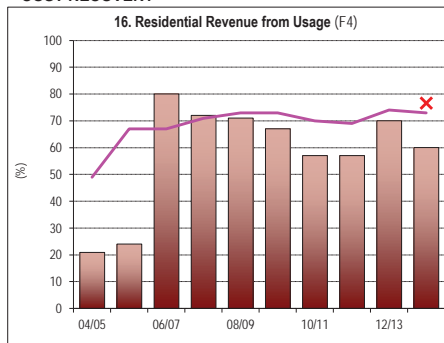


(Results shown for 10 years together with 2013-14 Statewide Median and Top 20%)

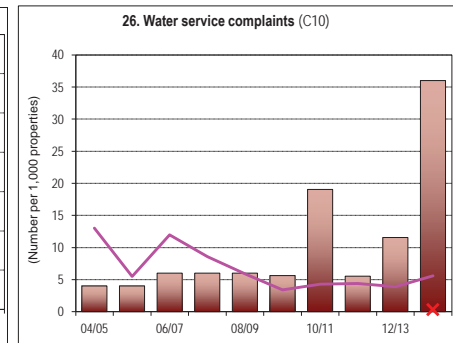
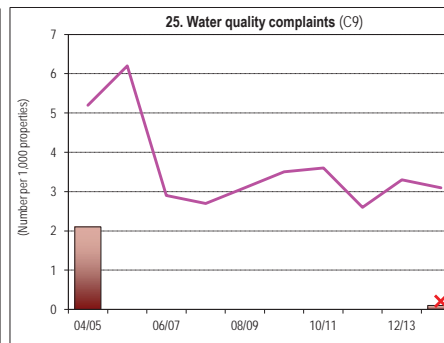
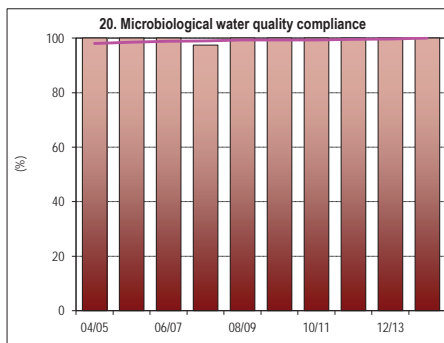
## RESIDENTIAL USE/REVENUE FROM USAGE



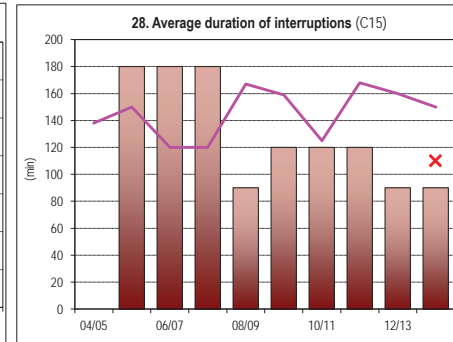
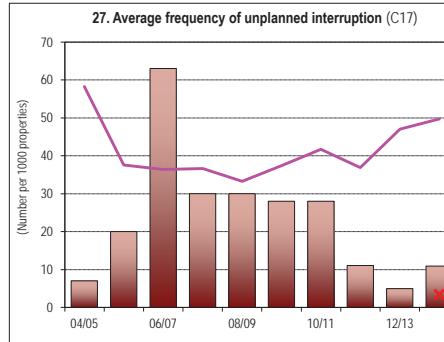
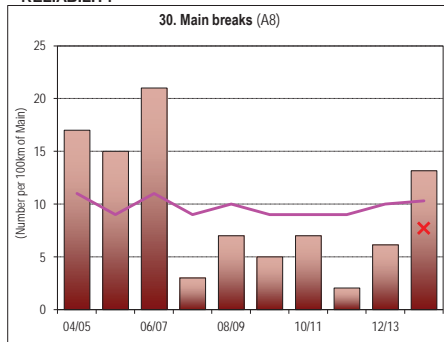
## COST RECOVERY



