2008-09

NSW WATER SUPPLY AND SEWERAGE

BENCHMARKING REPORT

Local Government Association of NSW

Shires Association of NSW

NSW GOVERNMENT | Office of Water

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The NSW Office of Water is a separate office within the Department of Environment, Climate Change and Water. The Office manages the policy and regulatory frameworks for the State's surface water and groundwater resources to provide a secure and sustainable water supply for all users. The Office also supports water utilities in the provision of water and sewerage services throughout New South Wales.

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BEST PRACTICE MANAGEMENT

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NSW WATER SUPPLY AND SEWERAGE

BENCHMARKING REPORT

Foreword

Performance monitoring and benchmarking are becoming increasingly important tools for the efficient and effective management of water supply and sewerage utilities. The National Water Initiative has extended the 1994 *Strategic Framework for Water Reform* to provide for national performance reporting of pricing and service quality for water delivery. It commits water utilities to effective, efficient and accountable water management.

In line with the National Water Initiative, the NSW government has developed the *Best-Practice Management of Water Supply and Sewerage Guidelines*[1]. These guidelines, which were updated in 2007, are the key driver for reform of planning and management and for continuing improvement by each utility. The guidelines require Local Water Utilities (LWUs) to undertake annual performance monitoring in accordance with the *National Water Initiative*[2], with the aim of improving the quality and efficiency of services to all NSW residents. Performance monitoring is also important for public accountability and has been strongly endorsed by the Independent Pricing and Regulatory Tribunal[3].

This *2008-09 NSW Water Supply and Sewerage Benchmarking Report* discloses the full suite of NSW water supply and sewerage performance indicators for all NSW water utilities including Sydney and Hunter Water Corporations over the past six years, enabling each utility to monitor trends in its performance indicators and to improve its performance through benchmarking against similar utilities.

A summary of the key performance indicators for all NSW urban water utilities, together with the overall Statewide performance of the NSW non-metropolitan water utilities and comparison of that performance with interstate utilities, are provided in the companion report *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report*.

The *Benchmarking Report* has been prepared by the NSW Office of Water since 1986. To facilitate comparisons, the Minister for Water has made both the performance monitoring report and the benchmarking report available on the NSW Office of Water website (*www.water.nsw.gov.au*).

To provide a balanced view of the long-term sustainability of NSW water utilities, a triple bottom line (TBL) accounting focus has been adopted, with performance reported on the basis of social, environmental and economic performance indicators.

NSW performance monitoring and benchmarking also provide valuable data for continuous performance improvement by disclosing the present position and facilitating development of suitable information and responses to address the future water supply and sewerage needs for non-metropolitan NSW. This ensures an appropriate focus and targeting of responses and initiatives to address current and emerging issues. Page 1 provides a summary of such information and responses.

[1] *Best-Practice Management of Water Supply and Sewerage Guidelines*, Department of Water and Energy, August 2007.
[2] *National Performance Framework – 2008-09 Urban Performance Reporting Indicators and Definitions*, National Water Commission/Water Services Association of Australia, April 2010.
[3] *Pricing Principles for Local Water Authorities*, Independent Pricing and Regulatory Tribunal NSW, 1996.

Acknowledgements

The Local Government Association of NSW and the Shires Association of NSW (LGA and SA) are acknowledged for their strong and continuing support for the NSW annual water supply and sewerage performance monitoring system since its commencement in 1986.

The contribution of NSW Health is acknowledged for providing additional water quality data (from the NSW Water Quality Database) and water quality monitoring compliance data. This data has been incorporated into Tables 5 and 12 and Appendix D1.

The NSW Local Government Water Directorate is also acknowledged for its support and significant contributions.

The success of the NSW performance monitoring system is contingent on full participation by all NSW Local Water Utilities (LWUs). The continuing participation of each LWU in the performance monitoring system and each LWU's significant efforts in providing current, accurate and timely data on its performance for each of the past six years are therefore particularly acknowledged.

Contents

1. Introduction

This *NSW Water Supply and Sewerage Benchmarking Report* discloses the full suite of NSW water supply and sewerage performance indicators and benchmarking data for all NSW urban water utilities over the past six years. The data is presented in the form of 66 figures and 18 tables and provides comparative information to enable each local water utility (LWU) to benchmark its performance against that of similar LWUs.

A companion report, the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report* (available at www.water.nsw.gov.au), provides the key performance indicators for the NSW water utilities together with the overall Statewide performance of the NSW non-metropolitan water utilities and compares that performance with interstate utilities. To avoid duplication, these matters are not repeated in this *Benchmarking Report.*

The NSW component of the *National Performance Report 2008-09 for Urban Water Utilities* is shown in Appendix F [page 245] of this Benchmarking Report while national performance comparisons are shown in Appendix A [page 179].

This Benchmarking Report discloses the NSW results for all 117 NWI Performance Indicators as shown in Note 20 on pages 31 and 32.

In addition, the Benchmarking Report is a valuable annual resource kit and continuous improvement tool for the NSW utilities by reporting a broad range of current and emerging issues and providing information and suggested responses to assist the utilities. These include:

- Statewide medians [pages 100, 101, 105, 106]
- Performance percentiles on a % of LWUs basis [page 231, 232]; including National Reporting medians
- Risk-based drinking water quality management plan [page 7]
- Achievement of microbiological compliance [page 7]
- Boil water alerts and lessons learnt [page 8]
- Effective disinfection of a water supply distribution system [page 243]
- Water quality sampling locations and frequency [page 201]
- Performance of each water treatment works [page 233] and sewage treatment works [page 238]
- Best-practice management [page 5] and best-practice management compliance [page 102]
- Renewals [page 10]
- Leakage [page 11]
- Benefits of strong pricing signals [page 10]
- Achieving full cost recovery [page 18]
- Achieving efficient water use [page 9]
- Greenhouse gases [page 12]
- Improving performance [page 14]
- Triple bottom line (TBL) Performance Report [pages 3, 26, 227, 229]
- Action plan [pages 3, 18, 24]
- Annual reporting forms [page 186]
- Economic efficiency indicators for four sizes of LWUs [page 17]
- Software, guidelines, tools and assistance available from the NSW Office of Water [pages 7, 8, 10, 11, 16, 20, 32]
- Contents of tables 5 to 18 [page 33]
- General notes [page 28]

2. NSW water utilities

This report discloses performance indicators for all NSW urban water utilities, comprising the 106 non-metropolitan local water utilities (LWUs) together with four metropolitan utilities (Sydney Water, Hunter Water, Sydney Catchment Authority and Hawkesbury Council). All utilities are listed in the table below in alphabetical order. To facilitate comparisons with similar sized LWUs, tables 5 to 18 of this report are sorted in order of the number of connected properties served. The number shown beside each utility in the table below is its rank in terms of connected properties for water supply. For example, the table shows '11 Albury City', indicating that Albury City is the 11th LWU in the water supply tables. LWUs are grouped in four size ranges: over 10,000, 3,001 to 10,000, 1,501 to 3,000, and 200 to 1,500 connected properties.

NSW water utilities (non-metropolitan and metropolitan) in alphabetical order

11	Albury City	54	Deniliquin	59	Lachlan	3	Shoalhaven
29	Armidale Dumaresq	18	Dubbo	48	Leeton	35	Singleton
				22	Lismore (R)	52	Snowy River
24	Ballina (R)			31	Lithgow		Sydney Catchment Authority
100	Balranald (DS)	15	Eurobodalla	61	Liverpool Plains		Sydney Water
21	Bathurst Regional			102	Lockhart (NO WS)		
23	Bega Valley	12	Fish River WS (BS)			13	Tamworth Regional
47	Bellingen	51	Forbes	5	MidCoast	69	Temora (NO WS)
53	Berrigan (DS)			32	Mid-Western Regional	68	Tenterfield
72	Bland (NO WS)	84	Gilgandra	38	Moree Plains	93	Tumbarumba
78	Blayney (NO WS)	60	Glen Innes Severn	65	Murray (DS)	43	Tumut
89	Bogan	82	Gloucester	101	Murrumbidgee	6	Tweed
97	Bombala	28	Goldenfields (NO SGE)	41	Muswellbrook		
104	Boorowa	1	Gosford			45	Upper Hunter
87	Bourke (DS)	20	Goulburn Mulwaree	34	Nambucca	73	Upper Lachlan
105	Brewarrina	80	Greater Hume	46	Narrabri	85	Uralla
27	Byron (R)	30	Griffith	63	Narrandera	107	Urana (NO WS)
		94	Gundagai	62	Narromine		
91	Cabonne	44	Gunnedah			9	Wagga Wagga (NO WS)
92	Carrathool	90	Guyra	83	Oberon (R)	88	Wakool (DS)
103	Central Darling (DS)	81	Gwydir	19	Orange	98	Walcha
40	Central Tablelands					79	Walgett (DS)
	(NO SGE)	76	Harden (R)	71	Palerang	96	Warren (DS)
14	Clarence Valley	30A	Hawkesbury (NO WS)	36	Parkes	55	Warrumbungle
67	Cobar (R)	86	Hay (DS)	7	Port Macquarie-Hastings	95	Weddin (NO WS)
66	Cobar WB (BS)		Hunter Water			57	Wellington
10	Coffs Harbour			17	Queanbeyan (R)	74	Wentworth (DS)
99	Coolamon (NO WS)	37	Inverell			16	Wingecarribee
50	Cooma-Monaro			33	Richmond Valley	2	Wyong
75	Coonamble	106	Jerilderie (DS)	8	Riverina (NO SGE)		
58	Cootamundra (R)	77	Junee (NO WS)	4	Rous (BS) (NO SGE)	56	Yass Valley
42	Corowa					49	Young (R)
26	Country Energy	25	Kempsey				
39	Cowra	70	Kyogle				

R – Reticulator; DS – Dual Supply; BS – Bulk Supplier; NO WS – No water supply; NO SGE – No sewerage

3. Performance monitoring

3.1 Performance reporting

Performance monitoring and benchmarking are required under National Competition Policy and the National Water Initiative, are important for public accountability and have been strongly endorsed by the Independent Pricing and Regulatory Tribunal (IPART).

The State Government promotes continuous performance improvement to improve the quality and efficiency of services to the NSW community. Performance benchmarking provides valuable comparative data which enables each local water utility (LWU) to review and improve its performance by examining trends in its performance indicators and by benchmarking its performance against that of similar utilities.

Water supply and sewerage data was obtained from each LWU's annual performance reports for their water supply and sewerage businesses. These reports are required to be lodged by each LWU on the NSW Performance Monitoring Database by 15 September each year in order to comply with the *Best-Practice Management of Water Supply and Sewerage Guidelines.* Financial data was obtained through the Department of Local Government from each LWU's Special Schedule Nos 3 to 6 and Notes 2 and 3 of the Special Purpose Financial Reports of their *2008-09 Annual Financial Statements.* The NSW Office of Water obtained the charging schedules on water supply, sewerage and trade waste fees and charges directly from each LWU.

3.2. Benchmarking

Each LWU can improve its performance in areas of apparent under-performance by benchmarking its key work processes in these areas with the work processes of one or two high-performing similar LWUs and implementing the best-practices thus identified. This will provide better customer service, reduced environmental impact and better value-for-money for the community.

In addition, each LWU should undertake 'Syndicate Benchmarking' with a group of LWUs with similar characteristics in order to determine current best-practice and to identify existing practices which each LWU can improve.

The syndicate benchmarking pilot project indicates that such process benchmarking should be highly cost effective for all NSW LWUs. The NSW Office of Water will be working with LWUs to facilitate appropriate syndicate benchmarking projects and will disseminate the results.

3.3 TBL performance reports and action plans

The NSW Office of Water provides each utility with an annual TBL Performance Report and a template for its Action Plan to Council for its water supply business and for its sewerage business. The TBL reports provide a summary of the LWU's compliance with the requirements of the Best-Practice Guidelines and its performance for over 50 key performance indicators together with the Statewide medians and the LWU's relative performance against similar sized LWUs. TBL reports and action plans are discussed in section 5.3 on page 18. An example TBL report [page 26] and action plan [page 24] are provided to assist the LWUs.

LWUs that comply with the 19 requirements of the *Best-Practice Management of Water Supply and Sewerage Guidelines*. will have demonstrated effective, sustainable and safe water supply and sewerage businesses and compliance with National Competition Policy and the National Water Initiative (refer to section 4).

To assist each LWU to gain a quick appreciation of its performance relative to similar sized LWUs, the LWU TBL Performance Report provides a ranking of each LWU's performance for each performance indicator (second shaded column). These rankings are based on the top 20 per cent of LWUs for each indicator being ranked 1 and the bottom 20 per cent being ranked 5 (LWUs in the range 40 per cent to 60 per cent are ranked 3). In addition, rankings are provided for each LWU's performance relative to all LWUs (third shaded column).

LWUs will appreciate that **each performance indicator is a 'partial' indicator only and therefore cannot be interpreted in isolation**. In addition, the rankings are indicative only and do not take into account the wide range of factors that can impact on an LWU's performance, as discussed in section 5.2 on page 15. The aim of ranking each LWU's performance is to assist the LWU in identifying any areas of under-performance in comparison with similar sized LWUs. It should also be noted that a low ranking for some performance indicators does not necessarily mean an LWU is not performing well as there are a number of factors that can impact performance as shown in section 5.2. For example, the rankings take no account of the impact of utility characteristics (eg. whether the water supply is fully filtered, whether the utility provides a bulk storage dam, whether the supply is a good quality groundwater etc.).

The second page of the TBL reports provide graphs with the LWU's performance over the past 10 years for 15 key indicators. These graphs enable the LWU to review trends over time for each indicator, which provide the most meaningful assessment of performance.

Each LWU needs to review its performance using its annual TBL performance reports for water supply and sewerage and to provide an Action Plan to Council which addresses any areas of under-performance, as outlined in section 5.3 on page 18.

4. Best-practice management

4.1 Regulatory framework

Through the NSW Government's Country Towns Water Supply and Sewerage Program, the *Local Government Act 1993* and the *Water Management Act 2000,* the Minister for Water is responsible for overseeing and monitoring the performance of NSW country LWUs in the sustainable provision of water supply and sewerage services to the community. The aim of NSW Government policy is for NSW country LWUs is to achieve effective, sustainable and safe water supply and sewerage services.

The State Government provides assistance to country towns in NSW through the Country Towns Water Supply and Sewerage Program, which is administered by the NSW Office of Water. This major reform program provides leadership, guidance and technical assistance in best practice management, operation and maintenance for LWUs, as well as financial assistance towards the capital cost of backlog water and sewerage infrastructure.

The program was revised in 1996 to foster the development of best practice management by LWUs in the strategic and operational management of water supply and sewerage systems. The role of Government and the Government's expectations of LWUs in the revised program were as follows:

- government will place increased emphasis on initiatives aimed at assisting LWUs improve their planning and operational management
- compliance with best practice management is a pre-requisite for financial assistance
- financial assistance will be directed towards the capital cost of backlog infrastructure
- government requires LWUs to put into place appropriate strategies to ensure that capital works needed to meet growth or renewal are self funded.

Subsequently, the Minister for Water published the *'Best-Practice Management of Water Supply and Sewerage Guidelines'* in 2004. These guidelines consolidated a number of earlier initiatives and are the key driver for reform of planning and management and for continuing performance improvement by each utility. Compliance with the guidelines is a requirement for the eligibility of LWUs for:

1. the payment of a dividend from their water and sewerage businesses to the Council's general revenue
2. financial assistance towards the capital cost of backlog infrastructure.

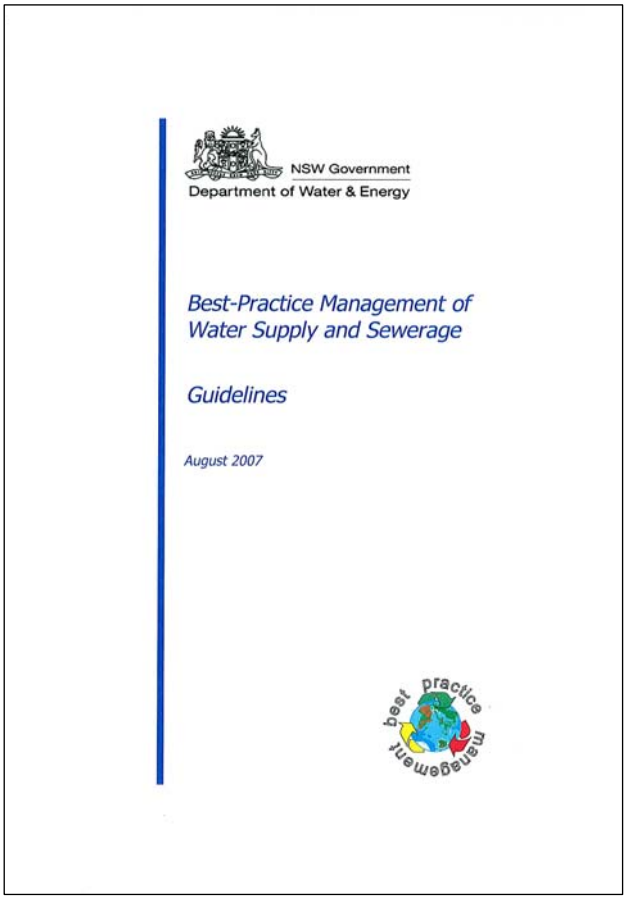
The Minister for Water published revised *Best-Practice Management Guidelines* in August 2007 in order to update the Guidelines and address the requirements of the National Water Initiative.

Utilities which have met all of the requirements of the *Best-Practice Management Guidelines* should consider paying an 'efficiency dividend' from the surplus of their water supply and sewage businesses to the Council's general revenue. Refer also to the box on page 18.

4.2 Best-practice management guidelines

The *Best-Practice Management of Water supply and Sewerage Guidelines* encourage continuing improvement in performance of water and sewerage businesses in NSW and the resulting compliance with the Australian Government's National Water Initiative. The guidelines identify the key elements in the delivery of water supply and sewerage services to the community and are available on the NSW Office of Water website (www.water.nsw.gov.au).

In summary, the guidelines require an LWU to prepare strategic business plans and financial plans setting out how it plans to manage these businesses over the next 20 to 30 years. This requires negotiation of appropriate levels of service with the community and development of the utility's 30-year asset management plan. This involves a cost-effective capital works program which discloses each of the growth, improved standards and renewals components, together with a sound operation plan and maintenance plan. The strategic business plan must include both the above asset management plan and a sound 20 to 30 year financial plan which identifies the resulting Typical Residential Bill (current dollars) over this period. 89 per cent of the NSW LWUs have now prepared such sound strategic business plans and financial plans, and implementation of these plans should ensure the long term sustainability of these services (Table 5 on page 107).



All utilities are expected to comply with the 19 requirements of the guidelines (Table 3 on page 102), which cover the following six criteria:

- strategic business planning
- pricing and regulation of water supply, sewerage and trade waste
- water conservation and demand management
- drought management
- performance monitoring
- integrated water cycle management.

The reported LWU compliance against each requirement of the Guidelines is shown in Table 3 on page 102 of this report. A summary of LWU compliance is provided on page 17 and Figures 21, 22 and 23 of the *2008-09 NSW Performance Monitoring Report*. Particular attention is required for strategic business planning and financial planning (column 1 of Table 3 on page 102), full cost recovery (column 14a of Table 6 on page 117, column 11a of Table 7 on page 129, page 20), residential water supply revenue from usage charges (column 13 of Table 6 on page 117), non-residential sewer usage charges (column 3a of Table 7 on page 129), liquid trade waste fees and charges (column 2 of Table 7C on page 136), trade waste approvals and policy (columns (3) and (1) of Table 7C on page 136), and an IWCM evaluation (column 20 of Table 8C on page 146).

As noted on page 18 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report*, future IWCM Strategies will need to include assessment of the secure yield of the utility's water supply in accordance with new climate change guidelines to be released in late 2010.

Comprehensive software and guidelines to assist LWUs in developing appropriate water supply and sewerage financial plans, water supply tariffs, sewerage tariffs, liquid trade waste fees and charges, developer charges and asset management plans (capital works plan, operation plan and maintenance plan) continue to be available from the NSW Office of Water (Dilip Dutta on tel: (02) 8281 7372, fax: (02) 8281 7351, email: Dilip.Dutta@water.nsw.gov.au).

In addition an IWCM 'Generic Scope of Work' document and seven IWCM information sheets are now available on the NSW Office of Water website (www.water.nsw.gov.au) to provide guidance for LWUs and the requirements for developing a sound IWCM evaluation and IWCM strategy.

4.3 Managing drinking water quality

Risk based drinking water quality management plan

A safe and reliable drinking water supply is the most essential and critical public health service provided by a Local Water Utility (LWU) to its community. Although 99 per cent of the 20,700 non-metropolitan NSW samples tested for E. coli in 2008-09 complied with the *Australian Drinking Water Guidelines 2004 (ADWG)*, it is a matter of concern that 14 per cent of LWUs did not comply with the guidelines (column 71 of Table 12 on page 158 and Figure 14 on page 47). **Achievement of microbiological compliance is a high priority for each LWU**. As noted on page 20, assistance is available from your NSW Office of Water Regional Water and Sewerage Inspector [contact details on page 32].

The risk of contamination of water supplies due to system failures therefore remains significant, as can be seen in the table overleaf, which indicates 22 boil water alerts were issued by LWUs over the period May 2006 to June 2008.

ADWG recommends a preventative management approach for assuring drinking water quality and protecting public health. This approach encompasses all steps in water production from catchments to the consumer and is set out in the Framework for Management of Drinking Water Quality, which includes development of a risk based drinking water quality management plan (refer to page 2-1 of the Guidelines**). Developing a risk based drinking water quality management plan is a high priority for each LWU** and is recommended in the *Best-Practice Management of Water Supply and Sewerage Guidelines*, 2007. NWI Indicator H6 reports on whether the utility has such a plan. It is disappointing to note that only eighteen LWUs have developed such a plan (column 69a of Table 12 on page 158). It is therefore strongly recommended that all LWUs develop a risk based drinking water quality management plan as a matter of priority. In addition, LWUs with over 10,000 properties should obtain third party accreditation of their plan (NWI Indicator H5 in column 69b of Table 12 on page 158).

Developing a risk based drinking water quality management plan

Chapter 3 of ADWG sets out *the Framework for Management of Drinking Water Quality.* The Framework involves 12 elements, based on a preventative risk management approach containing elements of ISO 9001 (Quality Management), AS/NZS 4360 (Risk Management) and the HACCP (Hazard Analysis and Critical Control Point) systems, which is applied in a drinking water supply context.

For small water supplies, Chapter 4 of ADWG sets out how a range of basic measures can be implemented by the water utility to provide reasonable assurance of safety.

The National Health and Medical Research Council has developed a tool (software), called *'Community Water Planner- A tool for small communities to develop drinking water management plans'*. A risk based management plan for small water supplies can be prepared by using this tool. This tool can also be used to quickly produce a "first cut" risk management plan for larger water supplies.

This tool and user assistance is available from the web link:
http://www.nhmrc.gov.au/publications/synopses/eh39.htm

The management plan produced using this tool identifies:

- potential hazards associated with each element of the water supply that can represent public health risk
- preventative measures to protect water quality
- operational monitoring and verification monitoring requirements.

Tools to assist the utilities, including a template for developing a risk-based water quality management plan are being developed by the NSW Office of Water. In addition, assistance for developing a risk-based drinking water quality management plan is available from the NSW Office of Water.

(Bill Ho on tel: (02) 8281 7326, fax: (02) 8281 7351, e-mail: Bill.Ho@water.nsw.gov.au).

Boil water alerts and lessons learnt

Information provided by the Water Unit of NSW Health has revealed that 22 boil water alerts were issued by LWUs over the period May 2006 to June 2008 (refer to the table below). These alerts were imposed due to the failure of the water utility to meet the microbiological water quality requirements of AWDG. The alerts were issued by LWUs of all sizes, with ten alerts issued by LWUs with over 10,000 connected properties, three by utilities with 3,001 to 10,000 properties and nine by utilities with under 3,000 properties. A total of 24,500 people (1.4 per cent of the 1.8 million people served) were affected by these boil water alerts.

These incidents highlight that a number of LWUs have been using reactive measures to protect public health. However preventive management on the basis of a sound risk management plan, with associated work procedures and process controls would have avoided the need for the bulk of these boil water alerts.

Summary of boil water alerts in non-metropolitan NSW – May 2006 to June 2008

No. of alerts	Reason for alert
9	Inadequate chlorine residual in the distribution system.
8	Gap in the reservoir roof enabling bird entry and contamination of the treated water.
3	Highly turbid raw water, no filtration plant, ineffective disinfection.[4]
1	Failure to properly clean and disinfect the main after replacement of valves and fittings.
1	Backflow in the mains due to inadequate backflow prevention device.

Notes:

1 The information in the above table was provided by NSW Health's Water Unit or obtained by the NSW Office of Water from the relevant LWU.

2 Duration of boil water alerts generally ranged from two days to 25 days with a median of nine days.

3 Total population affected by the 22 boil water alerts was 24,500.

[4] Guidance on maintaining effective disinfection of a water supply distribution system is provided in Appendix E on page 243.

A number of important lessons have been learnt from the above boil water alerts as tabulated below:

Lessons learnt from the boil water alerts

Practices	Lessons
Management	• Carry out regular preventative maintenance and calibration of chlorinators and associated equipment.
Disinfection	• **Maintain a minimum free chlorine residual of about 0.2 mg/L** throughout the water supply system[5] (including extremities).
	• Continuous monitoring[6] of the chlorination system to warn of any interruptions/failures of the chlorinator.
	• Chlorine demand tests should be carried out on a regular basis.
Storage (service reservoirs/tanks)	• Ensure entry hatches to service reservoirs are secure and that hatches are not left open; particular care is required if third parties (e.g. telephone companies) have been given access to your LWU's reservoirs.
	• Regular inspection is essential to ensure the roof and the bird proofing of each reservoir is effective and has not been damaged.
Backflow prevention	• Ensure appropriate backflow prevention devices are installed and are properly maintained (including any rain water tanks used for toilet flushing).
Source monitoring	• Monitor the raw water regularly and after storm events for evidence of changes in colour or turbidity.
	• Chlorine demand tests should be carried out on a regular basis.
	• Adjust chlorine dosing as necessary.

Each LWU should learn from the above valuable lessons in order to minimise the risk of contamination of its drinking water supply. In addition, each LWU should develop and implement a sound risk based drinking water quality management plan.

4.4 Achieving efficient water use

Achieving efficient water use is a key responsibility for each water utility. As shown on page 8 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report* (available at www.water.nsw.gov.au) and Figure 25 on page 59, the non-metropolitan NSW utilities have reduced the average annual residential water supplied per property by 47 per cent over the past 18 years.

Many LWUs have reduced their average annual residential water supplied per property by over 50 per cent over this period through community education, water conservation, water efficient appliances and providing appropriate pricing signals to encourage efficient water use. In particular, as shown on graph 3 on page 180 and Figure 10 on page 43, the median water usage charge for the first step has risen to 150 c/kL. This provides a strong pricing signal and is among the highest of all the other Australian utilities. The median water usage charge for the second step has risen to 180 c/kL. The median revenue from residential water usage charges was 73 per cent (Figure 29 on page 62). However, affordability has been maintained through the $900 (Jan 2010$) Typical Residential Bill for water supply and sewerage, which has increased by a total of 2% over the past 14 years (graph 6 on page 180).

[5] Maintaining such a chlorine residual is a key element in the recommended multi-barrier approach for assuring drinking water quality. Refer to the example in Table A10 on page A-21 of ADWG.
[6] Monitoring requirements must be clearly documented with appropriate responsibility and authority assigned to suitably trained officers.

The **strong pricing signals** provided by the NSW LWUs have enabled them to avoid over $1B in capital expenditure over the last decade for augmenting water supply headworks and treatment capacity and the associated increases in their typical residential bills. The strategic benefits of the strong pricing signals implemented by the NSW water utilities are highlighted on page 5 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report* (available at www.water.nsw.gov.au).

Any LWU which is not achieving the required revenue from residential water usage charges (column 13 of Table 6 on page 117) or full cost recovery (refer to page 18) should develop complying tariffs in order to provide the necessary pricing signals to its customers and achieve the above benefits of efficient water use in its area. Assistance is available from the NSW Office of Water (Dilip Dutta on tel: (02) 8281 7372, fax: (02) 8281 7351, email: Dilip.Dutta@water.nsw.gov.au).

4.5 Asset management

Renewals

As noted on page 6, assessment of infrastructure renewals requirements is a critical element of a utility's asset management plan, which must be documented in each utility's 20 to 30-year strategic business plan and financial plan. Details of each LWU's asset rehabilitation activities and renewals expenditure are provided in Tables 10 and 15 on pages 152 and 167 respectively.

Renewals programs for LWUs vary in complexity from a reactive approach (no renewals, repairs (maintenance) undertaken as required) to development of a comprehensive asset management plan. An asset management plan is essential as it forms the foundation for an LWU's strategic business plan. LWUs are therefore strongly encouraged to continue to develop and update such a plan.

The asset management plan comprises an operation plan, maintenance plan and a capital works plan (involving works for improved levels of service, works to service growth and works for renewals of existing assets).

For a distribution system, for example, an operation plan would be required as part of the LWU's risk management. The operations review would include:

- **An economic analysis** – identifies pipelines where renewal is more economic than continuing with repairs. Takes into account the impact of pipe failure (eg. failure of a pipeline in the CBD has more impact than failure of a pipeline on the outer edge of the system).
- **A reliability analysis** – identifies pipelines where renewal is required for reliability (to ensure performance requirements with regard to supply interruptions can be achieved).
- **A capacity review** – identifies pipelines where augmentation or replacement is required (to maintain the required pressure or flow).
- **A leakage analysis** – identifies whether leakage reduction is economically warranted.

The driver of renewals expenditure is the ability to meet the LWU's performance requirements, i.e. the levels of service and the associated Typical Residential Bill (TRB) negotiated with the community. Other relevant considerations are the condition and age of the assets.

For water supply and sewerage, it is misleading to measure annual renewals expenditure on the basis of a percentage (say one or two per cent) of the current replacement cost of assets. Renewals expenditure will be required towards the end of the economic life of an asset (e.g. a new water main with an economic life of 80 years would be expected to have minimal renewal expenditure before year 80). Therefore, LWUs should ensure that their 30-year financial plan includes capital expenditure, including renewals, identified in a soundly based asset management plan. They should also annually

monitor income and expenditure and update the financial plan to enable the LWU to address any new developments. Funding in the financial plan involves an appropriate mix of the utility's annual income, accumulated cash and investments and borrowings. As noted on page 20, your LWU's Action Plan must report on whether the Typical Residential Bill (TRB) is consistent with the projection in your LWU's 30-year strategic business plan and on any warranted corrective action.

As shown in Figure 20 on page 54, water main breaks for NSW LWUs have remained much lower than all the other states and the capital city utilities, indicating good water main asset condition.

Further information on the development of a cost-effective asset renewal program can be obtained from the NSW Office of Water (Dilip Dutta, tel: (02) 8281 7372, fax (02) 8281 7351, email Dilip.Dutta@water.nsw.gov.au). Information on asset valuation and economic life can be obtained from the *'NSW Reference Rates Manual for Valuation of Water Supply, Sewerage and Stormwater Assets'*, updated August 2009 and guidance on asset management is provided in the *'Asset Management Guidelines for Water Supply and Sewerage'* Public Works NSW 1991.

Leakage

Water leakage and apparent losses are often poorly defined and poorly understood and, in general, water utilities have a relatively limited awareness of the true value of these two parameters within their water supply systems. The International Water Association (IWA) has adopted the following terminology:

- Real losses are physical water losses from the distribution system up to the point of customer metering. They can occur through leaks, bursts and reservoir overflows. Recent LWU results are shown in column 41e of Table 10 on page 152.
- Apparent losses reflect errors in measurement and/or the documentation process. They generally consist of customer use which is not recorded due to metering error (mostly under-registration of worn customer meters), incorrect assumptions of unmeasured use or unauthorised consumption (illegal use), (Refer to columns 4 to 6 of Table 8A on page 142).
- Water losses are the sum of Real Losses (mostly leakage) and Apparent Losses (meter errors, illegal uses).
- Non-revenue water consists of Water Losses plus unbilled authorised consumption. Unbilled authorised consumption may or may not be metered and may include fire fighting and mains flushing. Any watering of parks and gardens should be metered and billed by each LWU.

Leakage management is an essential element of asset management. Leakage cannot be totally avoided due to the large number of connections in a water supply network. Small 'weeps' in connections result in unavoidable losses and these losses increase with higher system pressure.

Leakage and water losses have historically been reported as a percentage of water supplied. Although this identifies the significance of these parameters in relation to the total water supplied, it is not helpful in monitoring the effectiveness of a utility's performance in reducing losses and is perversely affected by reductions in water consumption and water restrictions due to drought. In addition, these indicators do not measure the efficient management of leakage in a distribution system because they take no account of multiple properties, density of service connections, length of mains, customer meter location in relation to the property boundary or the operating pressure. Water loss in L/d per connection is recommended by IWA as the best traditional basic technical indicator for real losses, although it does not account for other factors such as length of main or operating pressure. In particular, reductions in operating pressure have been shown to greatly reduce system leakage.

The Infrastructure Leakage Index (ILI) has been proposed as an indicator which measures how effectively real losses are being managed at current operating pressure while accounting for other

influential factors such as length of mains, number of service connections and customer meter location. The ILI is calculated from the ratio of the Current Annual Real Losses (CARL) to the Un-Avoidable Real Losses (UARL). CARL is the annual real losses divided by the number of service connections and percent of time that the system is under pressure, while UARL is a function derived from the length of mains, number of service connections and the average system pressure.

An ILI of 1.0 indicates that only unavoidable losses are occurring and that optimum leakage management is in place. There is of course a significant cost associated with operating a system with an ILI of 1.0 and this may not be warranted. An ILI of less than 1.0 is meaningless while an ILI greater than 1.0 can identify areas where there may be leakage problems. For example, it has been suggested that an ILI in the range 1.0 to 2.9 indicates that substantial efforts are being made to manage and maintain infrastructure and that active leakage control on a continuous or semi continuous basis is being undertaken, while an ILI greater than 2.9 suggests that there may be poor or old infrastructure or a relatively relaxed active leakage control policy.

When interpreting ILI data it should be noted that many of the inputs are imprecise and therefore, while an ILI of 2.2 appears to be better than one of 2.5, in practice it is likely that they both represent similarly well managed systems.

The ILI is recommended by the International Water Association for international comparisons of water utilities. The National Performance Framework has adopted the ILI as a measure of leakage and the NSW Office of Water has reported the ILI for each LWU since 2005-06 (column 41b of Table 10 on page 152). The NSW Office of Water will also continue to report leakage as L/d per connection (the relevant measure for utilities with over 20 connections/km, which is the vast majority of NSW LWUs) and kL/km of water main/d (columns 41 and 41a of Table 10 on page 152, Figure 26 on page 60), which are better measures for tracking an LWU's leakage performance over time. These indicators are also preferred in the National Performance Framework.

Analysis by the International Water Association has demonstrated that the Australian urban water utilities (based on the results reported in the National Performance Report 2007-08 for urban water utilities) are by far[7] the best performing urban water utilities in the world for minimising leakage and real losses.

Previous leakage studies for over 40 NSW water utilities found an average leakage of 17 per cent of annual consumption (range six per cent to 35 per cent). It is suggested that at present, most water utilities do not have sufficient data to determine the true extent of leakage in their system. The best means of assessing leakage is to undertake a reservoir drop test, detailed waste metering or night flow analysis of district meter areas. It is encouraging that Table 10 on page 152 shows that 42 NSW utilities have reported they have recently undertaken a reservoir drop test or night flow analysis in order to determine their present real losses and opportunities for leakage reduction. In addition, the LGA and SA and Water Directorate, Water Loss Management Program (Ian Maggs on tel: (02) 9242 4127) has reported that 74 of the 94 non-metropolitan NSW utilities responsible for providing reticulated water supply are participating in the Program. Refer also to note 14 on page 30.

Greenhouse gases

The National Water Initiative requires LWUs to report both direct and some indirect greenhouse gas (GHG) emission estimates (columns 35a to 35d of Table 5B on page 114). Direct emissions are produced from sources within the boundary of an organisation and as a result of that organisation's activities. Direct emissions mainly arise from the following activities:

- Generation of energy, heat, steam and electricity.

[7] Alan Lambert "The Future of Leakage Indicators" presentation to the National Performance Report 2008-09 Definitions Review and Planning Workshop, 11 February 2010.

- Manufacturing processes.
- Transportation of materials, products, waste and people.
- Fugitive emissions (e.g. Intentional or unintentional emissions from natural gas leaks, joints and seals).
- On-site waste management such as emissions from landfill sites.

For example, LWUs with a car fleet should report gas emissions from combustion of petrol in those motor vehicles as direct emissions.

Emission factors for calculating direct emissions are generally expressed in the form of the quantity of GHG emitted per unit of energy (kg CO_2/GJ). Emission factors are used to calculate GHG emissions by multiplying the factor (e.g. kg CO_2/GJ energy in petrol) with activity data (e.g. kL x energy density of petrol used).

Indirect emissions are emissions generated in the wider economy as a consequence of the LWU's activities, but which are physically produced by the activities of another organisation. For example, off-site waste disposal.

Emission factors and examples of the calculation of GHG emissions are provided by the Department of Climate Change – National Greenhouse Accounts (NGA) Factors (www.climatechange.gov.au/ workbook/ pubs/workbook-feb2008.pdf).

It should be noted that many opportunities for reducing greenhouse gas emissions are missed because their financial attractiveness is masked by not considering their full costs and benefits.

5. Improving performance

5.1 Performance review

A utility's **overall aim** for its water supply and sewerage businesses should be to provide the levels of service negotiated with its community at the lowest sustainable Typical Residential Bill (TRB). This is done by setting cost-reflective developer charges, non residential charges and liquid trade waste fees and charges and then minimising its TRB in current dollars on a sustainable basis. As noted on page 5, utilities which have complied with the *Best-Practice Management Guidelines (BPMG)* and wish to pay an 'efficiency dividend' to the Council's general revenue should also include the dividend amount.

In practice this means reviewing whether your performance indicators under 'Social', 'Environmental' and 'Economic' are satisfactory. If they are not, you need to develop options to raise your levels of service and consult the community to establish the option which provides the best value for money.

The typical residential bill is **the principal indicator of the overall cost** of a water supply or sewerage system (column 13b of Table 5 on page 107, Figure 1 on page 34, column 8 of Table 6 on page 117, Figure 8 on page 41, column 8 of Table 7 on page 129, Figure 40 on page 73) and is the annual bill paid by a residential customer using the utility's average annual residential water supplied (column 14 of Table 6 on page 117, Figure 25 on page 59). A critical element in minimising the typical residential bill and providing value for money for the community is to ensure each utility's operating cost (OMA – operation, maintenance and administration) (column 67 of Table 11 on page 155, Figures 31, 32, 33 on pages 64, 65, 66) is efficient.

The steps that each LWU should follow to review performance are:

1. **Check compliance with BPMG** and highlight areas of non-compliance. Any non-compliances must be addressed as a priority.

2. **Review performance** using the indicators shown on the first page of the TBL performance report for each of water supply and sewerage (example review and Action Plan is on pages 24 and 25, example reports are on pages 26 and 27). Particular note should be taken of indicators that appear to be less than satisfactory ie. with a ranking of 4 or 5.

3. **Identify any trends** over the past ten years in the selected performance indicators shown on the second page of your TBL performance report, and compare with the latest values shown for the Statewide median values and the top 20%.

In undertaking a review of indicators and trends in performance, LWUs should take note of the many factors that may contribute to the apparent under-performance (see also section 5.2). If further analysis is warranted (eg. if the ranking of the performance indicator is low and remains unexplained or other factors suggest apparent under-performance), then the following may also be required.

4. **Compare selected performance indicators** with those of similar sized utilities using Figures 1 to 66 showing performance trends for four utility size ranges over the past six years.

Where in-depth investigation is warranted for selected indicators, the LWU can also undertake process benchmarking.

5. **Process benchmarking** for selected indicators for areas of apparent under-performance, e.g. where the LWU has a low ranking relative to LWUs with similar characteristics.

5.2 Factors impacting performance

When comparing reported performance, utilities should take account of the wide range of factors which can impact on their performance and typical residential bill, which is the principal indicator of the overall cost of a water or sewerage system. Such factors can produce a fundamental difference in performance.

For example, in the case of water supply, a utility which provides full water treatment and has its own bulk storage dam will have a much higher capital and operating cost structure than a utility which has a good quality groundwater supply. Each utility can improve its performance by taking account of such factors and comparing its performance with utilities having similar characteristics.

Other factors include the extent of the services provided by each utility, geography, climate etc. An understanding of these factors is vital for valid interpretation of performance data. Each utility can improve its performance by taking account of such factors and comparing its performance with utilities having similar characteristics (refer to pages 15 and 16).

The most meaningful performance indicators are the trends over time for each utility. This involves analysis along the lines of Items 3 and 4 on page 14. However, even with such analysis, care needs to be exercised due to changes in the factors over time. For comparison between utilities, each utility should benchmark its performance with utilities having similar characteristics.

Some of the factors which can affect the performance of a water supply system are outlined below.

Utility characteristics

1. **Climate** – the variability of rainfall is a key driver of water supply costs in relation to water demand and drought security. This will affect both capital and operation and maintenance costs. For example, the average annual residential water supplied in inland NSW is over 60% higher than coastal NSW
2. **Geography** – Geology, geography and topography can significantly affect water transportation costs.
3. **Asset life cycle** – Recently constructed systems have much lower maintenance and renewals costs compared to older systems. They also have higher Typical Residential Bills and loan payments. Refer also to page 10.
4. **Development density**– Distribution networks are a major investment component of a water supply system. The density of urban development has a large effect on the infrastructure cost (e.g. the number of properties served per km of main has a Statewide median of 33, but has a range of 5 to 90 (column 26 of Table 9 on page 149, Figure 5 on page 38)). A further key factor is the number of small discrete urban water supply systems operated by the utility which tend to greatly increase the operating cost per property.
5. **Water resources availability and proximity** – can incur significant capital and operating costs. Such costs would not apply for utilities relying on groundwater or those receiving a regulated supply from a State Water dam (Note 17 on page 30). Such costs would not apply for utilities relying on groundwater or those receiving a regulated supply from a State Water dam.
6. **Size of LWU** – there are significant economies of scale for large utilities, particularly the capital cost of infrastructure and the operation and maintenance costs of water treatment works (Figure 35 on page 68).

Social – levels of service

7. **Service standards** – Increasingly stringent standards for water quality and environmental health may result in additional capital and operation and maintenance costs to the utility. Similarly, requirements for minimum pressures or rates of flow can also affect costs.

8. **Filtered supply** – will incur a high treatment cost per property for small water supply systems (utilities without 'unfiltered' or 'groundwater' after their name in Tables 3, 5 and 6 have water treatment involving at least filtration and disinfection for over 50 per cent of their water supply) (Note 18 on page 31).

Environmental

9. **High average annual residential water supplied per property** (column 56a of Table 10 on page 152, Figure 25 on page 59) – such utilities should examine opportunities for reducing the water supplied through water conservation and implementation of best-practice water pricing. Achieving efficient water use is a key responsibility for a water utility. As shown on Figure 25, the non-metropolitan NSW utilities have reduced the average annual residential water supplied per property by 48 per cent over the past 17 years. Many utilities with 3,000 to 10,000 connected properties are providing relatively weak pricing signals to their residential customers through their water usage charges. These utilities should review their tariff structure to provide appropriate pricing signals. Assistance is available from the NSW Office of Water in this regard (page 7). Refer also to section 4.4 on page 9.

Economic

10. **High loan payment per property** – indicates a relatively high capital cost per property, recent construction of significant capital works or use of short-term loans. Twenty-year loan terms are recommended in order to minimise the required Typical Residential Bill (TRB), which avoids unfairly burdening existing customers and facilitates inter-generational equity.

11. **High pumping cost** (columns 94 to 99 of Table 13 on page 161, Figure 36 on page 69) – is influenced mainly by topography and geography. As noted on page 23, the LWU may be able to achieve significant savings in energy cost.

Similar considerations to those listed in this section apply to sewerage. In addition, a significant cost impactor is whether the LWU is operating nutrient removal facilities at its treatment works or providing filtration and disinfection of its treated sewage effluent.

Median economic efficiency indicators for four sizes of LWUs – Water Supply 2008-09

Size of LWU	Over 10,000 connected properties	3,001 to 10,000 connected properties	1,501 to 3,000 connected properties	200 to 1,500 connected properties
Performance indicator	**(26 LWUs)**	**(26 LWUs)**	**(17 LWUs)**	**(25 LWUs)**
Operating cost/property ($)	297	443	387	450
Operating cost (c/kL)	111	101	90	96
Operating cost/100 km ($'000)	1,117	938	938	879
Management cost/property ($)	124	143	112	114
Treatment cost[1]/property ($)	32	93	100	150
Pumping cost/property ($)	24	31	53	79
Energy cost[2]/property ($)	13	13	23	40
Water Main cost/property ($)	47	82	68	70
No. of employees/1,000 properties	1.3	2.0	1.7	2.5
Economic Real Rate of Return	0.3	0.3	0.6	-0.3
Capital expenditure ($ per property)	306	185	142	95
Properties served/km of main	39	26	28	20

Notes:

1. Only LWUs with a treatment works with at least filtration and disinfection for over 50 per cent of supply have been considered.
2. A component of pumping cost.

Median economic efficiency indicators for four sizes of LWUs – Sewerage 2008-09

Size of LWU	Over 10,000 connected properties	3,001 to 10,000 connected properties	1,501 to 3,000 connected properties	200 to 1,500 connected properties
Performance indicator	**(21 LWUs)**	**(28 LWUs)**	**(24 LWUs)**	**(26 LWUs)**
Operating cost/property ($)	323	370	282	285
Operating cost (c/kL)	142	149	134	161
Operating cost/100 km ($'000)	1,394	1,238	913	700
Management cost/property ($)	123	124	85	78
Treatment cost/property ($)	101	122	112	105
Pumping cost/property ($)	40	53	42	36
Energy cost[1]/property ($)	19	20	21	16
Sewer main cost/property ($)	31	53	27	32
No. of employees/1,000 properties	1.3	1.9	1.2	2.1
Economic Real Rate of Return	1.2	0.8	0.6	0.7
Capital expenditure ($ per property)	397	184	110	86
Properties served/km of main	42	36	33	32

Note:

1. A component of pumping and treatment costs.

5.3 Action plan

Each LWU is required to prepare an annual Action Plan to Council, based on its review of the LWU's TBL Performance Report for its water supply business and for its sewerage business. The Action Plan should address any areas of under-performance and should also document any target dates for remedial actions. It should also report results for the financial year for the key actions set out in the utility's Strategic Business Plan.

A key role for the Action Plan is to 'close the planning loop' with the utility's strategic business plan. The utility's TRB must therefore be compared with the projection in its strategic business plan and any necessary corrective action documented in the Action Plan.

An example Action Plan is shown on pages 24 and 25. In order to assist LWUs, the NSW Office of Water will provide a template for each LWU's Action Plan together with the annual TBL reports for each LWU.

The template will show the LWU's results, the drivers for each indicator and the LWU's ranking relative to similar sized LWUs followed by the ranking relative to all LWUs. Space will be provided for the LWU to provide its comments and proposed actions (the 2 right hand columns on pages 24 and 25).

In order to prepare an Action Plan, it will be necessary for each LWU to review its performance. In practice this means reviewing whether the performance indicators under 'Health', 'Levels of Service', 'Environmental' and 'Economic' are satisfactory, taking into account factors that may affect performance outlined below. If the indicators are unsatisfactory, the LWU will need to develop suitable options to improve performance.

Achieving full cost recovery

The recent drought has adversely affected the economic real rate of return for many LWUs as the lower volume of water supplied to customers has reduced the LWU's revenue from usage charges. Where the reduction in the water supplied to customers has exceeded the LWU's estimate, the revenue and rate of return have been lower than forecast. However, as shown in Table 6 on page 117, 35 LWUs have responded by significantly increasing their 2009-10 charges in order to achieve full cost recovery.

Each LWU should continue to set each year's tariff to raise the required revenue on the basis of its careful estimate of the volume of water to be supplied to customers over the next financial year. This is particularly important during periods of drought and water restrictions in order to ensure the LWU continues to meet its obligation to achieve full cost recovery.

In addition, each LWU which meets all the requirements of the Best-Practice Management Guidelines should consider paying a dividend from the surplus of its water and sewerage businesses to the council's general revenue. An LWU which pays such an 'efficiency dividend' will be moving towards upper bound pricing, which is required under the National Water Initiative, where practicable. Refer also to section 4.4 on page 9 which highlights the strategic benefits of strong pricing signals and the resulting efficient water use.

Compliance with best practice management guidelines

Compliance with each of the key requirements (Table 3 on page 102) of the guidelines is shown on the TBL Report (page 26). LWUs should review these results and address any areas of non-compliance. For each instance of non compliance, the Action Plan should briefly outline the strategy and target date for achieving compliance. LWUs that achieve the outcomes required by the guidelines will have effective, sustainable and safe water supply and sewerage businesses and will comply with the National Water Initiative. Compliance with the guidelines is also a pre-requisite for payment of a dividend from the surplus of the LWU's water supply or sewerage business and for financial assistance towards the capital cost of backlog infrastructure under the Country Towns Water Supply and Sewerage Program.

Performance based on triple bottom line

LWUs should review the TBL indicators shown in the TBL Report and investigate those indicators where performance is below the median. In particular, for those indicators with a ranking of 4 or 5, LWUs should investigate the reasons for the ranking and if appropriate, develop a strategy for improvement. It should be noted that a low ranking does not necessarily imply poor performance as there are a number of factors that can impact performance as shown in section 5.2 on page 15. For example, the rankings take no account of the impact of utility characteristics (e.g. whether the water supply is fully filtered or whether it is a good quality groundwater, whether the LWU provides bulk storage etc). The Action Plan should take account of these characteristics.

As noted above, the rankings are based on statewide medians. While all LWUs should strive to raise their performance to at least the statewide 80 percentile (Tables 1 and 2 on pages 100 and 101), it is also useful to compare your LWU's performance with LWUs of a similar size. To assist LWUs in such comparisons, the medians for the relevant indicators have been shown in Tables 5 to 18 for each LWU size grouping. In addition, LWUs may benchmark their performance against LWUs with similar characteristics.

Of particular importance is for the Action Plan to identify trends in your LWU's performance indicators over the last 10 years (using the second page of the TBL Performance Report). This analysis of the trends in your utility's performance indicators is a powerful tool for monitoring and improving your performance.

Further factors that may assist LWUs in their assessment of performance are listed below.

Utility characteristics

- **Renewals** – LWUs should ensure that their TRB in current dollars (i.e. adjusted for inflation) is consistent with the projection in its 30 year financial plan in order to ensure it is raising sufficient revenue for the required infrastructure. LWUs should also examine their asset management policy and ensure that the necessary funds are directed to maintenance and renewals. Refer to page 10.
- **Employees** – the number of employees per 1,000 properties is a good indicator of operating and management costs (column 32 of Table 9 on page 149, Figure 8 on page 41, column 14 of Table 14 on page 164, Figure 39 on page 72). If the number of employees per 1,000 properties is significantly higher than the median shown in the tables on page 17 for the size of LWU, you should examine the management structure and identify the reasons for the difference and provide a brief explanation or your proposed remedial action in the Action Plan. Refer also to the comment on management cost on page 23.
- **Properties served per km** – the density of urban development has a large effect on the infrastructure cost. For LWUs with >10,000 properties the median is 39 properties per km (range 17 to 69), while for LWUs with 200 to 1,500 properties the median is 20 (range 2 to 36) (column 26 of Table 9 on page 149, Figure 5 on page 38, column 9 of Table 14 on page 164, Figure 38 on page 71).

Social factors

Affordability

- **Typical residential bill (TRB)** – as noted on page 14, this is the principal indicator of the overall cost of a water supply or sewerage system (it is the annual bill paid by a residential customer using the utility's average annual residential water supplied). A critical element of the TRB is the operating cost (OMA – operation, maintenance and administration) (column 67 of Table 11 on page 155, Figures 31, 32, 33 on pages 64, 65, 66) as noted on page 23 under Economic Factors – Efficiency.

As noted on page 18, your LWU's Action Plan must report on whether the TRB is consistent with the projection in your LWU's 30-year strategic business plan and on any warranted corrective action.

- **Residential water usage charge (c/kL)** – Higher usage charges have been ranked '1' because they provide a strong pricing signal, while lower charges have been ranked '5'. However, this indicator should be viewed in conjunction with the TRB and whether the LWU is achieving full cost recovery, in which case a lower water usage charge may be a good result. The **strategic benefits of strong pricing signals** and the resulting efficient water use are highlighted on page 5 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report*.

Health

- **Microbiological water quality compliance (per cent)** – This is the most important water supply health indicator and **achievement of microbiological compliance is a high priority for each LWU**. As shown in Figure 14 on page 47, 88 per cent of LWUs complied with the microbiological water quality requirements in 2008-09 (also refer to column 8 of Table 5 on page 107). The 12 LWUs with less than 98 per cent do not comply with the Australian Drinking Water Guidelines, 2004. These LWUs, which each serve between 1,000 and 5,300 connected properties should identify the reasons for non-compliance. Provide a brief explanation together with the necessary remedial action in your LWU's Action Plan (refer to pages 7 to 9 and to Appendix E on page 243). Assistance is available from your NSW Office of Water Regional Water and Sewerage Inspector (refer to page 32 for the contact details of each inspector).

  As indicated in section 4.3 on page 7, each LWU should develop a sound risk-based drinking water quality management plan as a matter of priority. Assistance is available from the NSW Office of Water (Bill Ho on tel: (02) 8281 7326).

- **Public health incidents** – Where this indicator is significantly higher than the statewide median, your LWU's Action Plan should provide a brief explanation together with proposed remedial action if appropriate.
- **Capital investment on improving public health** – If a LWU reported zero for this indicator, investigate to ensure that this indicator is not under reported.

Customer service

- **Water quality complaints** – LWUs with a high number of complaints (in the bottom 20 per cent of LWUs) should investigate the reasons for the complaints, including past performance and trends indicated in page two of the TBL Report. Provide a brief explanation together with proposed remedial action in your LWU's Action Plan. Note that the result for this indicator will be influenced by the type of business (e.g. Unfiltered supply, groundwater etc) (column 8b of Table 5 on page 107, Figure 18 on page 50).
- **Odour complaints** – This is a critical indicator for providing appropriate sewerage levels of service. LWUs with a high number of complaints (in the bottom 20 per cent of LWUs) should investigate the reasons for the complaints; including past performance and trends indicated in page two of the TBL Report. Provide a brief explanation together with proposed remedial action in your LWU's Action Plan (column 11 of Table 5 on page 107, Figure 45 on page 79).
- **Number of main breaks** – LWUs should annually monitor their breaks/100km of main, paying close attention to any sections of main with a high incidence of breaks (say treble the statewide median of nine breaks per 100 km). LWUs with a high incidence of breaks should investigate the likely reasons for the breaks, including the past performance and trends indicated in page two of the TBL Report. Provide a brief explanation together with proposed remedial action in your LWU's Action Plan (column 3a of Table 5 on page 107, Figure 20 on page 54). Refer also to section 4.5 on page 10.

- **Average duration of unplanned interruptions (water)** – where this indicator is significantly higher than the statewide median, your LWU's Action Plan should provide a brief explanation together with proposed remedial action if appropriate (column 3b of Table 5 on page 107).
- **Average break/choke repair time (sewerage)** – where this indicator is significantly higher than the statewide median of 120 minutes, your LWU's Action Plan should provide a brief explanation together with proposed remedial action if appropriate (column 65 of Table 17 on page 173).

Environmental factors

- **Average annual residential water supplied** – This indicator is heavily influenced by the location and type of LWU (e.g. an inland LWU would expect to have high residential water supplied while an LWU with a dual supply would expect to have a very high value) and any applied water restrictions. Inland LWUs have significantly higher residential water supplied due to their hotter and drier climate and the use of evaporative coolers. Note that the median residential water supplied for inland LWUs in 2008-09 was 245 kL/property compared to 150 kL/property for coastal LWUs (column 14 of Table 6 on page 117, Figure 25 on page 59). Refer also to Item 9 on page 16.
- **Real Losses** – LWUs should monitor their Real Losses (column 41 of Table 10 on page 149) in L/d /connection. These should be minimised if the LWU is facing drought water restrictions or the need for augmenting the capacity of its water supply headworks system or its water treatment works. Such reduction of Real Losses will provide major economic benefits through deferral of the need for capital investment for upgrading of infrastructure. As noted on page 12, for almost all LWUs, monitoring your leakage in "L/d per connection" is the relevant measure for tracking your LWU's leakage performance.
- **Water Losses (ILI)** – The real losses above are the principal indicators of leakage performance. The ILI may provide some additional information. ILI values of less than about 1.5 indicate excellent management of real losses, while an ILI close to 1.0 means that the real losses are close to the unavoidable or technical minimum losses. Such low ILI values are only likely to be economically justified where marginal costs of water supply are relatively high (e.g. desalination) or where water is scarce. An ILI of less than 1.0 is meaningless and may indicate errors in the input data. An ILI greater than three may indicate old or poor infrastructure or a relatively relaxed active leakage control policy (column 41b of Table 10 on page 152).
- **Recycled water** – The volume of recycled water use includes effluent reuse for town water and for agricultural uses. The volume reported for town water should equal the recycled volume shown in the water supply report. In 2008-09 25 per cent of LWUs reused over 50 per cent of their effluent (columns 13 to 14b of Table 8 on page 138 and Figures 54 and 55 on pages 88 and 89). As shown on Figure 54 on page 88, the highest volume recycled by a utility was 3,590 ML and a further eight utilities each recycled over 1,000 ML.
- **Compliance with BOD in licence** – where compliance is low (e.g. below 90 per cent), provide a brief explanation together with proposed remedial action in the Action Plan (column 55 of Table 17 on page 173, Figure 47 on page 81).
- **Compliance with SS in licence** – where compliance is low (e.g. in the bottom 20 per cent of LWUs), provide a brief explanation together with proposed remedial action in the Action Plan if appropriate (column 57 of Table 17 on page 173, Figure 48 on page 82).
- **Sewer main chokes and collapses** – sections of sewer main with a high incidence of chokes and collapses (say treble the statewide median of 44 per 1,000 connected properties) warrant close attention. Provide a brief explanation together with proposed remedial action in the Action Plan (column 59 of Table 17 on page 173, Figure 51 on page 85).

- **Sewer overflows to the environment** – where this indicator is significantly higher than the statewide median, provide a brief explanation together with proposed remedial action in the Action Plan (column 60 of Table 17 on page 173, Figure 53 on page 87).
- **Environmental incidents** – where this indicator is significantly higher than the statewide median, provide a brief explanation together with proposed remedial action in the Action Plan.

Economic factors

Financial

- **Residential revenue from usage charge (per cent)** – The revised Best Practice Management Guidelines require LWUs with greater than 4,000 properties to have at least 75 per cent of residential revenue generated through usage charges, while LWUs with less than 4,000 properties, including LWUs with a dual supply must have at least 50 per cent of residential revenue generated through usage charges. This is a key demand management measure to ensure customers receive a sufficiently high pricing signal to encourage careful water use (column 13 of Table 6 on page 117, Figure 29 on page 62). As noted in Section 4.4 on page 9, the statewide median residential revenue from water usage charges was 73 per cent. Refer also to item 9 on page 16 and the residential water usage charge on page 20.
- **Economic real rate of return (ERRR)** – this reflects the rate of return generated from operating activities (i.e. excluding interest income, grants for acquisition of assets and gain/loss on disposal of assets). Water and sewerage charges should be sufficiently high to ensure continuing financial viability and provide for asset renewals and a positive rate of return, but not so high that they generate excessive monopoly profits. The ERRR is a good indicator of the financial health of a business (column 12 of Table 6 on page 117, Figure 30 on page 63, column 11 of Table 7 on page 129, Figure 59 on page 92). The recent drought has had a significant effect on the rate of return for many LWUs, as a reduced volume of water supplied has reduced their income from water usage charges and these LWUs have not set their tariff taking in to account this reduced volume. LWUs should set each year's tariff to raise the required revenue on the basis of its careful estimate of the water to be supplied in the next financial year as indicated in the box on page 18. This is particularly important during drought periods. Refer also to Figures 13 and 14 of the *2008-09 NSW Performance Monitoring Report.*
- **Return on assets** – this ratio is similar to the ERRR. It indicates the earnings generated before interest and tax (EBIT) for the assets controlled by the business. It is calculated as the operating profit before dividends divided by the difference between total assets and total liabilities. All LWUs should aim to achieve a positive return on assets (column 11 of Table 6 on page 117, column 9 of Table 7 on page 129, column 24c of Table 5A on page 111).
- **Net Debt to equity** – net debt is the sum of long and short term borrowings less cash and investments. Equity is the total assets less total liabilities. In 2008-09 the NSW median net debt to equity for water supply and sewerage was zero per cent (column 19a of Table 5 on page 107). LWUs facing significant capital investment are encouraged to make greater use of borrowings to reduce their required TRB. Twenty year loan terms are recommended in order to avoid an unfair financial burden on existing customers and to facilitate inter-generational equity.
- **Loan payment ($/property)** – this indicator shows the component of the TRB applied to meet debt payments. A high loan payment per property indicates a relatively high capital cost per property, recent construction of significant capital works or use of short-term loans (column 66a of Table 11 on page 155 and column 51a of Table 16 on page 170). The median loan payment in 2008-09 for water supply was $52 per connected property (Table 1 on page 100).
- **Interest cover** – this ratio is an indicator of the LWU's ability to meet interest commitments. It is calculated as the earnings before interest and tax (EBIT) divided by net interest (interest expense

less interest income). The interest cover is nil for a loss making business (column 27 of Table 5A on page 111). As a general guide, an interest cover >2 is a good interest cover position. For 2008-09, the median interest cover for sewerage was 2.

Efficiency

The operating cost (OMA – operation, maintenance and administration) per property is a prime indicator of the performance of an LWU and should be reviewed carefully by each LWU to ensure it has an efficient operating cost (column 67 of Table 11 on page 155, Figure 31 on page 64). The components of operating cost are:

- **Management cost** – this includes administration, engineering and supervision and is typically almost 40 per cent of the total operating cost (column 68a of Table 11 on page 155, Figure 34 on page 67). The number of employees per 1,000 properties can be a good indicator of the operating and management costs and hence the efficiency of an LWU. However, LWUs with a number of non-contiguous (i.e. separate) water supply systems and those with small water treatment works or small sewage treatment works will need a higher level of employees/1000 properties in order to effectively manage their systems (refer also to page 19). Similarly, LWUs with a low development density, under about 20 properties served / km of water main (column 26 of Table 9 on page 149) will need a higher level of employees.
- **Treatment cost (water)** – (columns 104 to 107 of Table 13 on page 161, Figure 35 on page 68) this is dependent on the type and quality of the water source and the extent of treatment provided. In addition, as shown in the Table on page 17, there are great economies of scale for the operation of water treatment works (ie. facilities involving at least filtration and disinfection).
- **Treatment cost (sewage)** – (columns 90 to 92 of Table 18 on page 176, Figure 64 on page 97) this is dependent on the type of treatment and the discharge requirements. Where the discharge licence conditions are stringent, involving for example a low level of phosphorus, treatment costs will be high.
- **Pumping cost (water)** – (columns 94 to 99 of Table 13 on page 161, Figure 36 on page 69) this is dependent on topography and, for water supply, the location of the water source. For example, Country Energy has a high pumping cost due to the distance required to pump from the water source, while Fish River is almost a fully gravitational supply, with negligible pumping costs. For water supply, there are significant economies of scale in pumping cost per property.
- **Energy cost** – (columns 98 and 99 of Table 13 on page 161) this is mainly a consequence of pumping requirements and is a component of pumping cost for water supply. Energy cost may be reduced by maximising pumping in off peak periods or by obtaining a competitive energy rate from the energy supplier (e.g. maximising off peak pumping has provided annual savings in energy costs of over $200,000 for a number of large water supplies).

  For sewerage, energy cost is a component of pumping and treatment costs (columns 83 and 84 of Table 18 on page 176). Significant cost savings may be available by optimising energy use in the treatment process (e.g. such optimising of energy use has provided annual savings of over $100,000 for a number of large sewage treatment works).
- **Water and Sewerage mains cost** – (column 84 of Table 13 on page 161, Figure 37 on page 70, column 70 of Table 18 on page 176, Figure 66 on page 99) this is dependent on the age and condition of the mains, the ground conditions and the number of connected properties per km of main.

5.4 Example TBL report and action plan – Shoalhaven City Council

An example TBL Performance Report is shown on pages 26 and 27 for Shoalhaven Council which has 12 sewage treatment works providing advanced secondary and tertiary treatment. An example analysis and Action Plan is shown below.

Shoalhaven City Council Sewerage – Example Action Plan Page 1

Summary

In 2008-09, Shoalhaven Council complied with all 19 requirements of the NSW Best-Practice Management Guidelines and has performed well in the delivery of water supply and sewerage services. However, high residential growth over the last few years and the new backlog sewerage schemes have contributed to higher operating and management costs.

Key actions from Council's Strategic Business Plan:

- Backlog sewerage schemes completed for Conjola, Lake Tabourie and Currarong to provide a piped sewerage service to 1,900 people.
- Sewer relining program for high risk areas is nearing completion.

	INDICATOR	RESULT		COMMENT/DRIVERS	ACTION
	Best-Practice Management Guidelines	Complied with all the Best Practice Requirements [1]	Excellent	Demonstrates effective and sustainable water supply and sewerage businesses.	Continue the periodic review and update of Strategic Business Plan (SBP) and Financial Plan (FP), Integrated Water Cycle Management (IWCM) Strategy, Trade Regulation Waste Policy and Development Servicing Plan (DSP).
CHARACTERISTICS					
5	Connected property density	35 per km of main	Lower than the statewide median of 40	A connected property density below about 30 can significantly increase the cost per property of providing services.	
7	Renewals expenditure	0.4% Above average (2, 2) [2]	Good.	While the ranking is good, Council's maintenance and renewals expenditures are low.	Council has reviewed its asset management plan and increased funds have been directed to maintenance and renewals over the next 5 years.
8	Employees	2.1 per 1,000 props Lowest ranking (5, 4)	Requires review.	The employee ratio has risen by 0.5 over the last 4 years as a result of servicing the above backlog sewerage schemes, involving 4 STWs. (Graph 5 of TBL Report)	Refer to Indicator 50 below.
SOCIAL - CHARGES					
12	Typical residential bill (TRB)	$585 per assessment Median ranking (3, 5)	Satisfactory.	Drivers - Capital expenditure, OMA and management cost.	A good outcome as the TRB is identical to the projection in Council's Strategic Business Plan. The bill is reflective of the existing 12 sewerage schemes and Council's extensive backlog sewerage program.
13	Typical Developer Charges	$7630 per Highest ranking (1, 1)	Good.	The developer charge is 56% of the CRC of $13700	Council will continue to review and update its DSP after 5 years.
14	Non-residential sewer usage charge	91c/kL Below average (4, 4)	Requires review.	Marginally below the statewide median but much lower than Shoalhaven's operating cost of 274c/kL.	Council is progressively increasing this charge to ensure that appropriate pricing signals are provided to non-residential customers. This will address the present disparity where the non-residential sewage and trade waste volume was 19% of total sewage collected, but provided only 14% of the total revenue.
SOCIAL - HEALTH					
16	Urban Properties without reticulated sewerage service	2.5% Above average ranking (2, 2)	Good.	Statewide median 4%.	Backlog sewerage schemes completed for Conjola, Lake Tabourie and Currarong to provide a piped sewerage service to 1,900 people.
17	Percent sewage treated to tertiary level	58% Below average (4, 3)	Requires review.	Well below the statewide median of 88%.	Refer to Indicator 18 below.
18	Percent of sewage volume that complied	83% Below average (4, 4)	Requires review.	Low result, well below statewide median of 100%.	Council is planning to upgrade existing lagoon STWs where algae growth in maturation ponds is causing non-compliance with SS in licences.
19	Sewage treatment works compliant at all times	9 of 12	Requires review.		Refer to Indicator 18 above.
SOCIAL – LEVELS OF SERVICE					
21	Odour Complaints	1.2 per 1000 props Lowest ranking (5, 5)	Requires review.	Results over last 10 years are generally higher than statewide median of 0.4.	The 2008-09 result was adversely affected by the commissioning of the new Conjola STW. Shoalhaven's complaints monitoring system is able to accurately record all complaints.
22	Service complaints	7 per 1000 props Above average (2, 2)	Good.		
23 a	Average Duration of Interruption		Not reported.	Statewide median 116 minutes.	
25	Total Days Lost	3.5% Below average (4, 5)	Requires review.	This has remained above the statewide median over the last 10 years.	Council has critically reviewed its total days lost and has found its performance to be satisfactory.

1. Review of Council's TBL Performance Report and Preparation of an Action Plan to Council required annually.
SBP review and update required after 3 years. FP update required annually.
IWCM Strategy review and update required after 6 years. Liquid Trade Waste Regulation Policy in accordance with the 'NSW Liquid Trade Waste Regulation Guidelines, 2009' required by June 2011. DSP review and updating is required after 5 years.

2. The ranking relative to similar size LWUs is shown first (Col. 2 of TBL Report) followed by the ranking relative to all LWUs (Col. 3 of TBL Report).

Shoalhaven City Council Sewerage – Example Action Plan Page 2

INDICATOR		RESULT		COMMENT/DRIVERS	ACTION
ENVIRONMENTAL					
27	Percentage effluent recycled	29% Above average (2, 2)	Good.	Council's Regional Effluent Management Scheme (REMS) is a national leader, which highlights the high environmental values developed by Council and the community.	Council will continue to identify further options for recycling effluent.
28	Biosolids reuse	100% Highest ranking (1, 1)	Excellent.		
32	Net Greenhouse gas emissions (WS & Sge)	410 t CO2/1000 props Below average (4, 4)	Requires review.	Slightly higher than median emission.	Council will examine options for improvement.
34	Compliance with BOD in licence	100% Highest ranking (1, 1)	Excellent.		
35	Compliance with SS in licence	88% Lowest ranking (5, 5)	Requires review.	Result well below statewide median of 100%. Drivers - algae in maturation ponds, impact of drought.	Refer to Indicator 18 above.
36	Sewer main breaks and chokes	47 per 100km of main Above average (2, 2)	Good.	Drivers - condition and age of assets.	
37	Sewer overflows to the environment	13 per 100km of main Median ranking (3, 4)	Satisfactory.		Council has an ongoing commitment to reduce sewer overflows through its current inspection and relining program, and the development of its risk based asset renewal program.
ECONOMIC					
39	Non-residential percentage of sewage collected	19% Highest ranking (1, 1)	Good.		
43	Non-residential revenue	14% Below average (4, 4)	Requires review.		Refer to Indicator 14 above.
46	Economic Real Rate of Return (ERRR)	1.3% Median ranking (3, 2)	Satisfactory.		ERRR is about the Statewide median but has fallen significantly over the last 5 years. Council will continue to monitor its performance (refer to Indicators 14 and 43 above). The continuing drought has also had a detrimental effect on the ERRR.
47	Net debt to equity	8 Above average (2, 1)	Good.		
48	Interest cover	3 Below average (4, 4)	Good.	Drivers - in general an interest cover of >2 is satisfactory.	
48a	Loan payment	$135 per prop Above average (2, 1)	Good.	Drivers - expenditure on capital works, short term loans.	20-year loan terms are proposed for future loans to reduce the financial burden on the present customers and facilitate inter-generational equity.
50	Operating cost (OMA)	$424 per prop Lowest ranking (5, 5)	Ongoing review.	OMA has shown an increasing trend over the last 4 years. Drivers - development density, level of treatment, management cost, topography, number of discrete schemes and economies of scale.	Council has critically reviewed its OMA cost to ensure efficient operations. The above backlog sewerage schemes and increasing energy charges have resulted in the recent increases to the OMA cost per property.
52	Management cost	$153 per prop Lowest ranking (5, 5)	Ongoing review.	Management cost is high, with an increasing trend over the last 10 years. Drivers - development cost, number of discrete schemes, number of employees.	Refer to Indicator 50 above.
53	Treatment cost	$101 per prop Above average (2, 3)	Good.	Drivers - type and level of treatment, economies of scale	
54	Pumping cost	$73 per prop Lowest ranking (5, 4)	Low ranking	Drivers - topography, development density, effluent recycling.	Low ranking but the pumping cost is driven by the energy charges, system characteristics and recycling and is not able to be significantly reduced. Refer to Indicator 50 above.
56	Sewer main cost	$57 per prop Below average (4, 4)	Low ranking	Drivers - topography, asset age, development density.	Refer to Indicator 50 above.

Shoalhaven City Council sewerage (TBL performance report pg 1)

Shoalhaven City Council **TBL Sewerage Performance** **2008-09**

SEWERAGE SYSTEM - Shoalhaven Council has 12 sewage treatment works providing advanced secondary and tertiary treatment. The system comprises 133,800 EP treatment capacity (Intermittent Extended Aeration (Activated Sludge) and Trickling Filter), 219 pumping stations (755 ML/d), 168 km of rising mains and 944 km of gravity trunk mains and reticulation. Treated effluent is recycled by Council's Regional Effluent Management Scheme (REMS). Excess is discharged to ocean and river.

PERFORMANCE - Residential growth for 2008-09 was 2.5% which is higher than the statewide median. Shoalhaven City Council achieved 100% compliance with Best Practice requirements. The typical residential bill was $585 which was above the statewide median of $470 (Indicator 12). The economic real rate of return was 1.3% which was greater than the statewide median (Indicator 46). The operating cost per property (OMA) was $424 which was above the statewide median of $340 (Indicator 50). Sewage odour complaints were above the statewide median of 0.4 (Indicator 21). Although Council did not comply with the environmental regulator for effluent discharge, 85% of Council's effluent was compliant. The current replacement cost of system assets was $611M ($13,700 per assessment), cash and investments were $14M, debt was $51M and revenue was $30.4M (excluding capital works grants). Council paid a dividend of $1.2M.

COMPLIANCE WITH BEST-PRACTICE MANAGEMENT GUIDELINES REQUIREMENTS

(1) Complete current strategic business plan & financial plan	YES	**(2d) Pricing** - DSP with commercial developer charges	Yes
(2) **Pricing** - full cost-recovery, without significant cross subsidies	Yes	**(2e) Pricing** - Liquid trade waste approvals & policy	Yes
(2a) Pricing - Complying Residential Charges	Yes	**(3) Complete performance reporting (by 15 September)**	YES
(2b) Pricing - Complying Non-Residential Charges	Yes	**(4) Integrated water cycle management strategy commenced**	YES
(2c) Pricing - Complying Trade Waste Fees and Charges	Yes	**COMPLIANCE WITH ALL REQUIREMENTS**	100%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

		NWI	No.			LWU RESULT		RANKING >10,000 properties Note 1	RANKING All LWUs Note 2	STATEWIDE MEDIAN Note 3
						Col 1		Col 2	Col 3	Col 4
UTILITY	CHARACTERISTICS	C5	1	Population served: 80,100	Number of assessments: 44,480					
		C8	2	Number of connected properties: 39,410						
		C6	3	Number of residential connected properties: 38,050						
			4	New residences connected to sewerage (%)		2.5	%	1	1	0.8
		A6	5	Properties served per kilometre of main		35	%			40
		W18	6	Volume of sewage collected (ML)		6,510	ML			4,600
			7	Renewals expenditure (% of current replacement cost of system assets)		0.4	%	2	2	0.1
			8	Employees per 1000 properties	per 1,000 prop	2.1		5	4	1.6
SOCIAL	CHARGES & BILLS - 2009-10	P4		Description of residential tariff structure:	access charge per property; rate based on land value (Note 5)					
		P4.1	11	Residential access charge / assessment ($)	$	585		3	5	470
		P6	12	Typical residential bill / assessment ($)	$	585		3	5	470
			13	Typical developer charge / equivalent tenement ($)	$	7,630		1	1	3,900
			14	Non-residential sewer usage charge (c/kL)	c/kL	91		4	4	100
	HEALTH		16	Urban properties without reticulated sewerage service (%)		2.5	%	3	2	3.9
		E3	17	Percent of sewage treated to a tertiary level (%)		58	%	4	3	85
		E4	18	Percent of sewage volume treated that complied (%)		83	%	4	4	100
		E5	19	Sewage treatment works compliant at all times		9 of 12				
	SERVICE LEVELS		21	Odour complaints per 1000 properties	per 1,000 prop	1.2		5	5	0.4
		C11	22	Service complaints per 1000 properties	per 1,000 prop	7		2	2	12
		C16	23a	Average sewerage interruption (minutes)			min			116
			25	Total days lost (%)		3.5	%	4	5	2.4
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W19	26	Volume of sewage collected per property (kL)		165	kL	5	5	230
		W26	26a	Total recycled water supplied (ML)		1,900	ML	2	1	320
		W27	27	Recycled water (% of effluent recycled)		29	%	2	2	10
		E8	28	Biosolids reuse (%)		100	%	1	1	100
			30	Energy consumption per Megalitre (kiloWatt hours)		1,272	kwh	5	5	710
			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)		410		4	4	350
	ENVIRONMENTAL PERFORMANCE		33	90 Percentile licence limits for effluent discharge: BOD 40 mg/L; SS 40 mg/L						
			34	Compliance with BOD in licence (%)		100	%	1	1	100
			35	Compliance with SS in licence (%)		88	%	5	5	100
		A12	36	Sewer main breaks and chokes per 100 km of main	per 100km main	47		2	2	53
		E13	37	Sewer overflows per 100 km of main	per 100km main	13		3	4	12
			39	Non res & trade waste % of total sge volume		19	%	3	3	16
ECONOMIC	FINANCE	F6	42	Revenue per property - Sge ($)	$	770				650
			43	Revenue from non-residential plus trade waste charges (% of total revenue)		14	%	4	4	16
			44	Revenue from trade waste charges (% of total revenue)		0.6	%	4	3	1.2
		F18	46	Economic real rate of return - Sge (%)		1.3	%	3	2	1.1
			46a	Return on assets - Sge (%)		0.8	%	3	3	0.5
		F22	47	Net Debt to equity - Sge (%)		8	%	2	1	0
		F23	48	Interest cover - Sge		3		4	4	2
			48a	Loan payment per property - Sge ($)	$	135		2	1	55
		F24	47b	Net profit after tax - WS & Sge ($'000)	$'000	-291				-173
	EFFICIENCY		49	Operating cost (OMA) per 100 km of main ($'000)	$'000	1,500		4	4	1,380
		F12	50	Operating cost (OMA) per property ($) Note 8	$	424		5	5	340
			51	Operating cost (OMA) per kilolitre (cents)	c/kL	257		5	5	145
			52	Management cost per property ($)	$	153		5	5	123
			53	Treatment cost per property ($)	$	101		2	3	108
			54	Pumping cost per property ($)	$	73		5	4	50
			55	Energy cost per property ($)	$	19		2	2	20
			56	Sewer main cost per property ($)	$	57		4	4	40
		F15	57	Capital Expenditure per property ($)	$	530		2	2	248

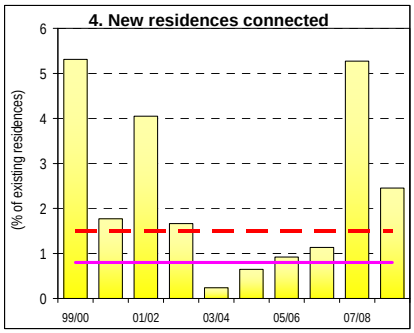
NOTES :

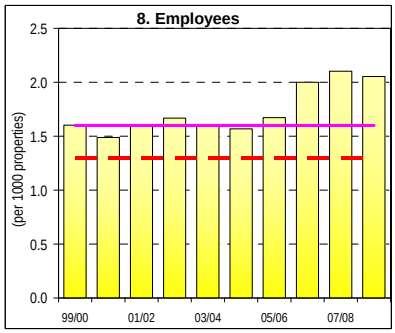
1. Council's ranking in Col 2 is based on a comparison of its result in Col 1 with the percentiles for LWUs with >10,000 properties. This is on a % of LWUs basis - see also Note 2.
2. Council's ranking in Col 3 is based on a comparison of its result in Col 1 with the percentiles for all LWUs. This is also on a % of LWUs basis as this is relevant for comparing the performance of an LWU with all other LWUs - see attachment.
3. The Statewide Median (Col 4) is on a % of connected properties basis. It best reveals statewide performance giving due weight to larger LWUs & reducing the effect of smaller LWUs.
4. Annual review of the key projections & actions in LWU's Strategic Business Plan (SBP) are required, together with annual updating of LWU's Financial Plan. The SBP should be updated after 3 years.
5. Non-residential: Access Charge based on square of meter size, sewer usage charge - 91c/kL.
6. Non-residential & trade waste volume was 19% of total sewage collected; these customers provided 14% of the revenue from annual charges, usage and trade waste charges.
7. Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
8. The operating cost (OMA)/property was $424. Components were: management ($153), operation ($189), maintenance ($45), energy ($19), chemical ($3) and effluent/biosolids ($16).

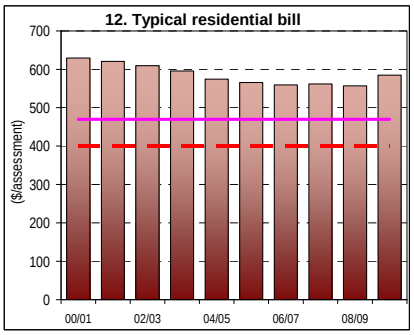
Shoalhaven City Council sewerage (TBL performance report pg 2)

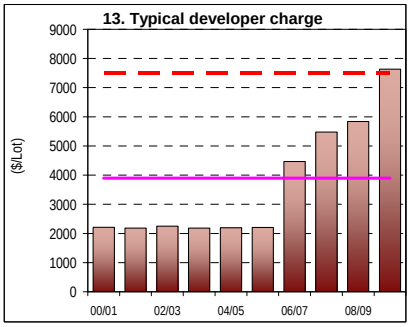
Shoalhaven City Council TBL Sewerage Performance (page 2) 2008-09

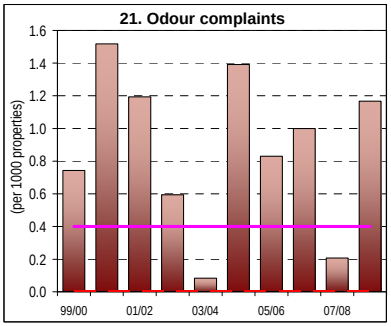
(Results shown for 10 years together with 2008/09 Statewide Median and Top 20%)

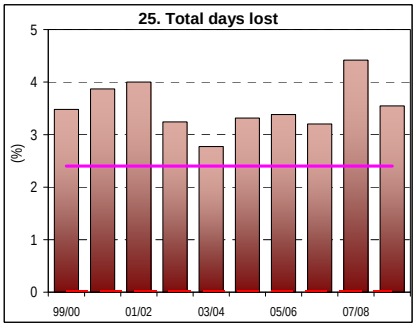


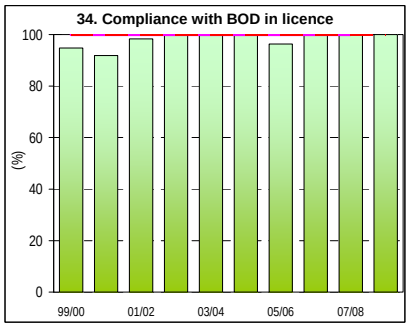


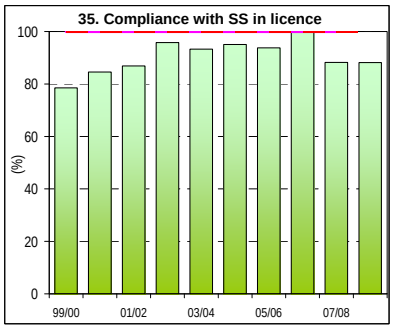


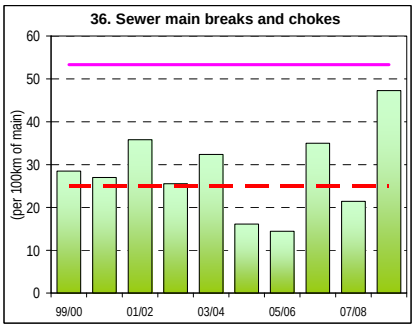


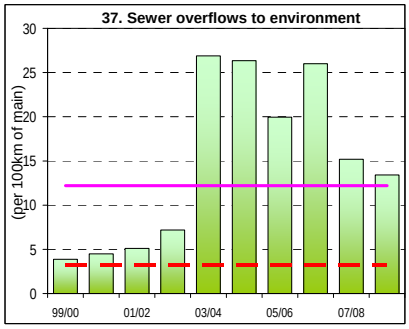


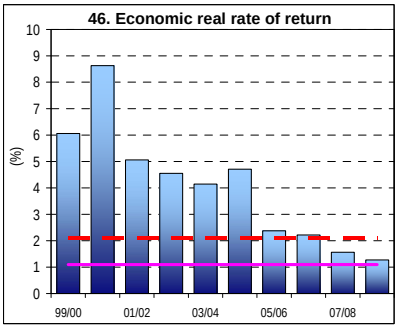


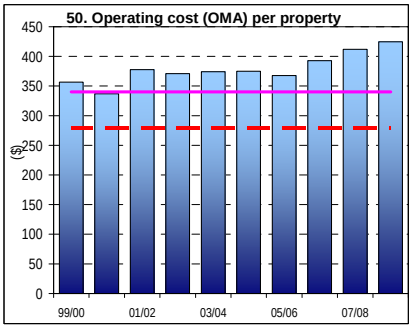


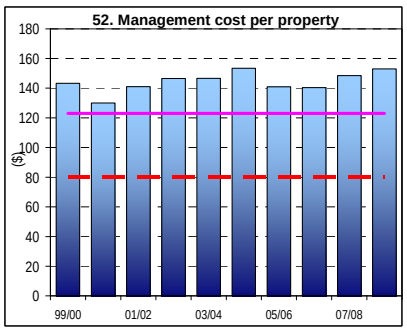


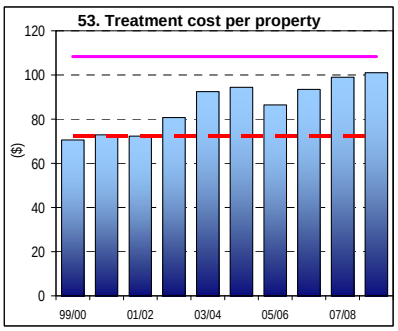


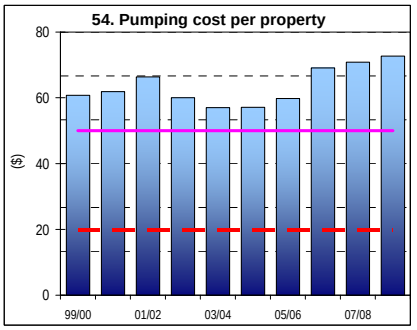












NOTES:

1. Costs are in Jan 2009$.

LEGEND
2008-09 State Median
2008-09 Top 20%

6. General notes

This 2008-09 NSW Water Supply and Sewerage Benchmarking Report provides the full suite of performance indicators and benchmarking data to enable each LWU to benchmark its performance against that of similar LWUs. The benchmarking report is available on the NSW Office of Water website (www.water.nsw.gov.au)

To provide a balanced view of the long-term sustainability of NSW LWUs, a TBL accounting focus has been adopted, with performance reported on the basis of social, environmental and economic performance indicators.

Statewide performance indicators are calculated on a 'percentage of connected properties basis'. This is a weighted median on the basis of connected properties, which best reveals Statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs on the data.

To facilitate comparisons, the performance indicators in this report have been prepared for each LWU's aggregated water supply businesses and aggregated sewerage businesses, rather than for individual water supply and sewerage systems.

6.1 Figures and tables

Most of the figures in this report show performance indicators for each of the last six years to enable review of trends and to facilitate benchmarking and 'yardstick' comparisons. The figures show ranked results for LWUs grouped into four size ranges in order to enable each LWU to compare its performance against similar sized LWUs. The better performing LWUs are shown at the left of each group.

Table 5 and Tables 6 to 18 show water supply and sewerage performance indicators for each of the 110 NSW water utilities (106 LWUs plus Sydney Water Corporation and Hunter Water Corporation, Sydney Catchment Authority and Hawkesbury Council).

As noted on page 2, these tables are sorted in order of the number of connected properties served in order to facilitate comparisons with similar size LWUs. The table on page 2 shows each LWU's ranking in terms of water supply connected properties. For example, the table shows '11 Albury City', indicating that Albury City is the 11th LWU in the water supply tables. To facilitate comparisons, the tables are also grouped into the same four size ranges as for the figures. Also, the median for many of the indicators are shown for each size grouping.

6.2 General notes

1. **TBL focus** – To provide a balanced view of the long-term sustainability of Local Water Utilities (LWUs), a triple bottom line (TBL) accounting focus has been adopted, with performance reported on the basis of **Social, Environmental** and **Economic** indicators.
2. **Data not reported –** Where an LWU has not reported a key performance indicator for 2008-09, the value previously reported has been used where appropriate. Such values are shown in ***italics bold*** in Tables 5 to 18.
3. **Properties vs assessments** – This report has been prepared on a ***'per connected property'*** basis for consistency with national performance reporting. A connected property is a property that is connected to the water supply or sewerage system, as opposed to an assessment which is a bill issued by a water utility. Factors that influence this indicator are the number of vacant blocks

(with no connection but which are billed as an assessment) and the number of multiple dwellings (e.g. blocks of flats or units) with a single assessment.

4. **Calculation of connected properties** – The number of connected properties is calculated as the product of the number of assessments times the ratio of the number of connected properties per assessment for each of water supply and sewerage. For any utility there is minimal change in this ratio of the number of connected properties per assessment from year to year. The NSW Office of Water has worked with LWUs to establish these ratios. Where warranted for a particular LWU, these ratios are updated from time to time.
5. **Statewide medians** – This report refers to statewide medians which are calculated on a 'percentage of connected properties' basis rather than a 'percentage of LWUs' basis. This is a weighted median on the basis of connected properties, which best reveals statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs. LWU rankings on a 'percentage of LWUs' basis are also provided where appropriate (e.g. for comparison of LWUs in the 'Ranking' columns of the two page TBL Performance Report for each utility (example on page 26 and in Appendix C on page 227). The statewide medians are shown in Tables 1 and 2 on pages 100 and 101.
6. **Aggregated businesses** To facilitate comparisons, the performance indicators in this report have been prepared for each LWU's aggregated water supply or sewerage businesses, rather than for individual water supply or sewerage systems.
7. **Typical residential bill (TRB)** – The typical residential bill per assessment is the annual bill paid by a residential customer using the LWU's average annual residential water supplied and is the **principal indicator of the overall cost** of a water or sewerage system. Pensioners pay a lower amount due to the $87.50 pensioner rebate as do owners of vacant lots as they pay no water usage charges. Refer also to page 14.

   Calculation of TRB – The 2009-10 typical residential bill is based on a customer of the LWU's principal water supply or sewerage system using the LWU's 2008-09 average annual residential water supplied (see Tables 6 and 7 on pages 117 and 129). The typical residential bill for 2008-09 and previous years is based on the reported average annual residential water supplied for that year (2008-09 residential water supplied is shown in column 3 of Table 5 on page 107).
8. **Full cost recovery –** Full cost recovery is achieved if either the Economic Real Rate of Return or the Return on Assets is >=0. In addition, many utilities have significantly increased their 2009-10 charges in order to achieve full cost recovery (shown as "Y*" in column 14a of Table 6 and column 11a of Table 7). Refer also to the box on page 18.
9. **Drinking Water Quality Guidelines** – These have become more stringent. Compliance is now determined from the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines (National Health & Medical Research Council/National Resource Management Ministerial Council).

   An LWU has complied with the guidelines for microbiological water quality (i.e. it had 100 per cent compliance) if the required number of samples was tested and at least 98 per cent of the samples contained no E. coli. For LWUs which did not comply, the percentage of samples complying is reported. Refer also to page 20.
10. **Total water supplied** – Total annual water supplied comprises the sum of the potable water supplied plus the non potable water supplied. Recycled water is a component of the non-potable supply which also includes raw water.
11. **Average annual residential water supplied** – The average annual residential water supplied per connected property (col 3 of Table 5) includes both potable and non-potable water supplied. Where an LWU has not separately reported its residential water supplied, it has been estimated using the Statewide average of 57 per cent of the LWU's total potable water supplied. The potable water

supplied and the total water supplied (potable + non-potable) have been separately reported for the 11 LWUs with a dual water supply (see Note 12 below).

12. **Dual supplies** – Eleven LWUs had a dual water supply to over 50 per cent of their residential customers in June 2008 (ie. with a potable supply for indoor use and a non potable supply for outdoor use).

    The total annual residential water supplied (i.e. potable + non-potable) kilolitres per property for those LWUs with a dual water supply is shown below, together with their potable residential water supplied in brackets. These volumes were: Balranald 958 (241), Berrigan 292 (173), Bourke 3,169 (539), Central Darling 526 (145), Hay 1,140 (184), Jerilderie 1,033 (245), Murray 260 (156), Wakool 839 (153), Walgett 938 (195), Warren 352 (164) and Wentworth 376 (119).

    The typical residential bill (TRB) has been calculated for those LWUs with a dual supply using the above volumes. The TRB for Brewarrina, Carrathool, Deniliquin and Moree Plains has also taken into account the significant volumes of non-potable supply provided by these LWUs.

13. **Water losses** – For consistency with national performance reporting, water losses comprise real losses (mostly leakage) plus apparent losses (unauthorised consumption and under-registration of customer meters). Unbilled water supplied (fire fighting and mains flushing) is not a water loss but is a component of non revenue water.

14. **Minimum real losses** – Leakage studies for over 40 NSW LWUs indicate an average leakage from water supply distribution systems of 17 per cent of annual consumption (range six per cent to 35 per cent). Therefore, a minimum real loss (i.e. leakage) of six per cent of the potable water supplied has been adopted for this report. Reported real losses of less than six per cent have only been accepted where the utility has provided evidence to support the adoption of a lower value. Table 10 on page 152 discloses that 42 LWUs have recently carried out a reservoir drop test, waste metering or night flow analysis in order to determine their present real losses and opportunities for leakage reduction.

    Minimum non-revenue water – Similarly, statewide analysis of non revenue water (water losses plus unbilled water supplied) for NSW water utilities other than bulk water suppliers, indicates a minimum of 10 per cent of annual water supplied. Reported non revenue water of less than 10 per cent of total water supplied has only been accepted where the utility has provided evidence to support the adoption of a lesser value. Where the reported non revenue water has not been accepted, the reported values of total potable town water supplied have been increased as a result of increasing the reported non revenue water component to 10 per cent. These adjusted values are shown in ***italics bold*** in column 10 of Table 8.

15. **OMA costs for reticulators** – The operation, maintenance and administration (OMA) costs for water supply reticulators include the OMA cost for the bulk supplier on the basis of the volume of water supplied to the reticulator divided by the total volume supplied by the bulk supplier to all customers. For example for Cootamundra, the OMA cost of $245/property comprises $109/property for the bulk supply from Goldenfields (bulk supplier) plus $136 for the reticulator (Cootamundra).

16. **Sydney Water, Hunter Water and Sydney Catchment Authority** – The performance indicators for Sydney Water Corporation, Hunter Water Corporation and Sydney Catchment Authority were obtained from the *National Performance Report 2008-09 for Urban Water Utilities*.

17. **Bulk storage** – Utilities that provide bulk storage dams for their water supply incur significant capital and operating costs for these facilities, resulting in a higher typical residential bill and operating cost per property (refer to item 5. on page 14). The following 45 non-metropolitan utilities provided such bulk storage: Armidale, Ballina, Bathurst, Bega Valley, Bourke, Brewarrina, Byron (Mullumbimby), Cabonne, Central Tablelands, Clarence Valley, Cobar, Coffs Harbour, Country Energy, Eurobodalla,

Fish River, Glen Innes-Severn, Gosford, Goulburn Mulwaree, Guyra, Inverell, Kempsey, Kyogle, Lachlan, Leeton, Lithgow, MidCoast, Mid Western Regional, Moree Plains, Orange, Palerang, Parkes, Port Macquarie-Hastings, Richmond Valley, Rous, Shoalhaven, Tamworth, Tenterfield, Tweed, Upper Hunter, Upper Lachlan, Uralla, Warrumbungle, Wingecarribee, Wyong, Yass Valley.

18. **Unfiltered** – A utility with over 50 per cent of its supply comprising an unfiltered surface water supply ie. the utility does not have a water treatment works providing filtration and disinfection for >50 per cent of its supply.

    Groundwater – A utility with >50 per cent of its supply comprising good quality unfiltered groundwater.

    Reticulator – A utility which purchases >70 per cent of its source water from a bulk supplier and reticulates water to householders in its area.

    Bulk supplier – A utility which provides a bulk water supply to other utilities, rather than reticulating water to householders.

    Dual supply – A utility with a potable reticulated water supply for indoor uses and a separate non-potable supply reticulated for outdoor uses to over 50 per cent of its residential customers (refer to Note 12 on page 30).

19. **National Water Initiative (NWI) Indicators** – There are 30 NSW water utilities with >10,000 connected properties including three metropolitan utilities and 27 non-metropolitan utilities. These utilities have reported their performance in the *National Performance Report 2008-09* based on a nationally agreed framework of indicator definitions. The reported NWI performance indicators (including key financial performance indicators) have been independently audited. The results that have met the rigorous NWI auditing requirements have been published in the *National Performance Report 2008-09* and are shown in Appendix F. Appendix F discloses the NSW results for all the 117 NWI performance indicators. Some of the reported non-financial performance indicators failed to meet the NWI auditing requirements. These results have been excluded from both the *National Performance Report 2008-09* and Appendix F. However they have been included in the Figures and in Tables 5 to 18 of this report.

    In addition, the reported values for the 30 NWI financial performance indicators have been independently audited for all the NSW utilities.

20. **Reported NWI Indicators** – This report discloses the performance of each of the 106 NSW Local Water Utilities (LWUs) for each of the 117 NWI performance indicators on the following basis:

    Table 5 (page 107) reports results for NWI indicators C4, W11, W12, A8, C15, F1, H4, H2, H3, C9, F2, E4, E13, W27, W26, F24, P8, F13 F19, F22 & F16.

    Table 5A on page 111 reports the results for NWI indicators F13, F7, F3, F19, F22, F23, F20, F21, F25, F8, F24 and F30.

    Table 5B on page 114 reports the results for NWI indicators C12, C14, E9, E10, E11, E12, W6, W13 and W15.

    Table 6 on page 117 reports indicators P1, P2, P3, F17, F4, W12 and C4.

    Table 7 on page 129 reports indicators P5, P6, F18 and C8.

    Table 8 on page 138 reports the results for NWI indicators W8, W10, W11, W20, W21, W26, W27, W14, W1, W2, W3, W4, W5, W6 and W7.

    Table 9 on page 149 reports the results for NWI indicators C4, C2, C1, A2, A3, A1, F14 and F26.

    Table 10 on page 152 reports the results for NWI indicators A10, A11, A9, A8, C17, W11 and W12.

    Table 11 on page 155 reports the results for NWI indicators F1, F5, F4, F9, F22, F17 and F11.

Table 12 on page 158 reports the results for NWI indicators H6, H5, H4, H2, H3, C9, C10, C18, C19, C14, C17 and C15.

Table 14 on page 164 reports the results for NWI indicators C8, C6, C5, A5, A6, A4, F15 and F27.

Table 15 on page 167 reports the results for NWI indicators A12, E13, W18, W17, E4, E5, E1, E2, E3, W19, E8, W26 and W27.

Table 16 on page 170 reports the results for NWI indicators F2, F6, F10, F22, F18 and F12.

Table 17 on page 173 reports the results for NWI indicators E7, C11, C13 and C16.

The results for NWI indicators P8; F3, F16 and F19; A3 and A5 and A2; W11; P3; C9; A8; W12; A10; F17; F12; F11; A6; P4; A12; E10; F18 and F12 are shown on Figures 1, 2, 5, 7, 9, 18, 20, 25, 26, 29, 30, 31, 38, 40, 45, 51, 53, 59 and 60 respectively.

The following NWI indicators have not been shown in the tables but can be determined as follows: W16 from (W18–W17), C3 from (C4-C2), C7 from (C8-C6). Indicator A7 is nil for all LWUs and indicator H1 refers to the 2004 ADWG for all LWUs.

Regional Water and Sewerage Inspectors – NSW Office of Water

Area	Name	Mobile	Email
Albury	Patrick Freeman	0429 308 954	Patrick.Freeman@water.nsw.gov.au
Alstonville	Terry Call	0412 283 768	Terry.Call@water.nsw.gov.au
Cootamundra	Bernie Barnes	0429 604 409	Bernie.Barnes@water.nsw.gov.au
Dubbo	Bruce Lamont	0458 268 453	Bruce.Lamont@water.nsw.gov.au
Newcastle	Graham Campbell	0419 620 990	Graham.Campbell@water.nsw.gov.au
Orange	Paul Beed	0419 624 576	Paul.Beed@water.nsw.gov.au
Tamworth	Trent Betts	0417 458 247	Trent.Betts@water.nsw.gov.au
Wollongong	Geoff Parish	0427 248 007	Geoff.Parish@water.nsw.gov.au

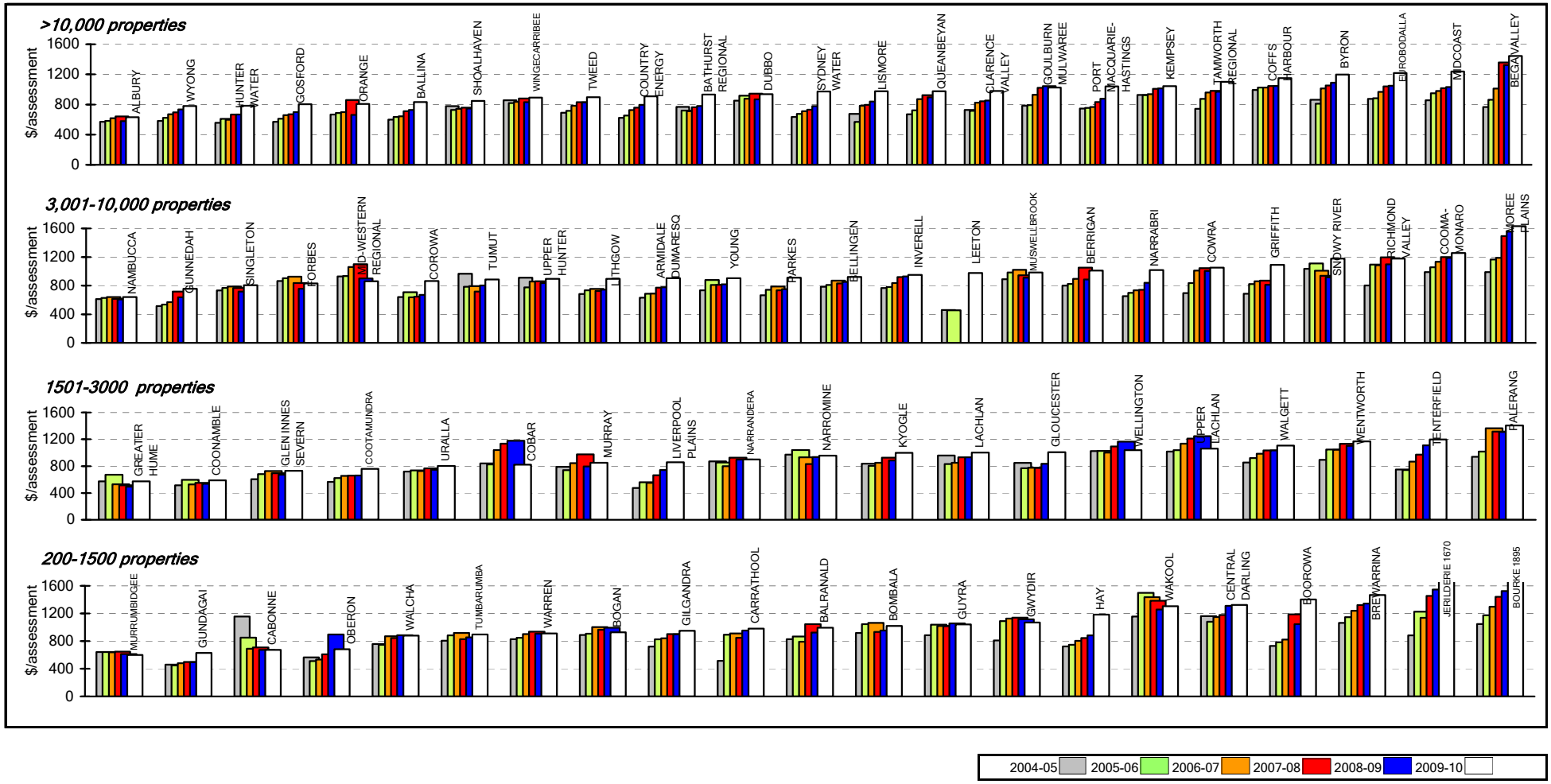
As noted on page 20, assistance is available from your NSW Office of Water Regional Water and Sewerage Inspector for achieving microbiological water quality compliance and for addressing other water and sewage treatment issues.

6.3 Contents of tables 5 to 18

Table 5	**2008-09 NSW water utility performance summary** – Overview of each water utility's key water supply and sewerage performance indicators.
Table 5A	**Water supply and sewerage – financial** – Combined water supply and sewerage indicators.
Table 5B	**Water supply and sewerage – levels of service** – Combined water supply and sewerage indicators.
Table 6	**Water supply – residential charges, bills, cost recovery** – Type of tariff, residential charges, bills, cost recovery, average annual residential water supplied and number of connected properties
Tables 6A to 6B	**Water supply – 2009-10 residential inclining block or multiple tariffs, non-residential tariffs**
Table 7	**Sewerage – residential charges, bills, cost recovery** – Residential charges, bills, non-residential sewer usage charge, cost recovery and number of connected properties for each water utility's sewerage business
Tables 7A to 7C	**Sewerage – 2009-10 residential multiple tariffs, non-residential tariffs, liquid trade waste fees and charges**
Table 8	**2008-09 NSW urban water supplied** – Water supplied by customer category, water losses, leakage, total potable and non-potable water supplied, recycled water use and surface and groundwater use
Table 8A	**2008-09 Water losses and non-revenue water**
Table 8B	**2008-09 Water consumptions from source catchments in non-metropolitan NSW** – Shows details of water consumptions by customer category for each source catchment
Table 8C	**2008-09 Water conservation initiatives**
Table 9	**Water supply – utility characteristics** – Population, no. of assessments, connected properties, new residential dwellings connected, assets employed, capital investment, workforce employed, outsourcing, days lost
Table 10	**Water supply – asset management, water resource management** – Leakage, main breaks, interruptions to supply, rehabilitations, renewals and maintenance expenditure, total annual and average residential water supplied, recycled water use, drought and demand management policies
Table 11	**Water supply – financial, efficiency** – Revenue, residential revenue and water supplied, current replacement cost, debt to equity, cross subsidies, operating result, externalities, loan payment, operating cost (OMA) and management cost
Table 12	**Water supply – health, levels of service** – Physical, chemical and e. coli water quality compliance, water quality complaints, Water Service Complaints, Customer Interruption Frequency and Drought Water Restrictions
Table 13	**Water Supply – benchmarking cost data** – Disaggregated benchmarking cost data including operating cost, management cost, retail/wholesale cost, pumping cost, treatment cost and water main cost
Table 14	**Sewerage – utility characteristics** – Population, no. of assessments, connected properties, new residential dwellings connected, assets employed, capital investment, workforce employed, outsourcing, days lost
Table 15	**Sewerage – asset management, resource management** – Infiltration, interruptions to service, rehabilitations, renewals, maintenance expenditures, volume of sewerage collected, treated, biosolids reused, per cent effluent reclaimed
Table 16	**Sewerage – financial, efficiency** – Revenue, current replacement cost, debt to equity, cross subsidies, operating result, externalities, loan payment, operating cost (OMA) and management cost
Table 17	**Sewerage – environmental, levels of service** – BOD and SS compliance, sewer main chokes and collapses, sewer overflows to the environment, odour complaints, service complaints, total complaints and average sewerage interruption
Table 18	**Sewerage – benchmarking cost data** – Disaggregated benchmarking cost data including operating cost, management cost, retail / wholesale cost, pumping cost, treatment cost and sewer main cost

7. Water supply and sewerage figures

Figure 1: Typical residential bill – water supply and sewerage



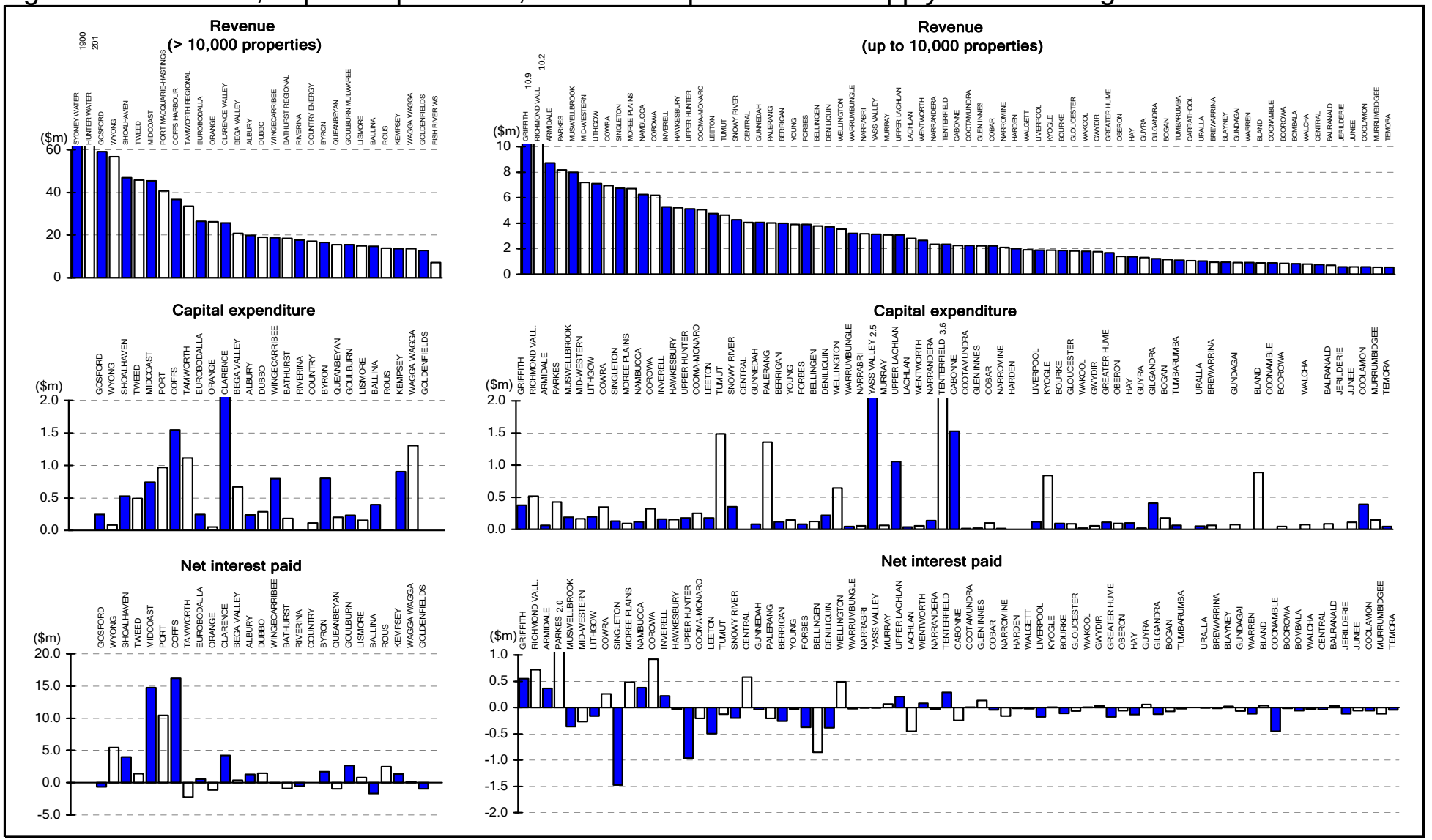
Parameter:

(2008-09 Average Residential Water Supplied x 2009-10 Water Usage Charge) + 2009-10 Water and Sewerage Access Charges

Notes:

1. This figure shows ranked values of the 2009-10 typical residential water bill for water and sewerage supply for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2009-10 typical residential water bill for water and sewerage supply for the 24 LWUs shown ranges from $642 to $1630. Results for the previous 5 years are also shown in Jan 2010$.
2. The 2009-10 Statewide median typical residential bill for water supply and sewerage is $900 per assessment.
3. Refer also to pages 6 and 26 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report*.
4. For general notes see page 28.

Figure 2: Revenue, capital expenditure, net interest paid – water supply and sewerage



Parameter: [Total revenue (W13 +S14) - grants for acquisition of assets (W11a + S12a)] ÷ 1,000,000

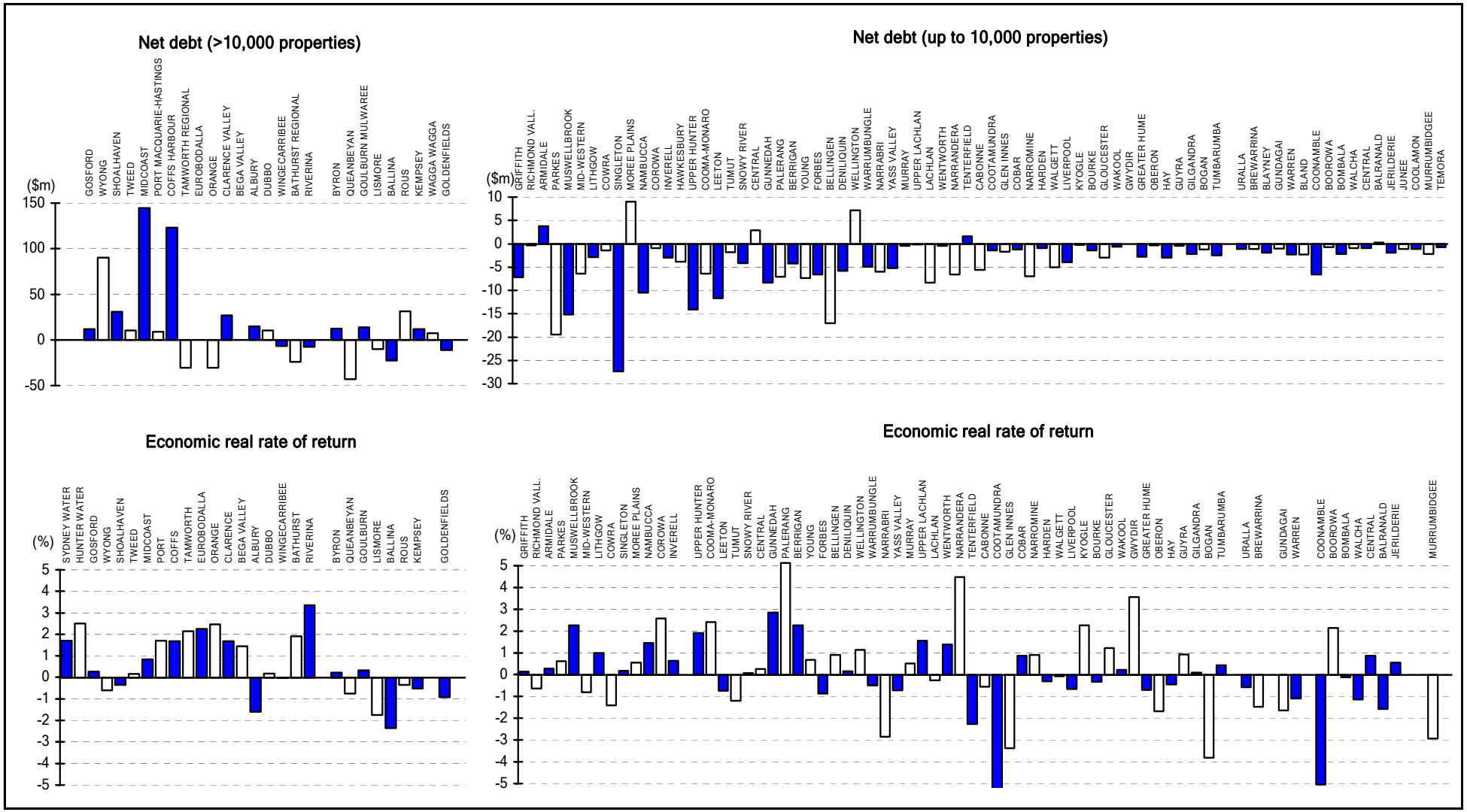
Parameter: Acquisition of fixed assets (W16 + S17)

Parameter: Interest expense (W4a + S4a) - interest income (W9 + S10)

Notes:

1. Utilities are ranked on the basis of revenue (see the top graph). Revenue for Sydney Water and Hunter Water was $1,903M and $201M respectively.
2. For general notes see page 28.

Figure 3: Net debt, economic real rate of return – water supply and sewerage



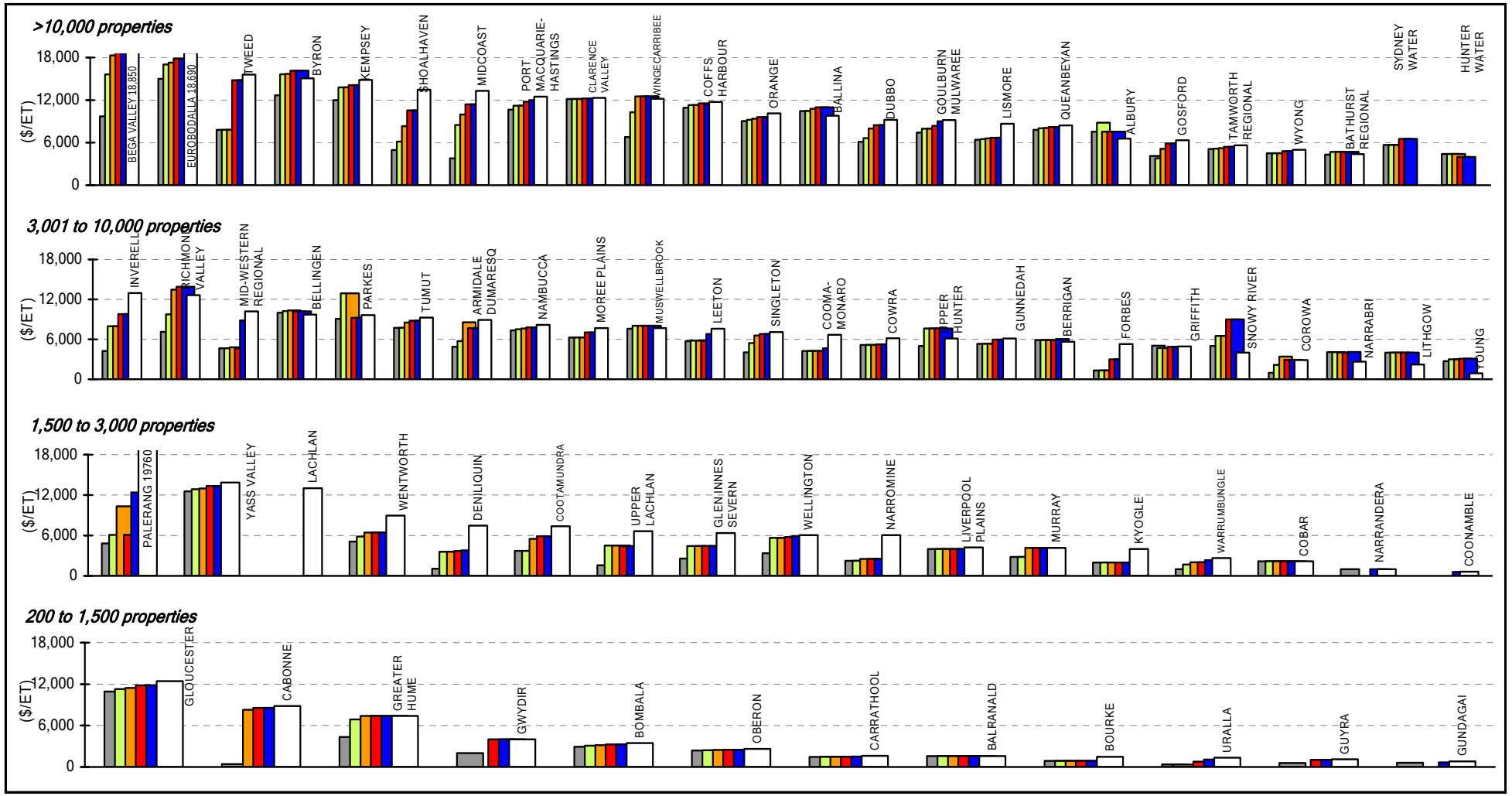
Parameter: [Borrowings (W39 + S40) + bank overdraft (W37 + S38)] - cash and investments (W30 + S31)

Parameter: $$\left[\text{Operating } \frac{\text{result (W15) + interest expense (W4a) - interest income (W9) - grants for acquisition of assets (W11a)}}{\text{Written down replacement cost of system assets, plant \& equipment (W33)}}\right] \times 100$$

Notes:

1. Utilities are ranked on the basis of revenue (see the top graph). Revenue for Sydney Water and Hunter Water was $1,903M and $201M respectively.
2. For general notes see page 28.

Figure 4: Typical developer charge – water supply and sewerage



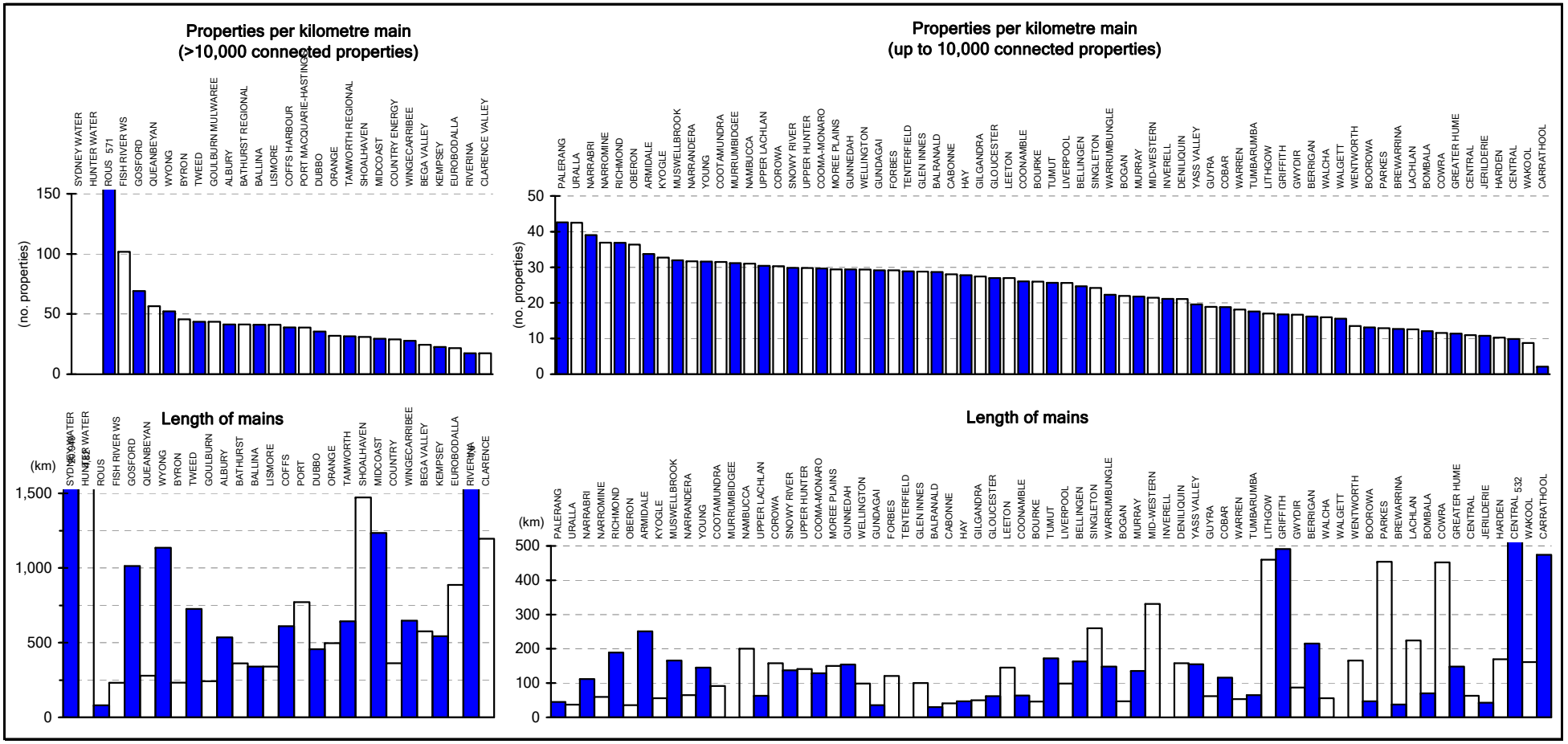
Parameter: Typical Water Supply Developer Charge (Q36) + Typical Sewerage Developer Charge (Q36)

Notes:

1. This figure shows ranked values of the 2009-10 typical developer charge for water supply and sewerage for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the typical developer charge for water supply and sewerage for the 24 LWUs shown ranges from $12950 to $900. Results for the previous 5 years are also shown in Jan 2010$.
2. The Statewide median typical developer charge for water supply and sewerage is $8500 per Equivalent Tenement (ET).
3. For general notes see page 28.

8. Water supply figures

Figure 5: Properties served per km of main, length of mains – water supply



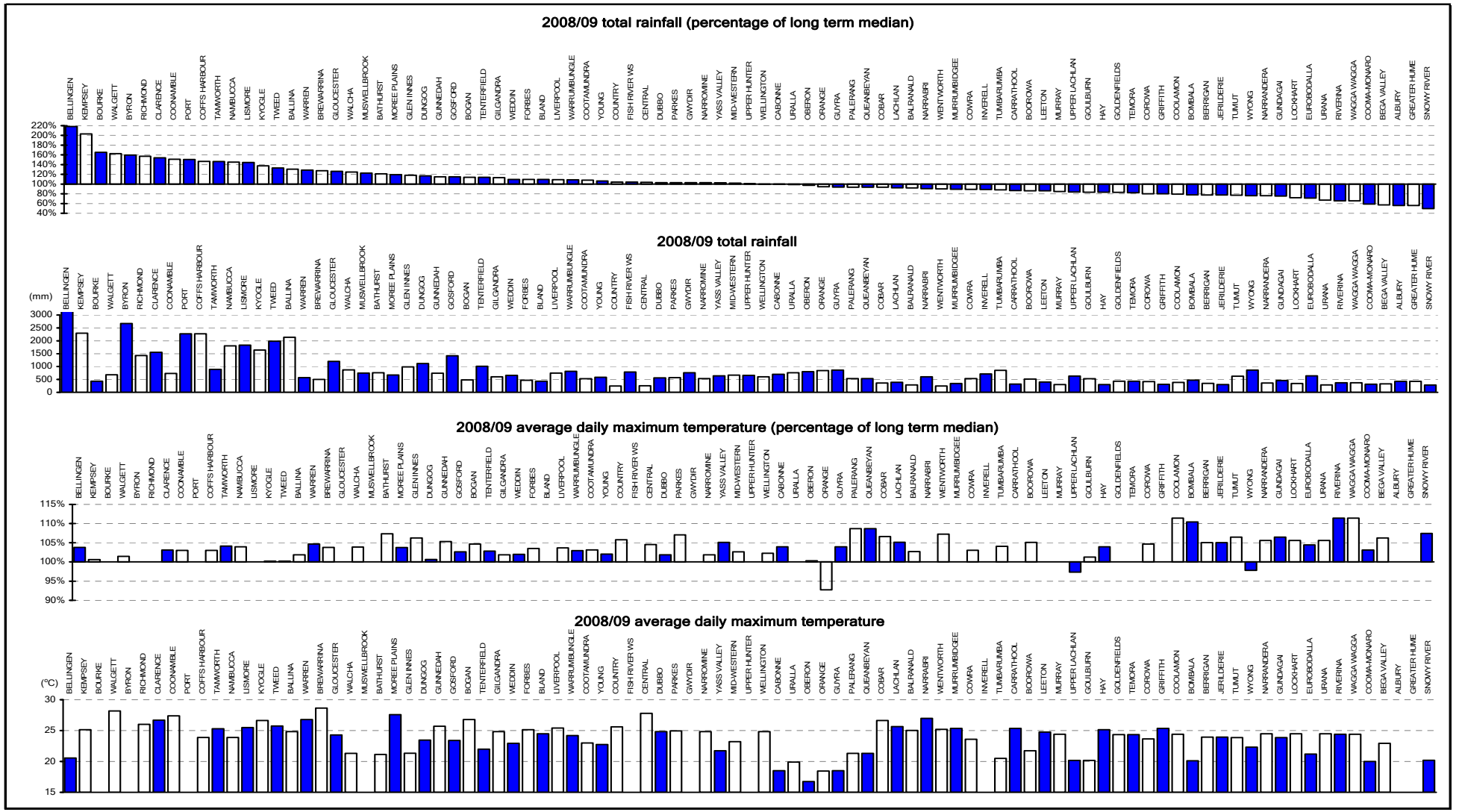
Parameter: $\frac{\text{No. of residential assessments (Q34) + No. of non-residential assessments (Q35) x No. of connected properties per assessment}}{\text{Length of headworks transfer mains (Q20a) + length of trunk mains (Q20) + length of reticulation mains (Q21)}}$

Parameter: Length of headworks transfer mains (Q20a) + length of trunk mains (Q20) + length of reticulation mains (Q21)

Notes:

1. The top graph shows the ranked values of number of connected properties per km of water main for each Local Water Utility (LWU). Each bar represents one LWU. The bottom graph of this figure shows the total length of mains for the corresponding LWUs.
2. The Statewide median water supply connected properties per km of main is 32.
3. For general notes see page 28.

Figure 6: Rainfall, temperature – water supply



Parameter: 2008/09 total rainfall x 100 / Long term median annual rainfall

Parameter: 2008/09 total rainfall

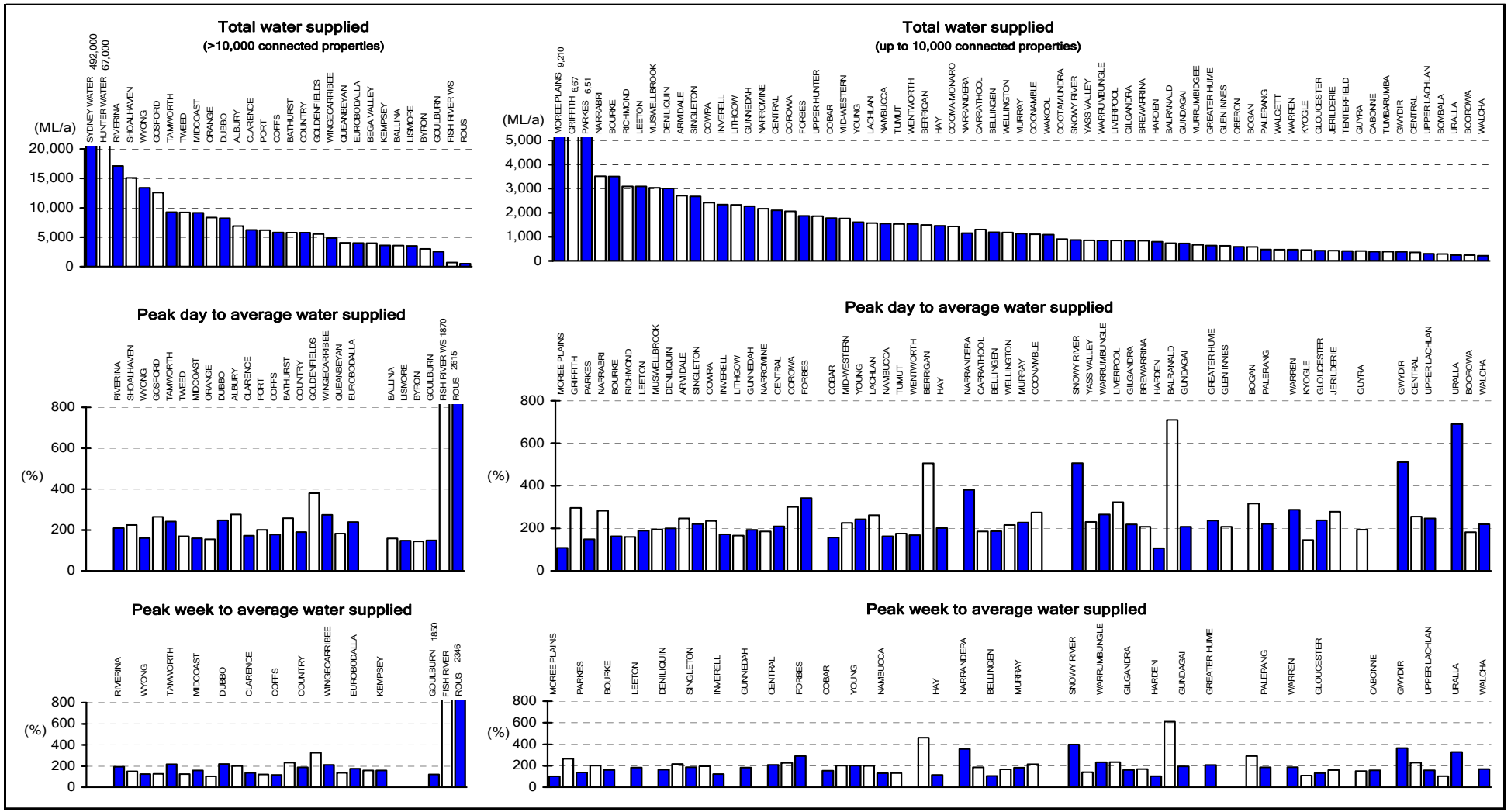
Parameter: 2008/09 average daily maximum temperature x 100 / Long term median daily maximum temperature

Parameter: 2008/09 average daily maximum temperature

Notes:

1. Data provided by the Bureau of Meteorology. Averages and long term medians not available for some localities.
2. Temperature and rainfall figures are only shown where weather stations returned complete records
3. For general notes see page 28.

Figure 7: Total water supplied – water supply



Parameter: Total Potable Water Supplied (Q71) + Non-Potable Water Supplied (Q72) + Recycled Water (STW Q25) - Bulk Water Supplied (Q12a)

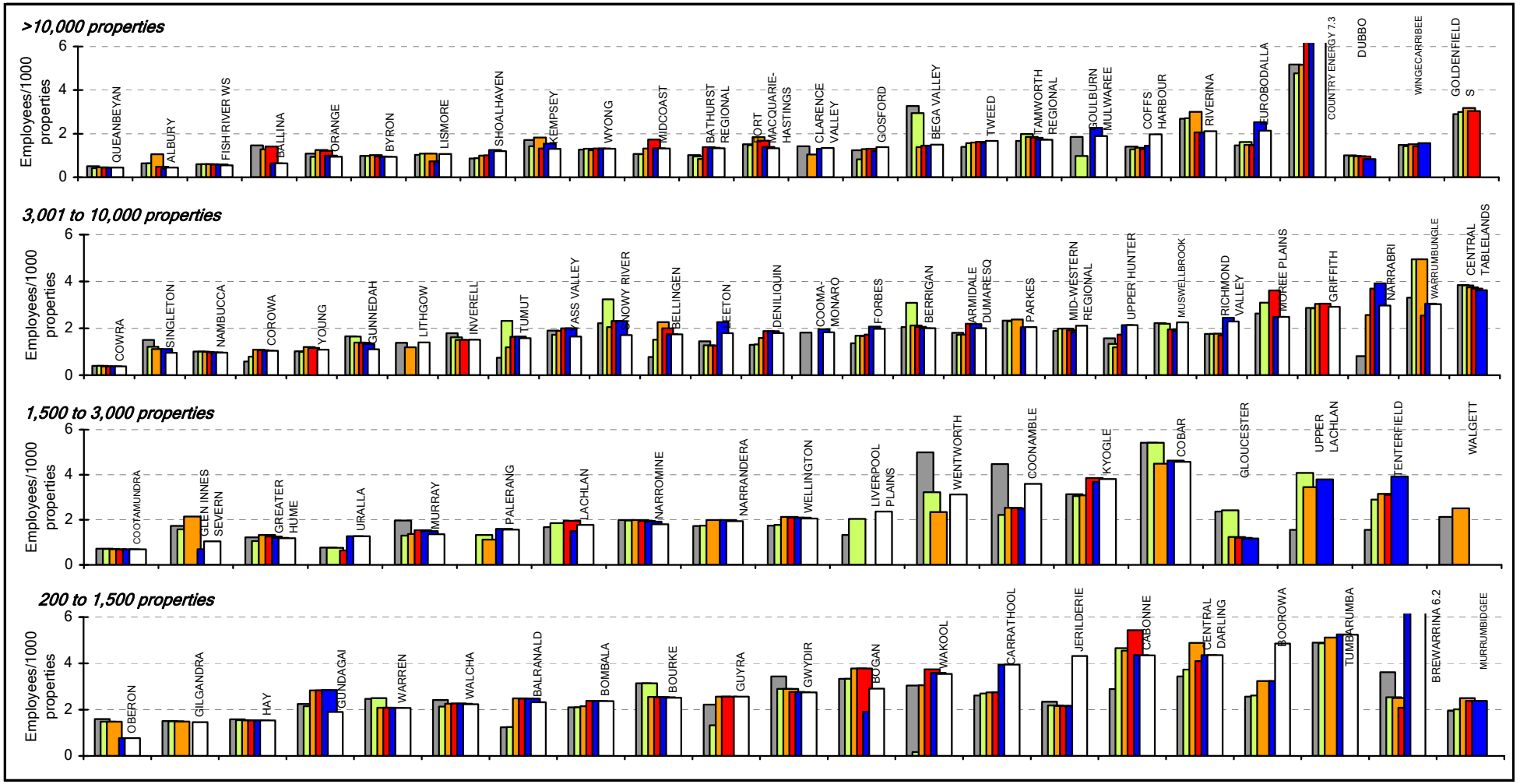
Parameter: $\frac{\text{Peak Day Water Supplied (Q82) x 365 x 10}}{\text{Total Potable Water Supplied (Q71)}}$

Parameter: $\frac{\text{Peak Week Water Supplied (Q83) x 365 x 10}}{\text{Total Potable Water Supplied (Q71)}}$

Notes:

1. The top graphs show the total town water supplied (potable and non-potable). The middle graphs show the percentage of peak to day average potable water supplied for each Local Water Utility (LWU). Each bar represents one LWU. The lower graphs show the percentage peak week to average potable water supplied.
2. For general notes see page 28.

Figure 8: Employees per 1,000 properties – water supply



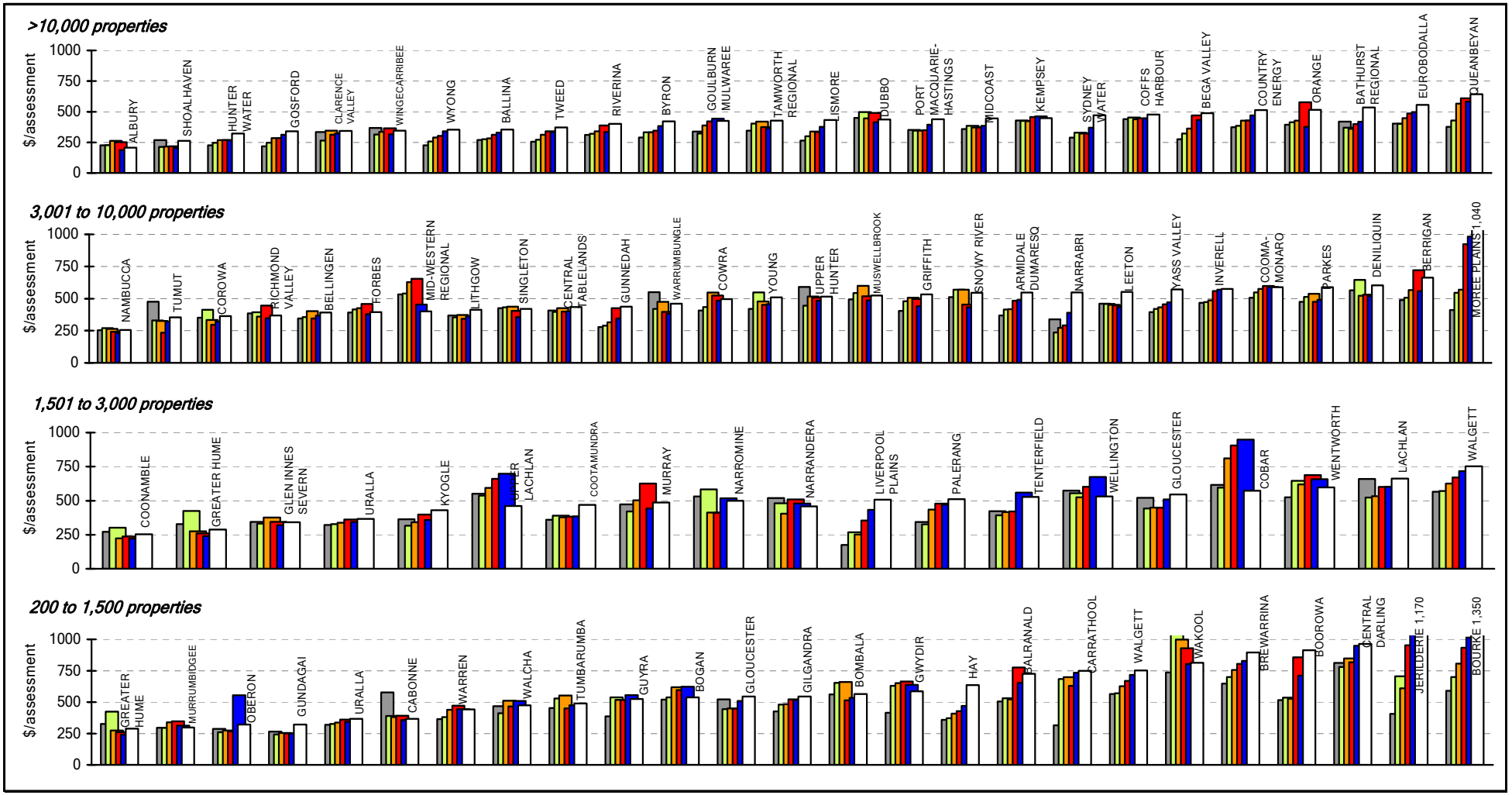
Parameter:

$$\frac{\text{Equivalent Full-time Employees (Q120) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2008-09 number of water supply employees per 1000 properties for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the water supply employees per 1000 connected properties for the 28 LWUs shown ranges from 0.4 to 3. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown.
2. The Statewide median number of water supply employees is 1.4 per 1000 connected properties.
3. For general notes see page 28.

Figure 9: Typical residential bill – water supply

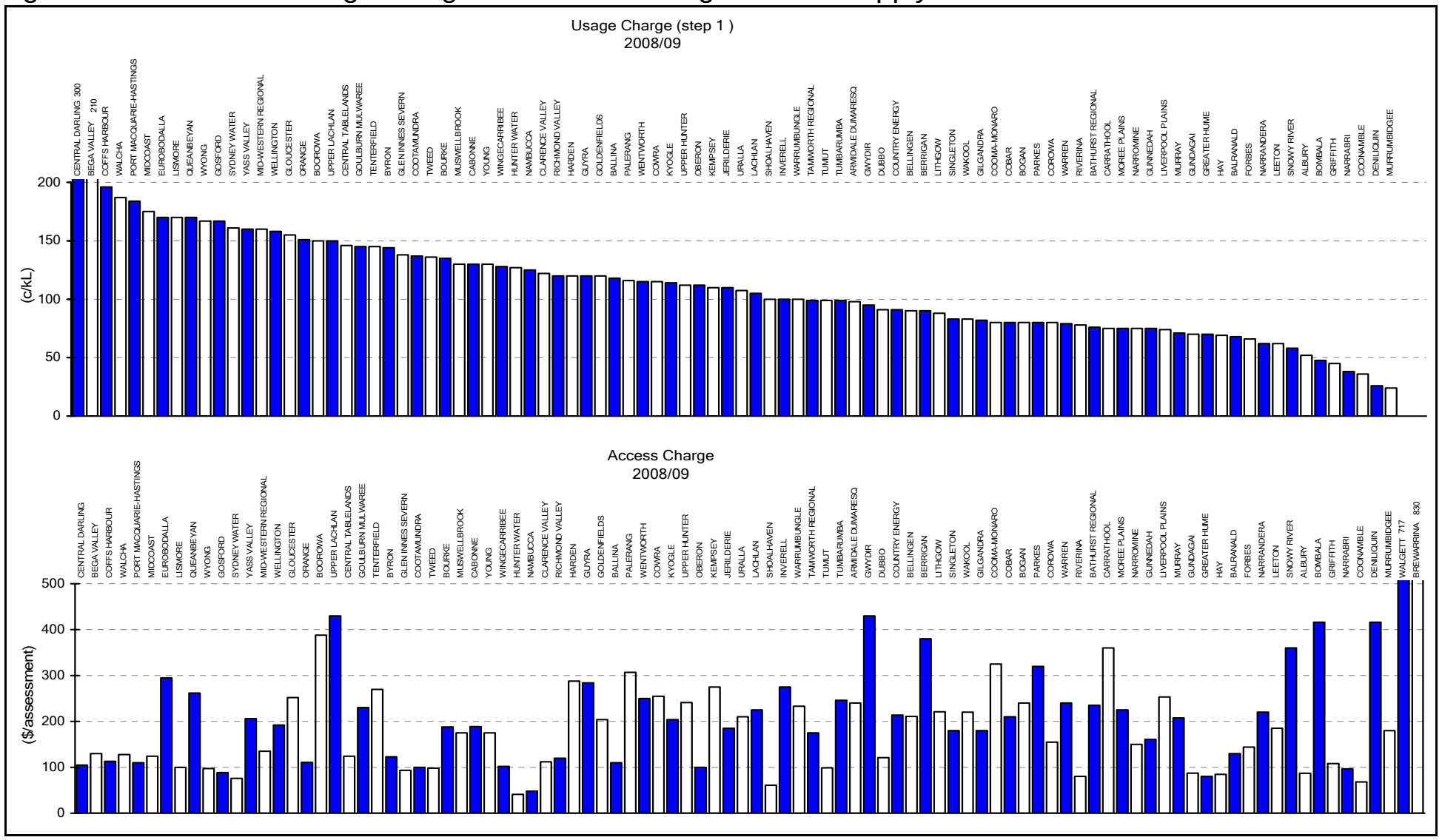


Parameter: (2008-09 Average Residential Water Supplied x 2009-10 Water Usage Charges) + 2009-10 Access Charge

Notes:

1. This figure shows ranked values of the 2009-10 typical residential bill for water supply for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the typical residential bill in 2009-10 for the 28 LWUs shown ranges from $260 to $1040 per assessment. Results for the previous 5 years are also shown in Jan 2010$.
2. The 2009-10 Statewide median typical residential bill for water supply is $430 per assessment.
3. For general notes see page 28.

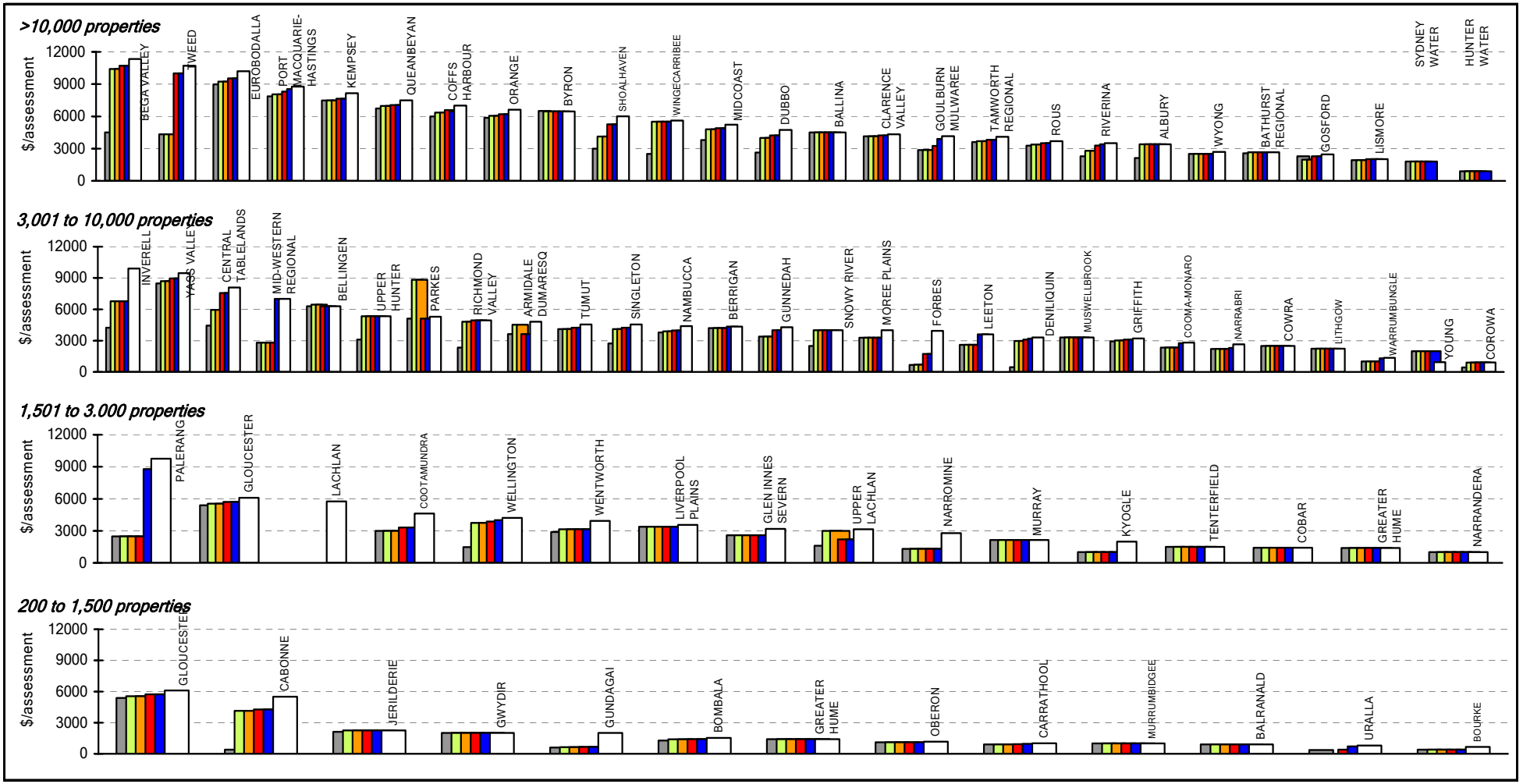
Figure 10: Residential usage charge and access charge – water supply



Notes:

1. ALL LWUs have now abolished their free water allowance for potable water supply. 2 LWUs did not have domestic water metering.
2. The first step residential water usage charge is shown above. Further information on water supply tariff structures is shown in Tables 6, 6A and 6B.
3. The Statewide median water usage charge for the first step was 150 c/kL. 20% of LWUs had a usage charge greater than 165 c/kL. 80% of LWUs had a usage charge greater than 85 c/kL. Approximately 75% of LWUs had step pricing in place for discretionary water use, with a higher charge per kL for usage over 200 to 600 kL/a (Table 6). The median water usage charge for the second step was 180c/kL.
4. For general notes see page 28.

Figure 11: Typical developer charge – water supply

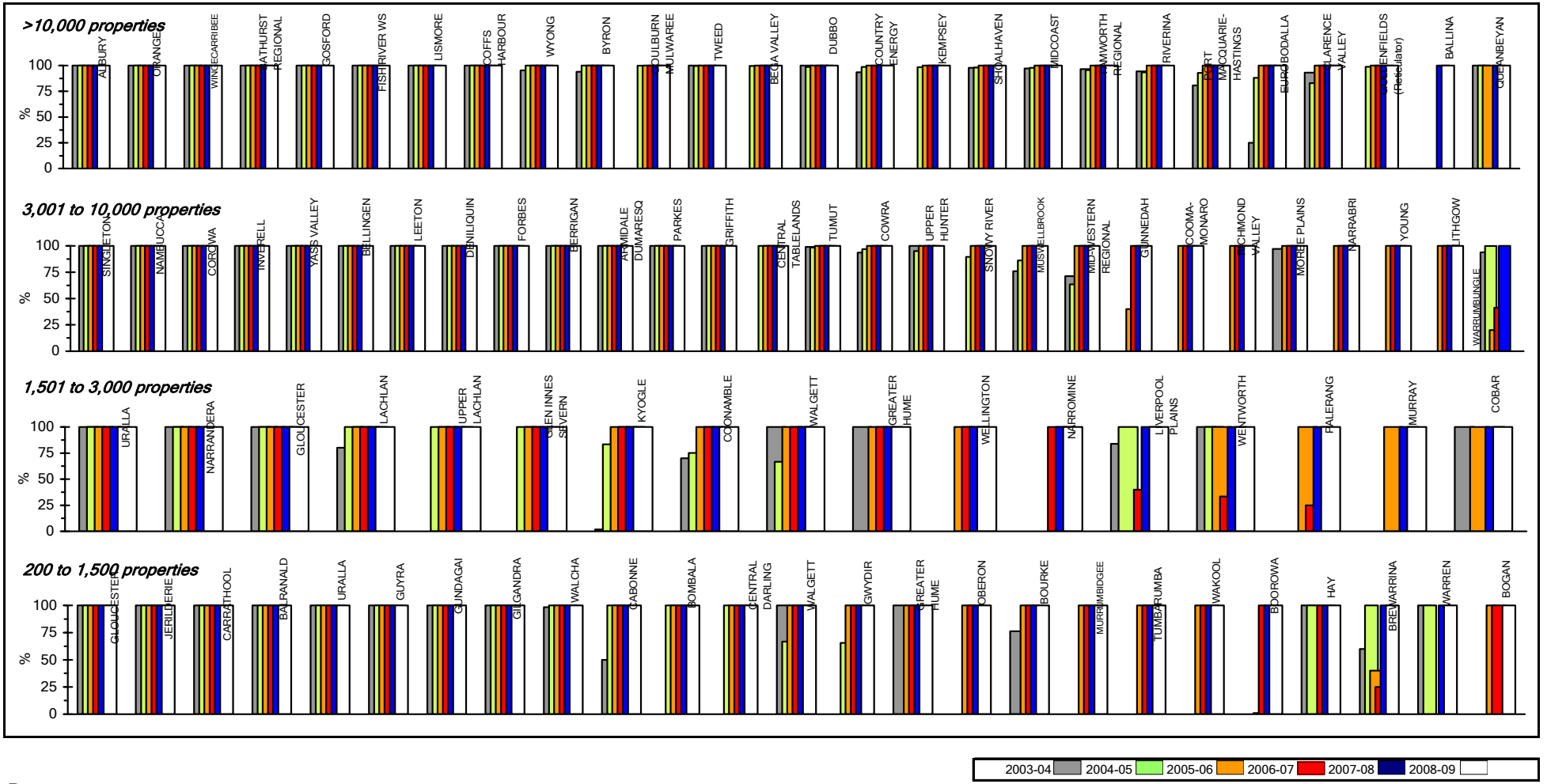


Parameter: Typical Water Supply Developer Charge (Q136)

Notes:

1. This figure shows ranked values of the 2009-10 typical developer charge for water supply for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the typical developer charge for water supply for the 28 LWUs shown ranges from $9900 to $900. Results for the previous 5 years are also shown in Jan 2010$.
2. The Statewide median typical developer charge for water supply is $4600 per equivalent tenement (ET), which is 39% of the median current replacement cost of water supply system assets of $11900 per assessment.
3. 82 LWUs levied water supply developer charges.
4. For general notes see page 28.