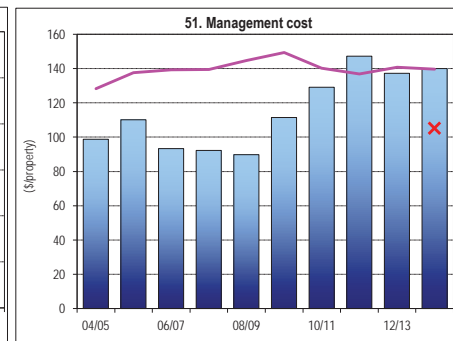
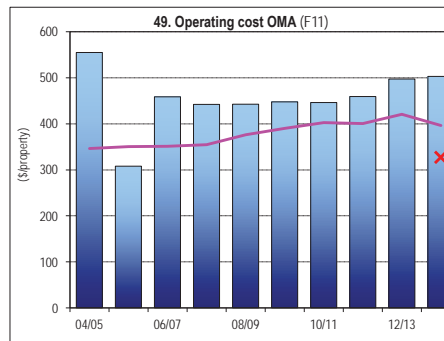
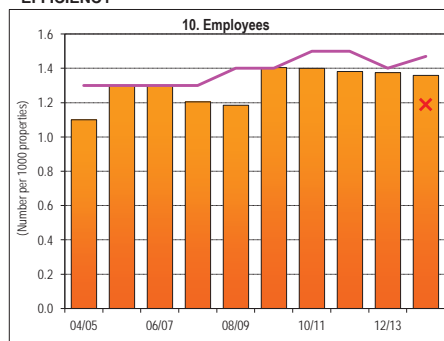
## WATER QUALITY/CUSTOMER SERVICE



## 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

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

SEWERAGE SYSTEM - Greater Hume Shire Council serves a population of 6,000 (2,610 connected properties) and has 6 sewage treatment works providing tertiary treatment. The system comprises 6,100 EP treatment capacity (Intermittent Extended Aeration (Activated Sludge), Common Effluent Disposal, Trickling Filter and Oxidation Pond), 21 pumping stations (10 ML/d), 8 km of rising mains and 69 km of gravity trunk mains and reticulation. 13% of effluent was recycled (Indicator 27) and the treated effluent is discharged to land and river.

PERFORMANCE - Residential growth for 2013-14 was 0.4% which is lower than the statewide median. Greater Hume Shire Council achieved 100% implementation of the NSW BPM requirements. The 2014-15 typical residential bill was \$489 which was much less than the statewide median of \$669 (Indicator 12). The economic real rate of return was 0.1% which was less than the statewide median (Indicator 46). The operating cost per property (OMA) was \$318 which was much less than the statewide median of \$430 (Indicator 50). Sewage odour complaints were less than the statewide median of 1 (Indicator 21). Greater Hume Council reported no public health incidents. Council complied with the requirements of the environmental regulator for effluent discharge. The current replacement cost of system assets was \$46M (\$16,700 per assessment), cash and investments were \$2M, debt was nil and revenue was \$1.4M (excluding capital works grants).