Figure 12: Physical water quality compliance – water supply

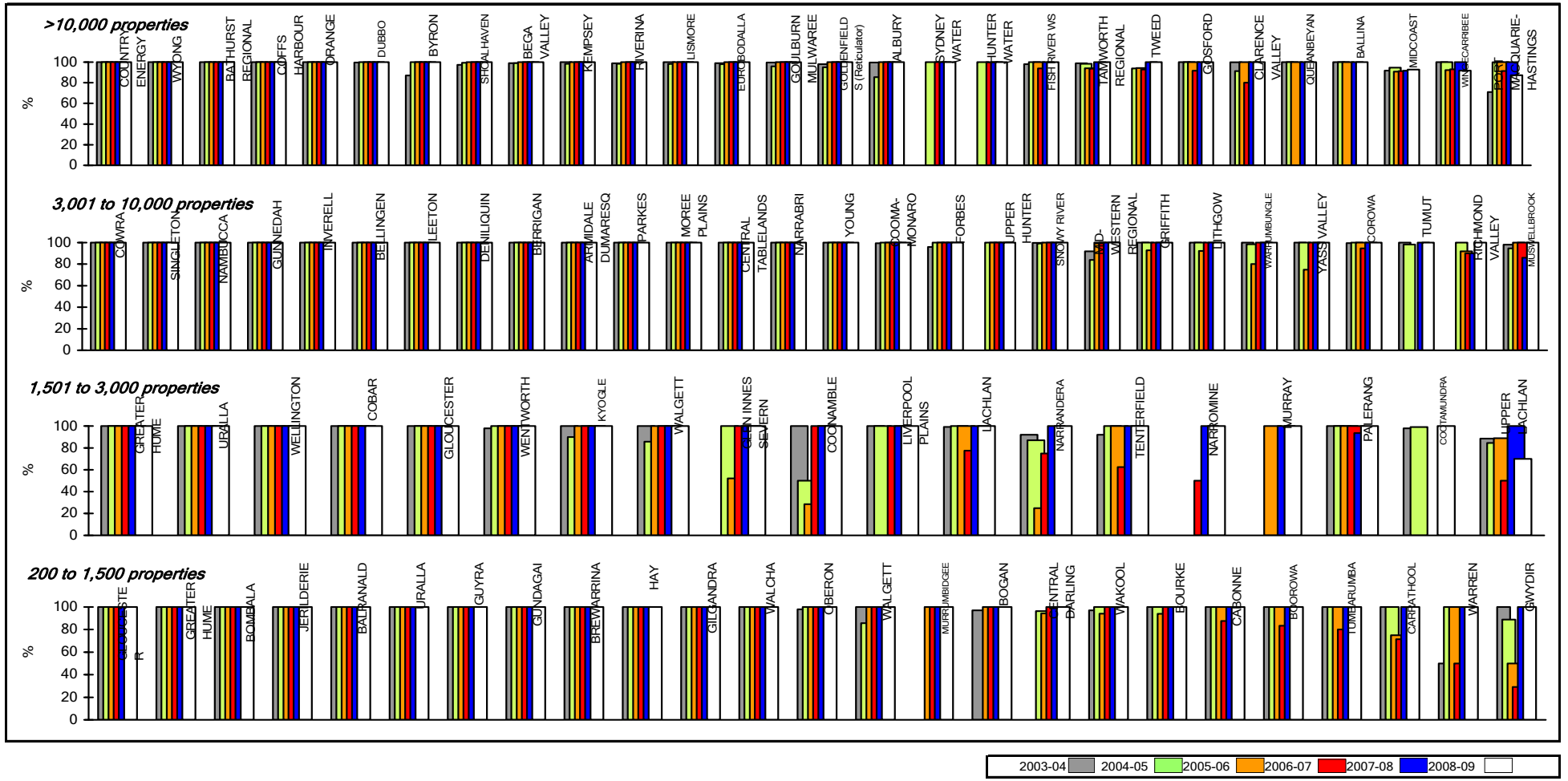


Parameter: Percentage of distribution system water samples complying with physical criteria of the NHMRC/NRMMC Australian Drinking Water Guidelines 2004.

Notes:

1. This figure shows ranked values of the 2008-09 distribution system compliance with the NHRMC/NRMMC Australian Drinking Water Guidelines 2004 for physical water quality for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the physical water quality compliance for the 28 LWUs shown are all 100%. Results for the previous 5 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. For an LWU to comply with the 2004 Australian Drinking Water Guidelines for physical water quality, the required number of samples must be tested and at least 50% of samples (not health related) must comply with the guideline limits. Non-potable water supplies are excluded.
3. 98% of the 26,500 samples tested in 2008-09 achieved 100% compliance with these guidelines. 98% of LWUs complied with the guidelines in 2008-09.
4. For LWUs with more than one water treatment works, the reported compliance has been pro-rated on the basis of the number of samples tested at each treatment works. Appendix D1 provides the 2008-09 results for each treatment works.
5. The Statewide median physical water quality compliance is 100%.
6. For general notes see page 28.

Figure 13: Chemical water quality compliance – water supply

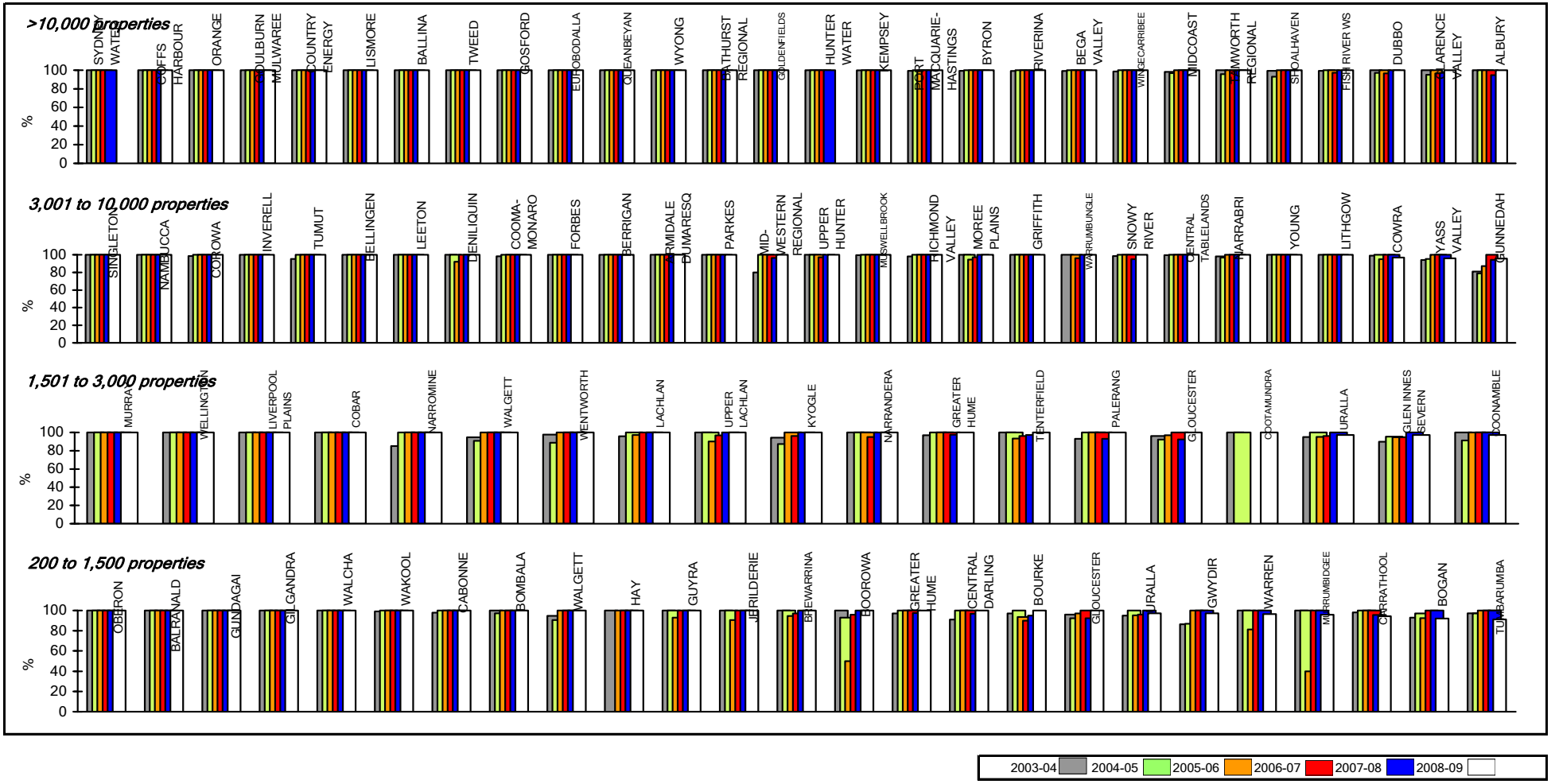


Parameter: Percentage of distribution system water samples complying with chemical criteria of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines.

Notes:

1. This figure shows ranked values of the 2008-09 distribution system compliance with the 2004 NHRMC/NRMMC Australian Drinking Water Guidelines for chemical water quality for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the chemical water quality compliance for the 28 LWUs shown ranges from 100% to 100%. The utility on the right did not report on this indicator for 2006/07. Results for the previous 5 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. 98% of the 23,600 samples tested in 2008-09 achieved 100% compliance with 2004 Guidelines. 96% of the LWUs complied with the Guidelines in 2008-09.
3. For an LWU to comply with the 2004 Australian Drinking Water Guidelines for chemical water quality, the required number of samples must be tested and at least 95% of samples (health related) must comply with the guideline limits. Non-potable water supplies are excluded.For LWUs with more than one water treatment works, the reported compliance has been pro-rated on the basis of the number of samples tested at each treatment works. Appendix D1 provides the 2008-09 results for each treatment works.
4. Most of the non-compliances above are not health-related and involve parameters such as hardness, iron and manganese.
5. The Statewide median chemical water quality compliance is 100%.
6. For general notes see page 28.

Figure 14: Microbiological water quality compliance – water supply

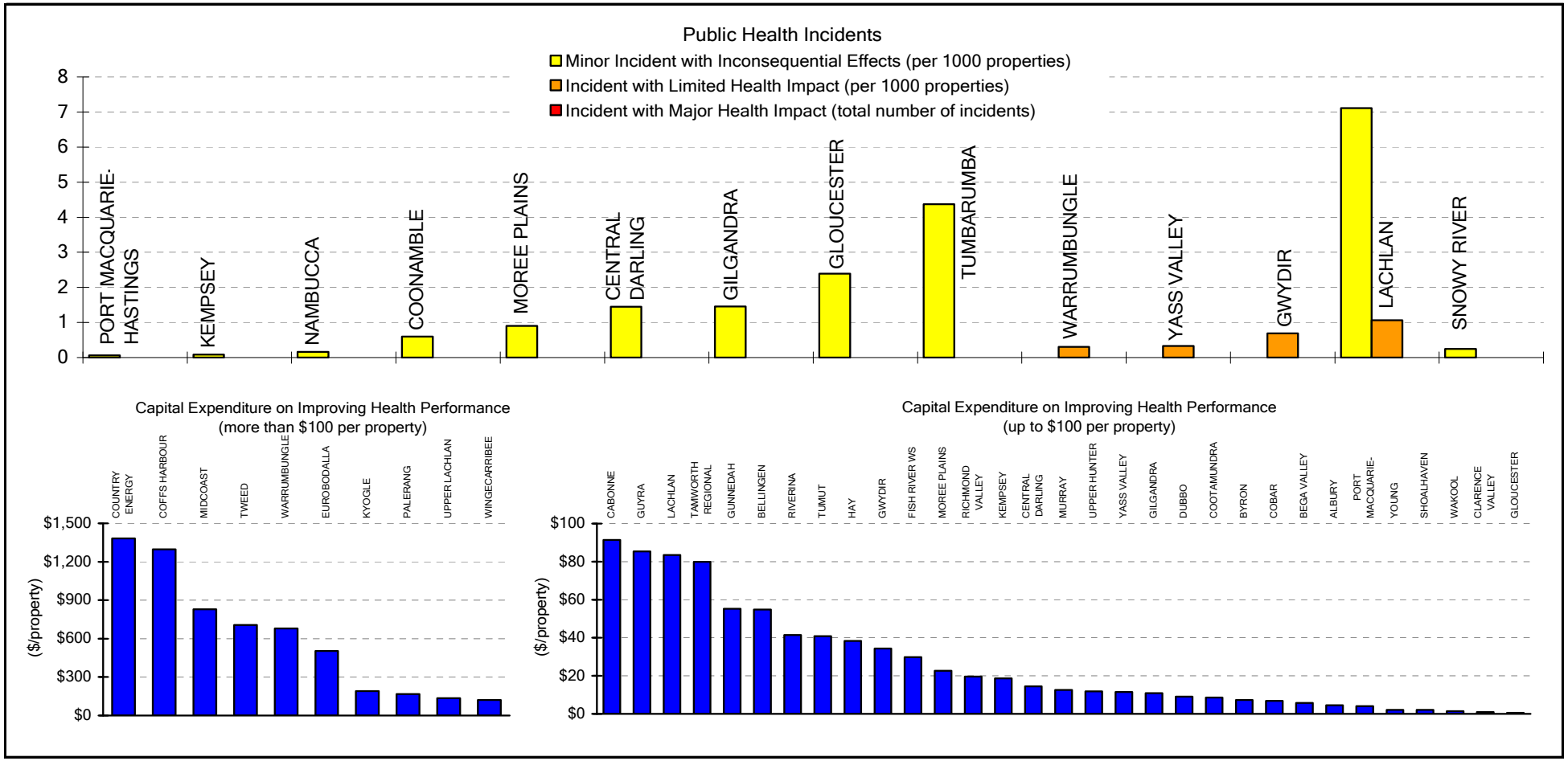


Parameter: Percentage of distribution system water samples complying with E. coli criteria of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines

Notes:

1. This figure shows ranked values of the 2008-09 distribution system compliance with the 2004 NHRMC/NRMMC Australian Drinking Water Guidelines for E. coli for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the microbiological water quality compliance for the 28 LWUs shown ranges from 100% to 96%. Results for the previous 5 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. For an LWU to comply with the 2004 Australian Drinking Water Guidelines for microbiological water quality, the required number of samples must be tested and at least 98% of the samples must contain no E.coli. Non-potable water supplies are excluded. 99% of the 20,700 samples tested in 2008-09 contained no E. coli. 88% of the LWUs complied with the 2004 Guidelines for E. coli in 2008-09. The 12 non-complying LWUs each served between 1,000 and 5,300 connected properties. Refer also to page 20.
3. For LWUs with more than one water treatment works, the reported compliance has been pro-rated on the basis of the number of samples tested at each treatment works.
4. The Statewide median microbiological water quality compliance is 100%.
5. For general notes see page 28.

Figure 15: Public health incidents, capital investment – water supply



Parameter: $\frac{\text{Total No. of Minor Incidents with Inconsequential Effects (Q115)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Total No. of Minor Incidents with Limited Health Impacts (Q116)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$

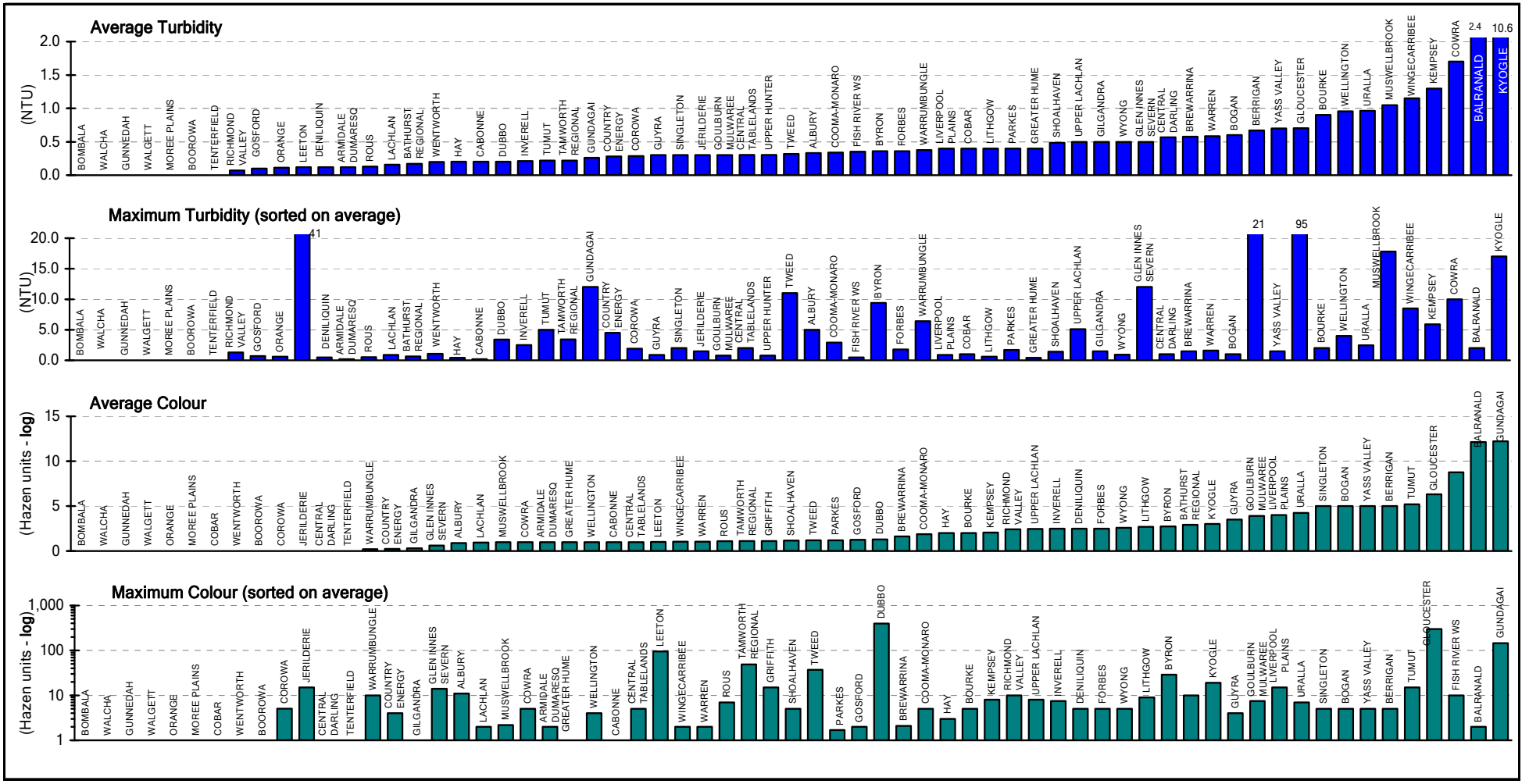
Parameter: $\frac{\text{Total No. of Major Incidents with Major Health Impacts (Q117)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Capital Expenditure on Improving Health Performance (\$) x (Q119)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$

Note:

1. The following 9 utilities did not report for public health incidents: Bathurst, Cooma-Monaro, Country Energy, Goldenfields, Murrumbidgee, Narrandera, Tenterfield, Urana and Walgett. 14 Utilities are shown in the figure above, while 64 utilities reported zero public health incidents.
2. For general notes see page 28.

Figure 16: Turbidity and colour for filtered supplies – water supply

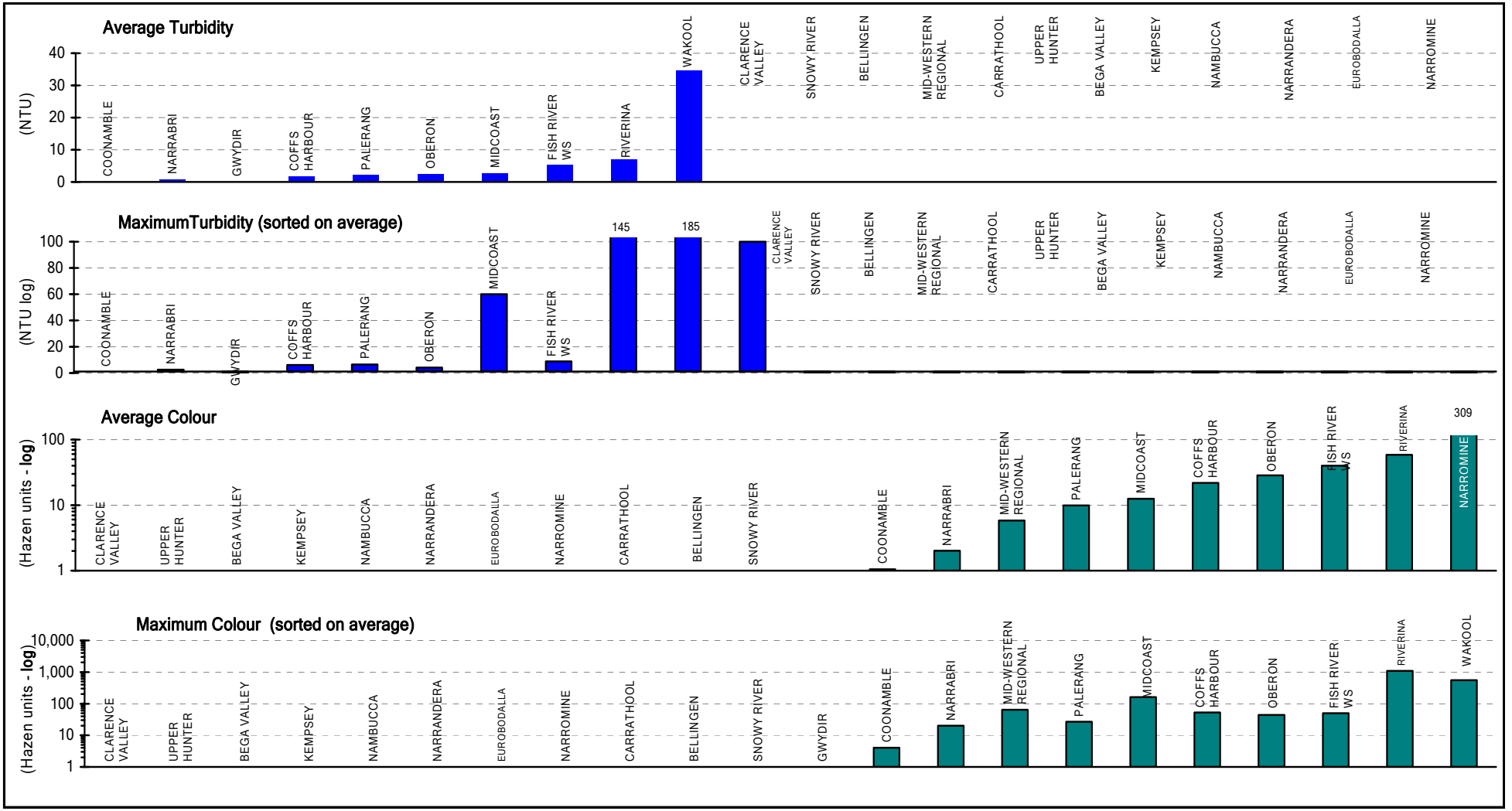


Parameter: Treated Water Average Turbidity (WTW Q15), Maximum Turbidity (WTW Q14), Treated Water Average Colour (WTW Q11), Maximum Colour (WTW Q10)

Notes:

1. Only Local Water Utilities (LWUs) with at least filtration and disinfection for over 50% of their supply have been considered. The reported results are the weighted average on the basis of volume treated for each LWU's water treatment work. A number of LWUs have some unfiltered supplies (<50% of their total supply) which increases the reported colour and turbidity values.
2. 97% of the 65 reporting LWUs had average turbidity not exceeding 2 turbidity units. 91% of these LWUs had average turbidity not exceeding 1 turbidity unit.
3. 95% of the 65 reporting LWUs had average colour not exceeding 8 colour units. 86% of these LWUs had average colour exceeding 5 colour units.
4. 2% of LWUs were unable to report on these items. All LWUs should carry out the necessary sampling and report thereon in the future.
5. For general notes see page 28.

Figure 17: Turbidity and colour for unfiltered supplies – water supply

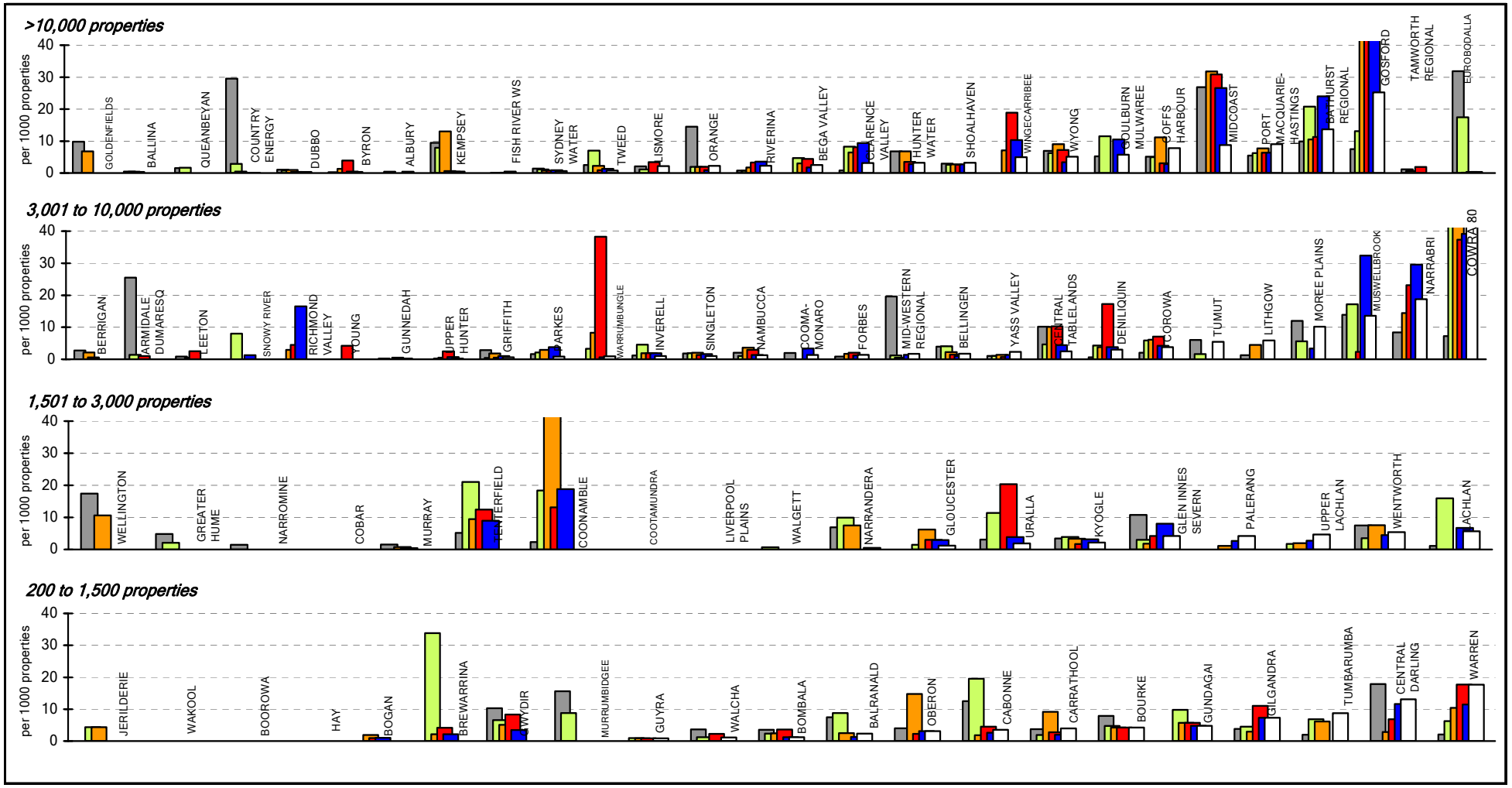


Parameter: Raw Water Average Turbidity (WTW Q13), Maximum Turbidity (WTW Q12), Raw Water Average Colour (WTW Q9), Maximum Colour (WTW Q8)

Notes:

1. Only unfiltered reporting supplies have been considered
2. 40% of the 10 reporting LWUs had average turbidity not exceeding 2 turbidity units. 75% of these LWUs had average turbidity not exceeding 1 turbidity unit.
3. 77% of reporting LWUs had average colour not exceeding 15 colour units. 82% of these LWUs had average colour not exceeding 5 colour units.
4. For general notes see page 28.

Figure 18: Water quality complaints – water supply



Parameter:

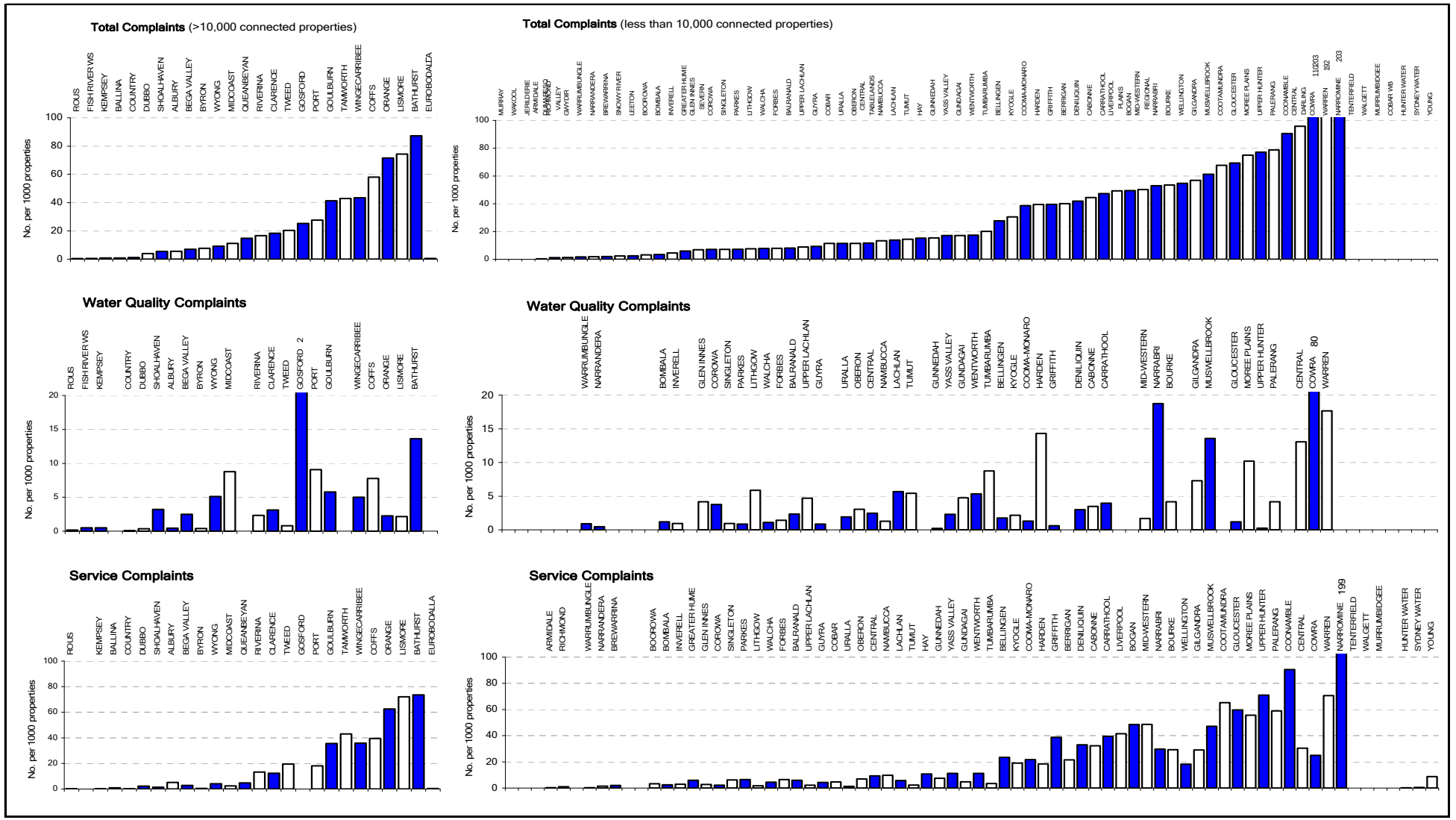
$$\frac{\text{No. of Water Quality Complaints (Q101) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2008-09 number of water quality complaints per 1000 connected properties for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the water quality complaints for the 28 LWUs shown ranges from nil to 80 per 1000 connected properties.

2. The Statewide median number of water quality complaints is 3 per 1000 properties.
3. For general notes see page 28.

Figure 19: Complaints (per 1,000 properties) – water supply



Parameter: Total No. of Complaints [(Q96)+(Q99)+(Q100)+(Q101)] x 1000
[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

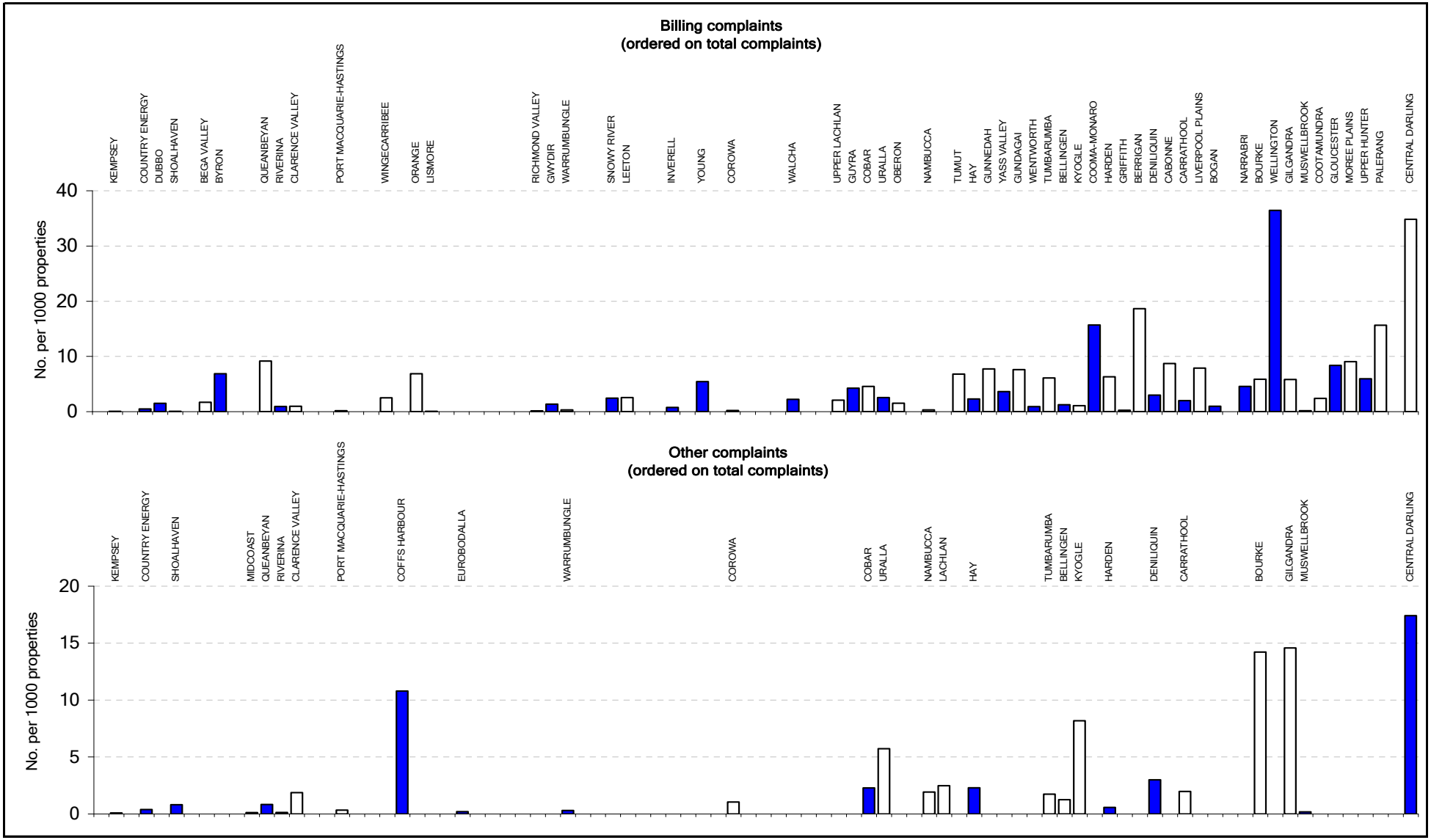
Parameter: No. of Water Quality Complaints (Q42a) x 1000
[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

Parameter: No. of Water Service Complaints (Q19a) x 1000
[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

Note:

1. For general notes see page 28.

Figure 19: Complaints (per 1,000 properties) – water supply (continued)



Parameter: No. of Billing Complaints (Q99)+ x 1000

[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

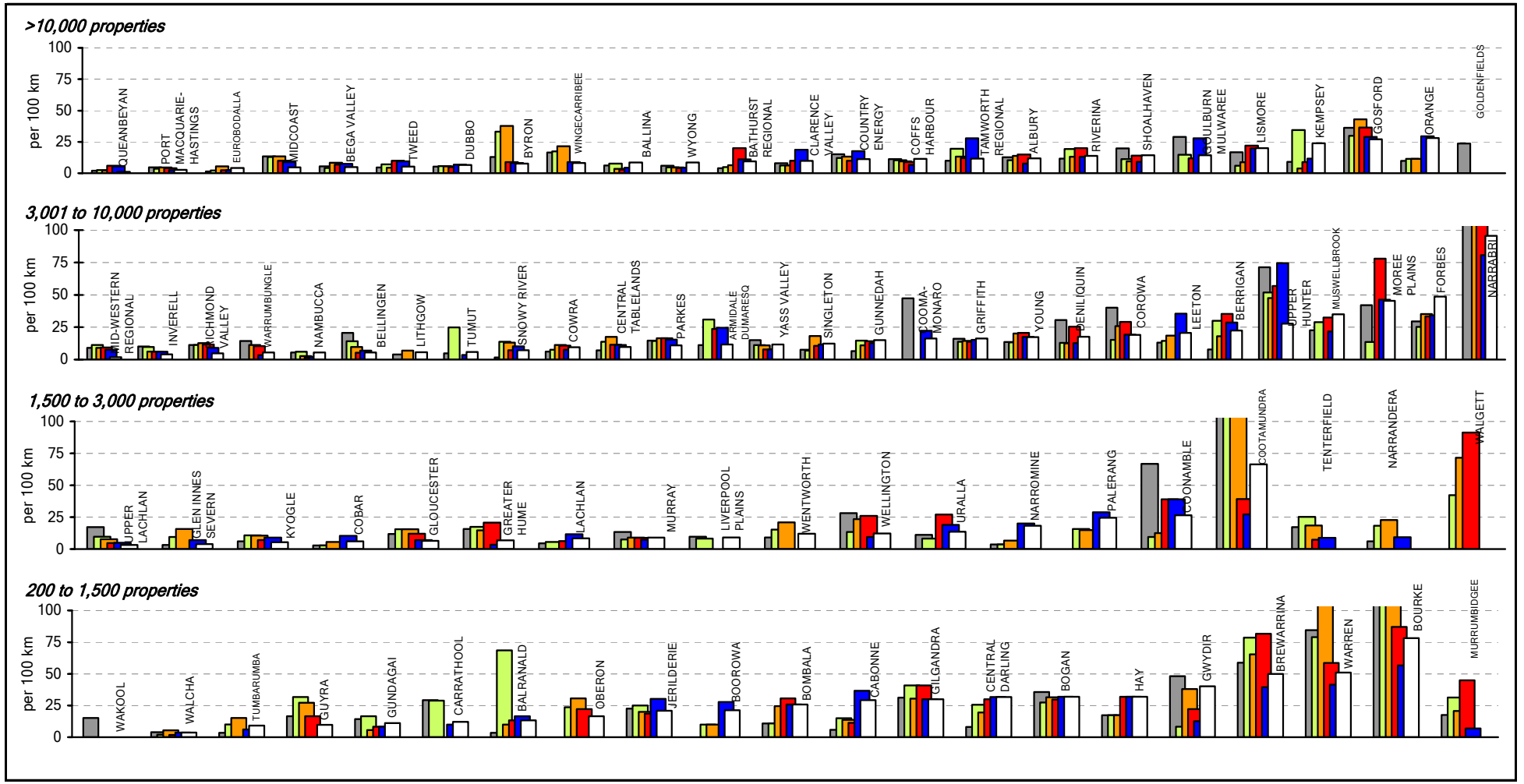
Parameter: No. of Other Complaints (Q100) x 1000

[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

Note:

1. For general notes see page 28.

Figure 20: Number of water main breaks – water supply

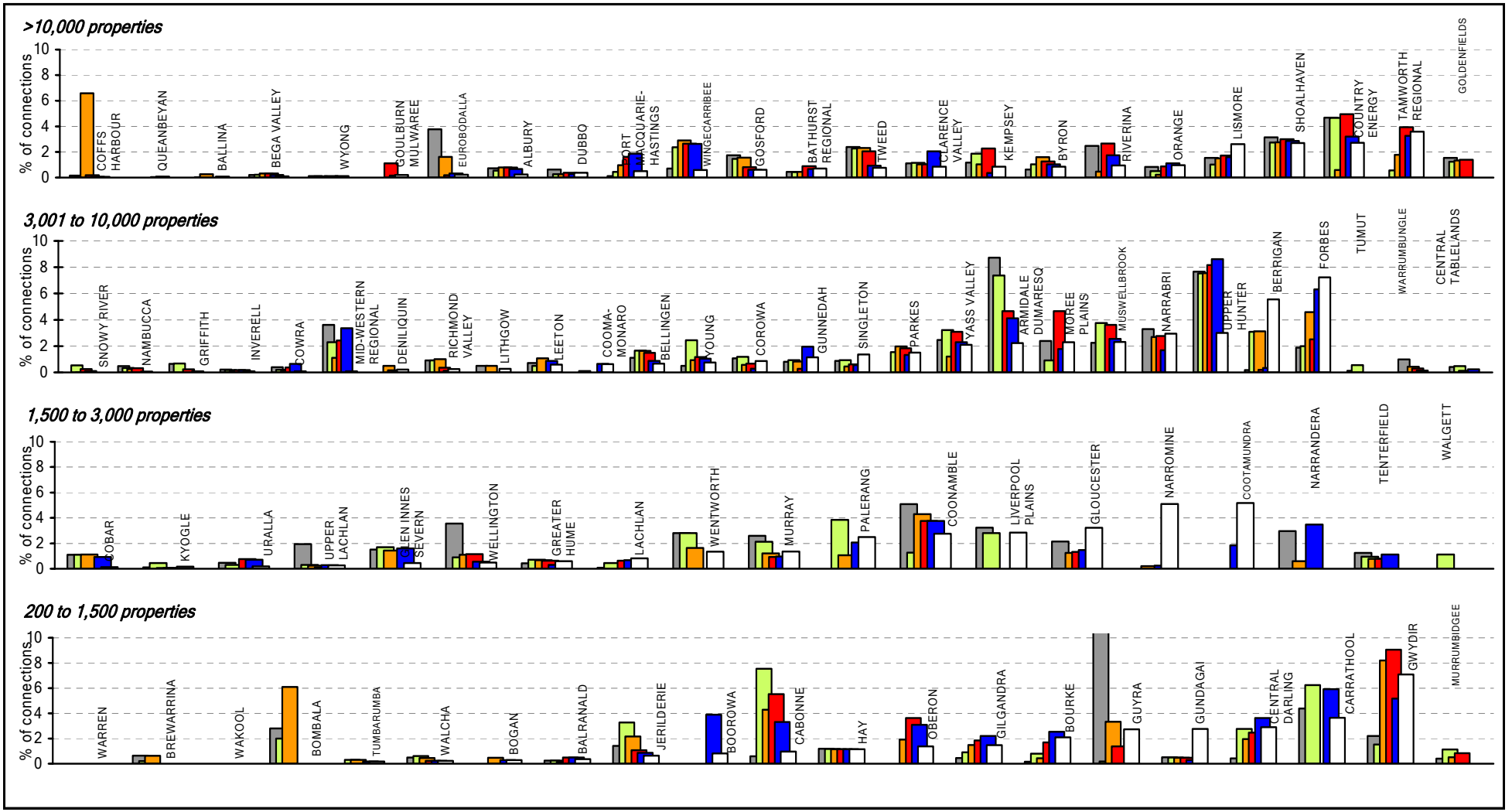


Parameter: No. of Pipeline Breaks (Q104) x 100
Length of Distribution and Trunk Mains (Q22)

Notes:

1. This figure shows ranked values of the 2008-09 water supply main breaks for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of main breaks for the 28 LWUs shown ranges from 1.8 to 100 per 100km of water mains. Results for the previous 5 years are also shown.
2. The Statewide median number of water supply main breaks is 10 per 100km of water main. This has remained much lower than all the other states and capital city utilities, indicating good water main asset condition (graph 9 on page 181 of Appendix A).
3. For general notes see page 28.

Figure 21: Service connection failures – water supply



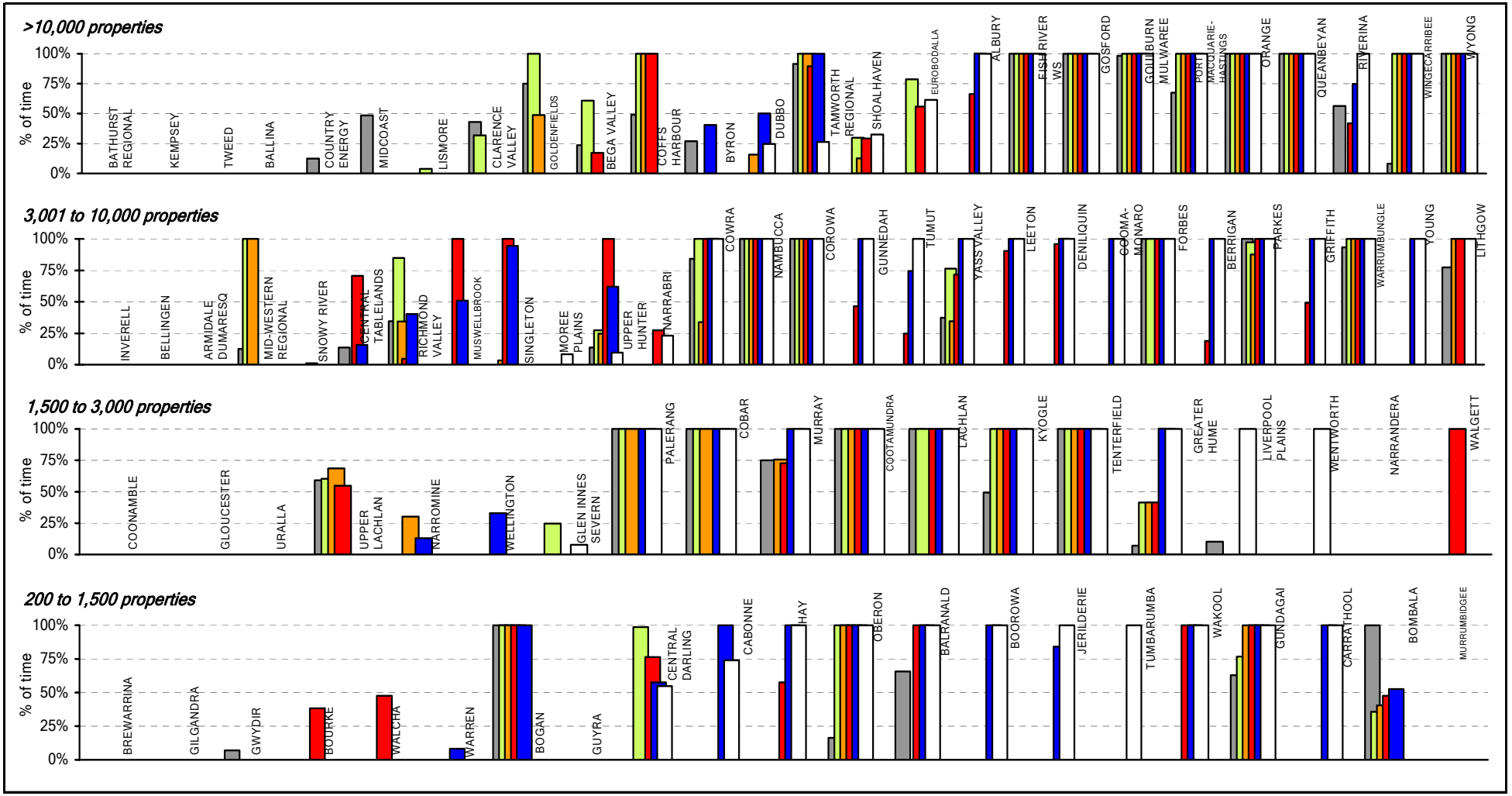
Parameter:

$$\frac{\text{No. of Service Connection Failures (Q105)} \times 100}{[\text{No. of Residential Assessments (Q34)} + \text{No. of Non-Residential Assessments (Q35)}] \times \text{No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2008-09 water supply service connection failures for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of service connection failures for the 28 LWUs shown ranges from nil to 7 %. The 3 LWUs on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown.
2. For general notes see page 28.

Figure 22: Drought water restrictions – water supply

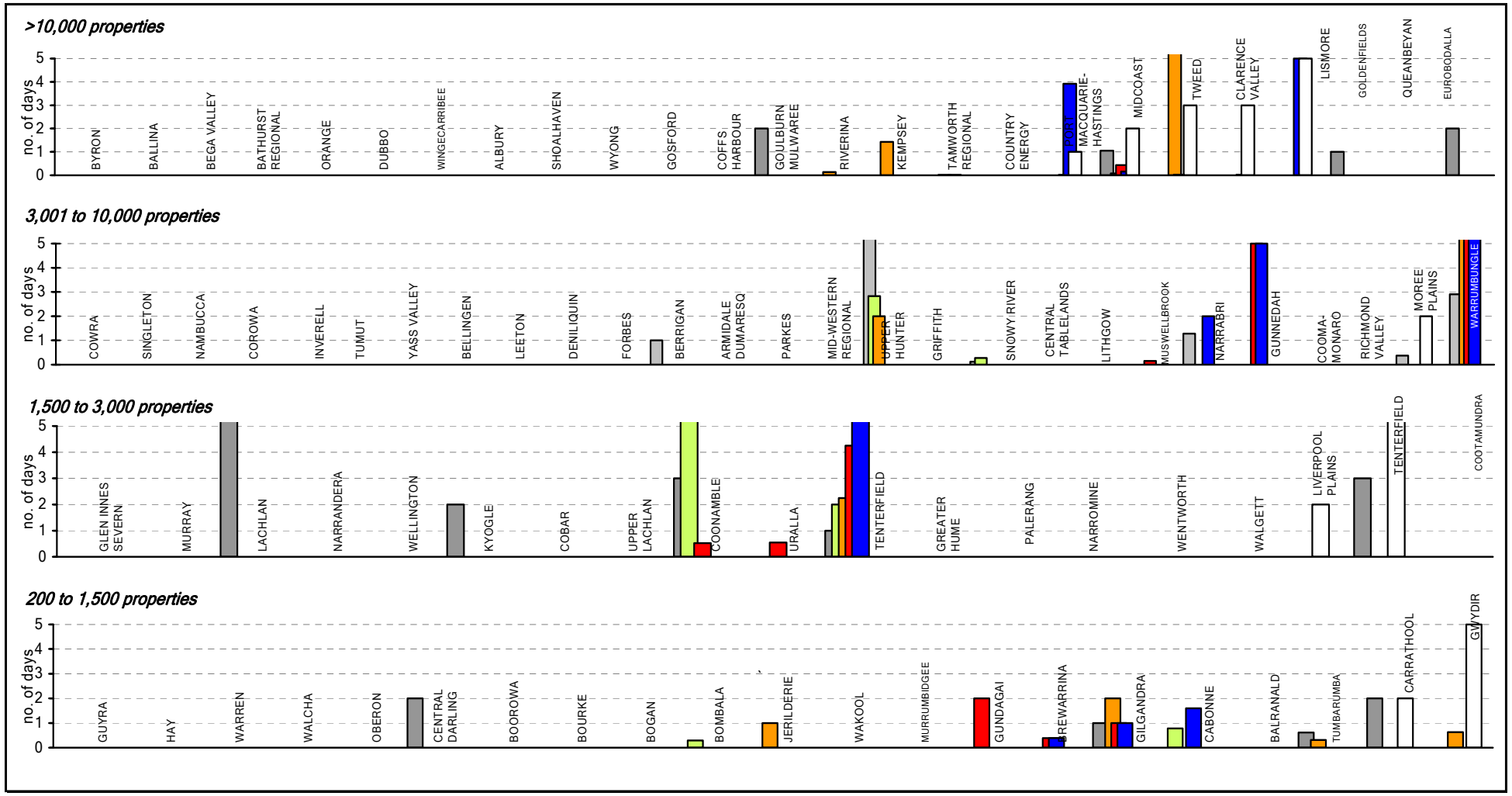


Parameter: $\frac{\text{No. of Days of Water Restrictions Due to Drought (Q95) x 100}}{\text{365 Days}}$

Notes:

1. This figure shows ranked values of the 2008-09 water restrictions due to drought for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), 19 of the 28 reporting LWUs reported restrictions ranging from 8% of the time to 100% of the time. 9 LWUs reported no restrictions. Results for the previous 5 years are also shown.
2. Refer also to page 3 of the 2008-09 NSW Water Supply and Sewerage Performance Monitoring Report.
3. For general notes see page 28.

Figure 23: Chlorination system malfunction – water supply

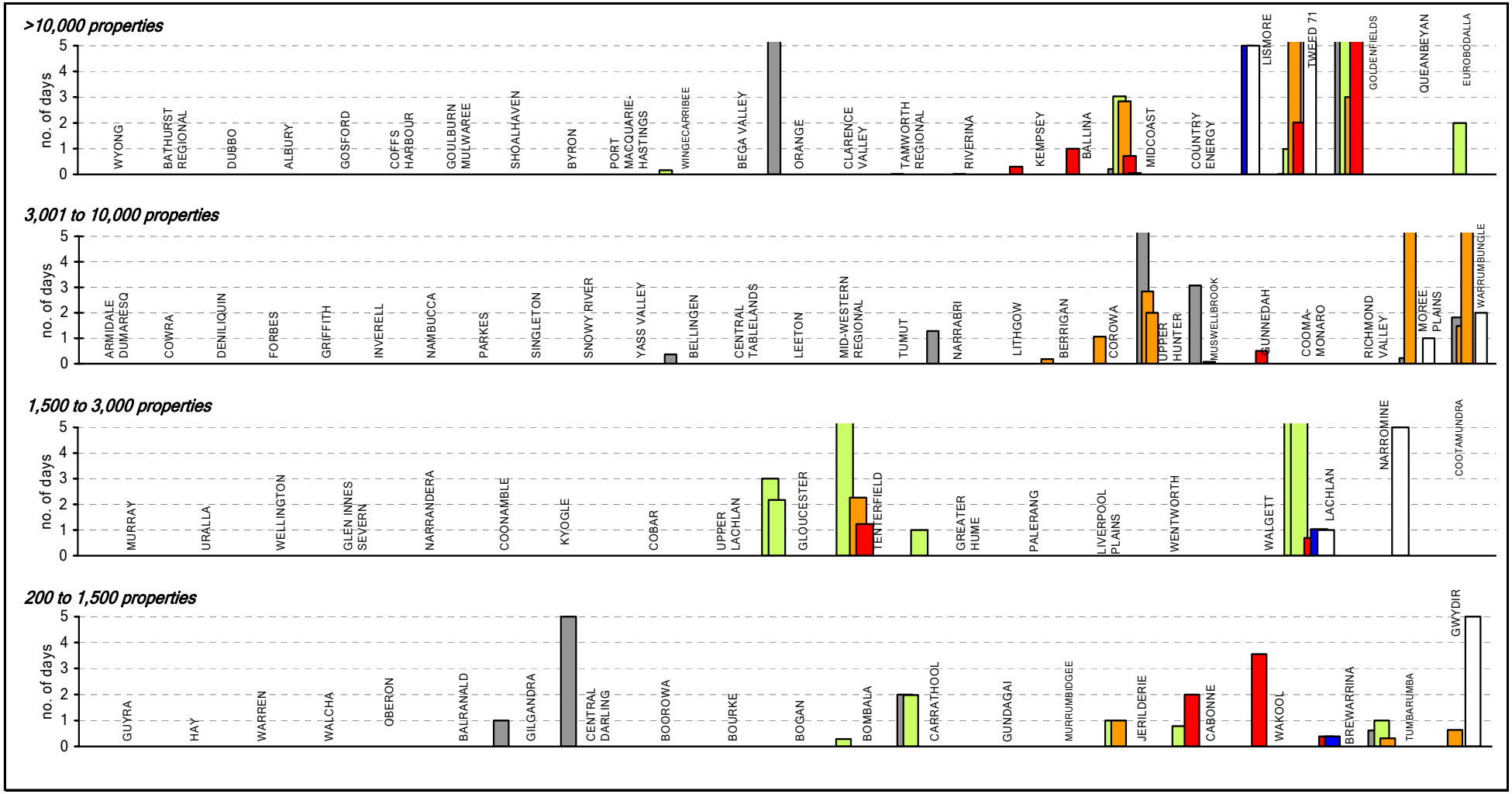


Parameter: Number of Days Chlorination System failed to Operate (Q44)

Notes:

1. The figure shows the 2008-09 ranked number of days the chlorination system for potable water did not operate for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of days the chlorination system did not operate for the 27 LWUs shown ranges from nil to 2 days. Results for the previous 5 years are also shown.
2. For LWUs with more than one chlorination system, the weighted average (based on capacity) of days was used.
3. For general notes see page 28.

Figure 24: Treatment works malfunction – water supply

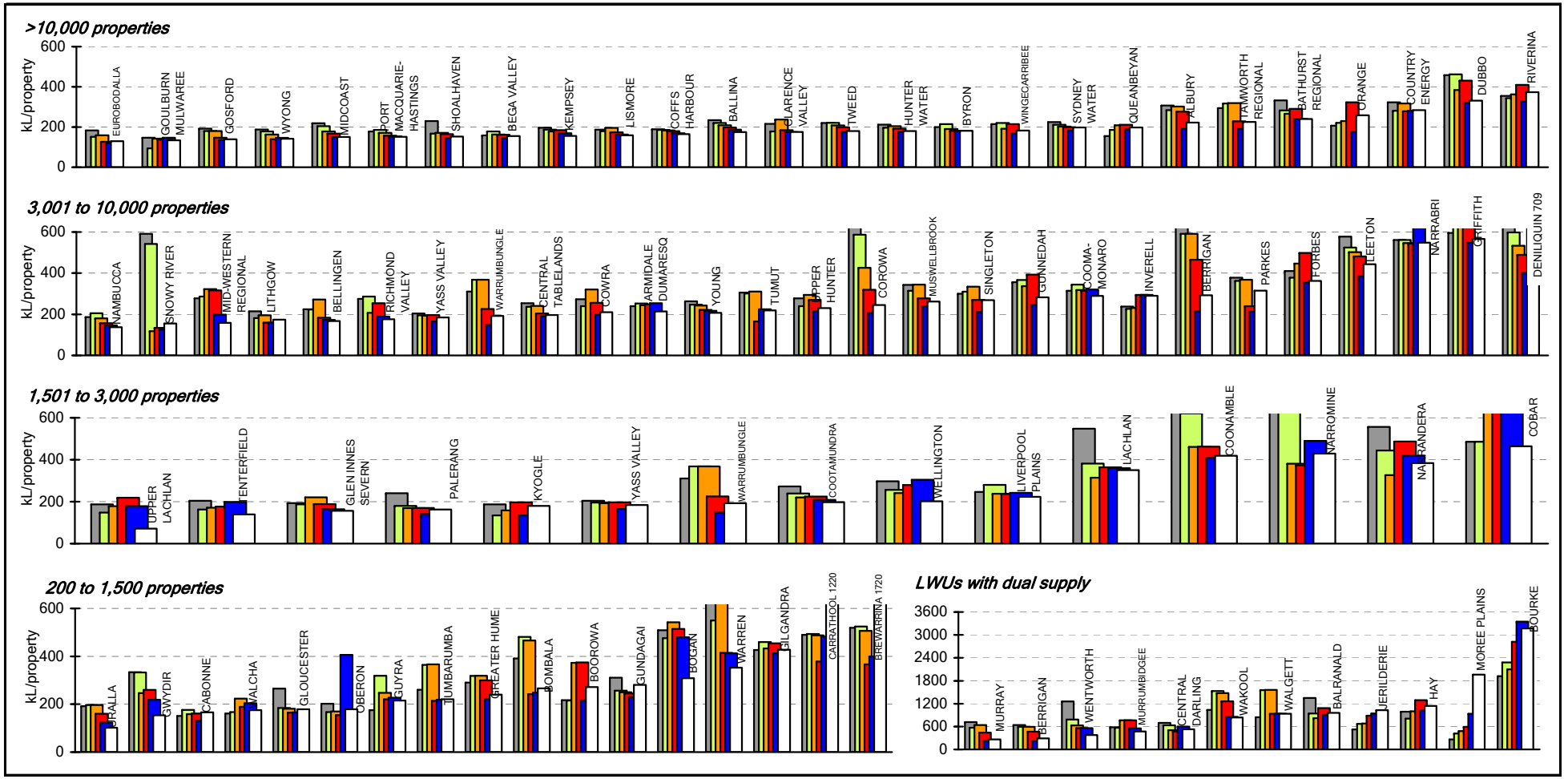


Parameter: Number of Days of major Malfunction of Treatment Processes (Q45)

Notes:

1. The figure shows the 2008-09 ranked number of days of treatment works malfunction for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of days of treatment works malfunction for the 27 LWUs shown ranges from nil to 2 days. Results for the previous 5 years are also shown.
2. For LWUs with more than one treatment works, the weighted average days of malfunction (based on treatment works capacity) was used.
3. For general notes see page 28.

Figure 25: Average annual residential water supplied – water supply

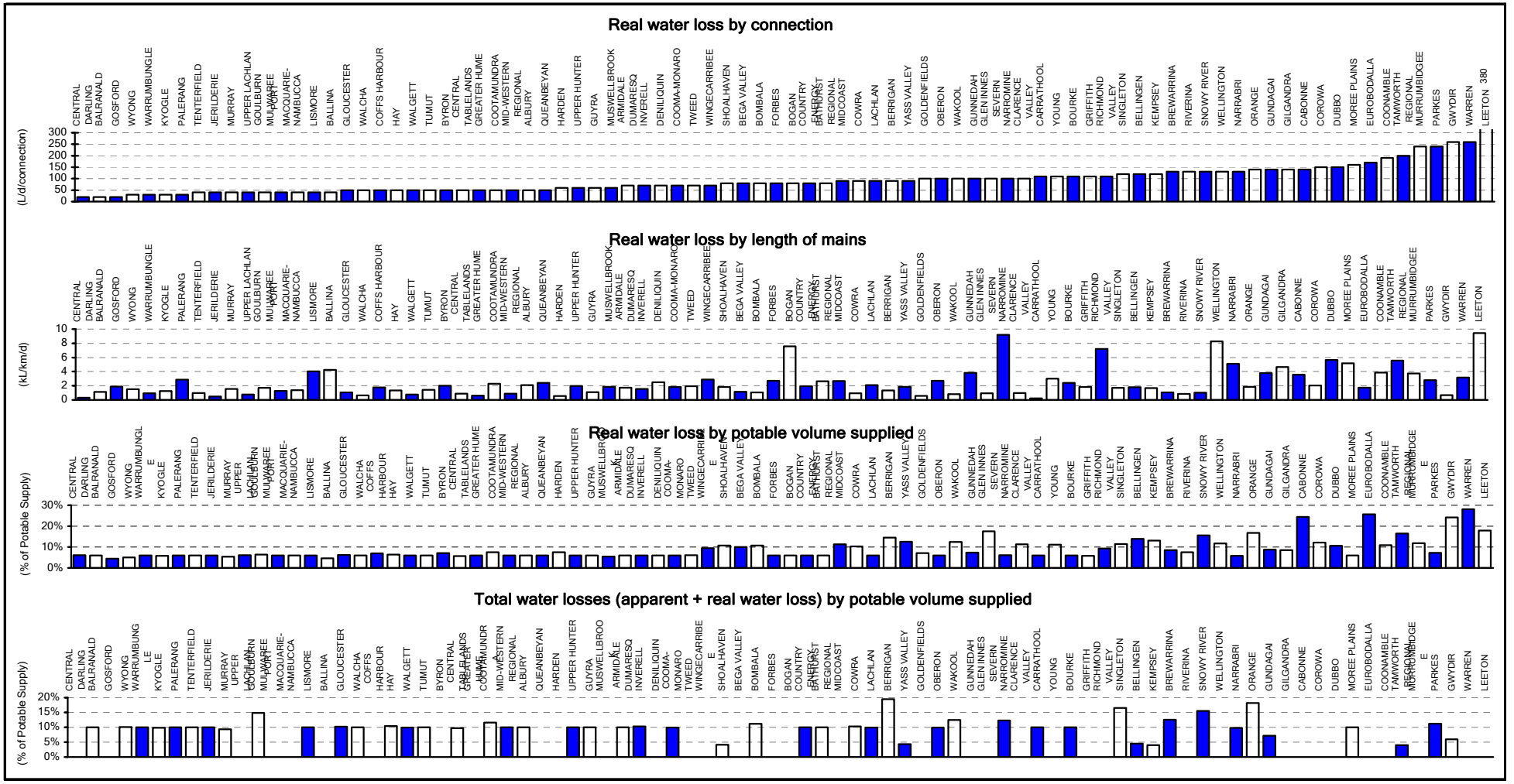


Parameter: $\frac{\text{Annual Residential Potable Supplied (Q54) x 1000}}{\text{No. of Residential Assessments (Q34) x No. of Connected Residential Properties per Residential Assessment}}$

Notes:

1. This figure shows ranked values of the 2008-09 average annual residential water supplied per connected property for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 annual residential water supplied for the 27 LWUs shown ranges from 140 to 709 kL/a per connected property. Results for the previous 5 years are also shown.
2. Results for the 11 LWUs with a dual watr supply (ie. A potable supply for indoor use and a non-potable supply for outdoor use) are shown as a separate group in the bottom right hand corner. All these LWUs have fewer than 3,000 properties. Refer to Note 12 on page 19 for further information.
3. The Statewide median annual residential water supplied is 175 kL/a per connected property. The median residential water supplied for coastal and inland LWUs is 150 and 245kL per connected property respectively.
4. Refer also to pages 8, 5 and 33 of the 2008-09 NSW Water Supply and Sewerage Performance Monitoring Report.
5. 61% of the LWUs needed to apply drought water restrictions in 2008-09.
6. For general notes see page 28.

Figure 26: Water losses (real loss (leakage) and apparent loss) – water supply



Parameter:

$$\frac{\text{Real water losses (Q68) x 1000}}{\text{[No. of residential assessments (Q34) + No. of non-residential assessments (Q35) x No. of connected properties per assessment}}$$

Parameter:

$$\frac{\text{Real water losses (Q68) x 100}}{\text{Length of mains (Q22)}}$$

Parameter:

$$\frac{\text{Real water losses (Q68) x 100}}{\text{Total potable water supplied (Q12i)}}$$

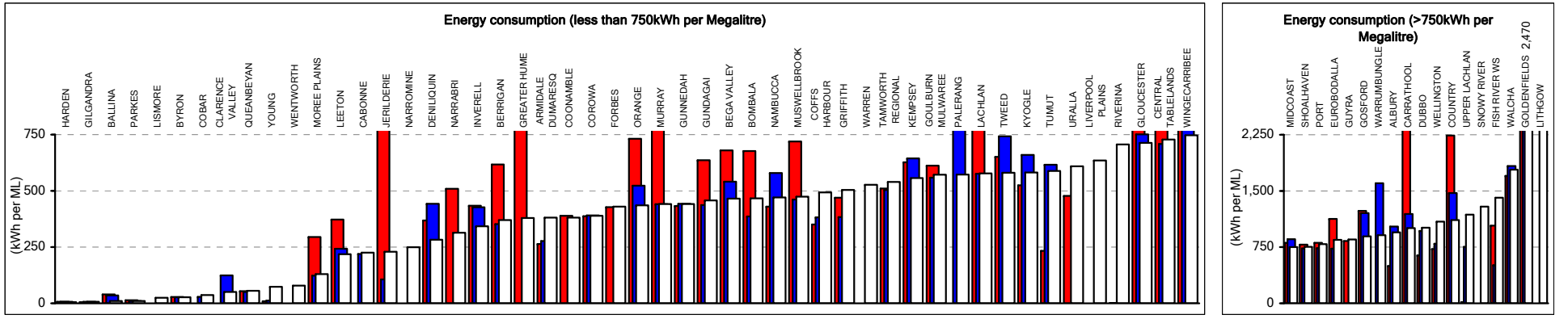
Parameter:

$$\frac{\text{Apparent \& real water losses (Q69) x 100}}{\text{Total potable water supplied (Q62)}}$$

Notes:

1. Refer to Note 13 of General Notes on page 28 for water losses.
2. For general notes see page 28.

Figure 27: Energy consumption per ML – water supply

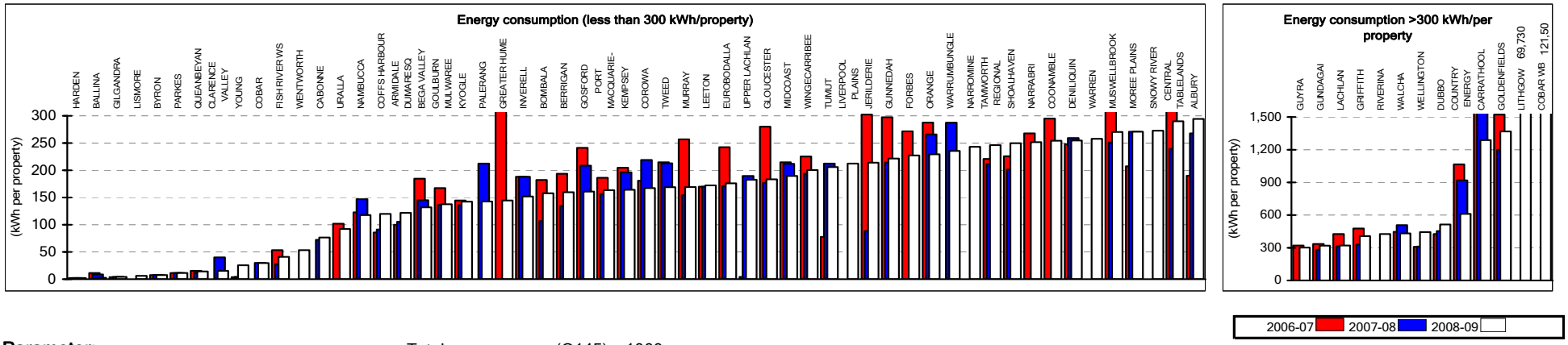


Parameter: $\frac{\text{Total energy usage (Q145) x 1000}}{\text{Total potable water consumption ((Q62)}}$

Notes:

1. This figure shows ranked values of the 2008-09 total energy consumption per ML. The energy consumption per ML for the 68 Local Water Utilitites (LWUs) shown range from about 5 to 234190kWh per Megalitre. Results for the previous 2 years are also shown.
2. For general notes see page 28.

Figure 28: Energy consumption per property – water supply

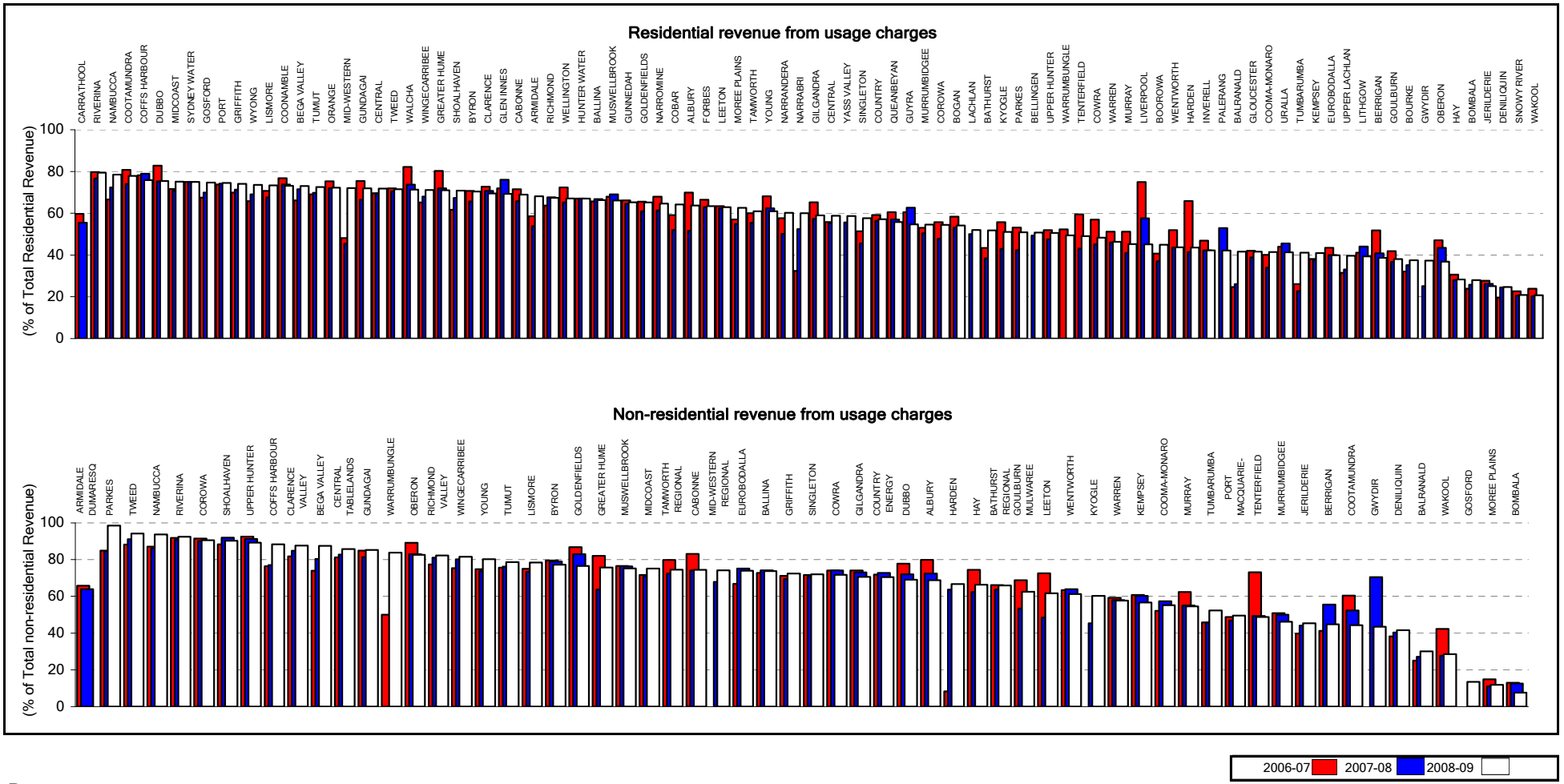


Parameter: $\frac{\text{Total energy usage (Q145) x 1000}}{\text{[No. of residential assessments (Q34) + No. of non-residential assessments (Q35) x No. of connected properties per assessment}}$

Notes:

1. This figure shows ranked values of the 2008-09 total energy consumption per connected property. The energy usage per connected property for the 69 Local Water Utilitites (LWUs) shown range from about 80 to 69730kWh per connected property. Results for the previous 2 years are also shown.
2. For general notes see page 28.

Figure 29: Revenue from usage – water supply



Parameter:

$$\frac{\text{Revenue from residential user charges (W6b)} \times 100}{\text{Revenue from residential access charges (W6a)} + \text{Revenue from residential user charges (W6b)}}$$

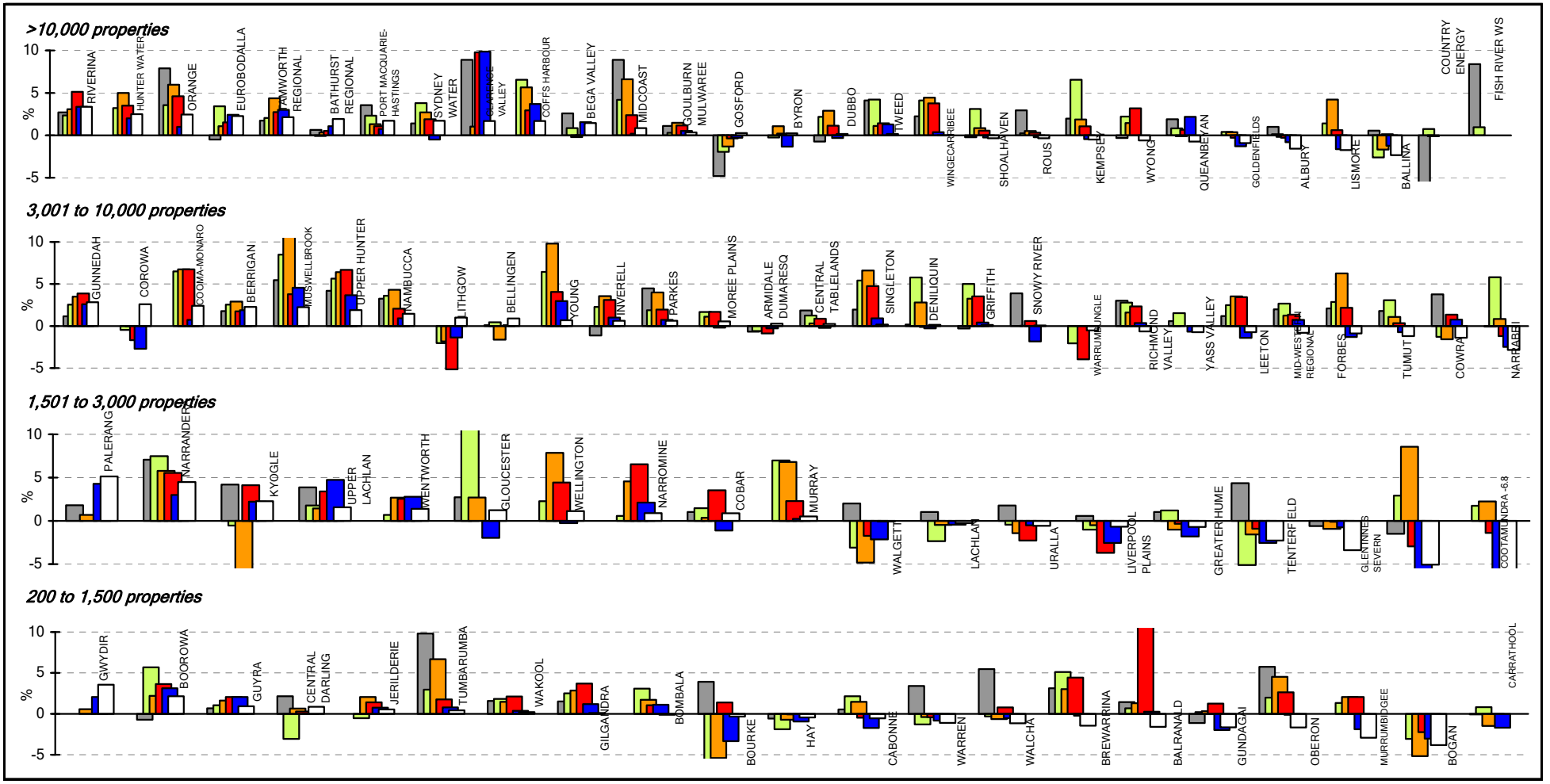
Parameter:

$$\frac{\text{Revenue from non-residential user charges (W7b)} \times 100}{\text{Revenue from non-residential access charges (W7a)} + \text{revenue from non-residential user charges (W7b)}}$$

Notes:

1. Many LWUs did not separately report their revenue from usage and access charges for each of residential and non-residential customers in Special Schedule No. 3 of their annual financial statements. All LWUs should do so in future.
2. The Statewide median residential revenue from water usage charges was 73%.
3. Refer also to page 5 of the 2008-09 NSW Water Supply and Sewerage Performance Monitoring Report.
4. For general notes see page 28.

Figure 30: Economic real rate of return – water supply

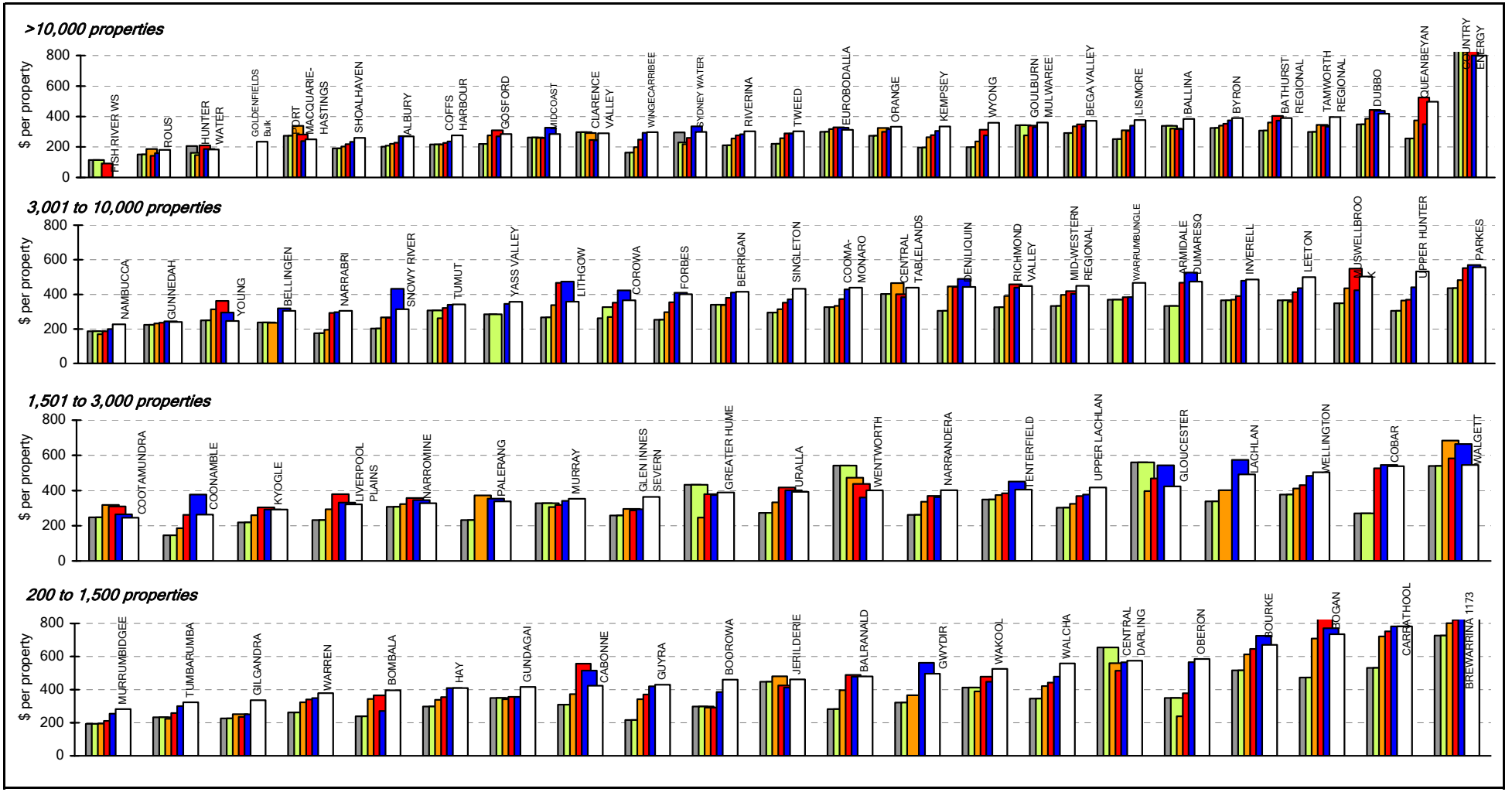


Parameter: [Operating result (W15) + interest expense (W4a) - interest income (W9) - grants for acquisition of assets (W11a)] x 100 / Written down replacement cost of system assets, plant & equipment (W33)

Notes:

1. This figure shows ranked values of the 2008-09 water supply economic real rate of return (ERRR) for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 water supply real rate of return for the 28 LWUs shown ranges from 3% to -3%. Results for the previous 5 years are also shown.
2. The statewide median water supply ERRR is 0.3%.
3. The ERRR was not reported for Sydney and Hunter Water Corporations from 2003/04 to 2004/05. The reported values for return on assets have been shown for these years.
4. The ERRR includes developer provided assets and capital contributions from other LWUs.
5. For general notes see page 28.

Figure 31: Operating cost (OMA) per property – water supply



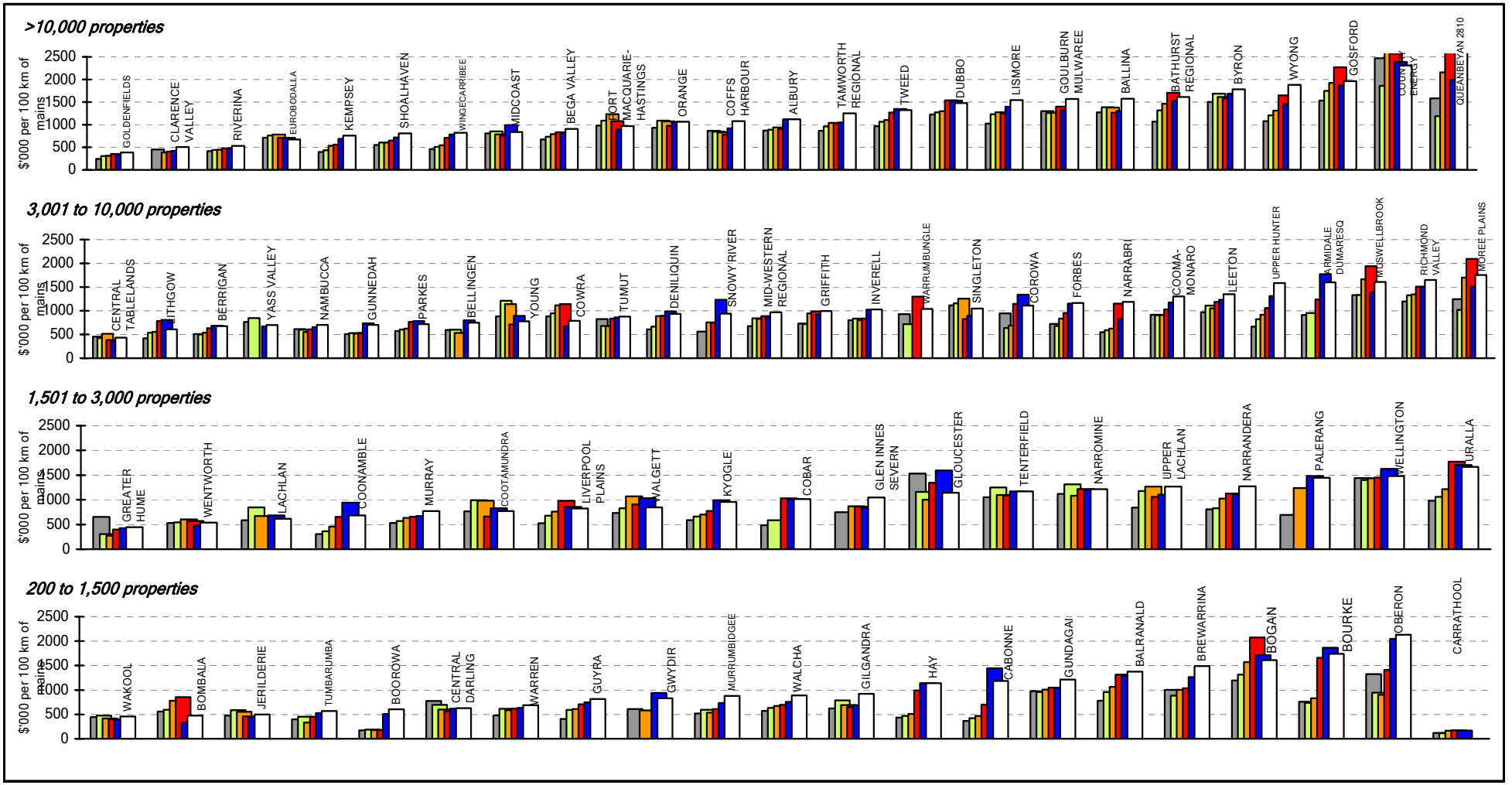
Parameter: Management Expenses (W1) + Total Operations Expenses (W2) - Purchase of Water + prorata Bulk Supplier's OMA

[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

Notes:

1. This figure shows ranked values of the 2008-09 water supply operating cost (OMA - operation, maintenance and administration) per property for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 water supply operating costs for the 28 LWUs shown ranges from $226 to $679 per connected property. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median operating cost per connected property is $330.
3. For general notes see page 28.

Figure 32: Operating cost (OMA) per 100 km of main – water supply

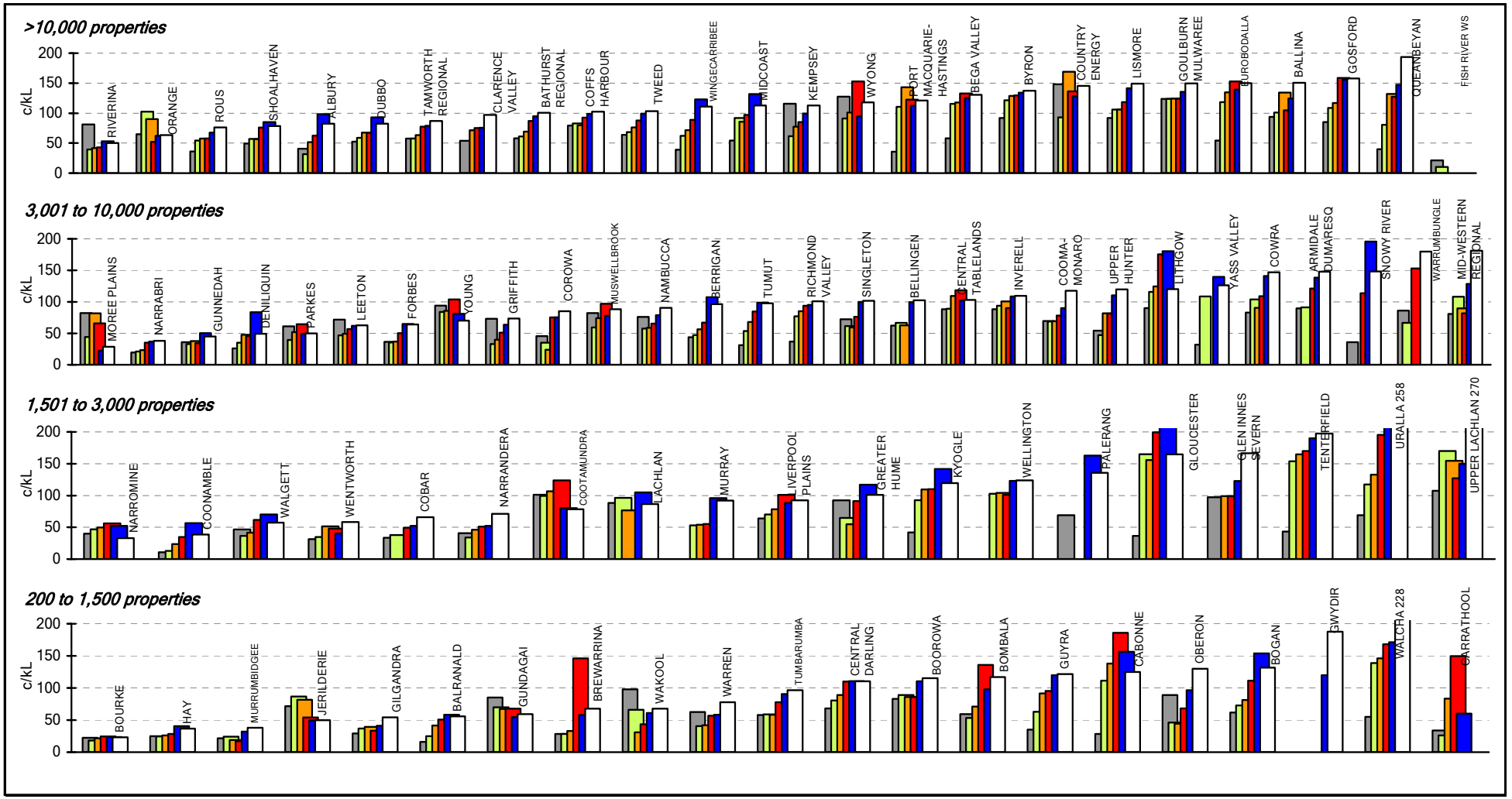


Parameter: $\frac{\text{Water Main Operation Expenses (W2c) + Water Main Maintenance Costs (W2d)}}{\text{Length of Distribution Mains (Q22) x 100}}$

Notes:

1. This figure shows ranked values of the 2008-09 water supply operating cost (OMA - operation, maintenance and administration) per 100 km of main for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 operating costs for the 28 LWUs shown ranges from $512,000 to $1,697,000 per 100km of main. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median operating cost is $1.07M per 100 km of Water Main.
3. For general notes see page 28.

Figure 33: Operating cost (OMA) per kL – water supply

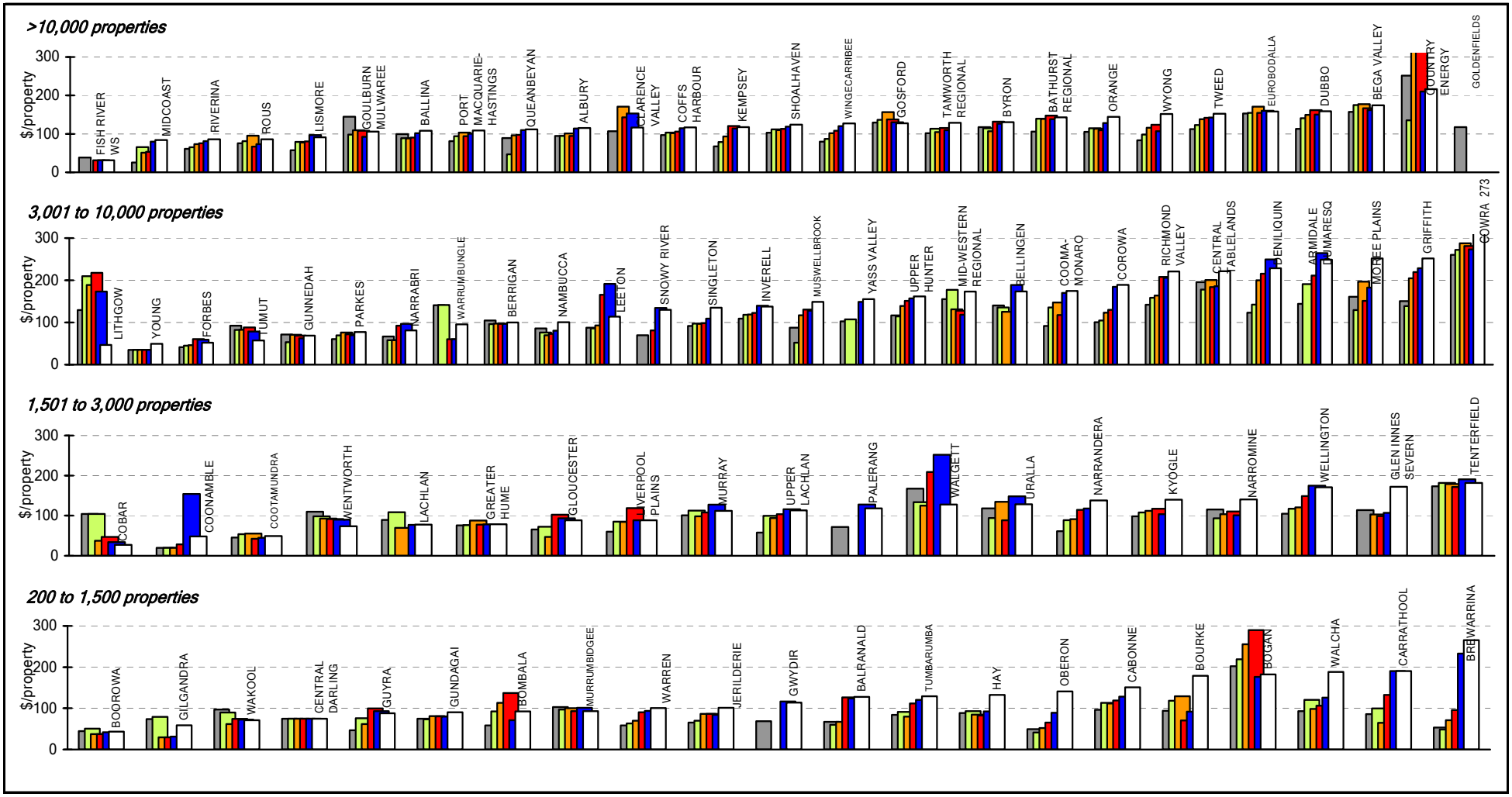


Parameter: $\frac{\text{Management Expenses (W1) + Total Operations Expenses (W2) - Purchase of Water (W2o)}}{\text{Total Potable Water Supplied (Q62)}}$

Notes:

1. This figure shows ranked values of the 2008-09 water supply operating cost (OMA - operation, maintenance and administration) per kL for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 operating costs per kL for the 28 LWUs shown ranges from 29 to 181 c/kL. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median operating cost is 111c/kL.
3. For general notes see page 28.

Figure 34: Management cost per property – water supply



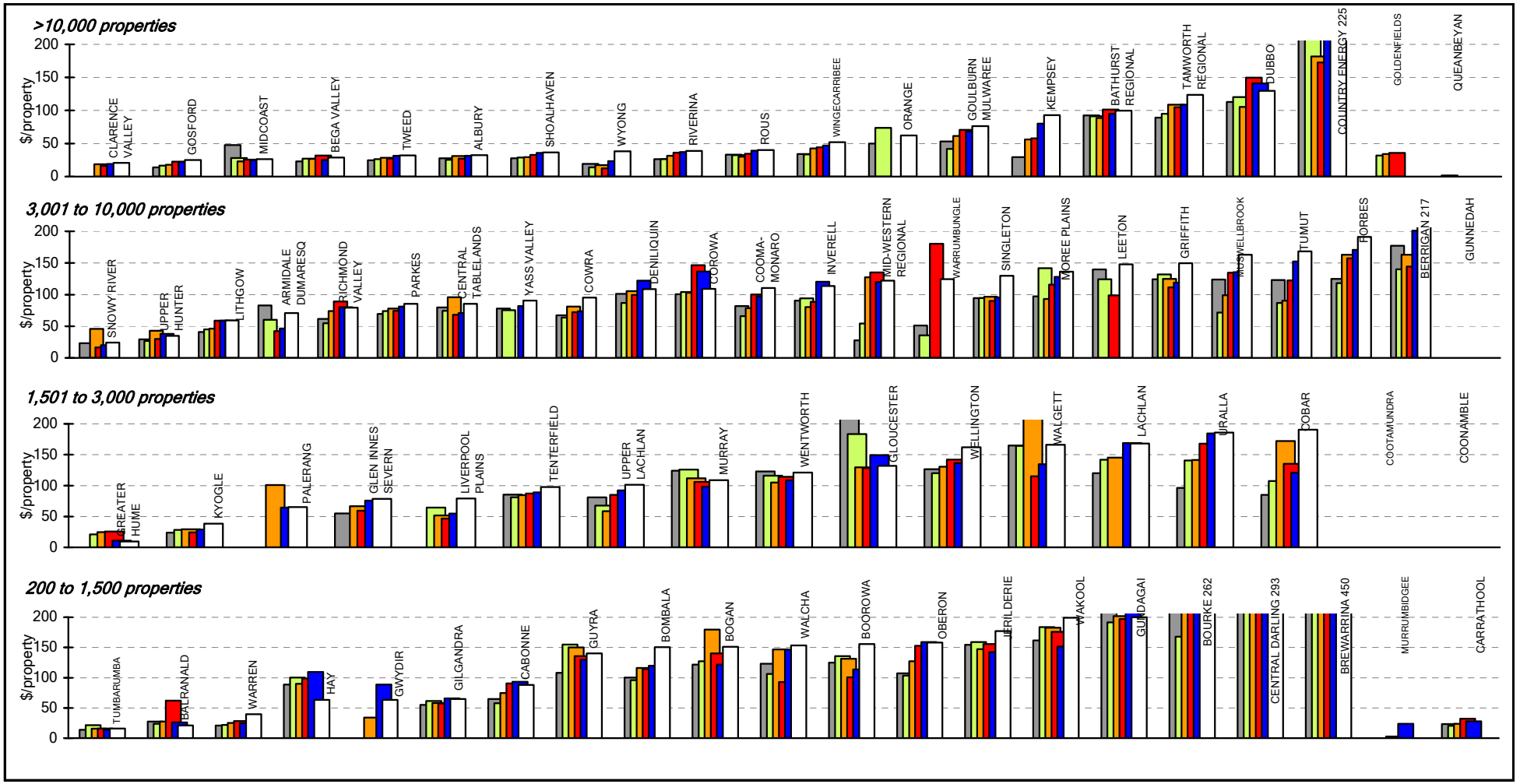
Parameter:

$$\frac{\text{Administration Cost (W1a) + Engineering Cost (W1b)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2008-09 water supply management cost per property for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 management costs per property for the 28 LWUs shown ranges from $47 to $366. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median management cost is $127 per connected property.
3. For general notes see page 28.

Figure 35: Treatment cost per property – water supply

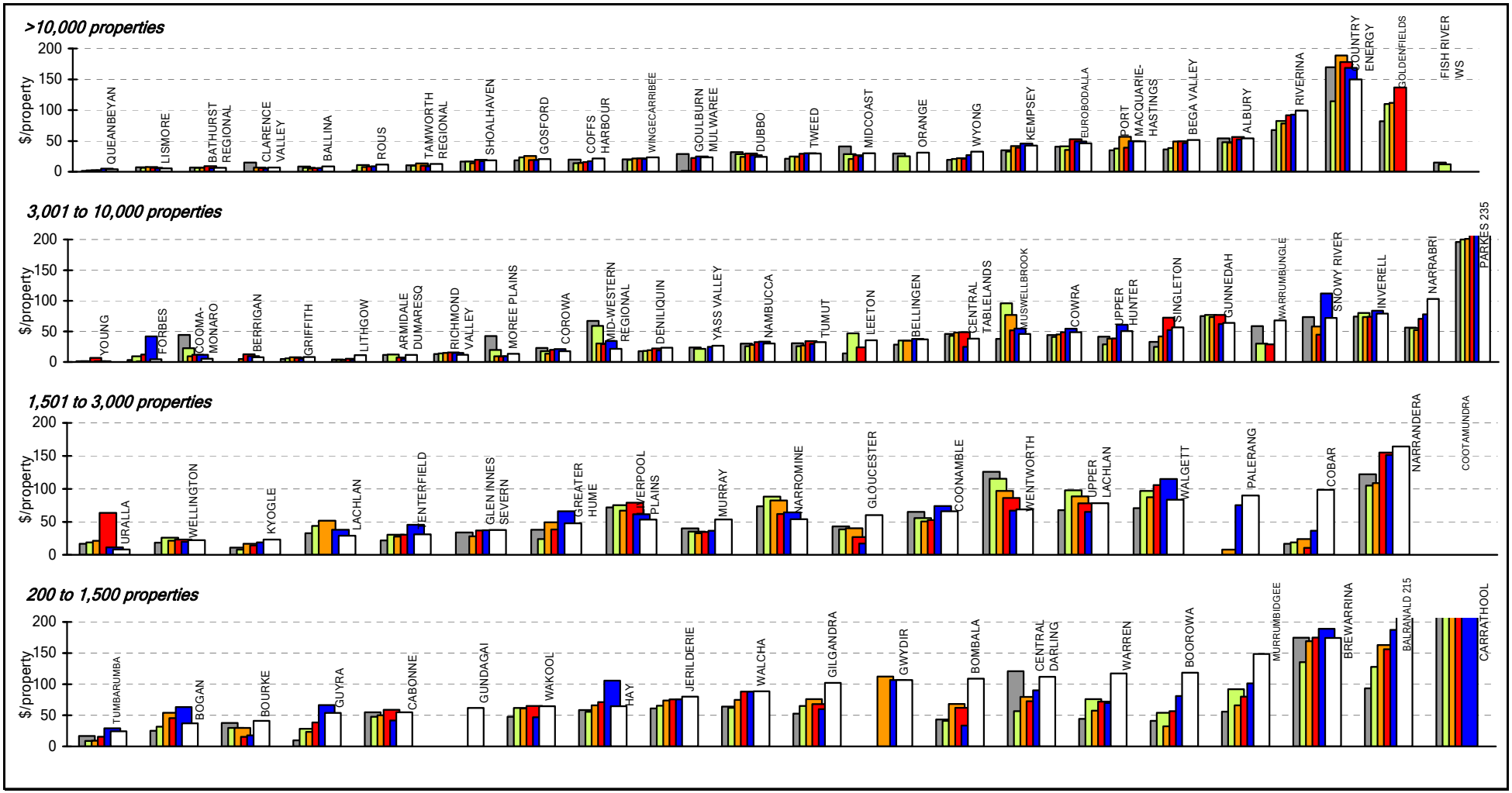


Parameter: Treatment Operation Expenses (W2j) + Treatment Chemical Cost (W2k) + Treatment Maintenance Expenses (W2l)
[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment

Notes:

1. This figure shows ranked values of the 2008-09 water treatment cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 treatment costs for the 24 LWUs shown ranges from $20 to $220 per connected property.The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. Only LWUs with a water treatment works involving at least filtration and disinfection for over 50% of their supply have been shown.
3. The Statewide median water treatment cost is $35 per connected property.
4. For general notes see page 28.

Figure 36: Pumping cost per property – water supply

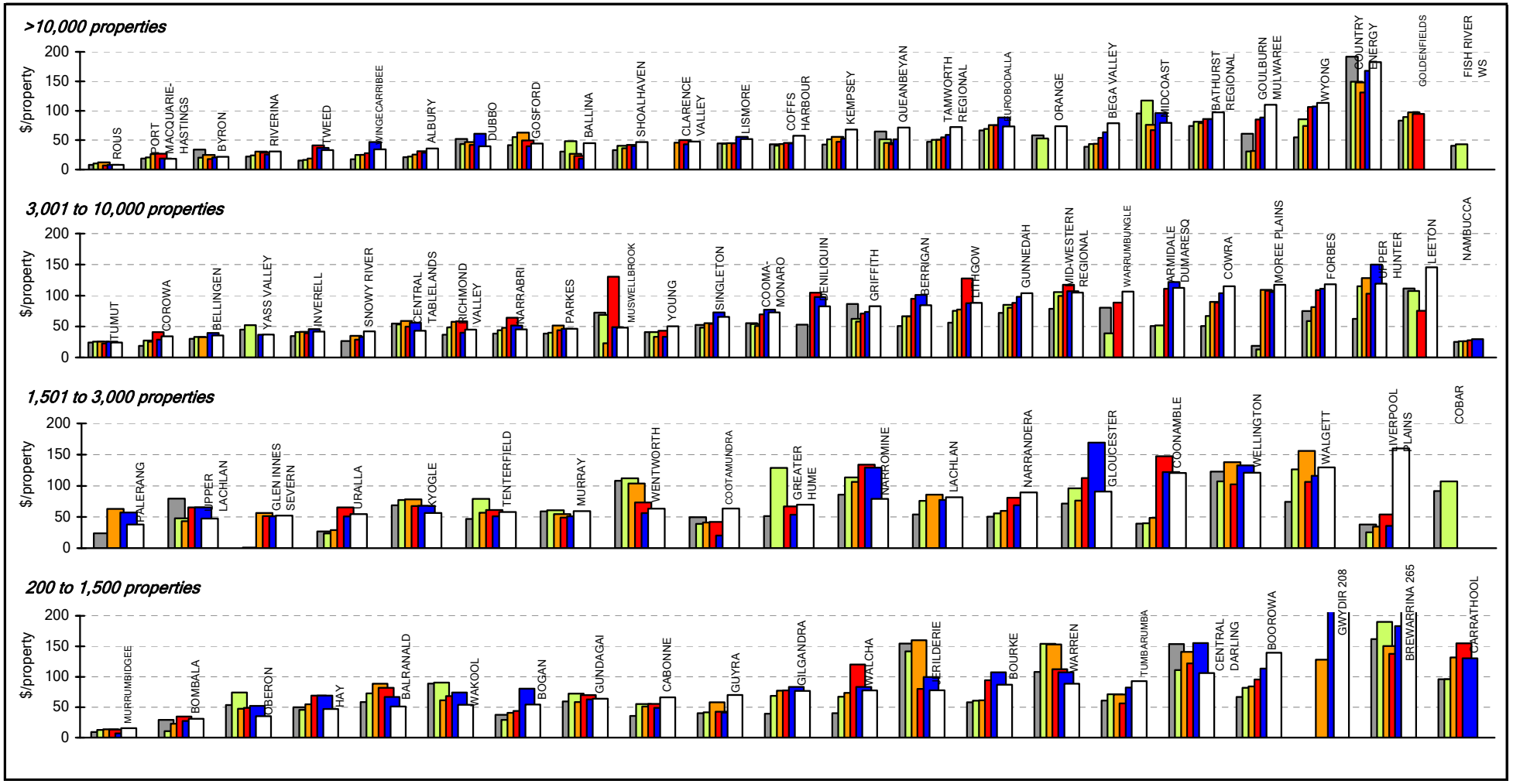


Parameter: Pumping Station Operation Expenses (W2g) + Pumping Station Energy Cost (W2h) + Pumping Station Maintenance Costs (W2i)
[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment

Notes:

1. This figure shows ranked values of the 2008-09 water pumping cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 water pumping costs for the 28 LWUs shown ranges from $1 to $230 per connected property. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median water pumping cost (including energy costs) is $29 per connected property.
3. For general notes see page 28.

Figure 37: Water main cost per property – water supply



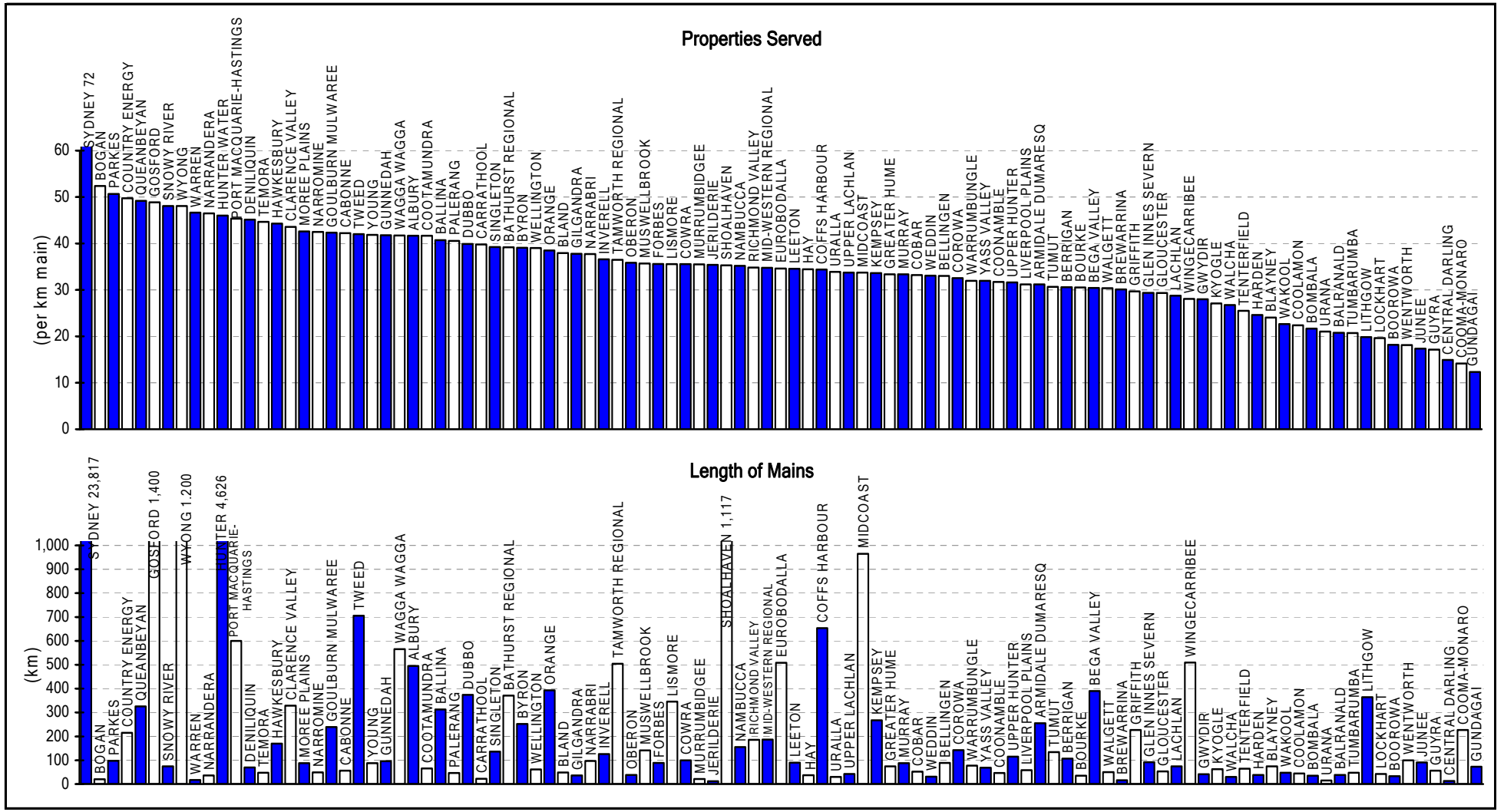
Parameter: $\frac{\text{Water main operation expenses (W2c) + water main maintenance costs (W2d)}}{\text{[No. of residential assessments (Q34) + No. of non-residential assessments (Q35) x No. of connected properties per assessment}}$

Notes:

1. This figure shows ranked values of the 2008-09 water main operating cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 water main costs for the 28 LWUs shown ranges from $24 to $146 per property. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median water main cost is $51 per property.
3. For general notes see page 28.

9. Sewerage figures

Figure 38: Properties served per km of main, length of mains – sewerage

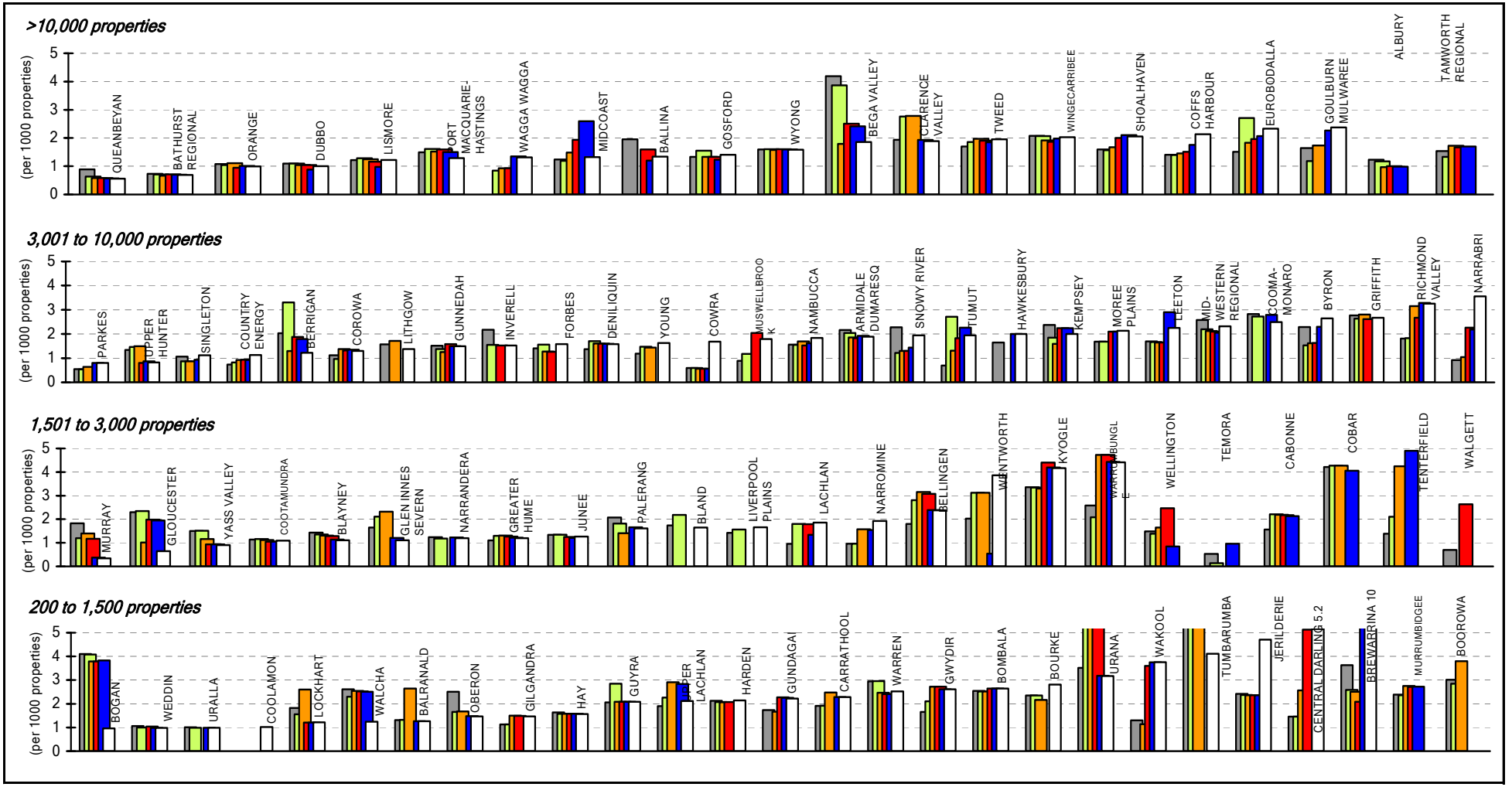


Parameter: [No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment
Length of Reticulation/Gravity Mains (Q7) + Length of Rising Mains (Q8)

Note:

1. For general notes see page 28.

Figure 39: Employees – sewerage

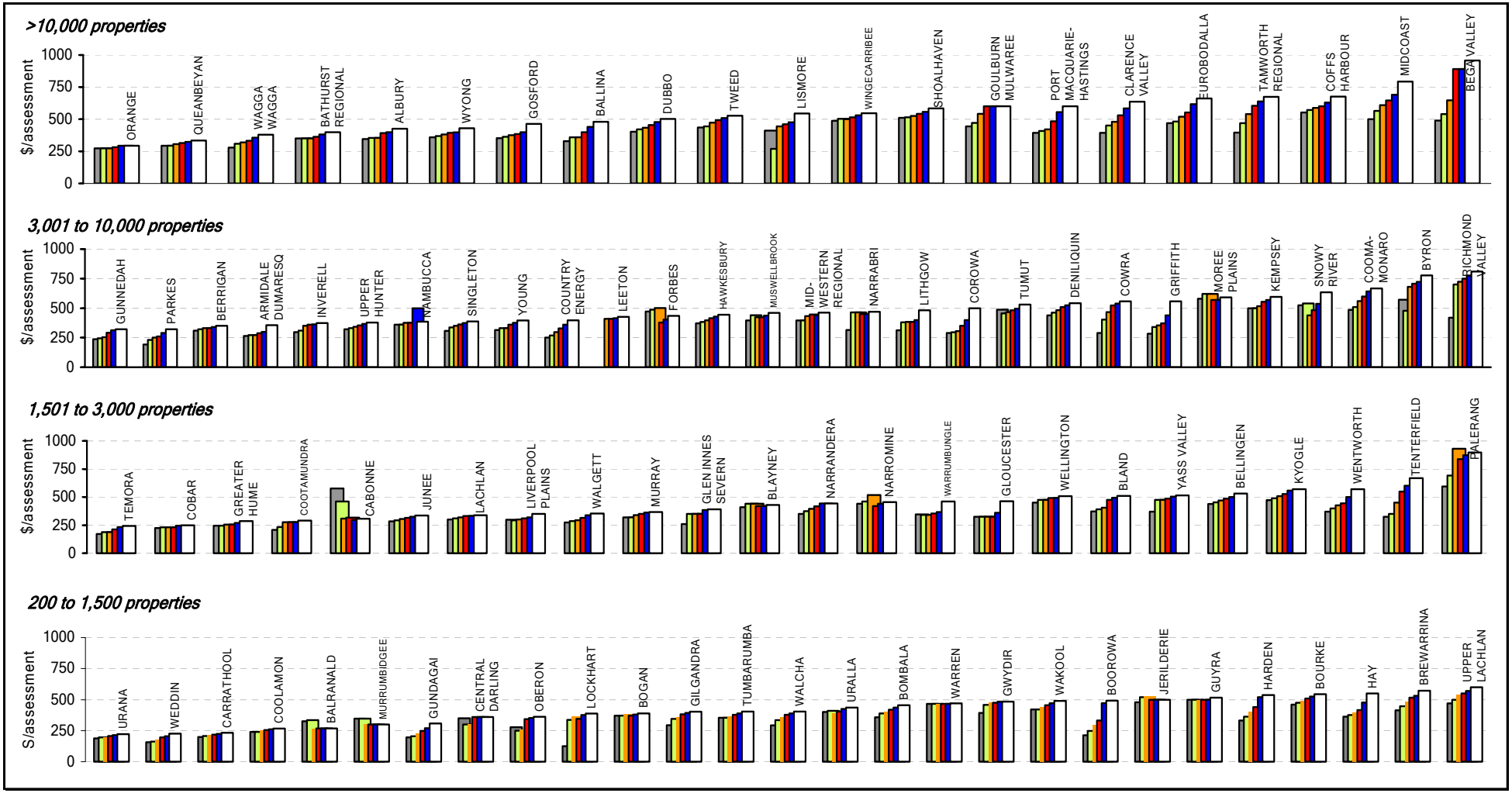


Parameter: $\frac{\text{Full-time Equivalent Employees (Q49) x 1000}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

Notes:

1. This figure shows ranked values of the 2008-09 sewerage employees for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewerage employees for the 28 LWUs shown ranges from about 1 to 4 per 1000 connected properties. Results for the previous 5 years are also shown.
2. The 2008-09 Statewide median number of sewerage employees is 1.6 per 1000 connected properties.
3. For general notes see page 28.

Figure 40: Typical residential bill – sewerage

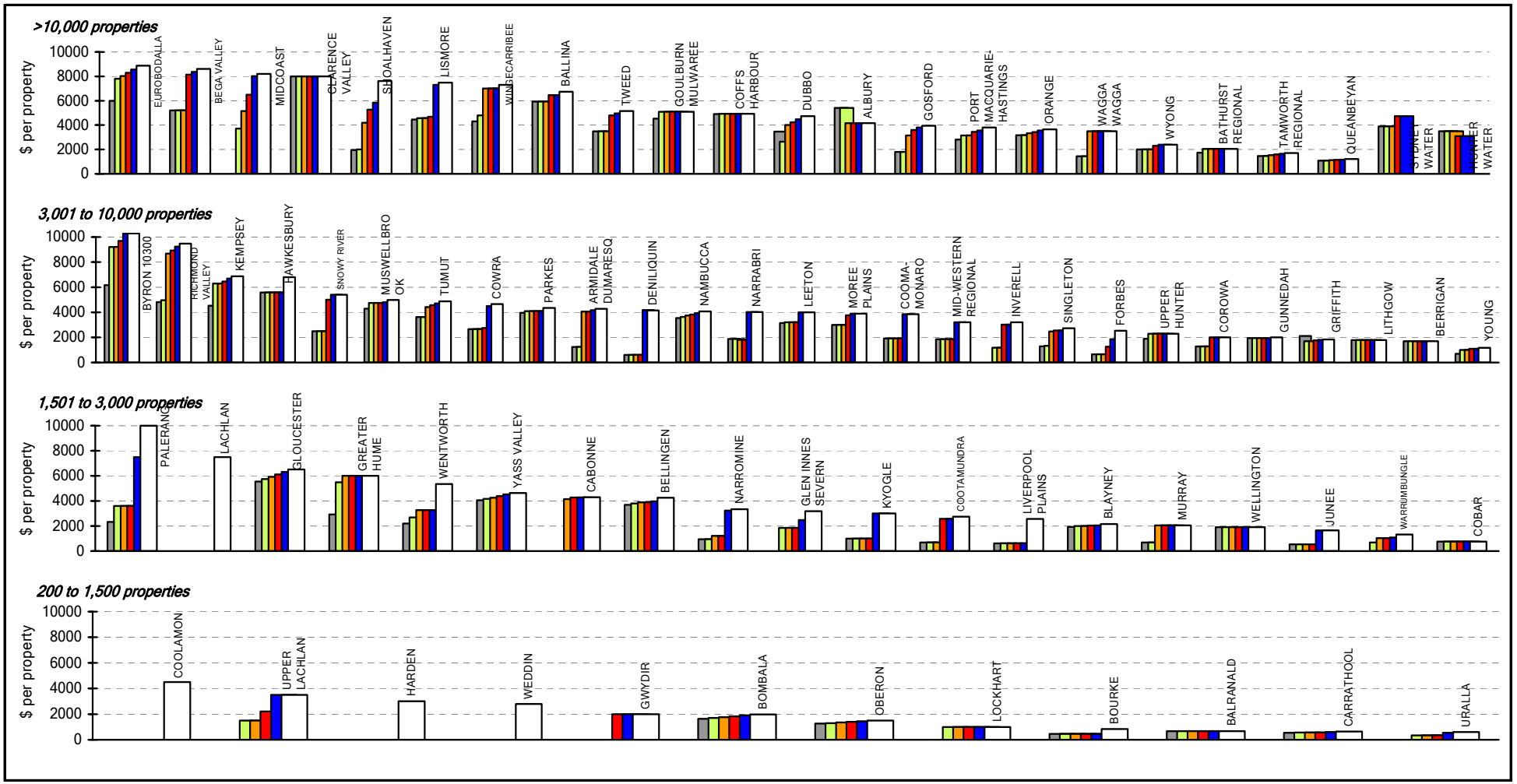


Parameter: Residential Access Charge

Notes:

1. This figure shows ranked values of the 2009-10 typical residential bill for sewerage for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2009-10 typical residential bill for sewerage for the 28 LWUs shown ranges from about $320 to $810. Results for the previous 5 years are also shown in Jan 2010$.
2. The 2009-10 Statewide median typical residential bill for sewerage supply is $470 per assessment.
3. For general notes see page 28.

Figure 41: Typical developer charge – sewerage

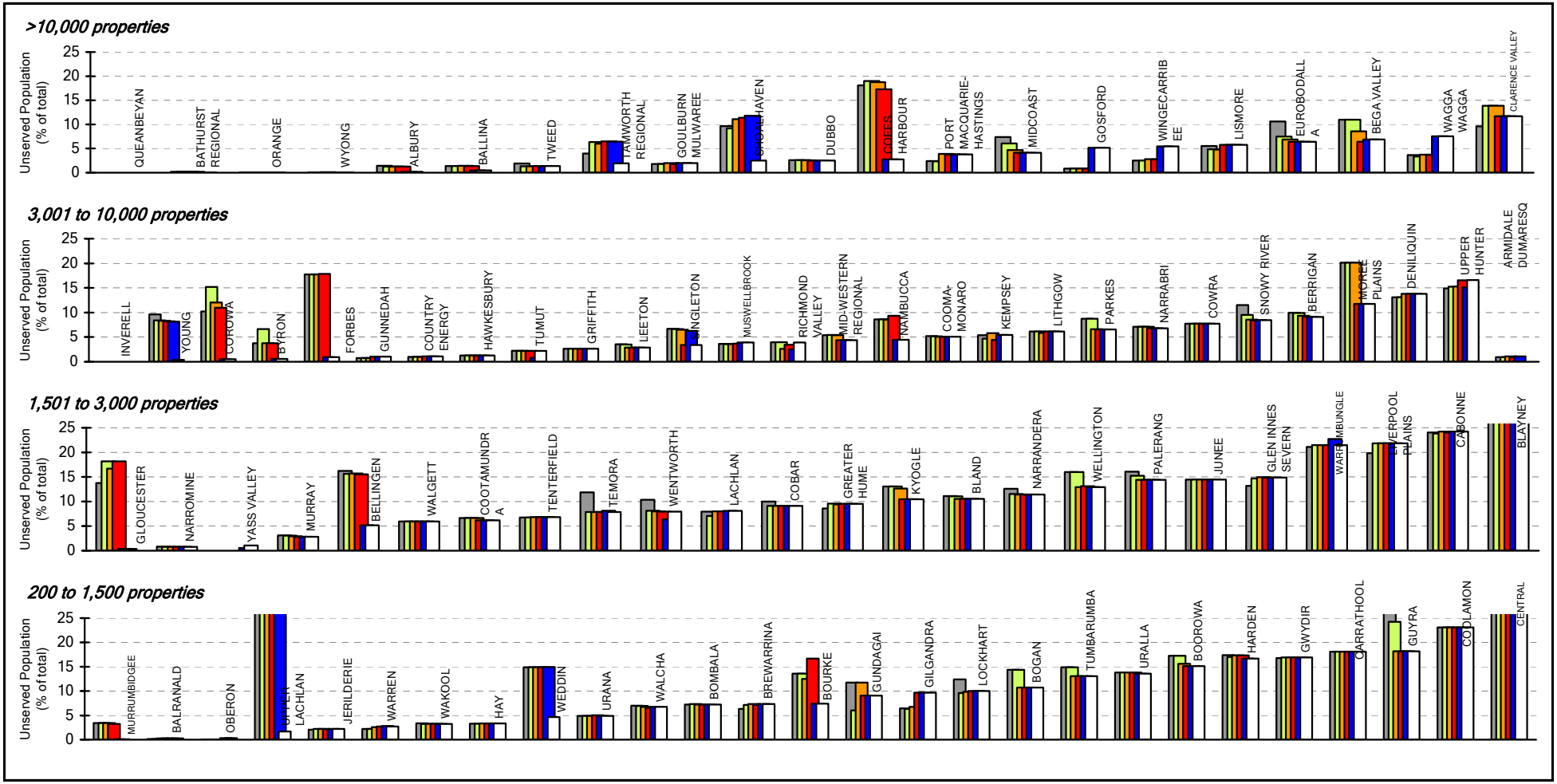


Parameter: Typical Sewerage Developer Charge (Q62)

Notes:

1. This figure shows ranked values of the 2009-10 typical developer charge for sewerage for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the typical developer charge for sewerage for the 28 LWUs shown ranges from from $10300 to nil per equivalent tenement (ET). Results for the previous 5 years are also shown in Jan 2010$.
2. The 2009-10 Statewide median typical sewerage developer charge was about $3900 per ET.
3. 80 LWUs levied sewerage developer charges.
4. For general notes see page 28.

Figure 42: Urban population without sewerage – sewerage



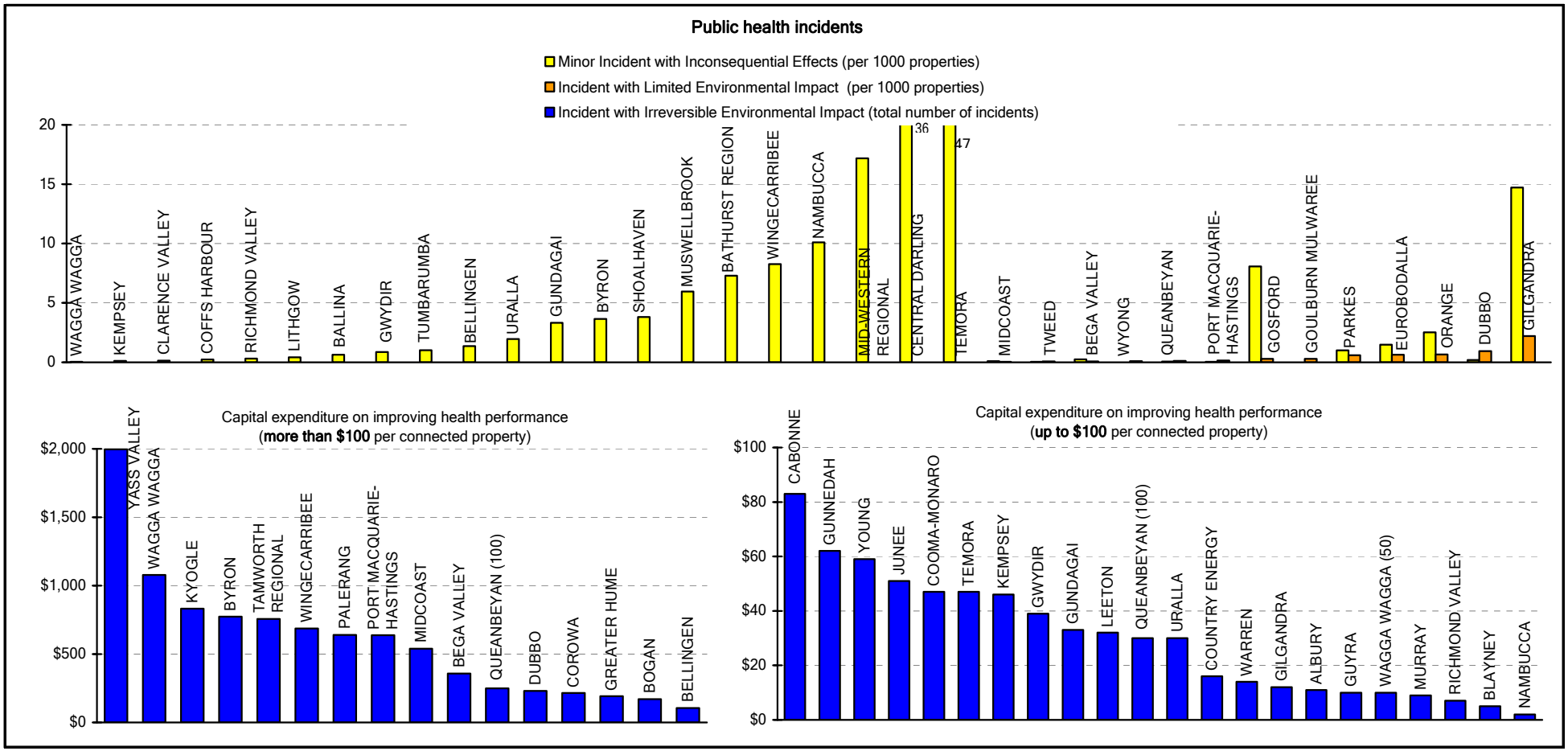
Parameter:

$$\frac{\text{Unserved urban population (Q21)}}{\text{Population served (Q1) + unserved urban population (Q21)}}$$

Notes:

1. This figure shows ranked values of the percentage of urban population without a reticulated sewerage service for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the urban population without a reticulated sewerage service for the 28 LWUs shown ranges from from nil to 17 %. Results for the previous 5 years are also shown.
2. The 2008-09 Statewide median urban population without a reticulated sewerage service was 3.9%.
3. The percentage of urban population without a reticulated sewerage service for the median LWU was 6%.
4. Overall, 95.2% of the urban population in non-metropolitan NSW (ie. 1.7 million people) received a reticulated sewerage service.
5. For general notes see page 28.

Figure 43: Public health incidents, capital expenditure – sewerage



Parameter: Total No. of minor incidents with inconsequential effects (Q44)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment

Parameter: Total No. of minor incidents with limited health impacts (Q45)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment

Parameter: Total No. of major incidents with major health impacts (Q46)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment

Parameter: Capital expenditure on improving health performance (S) x (Q48)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment

Notes:

1. The following 4 utilities did not report public health incidents: Carrathool, Murrumbidgee, Tenterfield and Walgett. 34 Utilities reported incidents and are shown in the figure above, while 63 utilities reported zero environmental incidents.
2. For general notes see page 28.

Figure 44: Complaints (per 1,000 properties) – sewerage

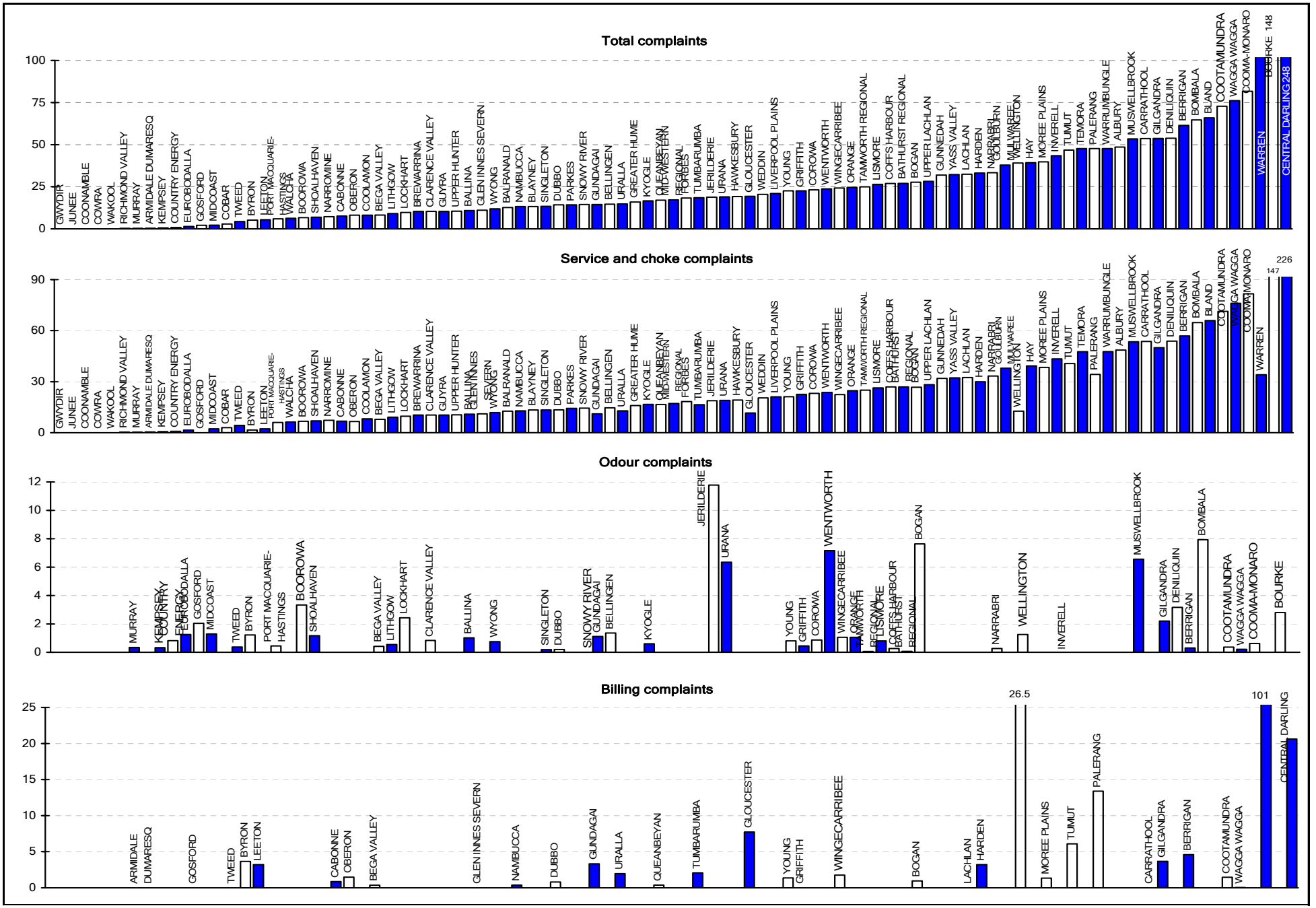


Figure 44: Complaints (per 1,000 properties) – sewerage (continued)

Parameter: $\frac{\text{[Total no. of complaints (Q34) + (Q37) + (Q38) +(Q39)] x 1000}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment}}$

Parameter: $\frac{\text{No of service or choke complaints reported (Q34)}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment}}$

Parameter: $\frac{\text{No. of odour complaints reported (Q39)}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment}}$

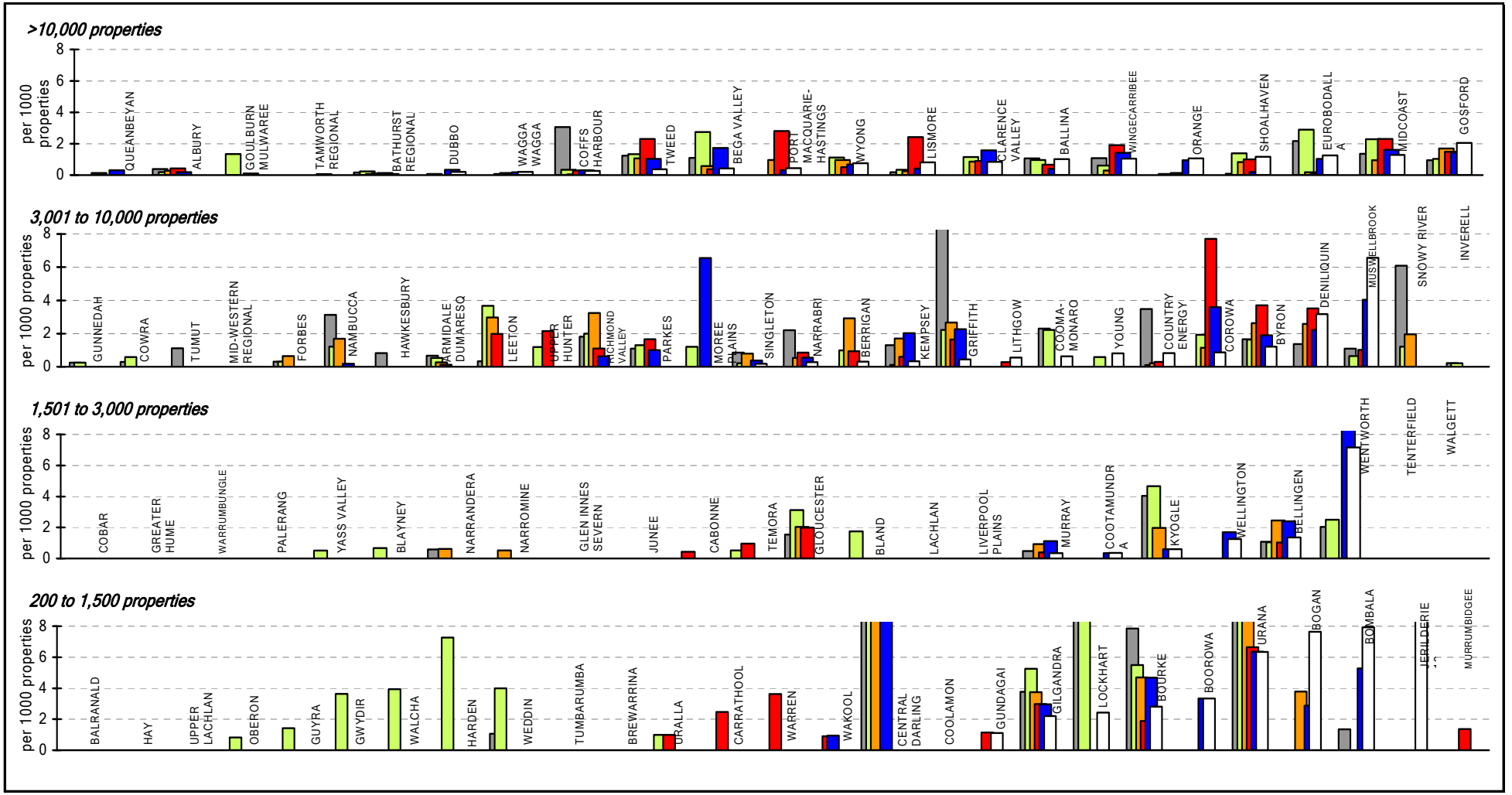
Parameter: $\frac{\text{No of billings complaints reported (Q37)}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment}}$

Parameter: $\frac{\text{No. of other complaints reported (Q38)}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16)] x No. of connected properties per assessment}}$

Note:

1. For general notes see page 28.

Figure 45: Odour complaints – sewerage

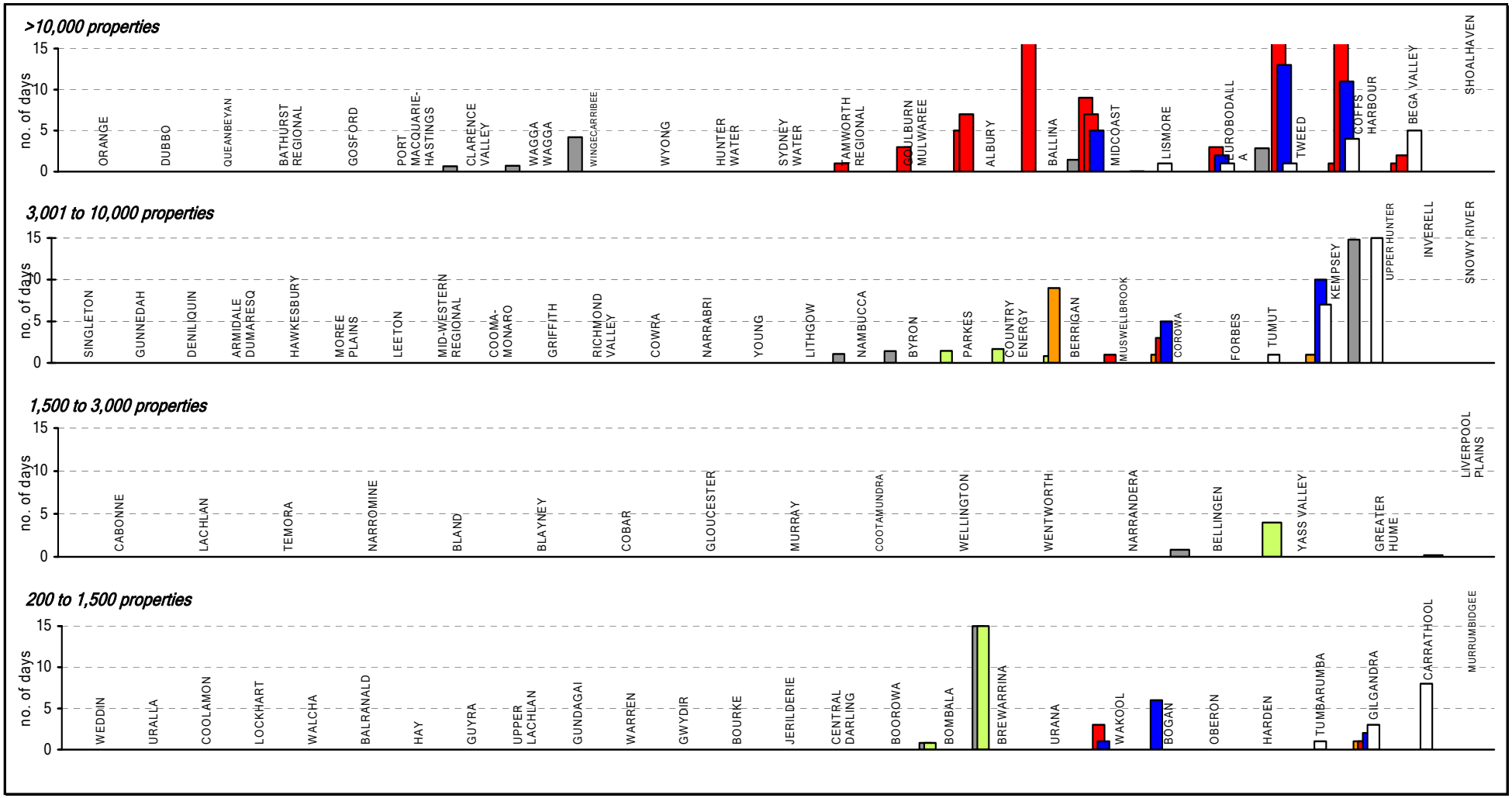


Parameter: [No. of Odour Complaints from Treatment Works and Pumping Stations (Q39) x 1000] / [No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment

Notes:

1. This figure shows ranked values of the 2008-09 number of sewage odour complaints for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of odour complaints for the 28 LWUs shown ranges from 0 to 6.6 complaints per thousand connected properties.The 2 LWUs on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown.
2. The 2008-09 Statewide median number of odour complaints is 0.4 per 1000 properties.
3. For general notes see page 28.

Figure 46: Treatment works malfunction – sewerage

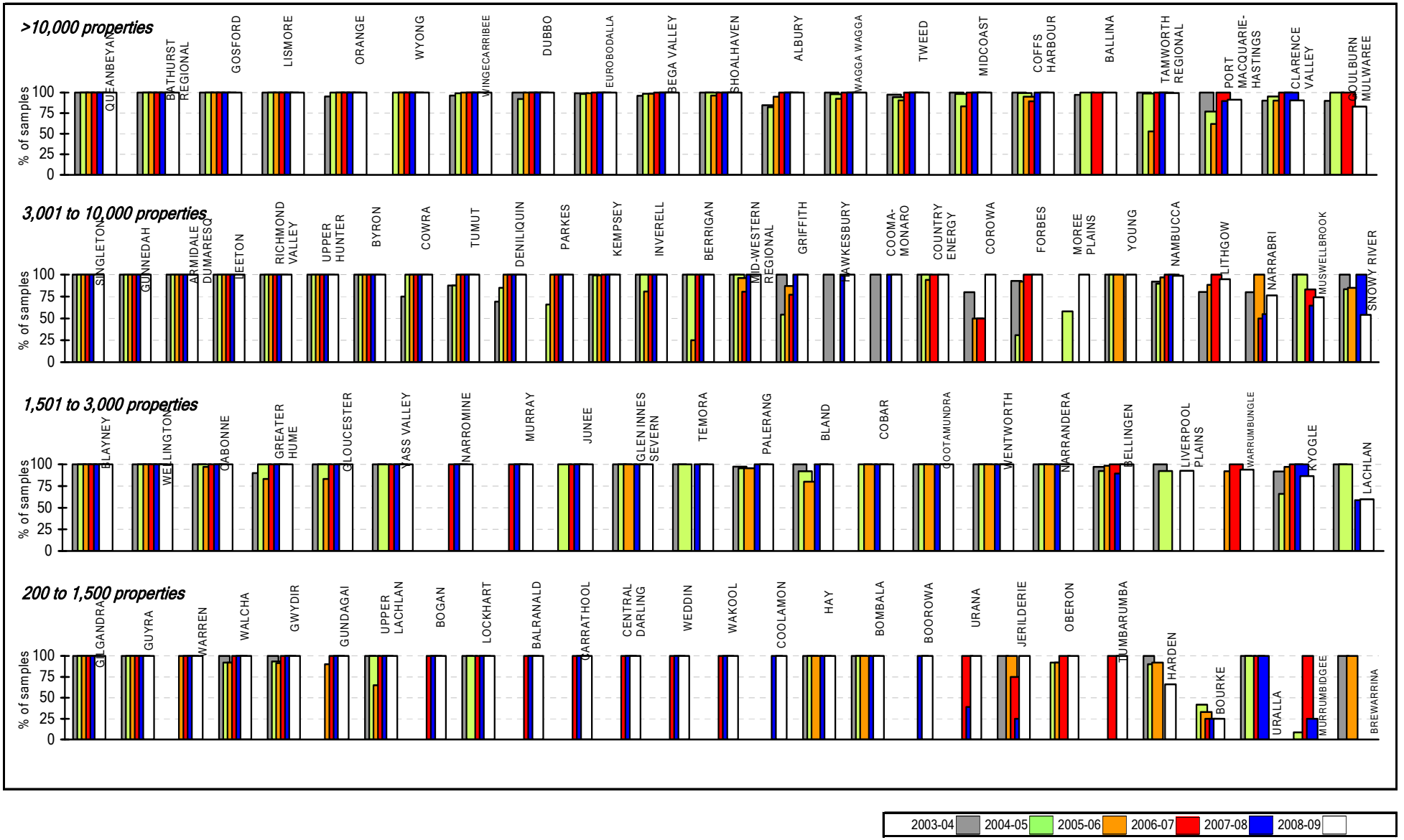


Parameter: Number of Days of major Malfunction of Treatment Processes (STW Q67)

Notes:

1. The figure shows the 2008-09 ranked number of days of treatment works malfunction for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the number of days of malfunction for the 28 LWUs shown ranges from nil to 15 days.
2. For LWUs with more than one treatment works, the weighted average (based on capacity) of days was used.
3. For general notes see page 28.