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

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

## TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

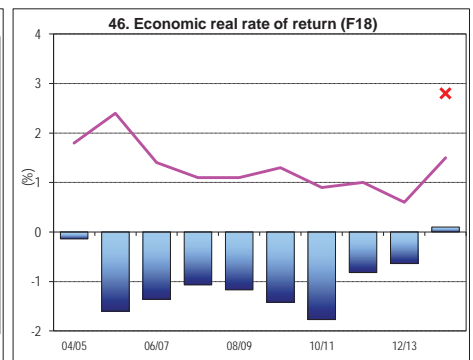
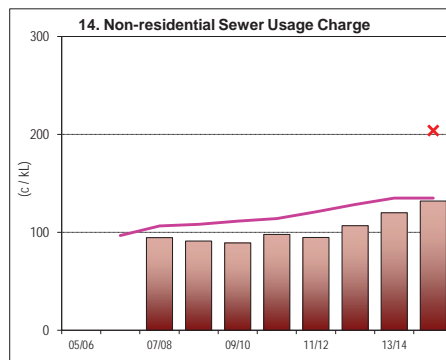
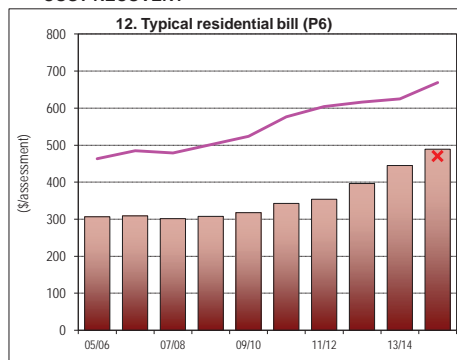
	NW1	No.			LWU RESULT	RANKING		MEDIAN	
						1,500 to 3,000	All LWUs	Statewide	National
UTILITY	CHARACTERISTICS	C5	1 Population served: 6,000						
		C8	2 Number of connected properties: 2,610	Number of assessments: 2,740					
		C6	3 Number of residential connected properties: 2,250						
			4 New residences connected to sewerage (%)		%	0.4	3	4	1.0
		A6	5 Properties served per kilometre of main		Prop/km	34			38
		W18	6 Volume of sewage collected (ML)		ML	448			4,600
			7 Renewals expenditure (% of current replacement cost of system assets)		%	0.4	3	3	0.5
			8 Employees per 1000 properties	per 1,000 prop		1.3	2	2	1.6
SOCIAL	CHARGES & BILLS	P4	Description of residential tariff structure:	access charge/prop: independent of land value					
		P4.1	11a Residential access charge for 2013-14 (\$/assessment)		\$ 2013-14	445	2	2	625
			11 Residential access charge for 2014-15 (\$/assessment)		\$ 2014-15	489	3	2	669
		P6	12a Typical residential bill for 2013-14 (\$/assessment)		\$ 2013-14	445	2	2	625
			12 Typical residential bill for 2014-15 (\$/assessment)		\$ 2014-15	489	3	2	669
			13 Typical developer charge for 2014-15 (\$/equivalent tenement)		\$ 2014-15	4,020	2	3	5,100
			14 Non-residential sewer usage charge (c/kL)		c/kL	132	2	3	136
		F6	15 Revenue per property - Sge (\$)		\$	530	3	4	846
			16 Sewerage Coverage (% of Urban Population with Reticulated Sge Service)		%	90.0	3	4	97.9
		E3	17 Percent of sewage treated to a tertiary level (%)		%	100	3	2	98
	HEALTH	E4	18 Percent of sewage volume treated that was compliant (%)		%	100	1	1	100
		E5	19 Number of sewage treatment works compliant at all times			6 of 6			
			21 Odour complaints per 1000 properties	per 1,000 prop		0.0	1	1	1.0
	SERVICE LEVELS	C11	22 Service complaints - sewerage per 1000 properties	per 1,000 prop		4	1	2	8
		C16	23a Average sewerage interruption (minutes)	min		100	4	3	109
			25 Total days lost (%)	%		2.6	5	4	2.9
			26 Volume of sewage collected per property (kL)		kL	172	2	2	221
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W26	26a Total recycled water supplied (ML)		ML	60	4	4	630
		W27	27 Recycled water (% of effluent recycled)		%	13	3	3	12
		E8	28 Biosolids reuse (%)		%				100
			30 Energy consumption - sewerage (kWh/ML)		kWh	522	3	2	770
			31 Renewable energy consumption (% of total energy consumption)		%	0	1	1	0
		E12	32 Net greenhouse gas emissions - WS & Sge (net tonnes CO2 equivalents per 1000 properties)			340	4	3	370
	ENVIRONMENTAL PERFORMANCE		33 90 <sup>th</sup> Percentile licence limits for effluent discharge:	BOD 20 mg/L; SS 30 mg/L					
			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		14	1	2	37
			37a Sewer overflows (per 100 km of main)	per 100km main		0	1	1	13
		E13	37b Sewer overflows reported to environmental regulator (per 100km of main)			0.0	1	1	0.8
			39 Non res & trade waste % of total sge volume		%	15	2	3	21
ECONOMIC	FINANCE		43 Revenue from non-residential plus trade waste charges (% of total revenue)		%	25	1	2	18
			44 Revenue from trade waste charges (% of total revenue)		%	4.2	1	1	2.0
		F18	46 Economic real rate of return - Sge (%)		%	0.1	4	4	1.5
			46a Return on assets - Sge (%)		%	0.4	4	4	1.3
			48a Loan payment per property - Sge (\$)		\$	1	3	3	90
		F24	48b Net profit after tax - WS & Sge (\$'000)		\$'000	-14	4	4	1180
			49 Operating cost (OMA) per 100 km of main (\$'000)		\$'000	1,080	2	2	1,730
	EFFICIENCY	F12	50 Operating cost (OMA) per property (\$) (Note 9)		\$	318	2	2	430
			51 Operating cost (OMA) per kL (cents)		c/kL	185	3	3	206
			52 Management cost per property (\$)		\$	125	3	3	161
			53 Treatment cost per property (\$)		\$	129	2	2	155
			54 Pumping cost per property (\$)		\$	43	2	2	68
			55 Energy cost per property (\$)		\$	22	1	2	42
			56 Sewer main cost per property (\$)		\$	18	2	1	47
		F29	57 Capital Expenditure per property - Sewerage (\$)		\$	110	1	3	193