Figure 47: Compliance with BOD in licence – sewerage

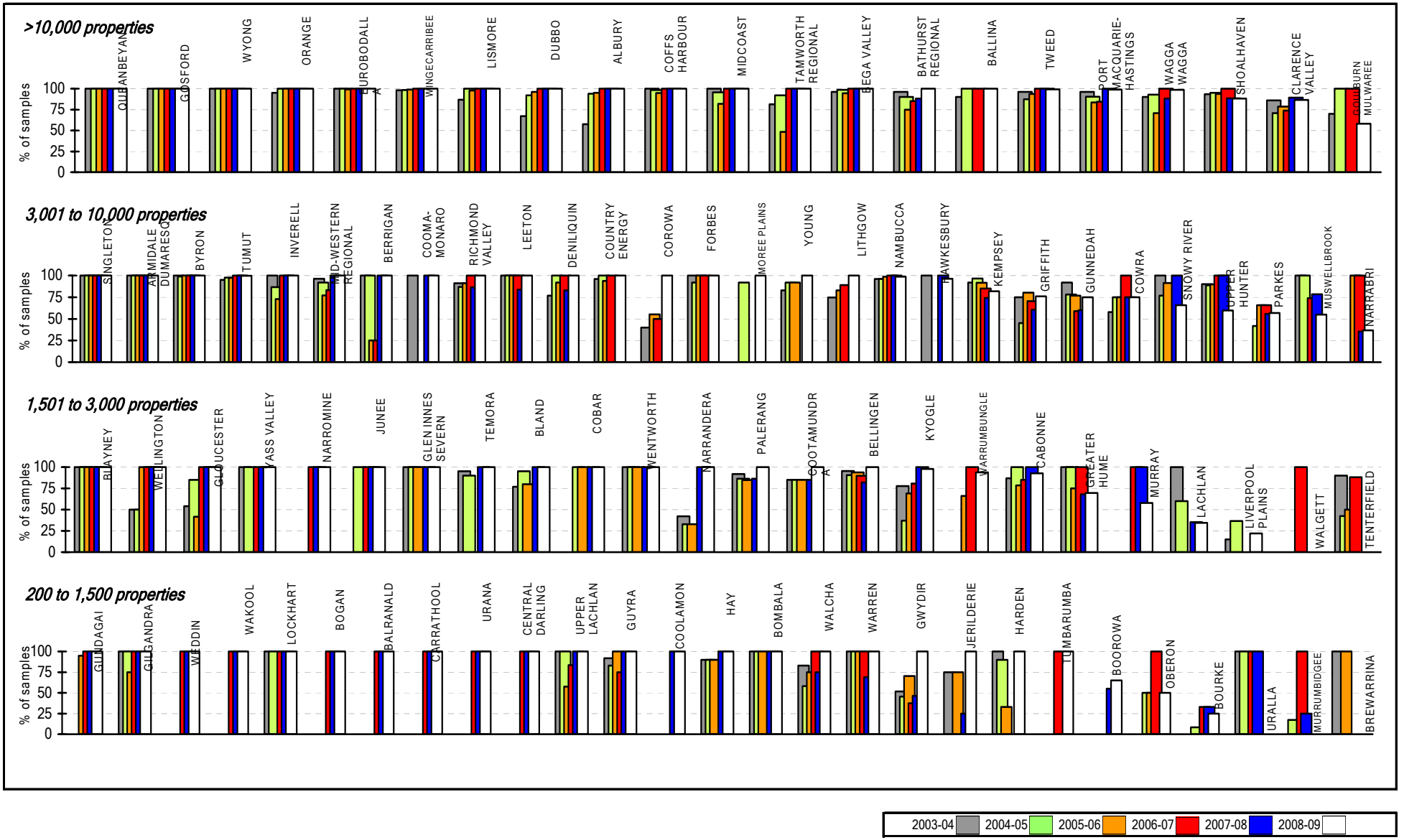


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Biochemical Oxygen Demand (BOD) (STW Q50)

Note:

1. For general notes see page 28.

Figure 48: Compliance with SS in licence – sewerage

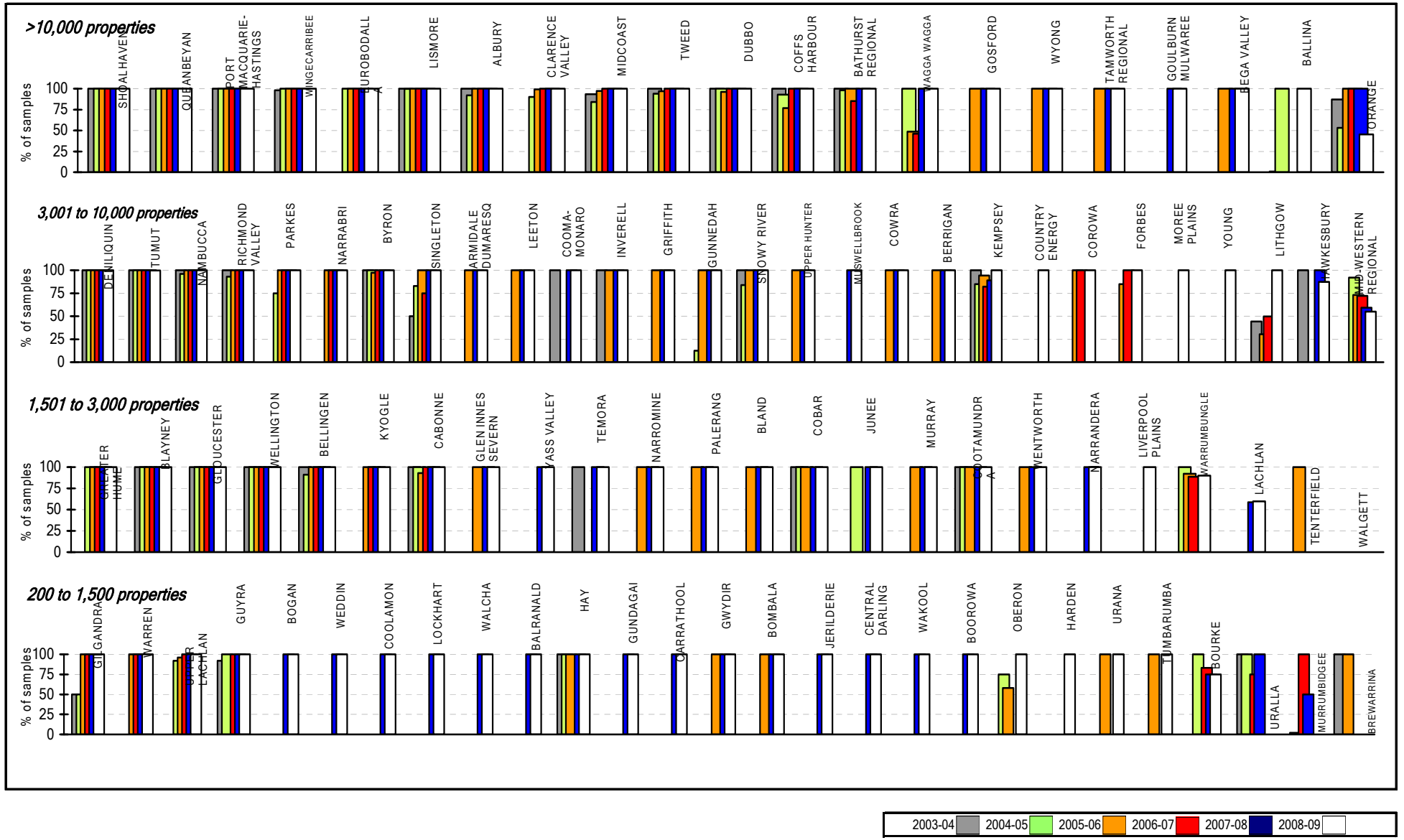


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Suspended Solids (SS) (STW Q52)

Note:

1. For general notes see page 28.

Figure 49: Compliance with N in licence – sewerage

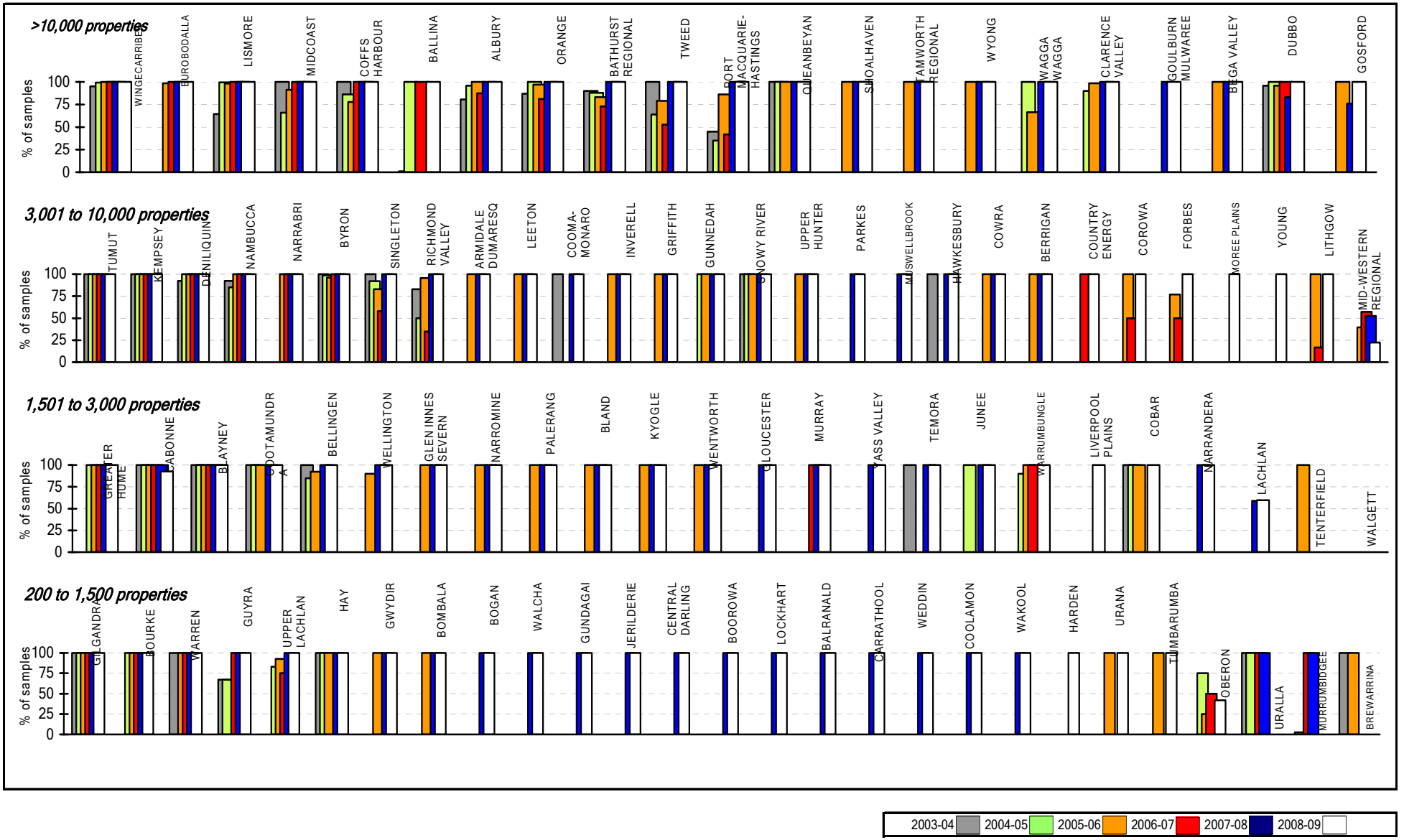


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Total Nitrogen (STW Q54)

Note:

1. For general notes see page 28.

Figure 50: Compliance with P in licence – sewerage

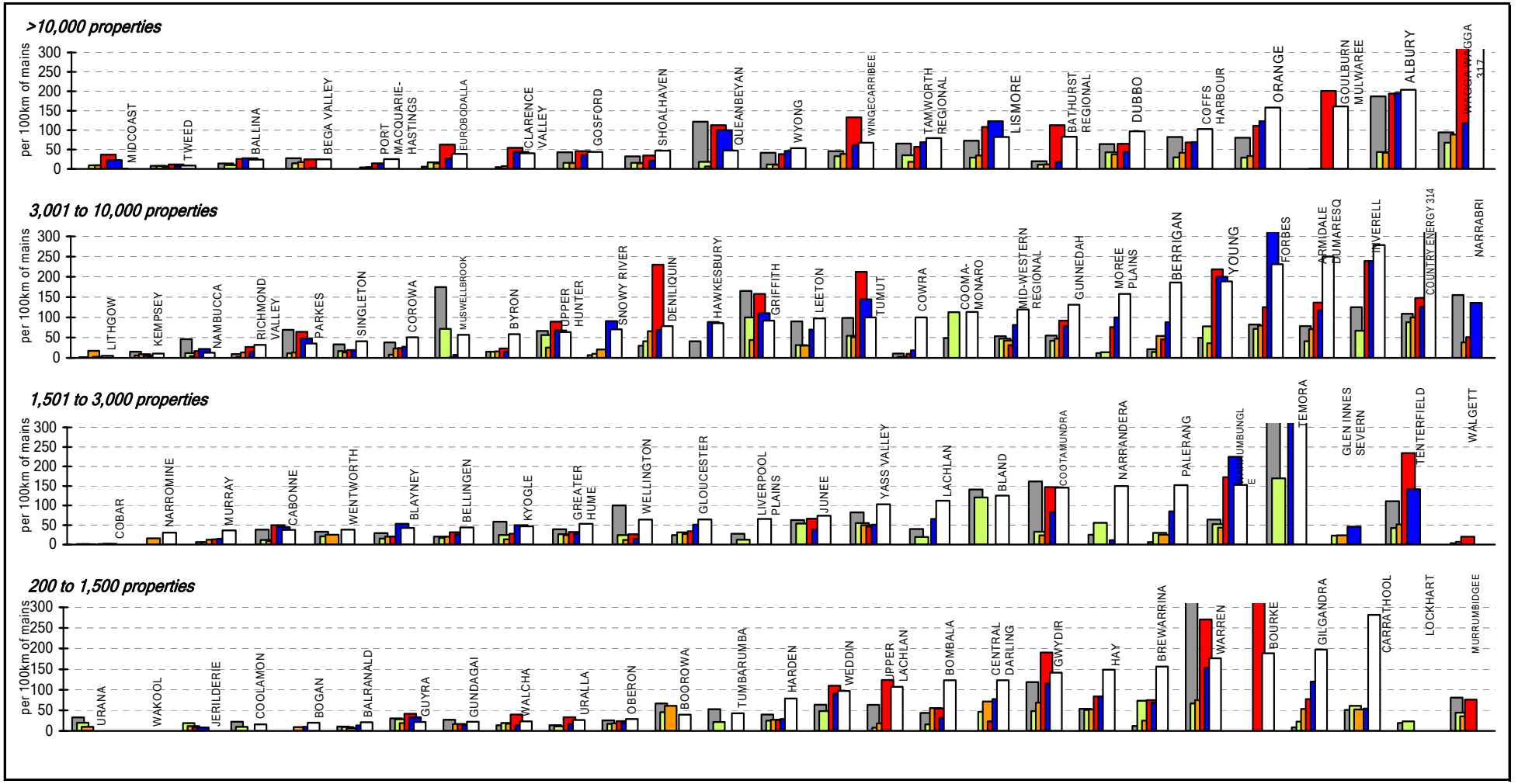


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Total Phosphorus (STW Q60)

Note:

1. For general notes see page 28.

Figure 51: Sewer main chokes and collapses – sewerage



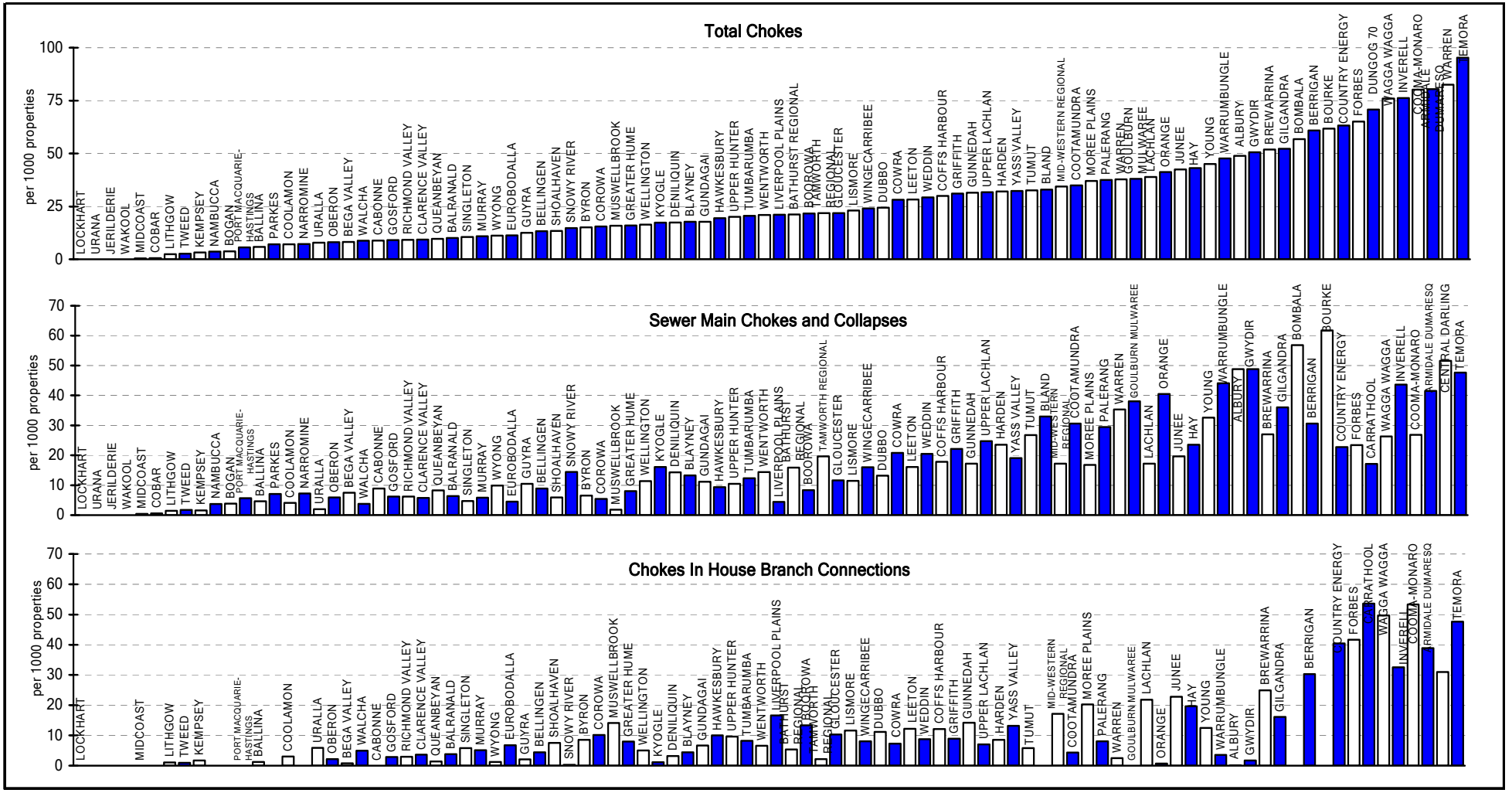
Parameter:

$$\frac{\text{Total No. of Confirmed Sewer Chokes (Q64) x 100}}{\text{Length of Reticulation/Gravity Mains (Q7) + Length of Rising Mains (Q8)}}$$

Notes:

1. This figure shows ranked values of the 2008-09 sewer main chokes and collapses for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewer main chokes and collapses for the 27 LWUs shown ranges from 5 to 314 chokes per 100 km of sewer mains. The 1 LWU on the right did not report this indicator for 2008-09 Results for the previous 5 years are also shown.
2. The Statewide median sewer main chokes and collapses is 53 per 100 km of sewer mains.
3. 13% of LWUs were unable to report on this item and those LWUs should institute a system to record and report such occurrences.
4. For general notes see page 28.

Figure 52: Total chokes (per 1,000 properties) – sewerage



Parameter: [No. of Confirmed Sewer Chokes (Q64) + No. of Chokes in House Branch Connections (Q67) + No. of Chokes in House Drains (Q68)] x 1000

[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment

Parameter: No. of Confirmed Sewer Chokes (Q64) x 1000

[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment

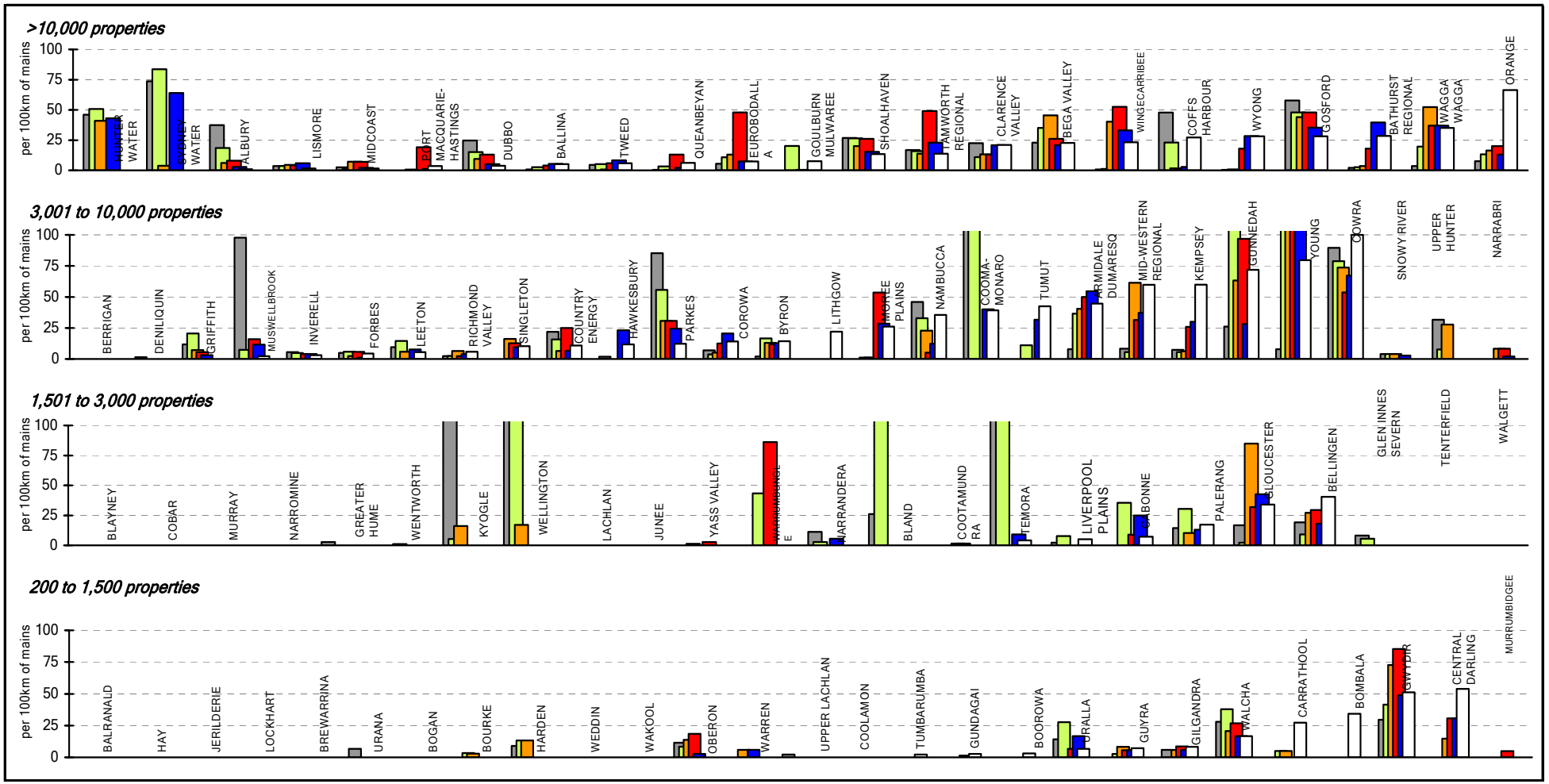
Parameter: No. of Chokes in House Branch Connections (Q67) x 1000

[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment

Note:

1. For general notes see page 28.

Figure 53: Sewer overflows to the environment – sewerage



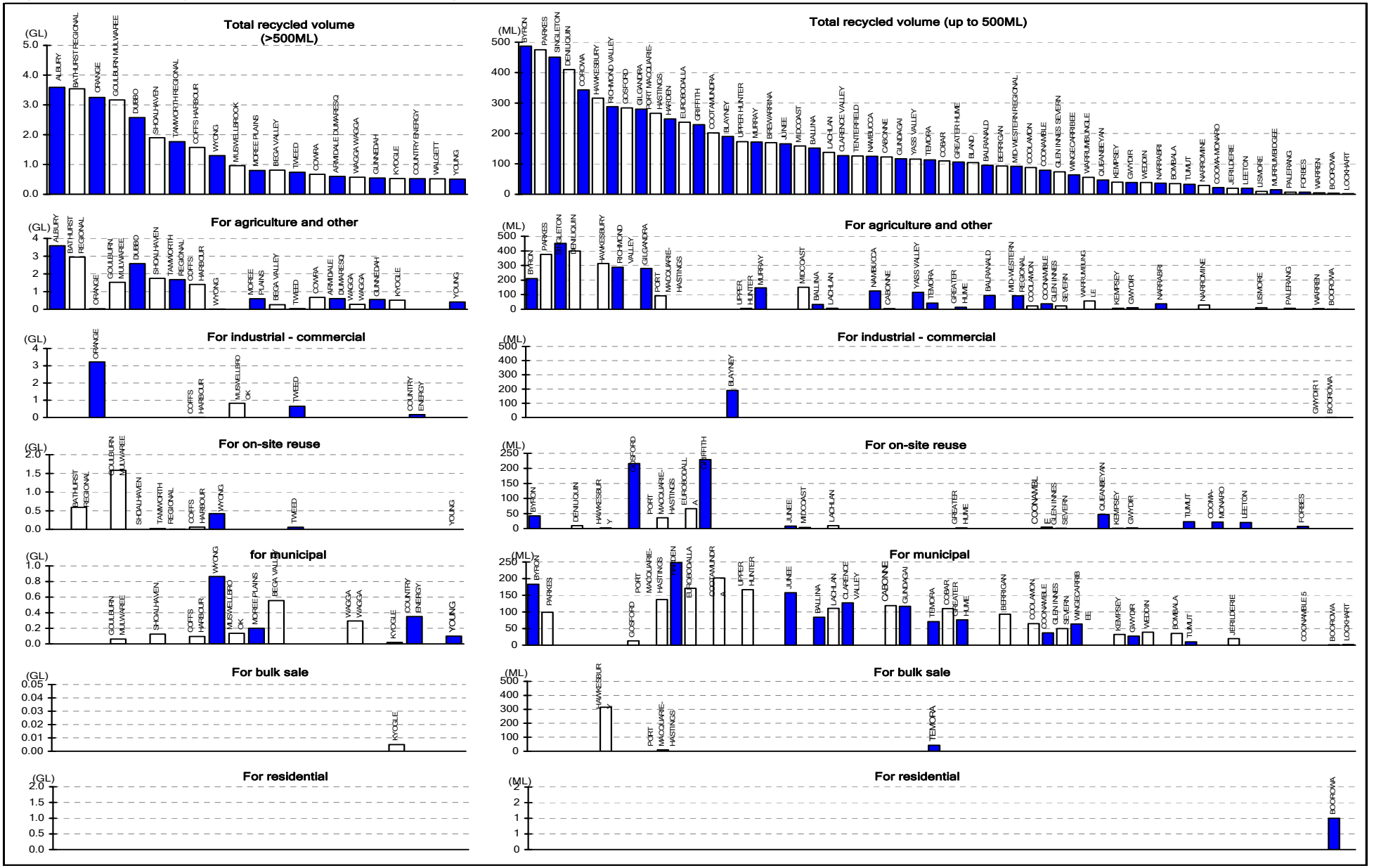
Parameter:

$$\frac{\text{Total No. of Sewage Overflows (Q63) x 100}}{\text{Length of Reticulation/Gravity Mains (Q7) + Length of Rising Mains (Q8)}}$$

Notes:

1. This figure shows ranked values of the 2008-09 sewer overflows to the environment for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewer overflows to the environment for the 28 LWUs shown ranges from nil to 100 overflows per 100 km of sewer mains. The 3 LWUs on the right did not report this indicator for 2008-09 Results for the previous 5 years are also shown.
2. The Statewide median sewer overflows to the environment is 12 per 100 km of sewer mains.
3. 36% of reporting LWUs reported no sewer overflows.
4. For general notes see page 28.

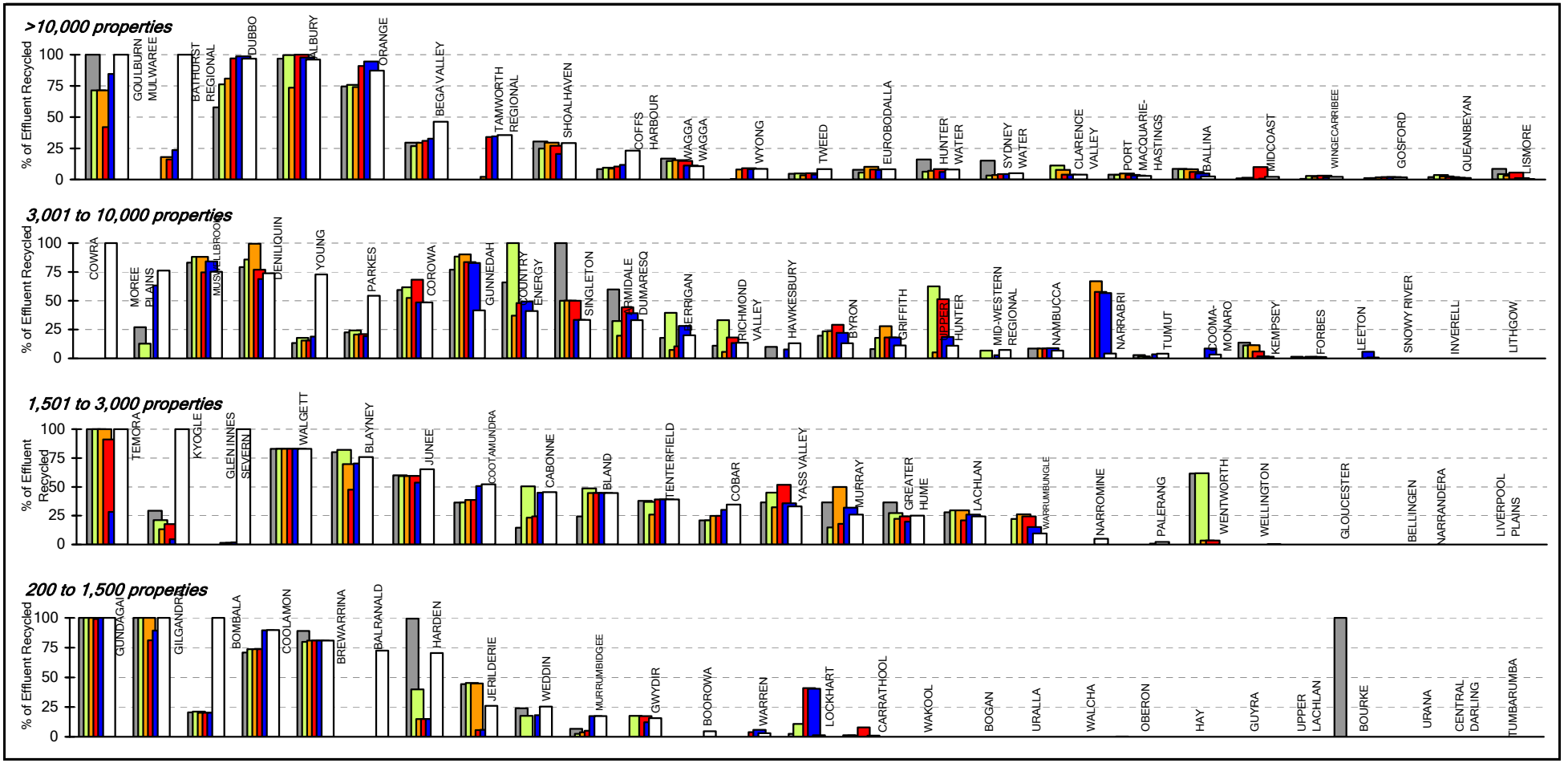
Figure 54: Recycled water – sewerage



Notes:

1. The total volume of recycled water for non-metropolitan NSW was 38000 ML, which was 23% of the total volume of sewage collected. Re-use was carried out by 79% of LWUs. 25% of LWUs recycled over 50% of their effluent.
2. Refer also to page 8 of the 2008-09 NSW Water Supply and Sewerage Performance Monitoring Report.
3. For general notes see page 28.

Figure 55: Recycled water (% of effluent recycled) – sewerage

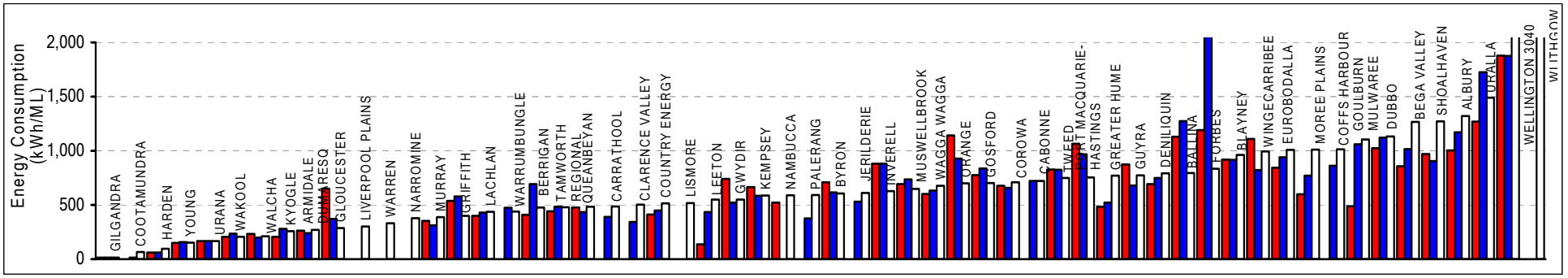


Parameter: Total Volume Recycled (STW Q25) x 100 / Volume of Sewage Receiving Secondary Treatment (STW Q18)

Notes:

1. This figure shows ranked values of the 2008-09 recycled water (% of sewage effluent recycled) for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 recycled water (% of sewage effluent recycled) for the 28 LWUs shown ranges from 100% to 0%. Results for the previous 5 years are also shown.
2. The 2007-08 result has been adopted for those LWUs that did not report but historically report consistent effluent reuse (generally >25%). These LWUs are shown in italics bold in Table 5 on page 107.
3. The Statewide median reuse of recycled water is 10% of effluent recycled.
4. The total volume of recycled water for non-metropolitan NSW was 38000 ML, which was 23% of the total volume of sewage collected. Re-use was carried out by 79% of LWUs. 25% of LWUs recycled over 50% of their effluent.
5. Refer also to page 8 of the 2008-09 NSW Water Supply and Sewerage Performance Monitoring Report.
6. For general notes see page 28.

Figure 56: Energy consumption per ML – sewerage

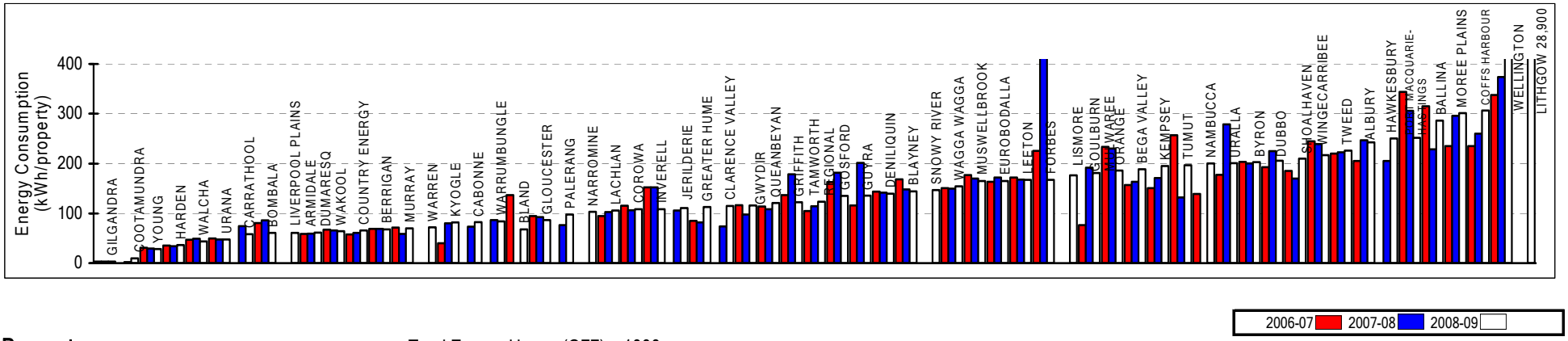


Parameter: $\frac{\text{Total Energy Usage (S Q77) x 1000}}{\text{Total Volume of Sewage Collected ((Q26)}}$

Notes:

1. This figure shows ranked values of the 2008-09 total energy consumption per ML. The energy consumption per ML for the 58 Local Water Utilitites (LWUs) shown range from about 14 to 95500kWh per connected property.
2. For general notes see page 28.

Figure 57: Energy consumption per property – sewerage

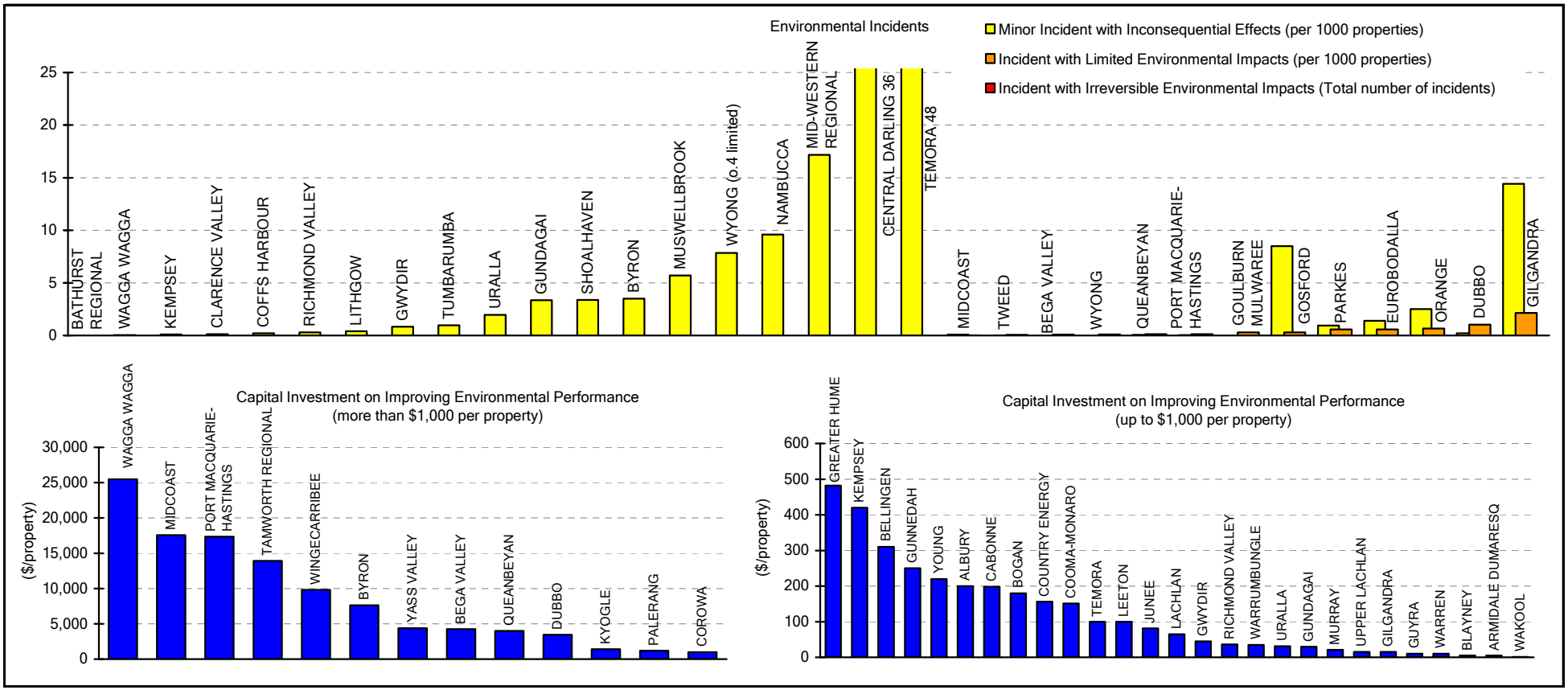


Parameter: $\frac{\text{Total Energy Usage (Q77) x 1000}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

Notes:

1. This figure shows ranked values of the 2008-09 total energy consumption per connected property. The energy usage per connected property for the 58 Local Water Utilitites (LWUs) shown range from about 3 to 250kWh per connected property.
2. For general notes see page 28.

Figure 58: Environmental incidents, management systems, capital investment – sewerage



Parameter: Total number of minor iIncidents with inconsequential effects (Q69)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Parameter: Total number of incidents with limited enviromental impacts (Q70)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

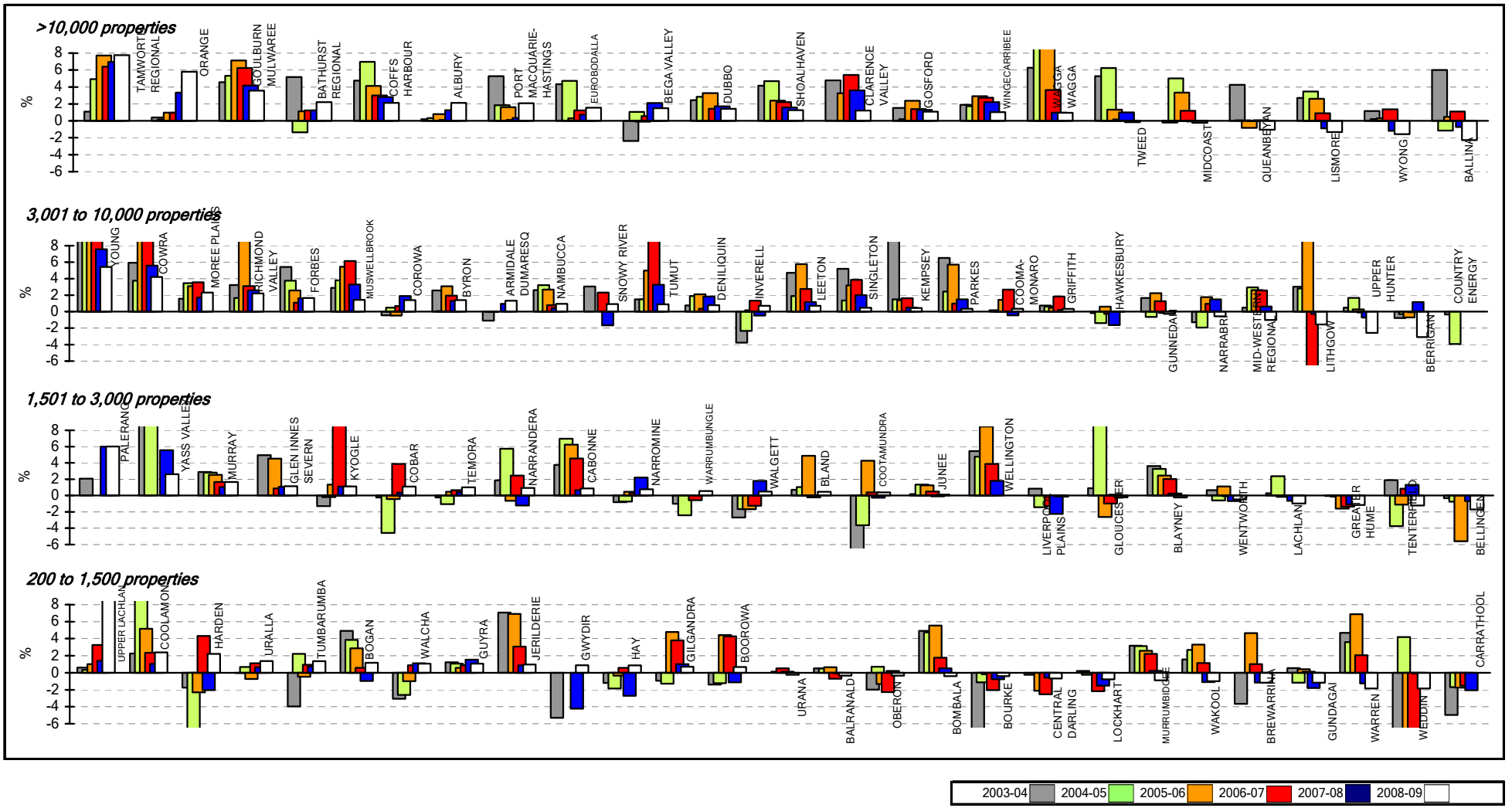
Parameter: Total number of incidents with irreversible enviromental impacts (Q71)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Parameter: Capital expenditure on improving environmental performance ($) (Q77)
[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Note:

1. The following 5 utilities did not report for environmental incidents: Carrathool, Murrumbidgee, Narrabri, Tenterfield and Walgett. 32 Utilities reported and are shown in the figure above, while 64 utilities reported zero environmental incidents.
2. The following 46 LWUs have prepared a sewerage Environmental Management Plan:
   Albury, Bega Valley, Bland, Bombala, Brewarrina, Cabonne, Carrathool, Clarence Valley, Coffs Harbour, Coolamon, Cooma Monaro, Cootamundra, Corowa, Country Energy, Dubbo, Eurobodalla, Gosford, Goulburn Mulwaree, Greater Hume, Griffith, Gunnedah, Hawkesbury, Junee, Kempsey, Kyogle, Lachlan, Lismore, Lithgow, Lockhart, MidCoast Water, Murray, Murrumbidgee, Narrandera, Narromine, Nambucca, Palerang, Shoalhaven, Singleton, Tumut, Uralla, Wagga Wagga, Wakool, Walcha, Weddin, Wingecaribee, Wyong.
3. For general notes see page 28.

Figure 59: Economic real rate of return – sewerage

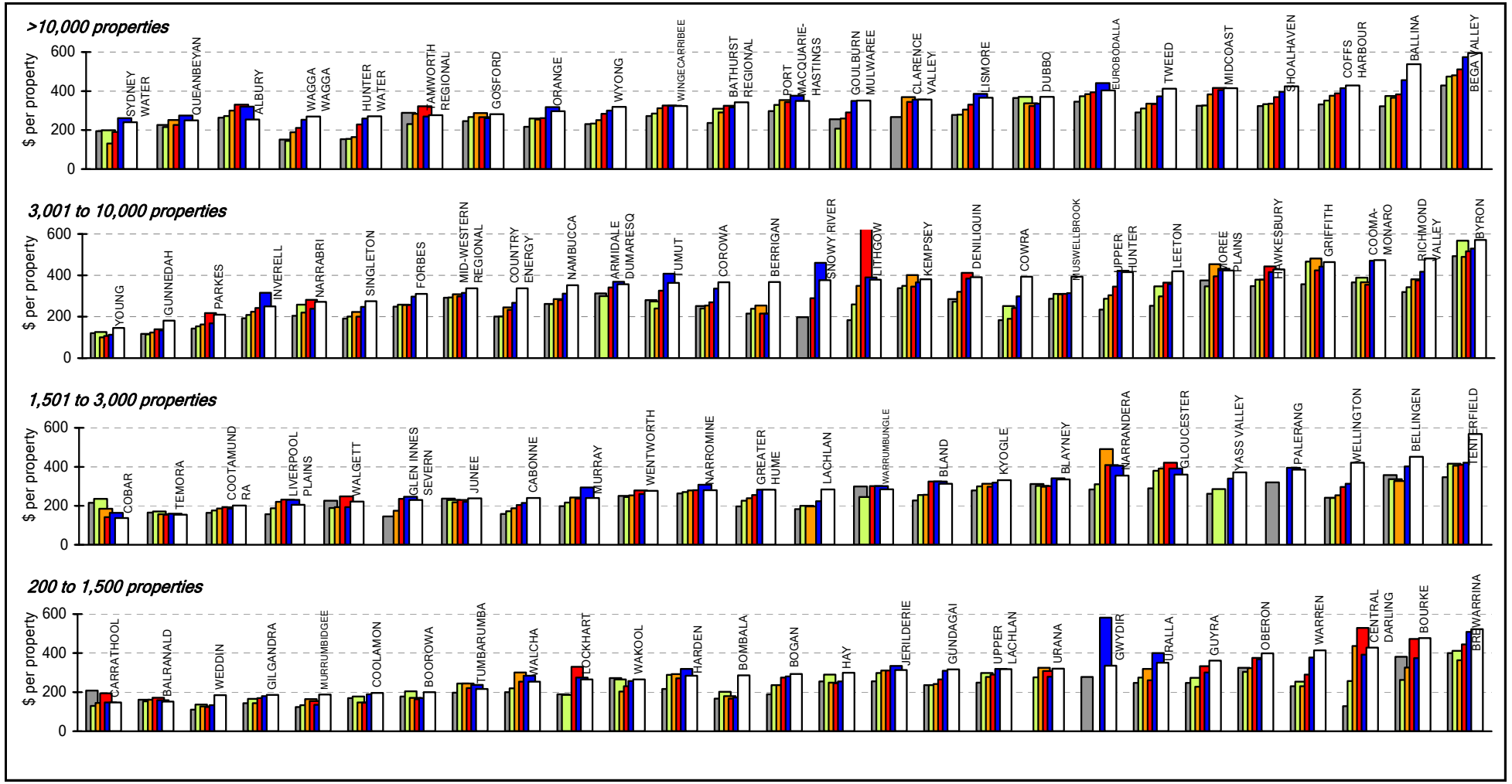


Parameter: [Operating Result (S16) + Interest Expense (S4a) - Interest Income (S10) - Grants for Acquisition of Assets (S12a)] x 100 / Written Down Replacement Cost of System Assets, Plant & Equipment (S34)

Notes:

1. This figure shows ranked values of the 2008-09 sewerage economic real rate of return (ERRR) for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewerage real rate of return for the 28 LWUs shown ranges from 5% to -3.1%. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown.
2. The Statewide median sewerage ERRR is 1.1%.
3. The ERRR was not reported for Sydney and Hunter Water Corporations from 2002/03 to 2004/05. The reported values for return on assets have been shown for these years.
4. The ERRR includes developer provided assets and capital contributions from other LWUs.
5. For general notes see page 28.

Figure 60: Operating cost (OMA) per property – sewerage



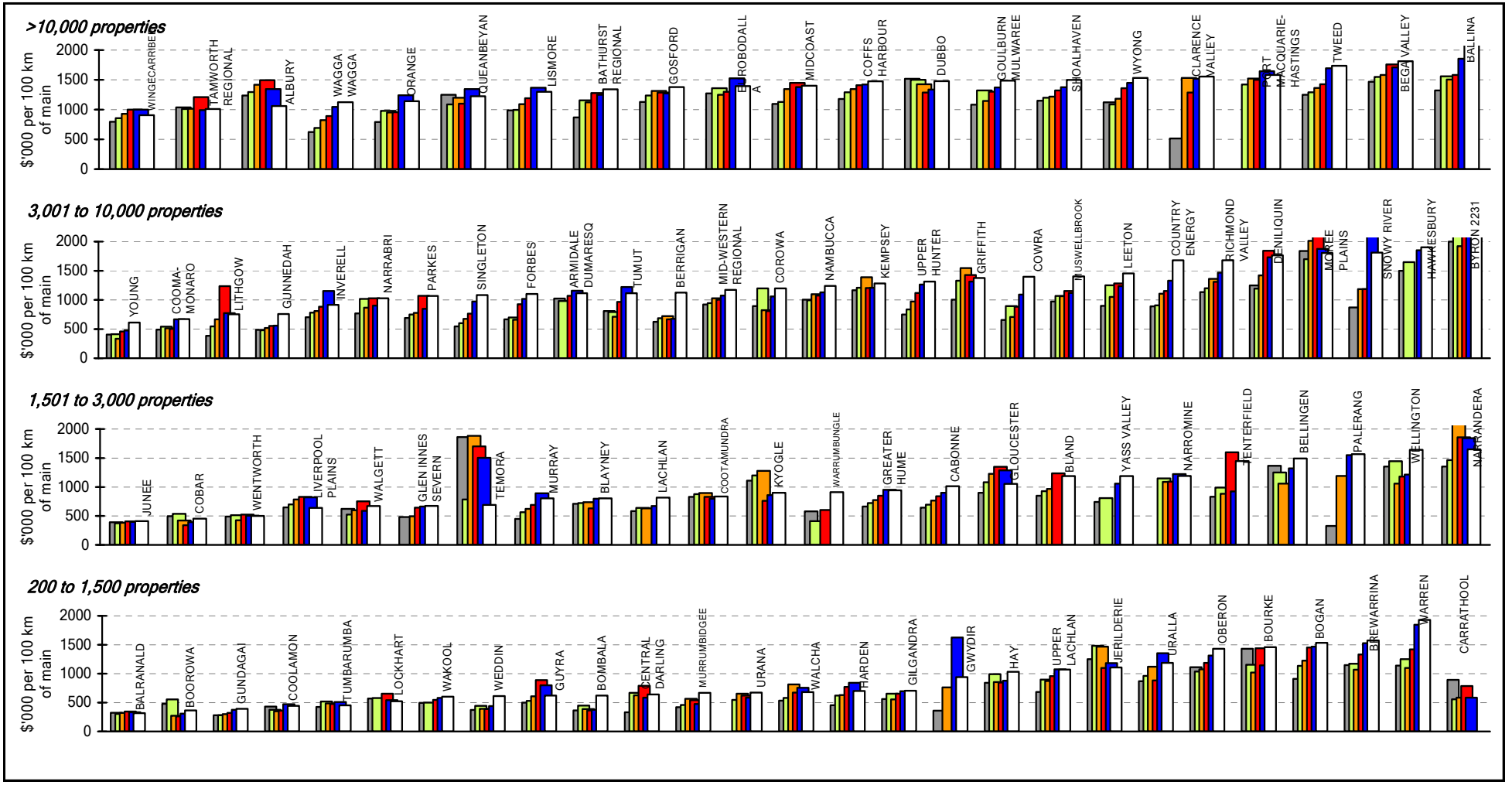
Parameter: Management Expenses (S1) + Total Operations Expenses (S2) - Purchase of Water + Bulk Supplier's OMA

[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Notes:

1. This figure shows ranked values of the 2008-09 water supply operating cost (OMA - operation, maintenance and administration) per property for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the operating costs for the 28 LWUs shown ranges from $146 to $570 per connected property. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median operating cost per connected property is $340.
3. For general notes see page 28.

Figure 61: Operating cost (OMA) per 100 km of main – sewerage



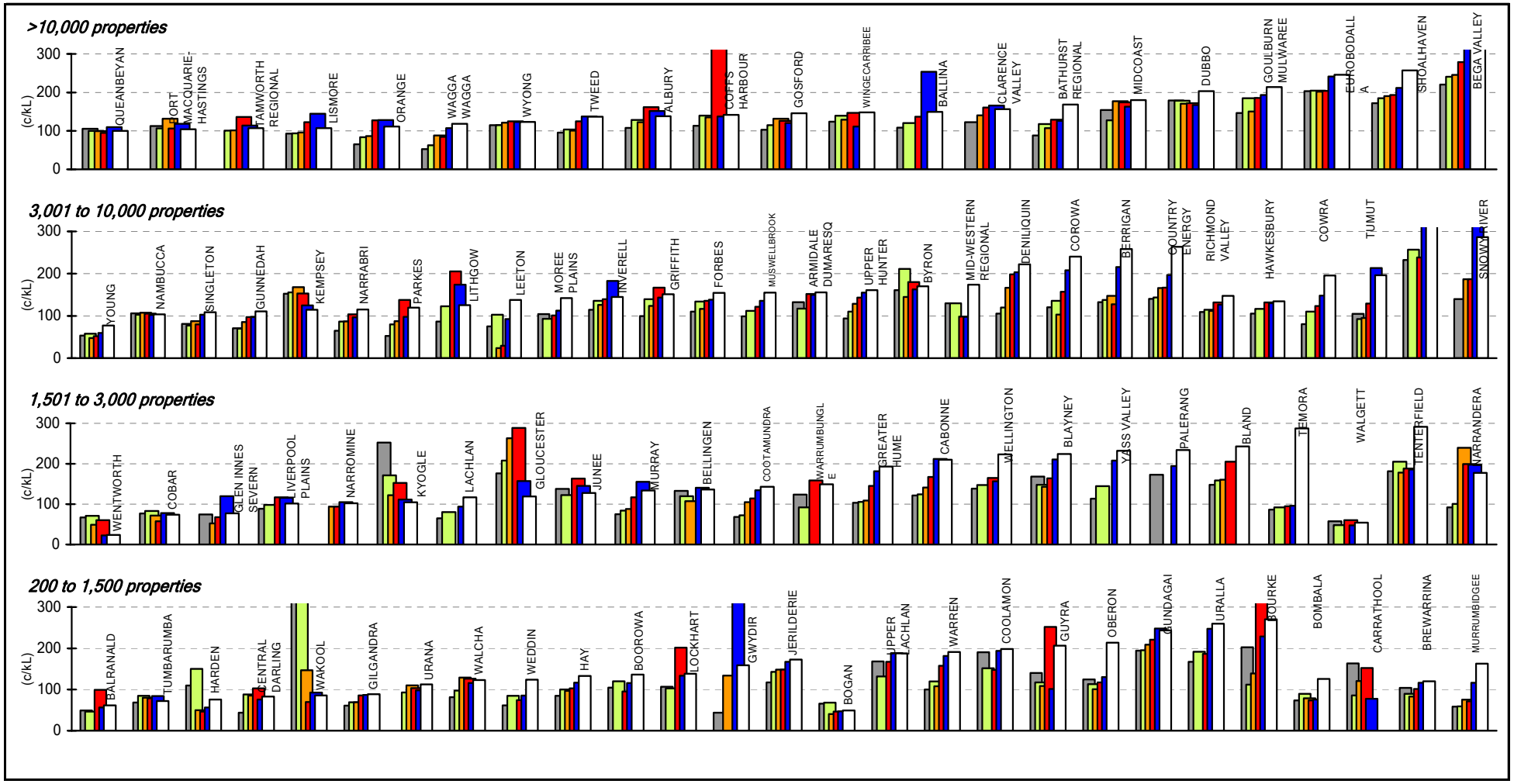
Parameter:

$$\frac{\text{Management Expenses (S1) + Total Operations and Maintenance Expenses (S2)}}{\text{[Length of Reticulation Mains (Q7) + Length of Rising Mains (Q8)]} \times 10}$$

Notes:

1. This figure shows ranked values of the 2008-09 sewerage operating cost (OMA - operation, maintenance and administration) per 100 km of main for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the sewerage operating costs for the 28 LWUs shown ranges from $0.61M to $2.23M per 100 km of sewer main. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median operating cost is $1.38M per 100 km of sewer main.
3. For general notes see page 28.

Figure 62: Operating cost (OMA) per kL – sewerage



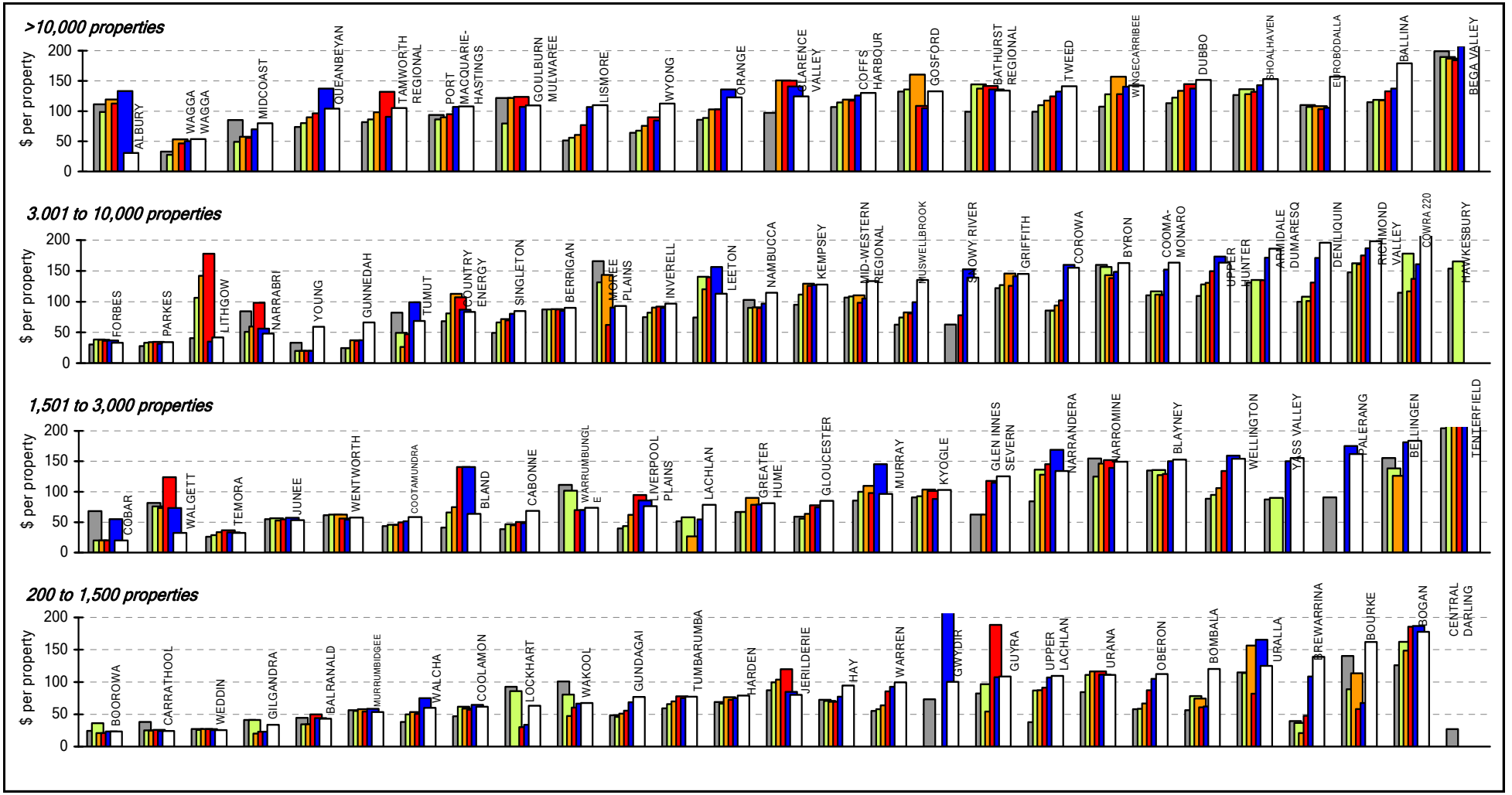
Parameter: $\frac{\text{Management Expenses (S1) + Total Operations and Maintenance Expenses (S2)}}{\text{Volume of Sewerage Receiving Secondary Treatment (Q26) x 10}}$

Notes:

1. This figure shows ranked values of the 2008-09 sewerage operating cost (OMA - operation, maintenance and administration) per 100 km of main for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the sewerage operating costs for the 28 LWUs shown ranges from 77c/kL to 317c/kL. Results for the previous 5 years are also shown in Jan 2009$.

2. The Statewide median operating cost is 145c/kL.
3. For general notes see page 28.

Figure 63: Management cost per property – sewerage



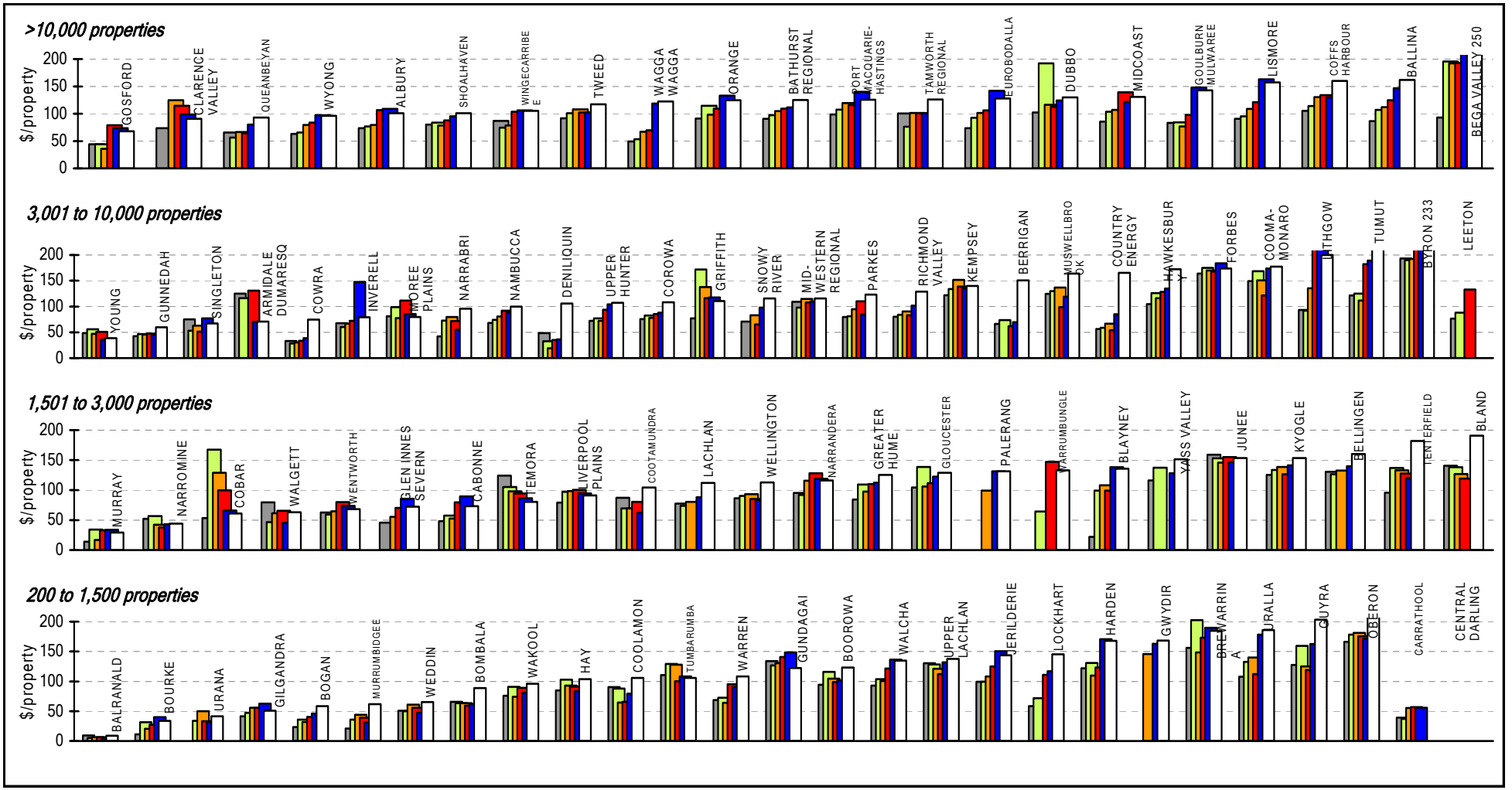
Parameter: Administration cost (S1a) + engineering cost (S1b)

[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Notes:

1. This figure shows ranked values of the 2008-09 water supply management cost per property for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 management costs for the 28 LWUs shown ranges from $33 to $221. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median management cost is $123 per connected property.
3. For general notes see page 28.

Figure 64: Treatment cost – sewerage



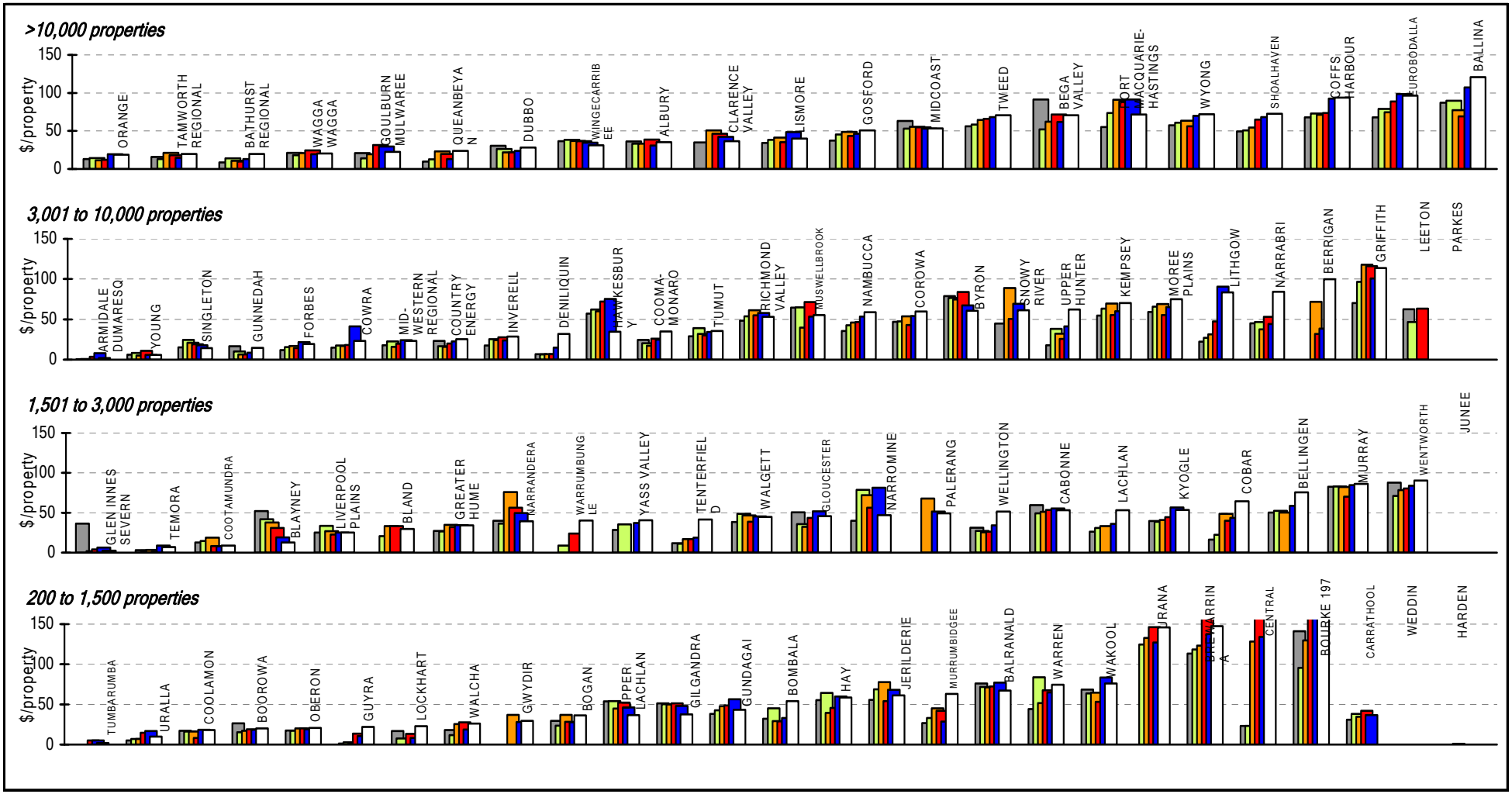
Parameter: Treatment Operation Expenses (S2f) + Treatment Chemical Cost (S2g) + Energy Cost (S2h)+ Treatment Maintenance Expenses (S2k)

[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Notes:

1. This figure shows ranked values of the 2008-09 sewerage treatment cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewerage treatment cost for the 28 LWUs shown ranges from $40 to $233 per connected property. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median sewage treatment cost is $108 per connected property.
3. For general notes see page 28.

Figure 65: Pumping cost – sewerage



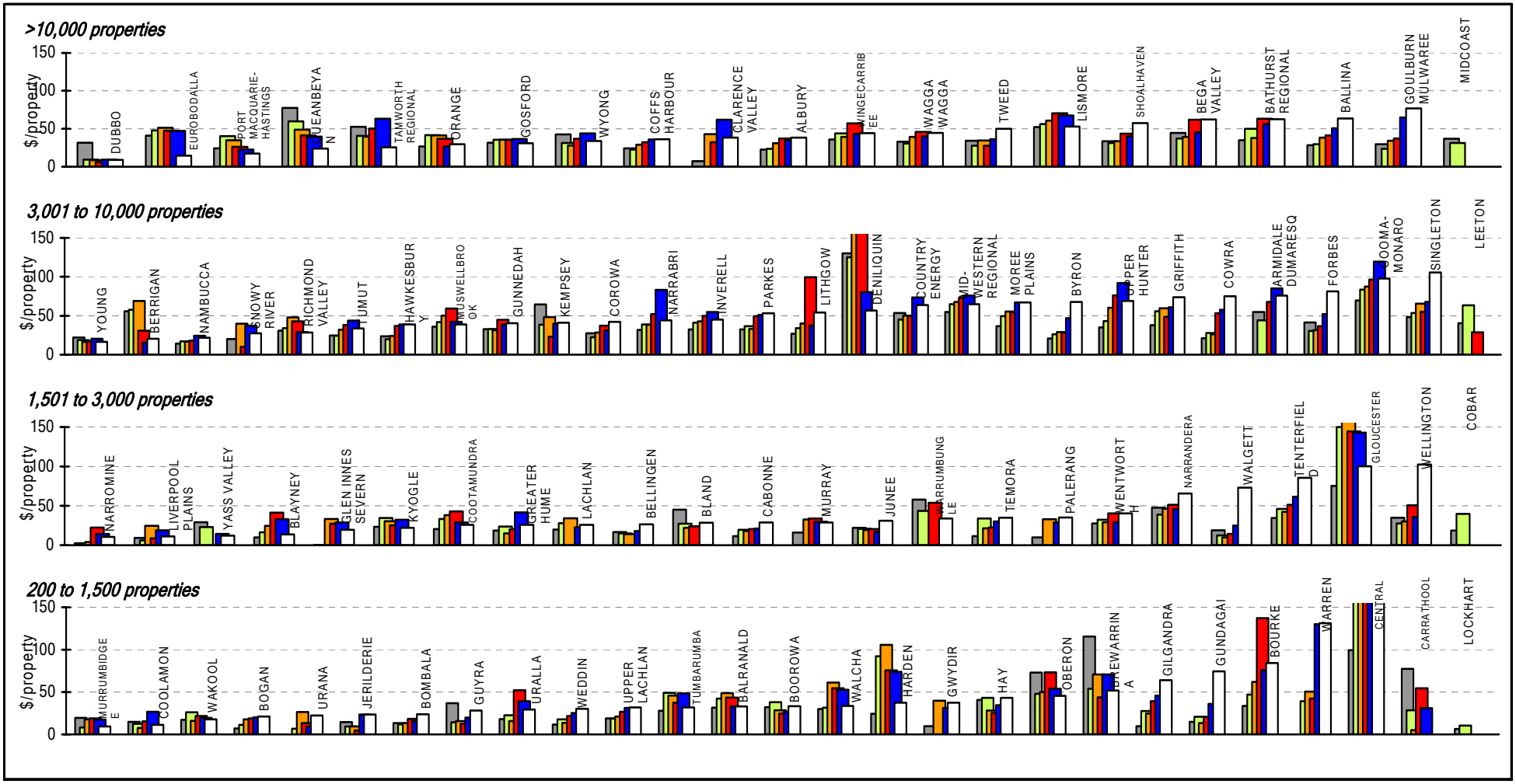
Parameter: Pumping station operation expenses (S2c) + energy cost (S2d) + treatment cost (S2e)

[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment

Notes:

1. This figure shows ranked values of the 2008-09 sewerage pumping cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewerage pumping cost for the 28 LWUs shown ranges from $2 to $114 per connected property. The 2 LWUs on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median pumping cost is $50 per connected property.
3. For general notes see page 28.

Figure 66: Sewer main cost – sewerage



Parameter:

$$\frac{\text{Serwer main operation cost (S2a) + sewer main maintenance cost (S2b)}}{\text{[No. of residential assessments (Q15) + No. of non-residential assessments (Q16) x No. of connected properties per assessment}}$$

Notes:

1. This figure shows ranked values of the 2008-09 sewer main cost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served - over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2008-09 sewer main cost for the 28 LWUs shown ranges from $17 to $105 per connected property. The 1 LWU on the right did not report this indicator for 2008-09. Results for the previous 5 years are also shown in Jan 2009$.
2. The Statewide median sewer main cost is $40 per connected property.
3. For general notes see page 28.

10. Tables

Table 1: NSW water supply performance indicators 2008-09

		Statewide Percentiles (% of properties)[3]		
		20%	Median (50%)	80%
	UTILITY CHARACTERISTICS			
3	**Residential Assessments** (% of total)	95	**92**	88
4	**New Residential Dwellings Connected to Water Supply** (%)	1.5	**0.9**	0.6
5	**Properties Served per km of Main**	53	**32**	22
6	**Rainfall** (% of average annual rainfall)	150	**115**	80
7	**Total Urban Water Supplied** (at Master Meters - ML)	13,800	**6,300**	2,700
8	**Peak Week to Average Consumption** (%)	130	**145**	205
9	**Renewals Expenditure** (% of current replacement cost of system assets)	0.8	**0.5**	0.2
10	**Employees** (employees per 1000 properties)	1.2	**1.4**	2.0
	SOCIAL - *Charges/Bills* *(2009/10)*			
12	**Residential Water Usage Charge** (c/kL)	190	**150**	100
13	**Residential Access Charge** ($/assessment)	90	**120**	230
14	**Typical Residential Bill** ($/assessment)	340	**430**	520
15	**Typical Developer Charge** ($/equivalent tenement)	7,500	**4,600**	2,700
	SOCIAL - *Health*			
18	**Urban Population without Reticulated Water Supply** (%)	0	**0.8**	2.4
19	**Physical Water Quality Compliance** (%)	100	**100**	100
19a	**Chemical Water Quality Compliance** (%)	100	**100**	100
20	**Microbiological (E. coli) Water Quality Compliance** (%)	100	**100**	100
20a	**Percent Population with Microbiological Compliance**	100	**100**	100
	SOCIAL - *Levels of Service*			
25	**Water Quality Complaints** (per 1000 properties)	0	**3**	8.7
26	**Water Service Complaints** (per 1000 properties)	1	**6**	36
27	**Customer Interruption Frequency** (per 1000 properties)	9	**33**	114
28	**Average Duration of Interruption** (minutes)	120	**167**	230
30	**Number of Main Breaks** (per 100 km of main)	5	**10**	19
31	**Drought Water Restrictions** (% of time)	0	**55**	100
32	**Total Days Lost** (%)	0.1	**2.2**	3.3
	ENVIRONMENTAL			
33	**Average Annual Residential Supplied** (kL/property)	140	**175**	260
33a	**Average Annual Residential Supplied COASTAL** (kL/property)	140	**150**	180
33b	**Average Annual Residential Supplied INLAND** (kL/property)	207	**245**	360
34	**Real Loss (leakage)** (L/service connection/day)	40	**60**	105
35	**Energy Consumption** (kWh/ML)	380	**640**	860
36	**Renewable Energy Consumption** (% of Total Energy)	48	**0**	0
36a	**Net Greenhouse Gas Emissions - WS & Sge** (net tonnes CO2 - equivalents/1000props)	190	**340**	440
	ECONOMIC - *Financial*			
40	**Revenue per property - Water** ($)	731	**578**	448
41	**Residential Revenue from Usage Charges** (% of total rates and charges)	75	**73**	60
42	**Current Replacement Cost per Assessment** ($)	15,180	**11,900**	9,300
43	**Economic Real Rate of Return** (%)	1.9	**0.3**	-0.6
44	**Return on Assets** (%)	1.6	**-0.1**	-1.2
45	**Net Debt to Equity** (%)	12	**0**	-7
46	**Interest Cover**	>100	**1**	0
47	**Loan Payment** ($/property)	150	**52**	0
47a	**Net Profit After Tax Ratio - WS & Sge (%)**	13	**0**	-21
47b	**Net Profit After Tax - WS & Sge ($)**	1889	**-173**	-3963
	ECONOMIC - *Efficiency*			
48	**Operating Cost (OMA) per 100 km of Main** ($'000)	780	**1,070**	1,785
49	**Operating Cost (OMA) per property** ($/property)	280	**330**	420
50	**Operating Cost (OMA) per kL** (c/kL)	79	**111**	149
51	**Management Cost** ($/property)	102	**127**	152
52	**Treatment Cost** ($/property)	21	**35**	98
53	**Pumping Cost** ($/property)	13	**29**	49
54	**Energy Cost** ($/property)	7	**13**	26
55	**Water Main Cost** ($/property)	36	**51**	95
56	**Capital Expenditure - Water Supply** ($/property)	452	**266**	110

Notes:

1. 20% top 20% of properties
   Median (50%) median of properties (Statewide)
   80% bottom 20% of properties
2. The above non-metropolitan NSW performance indicators are on a *percentage of connected properties* basis which is the most appropriate basis for judging Statewide performance by giving due weight to larger councils and reducing the effect of smaller LWUs.
3. The Table on page 231 of Appendix C shows percentiles on a *percentage of LWUs* basis as this is the most appropriate basis for comparing the performance of one LWU with other LWUs.

Table 2: NSW sewerage performance indicators 2008-09

		Statewide Percentiles (% of properties)[c]		
	UTILITY CHARACTERISTICS	**20%**	**Median (50%)**	**80%**
3	**Residential Assessments** (% of Total)	90	**93**	95
4	**New Residential Dwellings Connected to Sewerage** (%)	1.5	**0.8**	0.5
5	**Properties Served per km of Main**	49	**40**	34
6	**Volume of Sewage Collected** (ML)	13,300	**4,600**	1,400
7	**Renewals Expenditure** (% of current replacement cost of system assets)	0.4	**0.1**	0.0
8	**Employees** (per 1000 properties)	1.3	**1.6**	2
	SOCIAL - *Charges/Bills* *(2009/10)*			
11	**Residential Access Charge** ($/assessment)	400	**470**	600
12	**Typical Residential Bill** ($/assessment)	400	**470**	605
13	**Typical Developer Charge** ($/equivalent tenement)	7,490	**3,900**	2,530
14	**Non-residential sewer usage charge** (c/kL)	180	**100**	80
	SOCIAL - *Health*			
16	**Urban Properties without Reticulated Sewerage Service** (%)	0.4	**3.9**	7.4
17	**Percent of sewage treated to a tertiary level** (%)	100	**88**	8
18	**Percent of sewage volume treated that was compliant** (%)	100	**100**	84
19				
	SOCIAL - *Levels of Service*			
21	**Odour Complaints** (per 1000 properties)	0.0	**0.4**	1.2
22	**Service Complaints** (per 1000 properties)	3	**12**	27
23a	**Average Duration of Interruptions** (min)	60	**116**	146
25	**Total Days Lost**	0	**2.4**	3.5
	ENVIRONMENTAL			
26	**Volume of Sewage Collected per property** (kL)	305	**230**	180
26a	**Total recycled water supplied** (ML)	1,770	**320**	120
27	**Effluent Reclaimed for Recycling** (% of total effluent)	45	**10**	2
28	**Biosolids Reuse** (%)	100	**100**	0
30	**Energy Consumption** (kWh/ML)	520	**710**	1,020
31	**Renewable Energy Consumption** (% of total energy consumption)	0	**0**	0
32	**Net greenhouse gas emissions - WS & Sge** (net tonnes CO2 equivalents per 1000 properties)	170	**350**	390
33	**90 Percentile Licence Limits for Effluent Discharge:** BOD 35 mg/L; SS 40 mg/L; Total N 25 mg/L; Total P 5 mg/L			
34	**Compliance with BOD in Licence** (%)	100	**100**	100
35	**Compliance with SS in Licence** (%)	100	**100**	100
36	**Sewer Main Chokes and Collapses** (per 100 km of main)	25	**53**	107
37	**Sewer Overflows to the Environment** (per 100 km of main)	3	**12**	28
38	**Sewage treated that was compliant** (%)	100	**100**	84
	ECONOMIC - *Financial*			
42	**Revenue per property - Sge** ($)	821	**650**	444
43	**Revenue from Non-residential and Trade Waste Charges** (% of total rates & charges)	26	**16**	13
44	**Revenue from Trade Waste Charges** (% of total rates & charges)	6	**1**	0
45	**Current Replacement Cost per asssessment** ($)	16,200	**12,300**	9,200
46	**Economic Real Rate of Return** (%)	2.1	**1.1**	-0.4
46a	**Return on Assets** (%)	1.4	**0.5**	-1.0
47	**Net Debt to Equity** (%)	10	**0**	-5
48	**Interest Cover**	>100	**2**	0
48a	**Loan Payment** ($/property)	158	**55**	6
48b	**Net Profit After Tax Ratio WS & Sge** (%)	13	**0**	-21
48c				
	ECONOMIC - *Efficiency*			
49	**Operating Cost (OMA) per 100 km of Main** ($'000)	1,110	**1,380**	1,540
50	**Operating Cost (OMA) per property** ($/property)	280	**340**	410
51	**Operating Cost (OMA) per kL** (c/kL)	115	**145**	191
52	**Management Cost** ($/property)	80	**123**	150
53	**Treatment Cost** ($/property)	73	**108**	138
54	**Pumping Cost** ($/property)	20	**50**	70
55	**Energy Cost** ($/property)	16	**20**	32
56	**Sewer Main Cost** ($/property)	30	**40**	55
57	**Capital Expenditure** ($/property)	834	**248**	107

Notes:

1. *20%* *top 20% of properties*
   Median (50%) median of properties (Statewide)
   80% bottom 20% of properties
2. The above non-metropolitan NSW performance indicators are on a *percentage of connected properties* basis which is the most appropriate basis for judging Statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs.
3. The Table on page 232 of Appendix C show percentiles on a *percentage of LWUs* basis as this is the most appropriate basis for comparing the performance of one LWU with other LWUs.

Table 3: 2008-09 best practice management compliance

	WATER UTILITY (sorted on connected properties)	WATER SUPPLY & SEWERAGE REVENUE ($M)	WATER SUPPLY — COMPLIANCE WITH BPM CRITERIA (see Note 1)												SEWERAGE — COMPLIANCE WITH BPM CRITERIA (see Note 1)										
			(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)					(3) Sound Water Conservation implemented (Yes/No)	(4) Sound Drought Management implemented (Yes/No)	(5) Complete performance Reporting Form by 15 September each year (Yes/No)	(6) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 10 required Criteria (Note 2) (%)	Proposed Dividend from Surplus $'000	(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)							(3) Complete performance Reporting Form by 15 September each year (Yes/No)	(4) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 9 required Criteria (Note 3) (%)	Proposed Dividend from Surplus $'000
			Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Residential Usage Charges >=75% (Note 8)	(2d) Complying Non-Residential Charges	(2e) DSP with Commercial Developer Charges							Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Complying Non-Residential Charges	(2d) Complying Trade Waste Fees & Charges	(2e) DSP with commercial developer charges	(2f) Liquid trade waste approvals & policy				
	LWUs with >10,000 Properties																							
1	Gosford	59.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	1,694
2	Wyong	56.7	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
3	Shoalhaven	46.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	1,173
4	Rous (Bulk Supplier) (NO SGE)	13.8	Yes*	Yes				Yes	Yes	Yes	Yes	Yes	70												
5	MidCoast (Unfiltered)	45.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
6	Tweed	45.8	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes*	Yes*	Yes	Yes	100	
7	Port Macquarie-Hastings (Unfiltered)	40.7	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
8	Riverina (Groundwater) (NO SGE)	17.7	Yes*	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	90												
9	Wagga Wagga (NO WS)	13.6													Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	89	
10	Coffs Harbour (Unfiltered)	36.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
11	Albury City	20.0	Yes*		Yes		Yes	Yes	Yes	Yes	Yes	Yes	80		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
12	Fish River WS (Bulk Supplier, No Sge)	7.2	Yes*	Yes					Yes	Yes	Yes		50												
13	Tamworth Regional	33.6	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90	554	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	496
14	Clarence Valley	25.7	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
15	Eurobodalla (Unfiltered)	26.4	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
16	Wingecarribee	18.8	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
17	Queanbeyan (Reticulator)	15.5	Yes*	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
18	Dubbo	18.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
19	Orange	26.2	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
21	Bathurst Regional	18.4	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	80		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
22	Lismore (Reticulator)	14.9	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes		Yes	Yes	Yes*	Yes	Yes	89	
23	Bega Valley (Unfiltered)	20.9	Yes	Yes	Yes	Yes*	Yes	Yes	Yes		Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
24	Ballina (Reticulator)	14.8	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
25	Kempsey (Groundwater)	13.7	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
26	Country Energy	17.1	Yes	Yes	Yes		Yes	Yes[e]	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes	100	
27	Byron (Reticulator)	16.7	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
28A	Goldenfields (Reticulator) (NO SGE)	6.2	Yes	Yes	Yes	Yes	Yes	Yes			Yes		70												
28B	Goldenfields (Bulk) (NO SGE)	5.7	Yes	Yes				Yes			Yes		57												
	% of LWUs 'Yes' (>10,000 connected properties)		100%	96%	89%	63%	85%	93%	93%	89%	100%	89%	90%	Overall	100%	100%	100%	91%	100%	100%	100%	100%	100%	99%	Overall
	LWUs with 3,001 - 10,000 Properties																							
20	Goulburn Mulwaree	15.5		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	80		Yes*	Yes		Yes	Yes	Yes	Yes	Yes	Yes	89	
29	Armidale Dumaresq	8.7	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	89	
30	Griffith	10.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
30A	Hawkesbury (NO WS)	5.2													Yes*	Yes	Yes			Yes*	Yes			56	
31	Lithgow	7.1	Yes	Yes	Yes		Yes		Yes	Yes		Yes	70		Yes	Yes	Yes	Yes	Yes		Yes		Yes	78	
32	Mid-Western Regional	7.2	Yes		Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes				Yes		Yes	Yes	56	
33	Richmond Valley	10.2	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes*		Yes	89	
34	Nambucca (Groundwater)	6.3	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
35	Singleton	6.7	Yes*	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
36	Parkes	8.2	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
37	Inverell	5.3	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		80		Yes	Yes	Yes			Yes	Yes	Yes		67	
38	Moree Plains (Groundwater)	6.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
39	Cowra	6.9	Yes		Yes		Yes	Yes	Yes	Yes	Yes		70		Yes	Yes	Yes		Yes	Yes	Yes	Yes		78	
40	Central Tablelands (NO SGE)	4.1	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100												
41	Muswellbrook	8.0	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
42	Corowa	6.2	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes		Yes			67	
43	Tumut	4.6	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
44	Gunnedah (Groundwater)	4.0	Yes*	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes*	Yes	Yes		Yes	Yes	Yes	Yes	Yes	89	
45	Upper Hunter	5.1	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	

Table 3: 2008-09 best practice management compliance (continued)

	WATER UTILITY (sorted on connected properties)	WATER SUPPLY & SEWERAGE REVENUE ($M)	WATER SUPPLY: COMPLIANCE WITH BPM CRITERIA (see Note 1)												SEWERAGE: COMPLIANCE WITH BPM CRITERIA (see Note 1)										
			(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)					(3) Sound Water Conservation implemented (Yes/No)	(4) Sound Drought Management implemented (Yes/No)	(5) Complete performance Reporting Form by 15 September each year (Yes/No)	(6) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 10 required Criteria (Note 2) (%)	Proposed Dividend from Surplus $'000	(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)						(3) Complete performance Reporting Form by 15 September each year (Yes/No)	(4) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 9 required Criteria (Note 3) (%)	Proposed Dividend from Surplus $'000
			Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Residential Usage Charges >=75% (Note 8)	(2d) Complying Non-Residential Charges	(2e) DSP with Commercial Developer Charges							Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Complying Non-Residential Charges	(2d) Complying Trade Waste Fees & Charges	(2e) DSP with commercial developer charges	(2f) Liquid trade waste approvals & policy				
46	Narrabri (Groundwater)	3.2	Yes	Yes	Yes		Yes	Yes	Yes	Yes			70		Yes	Yes	Yes		Yes	Yes	Yes*	Yes		78	
47	Bellingen (Unfiltered)	3.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	89	
48	Leeton	4.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	100	
49	Young (Reticulator)	3.9	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes		90		Yes	Yes	Yes		Yes	Yes	Yes[e]	Yes		78	
50	Cooma-Monaro	5.1	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes		90		Yes	Yes	Yes			Yes		Yes		56	
51	Forbes	3.9	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
52	Snowy River (Unfiltered)	4.3	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	80		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
53	Berrigan (Dual Supply)	4.0	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		80		Yes	Yes	Yes			Yes		Yes		56	
54	Deniliquin	3.7	Yes*	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	90		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	89	
55	Warrumbungle	3.2	Yes*	Yes	Yes	Yes*	Yes	Yes		Yes	Yes	Yes	90		Yes*	Yes	Yes			Yes		Yes	Yes	67	
% of LWUs 'Yes' (3,001 - 10,000 connected properties)			96%	93%	100%	57%	100%	96%	93%	100%	93%	79%	91%	Overall	96%	100%	93%	57%	79%	93%	86%	86%	71%	85%	Overall
	LWUs with 1,501 - 3,000 Properties																								
56	Yass Valley	3.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
57	Wellington	3.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
58	Cootamundra (Reticulator)	2.3	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes		80		Yes8	Yes	Yes	Yes		Yes		Yes		67	
59	Lachlan	2.8	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes		80		Yes*	Yes	Yes		Yes		Yes	Yes		67	
60	Glen Innes Severn	2.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
61	Liverpool Plains	1.9		Yes	Yes	Yes*	Yes	Yes				Yes	60			Yes	Yes	Yes	Yes	Yes[e]	Yes		Yes	78	
62	Narromine (Groundwater)	2.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	90		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
63	Narrandera (Groundwater)	2.3	Yes	Yes	Yes	Yes	Yes		Yes	Yes			70		Yes*	Yes	Yes	Yes						44	
65	Murray (Dual Supply)	3.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
67	Cobar	2.2	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	80		Yes	Yes			Yes		Yes	Yes	Yes	67	
66	Cobar WB	1.3																							
68	Tenterfield	2.3	Yes	Yes	Yes	Yes*	Yes	Yes	Yes	Yes		Yes	90		Yes	Yes	Yes	Yes	Yes		Yes		Yes	78	
69	Temora (NO WS)	0.5													Yes*	Yes	Yes	Yes				Yes		56	
70	Kyogle	1.9	Yes*	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	90		Yes*	Yes	Yes	Yes	Yes		Yes	Yes	Yes	89	
71	Palerang	4.0	Yes*	Yes	Yes	Yes*	Yes	Yes	Yes	Yes	Yes		90		Yes*	Yes	Yes	Yes		Yes		Yes		67	
72	Bland (NO WS)	0.9													Yes*	Yes	Yes			Yes		Yes		56	
73	Upper Lachlan	3.1	Yes*	Yes	Yes		Yes	Yes	Yes	Yes	Yes		80		Yes*	Yes	Yes	Yes		Yes		Yes		67	
74	Wentworth (Dual Supply)	2.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			80		Yes	Yes								22	
75	Coonamble (Groundwater)	0.9	Yes*	Yes	Yes	Yes	Yes	Yes[e]		Yes	Yes		80		Yes*		Yes	Yes		Yes[e]		Yes		56	
76	Harden (Reticulator)	2.0	Yes*	Yes	Yes	Yes	Yes	Yes	Yes		Yes		80		Yes*	Yes	Yes	Yes						44	
% of LWUs 'Yes' (1,501 - 3,000 connected properties)			89%	94%	94%	89%	94%	72%	78%	83%	61%	50%	81%	Overall	90%	90%	85%	75%	50%	55%	50%	70%	45%	68%	Overall
	LWUs with 200 - 1,500 Properties																								
77	Junee (NO WS)	0.6													Yes	Yes								22	
78	Blayney (NO WS)	0.9													Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	89	
79	Walgett (Dual Supply)	1.9							Yes	Yes		Yes	30			Yes	Yes				Yes		Yes	44	
80	Greater Hume	1.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes				Yes	Yes	67	
81	Gwydir	1.8	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	80		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	89	
82	Gloucester	1.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100	
83	Oberon (Reticulator)	1.4		Yes	Yes	Yes	Yes	Yes	Yes		Yes		70			Yes	Yes	Yes		Yes		Yes		56	
84	Gilgandra (Groundwater)	1.2	Yes	Yes	Yes	Yes	Yes	Yes[e]		Yes	Yes		80		Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes		89	
85	Uralla	1.1		Yes	Yes	Yes*	Yes	Yes					50			Yes	Yes	Yes	Yes	Yes					56	
86	Hay (Dual Supply)	1.4	Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes		90		Yes	Yes	Yes	Yes			Yes	Yes		67	
87	Bourke (Dual Supply)	1.9	Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes	Yes	100		Yes	Yes				Yes[e]		Yes	Yes	56	
88	Wakool (Dual Supply)	1.8	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes			80		Yes*	Yes	Yes			Yes				44	
89	Bogan	1.2		Yes	Yes	Yes	Yes	Yes[e]			Yes	Yes	70			Yes	Yes	Yes		Yes[e]		Yes	Yes	67	
90	Guyra	1.3	Yes	Yes	Yes	Yes			Yes	Yes			60		Yes	Yes			Yes	Yes[e]	Yes			56	
91	Cabonne	2.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	89	
92	Carrathool (Groundwater)	*1.1*		Yes	Yes	Yes	Yes		Yes	Yes			60									Yes		11	
93	Tumbarumba	1.1	Yes*	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes	Yes	100		Yes*	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes	100	

Table 3: 2008-09 best practice management compliance (continued)

	WATER UTILITY (sorted on connected properties)	WATER SUPPLY & SEWERAGE REVENUE ($M)	WATER SUPPLY: COMPLIANCE WITH BPM CRITERIA (see Note 1)												SEWERAGE: COMPLIANCE WITH BPM CRITERIA (see Note 1)											
			(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)					(3) Sound Water Conservation implemented (Yes/No)	(4) Sound Drought Management implemented (Yes/No)	(5) Complete performance Reporting Form by 15 September each year (Yes/No)	(6) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 10 required Criteria (Note 2) (%)	Proposed Dividend from Surplus $'000	(1) Strategic Business Plan	(2) Pricing and Developer Charges (Yes/No)							(3) Complete performance Reporting Form by 15 September each year (Yes/No)	(4) Integrated Water Cycle Management Strategy Commenced (Yes/No)	Overall compliance with all 9 required Criteria (Note 3) (%)	Proposed Dividend from Surplus $'000
			Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Residential Usage Charges >=75% (Note 8)	(2d) Complying Non-Residential Charges	(2e) DSP with Commercial Developer Charges							Complete Current SBP & FP (Yes/No)	(2a) Full cost-recovery, minor cross subsidies	(2b) Complying Residential Charges	(2c) Complying Non-Residential Charges	(2d) Complying Trade Waste Fees & Charges	(2e) DSP with commercial developer charges	(2f) Liquid trade waste approvals & policy				
94	Gundagai	0.9		Yes	Yes	Yes	Yes		Yes	Yes	Yes		70			Yes	Yes	Yes	Yes				Yes		56	
95	Weddin (NO WS)	0.2													Yes*	Yes				Yes[e]	Yes	Yes	Yes	Yes	67	
96	Warren (Dual Supply)	0.9	Yes	Yes	Yes	Yes*	Yes	Yes[e]	Yes	Yes	Yes	Yes	100		Yes	Yes	Yes				Yes	Yes	Yes	Yes	67	
97	Bombala	0.8		Yes	Yes				Yes	Yes	Yes	Yes	60			Yes	Yes	Yes		Yes			Yes	Yes	67	
98	Walcha	0.8	Yes*	Yes	Yes	Yes	Yes				Yes	Yes	70		Yes*	Yes	Yes	Yes	Yes			Yes	Yes		78	
99	Coolamon (NO WS)	0.6													Yes	Yes						Yes			33	
100	Balranald (Dual Supply)	0.7	Yes*	Yes	Yes	Yes	Yes		Yes	Yes	Yes		80		Yes*	Yes	Yes	Yes				Yes			56	
101	Murrumbidgee (Groundwater)	0.5	Yes*	Yes	Yes	Yes	Yes						50		Yes*				Yes		Yes				33	
102	Lockhart (NO WS)	0.3													Yes	Yes	Yes	Yes					Yes		56	
103	Central Darling (Dual Supply)	0.8		Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes			70							Yes[e]					11	
104	Boorowa	0.9		Yes	Yes	Yes	Yes	Yes[e]		Yes	Yes		70			Yes	Yes		Yes	Yes[e]	Yes	Yes			67	
105	Brewarrina	1.0						Yes[e]	Yes	Yes	Yes	Yes	50							Yes[e]		Yes			22	
106	Jerilderie (Dual Supply)	0.6	Yes*	Yes	Yes	Yes	Yes		Yes	Yes			70		Yes*	Yes	Yes	Yes							44	
107	Urana (NO WS)	0.2													Yes*	Yes	Yes			Yes		Yes	Yes	Yes	67	
% of LWUs 'Yes' (200 - 1,500 connected properties)			60%	92%	92%	84%	84%	64%	76%	80%	68%	48%	75%	Overall	68%	87%	71%	55%	39%	52%	42%	71%	48%	59%	Overall
TOTAL 'YES' for large LWUs (>$10M Revenue)[6]			28	28	27	19	26	27	28	27	29	27	15		26	26	25	24	26	26	26	25	26	20	
% of Large LWUs (29 WS LWUs and 26 SGE LWUs)			97%	97%	93%	66%	90%	93%	97%	93%	100%	93%	52%		100%	100%	96%	92%	100%	100%	100%	96%	100%	77%	
TOTAL 'YES' for remainder of LWUs (<$10M Revenue)[6]			56	63	65	51	63	52	56	60	51	40	21		62	69	62	45	41	48	43	58	41	19	
% of Small LWUs (67 WS LWUs and 74 SGE LWUs)			84%	94%	97%	76%	94%	78%	84%	90%	76%	60%	31%		84%	93%	84%	61%	55%	65%	58%	78%	55%	26%	
TOTAL 'YES' for all LWUs			84	91	92	70	89	79	84	87	80	67	36		88	95	87	69	67	74	69	83	67	39	
% all LWUs			87%	94%	98%	74%	95%	81%	87%	90%	82%	69%	38%		88%	95%	87%	69%	67%	74%	69%	83%	67%	39%	

Overall Compliance for all WS Businesses 86%

Overall Compliance for all SGE Businesses 78%

Notes:

1 Best Practice Management criteria are set out in "*Best Practice Management of Water Supply and Sewerage Guidelines August 2007*" (BPMG).

2 There are 10 criteria which must be satisfied for an LWU to achieve compliance for water supply. These are (1), (2a), (2b), (2c), (2d), (2e), (3), (4), (5) and (6) shown in the table above for water supply.

3 There are 9 criteria which must be satisfied for an LWU to achieve compliance for sewerage. These are (1), (2a), (2b), (2c), (2d), (2e), (2f), (3) and (4) shown in the table above for sewerage.

4 Compliances shown in the table above are from Notes 2 or 3 of the Special Purpose Financial Reports reported by each LWU in their Annual Financial Statements, supplemented by other data provided to the NSW Office of Water by the LWU. Complying documents (including strategic business plans and IWCM evaluations and strategies) provided by LWUs to the NSW Office of Water by February 2010 are included in the results reported.

5 As shown in Table 8C of the *2008-09 NSW Water Supply and Sewerage Benchmarking Report*, 46 LWUs have completed an IWCM Evaluation, 26 of which have also completed an IWCM Strategy. These IWCM Evaluations and Strategies have been reviewed by the NSW Office of Water and found to be soundly based. Similarly, the strategic business plans and trade waste waste policies shown as Yes above have been found to be soundly based. However, the water conservation and drought management plans have only been briefly examined to confirm that they address the required issues.

6 The revenue for LWUs with water supply only or sewerage only is shown left justified above. For these LWUs, the relevant revenue to be classified as a "large LWU" is $5M.

7 Where an LWU has not yet reported its revenue for 2008-09, the revenue reported for 2007-08 is shown instead. This is shown in italics bold.

8 For criterion (2c) utilities with over 4,000 connected properties which obtained 65% to 74% of residential revenue from usage charges are shown as Yes*. Utilities with 4,000 or fewer connected properties are only required to achieve 50% for criterion (2c). Such utilities which have obtained 40% to 49% residential revenue from water usage charges are shown as Yes*. Bulk water suppliers are not required to comply with criteria 2(b), 2(c) or 2(d) which refer to residential water tariffs.

9 Yes* for criterion (1) indicates that the LWU's strategic business plan and financial plan need to be updated.

10 Yes* for criterion (2e) for water supply or for sewerage indicates that the LWU has commercial developer charges in place but is yet to complete its complying Development Servicing Plan (DSP). Yes[e] for these criteria indicates the LWU is exempt from the requirement to prepare a DSP due to low growth (under 5 lots/a).

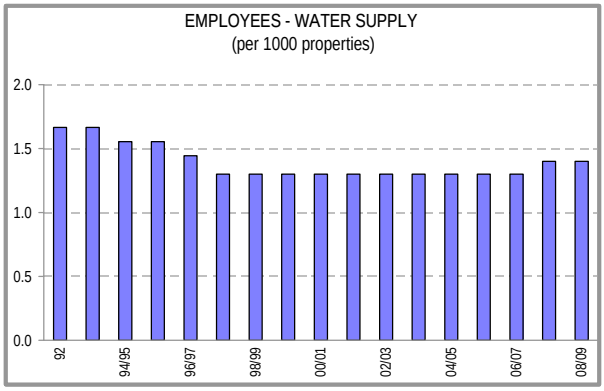
11 Yes* for criterion (2f) for sewerage indicates that the LWU has a year 2006 or earlier trade waste policy, which needs to be updated.

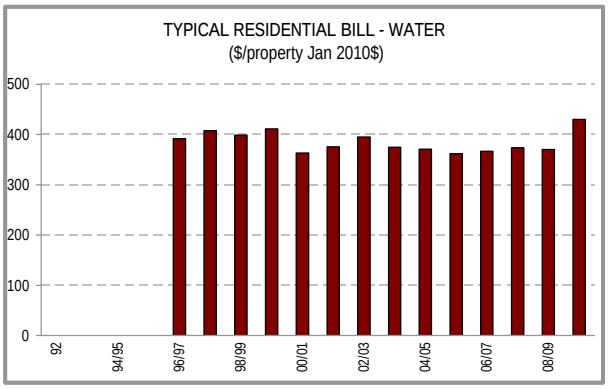
12 As shown above, the overall levels of compliance with the outcomes of the Best-Practice Management Criteria for water supply (for all 10 criteria) were: 90% for LWUs with >10,000 properties; 91% for LWUs with 3,001 - 10,000 properties; 81% for LWUs with 1,501 - 3,000 properties and 75% for LWUs with 200 - 1,500 properties respectively. The overall level of compliance for water supply for all LWUs was 86%.

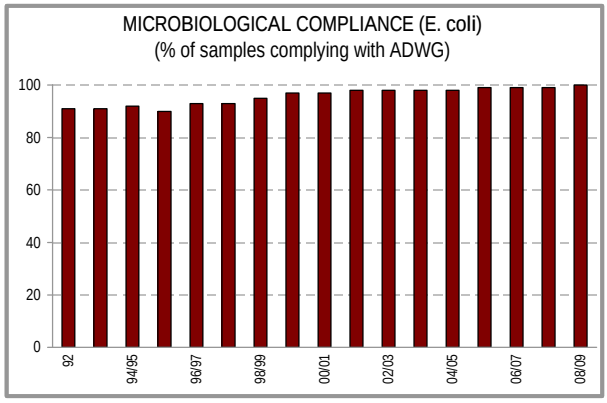
13 As shown above, the overall levels of compliance with the outcomes of the Best-Practice Management Critieria for sewerage (for all 9 criteria) were: 99% for LWUs with >10,000 properties; 85% for LWUs with 3,001 - 10,000 properties; 68% for LWUs with 1,501 - 3,000 properties and 59% for LWUs with 200 - 1,500 properties respectively. The overall level of compliance for sewerage for all LWUs was 78%.

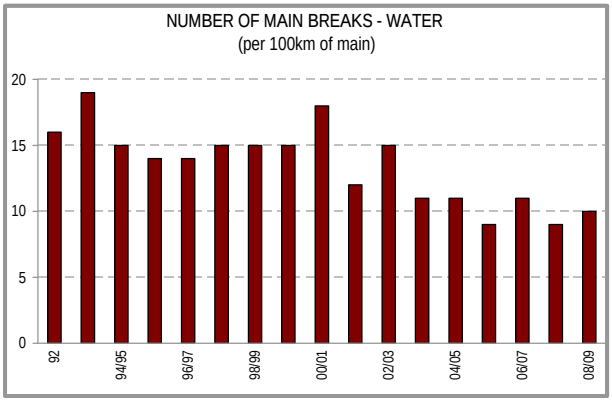
14 The overall compliance for water supply and sewerage was 82%.

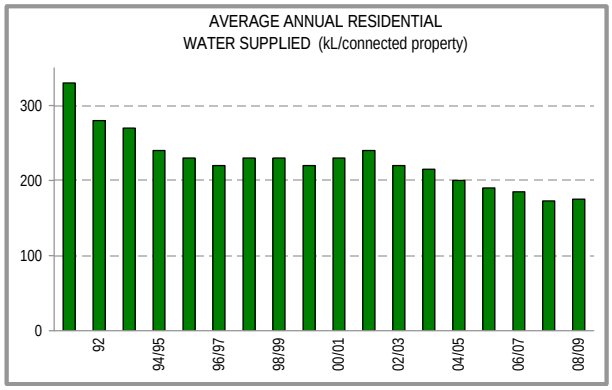
Table 4: Trends in statewide performance indicators – Water Supply 1991 to 2008-09

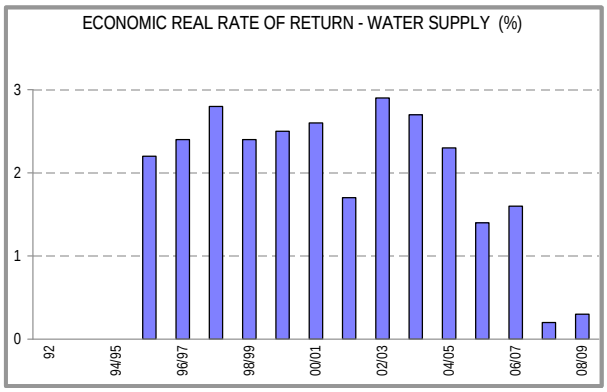


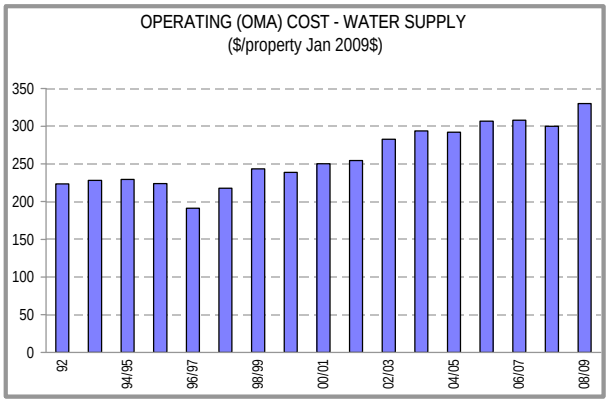












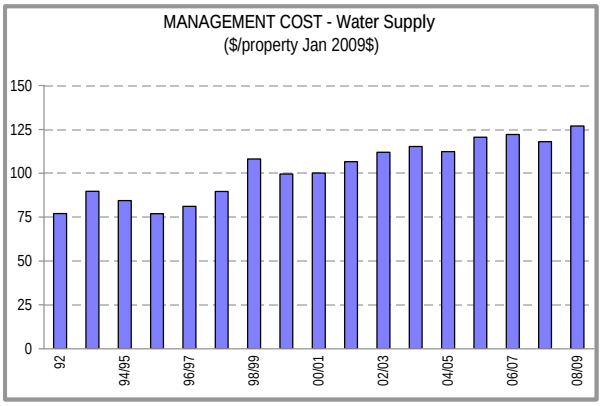
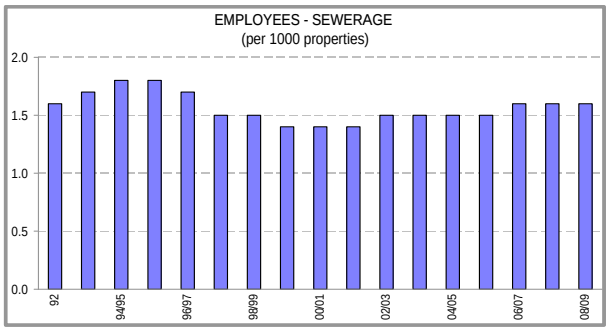
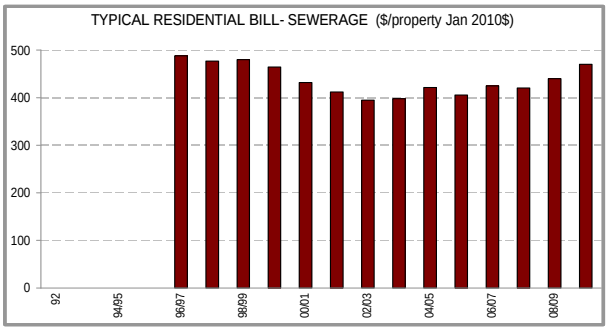
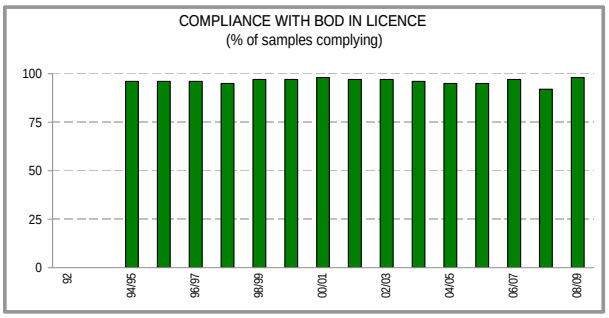
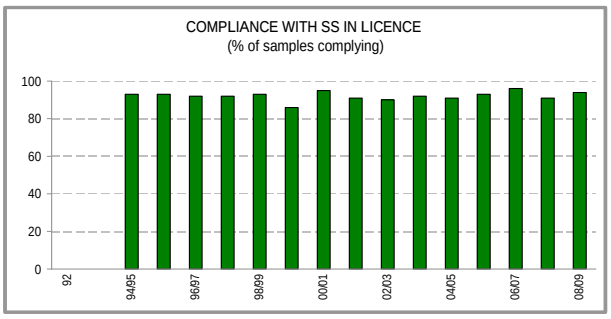


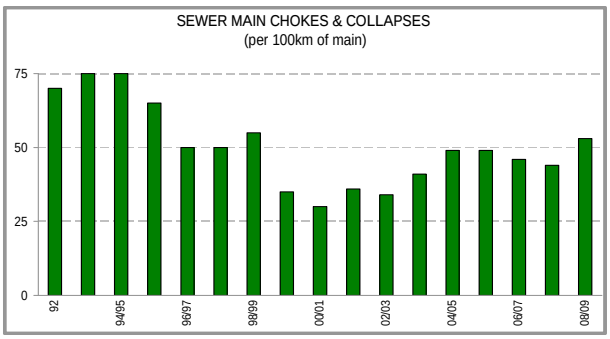
Table 4: Trends in statewide performance indicators – Sewerage 1991 to 2008-09

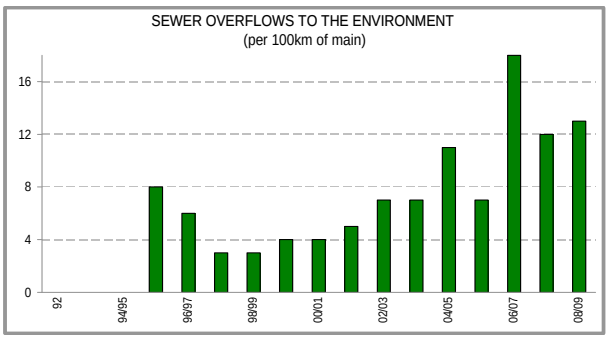


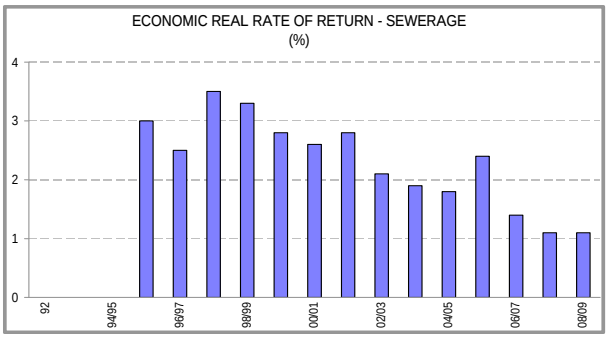


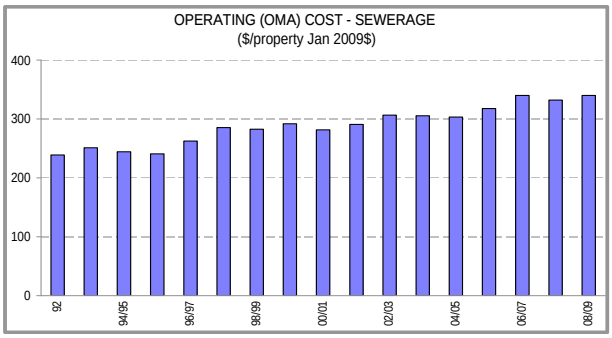


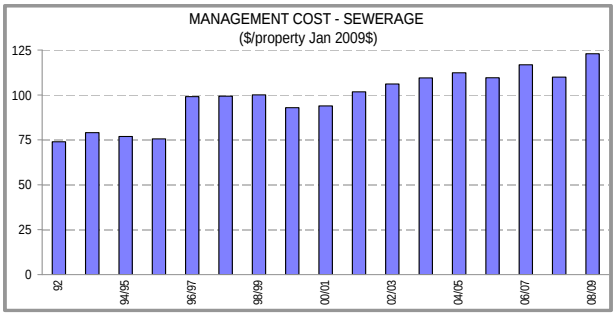












Notes:

1. The values shown are Statewide medians on a percentage of connected properties basis from 1992 to 2008/09, except for microbiological, BOD and SS compliance which are the percentage of samples complying.
2. From 1998/99, results are on the basis of E. coli in the 1996/2004 NHMRC/NRMMC Australian Drinking Water Guidelines. 1991 to 1997/98 results are on the basis of the 1987 NHMRC/AWRC Drinking Water Guidelines for Total Coliforms.

Table 5: 2008-09 NSW water utility performance summary

	WATER UTILITY	Water Supply												Sewerage						Water Supply & Sewerage - Current (2008-09) unless noted as 2009/10											
		Water Supply Connected Properties (No.)[5]	Total Water Supplied Potable + Non-potable + Recycled Excl Bulk Supply (ML)[2, 3]	Average Annual Residential Water Supplied Potable + Nonpotable (kL/connected proopertv)	Water Main Breaks (per 100km of Main)	Avge Duration of Unplanned Interruption (mins)	Revenue ($M)[3, 8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines)					Water Quality Complaints (per 1000 props)	Revenue ($M)[2,3,8]	% Sge Treated that was Compliant (%)	Sewer Overflows (No per 100km of Main)	Sewage Odour Complaints (per 1000 properties)	Recycled Water		Net Profit After Tax ($M)	2009/10 Typical Residential Bill ($/assessment)	2009/10 Typical Developer Charge ($/ET)	Current Replacement Cost per Assessment ($)	OMA Cost ($/connected property)	Mngmnt Cost ($/connected property)	ERRR (%)	Net Debt to Equity (%)	Capital Expenditure		Strategic Business Plans Completed ?
								Chemical Note 11 (%)	Zones	E. coli Note 12 (%)	Zones	% Pop'n with E. coli Compliance					(% of effluent recycled)	(Total ML)										($/prop)	($M)	Note 14 (Yes/No)
		(1) C 4	(2) W11	(3) W 12	(3a) A 8	(3b) C 15	(4) F 1	(7)	(7a) H 4	(8)	(8a) H 2	(8b) H 3	(8c) C 9	(9) F 2	(10) E 4	(10a) See also E13 in Table 15	(11)	(12) W 27	(12a) W 26	(13a) F 24	(13b) P8	(14)	(15)	(17) F 13	(18)	(19) F19	(19a) F22	(19b)	(19c) F16	(21)
	Sydney Water	1,755,000	492,000	198	34	141	908	100	13 of 13	100	13 of 13	100	0.6	996	96			5	25,442	177501	875			539		1.2	103		1848	
	Hunter Water	222,000	67,020	180	33	121	90	100	5 of 5	100	4 of 5	100	3	111	91			8	5,092	44253	633			456		2.2	32		139	
	Sydney Catchment Authority						176							NO SGE						39172									80	
LWUs with > 10,000 Properties																														
1	Gosford	70,070	12,620	140	27	238	28.9	100	2 of 2	100	2 of 2	100	25	30.2	100	28	2.0	2	284	1.5	804	6,430	8,618	566	260	0.6	1	502	34.8	Yes
2	Wyong	59,500	13,360	141	9	210	31.2	100	1 of 1	100	1 of 1	100	5	25.5	100	28	0.8	9	1,296	-17.5	782	5,090	10,529	679	264	-1.0	10	330	19.6	Yes
3	Shoalhaven	45,670	15,130	152	14	-	16.5	100	4 of 4	100	4 of 4	100	3	*30.4*	83	13	1.2	29	1,902	-0.3	848	13,650	9,223	685	277	0.7	4	563	22.4	Yes
4	Rous (Bulk Supplier) (NO SGE)	45,660	502		16	180	13.8	100	2 of 2	100	2 of 2	100	0.2	*NO SGE*						-5.2		3,690	9,492	182	85	-0.4	11	80	3.7	Yes*
5	MidCoast (Unfiltered)	36,270	9,170	150	5	-	18.9	93	3 of 4	100	4 of 4	100	9	26.6	100	1	1.3	2	159	-15.0	1,239	13,430	12,656	700	164	0.2	25	1,713	59.5	Yes
6	Tweed	31,660	9,210	180	5	120	18.3	100	3 of 3	100	3 of 3	100	0.8	27.5	91	6	0.4	8	743	-4.0	899	15,860	15,170	716	294	0.0	1	2,061	64.4	Yes
7	Port Macquarie-Hastings (Unfiltered)	29,880	6,190	151	3	178	21.5	87	4 of 5	100	5 of 5	100	9	19.2	90	4	0.4	3	266	-7.2	1,039	12,580	15,631	600	217	1.9	2	1,098	30.2	Yes
8	Riverina (Groundwater) (NO SGE)	28,280	17,080	374	14	334	17.7	100	13 of 14	100	14 of 14	100	2	*NO SGE*						3.9	401	3,500	8,388	303	85	3.4	0	306	8.7	Yes*
10	Coffs Harbour (Unfiltered)	23,830	5,800	165	11	120	16.2	100	3 of 3	100	3 of 3	100	8	20.5	100	27	0.3	23	1,572	-5.4	1,153	11,940	14,936	706	247	1.9	26	2,849	65.8	Yes
11	Albury	22,210	6,890	222	12	180	7.9	100	4 of 4	100	4 of 4	100	0.5	12.1	86	1	0.0	96	3,589	-1.0	633	7,560	15,036	524	146	0.1	4	423	9.0	Yes*
12	Fish River WS (Unfiltered, Bulk Supplier	23,500	684		5	2,160	*7.2*	100	1 of 1	100	1 of 1	100	0.5	*NO SGE*									4,000	0	31					Yes*
13	Tamworth Regional	20,350	9,270	226	12	-	15.1	100	6 of 7	100	7 of 7	100	-	18.5	99	14	0.1	36	1,766	16.4	1,101	5,790	13,680	673	234	4.7	-9	1,426	26.8	Yes
14	Clarence Valley	20,810	6,220	176	10	120	15.3	100	5 of 5	100	4 of 5	99	3	10.4	83	21	0.8	4	127	2.1	980	12,330	11,730	647	240	1.5	6	3,391	51.3	Yes
15	Eurobodalla (Unfiltered)	19,200	4,000	129	4	-	12.9	100	1 of 1	100	1 of 1	100	-	13.5	100	7	1.3	8	237	4.0	1,219	19,060	12,494	714	316	1.9	0	974	18.3	Yes
16	Wingecarribee	18,000	4,830	183	8	120	9.1	92	1 of 2	100	2 of 2	100	5	9.7	100	23	1.1	2	64	0.4	893	12,900	15,429	620	269	0.5	-2	1,279	20.1	Yes
17	Queanbeyan (Reticulator)	15,780	4,050	198	1	240	9.7	100	1 of 1	100	1 of 1	100	0.0	5.8	100	6	0.0	1	47	-1.9	978	8,710	10,964	746	216	-0.9	-16	249	4.0	Yes*
18	Dubbo	16,120	8,210	331	7	138	9.2	100	1 of 1	100	1 of 1	100	0.4	9.7	75	4	0.2	97	2,576	0.1	939	9,480	13,446	789	310	0.7	3	397	6.1	Yes
19	Orange	15,890	8,350	259	28	180	12.6	100	2 of 2	100	2 of 2	100	2	13.6	45	66	1.1	87	3,247	7.4	808	10,280	14,468	629	267	4.0	-11	410	6.5	Yes*
21	Bathurst Regional	14,940	*5,780*	240	9	120	10.6	100	1 of 1	100	1 of 1	100	14	7.8	100	29	0.1	100	3,539	4.9	934	4,700	14,298	732	277	2.0	-10	373	5.5	Yes
22	Lismore (Reticulator)	13,970	3,520	159	20	351	7.0	100	0 of 1	100	1 of 1	100	2	7.9	100	1	0.8	0	10	-4.8	977	9,510	10,536	742	201	-1.5	-4	236	3.0	Yes
23	Bega Valley (Unfiltered)	14,050	3,990	154	5	180	8.7	100	6 of 6	100	6 of 6	100	2	12.2	97	23	0.4	46	813	2.8	1,445	19,960	11,469	967	387	1.5	0	874	10.8	Yes
24	Ballina (Reticulator)	14,020	3,570	175	9	120	6.2	100	1 of 1	100	1 of 1	100	0.0	8.6	93	5	1.0	3	152	-3.0	834	11,250	9,334	921	288	-2.3	-11	442	5.7	Yes
25	Kempsey (Groundwater)	12,290	3,630	156	24	100	7.3	100	6 of 8	100	7 of 8	100	0.5	6.4	82	60	0.3	1	40	-3.3	1,042	15,020	26,802	716	245	-0.2	4	1,122	10.8	Yes
26	Country Energy	10,450	5,760	284	11	60	12.5	100	2 of 2	100	2 of 2	100	0.1	4.6	100	11	0.8	41	523	1.3	910		5,600	1,138	300		0	1,893	19.7	Yes
27	Byron (Reticulator)	10,650	3,020	181	8	120	5.7	100	1 of 1	100	1 of 1	100	0.4	11.0	100	14	1.2	13	487	-1.1	1,199	16,760	6,743	961	293	1.1	6	842	8.3	Yes
28A	Goldenfields (Reticulator) (NO SGE)	9,990	5,530	298	6	191	6.2	100	1 of 1	100	1 of 1	100	7	*NO SGE*						-0.2	572	6,400	16,100	632	144	-0.9	0	134	1.3	Yes
28B	Goldenfields (Bulk Supplier) (NO SGE)	18,590			0		5.7	100	3 of 3	100	3 of 3	100		*NO SGE*						-0.6			8,000	234	50	-0.8	0	209	3.9	Yes
	Totals or Medians (% of LWUs basis excl NO SGE suppliers) for >10,000	*574,000*	*176,350*	*176*	*9*	*138*	*352*	*23 of 26 complied with chemical guidelines*		*26 of 26 complied with E. coli guidelines*				*332*			*0.8*	*8*	*23,400*		*958*	*11,940*	*12,575*	*710*	*265.5*	*0.7*	*1*	*858*	*520*	
LWUs with 3,001 - 10,000 Properties																														
20	Goulburn Mulwaree	10,540	2,540	134	14	180	7.2	100	2 of 2	100	2 of 2	100	6	8.3	58	8	0.0	100	3,166	0.5	1,025	9,270	21,258	712	216	1.6	7	417	4.3	Yes*
29	Armidale Dumaresq	8,460	2,710	214	12	-	4.7	100	1 of 1	100	1 of 1	100	0.0	4.0	100	45	0	33	603	-2.9	905	9,080	12,532	831	435	0.7	2	493	4.1	Yes
30	Griffith	8,230	6,670	566	16	180	6.1	100	2 of 2	100	2 of 2	100	0.6	4.8	76	0	0.4	11	229	-0.1	1,091	5,050	11,913	1,058	397	0.2	-3	626	4.6	Yes
31	Lithgow	7,820	2,330	173	6	120	3.7	100	1 of 1	100	1 of 1	100	6	3.4	73	22	0.6	0	0	0.6	895		7,106	737	88	-0.1	-6	259	1.9	Yes
32	Mid-Western Regional	7,100	1,760	158	2	120	4.1	100	3 of 3	100	2 of 3	31	2	3.1	22	60	0	7	92	-0.6	862	10,200	14,353	786	307	-0.9	-6	334	2.3	Yes
33	Richmond Valley	6,960	3,090	175	5	-	4.1	100	1 of 1	100	1 of 1	100	0.0	6.1	100	6	0.0	13	288	-2.1	1,178	14,420	11,017	930	419	1.0	0	781	5.2	Yes
34	Nambucca (Groundwater)	6,210	*1,550*	137	6	120	3.0	100	1 of 1	100	1 of 1	100	1.3	3.3	99	35	0.0	7	125	0.8	642	8,480	11,352	578	215	1.2	-9	208	1.2	Yes*

Table 5: 2008-09 NSW water utility performance summary (continued)

	WATER UTILITY	Water Supply												Sewerage						Water Supply & Sewerage - Current (2008-09) unless noted as 2009/10										
		Water Supply Connected Properties (No.)[5]	Total Water Supplied Potable + Non-potable + Recycled Excl Bulk Supply (ML)[2, 3]	Average Annual Residential Water Supplied Potable + Nonpotable (kL/connected property)	Water Main Breaks (per 100km of Main)	Avge Duration of Unplanned Interruption (mins)	Revenue ($M)[3, 8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines)					Water Quality Complaints (per 1000 props)	Revenue ($M)[2,3,8]	% Sge Treated that was Compliant (%)	Sewer Overflows (No per 100km of Main)	Sewage Odour Complaints (per 1000 properties)	Recycled Water		Net Profit After Tax ($M)	2009/10 Typical Residential Bill ($/assessment)	2009/10 Typical Developer Charge ($/ET)	Current Replacement Cost per Assessment ($)	OMA Cost ($/connected property)	Mngmnt Cost ($/connected property)	ERRR (%)	Net Debt to Equity (%)	Capital Expenditure		Strategic Business Plans Completed ?
								Chemical Note 11 (%)	Zones	E. coli Note 12 (%)	Zones	% Pop'n with E. coli Compliance						(% of effluent recycled)	(Total ML)									($/prop)	($M)	Note 14 (Yes/No)
		(1) C 4	(2) W11	(3) W 12	(3a) A 8	(3b) C 15	(4) F 1	(7)	(7a) H 4	(8)	(8a) H 2	(8b) H 3	(8c) C 9	(9) F 2	(10) E 4	(10a) See also E13 in Table 15	(11)	(12) W 27	(12a) W 26	(13a) F 24	(13b) P8	(14)	(15)	(17) F 13	(18)	(19) F19	(19a) F22	(19b)	(19c) F16	(21)
35	Singleton	6,300	2,680	269	12	120	4.2	100	1 of 1	100	1 of 1	100	1.0	2.5	100	10	0.2	33	451	1.4	806	7,260	12,114	708	220	0.3	0	259	1.5	Yes*
36	Parkes	5,840	6,510	315	11	120	6.2	100	1 of 1	100	1 of 1	100	0.9	2.0	57	12	0.0	54	475	-1.0	910	9,650	20,462	767	112	0.5	0	539	2.8	Yes
37	Inverell	5,270	2,340	290	4	50	3.5	100	2 of 3	100	3 of 3	100	0.9	1.8	100	3	-	0	0	0.1	949	13,100	13,469	736	234	0.7	-4	607	3.1	Yes
38	Moree Plains (Groundwater)	4,420	9,210	1,960	45	60	3.7	100	5 of 6	100	3 of 6	95	10	3.0	100	26	0.0	76	800	-0.3	1,632	7,900	14,199	1,019	345	1.2	15	1,378	6.0	Yes
39	Cowra	5,250	2,420	211	10	180	4.3	100	1 of 1	97	0 of 1		80	2.6	45	100	0	100	672	-0.2	1,053		16,855	1,073	587	0.6	-2	453	1.8	Yes
40	Central Tablelands (NO SGE)	5,260	2,100	196	10	240	4.1	100	2 of 2	100	2 of 2	100	2	*NO SGE*						-0.6	434	8,090	19,593	439	221	0.3	5	225	1.2	Yes
41	Muswellbrook	5,310	3,030	263	35	167	4.7	100	2 of 3	100	3 of 3	100	14	3.3	55	2	6.6	75	960	1.9	983	8,280	11,333	896	284	1.9	-15	390	2.0	Yes
42	Corowa	4,790	2,060	245	19	120	3.6	100	3 of 4	100	3 of 4	100	4	2.6	93	14	0.9	49	343	-0.1	864	2,910	10,131	733	344	2.1	-1	706	3.3	Yes
43	Tumut	4,410	1,540	219	6	120	2.0	100	5 of 5	100	4 of 5	99	5	2.6	100	43	0	4	33	-0.4	885	9,420	11,004	706	126	-0.3	0	2,800	11.9	Yes
44	Gunnedah (Groundwater)	4,530	2,270	282	15	120	2.6	100	4 of 4	96	2 of 4	14	0.2	1.4	75	72	0	42	546	0.7	757	6,280	11,315	421	135	1.6	0	365	1.6	Yes*
45	Upper Hunter	4,200	1,860	230	28	45	3.3	100	3 of 4	100	3 of 4	14	0.2	1.8	60	-	0	11	173	0.7	894	7,640	7,666	948	325	-0.5	0	540	2.2	Yes
46	Narrabri (Groundwater)	4,370	3,510	548	96	120	1.5	100	6 of 6	100	5 of 6	99	19	1.7	37	-	0.3	4	37	-0.6	1,018		10,831	576	129	-1.4	-17	154	0.6	Yes
47	Bellingen (Unfiltered)	4,010	1,190	168	6	120	2.1	100	2 of 2	100	2 of 2	100	2	1.7	100	40	1.4	0	0	0.6	923	10,550	9,569	755	357	-0.2	-25	366	1.3	Yes
48	Leeton	3,910	3,090	444	21	120	2.6	100	3 of 4	100	2 of 4	96	0.0	2.2	98	6	0	1	20	0.3	977	7,600	12,026	920	227	0.2	-21	345	1.2	Yes
49	Young (Reticulator)	4,580	1,610	207	17	120	2.4	100	1 of 1	100	1 of 1	100	0.0	1.5	100	80	1	73	506	0.5	905		5,681	392	108	2.5	-23	172	0.7	Yes
50	Cooma-Monaro	3,830	1,430	*289*	16	180	2.7	100	3 of 3	100	2 of 3	5	1.3	2.4	100	39	1	3	22	0.8	1,256	6,680	10,690	912	338	1.3	-11	432	1.5	Yes
51	Forbes	3,530	1,870	363	49	135	2.0	100	1 of 1	100	1 of 1	100	1.4	1.9	100	4	0	1	7	0.6	831	6,460	14,361	710	85	0.6	-12	176	0.6	Yes*
52	Snowy River (Unfiltered)	4,090	866	156	7		2.1	100	5 of 5	100	4 of 5	91	0.0	2.2	54	-	-	0	0	0.4	1,178		13,335	691	269	0.5	-8	397	1.5	Yes
53	Berrigan (Dual Supply)	3,490	1,500	292	22	120	2.6	100	4 of 4	100	4 of 4	100	0.0	1.4	100	0	0	20	93	0.0	1,013	6,060	11,445	783	190	0.3	-8	432	1.5	Yes
	Totals or Medians (% of LWUs basis) for 3,001 - 10,000 Properties	*143,000*	*71,750*	*238*	*13*	*120*	*93*	*26 of 26 complied with chemical guidelines*		*24*		*of 26 complied with E. coli guidelines*		*72*			*0*	*11*	*9,641*		*923*	*8,090*	*11,445*	*755*	*234*	*0.6*	*-4*	*417*	*70*	
	LWUs with 1,501 - 3,000 Properties																												
54	Deniliquin	3,340	3,010	709	18	60	2.0	100	1 of 1	100	1 of 1	100	3	1.7	100	0	3.2	74	410	-1.0	1,147	7,450	11,630	833	424	0.3	-14	358	1.2	Yes*
55	Warrumbungle	3,300	854	192	5	120	2.1	100	1 of 8	100	7 of 8	90	0.9	1.1	84	0	0	10	56	-0.2	922	2,670	14,821	751	169	0.0	-12	759	2.5	Yes*
56	Yass Valley	3,040	855	184	12	240	1.6	100	1 of 1	96	0 of 1		2	1.5	100	0	0	33	116	0.1	1,087	14,100	16,177	727	311	0.5	0	2,928	6.9	Yes
57	Wellington	2,910	1,180	202	12	120	2.1	100	2 of 2	100	2 of 2	100	0.0	1.4	100	0	1.3	0	0	-0.4	1,038	6,130	8,839	924	325	0.5	24	1,092	2.8	Yes
58	Cootamundra (Reticulator)	2,900	907	198	66	120	1.3	100		100				1.0	100	2	0.4	52	202	-0.2	760	7,370	4,487	446	107	-0.7	-6	30	0.1	Yes*
59	Lachlan	2,810	1,570	351	8	85	2.1	100	1 of 3	100	2 of 3	89	6	0.7	35	0	0.0	24	138	-0.2	1,000	13,250	18,783	775	156	-0.5	0	175	0.5	Yes*
60	Glen Innes Severn	2,880	630	*157*	4	180	1.0	100	2 of 2	97	1 of 2		4	1.2	100	-	0	100	74	-0.5	731	6,380	10,276	593	298	-0.9	-5	76	0.2	Yes
61	Liverpool Plains	2,530	848	*223*	9	85	1.2	100	2 of 2	100	2 of 2	100	0.0	0.7	22	5	0.0	0	0	-0.2	858	6,130	9,747	527	165	-0.5	-10	401	0.9	
62	Narromine (Groundwater)	2,220	2,170	430	18	180	1.1	100	2 of 2	100	2 of 2	100	0.0	1.0	100	0	0	5	29	0.6	954	6,130	6,780	608	290	0.8	0	73	0.2	Yes
63	Narrandera (Groundwater)	2,060	1,160	384	-	90	1.4	100	1 of 1	100	1 of 1		0.5	1.0	80	0	0	0		0.3	901		6,551	757	272	3.0	0	343	0.7	Yes*
65	Murray (Dual Supply)	2,940	1,130	260	9	120	1.7	100	2 of 2	100	2 of 2	100	0.0	1.4	58	0	0.3	26	172	0.4	852	4,180	12,462	594	208	1.0	-1	174	0.5	Yes
67	Cobar	2,190	1,780	465	6	60	1.7	100	1 of 1	100	1 of 1	100	0.0	0.5	100	0	0	35	110	0.4	822	2,180	9,930	674	47	0.9	0	261	0.5	Yes
66	Cobar Water Board	0			0		0.0							*NO SGE*									0	0	0	0.0			
68	Tenterfield	1,990	*413*	140	-	-	1.1	100	1 of 2	100	1 of 2	71	0.0	1.2	-	-	-	39	126	-0.8	1,197		16,962	974	442	-1.6	5	3,801	6.4	Yes
70	Kyogle	1,830	449	180	5	120	0.9	100	2 of 3	100	1 of 3	89	2	1.0	84	0	0.6	100	528	0.3	998	5,000	9,718	624	242	1.5	-1	1,181	2.0	Yes*
71	Palerang	1,920	479	163	24	100	1.7	100	3 of 3	100	3 of 3	100	4	2.3	100	17	0	2	7	1.9	1,408	19,760	12,460	725	280	5.6	-18	1,715	3.2	Yes*
73	Upper Lachlan	1,920	296	72	3	100	1.3	70	3 of 4	100	3 of 4	88	5	1.8	100	0	0	0	0	1.1	1,060	6,650	11,555	735	223	6.4	-1	1,355	2.1	Yes*
74	Wentworth (Dual Supply)	2,240	1,540	376	12	60	1.7	100	3 of 3	100	3 of 3	100	5	1.0	38	0	7	0	0	-0.1	1,167	9,270	8,747	677	131	0.3	-1	100	0.2	Yes
76	Harden (Reticulator)	1,750	802	330	9	60	1.5	100	1 of 1	100	1 of 1	100	14	0.6	66	0	0	70	248	0.0	1,397	6,310	15,507	671	157	0.1	-5			Yes*
75	Coonamble (Groundwater)	1,670	1,110	419	27	60	0.4	100	3 of 3	97	2 of 3	19	0.0	0.5	78	0	0	32	79	-0.1	590		8,420	538	92	-6.1	-37			Yes*
	Totals or Medians (% of LWUs basis excl bulk suppliers) for 1,501 - 3,000	*46,000*	*21,200*	*223*	*9*	*100*	*28*	*18 of 19 complied with chemical guidelines*				*16 of 19 complied with E. coli guidelines*		*21*			*0*	*26*	*2,295*		*998*	*6,345*	*10,743*	*676*	*216*	*0.3*	*-1*	*358*	*31*	

Table 5: 2008-09 NSW water utility performance summary (continued)

WATER UTILITY	Water Supply												Sewerage						Water Supply & Sewerage - Current (2008-09) unless noted as 2009/10										
	Water Supply Connected Properties (No.)[5]	Total Water Supplied Potable + Non-potable + Recycled Excl Bulk Supply (ML)[2, 3]	Average Annual Residential Water Supplied Potable + Nonpotable (kL/connected property)	Water Main Breaks (per 100km of Main)	Avge Duration of Unplanned Interruption (mins)	Revenue ($M)[3, 8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines)					Water Quality Complaints (per 1000 props)	Revenue ($M)[2,3,8]	% Sge Treated that was Compliant	Sewer Overflows (No per 100km of Main) (10a) See also E13 in Table 15	Sewage Odour Complaints (per 1000 properties)	Recycled Water		Net Profit After Tax ($M)	2009/10 Typical Residential Bill ($/assessment)	2009/10 Typical Developer Charge ($/ET)	Current Replacement Cost per Assessment ($)	OMA Cost ($/connected property)	Mngmnt Cost ($/connected property)	ERRR (%)	Net Debt to Equity (%)	Capital Expenditure		Strategic Business Plans Completed ? Note 14 (Yes/No)
							Chemical Note 11 (%)	Zones	E. coli Note 12 (%)	Zones	% Pop'n with E. coli Compliance						(% of effluent recycled)	(Total ML)									($/prop)	($M)	
	(1) C 4	(2) W11	(3) W 12	(3a) A 8	(3b) C 15	(4) F 1	(7)	(7a) H 4	(8)	(8a) H 2	(8b) H 3	(8c) C 9	(9) F 2	(10) E 4		(11)	(12) W 27	(12a) W 26	(13a) F 24	(13b) P8	(14)	(15)	(17) F 13	(18)	(19) F19	(19a) F22	(19b)	(19c) F16	(21)
LWUs with 200 - 1,500 Properties																													
79 Walgett (Dual Supply)	1,590	473	938	-	-	1.3	100	2 of 2	100	2 of 2	100	0.0	0.6	-	-	-	83	517	0.1	1,107		14,455	766	160	0.1	-19			
80 Greater Hume	1,690	644	240	7	90	0.8	100	2 of 2	100	2 of 2	100	0.0	0.8	66	0	0	25	106	-0.2	573	7,400	13,130	671	160	-1.0	-7	172	0.4	Yes
81 Gwydir	1,450	384	154	40	180	1.1	100	3 of 3	97	2 of 3	54	0.0	0.7	100	51	0	16	39	0.2	1,071	4,000	8,773	831	214	2.2	0	119	0.2	Yes
82 Gloucester	1,670	430	179	6	230	1.1	100	2 of 2	100	2 of 2	100	1.2	0.7	100	34	0	0	0	0.1	1,008	12,600	9,375	783	173	0.4	0	181	0.3	Yes
83 Oberon (Reticulator)	1,310	589	179	17	120	0.8	100	1 of 1	100	1 of 1	100	3	0.6	50	0	0	0	0	-0.1	682	2,660	6,202	984	253	-1.1	-3	170	0.2	
84 Gilgandra (Groundwater)	1,370	836	428	30	100	0.7	100	1 of 1	100	1 of 1	100	7	0.5	100	8	2.2	100	280	0.1	948		9,958	521	93	0.4	-11	643	0.9	Yes
85 Uralla	1,570	238	102	14	120	0.6	100	2 of 2	97	1 of 2	16	2	0.5	-	7	0	0	0	-0.1	801	1,400	14,733	743	254	0.0	-4	69	0.1	
86 Hay (Dual Supply)	1,310	1,460	1,140	32	300	0.7	100	1 of 1	100	1 of 1	100	0.0	0.7	100	0	0	0	0	0.1	1,185		11,097	709	227	0.0	-19	378	0.5	Yes
87 Bourke (Dual Supply)	1,200	3,500	3,170	78	120	1.2	100	1 of 1	100	1 of 1	100	4	0.6	25	0	2.8	0	0	-0.1	1,893	1,490	18,466	1,147	341	-0.3	-10	389	0.5	Yes
88 Wakool (Dual Supply)	1,410	1,090	839	0		1.2	100	5 of 5	100	4 of 5	87	0.0	0.6	100	0	0.0	0	0	-0.2	1,304		22,347	791	139	-0.2	-2	171	0.2	Yes*
89 Bogan	1,030	576	309	32	180	0.7	100	1 of 1	92	0 of 1		0.0	0.5	100	0	7.6	0	0	-0.2	928		24,137	1,028	360	-1.8	-6	181	0.2	
90 Guyra	1,170	*414*	215	10	180	0.8	100	1 of 1	100	1 of 1	100	0.9	0.5	100	7	0	0	0	0.2	1,040	1,100	12,155	792	196	1.0	-1	113	0.1	Yes
91 Cabonne	1,150	390	166	29	240	0.9	100	3 of 4	100	3 of 4	86	3	1.4	93	7	0	46	123	0.2	672	9,810	33,010	664	219	0.3	-10	1,716	3.8	Yes
92 Carrathool (Groundwater)	1,010	1,300	1,220	12	180	*0.9*	100	2 of 5	94	3 of 5	87	4	*0.2*	100	27	0	1		0.0	981	1,650	54,500	929	214		0			
93 Tumbarumba	1,140	388	221	9	120	*0.6*	100	2 of 2	91	0 of 2		9	0.5	100	2	0	0		0.1	894		14,568	540	206	0.8	-13	384	0.4	Yes*
94 Gundagai	1,050	734	281	11	60	0.6	100	1 of 1	100	1 of 1	100	5	0.4	100	3	1	100	117	-0.1	629		13,546	733	167	-1.4	0	88	0.1	
96 Warren (Dual Supply)	960	471	352	51	120	0.5	100	3 of 3	97	1 of 3	89	18	0.5	100	0	0	3	5	-0.1	912		11,029	793	200	-1.4	-20			Yes
97 Bombala	840	285	266	26	20	0.5	100	2 of 2	100	2 of 2	100	1.2	0.3	100	34	7.9	100	35	0.0	1,018	3,510	14,106	683	213	-0.3	-13			
98 Walcha	890	217	176	4	70	0.5	100	1 of 1	100	1 of 1	100	1.1	0.3	100	17	0	0	0	-0.2	881		16,769	812	248	-0.4	-4			Yes*
100 Balranald (Dual Supply)	860	742	958	13	60	0.5	100	2 of 2	100	2 of 2	100	2	0.2	100	0	0	73	95	-0.2	995	1,590	15,003	631	171	-1.0	1	143	0.1	Yes
101 Murrumbidgee (Groundwater)	900	*666*	474	-	-	0.3	100	2 of 2	96	1 of 2		0.0	0.2	-	-	-	17	15	0.0	598		5,780	470	147	-2.0	0	147	0.1	Yes*
103 Central Darling (Dual Supply)	690	359	526	32	120	0.7	100	2 of 2	100	1 of 2	65	13	0.1	100	54	0	0	0	-0.1	1,325		19,891	1,003		0.6	0			
104 Boorowa	620	244	271	21	120	*0.6*	100	1 of 1	100	1 of 1	100	0.0	0.3	65	3	3.3	5	4	0.1	1,405		17,338	660	67	1.7	-9	275	0.2	
105 Brewarrina	480	838	1,720	50	30	0.6	100	2 of 2	100	2 of 2	100	0.0	0.3		0	0	81	170	-0.1	1,467		19,816	1,696	404	-1.3	-8			
106 Jerilderie (Dual Supply)	460	431	1,030	21	120	0.3	100	1 of 1	100	1 of 1	100	0.0	0.2	100	0	12	26	20	0.1	1,672		15,429	775	182	0.7	0			Yes*
Totals or Medians (% of LWUs basis) for 200 - 1,500 Properties	*28,000*	*17,699*	*309*	*21*	*120*	*18.4*	*25 of 25 complied with chemical guidelines*		*18 of 25 complied with E. coli guidelines*				*12.2*			*0*	*3*	*1,526*		*995*	*2,660*	*14,568*	*775*	*203*	*-0.1*	*-4*	*172*	*8.2*	
LWUs without Water Supply																													
9 Wagga Wagga (NO WS)	23,609	294											13.6	95	35	0.2	11	572	1.7	380	3,500	-10	270	54	1.0	1	1,306	30.8	Yes
30A Hawkesbury	7,487												5.2	84	12	0	13	316	0.2	445	6,800	-4	429		0.0	-2	151	1.1	Yes*
69 Temora	2,099	71											0.5	75	4	0	100	113	0.1	244	160	-5	155	32	1.0	1	41	0.1	Yes*
72 Bland	1,821												0.9	100	0	0	*45*	*104*	0.0	510		-25	312	64	0.5		882	1.6	Yes*
77 Junee	1,578	158											0.6	100	0	0	65	166	0.1	335	1,650	-7	238	53	0.1	0	110	0.2	Yes
78 Blayney	1,805	190											0.9	100	0	0	76	190	-0.1	430	2,160	-10	335	153	-0.2	-2			Yes
95 Weddin	1,026	39											0.2	100	0	0	25	39	-0.2	225	2,800	-42	185	25	-1.9	1			Yes*
99 Coolamon	985	65											0.6	100	0	0	*90*	*88*	0.3	267	4,500	-9	197	62	2.4	2	387	0.4	Yes
102 Lockhart	825	2											0.3	100	0	2	1	2	0.0	388	1,000	-15	266	63	-0.8	0	81	0.1	Yes
107 Urana	315												0.2	100	0	6.3	0	0	0.0	221		-5	320	111	-0.2	0			Yes*
Totals or Medians (% of LWUs basis) for LWUs without WS	*34,000*	*819*											*23.0*			*0*	*35*	*1,590*		*357*	*2,480*	*-9*	*268*	*62*	*0.1*	*0*	*151*	*34.3*	
Statewide Totals & Medians[6]	791,000 WS Connected Properties	288,000 ML (note 6)	Median 175kL per connected property (note 7)	Median 10 Breaks per 100km (note 7)	Median 167 minutes (note 7)	Total $490M (note 6)	92 of 96 LWUs (96%) complied with the chemical guidelines. 84 of 96 LWUs (88%) complied with E.coli guidelines					Median 3 Quality Complaints per 1000 props	Total $460M (note 6)	88% of LWUs and 98% of samples complied with BOD licences	Median 12 Overflows per 100km	Reuse of effluent was carried out by 79% of LWUs 23% of effluent collected was recycled	Total 38,450 ML			Median $900 per assessment (note 7)	Median $8,500 per ET (note 7)	Median $24,200 per assessment (note 7)	Median $670 per connected property (note 7)	Median $250 per connected property (note 7)	Median 0.6% (note 7)	Median 1.4% (note 7)	Median $514 per assessment (note 7)	Total $660M (note 7)	64 Yes 30 Yes* (note 14)	

Notes

1. This table shows the key 2008-09 performance indicators/characteristics for NSW water utilities.
   A more detailed breakdown is provided in Tables 6 to 18 and Figures 1 to 65.
2. No WS means not responsible for water supply;
   No SGE means not responsible for sewerage. For LWUs with water supply only or sewerage only,
   the results are shown left justified and are not included in the median calculation for water supply and sewerage.
3. Where an LWU has not reported an item for 2008-09, the value previously reported has been used where available.
   Such values are shown in this table in ***italics bold*** .
4. The number of connected properties for LWUs responsible for sewerage only (column (1)) is sewerage properties.
5. NSW Water Utilities
   In NSW there are 110 water utilities comprising:
   - 4 metropolitan water utilities (Sydney and Hunter Water Corporations,
     Sydney Catchment Authority (SCA) and Hawkesbury Council), and
   - 106 non-metropolitan Local Water Utilities (LWUs).

   The 106 LWUs comprise:
   - 101 local government councils (under *Local Government Act 1993*),
   - 5 LWUs (Gosford Council, Wyong Council, Cobar WB, Fish River WS, Country Energy)
     under the *Water Management Act 2000* .

   Of the 106 LWUs,
   - 97 were responsible for water supply (including 3 for bulk supply - Cobar WB, Fish River WS & Rous Water)
   - 100 were responsible for sewerage.
   - 91 were responsible for both water supply and sewerage, 6 for water supply only and 9 for sewerage only.
6. Totals for Non-metropolitan NSW
   The totals shown below are for non-metropolitan NSW & therefore exclude Sydney & Hunter Water Corporations,
   the SCA and Hawkesbury Council. The totals exclude double-counting where bulk water suppliers are involved.
   - ***Total number of water supply connected properties*** in non-metropolitan NSW was 791,000 (col (1)).
   - ***Total annual water supplied*** was 288,000 ML (column (2)).
   - ***Total revenue*** for water supply and sewerage was $950M (columns (4) and (9)) and the current
     replacement cost of assets was $19,900M ($10,700M for Water, $9,200M for Sewerage).
7. Statewide medians (non-metropolitan) were:
   - ***Average annual residential water supplied*** - 175kL/connected property (column (3)).
   - ***Typical residential bill (TRB)*** for water and sewerage - $900/assessment (column(13b). The 2009-10 TRB
     for water supply has been calculated on the basis of each LWU's 2009-10 tariff using the 2008-09 average annual
     residential water supplied (column (3)). The TRB for sewerage is based on the LWU's access charge (col(1))
     of Appendix F except for 3 LWUs where account was also taken of the usage charges. The TRB in col (13b)
     is for 2009-10. However, NWI indicators P2, P4 and P5 are defined as the TRB for 2008-09 and will therefore
     differ from those shown in column (13b). The 2008-09 TRBs are shown in column 8 of Tables 6 & 7 on
     pages 117 and 129.
   - ***Typical developer charge*** for water and sewerage - $8,500/ET for 2009-10 (col (14) and Tables 6 & 7).
   - ***Economic real rate of return (ERRR)*** for water and sewerage - 0.6% (column (19)). As shown in
     Figures 13 and 14 of the *2008-09 NSW Water Supply and Sewerage Performance Monitoring Report* ,
     96% of LWUs are achieving full cost recovery for water supply and 97% are achieving
     full cost recovery for sewerage. The remaining 4 water utilities and 1 sewerage utility with over 1,000 properties
     which are not achieving full cost recovery have agreed to do so. Refer also to Tables 6 and 7.
   - ***Net debt/equity*** for water and sewerage was 1.4% (column (19a)).
   - ***Water main breaks*** - 10 breaks per 100km of main (column (3a)).
   - ***Average duration of unplanned interruptions (water supply)*** - 167 minutes (column (3b)).
7. cont'd Statewide medians (non-metropolitan):
   - ***Water quality complaints*** - 3 per 1000 properties (column (8b)).
   - ***Operation, maintenance and administration (OMA)*** cost (water & sewerage) - $670/connected property (column (17)).
     OMA cost includes part of the OMA cost of the bulk water supplier but excludes the purchase cost of water. However,
     NWI indicator F11 includes the purchase cost of water and therefore may differ from column (17).
   - ***Management cost*** for water supply and sewerage - $250/connected property (column (18)).
   - ***Current replacement cost*** for water supply and sewerage - $24,200/assessment (column (15)).
   - ***Capital expenditure*** for water supply and sewerage - $514/property (column (19b)). The total capital
     expenditure for water supply and sewerage was $660M (column (19c)).
8. Category 1 Businesses - Category 1 businesses are defined as having an annual revenue of over $2M (*NSW
   Government's Policy Statement on Application of National Competition Policy to Local Government, June 1996*).
   72 LWUs are Category 1 businesses (shown in bold in Cols (4) & (9)). Column (4) shows there were 56 LWUs
   responsible for water supply with a revenue of over $2M; and 42 such utilities responsible for sewerage (column (9).
9. Pay-for-use water supply tariff - 92 of the 94 LWUs providing reticulated water have a pay-for-use water supply tariff
   in 2009-10 (ie. a two-part tariff or an inclining block tariff). Such tariffs comply with IPART recommendations
   and the *COAG Strategic Framework for Water Reform* .
10. Pay-for-Use Pricing & Full Cost Recovery - For water supply, 94% of LWUs have pay-for-use pricing in 2008-09,
    residential tariffs independent of land value together with full cost recovery (col 2 of Table 3 on page 102).
    For sewerage, 95% of LWUs have tariffs independent of land value and full cost recovery (col 2 of Table 3).
    Such LWUs comply with the *COAG Strategic Framework for Water Reform* and the *National Water Initiative* .
11. Physical and chemical water quality - 98% of the 26,500 physical samples and 98% of the 23,600 chemical
    samples tested for NSW LWUs achieved 100% compliance with the 2004 NHMRC/NRMMC Guidelines.
    Col (7) shows that 96% of LWUs complied with chemical water quality (health related).
    98% of LWUs complied for physical water quality.
12. Microbiological water quality - E.coli contamination is the primary health-related indicator.
    - ***E.coli*** - 99% of the 20,700 samples tested for NSW LWUs achieved 100% compliance with the
      2004 NHMRC/NRMMC Guidelines. 88% of LWUs complied with these guidelines (column 8).
13. Compliance with DECC Discharge Licence for Sewerage
    - ***BOD*** - 98% of the 3,989 sampling days for NSW LWUs achieved 100% compliance with the 90-percentile limit
      of their DECC licence for BOD (Biochemical Oxygen Demand). 88% of LWUs complied with the DECC licence (col 10).
    - ***SS*** - 94% of the 3,989 sampling days for NSW LWUs achieved 100% compliance with the 90-percentile limit of
      their DECC licence for SS (Suspended Solids). 76% of LWUs complied with their DECC licence for SS (Table 17 on p173).
      (16 LWUs had no DECC discharge licence limit and 5 did not report BOD or SS)
14. Strategic Business Plans - 94 LWUs have completed a sound water &/or sewerage Strategic Business Plan (col 21)
    and have demonstrated long term financial sustainability of their water and sewerage businesses to comply with
    National Competition Policy. The plans of 30 of these LWUs now need updating (these are shown as "Yes*" in column 21).
15. Total Water Supplied (col (2)) includes non-potable and recycled water (see Table 8 on page 138).
    Similarly, the average annual residential water supplied (col (3)) includes non-potable and recycled water.
16. Reuse of recycled water comprised 38,000ML which is 23% of the volume of sewage collected and
    was carried out by 79% of utilities, mostly for agriculture.
17. National Water Initiative (NWI) Indicators - The 30 NSW water utilities with over 10,000 connected properties
    (3 metropolitan utilities and 27 non-metropolitan utilities) are required to report their performance under the NWI. The results
    that have met the rigorous NWI auditing requirements have been published in the *National Performance Report 2008-09.*
    Refer also to Notes 19 and 20 on page 31.
18. The performance indicators for Sydney and Hunter Water Corporations and Sydney Catchment Authority are from the
    National Performance Report 2008-09 for Urban Water Utilities .