## NOTES:

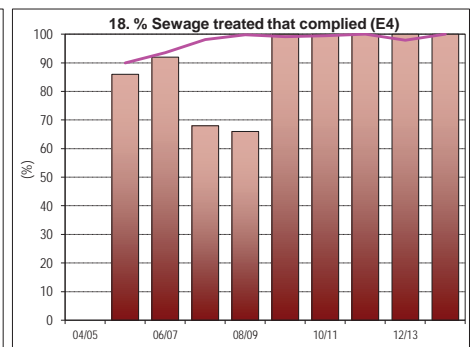
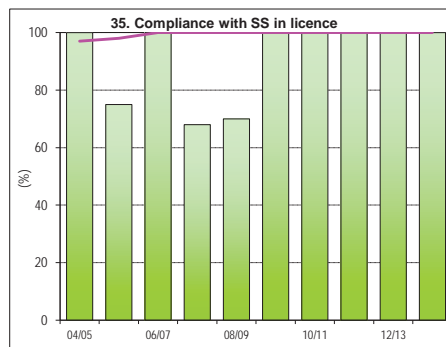
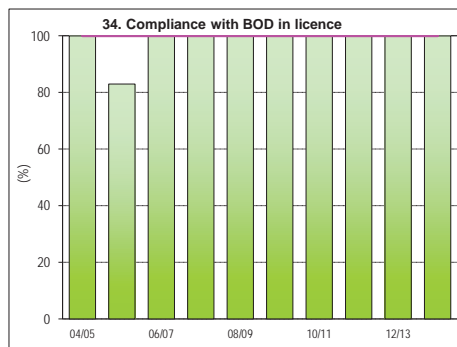
- Col 2 rankings are on a % of LWUs basis - best reveals performance compared to similar sized LWUs (ie. Col 1 is compared with LWUs with 1,500 to 3,000).
- Col 3 rankings are on a % of LWUs basis - best reveals performance compared to all LWUs (ie. Col 1 is compared with all LWUs). - see attachment.
- Col 4 (Statewide Median) is on a % of connected properties basis- best reveals statewide performance (gives due weight to larger LWUs & reduces effect of smaller LWUs).
- Col 5 (National Median) is the median value for the 66 utilities reporting sewerage performance in the National Performance Report 2013-14 ([www.bom.gov.au](http://www.bom.gov.au)).
- LWUs are required to annually review key projections & actions in the later of their IWCM Strategy and financial plan and their Strategic Business Plan and to annually 'roll forward', review and update their 30-year total asset management plan (TAMP) and 30-year financial plan.
- Non-residential access charge - \$247, proportional to square of size of service connection. Sewer usage charge - 132 c/kL.
- Non-residential and trade waste volume was 15% of total sewage collected.
- Non-residential revenue was 25% of revenue from access, usage & trade waste charges, indicating fair pricing of services between the residential and non-residential sectors.
- Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
- Operating cost (OMA)/property was \$318. Components were: management (\$125), operation and maintenance (\$157), energy (\$22), chemical (\$5) & effluent/biosolids (\$10).
- Greater Hume Shire Council rehabilitations included 0.1% of its service connections. Renewals expenditure was \$225,000/100km of main.