Table 5A: Water supply and sewerage indicators – financial

	WATER UTILITY	FINANCIAL																																								
		Operating Cost (OMA)			Income per Property			Total Income			Capital Expenditure (Assets, Renewals, Plant/Equip)			Return on Assets			Economic Real Rate of Return			Net Debt to Equity			Interest Cover			Dividend Payable			Dividend Payout Ratio		CSOs			% Revenue from CSOs		Net Profit after Tax NPAT		NPAT Ratio		
		WS & SGE ($/property)			($/property) WS & Sge			WS & Sge ($M)			WS & Sge ($ per prop)			WS & Sge (%)			WS & Sge (%)			WS & Sge (%)			WS & Sge			WS & Sge ($'000)			WS & Sge (%)		WS & Sge ($'000)			WS & Sge (%)		WS & Sge ($'000)		WS & Sge		
		(23) F13			(24) F7			(24a) F 3			(24b) F28 + F29			(24c)			(25) F19			(26) F22			(27) F23			(29) F20			(29) F21		(30) F25			(31) F8		(32) F24		(32a) F30		
		06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09		
	Sydney Water			539			1,066	1620	1690	1,871			1,059				1.9	0.7	1.2	45	62	103	2	1	2	140,000	190,000	205,000	105	115	89676	91,295	112,736	5	6	180,500	177,501	0.1	0.1		
	Hunter Water			456			908	202	200	202			644				2.3	2.2	2.2	23	30	32	6	3	3	35,100	34,600	30,400	96	69	8993	8,958	9,278	4	5	36,035	44,253	0.2	0.2		
	Sydney Catchment Authority																									16,581	6,164	26,816		68						39,172				
LWUs with > 10,000 Properties																																									
1	Gosford	551	531	566	802	756	839	56	52.7	58.8	466	530	502	0.8	0.3	0.7	0.4	0.4	0.6	-2	-0.5	1.4	>100	4	>100	947	1,746	1,694	437	115	1038	1,115	1,162	2.1	2.0	400	1,477	0.0	0.0		
2	Wyong	597	760	679	1166	930	952	68	54.9	56.6	911	321	330	2.2	-1.1	-1.7	2.3	-0.5	-1.0	6	8.1	9.6	22	0	0						1294	1,306	1,270	2.3	2.2	-25,221	-17,874	-0.5	-0.3		
3	Shoalhaven	589	616	685	951	969	1022	43	44.0	46.7	927	609	563	1.6	0.6	0.2	1.5	0.9	0.7	1	1.0	3.9	>100	4	1	2560	2,208	1,173	65	-403	830	876	925	2.0	2.0	3,387	-291	0.1	0.0		
5	MidCoast	674	662	700	1166	1217	1248	42	43.9	45.3	1235	1569	1713	1.9	-2.5	-1.8	1.6	0.0	0.2	9	15.9	24.6	>100	0	0						952	952	825	2.3	1.8	-18,959	-15,011	-0.4	-0.3		
6	Tweed	622	661	716	1512	1553	1410	44	48.9	44.6	1807	2050	2061	1.1	1.2	-0.2	0.7	1.1	0.0	-6	-5.6	1.1	>100	>100	0						720	713	718	2.5	1.6	6,541	-3,963	0.1	-0.1		
7	Port Macquarie-Hastings	626	659	600	990	1122	1349	29	32.1	40.3	996	457	1098	1.3	0.5	0.0	0.8	0.6	1.9	-5	-2.5	1.7	>100	8	1	753					688	656	679	2.1	1.7	-2,978	-7,344	-0.1	-0.2		
11	Albury City	559	590	524	854	885	899	19	19.4	20.0	207	366	423	-0.2	-0.3	-0.3	-0.1	-0.2	0.1	2	2.8	4.5	30	0	0						331	286	294	1.5	1.5	-2,210	-1,121	-0.1	-0.1		
10	Coffs Harbour	615	642	706	1422	1609	1540	33	37.9	36.7	908	2935	2849	3.4	1.2	-0.8	3.0	3.2	1.9	-4	13.2	25.8	>100	2	1						452	471	451	1.2	1.2	4,393	-5,478	0.1	-0.1		
13	Tamworth Regional	662	602	673	1218	1405	1648	24	28.3	33.5	368	759	1426	5.3	5.0	5.4	4.2	4.6	4.7	-18	-11.7	-8.9	>100	>100	>100	1051	1,048	1,051	9	6	359	371	380	1.3	1.1	12,019	16,380	0.4	0.5		
15	Eurobodalla	723	770	714	1091	1263	1287	21	24.0	24.7	410	1133	974	1.4	1.6	1.8	1.4	1.6	1.9	-2	2.2	0.0	>100	>100	12						359	364	373	1.6	1.5	2,918	4,033	0.1	0.2		
17	Queanbeyan	590	623	746	1039	1120	968	16	17.9	15.3	131	368	249	1.4	1.9	-0.5	0.3	1.1	-0.9	-14	-16.2	-15.5	>100	>100	0						160	155	156	0.9	1.0	3,919	-1,947	0.2	-0.1		
19	Orange	561	618	629	1279	1300	1647	20	20.9	26.2	487	104	410	3.9	2.0	4.4	3.0	2.0	4.0	-11	-12.1	-11.2	>100	>100	>100						232	240	244	1.2	0.9	1,044	7,441	0.0	0.3		
20	Goulburn Mulwaree	630	680	712	1475	1544	1449	14	14.9	15.3	1380	722	417	2.3	-0.5	0.4	2.9	1.9	1.6	6	7.3	6.5	8	1	1						173	175	173	1.2	1.1	-1,308	463	-0.1	0.0		
18	Dubbo	768	779	789	1260	1147	1131	20	17.9	18.2	480	271	397	1.1	0.2	0.3	1.3	0.6	0.7	4	3.4	3.5	31	2	2						186	181	180	1.0	1.0	489	13	0.0	0.0		
16	Wingecarribee	575	617	620	1127	991	1039	20	17.7	18.7	321	414	1279	3.3	1.8	0.5	3.2	1.4	0.5	-7	-6.4	-1.8	>100	>100	>100						269	265	369	1.6	2.0	741	422	0.0	0.0		
14	Clarence Valley	590	600	647	1723	1960	1233	34	40.3	25.7	2453	2862	3391	9.5	7.9	0.7	8.7	8.4	1.5	-8	-1.2	5.8	>100	17	2						388	414	423	1.0	1.7	22,102	1,959	0.5	0.1		
21	Bathurst Regional	727	690	732	1087	1064	1237	16	15.7	18.5	1481	391	373	1.0	1.6	2.4	0.8	1.1	2.0	-9	-9.4	-10.0	>100	>100	>100						188	191	199	1.2	1.1	2,998	4,852	0.2	0.3		
24	Ballina	700	774	921	946	1067	1034	13	14.8	14.5	327	351	442	1.7	0.3	-1.4	0.6	-1.0	-2.3	-13	-12.7	-11.0	>100	0	0	350	240		130		304	276	284	1.9	2.0	185	-3,019	0.0	-0.2		
22	Lismore	637	727	742	928	1089	1043	13	15.1	14.6	329	578	236	1.2	-1.3	-1.8	0.8	-1.1	-1.5	-6	-3.9	-3.8	>100	0	0	206					218	232	285	1.6	2.0	-3,911	-4,869	-0.3	-0.3		
	Totals for >10,000 Properties									*$574M*															*3 LWUs paid a dividend*														*9 of 19 LWUs had a +ve NPAT*		
LWUs with 3,001 - 10,000 Properties																																									
23	Bega Valley	858	922	967	1185	1431	1483	16	19.7	20.8	1555	1714	874	1.0	1.9	1.3	0.3	1.8	1.5	-3	0.2	0.0	>100	>100	8						228	244	252	1.2	1.2	3,928	2,767	0.2	0.1		
27	Byron	869	905	961	1356	1382	1559	14	14.5	16.6	562	710	842	1.0	0.4	0.3	1.1	0.7	1.1	2	3.8	6.4	>100	2	1						152	149	149	1.0	0.9	-519	-1,158	0.0	-0.1		
26	Country Energy	1103	1137	1138	1435	1525	1629	15	16.5	17.0	632	912	1893								0.0	0.0	>100	>100	>100						286	284	273	1.7	1.6	1,282	1,313	0.1	0.1		
25	Kempsey	623	643	716	1025	1048	1075	12	12.8	13.2	310	308	1122	0.9	-0.4	-0.6	1.2	-0.1	-0.2	3	1.7	3.7	7	0	0						118	241	241	1.9	1.8	-1,872	-3,311	-0.1	-0.3		
31	Lithgow	1097	856	737	917	991	910	7	7.8	7.1	55	268	259	-6.8	0.1	0.3	-7.9	-0.9	-0.1	-8	-7.3	-5.9	>100	0	0						176	266	177	3.4	2.5	27	613	0.0	0.1		
29	Armidale Dumaresq	809	836	831	1026	997	1038	8	8.2	8.8	147	389	493	-0.2	0.5	0.5	-0.5	0.2	0.7	-6	-1.0	2.2	>100	>100	3						122	119	59	1.4	0.7	-5,398	-2,861	-0.7	-0.3		
30	Griffith	986	993	1058	1551	1292	1318	12	10.5	10.8	640	615	626	3.6	0.0	0.0	2.8	0.3	0.2	-11	-4.5	-3.4	>100	1	1						115	115	35	1.1	0.3	-93	-144	0.0	0.0		
33	Richmond Valley	833	875	930	1602	1550	1271	10	10.1	8.8	1893	717	781	3.2	1.8	0.4	2.8	1.6	1.0	-2	-2.6	-0.3	>100	>100	2						170	160	166	2.2	1.9	-1,513	-2,101	-0.1	-0.2		
32	Mid-Western Regional	717	718	786	1200	1111	1006	8	7.8	7.1	292	353	334	1.9	1.0	-0.6	1.8	0.7	-0.9	-5	-6.0	-6.3	>100	>100	0						128	128	124	1.8	1.7	291	-569	0.0	-0.1		
34	Nambucca	467	499	578	855	866	1018	5	5.3	6.3	101	96	208	1.8	0.4	0.8	1.3	0.6	1.2	-11	-11.1	-9.1	>100	3	3						136	134	134	2.5	2.1	302	786	0.1	0.1		
35	Singleton	552	619	708	1304	1096	1065	8	6.9	6.7	527	393	259	6.5	2.8	2.2	4.4	1.3	0.3	-26	-25.1	0.0	>100	>100	>100						74	75	75	1.1	1.1	1,762	1,397	0.3	0.2		
37	Inverell	632	706	736	1109	998	1007	6	5.3	5.3	133	140	607	2.7	-1.4	0.4	2.3	0.3	0.7	-8	-6.8	-3.6	>100	0	2						128	128	124	2.4	2.3	-1,186	102	-0.2	0.0		
41	Muswellbrook	860	752	896	1875	1640	1512	10	8.7	8.0	554	1140	390	6.0	5.1	2.3	4.9	4.0	1.9	-14	-14.5	-15.4	>100	>100	>100						67	68	66	0.8	0.8	4,046	1,856	0.5	0.2		
36	Parkes	769	800	767	1250	1236	1413	7	7.2	8.3	336	399	539	3.6	-4.3	-0.2	1.7	1.0	0.5	-21	-18.5	0.0	>100	0	1						125	264	107	3.6	1.3	-4,382	-1,026	-0.6	-0.1		
42	Corowa	622	792	733	846	966	1284	4	4.6	6.2	151	2072	706	0.5	-0.7	0.7	-0.9	-0.6	2.1	-16	-3.6	-1.4	>100	0	1						95	96	111	2.1	1.8	-951	-59	-0.2	0.0		
38	Moree Plains	870	906	1019	1369	1282	1470	6	5.7	6.5	1677	1033	1378	2.6	-2.2	0.5	2.5	0.6	1.2	5	9.5	14.9	>100	0	2						0	0				-1,463	-342	-0.3	-0.1		

Table 5A: Water supply and sewerage indicators – financial (continued)

	WATER UTILITY	FINANCIAL																																	
		Operating Cost (OMA)			Income per Property			Total Income			Capital Expenditure (Assets, Renewals, Plant/Equip)			Return on Assets			Economic Real Rate of Return			Net Debt to Equity			Interest Cover			Dividend Payable			Dividend Payout Ratio			CSOs			% Revenue from CSOs		Net Profit after Tax NPAT			NPAT Ratio	
		WS & SGE ($/property)			($/property) WS & Sge			WS & Sge ($M)			WS & Sge ($ per prop)			WS & Sge (%)			WS & Sge (%)			WS & Sge (%)			WS & Sge			WS & Sge ($'000)			WS & Sge (%)			WS & Sge ($'000)			WS & Sge (%)		WS & Sge ($'000)			WS & Sge	
		(23) F13			(24) F7			(24a) F 3			(24b) F28 + F29			(24c)			(25) F19			(26) F22			(27) F23			(29) F20			(29) F21			(30) F25			(31) F8		(32) F24			(32a) F30	
		06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09
44	Gunnedah	376	370	421	824	795	895	4	3.6	4.1	311	365	365	3.7	1.2	1.7	2.7	1.5	1.6	-13	-12.6	0.0	>100	5	>100							0	94	82	2.6	2.0	441	743	0.1	0.2
46	Narrabri	574	531	576	751	724	733	3	3.1	3.2	90	391	154	1.9	-2.2	-1.4	0.1	0.0	-1.4	-20	-17.5	-16.9	>100	0	0							69	67	69	2.1	2.2	-3,792	-590	-1.2	-0.2
43	Tumut	646	728	706	1744	1311	1035	7	5.6	4.6			2800	6.5	1.6	-0.2	5.7	1.0	-0.3	-5	-4.9	0.0	>100	>100	0							65	83	83	2.6	1.8	-1,511	-384	-0.3	-0.1
49	Young	469	474	392	906	880	848	4	3.8	3.9	112	409	172	8.8	6.1	2.6	6.9	4.7	2.5	-25	-22.4	-23.1	>100	>100	>100							80	80	80	2.1	2.1	-84	522	0.0	0.1
39	Cowra	766	889	1073	1123	1277	1320	6	6.7	6.9	606	646	453	2.9	2.0	0.2	2.9	2.4	0.6	-6	-3.1	-2.2	>100	6	1							105	99	103	1.5	1.5	1,011	-168	0.2	0.0
45	Upper Hunter	714	803	948	1198	1265	1216	5	5.3	5.1	199	376	540	5.0	3.1	1.5	2.9	1.3	-0.5	-21	-20.7	0.0	>100	>100	0							76	76	77	1.6	1.5	1,003	727	0.2	0.1
52	Snowy River	554	724	691	851	986	1045	3	3.8	4.3	265	868	397	1.9	-1.2	0.9	1.3	-1.8	0.5	-9	-6.4	-8.0	>100	0	>100							20	19	21	0.5	0.5	-554	407	-0.1	0.1
51	Forbes	612	707	710	1058	1087	1114	4	3.7	3.9	181	263	176	1.7	0.9	1.4	1.6	0.3	0.6	-7	-9.8	-12.1	>100	>100	>100							63	63	64	1.7	1.6	428	643	0.1	0.2
50	Cooma-Monaro	727	843	912	1345	1221	1329	5	4.4	5.1	388	406	432	5.1	-0.2	1.7	4.2	0.1	1.3	-14	-10.6	-11.2	>100	0	>100							62	66	65	1.5	1.3	-199	764	0.0	0.2
53	Berrigan	595	594	783	988	1164	1147	3	4.1	4.0	483	280	432	1.8	2.4	0.9	1.1	1.6	0.3	-9	-7.1	-8.5	>100	>100	>100							41	81	81	2.0	2.0	747	46	0.2	0.0
	Totals for 3,001 - 10,000 Props										*$203M*														*No. of LWUs paying dividend is 0*												*14 of 26 LWUs had a +ve NPAT*			
	LWUs with 1,501 - 3,000 Properties																																							
48	Leeton	777	771	920	1204	1015	1211	5	4.0	4.7	199	123	345	4.0	1.1	1.0	3.1	-0.2	0.2	-19	-20.1	-21.4	>100	0	>100							66	63	63	1.6	1.3	343	270	0.1	0.1
54	Deniliquin	855	828	833	1113	1217	990	4	3.9	3.3	330	433	358		2.1	1.4	0.0	0.4	0.3	-19	-16.9	-14.1	>100	>100	>100							71	70	69	1.8	2.1	-777	-988	-0.2	-0.3
47	Bellingen		402	755	1090	882	929	4	3.5	3.7		319	366		1.4	1.8		-0.3	-0.2		-29.0	-25.2	>100	0	0								89	91	2.5	2.4	451	590	0.1	0.2
60	Glen Innes Severn	522	532	593	790	807	769	2	2.3	2.2		109	76		0.0	-1.1	0.5	0.2	-0.9	-3	-4.4	-4.6	>100	1	0							57	54	56	2.3	2.5	-83	-487	0.0	-0.2
58	Cootamundra	502	495	446	749	697	775	2	2.0	2.2		16	30	0.0	-1.2	-0.7	0.1	-1.1	-0.7	-4	-5.3	-6.3	3	0	0							76	78	80	3.9	3.6	-267	-173	-0.1	-0.1
57	Wellington	726	795	924	1289	1094	1190	4	3.1	3.5	965	2120	1092	3.5	-0.4	-0.8	4.2	0.9	0.5	14	18.4	24.3	11	1	0							64	60	63	1.9	1.8	-151	-425	0.0	-0.1
91	Cabonne	762	772	664	1836	1723	1957	2	2.0	2.3	107	268	1716	3.7	0.5	0.8	2.4	-0.4	0.3	-14	-13.6	-10.5	>100	0	>100							44	44	42	2.2	1.9	135	182	0.1	0.1
80	Greater Hume	633	656	671	947	869	991	2	1.4	1.7	111	437	172	-0.5	-0.8	-0.5	-0.9	-1.4	-1.0	-7	-6.5	-7.5	>100	0	0							39	37	42	2.6	2.5	-294	-159	-0.2	-0.1
59	Lachlan		224	775	1095	967	993	3	2.6	2.8			175		0.6	-0.1		-0.5	-0.5		-16.8	0.0	>100	0	0								44	45	1.7	1.6	227	-188	0.1	-0.1
65	Murray	555	635	594	1146	1061	1048	3	2.8	3.1	284	240	174	2.0	0.3	0.8	2.0	0.6	1.0	2	1.1	-0.9	63	2	7							48	49	53	1.7	1.7	32	386	0.0	0.1
62	Narromine	637	665	608	1026	927	968	2	1.9	2.1		90	73	5.1	3.8	1.1	2.8	2.2	0.8	-36	-34.8	0.0	>100	>100	>100							37	36	36	1.9	1.7	420	626	0.2	0.3
56	Yass Valley		340	727	1003	1028	1037	3	3.1	3.2		534	2928		1.0	0.5		1.0	0.5		-21.0	0.0	>100	>100	>100								43	45	1.4	1.4	222	104	0.1	0.0
61	Liverpool Plains	611	609	527	607	698	746	2	1.8	1.9	177	231	401	-1.4	-1.9	-0.2	-3.1	-2.5	-0.5	-11	-10.2	-10.0	>100	0	0							64	62	60	3.5	3.2	-749	-177	-0.4	-0.1
55	Warrumbungle	684	684	751	651	0	967	3	0.0	3.2	139		759	-1.3		0.0	-4.0		0.0	-13		-11.8	>100	>100	0							70		72		2.3		-201		-0.1
71	Palerang		395	725	1341	1950	2072	2	3.7	4.0		829	1715		6.0	6.3		5.2	5.6		-15.1	-18.1	>100	>100	>100								24	29	0.7	0.7	1,632	1,896	0.4	0.5
63	Narrandera	779	776	757	1112	1009	1134	2	2.0	2.3	511	348	343	8.0	1.2	3.2	4.2	1.2	3.0	-36	-29.1	0.0	>100	>100	>100							45	45	47	2.2	2.0	-728	281	-0.4	0.1
67	Cobar	668	691	674	1176	869	1014	2	1.9	2.2	424	175	261	4.2	0.0	1.0	3.6	-0.5	0.9	-16	-3.9	0.0	>100	0	>100							24	21	22	1.1	1.0	-15	384	0.0	0.2
74	Wentworth	717	698	677	1294	1228	1191	3	2.7	2.7	22	25	100	0.9	0.4	0.1	1.4	0.8	0.3	2	-0.9	-1.1	7	2	1							35	35	33	1.3	1.2	84	-51	0.0	0.0
75	Coonamble	478	558	538	544	533	529	1	0.9	0.9	146			1.1	-2.7	-1.2	-3.2	-7.7	-6.1	-44	-45.3	-37.0	>100	0	0							26	23	24	2.7	2.7	-247	-115	-0.3	-0.1
	Totals for 1,501 - 3,000 Props										*$52M*														*No. of LWUs paying dividend is 0*												*9 of 19 LWUs had a +ve NPAT*			
	LWUs with 200 - 1,500 Properties																																							
70	Kyogle	602	623	624	1885	913	1048	3	1.7	1.9	1454	847	1181	10.7	1.6	1.4	10.4	1.4	1.5	-7	-2.8	-1.1	>100	>100	91							52	53	53	3.1	2.8	236	251	0.1	0.1
79	Walgett	830	776	766	1173	1129	1199	2	1.8	1.9				-1.4	-0.2	0.1	-1.5	-0.4	0.1	-15	-16.9	-18.5	>100	0	>100							23	23	23	1.3	1.2	-46	95	0.0	0.0
68	Tenterfield	794	805	974	1069	1116	1168	2	2.0	2.3	201	521	3801	0.8	-2.9	-2.5	0.1	-0.5	-1.6	-11	-6.7	4.9	>100	0	0							43	42	41	2.1	1.8	-828	-840	-0.4	-0.4
84	Gilgandra	405	415	521	907	868	882	1	1.2	1.2	198	203	643	4.4	2.1	1.1	3.7	1.1	0.4	-12	-14.2	-11.5	>100	>100	>100							26	25	25	2.1	2.1	228	74	0.2	0.1
73	Upper Lachlan	658	687	735	1064	1181	1615	2	2.2	3.1	473	390	1355	3.3	2.6	5.4	3.3	3.3	6.4	-2	-3.6	-0.7	>100	5	6							31	31	31	1.4	1.0	415	1,080	0.2	0.3
82	Gloucester	889	860	783	1029	1091	1089	2	1.9	1.8	171	116	181	0.4	-0.8	0.8	-2.7	-0.8	0.4	-13	-14.0	0.0	>100	0	>100							36	36	37	1.9	2.0	-244	54	-0.1	0.0
87	Bourke	1119	1020	1147	1466	1514	1557	2	1.8	1.9		199	389	0.4	-1.4	-0.1	-0.1	-2.0	-0.3	-7	-9.1	-9.9	>100	0	0							10	10	10	0.6	0.5	-179	-69	-0.1	0.0

Table 5A: Water supply and sewerage indicators – financial (continued)

	WATER UTILITY	FINANCIAL																																	
		Operating Cost (OMA)			Income per Property			Total Income			Capital Expenditure (Assets, Renewals, Plant/Equip)			Return on Assets			Economic Real Rate of Return			Net Debt to Equity			Interest Cover			Dividend Payable			Dividend Payout Ratio		CSOs			% Revenue from CSOs		Net Profit after Tax NPAT		NPAT Ratio	
		WS & SGE ($/property)			($/property) WS & Sge			WS & Sge ($M)			WS & Sge ($ per prop)			WS & Sge (%)			WS & Sge (%)			WS & Sge (%)			WS & Sge			WS & Sge ($'000)			WS & Sge (%)		WS & Sge ($'000)			WS & Sge (%)		WS & Sge ($'000)		WS & Sge	
		(23) F13			(24) F7			(24a) F 3			(24b) F28 + F29			(24c)			(25) F19			(26) F22			(27) F23			(29) F20			(29) F21		(30) F25			(31) F8		(32) F24		(32a) F30	
		06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09
86	Hay	602	665	709	982	949	1052	1	1.2	1.4	125	118	378	1.3	-0.2	1.1	0.2	-1.6	0.0	-17	-19.0	-19.0	>100	0	>100						24	24	24	1.9	1.7	-20	92	0.0	0.1
83	Oberon	753	935	984	1160	1184	1060	2	1.5	1.4	110	290	170	1.5	1.0	-0.6	0.8	0.0	-1.1	-9	-1.5	-3.1	>100	>100	0						18	18	17	1.2	1.2	-801	-83	-0.5	-0.1
81	Gwydir		581	831	924	1308	1218	1	1.9	1.8		710	119		-0.5	1.9		-0.1	2.2		5.3	-0.2	>100	0	7							45	46	2.4	2.6	-676	151	-0.4	0.1
85	Uralla	678	816	743	611	676	771	1	1.1	1.2	124	32	69	-1.0	0.4	0.1	-1.3	-0.2	0.0	-7	-4.6	-4.4	>100	0	>100						33	32	32	3.0	2.6	-554	-60	-0.5	0.0
89	Bogan	1197	1051	1028	1355	1065	1135	1	1.1	1.2	18	212	181	-0.8	-1.8	-1.4	-1.2	-2.2	-1.8	-8	-6.1	-6.4	>100	0	0						17	17	17	1.5	1.5	-309	-241	-0.3	-0.2
76	Harden	829	878	671	1093	1019	1150	2	1.8	2.0	300	242		1.4	-0.9	0.2	1.4	-0.9	0.1	-1	-2.0	-4.8	63	0	>100						36	35	34	2.0	1.7	-153	38	-0.1	0.0
88	Wakool	709	819	791	1430	1201	1239	2	1.7	1.7	240	238	171	1.7	-0.2	-0.2	1.8	-0.1	-0.2	1	-0.1	-1.6	22	0	0						26	26	26	1.6	1.5	-138	-182	-0.1	-0.1
93	Tumbarumba	479	495	540	888	948	957	1	1.1	1.1	256	565	384	2.4	2.0	0.9	1.4	0.8	0.8	-13	-12.5	-12.6	>100	>100	>100						19	19	19	1.8	1.7	212	79	0.2	0.1
94	Gundagai	621	665	733	751	682	878	1	0.7	0.9	57	119	88	1.1	-1.5	-1.0	0.8	-1.9	-1.4	-6	-6.3	0.0	>100	0	0						19	19	21	2.7	2.3	-199	-130	-0.3	-0.1
92	Carrathool	946	899	929	1022	1064		1	1.1		305	425		-0.1	-1.7		-0.2	-1.7				0.0	>100	0	>100						13	14		1.3		-793		-0.7	
96	Warren	631	727	793	966	925	947	1	0.9	0.9				1.6	0.3	-0.2	-0.4	-0.8	-1.4	-3	-3.6	-19.7	>100	0	0						15	15	16	1.7	1.8	-19	-62	0.0	-0.1
98	Walcha	697	727	812	1107	951	921	1	0.8	0.8		40		1.1	0.2	-0.3	0.8	0.0	-0.4	-3	-3.2	-3.9	>100	>100	0						8	9	18	1.1	2.2	-175	-163	-0.2	-0.2
100	Balranald	660	648	631	2465	1081	800	2	0.9	0.7	3595	380	143	6.3	0.0	-1.1	6.4	0.1	-1.0	2	1.6	1.3	56	1	0											-4	-222	0.0	-0.3
97	Bombala	533	539	683	904	937	980	1	0.8	0.8				2.1	1.9	0.2	1.4	0.8	-0.3	-6	-12.8	-13.4	>100	>100	0						18	19	18	2.4	2.2	152	-31	0.2	0.0
101	Murrumbidgee	365	347	470	613	598	604	1	0.5	0.5	102	35	147	4.8	2.2	1.0	2.1	-1.0	-2.0	-29	-33.7	0.0	>100	0	0						12	14	14	2.8	2.6	79	30	0.2	0.1
90	Guyra	703	670	792	1121	1185	1130	1	1.4	1.3		116	113	1.3	2.0	0.8	1.5	1.8	1.0	-2	-0.7	-1.3	11	>100	5						57	27	28	1.9	2.1	-443	199	-0.3	0.2
104	Boorowa	455	461	660	1066	1294	1390	1	0.8	0.9			275	3.8	2.0	1.9	3.8	1.8	1.7	-1	-6.3	-8.7	>100	>100	>100						15	14	15	1.7	1.7	135	63	0.2	0.1
105	Brewarrina	1265	1329	1696	1921	1902	1988	1	0.9	1.0				2.7	-0.6	-1.2	2.6	-0.7	-1.3	-8	-8.2	-8.2	>100	0	0						4	4	4	0.4	0.4	-79	-140	-0.1	-0.1
106	Jerilderie	736	747	775	1189	1241	1280	1	0.6	0.6	60	58		3.5	2.6	2.4	2.2	0.8	0.7	-18	-20.0	0.0	>100	>100	>100						10	10	10	1.8	1.7	146	144	0.3	0.2
103	Central Darling	1043	906	1003	959	990	1110	1	0.7	0.8				0.0	0.3	0.9	-0.2	-0.1	0.6	-8	-7.3	0.0	>100	0	>100											-179	-62	-0.3	-0.1
	Totals for 200 - 1,500 Props							*$38M*	*$34M*	*$35M*													*No. of LWUs paying dividend is 0*														*13 of 26 LWUs had a +ve NPAT*		
LWUs with a single service (WS or Sge)																																						
4	Rous (Bulk Supplier) (NO SGE)	187	143	182	214	274	294	10	12.3	13.4	723	348	80	0.4	-1.2	-1.1	0.3	-0.2	-0.3	6	10.4	10.8	>100	0	0						11	10	7	0.1	0.1	-11,150	-5,240	-0.9	-0.4
8	Riverina (Groundwater) (NO SGE)	255	277	303	659	600	626	18	16.7	17.7	310	17	306	4.3	3.9	3.7	5.1	3.4	3.4	-8	-7.1	0.0	6	>100	>100						201	187	190	1.1	1.1	4,561	3,940	0.3	0.2
12	Fish River WS (Bulk Supplier, NO SGE)			0	304	0		7	0.0								7.9			-13			>100		>100														
28A	Goldenfields (Reticulator) (NO SGE)	748	700	632	587	555	612	6	5.5	6.1	575	5	134	1.6	0.1	-0.1	-0.3	-1.3	-0.9	-13		0.0	>100	0	0						97		96		1.6	-22	-184	0.0	0.0
28B	Goldenfields (Bulk) (NO SGE)	220	254	234		305	306		5.4	5.7		558			-0.5	-0.5	0.4	-0.5	-0.8			0.0		>100	0							0		0.0	-539	-561	-0.1	-0.1
40	Central Tablelands (NO SGE)	465	401	439	696	656	766	4	3.4	4.0	305	210		0.4	-0.6	-0.7	0.9	-0.2	0.3	6	6.4	5.1	2	0	0						56	57	56	1.7	1.4	-476	-581	-0.1	-0.1
9	Wagga Wagga (NO WS)	189	211	270	506	534	574	11	12.3	13.6	190	592		4.3			3.6	1.0	1.0	-10	-9.0	3.6	>100	>100	9						152	154	153	1.3	1.1	2,039	1,701	0.2	0.1
69	Temora (NO WS)	157	155	155	222	231	254	0	0.5	0.5	88	68		1.0	0.8	1.5	0.7	0.4	1.0	-5	-6.1	0.0	>100	>100	>100						24	25	25	5.2	4.7	68	130	0.1	0.2
72	Bland (NO WS)	257	324	312	459	0	493	1	0.0	0.9	199			1.5		0.1	-0.2		0.5	-25		0.0	>100	>100	1						21						8		0.0
77	Junee (NO WS)	218	230	238	333	341	372	1	0.6	0.6	45	86		0.7	0.4	0.7	0.5	-0.1	0.1	-7	-9.0	0.0	>100	0	>100						20	19	19	3.4	3.2	42	74	0.1	0.1
78	Blayney (NO WS)	298	301	335	597	557	518	1	1.0	0.9	17	27		2.2	-2.0	-0.4	2.0	0.3	-0.2	-10	-9.6	-11.5	>100	0	0								16	1.5	1.7	-288	-53	-0.3	-0.1
95	Weddin (NO WS)	127	124	185	184	200	208	0	0.2	0.2	3			-10.4	0.7	-1.6	-13.2	-0.1	-1.9	-42	-15.1	0.0	>100	0	0						15	16	14	7.8	6.6	-20	-158	-0.1	-0.7
99	Coolamon (NO WS)	148	147	197	486	425	585	0	0.4	0.6	134	88		3.0	1.6	3.0	2.3	1.0	2.4	-9	-9.7	0.0	>100	>100	>100						13	13	12	3.1	2.1	128	265	0.3	0.5
102	Lockhart (NO WS)		330	266	369	361	407	0	0.3	0.3				-1.4	-0.5	0.2	-2.2	-1.5	-0.8	-15	-17.1	0.0	>100	0	0						10	9	10	3.0	3.0	-34	4	-0.1	0.0
	Totals for all LWUs							*Total Income for single service LWUs is $65 M*															*No single service LWUs paid a dividend*														*7 of 13 single service LWUs had a +ve NPAT*		
								Total Income is $930 M including single service LWUs															*Total No. of LWUs paying dividend is 3*														*Total No. of LWUs with +ve NPAT is 52*		
														Median ERRR (% LWU basis) *0.3*																										
														Median Net Debt to Equity (% LWU basis) *-0.8*																										

Table 5B: Water supply and sewerage – levels of service, environmental

	WATER UTILITY	LEVELS OF SERVICE						ENVIRONMENTAL							
		Billing Complaints WS & Sge (per 1000 properties) (33) C12			% of calls Answered by Operator within 30 seconds (seconds) (34) C14			Greenhouse Gas Emissions: Water (tonnes CO2 per 1000 properties) (35a) E9		Sewerage (tonnes CO2 per 1000 properties) (35b) E10		Other (tonnes CO2 per 1000 properties) (35c) E11		Total (tonnes CO2 per 1000 properties) (35d) E12	
		06/07	*07/08*	*08/09*	*06/07*	*07/08*	*08/09*	*07/08*	*08/09*	*07/08*	*08/09*	*07/08*	*08/09*	*07/08*	*08/09*
	Sydney Water	3	5	4	83	89	85	83	68	150	192	11	-55	240	200
	Hunter Water	5.6	3	2	61	56	72	117	132	215	273	14	21	333	412
	Sydney Catchment Authority														
LWUs with > 10,000 Properties															
1	Gosford			-			-	205	128	179	298		13	384	439
2	Wyong			0		88	92		-		-		-		-
3	Shoalhaven		0	0		100	100	220	239	187	163	11	7	418	408
5	MidCoast		0	0			-	155	165	156	138	12	12	323	315
6	Tweed			0			-	190	150	199	189		0	389	339
7	Port Macquarie-Hastings	1	0	0		86	81								12
11	Albury City		0	0			-	282	310		238			282	548
10	Coffs Harbour	0	0	0			-	96	104	274	278	61	76	432	458
13	Tamworth Regional		5	0			-	224	261	121	118			346	379
15	Eurobodalla		0	0			-	180	186	181	159			361	345
17	Queanbeyan	14	9	9			-	13	15	154	160	37	39	204	214
19	Orange		0	7			-	280	241	243	186		0	523	428
20	Goulburn Mulwaree	0	0	0			-	269	122	146	134	2	2	417	257
18	Dubbo		2	1		82	87	483	545	240	202	13	13	735	759
16	Wingecarribee		13	3		100	75	193	178	238	151	186	7	617	336
14	Clarence Valley	1	1	1			-	40	16	78	84	2	-	120	100
21	Bathurst Regional		0	0			-		-		-		-		-
24	Ballina			0		99	99		2		264		-		266
22	Lismore		0	0		75	75		7		162		0		169
	Totals for >10,000 Properties														
LWUs with 3,001 - 10,000 Properties															
23	Bega Valley		3	2		87	72		8		8		1		17
27	Byron		2	7			-		-		-		-		-
26	Country Energy	1	0	0			-		549		55				604
25	Kempsey		0	0			0	207	173	180	150	1	1	389	324
31	Lithgow			0			100		54		28		-		83
29	Armidale Dumaresq	0	0	-			-	172	113	52	53	23	25	247	191
30	Griffith	5	5	0			-	396	366	42	53		-	438	419
33	Richmond Valley	1	0	0			-		-		-		-		-
32	Mid-Western Regional	2	1	0			-		-		-		-		-
34	Nambucca	9	3	0			100		-		-		-		-
35	Singleton	0	0	0			-		-		-		-		-
37	Inverell	1	1	1			100								
41	Muswellbrook	0	1	0			-		-		-		-		-
36	Parkes	0	2	0			-	416	-	399	-	17	-	832	-
42	Corowa	0	0	0		100	100		-		-		-		-
38	Moree Plains	5	17	9			90	128	64	64	64		-	191	128

Table 5B: Water supply and sewerage – levels of service, environmental (continued)

	WATER UTILITY	LEVELS OF SERVICE						ENVIRONMENTAL							
		Billing Complaints WS & Sge (per 1000 properties) (33) C12			% of calls Answered by Operator within 30 seconds (seconds) (34) C14			Greenhouse Gas Emissions							
								Water (tonnes CO2 per 1000 properties) (35a) E9		Sewerage (tonnes CO2 per 1000 properties) (35b) E10		Other (tonnes CO2 per 1000 properties) (35c) E11		Total (tonnes CO2 per 1000 properties) (35d) E12	
		06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09
44	Gunnedah	30	10	8		90	95		-		-		-		-
46	Narrabri	9	5	5			-		-		-		-		-
43	Tumut		1	7			-		-		-		-		-
49	Young	1	3	5			95		-		-		-		-
39	Cowra	3	3	1		100	100		-		-		-		-
45	Upper Hunter	2	5	6			-		-		-		-		-
52	Snowy River	3	10	2		95	95		289		137				426
51	Forbes	0	0	0		100	100	449	180	359	122	90	36	898	339
50	Cooma-Monaro		1	16		95	95		-		-		-		-
53	Berrigan	8	9	19			-		-		-		-		-
	Totals for 3,001 - 10,000 Props														
	LWUs with 1,501 - 3,000 Properties														
48	Leeton		1	3		100	100		-		-		-		-
54	Deniliquin	3	2	3			-	420	-	140	-	34	-	594	-
47	Bellingen	3	2	1		95	95		-		-		-		-
60	Glen Innes Severn		37	-		100	100		-		-		-		-
58	Cootamundra	1	1	2		80	80	215		215	-			431	
57	Wellington	111	95	36		99	-		468						1,004
91	Cabonne	5	10	9			-		-		-		-		-
80	Greater Hume	0	0	0		100	100		155		178		15		348
59	Lachlan	2		-		100	100	436	341	90	85	12	11	538	438
65	Murray	1	0	0		95	98		-		-		-		-
62	Narromine		6	4			87		283		113		10		406
56	Yass Valley	3	5	4		95	95		-		-		-		-
61	Liverpool Plains			8			-		-		-		-		-
55	Warrumbungle	13	1	0			-	373	257	78	70		-	451	327
71	Palerang		24	16			90	302	152	77	101			380	252
63	Narrandera		3	-			-		-		-		-		-
67	Cobar		9	5			100				-				
74	Wentworth		0	1			-								
75	Coonamble	8	0	0			90		-		-		-		-
	Totals for 1,501 - 3,000 Props														
	LWUs with 200 - 1,500 Properties														
70	Kyogle	3	4	1		100	100	217	150	74	78		17	292	246
79	Walgett			-			-		-		-		-		-
68	Tenterfield	3	3	-		90	-		-		-		-		-
84	Gilgandra	13	7	6		80	75	27	22	4	4	2	2	32	27
73	Upper Lachlan	5	3	2		95	90	135	131		-		-	135	131
82	Gloucester	2	1	8		50	50	570	163	89	71	294	25	953	259
87	Bourke	9	12	6		100	80								

Table 5B: Water supply and sewerage – levels of service, environmental (continued)

	WATER UTILITY	LEVELS OF SERVICE						ENVIRONMENTAL							
		Billing Complaints WS & Sge			% of calls Answered by Operator within 30 seconds			Greenhouse Gas Emissions							
		(per 1000 properties)			(seconds)			Water (tonnes CO2 per 1000 properties)		Sewerage (tonnes CO2 per 1000 properties)		Other (tonnes CO2 per 1000 properties)		Total (tonnes CO2 per 1000 properties)	
		(33) C12			(34) C14			(35a) E9		(35b) E10		(35c) E11		(35d) E12	
		06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09
86	Hay	2	2	2			-		-		-		-		-
83	Oberon		5	2			95	214	-	81	-		-	295	-
81	Gwydir	4	0	1			-		-		-		-		-
85	Uralla	1	3	3		85	85	252	97	137	145	8	8	397	249
89	Bogan		0	1		98	97		-		-		-		-
76	Harden	14	12	6		80	90		-						
88	Wakool	0	0	0			100		-		-		-		-
93	Tumbarumba		2	6			100		-		-		-		-
94	Gundagai	9	7	8		95	98	301	339		-			301	339
92	Carrathool	1	1	2		100	-	1629	1194	72	77		-	1701	1,270
96	Warren	30	27	85		90	95		230		52		25		306
98	Walcha	9	2	2			-		-		-		-		-
100	Balranald	0	0	0		100	100		29078		-		-		29,078
97	Bombala	0	0	0		100	100	168	141	82	49		178	250	367
101	Murrumbidgee	50		-			-	386	-	57	-		-	443	-
90	Guyra	2	0	4			100	164	334	160	111	4	10	329	455
104	Boorowa		0	0		98	99				-				
105	Brewarrina	0	0	0			-	644	589	26	-		-	671	589
106	Jerilderie	0	0	0		95	95	168	76	82	82	11	11	261	168
103	Central Darling	25	44	35			-		-		-		-		-
	Totals for 200 - 1,500 Props														
	LWUs with a single service (WS or Sge)														
4	Rous (Bulk Supplier) (NO SGE)		0				95	60	-		-		-	60	-
8	Riverina (Groundwater) (NO SGE)		0	1			99	0	395		-		0	0	395
12	Fish River WS (Bulk Supplier, NO SGE)		0				98	116	118		-			116	118
28A	Goldenfields (Reticulator) (NO SGE)			0			-				-				
28B	Goldenfields (Bulk) (NO SGE)						-				-				
40	Central Tablelands (NO SGE)		0	0			-		303		-		4		308
9	Wagga Wagga (NO WS)		0	0			-		-	35	36		-	35	36
69	Temora (NO WS)		0	0			-		-	3	3		0	3	4
72	Bland (NO WS)			0			-		-		-		-		-
77	Junee (NO WS)		0	0			-		-		-		-		-
78	Blayney (NO WS)		0	0			-		-		133		-		133
95	Weddin (NO WS)		0	0			-		-						
99	Coolamon (NO WS)			0			-		-		-		-		-
102	Lockhart (NO WS)			0			-		-		-		-		-

Table 6: Water supply – residential charges, bills and cost recovery

	WATER UTILITY	RESIDENTIAL CHARGES - Current and 2009/10																Billing (2006 National Guidelines)		Operating Cost (OMA)			Typical Developer Charge			BILLS			COST RECOVERY																						Full Cost Recovery ?	Total Connected Properties
		Fixed Charge (or Minimum)			Usage Charge (for Step 1 and Step 2)																																															
					Step 1						Step 2																																									
		($)			Step (kL)			Charges (c/kL)			Step (kL)			Charges (c/kL)			(% Imple-mentation)		(c/kL)			($/ET)			Typical Residential Bill based on avge res water supplied ($/assessment)			Return on Assets (%)			ERRR (Water Supply) (%)			Residential Revenue from Usage Charges (% of residential		Avge Annual Residential Water Supplied[3] Potable kL/prop		Pot + Non Pot kL/prop (14b)		L/c/d (14c)	(N / Y* / Y)	
		(2) P1.2			(5a) P1.3			(5b) P1.3			(5c) P1.4			(5d) P1.4			(5e)		(6)			(7)			(8) P3			(11)			(12) F17			(13) F4		(14a) P2.1					(14c)	(15) C4
		07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	06/07	07/08	08/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09	08/09	08/09	08/09
	Sydney Water	57	76	102	<400	<400	All	134	161	187	>400	>400		183	183				88			840	840		306	369	472				1.9	-0.5	1.7	84	78	186	198	186	198	203	Y	1,755,000
	Hunter Water	38	41	40	<1000	All	All	120	127	157	>1000			118					49			560	560		251	266	322				3.5	2.0	2.5	66	66	177	180	177	180	198	Y	222,000
	LWUs with > 10,000 Properties																																										
1	Gosford	85	88	92	All	All	All	138	167	178								100	159	156	158	2,300	2,380	2,470	271	321	341	-0.1	-0.4	0.2	-0.4	-0.3	0.3	72*	75	135	140	135	140	160	Y	70,070
2	Wyong	95	97	102	All	All	All	138	167	178							100	100	153	94	118	2,500	2,600	2,690	296	332	353	2.8	-0.9	-1.8	3.2	0.0	-0.6	71*	74	146	141	146	141	150	Y*	59,500
3	Shoalhaven	61	61	65	<450	<450	<450	95	100	130	>450	>450	>450	143	150	195	100	100	76	85	79	5,270	5,840	6,020	198	213	263	1.1	-0.1	-0.8	0.6	-0.3	-0.3	70*	75*	144	152	144	152	199	Y*	45,670
4	Rous (Bulk Supplier) (No Sge)																		58	67	76	3,500	3,600	3,690				0.4	-1.2	-1.1	0.3	-0.2	-0.4								Y*	45,660
5	MidCoast (Unfiltered)	130	124	142	<200	<200	<200	145	175	202	>200	>200	>200	165	195	224	50	60	97	132	113	4,900	5,090	5,220	346	386	445	3.7	-3.3	-1.7	2.4	0.2	0.8	71	75	149	150	149	150	179	Y	36,270
6	Tweed	95	98	102	All	All	<450	123	136	150			>450			225	10	10	88	99	103	10,000	10,400	10,710	325	342	372	1.9	1.6	-0.2	1.4	1.3	0.2	71*	73*	174	180	174	180	205	Y	31,660
7	Port Macquarie-Hastings (Unfiltere	110	110	141	<270	<270	<270	153	184	197	>270	>270	>270	306	368	394	33	33	123	112	121	8,300	8,660	8,780	346	388	438	0.9	0.5	0.3	1.1	0.7	1.7	74	74	154	151	154	151	143	Y	29,880
8	Riverina (Groundwater) (No Sge)	80	80	80	All	All	<600	75	78	86			>600			129	50	50	43	53	50	3,300	3,400	3,500	325	372	401	4.3	3.9	3.7	5.1	3.4	3.4	77	80*	327	374	327	374	385	Y	28,280
10	Coffs Harbour (Unfiltered)	108	113	124	<365	<365	<365	189	196	214	>365	>365	>365	227	255	300	95	95	93	99	102	6,590	6,800	7,010	428	436	477	3.5	1.6	-0.9	2.9	3.7	1.7	79	76	169	165	169	165	155	Y	23,830
11	Albury City	87	87	87	<225	<225	<225	50	52	54	>225	>225	>225	100	104	109	100	100	63	98	82	3,400	3,400	3,400	184	203	207	0.0	-0.7	-1.5	-0.3	-0.8	-1.6	54*	64	193	222	193	222	247	N	22,210
12	Fish River WS (Bulk Supplier) (No Sg	MAQ	MAQ	MAQ																								0.1													Y*	23,500
13	Tamworth Regional	170	175	187	<400	<400	<400	90	99	106	>400	400-800	400-800	135	149	159	30	80	78	79	87	3,820	3,940	4,090	343	398	426	3.5	3.3	2.6	2.7	3.0	2.1	55	61	192	226	192	226	258	Y	20,350
14	Clarence Valley	104	112	119	<450	<450	<450	113	122	130	>450	>450	>450	170	183	195	75	75	75	75	97	4,230	4,330	4,330	331	322	343	10.2	9.7	1.1	9.8	9.9	1.7	71	69	174	172	174	176	178	Y	20,810
15	Eurobodalla (Unfiltered)	285	295	305	<450	<450	<450	160	170	195	>450	>450	>450	240	255	290			153	139	150	9,540	9,820	10,190	475	515	557	2.2	3.0	2.2	1.5	2.4	2.3	41*	45*	119	129	119	129	179	Y	19,200
16	Wingecarribee	99	102	107	<300	<225	<225	124	128	131	>300	>225	>225	185	192	196			89	123	111	5,500	5,500	5,600	307	336	346	4.6	1.4	0.3	3.8	0.4	0.0	68	71	168	183	168	183	223	Y	18,000
17	Queanbeyan (Reticulator)	254	262	271	<176	<200	<176	160	170	181	>176	>200	>176	215	230	244	100	100	127	147	193	7,060	7,210	7,500	562	599	644	1.1	2.6	-0.5	0.6	2.2	-0.7	57	58*	188	198	188	198	223	Y*	15,780
18	Dubbo	116	121	126	<550	<550	<450	87	91	94	>550	>550	>450	138	145	175	100	100	67	93	82	4,230	4,480	4,740	395	423	437	0.8	-1.0	-0.5	1.1	-0.3	0.2	75	75	322	331	322	331	358	Y	16,120
19	Orange	106	111	118	<450	<450	<450	146	151	154	>450	>450	>450	219	227	231			52	62	63	6,200	6,460	6,620	375	502	516	5.1	1.2	2.5	4.6	1.0	2.5	72	77*	177	259	177	259	267	Y	15,890
21	Bathurst Regional	269	235	235	<300	<250	<250	45	76	125	>300	>250	>250	90	115	188			87	95	101	2,650	2,650	2,650	377	417	535	0.6	1.5	2.3	0.5	1.1	1.9	44*	56*	241	240	241	240	267	Y	14,940
22	Lismore (Reticulator)	100	100	130	All	All	All	135	170	190									119	141	149	2,020	2,020	2,020	320	370	432	0.9	-1.6	-1.8	0.6	-1.6	-1.7	73*	73	163	159	163	159	158	Y*	13,970
23	Bega Valley (Unfiltered)	130	130	164	All	All	All	210	210	210							85	90	133	125	131	10,700	11,000	11,340	433	454	488	0.8	2.7	2.4	0.0	1.6	1.5	71	73	144	154	144	154	188	Y	14,050
24	Ballina (Reticulator)	100	110	123	<350	<350	<350	107	118	132	>350	>350	>350	160	177	198	100	100	105	124	151	4,510	4,510	4,510	299	316	354	0.8	-0.2	-1.6	0.1	-1.2	-2.4	67	66	186	175	186	175	171	Y*	14,020
25	Kempsey (Groundwater)	276	275	260	All	<250	<250	99	110	120		>250	>250		165	175	70	12	85	100	113	7,650	7,950	8,150	442	447	447	0.7	-0.8	-0.9	1.1	-0.4	-0.5	40*	42*	169	156	169	156	184	Y*	12,290
26	Country Energy	209	214	219	<400	<400	<400	79	91	105	>400	>400	>400	236	236	236		100	136	128	145				430	469	513							56	57*	280	280	280	284	398	Y*	10,450
27	Byron (Reticulator)	115	123	115	All	All	<450	127	144	170			>450			250		80	129	134	137	6,460	6,460	6,460	344	383	422	0.7	-0.5	0.0	0.2	-1.3	0.2	68*	73*	181	181	181	181	163	Y	10,650
28A	Goldenfields (Reticulator) (No Sge)	204	204	125	All	All	<600	114	120	152			>600			230	25	75	50	132	114	4,200	5,300	6,400	491	557	572	1.6	0.1	-0.1	-0.3	-1.3	-0.9	61	78*	252	294	252	298	271	Y*	9,990
28B	Goldenfields (Bulk Supplier) (No Sge)																		40	68	45							0.4	-0.5	-0.5	0.4	-0.5	-0.8								Y*	18,590
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties	*110*	*113*	*125*				*124*	*132*	*151*									*91*	*106*	*113*	*5,085*	*4,900*	*5,600*	*345*	*380*	*435*	*1.3*	*0.5*	*-0.1*	*1.1*	*0.4*	*0.2*	*71*	*73*	*174*	*177*	*174*	*178*	*194*	*1 LWU with N*	
	LWUs with 3,001 - 10,000 Properties																																									
20	Goulburn Mulwaree	230	230	230	<292	<292	<292	140	145	145	>292	>292	>292	200	200	200	25	25	124	135	149	3,250	4,070	4,170	436	425	425	1.1	-1.1	-0.5	1.2	0.5	0.3	48*	46*	147	134	147	134	159	Y	10,540
29	Armidale Dumaresq	240	240	240	<200	<400	<400	92	98	148	>200	>400	400-1000	123	130	196		10	121	138	148	3,620	4,630	4,800	491	444	548	-0.7	-0.2	-0.1	-0.9	-0.3	0.3	54	68	254	208	254	214	219	Y	8,460
30	Griffith	108	108	120	<200	<200	<200	40	45	55	>200	>200	>200	65	70	90	10	15	51	64	73	3,110	3,110	3,210	414	434	533	4.4	0.0	-0.2	3.5	0.4	0.1	76*	77*	548	537	548	566	438	Y	8,230
31	Lithgow	206	221	236	<500	<500	<450	85	88	102	>500	>500	>450	160	176	176			176	181	120	2,230	2,230	2,230	342	373	413	-4.0	-0.2	1.5	-5.2	-1.4	1.0	44	43*	160	173	160	173	179	Y	7,820
32	Mid Western Regional	312	135	139	All	<450	<450	108	160	165		>450	>450		240	247			82	128	181	2,800	7,000	7,000	526	388	400	1.2	0.6	-0.9	1.3	0.7	-0.8	70*	72	199	158	199	158	203	N	7,100
33	Richmond Valley	120	120	100	<200	<200	<200	120	120	153	>200	>200	>200	160	160	203			94	95	101	4,950	4,950	4,950	347	331	368	2.9	1.1	-0.6	2.3	0.4	-0.6	68	73*	189	175	189	175	186	Y*	6,960
34	Nambucca (Groundwater)	70	48	67	All	All	All	110	125	138									65	79	90	3,970	4,090	4,400	231	220	257	3.0	0.9	1.2	2.1	0.9	1.5	79*	79	146	137	146	137	157	Y	6,210
35	Singleton	180	180	180	All	<450	<450	83	83	89		>450	>450		160	166			76	100	101	4,250	4,380	4,540	355	403	419	6.8	2.4	2.2	4.7	0.9	0.2	49*	58	211	269	211	269	228	Y	6,300
36	Parkes	307	320	295	<365	<365	<365	70	80	95	>365	>365	>365	175	190	200	40	50	64	49	50	5,110	5,300	5,300	456	568	590	4.0	-4.7	-0.2	1.9	0.7	0.6	42	51	212	310	212	315	372	Y	5,840
37	Inverell	265	275	285	<700	<700	<500	100	100	100	>700	>700	>500	120	120	120			90	109	110	6,780	9,750	9,900	559	565	575	3.4	-0.6	1.4	3.1	1.0	0.6	52*	50*	294	290	294	290	328	Y	5,270
38	Moree Plains (Groundwater Dual Sup	250	225	225	All	<750	<750	72	75	80		>750	>750		105	110	50	60	66	23	29	3,270	3,800	4,000	924	993	1041	2.0	-3.3	-0.3	1.7	-0.2	0.6	77*	78*	936	946	936	1960	1804	Y	4,420
39	Cowra	255	255	264	<600	<600	<600	105	115	120	>600	>600	>600	200	210	217			109	141	147	2,500	2,500	2,500	463	477	496	1.5	0.3	-1.9	1.4	0.8	-1.4	47*	48	198	193	198	211	320	N	5,250
40	Central Tablelands (No Sge)	124	124	124	<450	<450	<450	135	146	158	>450	>450	>450	202	219	237		50	118	102	103	7,570	7,800	8,090	380	411	434	0.4	-0.6	-0.7	0.9	-0.2	0.3	70	72	190	196	190	196	183	Y	5,260
41	Muswellbrook	175	175	175	<350	<350	<350	124	130	133	>350	>350	>350	185	194	200	80	80	97	78	88	3,300	3,300	3,300	472	516	524	5.1	5.8	2.6	3.8	4.5	2.3	69	67*	240	263	240	263	205	Y	5,310

Table 6: Water supply – residential charges, bills and cost recovery (continued)

	WATER UTILITY	RESIDENTIAL CHARGES - Current and 2009/10																							BILLS			COST RECOVERY														
		Fixed Charge (or Minimum)			Usage Charge (for Step 1 and Step 2)												Billing (2006 National Guidelines)		Operating Cost (OMA)			Typical Developer Charge			Typical Residential Bill based on avge res water supplied			Return on Assets			ERRR (Water Supply)			Residential Revenue from Usage Charges		Avge Annual Residential Water Supplied[3]					Full Cost Recovery ?	Total Connected Properties
					Step 1						Step 2																									Potable		Pot + Non Pot				
		($)			Step (kL)			Charges (c/kL)			Step (kL)			Charges (c/kL)			(% Implementation)		(c/kL)			($/ET)			($/assessment)			(%)			(%)			(% of residential		kL/prop		kL/prop		L/c/d	(N / Y* / Y)	
		(2) P1.2			(5a) P1.3			(5b) P1.3			(5c) P1.4			(5d) P1.4			(5e)		(6)			(7)			(8) P3			(11)			(12) F17			(13) F4		(14a) P2.1		(14b)		(14c)	(14c)	(15) C4
		07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	06/07	07/08	08/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09	08/09	08/09	08/09
42	Corowa	120	155	160	All	All	All	55	80	83									75	75	85	910	910	910	234	351	364	-0.7	-2.7	0.8	-1.7	-2.7	2.6	52*	56*	207	245	207	245	288	Y	4,790
43	Tumut	94	99	111	<400	<300	<300	85	99	111	>400	>300	>300	106	149	167			85	99	98	4,250	4,390	4,540	284	316	354	0.9	-0.2	-1.1	0.3	-0.7	-1.2	70	73	224	219	224	219	198	Y*	4,410
44	Gunnedah (Groundwater)	150	161	183	<400	<400	<400	70	75	90	>400	>400	>400	110	120	130			34	50	45	4,000	4,120	4,280	323	373	437	4.8	2.3	2.9	3.9	2.6	2.8	65	65	247	282	247	282	297	Y	4,530
45	Upper Hunter	219	241	249	All	<300	<300	107	112	116		>300	>300		160	166			81	110	120	5,340	5,340	5,340	450	499	516	9.6	6.0	4.6	6.7	3.6	1.9	50*	52*	216	230	216	230	269	Y	4,200
46	Narrabri (Groundwater)	100	97	220	All	All	All	35	38	60									35	37	38	2,200	2,300	2,650	371	305	549	2.9	-6.0	-2.1	-1.2	-2.5	-2.9	75*	60	773	548	773	548	515	Y*	4,370
47	Bellingen (Unfiltered)	202	211	228	All	<365	<365	79	90	98		>365	>365		135	147				99	102	6,300	6,300	6,300	339	362	392		1.9	3.0		0.1	0.9	49	51	173	168	173	168	179	Y	4,010
48	Leeton	175	185	198	<350	<350	<350	50	62	72	>350	>350	>350	75	93	108			57	62	63	2,600	3,600	3,600	375	489	551	3.9	0.1	0.3	3.5	-1.4	-0.7	62	64*	384	444	384	444	471	Y	3,910
49	Young (Reticulator)	175	175	157	<300	<300	<320	125	130	170	>300	>300	>320	170	175	265	50	50	104	81	70	2,000	2,000	950	446	445	510	5.3	3.8	0.6	4.0	3.0	0.7	62	69*	217	207	217	207	237	Y	4,580
50	Cooma-Monaro	342	325	300	<300	<300	<300	80	80	100	>300	>300	>300	120	128	150	25	100	78	90	118	2,340	2,830	2,830	606	556	589	9.2	0.4	3.2	6.7	0.7	2.4	45*	49*	320	289	320	289	347	Y	3,830
51	Forbes	140	144	149	<600	<600	<600	64	66	68	>600	>600	>600	96	99	100		25	50	65	64	1,730	1,730	3,940	368	384	396	3.4	0.7	1.3	2.2	-1.3	-0.9	63	63	356	363	356	363	395	Y	3,530
52	Snowy River (Unfiltered)	329	360	435	All	All	All	53	58	70								90	113	195	148	4,000	4,000	4,000	395	450	544	0.8	-1.9	0.1	0.6	-1.8	0.1	21	21	126	156	126	156	376	Y	4,090
53	Berrigan (Dual Supply)	300	380	430	All	All	All	90	90	100									67	108	96	4,200	4,360	4,360	456	619	663	2.1	2.2	2.5	1.7	1.9	2.3	41	39	131	173	215	292		Y	3,490
53	Berrigan (Non Potable)				All	All	All	45	70	50																										84	119	215	292	371		3,490
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties	*191*	*183*	*209*				*88*	*90*	*100*									*81*	*97*	*99*	*3,285*	*3,940*	*4,225*	*405*	*438*	*503*	*3*	*0*	*0.4*	*1.9*	*0.5*	*0.4*			*215*	*225*	*215*	*238*	*269*	*2 LWU with N*	
	LWUs with 1,501 - 3,000 Properties																																									
54	Deniliquin	409	416	431	<800	<800	<800	25	26	27	>800	>800	>800	57	59	61			46	83	49	3,100	3,310	3,310	510	582	604	0.0	1.3	1.2	-0.1	-0.3	0.2	24	29*	403	640	403	709	705	Y	3,340
55	Warrumbungle	217	233	268	All	<450	<450	80	100	100		>450	>450		150	120			153		180	1,000	1,320	1,350	335	425	460	-2.9		-0.3	-4.0		-0.5	39*	49	148	192	148	192	247	Y	3,300
56	Yass Valley	200	206	212	All	All	All	130	160	195							50	50		139	126	8,960	9,230	9,460	415	501	572		-0.7	-0.7		-0.7	-0.7	56*	63*	165	184	165	184	204	Y*	3,040
57	Wellington	183	192	199	<300	<300	<300	150	158	164	<500	<500	<500	181	190	197	100	100	101	123	124	3,880	4,140	4,220	641	511	530	3.6	-1.9	-0.5	4.4	-0.3	1.1	72*	67	304	202	304	202	223	Y	2,910
58	Cootamundra (Reticulator)	100	100	180	<450	<450	<450	126	137	147	>450	>450	>450	252	273	293		10	124	80	78	3,310	4,620	4,620	362	371	470	-1.2	-5.5	-6.5	-1.4	-5.8	-6.8	74*	78	208	198	208	198	182	Y*	2,900
59	Lachlan	265	225	225	<450	<450	<450	93	105	130	>450	>450	>450	140	160	180				105	87		5,500	5,750	598	578	662		0.4	0.0		-0.4	-0.3	63*	66*	360	337	360	351	384	Y*	2,810
60	Glen Innes Severn	85	94	90	<450	<450	<450	138	138	160	>450	>450	>450	195	195	240			99	123	166	2,590	3,190	3,190	311	310	341	0.0	-0.4	-2.4	-0.1	-0.7	-3.4	76	74*	164	157	164	157	166	Y*	2,880
61	Liverpool Plains	203	253	303	<300	<300	<300	64	74	92	>300	>300	>300	106	122	141			101	88	92	3,390	3,390	3,560	358	418	508	-2.1	-2.1	-0.4	-3.7	-2.5	-0.7	58	45	242	223	242	223	246	Y*	2,530
62	Narromine (Groundwater)	150	150	155	All	All	All	70	75	80							80	85	56	52	33	1,300	2,700	2,790	493	472	499	11.1	4.7	1.3	6.5	2.1	0.9	71*	69*	490	430	490	430	428	Y	2,220
63	Narrandera (Groundwater)	220	220	220	All	All	All	60	62	62									51	52	71	1,000	1,000	1,000	470	458	458	9.9	3.0	4.9	5.5	3.0	4.5	54*	60	419	384	419	384	384	Y	2,060
65	Murray (Dual Supply)	196	207	216	All	All	All	67	71	74									55	96	92	2,130	2,130	2,130	409	467	486	2.2	-0.1	0.3	2.3	0.2	0.5	53*	56*	179	156	225	260		Y	2,940
65	Murray (Non Potable)	72	76	79	All	All	All	46	69	72																										46	104	225	260	312		2,940
67	Cobar	230	210	200	<450	<450	<450	75	80	85	>450	>450	>450	130	140	150			49	52	66	1,410	1,410	1,410	919	560	572	3.6	0.0	1.0	3.5	-1.1	0.9	78*	65*	721	438	721	465	328	Y	2,190
66	Cobar WB																			41									-2.1			-2.1									N	
68	Tenterfield	218	270	305	All	All	<450	115	145	159			>450			183			170	190	197	1,500	1,500	1,500	446	473	528	-0.4	-3.9	-2.6	-0.9	-2.6	-2.3	52*	49	199	140	199	140	180	Y*	1,990
70	Kyogle	192	204	224	<200	<200	<200	105	114	114	>200	>200	>200	175	175	175	90	90	110	142	119	1,000	1,000	2,000	333	409	429	5.1	3.0	2.6	4.1	2.2	2.3	43	51	134	180	134	180	193	Y	1,830
71	Palerang	290	307	315	<200	<200	<200	110	116	120	>200	>200	>200	180	190	195		100		163	136	2,490	9,430	9,760	445	496	511		5.2	5.9		4.3	5.1	53	42	141	163	141	163	170	Y	1,920
73	Upper Lachlan	420	430	320	<250	<200	<200	110	150	195	>250	>200	>200	150	200	260	60	75	127	150	270	2,200	3,150	3,150	616	538	460	3.6	4.6	1.0	3.4	4.7	1.6	38*	40	179	72	179	72	114	Y	1,920
74	Wentworth (Dual Supply)	250	250	240	<250	<250	<250	115	115	115	>250	>250	>250	270	270	270			48	41	58	3,150	3,600	3,930	657	617	597	2.1	2.5	1.5	2.5	2.8	1.4	62*	60*	83	119	560	376		Y	2,240
74	Wentworth (Non Potable)	135	135	125	<700	<700	<700	37	37	37	>700	>700	>700	63	80	80																				477	257	560	376	529		2,240
75	Coonamble (Groundwater)	64	68	75	<370	<370	<370	34	36	40	>370	>370	>370	51	55	61	20		35	57	39	600	620	670	209	228	253	1.6	-3.0	-0.4	-2.9	-8.3	-5.0	74	73	408	419	408	419	520	Y*	1,670
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties	*209.9*	*215*	*222*				*99*	*110*	*115*									*100*	*92*	*92*	*2,165*	*2,200*	*3,170*	*446*	*475*	*504*	*2.1*	*-0.1*	*0.1*	*2.1*	*-0.3*	*0.7*			*234*	*180*	*234*	*223*	*235*	*1 LWU with N*	

Table 6: Water supply – residential charges, bills and cost recovery (continued)

No.	WATER UTILITY	RESIDENTIAL CHARGES - Current and 2009/10: Fixed Charge (or Minimum) ($) (2) P1.2			Usage Charge (for Step 1 and Step 2): Step 1 Step (kL) (5a) P1.3			Step 1 Charges (c/kL) (5b) P1.3			Step 2 Step (kL) (5c) P1.4			Step 2 Charges (c/kL) (5d) P1.4			Billing (2006 National Guidelines) (% Implementation) (5e)		Operating Cost (OMA) (c/kL) (6)			Typical Developer Charge ($/ET) (7)			BILLS: Typical Residential Bill based on avge res water supplied ($/assessment) (8) P3			COST RECOVERY: Return on Assets (%) (11)			ERRR (Water Supply) (%) (12) F17			Residential Revenue from Usage Charges (% of residential) (13) F4		Avge Annual Residential Water Supplied[3]: Potable kL/prop (14a) P2.1		Pot + Non Pot kL/prop (14b)		Pot + Non Pot L/c/d (14c)	Full Cost Recovery? (N / Y* / Y) (14c)	Total Connected Properties (15) C4
		07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	09/10	07/08	08/09	06/07	07/08	08/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	07/08	08/09	07/08	08/09	08/09	08/09	08/09
	LWUs with 200 - 1,500 Properties																																									
76	Harden (Reticulator)	280	288	200	<350	<350	<450	120	120	200	>350	>350	>450	150	150	300		15	214	178	84	3,310	3,310	3,310	666	684	860	0.6	-0.6	-0.2	0.6	-0.6	-0.3	57*	77*	322	330	322	330	281	Y*	1,750
79	Walgett (Dual Supply)	670	717	753	All	All	All												61	70	57				670	717	753	-1.6	-2.0	0.0	-1.7	-2.1	-0.1			189	195	938	938		Y*	1,590
79	Walgett (Non Potable)				All	All	All	Nil	Nil	Nil																										749	744	938	938	113		1,590
80	Greater Hume	60	80	90	<200	<200	<200	60	70	80	>200	>200	>200	80	90	95			91	117	101	1,400	1,400	1,400	198	256	288	0.1	-1.3	-0.2	-0.3	-1.8	-0.7	72	71	223	240	223	240	203	Y*	1,690
81	Gwydir	430	430	440	<450	<600	<600	90	95	95	>450	>600	>600	195	195	195				120	188	2,000	2,000	2,000	627	576	586		1.0	1.9		2.1	3.6	33*	37	219	154	219	154	204	Y	1,450
82	Gloucester	225	252	195	All	All	<200	135	155	196			>200			255		95	199	230	165	5,720	5,900	6,090	449	529	545	0.5	-2.0	1.4	0.0	-2.0	1.2	50*	64*	166	179	166	179	222	Y	1,670
83	Oberon (Reticulator)	100	100	100	All	All	All	108	112	123									68	97	130	1,100	1,130	1,170	289	301	321	2.6	0.2	-1.7	2.6	-0.1	-1.7	82*	69*	175	179	175	179	176	Y*	1,310
84	Gilgandra (Groundwater)	180	180	186	All	All	All	75	82	84							5	5	33	41	54				490	531	545	4.5	2.3	1.0	3.7	1.2	0.1	65*	66*	413	428	413	428	488	Y	1,370
85	Uralla	200	210	239	All	All	All	100	108	125							95	95	196	235	258	400	750	800	323	319	366	-1.9	-0.1	-0.5	-2.3	-0.5	-0.6	46	41	123	102	123	102	155	Y*	1,570
86	Hay (Dual Supply)	77	85	110	<300	<300	<300	63	69	95	>300	>300	>300	95	105	140			28	41	37				427	472	635	1.0	0.4	0.5	-0.1	-0.9	-0.5	82*	83*	179	184	1021	1140		Y	1,310
86	Hay (Non Potable)	237	260	350	All	All	All																													842	956	1021	1140	1221		1,310
87	Bourke (Dual Supply)	182	188	195	All	All	All	110	135	155									24	23	23	400	640	660	903	1225	1350	1.4	-3.3	-0.2	1.4	-3.3	-0.3	81*	86*	383	539	3350	3169		Y*	1,200
87	Bourke (Non Potable)	300	309	320	All	All	All																													2967	2631	3350	3169	4312		1,200
88	Wakool (Dual Supply)	210	220	228	<600	<600	<600	80	83	86	>600	>600	>600	126	131	135			43	61	68				768	787	815	1.9	0.2	0.1	2.1	0.4	0.2	73*	72*	173	153	853	839		Y	1,410
88	Wakool (Non-Potable)	420	440	455																																680	685	853	839	868		1,410
89	Bogan	220	240	260	<500	<500	<600	72	80	90	>500	>500	>600	108	120	130		90	111	154	132				565	487	538	0.0	-2.7	-3.6	-2.3	-3.0	-3.8	62*	54	479	309	479	309	305	Y*	1,030
90	Guyra	284	284	293	<450	<450	<450	105	105	108	>450	>450	>450	120	120	124			96	120	122	630	650	650	523	510	525	2.1	2.6	1.0	2.1	2.1	0.9	63	55	227	215	227	215	209	Y	1,170
91	Cabonne	182	189	195	<300	<300	<300	130	130	130	>300	>300	>300	290	300	310	100	100	186	156	125	4,280	4,540	5,510	352	359	366	1.5	-0.8	0.2	-0.5	-1.7	-0.6	66	69	131	131	131	166	202	Y	1,150
92	Carrathool (Groundwater)	343	360	372	<350	<350	<350	75	75	82	>350	>350	>350	85	85	93	90	90		60		920	980	1,010	718	704	748	0.1	-1.6		0.0	-1.7		55	50*	482	446	482	1215	1409	Y*	1,010
93	Tumbarumba	310	246	246	<300	<200	<200	65	99	104	>300	>200	>200	109	164	174			78	90	96	440	490	490	452	478	490	2.3	1.4	0.4	1.8	0.8	0.4	48*	50*	219	221	219	221	305	Y	1,140
94	Gundagai	80	88	96	<300	<300	<300	70	70	80	>300	>300	>300	90	90	100	100	100	68	54	59	660	800	2,000	241	284	321	1.8	-1.4	-0.9	1.2	-2.0	-1.6	67	72	230	281	230	281	290	Y*	1,050
96	Warren (Dual Supply)	225	240	250	<450	<450	<450	75	79	83	>450	>450	>450	113	119	125		50	57	58	77				419	422	442	-0.4	-0.7	-0.9	-0.4	-0.8	-1.1	46	46	172	164	412	352		Y*	960
96	Warren (Non Potable)				<450	<450	<450	27	28	30	>450	>450	>450	48	50	52																				240	189	412	352	453		960
97	Bombala	400	416	433	<350	<350	<350	48	48	49	>350	>350	>350	103	103	108			136	98	117	1,420	1,470	1,530	518	542	564	1.9	2.5	0.5	1.1	1.1	-0.1	26	28	249	266	249	266	283	Y	840
98	Walcha	124	128	133	<300	<300	<300	181	187	195	>300	>300	>300	269	277	287			168	171	228				493	456	476	1.1	-0.3	-0.9	0.8	-0.5	-1.1	75*	72*	204	176	204	176	219	Y*	890
100	Balranald (Dual Supply)	198	130	135	All	<600	<600	66	68	70		>600	>600		102	105			51	58	56	910	910	910	741	672	726	12.5	-0.4	-2.3	13.1	0.3	-1.6	80*	81*	257	241	910	958		Y*	860
100	Balranald (Non Potable))	210	138	143	>200	<600	<600	25	31	36		>600	>600		47	54																				653	717	910	958	981		860
101	Murrumbidgee (Groundwater)	180	180	180	All	All	<500	22	24	25			>500			30			17	32	38	1,000	1,000	1,000	301	294	298	3.9	0.4	-0.6	2.1	-1.9	-2.9	50	55	550	474	550	474	622	Y*	900
103	Central Darling (Dual Supply)	105	105	105	All	All	All	300	300	300							15	5	110	111	110				950	965	965	0.6	0.0	0.0	0.3	0.0	0.9	89*	89*	140	145	601	526		Y*	690
103	(Non Potable-Wilcannia)	425	425	425	All	All	All																													461	382	601	526	664		690
104	Boorowa	388	388	388	All	<240	<200	125	150	165		>240	>200		250	280		2	86	110	115	400	400	400	658	822	913	3.4	3.2	2.1	3.6	3.1	2.1	46*	57*	216	270	216	271	601	Y	620
105	Brewarrina	805	829	895	All	All	All													58	68				805	829	895	4.7	0.0	-1.2	4.4	-0.2	-1.5			400	335	400	1721	1387	Y*	480
106	Jerilderie (Dual Supply)	177	185	195	<250	<250	<250	105	110	115	>250	>250	>250	140	140	140			54	49	50	2,250	2,250	2,250	792	1113	1172	2.2	1.9	1.6	1.4	0.8	0.5	82*	83*	208	245	942	1033		Y	460
106	Jerilderie (Non Potable)	253	265	278	>300	All	All	48	50	53																										734	788	942	1033	1117		460
	Medians (% of LWUs basis) for 200 to 1,500 Properties	*205*	*215*	*198*				*85*	*97*	*100*									*86*	*93*	*96*	*1,000*	*1,000*	*1,170*	*531*	*556*	*555*	*2*	*0.0*	*0.0*	*1.1*	*-0.5*	*-0.3*	*55*	*54*	*219*	*231*			*282*	*0 LWUs with N*	

Median All LWUs (% of LWUs basis) — *Fixed Charge 200* — *Usage Charge Step 1 120 c/kL* — *Usage Charge Step 2 180* — *OMA (c/kL) 102* — *Developer Charge 3,800* — *TRB 490* — *ERRR 0.2* — *65%* — *225 kL/prop* — *93 LWUs have FCR for WS*

Median All LWUs (Statewide basis) — *Fixed Charge 120* — *Usage Charge Step 1 150* — *OMA (c/kL) 111* — *Developer Charge 4,600* — *TRB 430* — *ERRR 0.3* — *73%* — *175 kL/prop*

4 LWUs did not achieve FCR for WS

NOTES: 1. **Residential Revenue from Usage Charges**: Where this is marked *, it has been calculated from the projected typical residential bill for the 2009/10 financial year as this provides a higher value than the result for the 2008/09 financial year.

2. **Dual Water Supplies:** 11 LWUs had a dual water supply to over 50% of their residential customers with a potable supply for indoor use and a non-potable supply for outdoor use (refer to General Notes - Note 12 on page 17).

3. **Average Annual Residential Water Supplied:** The 11 Dual Supply LWUs are shown on two rows. The first row is labelled Dual Supply while the second row is labelled Non-Potable.
The first row in column (14a) shows the potable average Annual Residential Water Supplied while the second row in column (14a) shows the non-potable Average Annual Residential Water Supplied (see also Note 12 on page 17).
The total potable plus non-potable Average Annual Residential Water Supplied is shown in column (14b). See also Table 10 columns (56) and (56a).

4. **Full Cost Recovery** has been achieved by 93 LWUs (96%). These comprise 58 utilities which had either an Economic Real Rate of Return or Return on Assets of >=0 for the 2008/09 financial year (shown as "Y" in col(14a)).
They also include 35 utilities which have significantly increased their 2009/10 charges in order to recover their costs (shown as "Y*"). 4 LWUs did not achieve full cost recovery (shown as "N").
The Average Annual Residential Water Supplied has now fallen to 175kL/property which has significantly reduced the water supply revenue of many LWUs.