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

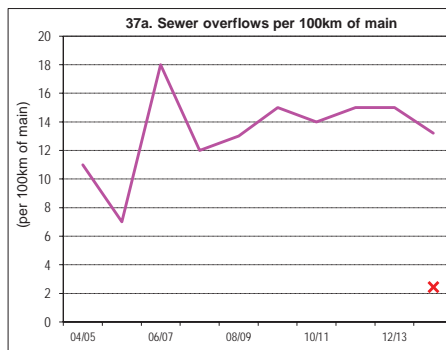
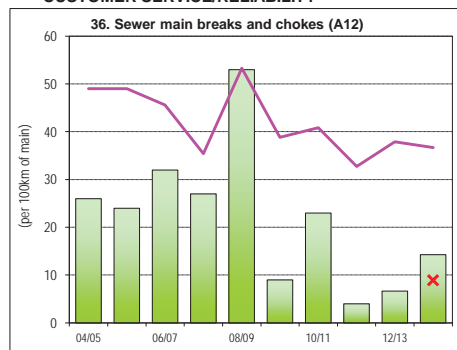
## COST RECOVERY



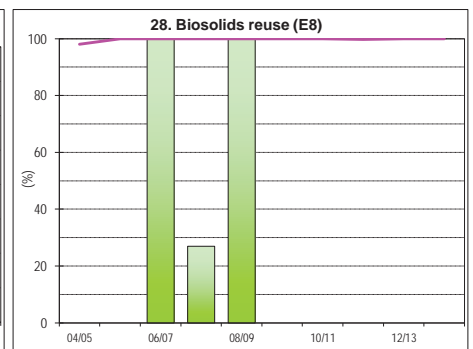
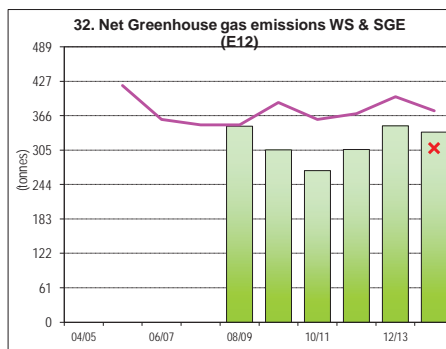
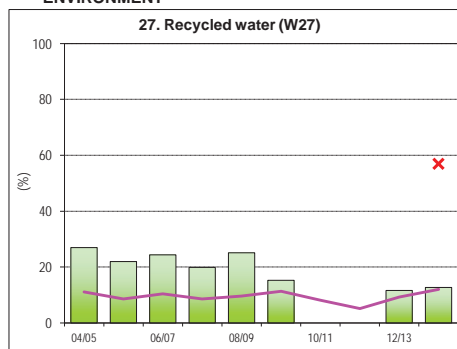
## COMPLIANCE



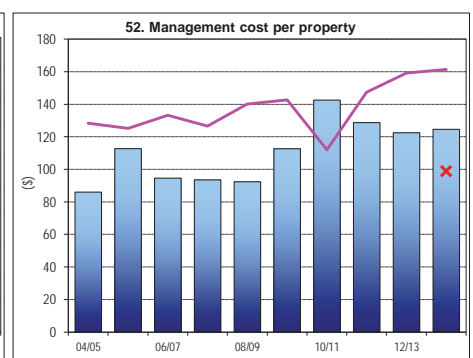
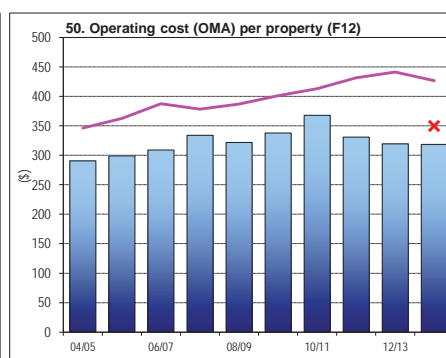
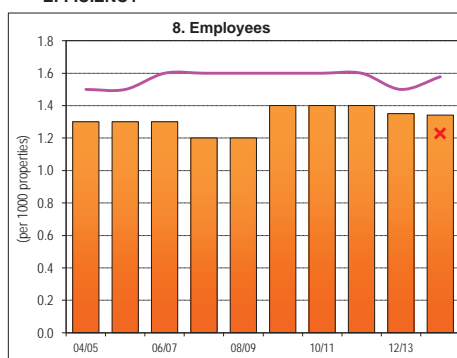
## CUSTOMER SERVICE/RELIABILITY



## ENVIRONMENT



## EFFICIENCY



## NOTES:

- 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



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