Table 6A: Water supply – 2009-10 residential multiple tariffs

	WATER UTILITY	Town	Tariff Type (1)	Access Charge ($) (2)	Access Charge Independent of Land Value ? (3)	Allowance (kL) (4)	Usage Range (kL) (5)	Usage Charge (c/kL) (6)
29	Armidale Dumaresq	Armidale	Inclining Block	240	✓	Nil	up to 400 kL	148
							401 kL to 1000 kL	196
							>1000 kL	228
		Armidale, untreated	Inclining Block		✓	Nil	up to 400 kL	72
							401 kL to 1000 kL	128
							>1000 kL	157
100	Balranald (Dual Supply)	Balranald & Euston, Filtered	Inclining Block	135	✓	Nil	<600 kL	70
							>600 kL	105
		Balranald & Euston, Raw	Inclining Block	143	✓	Nil	<600 kL	36
							>600 kL	54
21	Bathurst Regional	Filtered	Inclining Block	125	✓	Nil	0 to 250 kL	125
							>250 kL	188
		Raw Water	Inclining Block				0 to 250 kL	56
							>250 kL	95
		Hillview Water	Inclining Block	128	✓	Nil	0 to 250 kL	145
							>250 kL	306
53	Berrigan (Dual Supply)	Berrigan,Barooga,Finley(Potable)	Two Part	430	✓	Nil	All	100
		Berrigan,Barooga,Finley(Non-Potable)	Two Part		✓	Nil	All	50
		Tocumwal (Filtered)	Two Part	430	✓	Nil	All	67
89	Bogan	Nyngan	Inclining Block	260	✓	Nil	<500 kL	90
							>500 kL	130
		Nyngan, Raw Water	Inclining Block	320			<500 kL	54
							>500 kL	78
		Hermidale	Annual Charge	480	✓			
		Girilambone & Coolabah	Annual Charge	330	✓			
97	Bombala	Bombala	Inclining Block	433	✓	Nil	up to 350 kL	49
							>350 kL	108
		Delegate	Unmetered	331	✓			
87	Bourke (Dual Supply)	Bourke, Filtered	Two Part	320	✓	Nil	All	155
		Bourke, Raw	Unmetered	309	✓			
105	Brewarrina	Brewarrina	Unmetered	895				
		Goodooga	Unmetered	734				
91	Cabonne	Molong	Inclining Block	195	✓	Nil	up to 300 kL	130
							301 kL to 500 kL	310
							>500 kL	420
		Cumnock	Inclining Block	172	✓	Nil	up to 300 kL	340
							301 kL to 500 kL	430
							>500 kL	470
		Yeoval	Inclining Block	144	✓	Nil	up to 300 kL	190
							301 kL to 500 kL	250
							>500 kL	410
		North Yeoval Wellington	Inclining Block	144	✓	Nil	up to 300 kL	190
							301 kL to 500 kL	250
							>500 kL	410
92	Carrathool	Carrathool	Inclining Block	372	✓	Nil	up to 350 kL	82
							>350 kL	93
		Hillston	Inclining Block	164	✓	Nil	up to 350 kL	52
							>350 kL	62
		Melbergen	Inclining Block	270	✓	Nil	up to 400 kL	45
							>400 kL	75
		Goolgowi Rural Water	Inclining Block	547	✓	Nil	<450 kL	52
							>450 kL	78
		Rankins Springs	500 kL Allowance	660	✓	500	>500 kL	31
103	Central Darling	Wilcannia (Filtered)	Two Part	105	✓	Nil	All	300
		Wilcannia (Raw)	Unmetered	425	✓			
		White Cliffs, Raw	Two Part	400	✓	Nil	All	330
		Ivanhoe (Raw)	Two Part	195	✓	Nil	All	145
		Ivanhoe (Filtered)	Two Part	120	✓	Nil	All	340
40	Central Tablelands	Central Tablelands	Inclining Block	124	✓	Nil	up to 450 kL	158
							>450 kL	237
		Quandialla	Inclining Block	464	✓	Nil	up to 200 kL/quarter	130
							after 200 kL/quarter	216
67	Cobar	Cobar	Inclining Block	200	✓	Nil	up to 450 kL	85
							451 to 550 kL	150
							>551 kL	195

Table 6A: Water supply – 2009-10 residential multiple tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge ($) (2)	Access Charge Independent of Land Value ? (3)	Allowance (kL) (4)	Usage Range (kL) (5)	Usage Charge (c/kL) (6)
75	Coonamble Shire	Coonamble	Inclining Block	75	✓	Nil	<370 kL	40
							>370 kL	61
		Gulargambone	Inclining Block	121	✓	Nil	<430 kL	54
							>430 kL	81
		Quambone	Inclining Block	125			<430 kL	56
							>430 kL	84
26	Country Energy	Broken Hill, Sunset Strp, Menindi (filtered)	Inclining Block	219	✓	Nil	up to 400 kL	105
							> 400 kL	236
		Broken Hill, Sunset Strp, Menindi (filtered) Summer Use					extra 0.549kL/day for summer	105
		Pipeline Customers or Unfiltered Water	Inclining Block	219	✓	Nil	up to 400 kL	67
							> 400 kL	117
54	Deniliquin	Deniliquin, Filtered &/or Raw	Inclining Block	431	✓	Nil	< 800 kL	27
							>800 kL	61
51	Forbes	Filtered		149	✓	Nil	< 600 kL	68
							> 600 kL	100
		Raw					All	31
		Ootha		174			< 600 kL	68
							> 600 kL	100
84	Gilgandra (Groundwater)	Gilgandra	Two Part	186	✓	Nil	All	84
		Tooraweenah	Two Part	100	✓	Nil	All	120
60	Glen Innes Severn	Glen Innes	Inclining Block	90	✓	Nil	up to 450 kL	160
							>450 kL	240
		Deep water	Inclining Block	90	✓	Nil	up to 450 kL	70
							>450 kL	120
82	Gloucester	Gloucester	Inclining Block	195	✓	Nil	<50 kL	196
							>50 kL	255
		Barrington	Inclining Block	195	✓	Nil	<50 kL	196
							>50 kL	255
20	Goulburn Mulwaree Counci	Goulburn	Inclining Block	230	✓	Nil	up to 292 kL	149
							>292 kL	200
		Marulan	Inclining Block	330	✓	Nil	<292 kL	149
							>292 kL	200
80	Greater Hume	Culcairn	Inclining Block	90	✓	Nil	<200kL	80
							>200kL	95
		Villages	Inclining Block	150	✓	Nil	<200kL	110
							>200kL	150
30	Griffith	Griffith (Filtered)	Inclining Block	120	✓	Nil	up to 200 kL	55
							>200 kL	90
		Yenda (Dual), Filtered	Inclining Block	189	✓	Nil	up to 200 kL	55
							>200 kL	90
		Yenda (Dual), Raw	Two Part		✓	Nil	All	26
94	Gundagai		Inclining Block	96	✓	Nil	up to 300 kL	80
							301 to 500 kL	100
							> 500 kL	155
44	Gunnedah (Groundwater)	Gunnedah	Inclining Block	173	✓	Nil	<400 kL	80
							>400 kL	130
		Curlewis	Inclining Block	183	✓	Nil	<400 kL	90
							>400 kL	130
		Mullaley	Inclining Block	298	✓	Nil	<400 kL	135
							>400 kL	175
		Tambar Springs	Inclining Block	344	✓	Nil	<400 kL	220
							>400 kL	250

Table 6A: Water supply – 2009-10 residential multiple tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge ($) (2)	Access Charge Independent of Land Value ? (3)	Allowance (kL) (4)	Usage Range (kL) (5)	Usage Charge (c/kL) (6)
90	Guyra	Guyra	Inclining Block	293		Nil	up to 450 kL	108
							>450 kL	124
		Tingha	Inclining Block	254		Nil	up to 450 kL	165
		Tingha Rural	Inclining Block	233		Nil	>450 kL	196
86	Hay (Dual Supply)	Hay (Filtered)	Inclining Block	110	✓	Nil	up to 300 kL	95
							>300 kL	140
		Hay (Unfiltered)	unmetered	350				
106	Jerilderie (Dual Supply)	Jerilderie, Filtered	Inclining Block	195	✓	Nil	up to 250 kL	115
							>250 kL	140
		Jerilderie, Raw	Two Part	278	✓	Nil	all	53
61	Liverpool Plains Shire Coun	Quirindi	Inclining Block	253	✓	Nil	<300 kL	74
							>300 kL	122
		Werris Creek	Inclining Block	306	✓	Nil	<300 kL	100
							>300 kL	164
		Villages	Inclining Block	150	✓	Nil	<300 kL	74
							>300 kL	122
38	Moree Plains Shire	Moree, Mungindi, Boggabilla, Pallamallawa	Potable,Two Part	225	✓	Nil	<750 kL	75
							>750 kL	105
		Garah, Boomi, Boggabilla, Gurley, Weemalah	Non-Potable, Two Part	225	✓	Nil	<750 kL	50
							>750 kL	93
65	Murray	Murray, Filt	Two Part	207	✓	Nil	All	71
		Murray, Raw	Two Part	76	✓	Nil	All	69
101	Murrumbidgee	Darlington Point	Two Part	180	✓	Nil	All	24
		Coleambally	Two Part	200	✓	Nil	All	22
46	Narrabri (Groundwater)	Narrabri	Two Part	97	✓	Nil	All	38
		Narrabri, unmetered	Two Part	300	✓			
		Gwabegar	Two Part	183	✓	Nil	All	68
		Wee Wa	Two Part	101	✓	Nil	All	44
		Boggabri	Two Part	198	✓	Nil	All	56
		Bellata	Two Part	295	✓	Nil	All	67
		Pilliga	Two Part	188	✓	Nil	All	63
71	Palerang	Bungendore	Inclining Block	307	✓	Nil	up to 200 kL	116
							>200 kL	190
		Braidwood	Inclining Block	391	✓	Nil	up to 200 kL	167
							>200 kL	323
		Captains Flat	Inclining Block	368	✓	Nil	up to 200 kL	274
							>200 kL	361
8	Riverina (Groundwater) (No	WaggaWagga	Two Part	80	✓	Nil	All	78
		Rural Towns & Villages	Two Part	100	✓	Nil	All	90
35	Singleton	Singleton	Two Part	180	✓	Nil	All	83
		Mt Thorley	Two Part	496	✓	Nil	All	150
		Jerry's Plains /Broke Water	Inclining Block	180	✓	Nil	<450 kL	120
							>450 kL	160
13	Tamworth	Tamworth	Inclining Block	175	✓	Nil	up to 400 kL	99
							401 to 800 kL	149
							>800 kL	224
		Calala Backwash Water	Inclining Block		✓	Nil	All	23
		Raw Water			✓		up to 400 kL	68
							401 to 800 kL	83
							>800 kL	78
		Dungowan Dam (if main crosses property)	Inclining Block	88	✓	Nil	up to 400 kL	34
		Raw Water					401 to 800 kL	75
							>800 kL	83
68	Tenterfield	Tenterfield	Two Part	270	✓	Nil	All	145
		Jennings	Two Part	270	✓	Nil	All	170
		Urbenville	Two Part	350	✓	Nil	All	116
93	Tumbarumba (Unfiltered)	Tumbarumba	Inclining Block	246	✓	Nil	<200 kL	98
							>200 kL	164
		Khancoban, metered	IncliningBlock	285	✓	Nil	<200 kL	98
							>200 kL	174

Table 6A: Water supply – 2009-10 residential multiple tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge ($) (2)	Access Charge Independent of Land Value ? (3)	Allowance (kL) (4)	Usage Range (kL) (5)	Usage Charge (c/kL) (6)
43	Tumut	Tumut	Inclining Block	99		Nil	<300 kL	99
							>300 kL	149
		Tumut Raw Water	Inclining Block	79			<300 kL	41
							>300 kL	66
45	Upper Hunter Shire Council	Murrurundi	Inclining Block	298	✓	Nil	<300 kL	135
							>300 kL	160
		Merriwa/Cassilis	Inclining Block	241	✓	Nil	<300 kL	112
							>300 kL	160
		Aberdeen/Scone	Inclining Block	241	✓	Nil	<300 kL	112
							>300 kL	160
73	Upper Lachlan Council	Crookwell	Inclining Block	430	✓	Nil	< 200 kL	150
							> 200 kL	200
		Taralga	Inclining Block	430	✓	Nil	< 200 kL	150
							> 200 kL	200
		Dalton Water	Inclining Block	430	✓	Nil	< 200 kL	150
							> 200 kL	200
		Gunning	Inclining Block	280	✓	Nil	< 200 kL	150
							> 200 kL	200
85	Uralla	Uralla	Two Part	210	✓	Nil	All	108
		Bundarra	Two Part	525	✓	Nil	All	108
88	Wakool (Dual Supply)	Barham, Tooleybuc, Moulamein(Filtered + Raw Water)	Inclining Block, Raw Water is unmetered	220+440	✓	Nil	up to 600 kL	83
					✓		>600 kL	131
		Wakool , Murray Downs, Koraleigh (Filtered)	Inclining Block	220	✓	Nil	up to 600 kL	83
							>600 kL	131
79	Walgett	Walgett Shire	Unmetered	717	✓			
		Lightening Ridge	Unmetered	717				
		Collarenebri	Unmetered	744				
		Carinda	Unmetered	313	✓			
		Carinda Bore	Unmetered	298	✓			
		Rowena	Unmetered	368	✓			
		Cumborah	Unmetered	334				
96	Warren (Dual Supply)	Warren Bore Water	Inclining Block	240	✓	Nil	< 400 kL	79
							>400 kL	119
		Warren River Water	Inclining Block			Nil	< 400 kL	28
							>400 kL	50
		Nevertire	Inclining Block	355	✓	Nil	< 400 kL	45
							>400 kL	66
		Collie	Inclining Block	245	✓	Nil	< 400 kL	97
							>400 kL	143
55	Warrumbungle, Northern	Coonabarabran	Inclining Block	233	✓	Nil	< 450 kL	100
							>450 kL	150
		Timore Dam (Raw)	Inclining Block	233	✓	Nil	< 450 kL	100
							>450 kL	150
		Baradine	Inclining Block	233	✓	Nil	< 450 kL	120
							>450 kL	180
		Binnaway	Inclining Block	233	✓	Nil	< 450 kL	120
							>450 kL	180
		Villages: Bugaldie, Kenebri	Inclining Block	460	✓	Nil	< 450 kL	120
							>450 kL	180
	Warrumbungle, Southern	Southern, Coolah, Dunedoo	Inclining Block	283	✓	Nil	< 450 kL	110
							>450 kL	165
		Village	Inclining Block	460	✓	Nil	< 450 kL	110
							> 450 kL	165
		Mendooran	Inclining Block	480	✓	Nil	< 450 kL	110
							> 450 kL	165
57	Wellington	Wellington, Geurie	Inclining Block	192	✓	Nil	up to 300 kL	158
							301 to 10000 kL	190
							>10000 kL	195
74	Wentworth (Dual Supply)	Filtered	Inclining Block	250	✓	Nil	up to 250 kL	115
							>250 kL	270
		Raw	Inclining Block	135	✓	Nil	up to 700 kL	37
							>700 kL	80
56	Yass Valley	Yass, Bowning, Binalong & Rural Areas	Two Part	206	✓	Nil	All	160
		Murrumbateman	Two Part	155	✓	Nil	All	160
49	Young (Reticulator)	Young	Inclining Block	175	✓	Nil	up to 50 kL (1st & 4th quarter)	130
							>50 kL	175
							up to 100 kL (2nd & 4th quarter)	130
							>100 kL	175

Table 6B: Water supply – 2009-10 non-residential tariffs

	WATER UTILITY	Town	Tariff Type (1)	Access Charge for 20 mm Service Connection (or Minimum) ($) (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Access Charge Independent of Land Value ? (4)	Allowance (kL) (5)	Usage Range (kL) (6)	Usage Charge (c/kL) (7)	Compliance with 2(b) of BPMG (8)
11	Albury City	Albury	Inclining Block	87	Meter Size* (eg 40mm:$348)	Y	Nil	up to 225 kL	54	Y
								226 kL to 19999kL	109	
								>19999	76	
29	Armidale Dumaresq	Armidale	Inclining Block	240	Uniform Access Charge	Y	Nil	up to 400 kL	148	N
								401 kL to 1000 kL	196	
								>1000 kL	228	
		Armidale, Untreated Water	Inclining Block	240	Uniform Access Charge	Y	Nil	up to 400 kL	72	
								401 kL to 1000 kL	128	
								>1000 kL	157	
24	Ballina (Reticulator)	Ballina	Inclining Block	123	Service Connection Size* (eg. 40mm $493)	Y	Nil	up to 350 kL	132	Y
								>350 kL	198	
100	Balranald (Dual Supply)	Balranald & Euston, Filtered	Inclining Block	135	Service Connection Size* (eg. 40mm $540)	Y	Nil	>600 kL	70	Y
								>600 kL	105	
		Balranald & Euston, Raw	Inclining Block	143	Service Connection Size* (eg. 40mm $572)	Y	Nil	>600 kL	36	
								>600 kL	54	
21	Bathurst Regional	Bathurst (Filtered)	Inclining Block	125	Service Connection Size* (eg. 40mm $500)	Y	Nil	up to 250kL	125	Y
								>250 kL	188	
23	Bega Valley (Unfiltered)	Bega Valley	Two Part	164	Service Connection Size* (eg. 40mm $656)	Y	Nil	all	210	Y
47	Bellingen (Unfiltered)		Two Part	228	Service Connection Size* (eg 40mm $912)	Y	Nil	All	98	Y
53	Berrigan (Dual Supply)	Berrigan,Barooga,Finley(Potable)	Two Part	430	Uniform Access Charge	Y	Nil	All	100	N
		Berrigan,Barooga,Finley(Non-Potable)	Two Part		Uniform Access Charge	Y	Nil	All	50	
		Tocumwal (Filtered)	Two Part	430	Uniform Access Charge	Y	Nil	All	67	
89	Bogan	Nyngan	Inclining Block	260	Service Connection Size* (eg. 40mm $1040)	Y	Nil	up to 500 kL	90	Y
								>500 kL	130	
		Nyngan, Raw Water	Inclining Block	320			Nil	up to 500 kL	54	
								>500 kL	78	
		Hermidale	Annual Charge	480						
		Girilambone & Coolabah	Annual Charge	330						
97	Bombala	Bombala	Inclining Block	433	Uniform Access Charge	Y	Nil	up to 350 kL	49	N
								>350 kL	108	
		Delegate	Unmetered	331	Uniform Access Charge	Y				
104	Boorowa	Boorowa	Inclining Block	388	Uniform Access Charge	Y	Nil	up to 200 kL	165	N
								>200 kL	280	
87	Bourke (Dual Supply)	Bourke, Filtered	Two Part	195	Service Connection Size (eg. 40mm $669)	Y	Nil	All	155	N
		Bourke, Raw	Unmetered	320	Service Connection Size (eg. 40mm $1007)					
105	Brewarrina	Brewarrina	Unmetered	829						N
		Goodooga	Unmetered	661						N
27	Byron (Reticulator)	Byron	Two Part	115	Service Connection* (40mm: $460)	Y	Nil	All	185	
91	Cabonne	Molong	Inclining Block	195	Service Connection (40mm: $377.20)	Y	Nil	up to 300 kL	130	N
								301 kL to 500 kL	310	
								>500 kL	420	
		Cumnock	Inclining Block	172	Service Connection (40mm: $332.8)	Y	Nil	up to 300 kL	340	
								301 kL to 500 kL	430	
								>500 kL	470	
		Yeoval	Inclining Block	144	Service Connection (40mm: $278.60)	Y	Nil	up to 300 kL	190	
								301 kL to 500 kL	250	
								>500 kL	410	
		North Yeoval Wellington	Inclining Block	144	Service Connection (40mm: $277.40)	Y	Nil	up to 300 kL	190	
								301 kL to 500 kL	250	
								>500 kL	410	
92	Carrathool	Carrathool	Inclining Block	372	Service Connection (40mm $559)	Y	Nil	up to 350kL	82	Y
								>350kL	93	
		Hillston	Inclining Block	164	Meter Size (40mm $246.35)	Y	Nil	up to 350kL	52	
								>350kL	62	
		Melbergen	Inclining Block	270	Uniform Access Charge	Y	Nil	up to 400 kL	45	
								>400 kL	75	
		Goolgowi Rural Water	Inclining block	547	Uniform Access Charge	Y	500	up to 450 kL	52	
								>450 kL	78	
		Rankins Springs	500 kL Allowance	660	Uniform Access Charge	Y	500	>500 kL	31	
103	Central Darling	Wilcannia (Filtered)	Two Part	105	Uniform Access Charge	Y	Nil	All	300	N
		Wilcannia (Raw)	Unmetered	425	Uniform Access Charge	Y	Nil			
		White Cliffs, Raw	Two Part	400	Uniform Access Charge	Y	Nil	All	330	
		Ivanhoe (Raw)	Two Part	195	Uniform Access Charge	Y	Nil	All	145	
		Ivanhoe (Filtered)	Two Part	120	Uniform Access Charge	Y	Nil	All	340	

Table 6B: Water supply – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Tariff Type	Access Charge for 20 mm Service Connection (or Minimum)	Basis for Access Charge	Access Charge Independent of Land Value ?	Allowance	Usage Range	Usage Charge	Compliance with 2(b) of BPMG
			(1)	($) (2)	*Proportional to square of size of service connection or water meter (3)	(4)	(kL) (5)	(kL) (6)	(c/kL) (7)	(8)
40	Central Tablelands	Central Tablelands	Two Part	124	Meter Size*(40mm:$496)	Y	Nil	All	158	Y
		Quandialla	Inclining Block	464		Y	Nil	up to 200 kL/quarter	130	
								after 200 kL/quarter	216	
14	Clarence Valley	Treated	Two Part	119	Service Connection Size (40mm:$476)	Y		All	130	Y
		Raw Water	Two Part	60	Service Connection Size (40mm:$238)	Y		All	65	
67	Cobar (Dual Supply)	Cobar	Inclining Block	250	Service Connection Size (40mm:$600)	Y	Nil	up to 450 kL	85	Y
								451 - 550 kL	150	
								>551 kL	195	
10	Coffs Harbour (Unfiltered)	Coffs Harbour, Nana Glen, Coramba	Two Part	124	Meter Size: 40mm $496	Y	Nil	All	214	Y
50	Cooma-Monaro	Cooma, Bredbo, Nimmitabel	Two Part	225	Service Connection Size (40mm:900)	Y	Nil	All	100	Y
75	Coonamble Shire	Coonamble	Inclining Block	75	Meter Size 40mm :272	Y	Nil	up to 370 kL	40	N
								>370 kL	61	
		Gulargambone	Inclining Block	121	Meter Size 40mm :441	Y	Nil	up to 430 kL	54	
								>430 kL	81	
		Quambone	Inclining Block	125	Meter Size 40mm :454			up to 430 kL	56	
								>430 kL	84	
58	Cootamundra (Reticulator)	Cootamundra	Two Part	273	Meter Size*: 40 mm $1092	Y	Nil	all	141	Y
42	Corowa	Corowa, Mulwala, Howlong	Two Part	160	Service Connection (eg.40mm $640)	Y	Nil	all	83	Y
26	Country Energy	Broken Hill, Sunset Strp, Menindi, Filtered	Inclining Block	219	Service Connection (eg.40mm $876)	Y	Nil	up to 400 kL	105	Y
								> 400 kL	236	
								extra 0.549kL/day for summer	105	
		Chlorinated	Inclining Block	219	Service Connection* (eg.40mm $876)	Y	Nil	up to 400 kL	89	
								> 400 kL	224	
								extra 0.549kL/day for summer	89	
		Untreated	Two Part	219	Service Connection* (eg.40mm $876)			up to 400 kL	67	
								> 400 kL	117	
		Effluent Water	Two Part	219	Service Connection* (eg.40mm $876)	Y	Nil	all	43	
39	Cowra	Cowra, Rural, Commercial, Government	Two Part	194	Meter Size: 40 mm $776	Y	Nil	All	120	Y
		Cowra, Industrial	Two Part	194	Meter Size: 40 mm $776	Y	Nil	All	62	
		Raw Water	Two Part	194	Meter Size: 40 mm $776		Nil	all	72	
54	Deniliquin	Deniliquin, Filtered	Two Part	431	Service connection(40mm $861)	Y	Nil	All	61	Y
		Deniliquin,Raw	Two Part	207		Y		All	17	
18	Dubbo	Dubbo	Two Part	126	Meter Size* (eg.40mm $502.08)	Y	Nil	All	112	Y
15	Eurobodalla (Unfiltered)	Eurobodalla	Inclining Block	305	Meter Size*: 40mm:$1220	Y	Nil	<150 kL	195	Y
								>150 kL	290	
51	Forbes	Forbes	Inclinign Block	149	Service Connection Size* (40mm:$596.15)	Y	Nil	<600 kL	68	Y
								>600 kL	100	
84	Gilgandra (Groundwater)	Gilgandra	Two Part	186	Service Connection Size* (40mm:747)	Y	Nil	All	84	Y
		Tooraweenah	Two Part	100	Uniform Access Charge	Y	Nil	All	120	
60	Glen Innes Severn	Glen Innes	Inclining Block	90	Service Connection Size* (40mm:$360)	Y	Nil	up to 450 kL	160	Y
								>450 kL	240	
		Deepwater	Inclining Block	90	Service Connection Size* (40mm:$360)	Y	Nil	up to 450 kL	70	Y
								>450 kL	120	
82	Gloucester	Gloucester & barrington	Inclining Block	195	Service Connection Size (40mm:$780)	Y	Nil	<50 kL	196	Y
								>50 kL	255	
28A	Goldenfields (Reticulator)	Retail	Two Part	125	Meter Size*(40mm:$500)	Y	Nil	All	152	
1	Gosford	Gosford	Two Part	92	Service Connection Size* (40mm:$367.72)	Y	Nil	All	178	Y
20	Goulburn	Goulburn	Inclining Block	230	Meter Size*(40mm:$915)	Y	Nil	up to 292 kL (for 20mm	149	Y
								>292 kL (for 20mm meter)	200	
		Marulan	Inclining Block	330	Meter Size*(40mm:$1315)	Y	Nil	up to 292 kL (for 20mm	149	
								>292 kL (for 20mm meter)	200	

Table 6B: Water supply – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge for 20 mm Service Connection (or Minimum) ($) (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Access Charge Independent of Land Value ? (4)	Allowance (kL) (5)	Usage Range (kL) (6)	Usage Charge (c/kL) (7)	Compliance with 2(b) of BPMG (8)
80	Greater Hume	Culcairn	Inclining Block	90	Service Connection Size (40mm:$140)	Y	Nil	up to 200kL	80	Y
								>200kL	95	
		Villages	Inclining Block	150	Service Connection Size (40mm:$258)	Y	Nil	up to 200kL	110	
								>200kL	150	
30	Griffith	Griffith (Filtered)	Inclining Block	120	Meter Size*(40mm:$432)	Y	Nil	up to 200 kL	55	Y
								>200 kL	90	
		Yenda (Dual, Filtered)	Inclining Block			Y	Nil	up to 200 kL	55	
				189	Uniform Access Charge			>200 kL	90	
		Yenda (Dual), Raw	Two Part				Nil	all	26	
94	Gundagai	Gundagai	Two Part	96	Service Connection Size*: 40mm:$384	Y	Nil	all	100	Y
44	Gunnedah (Groundwater)	Gunnedah	Inclining Block	173	Service Connection Size: 20 to 40 mm:$161, 50mm: $360	Y	Nil	up to 400 kL	80	Y
								>400 kL	130	
		Curlewis	Inclining Block	183	Service Connection Size: 20 to 40 mm:$170, 50mm: $390	Y	Nil	up to 400 kL	90	
								>400 kL	130	
		Mullaley	Inclining Block	298	Service Connection Size: 20 to 40 mm:$277, 50mm: $520	Y	Nil	up to 400 kL	135	
								>400 kL	175	
		Tambar Springs	Inclining Block	344	Service Connection Size: 20 to 40 mm:$320	Y	Nil	up to 400 kL	220	
								>400 kL	250	
90	Guyra	Guyra	Inclining Block	293	Uniform Access Charge	Y	Nil	up to 450 kL	108	Y
								>450 kL	124	
		Tingha	Inclining Block	254	Uniform Access Charge	Y	Nil	up to 450 kL	165	
		Tingha Rural	Inclining Block	233	Uniform Access Charge			>450 kL	196	
81	Gwydir		Inclining Block	440	Meter Size*(40mm:$1760)	Y	Nil	up to 600 kL	95	Y
								>600 kL	195	
76	Harden (Reticulator)	Harden	Two Part	200	Service Connection Size*:40 mm:$800	Y	Nil	all	200	Y
7	Port Macquarie-Hastings (Unfiltered)	Hastings	Inclining Block	141	Meter Size* (eg. 40mm $565)	Y	Nil	up to 270 kL	197	Y
								>270 kL	394	
86	Hay (Dual Supply)	Hay (Filtered)	Inclining Block	110	Service Connection Size*:40 mm:$440	Y	Nil	up to 300 kL	95	Y
								>300 kL	140	
		Hay (Unfiltered) - commercial users	Inclining Block	110	Service Connection Size*:40 mm:$440	Y	Nil	up to 450 kL	40	
								>450 kL	60	
37	Inverell	Inverell/Ashford/Yetman, Filtered	Two Part	285	Uniform Access Charge	Y	Nil	All	100	N
106	Jerilderie (Dual Supply)	Jerilderie, Filtered	Inclining Block	195	Service Connection Size*(32mm:$499)	Y	Nil	up to 250 kL	115	Y
								>250 kL	140	
		Jerilderie, Raw	two part	278	Uniform Access Charge	Y	Nil	all	53	
25	Kempsey (Groundwater)	Kempsey	Two Part	260	Meter Size:40 mm:$1040	Y	Nil	All	120	Y
70	Kyogle	Kyogle, Bonalbo, Muli-Muli, Woodenbong	Inclining Block	224	Service Connection Size*:40 mm:$896	Y	Nil	up to 200 kL	114	Y
								> 200 kL	175	
59	Lachlan	Condoblin	Two Part	225	Service Connection Size*:40 mm:$900	Y	Nil	all	130	Y
48	Leeton	Leeton, Whitton, Murrami	Inclining Block	198	Meter Size*(40mm:$770)	Y	Nil	up to 350 kL	72	Y
								>350 kL	108	
22	Lismore (Reticulator)	Lismore, Nimbin	Two Part	130	Service Connection Size*(40mm:$520)	Y	Nil	All	190	Y
31	Lithgow	Lithgow	Inclining Block	560	Service Connection Size (50mm:$740)	Y	Nil	up to 450 kL	102	Y
								>450 kL	176	
61	Liverpool Plains Shire Council	Quirindi	Inclining Block	303	Service Connection Size (eg. 40mm $961)	Y	Nil	up to 300 kL	92	Y
								>300 kL	141	
		Werris Creek	Inclining Block	356	Service Connection Size(eg. 40mm $1737)			up to 300 kL	103	
								>300 kL	169	
		Villages	Inclining Block	225	Service Connection Size(eg. 40mm $602)			up to 300 kL	92	
								>300 kL	141	
								up to 50 kL per quarter	202	
5	MidCoast		Inclining Block	142	Meter Size* (eg. 40mm $568)	Y	Nil	> 50 kL per quarter	224	Y
32	Mid Western Regional Council	Mudgee, Gulgong & Rylstone	Two Part	139	Meter Size* (eg. 40mm $556)	Y	Nil	all	165	Y
38	Moree Plains Shire	Moree, Mungindi, Boggabilla, Pallamallawa Potable???	Inclining Block	225	Service Connection Size (eg. 40mm $900)	Y	Nil	up to 750 kL	80	Y
								>750 kL	110	
		Weemalah Non-Potable???	Inclining Block	225	Service Connection Size (eg. 40mm $900)	Y	Nil	up to 750 kL	60	
								>750 kL	83	
65	Murray	Murray, Filt	Two Part	216	Service Connection Size (eg. 40mm $862.95)	Y	Nil	All	74	Y
								All ($72 for stage 2 and 3	72	
		Murray, Raw	Two Part	79	Service Connection Size (eg. 40mm $317.95)	Y	Nil	water restrictions)		
								up to 500 kL	25	Y
					Service Connection Size (eg. 40mm $340)	Y		501 kL to 800 kL	30	
101	Murrumbidgee	Darlington Point	Inclining Block	180			Nil	> 800 kL	35	
								up to 500 kL	25	
					Service Connection Size (eg. 40mm $360)	Y		501 kL to 800 kL	30	
		Coleambally	Inclining Block	200			Nil	> 800 kL	35	
41	Muswellbrook	Muswellbrook,Denman, Sandy Hollow	Two Part	175	Service Connection Size* (eg. 40mm $700)	Y	Nil	All	168	Y
34	Nambucca	Nambucca	Two Part	67	Service Connection Size (eg. 40mm $268)	Y	Nil	All	138	Y

Table 6B: Water supply – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge for 20 mm Service Connection (or Minimum) ($) (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Access Charge Independent of Land Value ? (4)	Allowance (kL) (5)	Usage Range (kL) (6)	Usage Charge (c/kL) (7)	Compliance with 2(b) of BPMG (8)
46	Narrabri (Groundwater)	Narrabri	Two Part	220	Service Connection Size (eg. 40mm $256)	Y	Nil	All	60	Y
		Narrabri, non - metered	Unmetered	320	Service Connection Size (eg. 40mm $768)					
		Gwabegar	Two Part	350	Service Connection Size* (eg. 40mm $461)	Y	Nil	All	75	
		Wee Wa	Two Part	215	Service Connection Size* (eg. 40mm $260)	Y	Nil	All	60	
		Boggabri	Two Part	235	Service Connection Size* (eg. 40mm $576)	Y	Nil	All	70	
		Bellata	Two Part	350	Service Connection Size* (eg. 40mm $768)	Y	Nil	All	75	
		Pilliga	Two Part	350	Service Connection Size* (eg. 40mm $461)	Y	Nil	All	75	
63	Narrandera (Groundwater)	Narrandera	Two Part	228	Meter Size (eg. 40mm $912)	Y	Nil	All	65	Y
62	Narromine (Groundwater)	Narromine, Trangie, Tomingley	Two Part	155	Service Connection Size* (eg. 40mm $621)	Y	Nil	All	80	Y
83	Oberon (Unfiltered, Reticulator)	Oberon	Two Part	100	Service Connection Size* (eg. 38mm $361)	Y	Nil	All	123	Y
19	Orange	Orange	Two Part	118	Service Connection Size* (eg. 40mm $470)	Y	Nil	All	154	Y
71	Palerang	Bungendore	Inclining Block	315	Service Connection Size* (eg. 40mm $1259)	Y	Nil	up to 200 kL	120	Y
								>200kL	195	
		Braidwood	Inclining Block	402	Service Connection Size* (eg. 40mm $1605)	Y	Nil	up to 200 kL	172	
								>200kL	332	
		Captains Flat	Inclining Block	378	Service Connection Size* (eg. 40mm $1511)	Y	Nil	up to 200 kL	281	
								>200kL	371	
36	Parkes	Parkes	Inclining Block	295	Meter Size, eg : 40mm $720	Y	Nil	up to 365kL	95	Y
								>365 kL	200	
17	Queanbeyan (Reticulator)	Queanbeyan	Inclining Block	271	Meter Size, eg : 40mm $1180	Y	Nil	up to 176 kL	181	Y
								>176kL	244	
33	Richmond Valley	all	Inclining Block	100	Service Connection Size* (eg. 40mm $400)	Y	Nil	up to 200 kL	153	Y
								>200 kL	203	
8	Riverina	WaggaWagga	Inclining Block	120	Uniform Access Charge	Y	Nil	up to 600 kL	86	N
								>600 kL	129	
		Rural Towns & Villages	Inclining Block	125	Uniform Access Charge		Nil	up to 600 kL	95	
						Y		>600 kL	144	
4	Rous County Council	Rous Retail	Two Part	120	Uniform Access Charge	Y	Nil	All	115	N
3	Shoalhaven	Shoalhaven, treated	Inclining Block	65	Service Connection Size(40mm:$260)	Y	Nil	up to 450 kL	130	Y
								>450 kL	195	
35	Singleton	Singleton	Two Part	180	Meter Size* (eg. 40mm $720)	Y	Nil	All	89	Y
		Mt Thorley	Two Part	514	Meter Size* (eg. 40mm $1074)	Y	Nil	All	156	
		Jerry's/Broke Plains	Inclining Block	180	Uniform Access Charge	Y	Nil	up to 450 kL	124	
								>450 kL	166	
52	Snowy River (Unfiltered)	Snowy River	Two Part	435	Uniform Access Charge+Usage ($1.75/kL)	Y	Nil	All	70	N
13	Tamworth	Tamworth	Inclining Block	187	Service Connection Size* (eg. 40mm $754)	Y	Nil	up to 400 kL	106	Y
								401 to 800 kL	117	
								>800 kL	129	
		Calala Backwash Water	Two Part					All	25	
		Raw Water	Inclining Block					up to 400 kL	73	
								401 to 800 kL	80	
								>800 kL	88	
		Dungowan Dam (if main crosses property)	Inclining Block	94	Uniform Access Charge	Y	Nil	up to 400 kL	36	
		Raw Water						401 to 800 kL	80	
								>800 kL	88	
								up to 450 kL	159	N
68	Tenterfield	Tenterfield	Inclining Block	114	Meter Size* (eg. 40mm $456)	Y	Nil	> 450 kL	183	
								up to 450 kL	159	
		Jennings	Inclining Block	114	Meter Size* (eg. 40mm $456)	Y	Nil	> 450 kL	183	
		Urbenville	Two Part	114	Meter Size* (eg. 40mm $456)	Y	Nil	All	116	
93	Tumbarumba (Unfiltered)	Tumbarumba	Inclining Block	246	Meter Size* (eg. 40mm $984)	Y	Nil	up to 200 kL	104	Y
								>200 kL	174	
		Khancoban	Inclining Block	285	Meter Size* (eg. 40mm $1400)	Y	Nil	up to 200 kL	107	
								>200 kL	190	
43	Tumut	Tumut	Inclining Block	111	Meter Size* (eg. 40mm $443)	Y	Nil	up to 300 kL	111	Y
								>300 kL	167	
		Tumit Raw Water	Inclining Block	88	Meter Size (eg. 40mm $223)			up to 300 kL	46	
								>300 kL	74	
6	Tweed	Tweed	Two Part	102	Meter Size*(40mm:$406)	Y	Nil	All	150	Y
45	Upper Hunter Shire Council	Murrurundi	Two Part	310	Meter Size(40mm:$619)	Y	Nil	All	139	Y
		Merriwa/Cassilis	Two Part	249	Meter Size(40mm:$505)	Y	Nil	All	136	
		Aberdeen/Scone	Two Part	249	Meter Size(40mm:$505)	Y	Nil	All	136	

Table 6B: Water supply – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Tariff Type (1)	Access Charge for 20 mm Service Connection (or Minimum) ($) (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Access Charge Independent of Land Value ? (4)	Allowance (kL) (5)	Usage Range (kL) (6)	Usage Charge (c/kL) (7)	Compliance with 2(b) of BPMG (8)
73	Upper Lachlan Council	Crookwell	Inclining Block	320	Service Connection Size 38mm:$555	Y	Nil	up to 200 kL	195	Y
								> 200 kL	260	
		Taralga	Inclining Block	320	Service Connection Size 38mm:$555	Y	Nil	up to 200 kL	195	
								> 200 kL	260	
		Dalton	Inclining Block	320	Service Connection Size 38mm:$555	Y	Nil	up to 200 kL	195	
								> 200 kL	260	
		Gunning	Inclining Block	320	Service Connection Size 38mm:$555	Y	Nil	up to 200 kL	195	
								> 200 kL	260	
85	Uralla	Uralla	Two Part	239	Uniform Access Charge	Y	Nil	All	125	N
		Bundarra	Two Part	532	Uniform Access Charge	Y	Nil	All	125	
88	Wakool (Dual Supply)	Barham, Tooleybuc, Moulamein (Filt + Raw)	Two Part	683	Service Connection Size*(40mm:4x20mm access)	Y	Nil	All potable	86	Y
		Filtered	Two Part	228	Service Connection Size*(40mm:4x20mm access)	Y	Nil	All	86	
98	Walcha	Walcha	Two Part	133	Service Connection Size 38mm:$480)	Y	Nil	All	195	Y
79	Walgett (Dual Supply)	Walgett Shire	Unmetered	753	Uniform Access Charge	Y	Unmetered			N
		Lightening Ridge	Unmetered	669	Uniform Access Charge	Y	Unmetered			
		Collarenebri	Unmetered	781	Uniform Access Charge	Y	Unmetered			
		Carinda	Unmetered	329	Uniform Access Charge	Y	Unmetered			
		Carinda Bore	Unmetered	312	Uniform Access Charge	Y	Unmetered			
		Rowena	Unmetered	387	Uniform Access Charge	Y	Unmetered			
		Cumborah	Unmetered	350	Uniform Access Charge	Y	Unmetered			
96	Warren (Dual Supply)	Warren Bore Water	Inclining Block	250	Uniform Access Charge	Y	Nil	up to 450 kL	83	N
								>450 kL	125	
		Warren River Water	Inclining Block	???			Nil	up to 450 kL	30	
								>450 kL	52	
		Nevertire	Inclining Block	365	Uniform Access Charge	Y	Nil	up to 450 kL	47	
								>450 kL	70	
		Collie	Inclining Block	255	Uniform Access Charge	Y	Nil	up to 400 kL	102	
								>400 kL	155	
55	Warrumbungle, Northern	Coonabarabran	Inclining Block	268	Uniform Access Charge	Y	Nil	up to 450 kL	100	N
								>450 kL	120	
		Timore Dam (Raw)	Inclining Block	268	Uniform Access Charge	Y	Nil	up to 450 kL	100	
								>450 kL	120	
		Baradine	Inclining Block	291	Uniform Access Charge	Y	Nil	up to 450 kL	138	
								>450 kL	166	
		Binnaway	Inclining Block	398	Uniform Access Charge	Y	Nil	up to 450 kL	138	
								>450 kL	166	
		Villages: Bugaldie, Kenebri	Inclining Block	460	Uniform Access Charge	Y	Nil	up to 450 kL	120	
								>450 kL	144	
	Warrumbungle, Southern	Southern, Coolah, Dunedoo	Inclining Block	330	Uniform Access Charge	Y	Nil	up to 450 kL	138	
								>450 kL	166	
		Village	Inclining Block	460	Uniform Access Charge	Y	Nil	up to 450 kL	120	
								> 450 kL	144	
		Mendooran	Inclining Block	723	Uniform Access Charge	Y	Nil	up to 450 kL	138	
								> 450 kL	166	
57	Wellington	Wellington, Geurie	Inclining Block	295	Service Connection Size 40mm:$1173.69)	Y	Nil	up to 300 kL	107	Y
								301 to 500 kL	118	
								500 to 10000kL	129	
								>10000 kL	202	
74	Wentworth (Dual Supply)	Filtered	Inclining Block	240	Service Connection Size*(40mm:$1000)	Y	Nil	up to 250 kL	115	Y
								>250 kL	270	
		Raw	Inclining Block	125	Service Connection Size(40mm:$500)	Y	Nil	up to 700 kL	37	
								>700 kL	80	
16	Wingecarribee	Wingecarribee	Inclining Block	106	Meter Size*(40mm:$423.40)		Nil	up to 616 kL	131	Y
								>616 kL	196	
2	Wyong	Wyong	Two Part	117	Service Connection Size (eg. 40mm: $422.49)	Y	Nil	All	178	Y
56	Yass Valley	Yass, Bowning, Binalong & Rural Areas	Two Part	212	Meter Size 40mm:$331)	Y	Nil	All	195	Y
		Murrumbateman	Two Part	159	Uniform Access Charge	Y	Nil	All	195	
49	Young (Reticulator)	Young	Two Part	157	Meter Size* (40mm:$628)	Y	Nil	All	170	Y

Table 7: Sewerage – residential charges, bills and cost recovery

	WATER UTILITY	RESIDENTIAL CHARGES (Current & 2009/10)																		BILLS			COST RECOVERY								
		Fixed Charge (or Minimum) ($) (1) P4.1			Operating Cost (OMA) (c/kL) (2)			Access Charge Independent of Land Value ? Yes/No (3)		Non-residential Sewer Usage Charge (Not incl SDF) c/kL (3a)		Trade Waste Usage Charge c/kL (3b)		Complying Liquid Trade Waste Fees and Charges* ? (4)		Non-Res & Trade Waste Charges (% of Annual rates & Charges) (5)	Non-Res & Trade Waste Volume (% of Sewage Collected) (6)	Typical Developer Charge ($/Equivalent Tenement [ET]) (7)			Typical Residential Bill ($/assessment) (8) P6			Return on Assets (%) (9)			Economic Real Rate of Return (Sewerage) (11) F18			Full Cost Recovery? (N / Y* / Y) (11a)	Recycled Water Usage Charge in place? (c/kL) (11b)	Connected Properties (No.) (12) C8
		07/08	08/09	09/10	06/07	07/08	08/09	08/09	09/10	08/09	09/10	08/09	09/10	08/09	09/10	2008/09	2008/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	2008/09
	Sydney Water	408	480	501	65			Y	Y	137	142			Y	Y			4,740	4,740		408	480	501				1.9	1.2	0.9	Y		1,707,000
	Hunter Water	303*	362*	462	61			Y	Y	46	62			Y	Y			3,090	3,090		344	362	462				1.5	2.3	2.0	Y		211,000
	LWUs with > 10,000 Properties																															
1	Gosford	385	399	464	126	121	146	Y	Y	85	99	141		Y	Y		18	3,590	3,660	3,960	385	399	464	1.8	1.1	1.4	1.4	1.3	1.1	Y		68,469
2	Wyong	394	398	429	125	124	124	Y	Y	74	77	31		Y	Y	15		2,300	2,400	2,400	394	398	429	1.4	-1.2	-1.6	1.4	-1.2	-1.6	Y*	69	58,635
3	Shoalhaven	541	557	585	193	211	257	Y	Y	88	91	139		Y	Y	14	19	5,270	5,840	7,630	541	557	585	1.9	1.1	0.8	2.2	1.6	1.3	Y		39,409
5	MidCoast (Combined)	646	690	794	174	163	180	Y	Y	177	204	200		Y	Y	15	18	6,490	8,010	8,210	646	690	794	0.9	-1.9	-1.8	1.2	-0.1	-0.2	Y*		32,556
6	Tweed	492	509	527	125	138	137	Y	Y	85	95	112		Y	Y	13	19	4,800	4,970	5,150	492	509	527	0.5	0.9	-0.2	0.2	1.0	-0.2	Y*		29,682
9	Wagga Wagga	333	356	380	85	107	119	Y	Y			66		Y	Y	27	14	3,500	3,500	3,500	333	356	380	4.3	1.2	0.9	3.6	1.0	1.0	Y	52	23,609
7	Port Macquarie-Hastings	484	556	601	106	119	104	Y	Y	85	92	140		Y	Y	12		3,450	3,550	3,800	484	556	601	2.1	0.5	-0.7	0.1	0.3	2.1	Y	69	27,192
11	Albury City	392	399	426	162	152	138	Y	Y	164	185	135		Y	Y	26	5	4,160	4,160	4,160	392	399	426	-0.4	0.8	1.2	0.1	1.3	2.1	Y		20,619
10	Coffs Harbour	600	630	676	350	138	142	Y	Y	163	172	40		Y	Y	20	13	4,930	4,930	4,930	600	630	676	3.3	0.9	-0.7	3.0	2.8	2.1	Y		22,466
13	Tamworth Regional	605	638	675	136	114	107	Y	Y	38	60	57		Y	Y	20	31	1,590	1,640	1,700	605	638	675	8.1	7.5	8.8	6.4	6.9	7.8	Y		18,382
15	Eurobodalla	553	617	662	204	241	246	Y	Y		50	120		Y	Y	8	5	8,300	8,550	8,870	553	617	662	0.7	0.4	1.3	1.2	0.7	1.6	Y		17,590
17	Queanbeyan	314	323	334	95	110	100	Y	Y	62	64	135		Y	Y	12	18	1,140	1,160	1,210	314	323	334	1.7	1.3	-0.5	0.0	0.1	-1.0	Y*		16,027
19	Orange	283	292	292	128	128	112	Y	Y	137	137	137		Y	Y		5	3,420	3,560	3,660	283	292	292	2.4	3.1	6.8	1.0	3.3	5.8	Y		15,125
18	Dubbo	455	478	502	172	167	204	Y	Y	137	144	130		Y	Y	31	41	4,230	4,480	4,740	455	478	502	1.6	1.7	1.2	1.4	1.7	1.4	Y		14,926
16	Wingecarribee	515	530	546	147	112	148	Y	Y	89	92	135		Y	Y	12	17	7,000	7,000	7,300	515	530	546	2.3	2.0	0.7	2.7	2.2	1.0	Y		14,283
14	Clarence Valley	530	585	637	161	166	157	Y	Y	143	193	167		Y	Y	18	6	8,000	8,000	8,000	530	585	637	7.4	1.9	-0.1	5.4	3.6	1.2	Y		14,328
21	Bathurst Regional	363	381	399	129	126	168	Y	Y	85	89	150		Y	Y	36	39	2,050	2,050	2,050	363	381	399	1.7	1.8	2.7	1.2	1.3	2.2	Y		14,529
24	Ballina	400	440	480	137	254	149	Y	Y	115	125	110		Y	Y	20		6,460	6,460	6,740	400	440	480	2.4	0.8	-1.2	1.1	-0.7	-2.3	Y*		12,711
22	Lismore	461	476	545	123	145	107	Y	Y					Y	Y	13		4,680	7,310	7,490	461	476	545	1.3	-1.2	-1.8	0.9	-0.9	-1.3	Y*		12,290
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties	*461*	*478*	*527*	*136*	*138*	*142*			*17 out of 19 have non-res sewer usage charges*				*19 out of 19 have trade waste charges*				*4,230*	*4,480*	*4,740*	*461*	*478*	*527*	*1.8*	*1.1*	*0.7*	*1.2*	*1.3*	*1.2*	*0 LWUs did not have FCR*		
	LWUs with 3,001 - 10,000 Properties																															
23	Bega Valley	890	890	957	279	357	400	Y	Y	300	322			Y	Y	16		8,150	8,370	8,620	890	890	957	1.2	1.3	0.4	0.6	2.1	1.5	Y		11,855
20	Goulburn Mulwaree	600	600	600	185	193	214	Y	Y	230	235	200		Y	Y	27		5,100	5,100	5,100	600	600	600	4.7	0.4	1.8	6.2	4.2	3.6	Y		10,113
27	Byron	544*	576*	603*	180	163	170	Y	Y	153	180	153		Y	Y	24	27	9,690	10,300	10,300	713	722	777	1.4	0.6	0.4	1.9	1.3	1.4	Y	100	9,847
26	Country Energy	328	361	397	167	197	264	Y	Y	95	95	139		Y	Y	21	39				328	361	397							Y*		9,696
25	Kempsey	553	570	595	153	125	115	Y	Y	139	146	140		Y	Y	25	13	6,450	6,700	6,870	553	570	595	1.3	0.2	0.0	1.6	0.5	0.4	Y		8,974
31	Lithgow	384	399	482	206	174	125	Y	Y	98	103	120		Y	Y	9		1,790	1,790	1,790	384	399	482	-11.1	0.5	-1.4	-12.2	-0.3	-1.6	Y*		7,231
29	Armidale Dumaresq	288	300	357	152	150	156	Y	Y			23		Y	Y	38	19	4,060	4,160	4,280	288	300	357	0.6	1.5	1.3	0.0	0.9	1.3	Y		7,948
30A	Hawkesbury	414	429	445	132	130	134	Y	Y					N	N	28		5,590	5,590	6,800	414	429	445	-0.1	-1.6	0.1		-1.7	0.0	Y*		7,487
30	Griffith	372	438	558	167	143	152	Y	Y	120	130	75		Y	Y	28	22	1,770	1,800	1,840	372	438	558	2.4	-0.1	0.1	1.8	0.2	0.3	Y		6,735
33	Richmond Valley	750	775	810	132	127	147	Y	Y	155	162				Y	12		8,930	9,230	9,470	750	775	810	3.5	2.4	1.1	3.1	2.6	2.2	Y		6,440
32	Mid Western Regional	447	440	462	98	98	174	Y	Y							9		1,850	3,200	3,200	447	440	462	3.4	1.7	0.1	2.6	0.6	-1.0	Y		6,465
34	Nambucca	375	340	385	106	102	104	Y	Y	170	186	120		Y	Y	28	6	3,820	3,930	4,080	375	340	385	1.0	0.1	0.5	0.8	0.4	0.9	Y		5,449
35	Singleton	362	373	387	80	103	109	Y	Y	85	110	40		Y	Y	15		2,550	2,550	2,720	362	373	387	5.8	3.6	2.3	3.9	2.0	0.5	Y		5,337
37	Inverell	360	363	374	140	183	145	Y	Y					N	N	7		3,010	3,010	3,200	360	363	374	1.9	-2.4	-1.0	1.3	-0.5	0.7	Y		4,609
41	Muswellbrook	424	437	459	122	136	155	Y	Y	163	168			Y	Y	18		4,750	4,800	4,980	424	437	459	7.0	4.4	1.9	6.1	3.3	1.4	Y		5,033

Table 7: Sewerage – residential charges, bills and cost recovery (continued)

	WATER UTILITY	RESIDENTIAL CHARGES (Current & 2009/10)																		BILLS			COST RECOVERY								
		Fixed Charge (or Minimum) ($) (1) P4.1			Operating Cost (OMA) (c/kL) (2)			Access Charge Independent of Land Value ? Yes/No (3)		Non-residential Sewer Usage Charge (Not incl SDF) c/kL (3a)		Trade Waste Usage Charge c/kL (3b)		Complying Liquid Trade Waste Fees and Charges* ? (4)		Non-Res & Trade Waste Charges (% of Annual rates & Charges) (5)	Non-Res & Trade Waste Volume (% of Sewage Collected) (6)	Typical Developer Charge ($/Equivalent Tenement [ET]) (7)			Typical Residential Bill ($/assessment) (8) P6			Return on Assets (%) (9)			Economic Real Rate of Return (Sewerage) (11) F18			Full Cost Recovery? (N / Y* / Y) (11a)	Recycled Water Usage Charge in place? (c/kL) (11b)	Connected Properties (No.) (12) C8
		07/08	08/09	09/10	06/07	07/08	08/09	08/09	09/10	08/09	09/10	08/09	09/10	08/09	09/10	2008/09	2008/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	2008/09
36	Parkes	260	290	320	138	98	120	Y	Y	104	104	140		Y	Y	26	27	4,100	4,100	4,350	260	290	320	2.7	-3.1	-0.2	1.0	1.5	0.4	Y		4,968
42	Corowa	350	400	500	157	208	240	Y	Y					N	Y	16	9	2,000	2,000	2,000	350	400	500	2.7	1.8	0.5	0.7	1.9	1.4	Y		4,623
38	Moree Plains	570	570	591	101	112	142	Y	Y	100	104			Y	Y	33		3,760	3,870	3,900	570	570	591	3.5	-0.6	1.8	3.5	1.7	2.3	Y	10	3,749
44	Gunnedah	292	314	320	97	97	111	Y	Y		24			N	Y	5	11	1,950	1,950	2,000	292	314	320	2.3	-0.4	-0.2	1.3	-0.2	-0.3	Y*		4,007
46	Narrabri	450	450	469	104	97	115	Y	Y			175		Y	Y			1,800	4,020	4,020	450	450	469	1.1	0.0	-1.0	1.0	1.5	-0.6	Y*		3,661
43	Tumut	482	496	531	129	213	196	Y	Y	145	155			Y	Y	23		4,560	4,710	4,880	482	496	531	13.2	3.9	1.1	12.1	3.3	0.9	Y		4,107
49	Young	360	375	395	52	60	77	Y	Y					Y	Y	20	6	1,100	1,100	1,160	360	375	395	15.3	10.1	5.8	12.2	7.6	5.4	Y		3,684
39	Cowra	522	538	557	123	148	196	Y	Y					Y	Y	20		2,750	4,490	4,650	522	538	557	8.5	5.3	4.0	8.8	5.6	4.2	Y		3,552
45	Upper Hunter	354	365	378	143	155	161	Y	Y	68	70			Y	Y	14		2,300	2,300	2,300	354	365	378	1.4	0.6	-1.2	-0.1	-0.7	-2.6	Y*		3,636
52	Snowy River	396*	435*	525*	187	338	286	Y	Y	80	100			Y	Y			5,000	5,400	5,400	511	536	634	3.6	-0.3	1.8	2.3	-1.7	0.9	Y		3,605
51	Forbes	378	403	435	135	139	154	Y	Y	120	124	55		Y	Y	22	15	1,260	1,850	2,520	378	403	435	0.4	1.2	1.4	1.1	1.6	1.6	Y		3,166
50	Cooma-Monaro	599	641	667	238	316	317	Y	Y					N	N	17		1,910	3,850	3,850	599	641	667	2.8	-0.8	0.4	2.7	-0.4	0.3	Y		3,208
53	Berrigan	330	340	350	128	216	258	Y	Y					N	N	19		1,700	1,700	1,700	330	340	350	1.2	2.5	-1.9	-0.1	1.2	-3.1	Y*		3,270
	Medians (% of LWUs basis excl bulk suppliers) for 3,000 to 10,000 Properties	*378*	*416*	*461*	*137*	*146*	*155*			*18 out of 28 have non-res sewer usage charges*				*23 out of 28 have trade waste charges*				*2,750*	*3,930*	*4,020*	*381*	*438*	*466*	*2.4*	*0.6*	*0.4*	*1.7*	*1.3*	*0.9*	*0 LWU did not have FCR*		
	LWUs with 1,501 - 3,000 Properties																															
48	Leeton	415	414	426	29	93	138	Y	Y	66	68			Y	Y	50	22	3,200	4,000	4,000	409	414	426	4.0	2.4	1.4	2.7	1.2	0.7	Y		3,111
54	Deniliquin	508	525	543	198	203	222	Y	Y			139		Y	Y	3	7	600	4,190	4,140	508	525	543	2.1	3.8	2.0	0.3	1.8	0.8	Y		3,158
47	Bellingen	485	499	531		141	136	Y	Y	109	115	109		Y	Y	4		3,900	3,970	4,250	485	499	531		0.8	0.3		-0.7	-1.7	Y		2,939
60	Glen Innes Severn	350	385	390	68	120	78	Y	Y	88	90	135		Y	Y			1,860	2,470	3,190	350	385	390	0.7	0.3	-0.1	0.9	1.1	1.2	Y		2,704
58	Cootamundra	275	275	290	114	134	143	Y	Y	153	153			N	N	26		2,580	2,580	2,750	275	275	290	0.2	-0.4	0.3	0.4	-0.3	0.4	Y		2,748
57	Wellington	492	492	508	165	157	223	Y	Y	70	72	127		Y	Y	21	9	1,910	1,910	1,910	492	492	508	3.3	0.8	-1.1	3.9	1.8	0.0	Y		2,379
91	Cabonne	183*	189.6*	196.2*	167	212	210	Y	Y	120	131	140		Y	Y	18	5	4,280	4,280	4,300	299	297	306	5.3	1.5	1.2	4.6	0.7	0.9	Y		2,363
80	Greater Hume	255	270	285	145	181	193	Y	Y	80	80			N	N	22		6,000	6,000	6,000	255	270	285	-0.9	-0.5	-0.6	-1.4	-1.1	-1.2	Y*		2,504
59	Lachlan	331	332	338		94	117	Y	Y		105			N	Y	17	23			7,500	331	332	338		1.1	-0.4		-0.6	-1.0	Y*		2,157
65	Murray	351	363	366	117	155	134	Y	Y	49	50	125		Y	Y	24	31	2,050	2,050	2,050	351	363	366	1.7	0.9	1.7	1.7	1.0	1.7	Y		2,937
62	Narromine	420	440*	455	94	105	102	Y	Y	160	165	160		Y	Y	17		1,220	3,240	3,340	420	440	455	1.0	3.3	1.0	0.3	2.2	0.8	Y		2,081
56	Yass Valley	485	505	515		208	232	Y	Y	148	148	120		Y	Y		9	4,390	4,520	4,640	485	505	515		5.6	2.7		5.5	2.6	Y		2,204
61	Liverpool Plains	310	319	350	117	116	102	Y	Y	137	141			Y	Y	22	30	610	610	2,570	310	319	350	1.1	-1.3	0.0	-1.3	-2.3	-0.1	Y		1,808
55	Warrumbungle	354	366	461	159		149	Y	Y					N	N	17	30	1,030	1,100	1,320	354	366	461	0.6		0.4	-0.6		0.6	Y*		2,495
69	Temora	211	232	244	95	96	288	Y	Y	25	25			N	N	21	9		150	160	211	232	244	1.0	0.8	1.5	0.7	0.4	1.0	Y	35	2,099
71	Palerang	838	873	897		194	234	Y	Y	264	271	127		Y	Y	8		3,600	7,500	10,000	838	873	897		6.7	6.6		6.0	6.0	Y		1,867
72	Bland	476	493	510	205		243	Y	Y					N	N			1,000	1,000	1,000	476	493	510	1.5		0.1	-0.2		0.5	Y		1,821
63	Narrandera	417	443	443	200	198	177	Y	Y	113	113			N	N	21					417	443	443	5.6	-1.2	0.8	2.4	-1.2	0.9	Y		1,673
67	Cobar	230	245	250	58	78	74	Y	Y					Y	Y	3		770	770	770	230	245	250	6.2	0.6	1.2	3.9	0.3	1.1	Y	35	1,726
74	Wentworth	445	500	570	60	23	24	Y	Y					N	N	10		3,280	3,280	5,340	445	500	570	-0.7	-1.0	-0.9	-0.1	-0.7	-0.5	Y*		1,814
75	Coonamble	313	324	337	106	143	163	Y	Y	74	74			N	N	15	13				313	324	337	0.4	-2.2	-2.5	-3.5	-6.9	-7.5	N		1,460
	Medians (% of LWUs basis excl bulk suppliers) for 1,500 to 3,000 Properties	*354*	*385*	*426*	*117*	*141*	*149*			*16 out of 21 have non-res sewer usage charges*				*13 out of 21 have trade waste charges*				*1,885*	*2,910*	*3,340*	*381*	*385*	*426*	*1.1*	*0.8*	*0.4*	*0.4*	*0.4*	*0.7*	*1 LWU did not have FCR*		

Table 7: Sewerage – residential charges, bills and cost recovery (continued)

	WATER UTILITY	RESIDENTIAL CHARGES (Current & 2009/10)																		BILLS			COST RECOVERY								
		Fixed Charge (or Minimum)			Operating Cost (OMA)			Access Charge Independent of Land Value ?		Non-residential Sewer Usage Charge (Not incl SDF) c/kL		Trade Waste Usage Charge c/kL		Complying Liquid Trade Waste Fees and Charges* ?		Non-Res & Trade Waste Charges (% of Annual rates & Charges)	Non-Res & Trade Waste Volume (% of Sewage Collected)	Typical Developer Charge			Typical Residential Bill			Return on Assets			Economic Real Rate of Return (Sewerage)			Full Cost Recovery?	Recycled Water Usage Charge in place?	Connected Properties
		($)			(c/kL)			Yes/No										($/Equivalent Tenement [ET])			($/assessment)			(%)						(N / Y* / Y)	(c/kL)	(No.)
		(1) P4.1			(2)			(3)		(3a)		(3b)		(4)		(5)	(6)	(7)			(8) P6			(9)			(11) F18			(11a)	(11b)	(12) C8
		07/08	08/09	09/10	06/07	07/08	08/09	08/09	09/10	08/09	09/10	08/09	09/10	08/09	09/10	2008/09	2008/09	07/08	08/09	09/10	07/08	08/09	09/10	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	2008/09
	LWUs with 200 - 1,500 Properties																															
70	Kyogle	526	557	569	122	153	105	Y	Y	91	91	100		Y	Y	21	17	1,000	3,000	3,000	526	557	569	13.7	0.9	0.9	13.7	1.1	1.1	Y		1,682
77	Junee	314	325	335		164	128	Y	Y					N	N	13		550	1,650	1,650	314	325	335	0.7	0.4	0.7	0.5	-0.1	0.1	Y	15	1,578
78	Blayney	420	420	430	143	164	224	Y	Y	110	110	105		Y	Y	10	11	2,040	2,040	2,160	420	420	430	2.2	-2.0	-0.4	2.0	0.3	-0.2	Y*		1,805
79	Walgett	316	338	355		61	54	Y	Y												316	338	355	-1.1	1.9	0.5	-1.2	1.8	0.5	Y		1,518
68	Tenterfield	550	600	669	178	188	292	Y	Y	80	90			N	Y	19		1,500	1,500	1,500	550	600	669	1.9	-2.0	-2.4	0.8	1.3	-1.2	Y*		1,657
84	Gilgandra	381	393	403	69	86	89	Y	Y	92	97	143		Y	Y	19	25				381	393	403	4.3	1.8	1.3	3.8	1.0	0.7	Y		1,360
73	Upper Lachlan	550	570	600		167	188	Y	Y	150	195			N	N	17	13	2,200	3,500	3,500	550	570	600	2.9	0.2	10.5	3.3	1.4	12.0	Y		1,417
82	Gloucester	325	360	463	263	289	119	Y	Y	180	195			Y	Y	26	16	6,110	6,310	6,510	325	360	463	0.4	0.1	0.3	-1.0	0.1	-0.2	Y		1,553
87	Bourke	509	525	543	139	357	270	Y	Y					N	N	12		460	460	830	509	525	543	-1.1	0.5	0.2	-2.0	-0.8	-0.4	Y		1,069
86	Hay	415	477	550	97	103	133	Y	Y	78	95			N	N	17	5				415	477	550	1.8	-1.1	2.1	0.6	-2.7	0.9	Y		1,274
83	Oberon	342	352	361	101	117	214	Y	Y	115	119					42	24	1,400	1,440	1,490	342	352	361	-0.3	1.9	0.7	-2.3	0.2	-0.3	Y		1,362
81	Gwydir	475	485	485	134		159	Y	Y	245	245	120		Y	Y	19	11	2,000	2,000	2,000	475	485	485		-3.3	2.0		-4.2	0.9	Y	12	1,147
85	Uralla	404	425	435		187	260	Y	Y	100	100			Y	Y	5	4	360	550	600	404	425	435	1.2	1.6	1.3	1.1	0.7	1.4	Y		1,016
95	Weddin	195	205	225		74	124	Y	Y					N	N	8	16			2,800	195	205	225	-10.4	0.7	-1.6	-13.2	-0.1	-1.9	Y*		1,026
89	Bogan	370	380	390	40	47	49	Y	Y	185	195			N	N						370	380	390	1.1	-0.3	2.0	0.6	-1.0	1.2	Y		1,047
76	Harden	440	519	537	50	46	76	Y	Y	151	157			N	N	21				3,000	440	519	537	4.2	-1.9	2.3	4.3	-2.0	2.2	Y		935
88	Wakool	454	472	489	147	70	86	Y	Y					N	N	24	9				454	472	489	1.2	-1.0	-0.9	1.1	-1.1	-1.0	Y*		1,065
93	Tumbarumba	378	390	404	80	78	72	Y	Y	83	83	120		Y	Y	25		430	430	430	378	390	404	2.7	2.7	1.7	0.9	0.7	1.4	Y		974
94	Gundagai	248	270	308	209	221	244	Y	Y	116	132	140		Y	Y	40					248	270	308	0.2	-1.7	-1.1	0.1	-1.8	-1.2	Y*		900
92	Carrathool	217	224	232	121	152		Y	Y					N	N			570	610	640	217	224	232	-1.4	-2.0		-1.5	-2.1		N		876
96	Warren	465	465	470	108	158	191	Y	Y					N	N	22					465	465	470	4.6	1.8	1.1	2.1	-1.3	-1.8	Y		793
99	Coolamon	255	260	267		148	198	Y	Y					N	N	20	4			4,500	255	260	267	3.0	1.6	3.0	2.3	1.0	2.4	Y		985
102	Lockhart	344	377	388		201	139	Y	Y	180	180			N	N	17		1,000	1,000	1,000	344	377	388	-1.4	-0.5	0.2	-2.2	-1.5	-0.8	Y	58	825
98	Walcha	378	390	405	129	126	123	Y	Y	90	90	134		Y	Y		17				378	390	405	1.1	1.3	1.0	0.9	1.1	1.1	Y		802
100	Balranald	269	269	269		99	61	Y	Y	15	15			N	Y	15		680	680	680	269	269	269	-0.4	0.5	0.1	-0.7	-0.1	-0.3	Y*		790
97	Bombala	419	436	454	79	73	125	Y	Y	15	15			N	N	19		1,840	1,910	1,980	419	436	454	2.2	1.4	-0.1	1.8	0.5	-0.4	Y*		757
101	Murrumbidgee	300	300	300	75	71	163	N	N					Y	Y	7		1,000	1,000	1,000	300	300	300	6.0	4.6	3.0	2.2	0.2	-0.9	Y		746
90	Guyra	500	500	515	108	252	207	Y	Y					N	Y	10	11	420	420	450	500	500	515	0.4	1.3	0.6	0.9	1.5	1.1	Y		960
104	Boorowa	331	471	492		95	136	Y	Y					Y	Y	2		500	500	500	331	471	492	4.7	-0.4	1.4	4.3	-1.1	0.7	Y		601
105	Brewarrina	515	530	572	83	101	120	N	N					N	N	17					515	530	572	1.1	-1.1	-1.1	1.0	-1.1	-1.2	Y*		482
106	Jerilderie	500	500	500	148	148	173	Y	Y	70	70			N	N	31		930	930	930	500	500	500	5.1	3.5	3.4	3.1	0.9	1.0	Y		425
103	Central Darling	360	360	360	85	103	83	Y	Y					N	N			400	400	400	360	360	360	-2.3	-0.3	-0.5	-2.5	-0.6	-0.7	N		194
107	Urana	207	214	221	110	103	112	Y	Y					N	N			4,100	4,100	4,100	207	214	221	0.7	0.5	0.0	0.5	0.1	-0.2	Y		315
	Medians (% of LWUs basis excl bulk suppliers) for 200 to 1,500 Properties	*380*	*393*	*430*		*122*	*130*			*19 out of 33 have non-res sewer usage charges*				*14 out of 33 have trade waste charges*				*1,000*	*1,000*	*1,495*		*393*	*430*	*1.2*	*0.5*	*0.7*	*0.9*	*0.1*	*-0.1*	*2 LWUs did not have FCR*		
	Median All LWUs (% of LWUs basis)	*Access Charge*		*$460*	*OMA (c/kL)*		*146*	*Non Res Usage Charge*		*110*								*Developer Charge*		*3250*		*TRB*	*$460*					*ERRR*	*0.7*		*97 LWUs have FCR for SGE*	
	Median All LWUs (Statewide basis)			*$470*			*145*			*100*										*3900*			*$470*						*1.1*			
	70 out of 100 LWUs have nonresidential usage charges and 69 out of 100 have complying trade waste charges																														*3 LWUs did not achieve FCR for SGE*	

NOTES: 1. 70 LWUs have non-residential sewerage charges which substantially comply with the Best-Practice Management Guidelines (Table C, page 61) and 69 LWUs have complying trade waste fees and charges.

2 **Full Cost Recovery for water supply** has been achieved by 97 utilities (97%). These comprised the 73 utilities which had either an Economic Real Rate of Return or Return on Assets of >=0 for the 2008/09 financial year, shown as 'Y" in col(11a). In addition they include the 24 utilities which have significantly increased their 2009/10 charges in order to recover all their costs which are shown as "Y*". A total of 3 LWUs did not achieve full cost recovery. These are shown as "N".

3. * in column (1) indicates that this LWU has a residential sewer usage charge as follows; Byron 128 c/kL, Snowy River 100c/kL and Cabonne 120c/kL.

Table 7A: Sewerage – 2009-10 residential multiple tariffs

WATER UTILITY		Town	Access Charge (or Minimum) ($) (1)	Access Charge Independent of Land Value ? (2)
78	Blayney	Blayney	430	Y
		Millthorpe	700	Y
87	Bombala	Bombala	454	Y
		Delegate	368	Y
105	Brewarrina	Brewarrina	572	
		Goodooga	249	
91	Cabonne	Molong	196	Y
		Canowindra	402	Y
		Eugowra	342	Y
		Cudal	402	N
		Manildra, Cumnock, Yeoval	500	N
92	Carrathool	Hilston	232	Y
		Goolgowi	150	Y
75	Coonamble	Coonamble	337	Y
		Gulargambone	448	Y
20	Goulburn Mulwaree Council	Goulburn	600	Y
		Marulan	730	Y
80	Greater Hume	Burrumbuttock	480	Y
		Jindera	240	Y
		Holbrook	340	Y
		Culcairn	285	Y
		Henty	210	Y
		Walla Walla	320	Y
44	Gunnedah	Gunnedah	320	Y
		Curlewis	499	Y
90	Guyra	Guyra	515	Y
		Tingha	361	Y
102	Lockhart	Lockhart	377	Y
		The Rock	343	Y
		Yerong Creek	345	Y
101	Murrumbidgee	Darlington Point	300	N
		Coleambally	250	N
46	Narrabri	Narrabri	450	Y
		Wee Waa	460	Y
		Boggabri	350	Y
71	Palerang	Bungendore	873	Y
		Braidwood	1294	Y
		Captaind Flat	1007	Y
93	Tumbarumba	Tumbarumba	390	Y
		Khancoban	415	Y
73	Upper Lachlan Council	Crookwell	570	Y
		Gunning	600	Y
		Taralga	750	Y
88	Wakool	Wakool, Barham, Moulamein, Murray Downs	472	Y
		Tooleybuc	439	Y
79	Walgett	Walgett	338	Y
		Lightening Ridge	320	Y
		Collarenebri	366	Y
96	Warren	Warren	465	Y
		Nevertire	490	Y
55	Warrumbungle Shire Council	Coolah & Dunedo	325	Y
		Coonabarabran	366	N
		Baradine	466	Y
57	Wellington	Wellington	492	Y
		Mumbli	472	Y
		Guerie	461	Y

NOTE: This Table only lists LWUs with multiple tariffs for residential customers.
Residential tariffs for all LWUs are shown in Table 7.

Table 7B: Sewerage – 2009-10 non-residential tariffs

	WATER UTILITY	Town	Access Charge (or Minimum) ($) (1)	Access Charge Independent of Land Value? (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Sewer Usage Charge (for estimated volume discharged to sewerage system = water usage x sewer discharge factor) (4)	Subtantial Compliance with 2(b) of BPMG Yes/No (5)
11	Albury	Albury	147xSDF	Y	Service Connection (40mm:$588xSDF)	185 c/kL	Y
29	Armidale Dumaresq	Armidale	357	Y	Multiple Units: $318/WC; Hotels, Motels: $117/WC, $50/Urinals		N
24	Ballina	Ballina	360	Y	Service connection size* (40mm $1438)	125 c/kL	Y
100	Balranald	Balranald	269	Y	Service connection size* (40mm $1076)	15 c/kL	Y
21	Bathurst Regional	Bathurst	349	Y	Service Connection Size*(40mm:$1399)	89 c/kL	Y
23	Bega Valley	Bega Valley	957	Y	Meter size* (eg. 40mm $3828)	322 c/kL	Y
47	Bellingen	Bellingen, Urunga, Dorrigo	531	Y	Uniform Access Charge	115 c/kL for >365kL discharge	
53	Berrigan	Berrigan, Finley, Tocumwal, Barooga	350	Y	Uniform Access Charge, after two WCs $76/WC		
72	Bland	Bland	510	N	Uniform Access Charge		N
78	Blayney	Blayney	383	Y	Service connection size* (40mm $1533)	110 c/kL	Y
		Millthorpe	655	Y	Service connection size* (40mm $2620)	110 c/kL	
89	Bogan	Nyngan	103	Y	Service connection size* (40mm $412)	195 c/kL	Y
97	Bombala	Bombala	436	Y	Uniform Access Charge	65 c/kL	Y
		Delegate	369	Y	Uniform Access Charge	65 c/kL	
104	Boorowa	Boorowa	493	Y	Uniform Access Charge		N
87	Bourke	Bourke	543	Y	Uniform Access Charge		N
105	Brewarrina	Brewarrina	572			$48.60/Urinals, Additional WCs (2-5) $144.50, additional WC $48.60/WC	N
		Goodooga	249			$48.60/Urinals, Additional WCs (2-5) $144.50, additional WC $48.60/WC	
27	Byron	Byron	603	Y	Service connection size* (40mm $2412)	180 c/kL	Y
91	Cabonne	Molong	196	Y	Service connection size (40mm $551)	120 c/kL	Y
		Canowindra	402	Y	Service connection size (40mm $557.70)	120 c/kL	
		Eugowra	342	Y	Service connection size (40mm 541.10)	120 c/kL	
		Manildra	500	N	Land Value		
		Cudal, Cumnock, Yeoval	500	N	Land Value		
92	Carrathool	Hilston	232.10+$23.25/unit	Y	Base Charge: Motels:Base+10% Base charge/unit; Service Station:1.5 Base Charge;laundromat, Clubs & Hotels:2xBase Charge		N
		Goolgowi	144.70+$14.45/unit		Base Charge: Motels:Base+10% Base charge/unit; Service Station:1.5 Base Charge;laundromat, Clubs & Hotels:2xBase Charge		
103	Central Darling	Wilcannia	360	Y	Uniform Access Charge for two fittings, $120/additional fitting		N
14	Clarence Valley		367	Y	Service connection size* (40mm: $1468)	193 c/kL	Y
67	Cobar		270	Y	Uniform Access Charge for 3 WCs, additional $70/WC		N
10	Coffs Harbour	Coffs Harbour	660*water meter factor*discharge factor	Y	based on water meter factor	172 c/kL	Y
99	Coolamon	Coolamon & Gainmain	267	Y	Uniform Access Charge	for >2 Pedestals, $77/Pedestal	N
50	Cooma-Monaro	Cooma,Nimmitabel	710	Y	$710 for consumption < 100 kL, increasing to $16863 for consumption > 8,000 kL		N
75	Coonamble	Coonamble	337	Y	Uniform Access Charge	55 c/kL	Y
		Gulargambone	448	Y	Uniform Access Charge	74 c/kL	
58	Cootamundra	Cootamundra	168	Y	Meter Size* 40mm:$672	161 c/kL	Y
42	Corowa	Corowa, Howlong & Mulwala	500	Y	Service connection size (40mm:$1140)	100 c/kL	
26	Country Energy	Broken Hill	537	Y	Service connection size* (40mm:$2148)	95 c/kL	Y
39	Cowra	Cowra	557+121	Y	Uniform Access Charge	$61/cistern	N
54	Deniliquin	Deniliquin	525	Y	Uniform Access Charge	$58/3WC the $29/WC	N
18	Dubbo	Dubbo	265	Y	Service connection size* (40mm:4*$264.76)	144 c/kL	Y
15	Eurobodalla	Eurobodalla	662	Y	Meter Size(Availability Factor based)* (eg. 40mm 4x$662)	50c/kL	Y
51	Forbes	Forbes	435	Y	Service Connection Size* 40mm:1740	124 c/kL	Y
84	Gilgandra	Gilgandra	190	Y	Service Connection Size*(40mm:$755)	97 c/kL	Y
60	Glen Innes Severn	Glen Innes	163	Y	Service Connection Size*(40mm:$653.40)	90 c/kL	Y
82	Gloucester	Gloucester	396	Y	Service connection size* (40mm:$1618)	195 c/kL	Y
1	Gosford	Gosford	347	Y	Meter Size*(40mm $1386.36)	99 c/kL	Y
76	Goulburn Mulwaree	Goulburn	330	Y	Meter Size* (40mm:1325)	235 c/kL	Y
		Marulan	730	Y	Meter Size* (40mm:2900)	235 c/kL	

Table 7B: Sewerage – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Access Charge (or Minimum) ($)	Access Charge Independent of Land Value?	Basis for Access Charge *Proportional to square of size of service connection or water meter	Sewer Usage Charge (for estimated volume discharged to sewerage system = water usage x sewer discharge factor)	Subtantial Compliance with 2(b) of BPMG Yes/No
			(1)	(2)	(3)	(4)	(5)
80	Greater Hume	Burrumbuttock	108	Y	Service Connection Size(40mm:$372)	80 c/kL	Y
		Jindera	105	Y	Service Connection Size(40mm:$189)	80 c/kL	Y
		Holbrook	116	Y	Service Connection Size(40mm:$212)	80 c/kL	Y
		Culcairn	126	Y	Service Connection Size(40mm:$222)	80 c/kL	Y
		Henty	120	Y	Service Connection Size(40mm:$220)	80 c/kL	Y
		Walla Walla	143	Y	Service Connection Size(40mm:$246)	80 c/kL	Y
30	Griffith	Griffith	279	Y	Service Connection Size* (40mm:$1113)	130	Y
94	Gundagai	Gundagai	96	Y	Service Connection(20-40mm:$173)	160 c/kL	Y
44	Gunnedah	Gunnedah	173	Y	Service Connection Size (20-40mm:$173)	24 c/kL	
		Curlewis	183	Y	Service Connection Size(20-40mm:$182.50)	24 c/kL	
90	Guyra	Guyra	515	Y	Uniform Access Charge	Ist WC/Urinal covered by rate, 2 to 6: $218.36/WC or Urinal, All additional: $109.18/WC or Urinal	N
		Tingha	361	Y	Uniform Access Charge		
81	Gwydir	Bingara, Warialda	410	Y	Meter Size(eg 40mm:1600)	245 c/kL	Y
76	Harden	Harden	200	Y	Service Connection*(eg 40mm:800)	157 c/kL	Y
7	Port Macquarie-Hastings	Hastings	601	Y	Uniform Access Charge	92 c/kL	Y
30A	Hawkesbury	Category 1, Vol < 1kL/d	518	Y	Uniform Access Charge		N
		Category 2, Vol : 1kL to 5 kL/d	2597	Y	Uniform Access Charge		
		Category 3, Vol < 5kL to 10 kL/d	5174	Y	Uniform Access Charge		
		Category 4, Vol : 10kL to 20 kL/d	10316	Y	Uniform Access Charge		
		Category 5, Vol > 20 kL/d	10316	Y	Uniform Access Charge	for waste > 20 kL/d, 185c/kL	
86	Hay	Hay	450	Y	Uniform Access Charge	95 c/kL	Y
37	Inverell	Inverell, Ashford, Delungra, Gilgai	374	Y	Uniform Access Charge		N
106	Jerilderie	Jerilderie	500	Y	Service Connection*(eg 32mm:1280)	70 c/kL	Y
77	Junee	Junee	335	Y	$84/WC, $32.40/Urinal		N
25	Kempsey	Kempsey	536	Y	Meter Size(eg 40mm:$3344)	146 c/kL	Y
70	Kyogle	Kyogle	224	Y	Service Connection Size*(40mm:$896)	91 c/kL	Y
59	Lachlan	Lachlan	224	Y	Service Connection*(eg 40mm:900)	105 c/kL	N
48	Leeton	Leeton	426	Y	Meter Size (40mm:$1060)	68 c/kL	Y
22	Lismore	Lismore, Nimbin & Perradenya	545	Y	Uniform Access Charge		N
31	Lithgow	Lithgow,Wallerawang, Portland	560	Y	Service Connection Size(50mm:$740)	103 c/kL	Y
61	Liverpool Plains	Quirindi, Werris Creek	212	Y	Service Connection Size*(40mm:$853)	141 c/kL	Y
102	Lockhart	Lockhart	156	Y	Meter Size*(40mm:$623)	180 c/kL	Y
		The Rock	231	Y	Meter Size*(40mm:$973)	94 c/kL	
5	MidCoast		600	Y	Meter Size*(eg 40mm: $2400)	204 c/kL	Y
32	Mid Western Regional	Mudgee, Gulgong & Rylstone	462	Y	Uniform Access Charge		N
38	Moree Plains Shire	Moree, Mungindi, Balone, Bogabilla and Gurly	591	Y	Service Connection Size (40mm:$1352)	104 c/kL	Y
65	Murray	Moama, Mathoura	264	Y	Service Connection Size*(40mm:$1054.16)	50 c/kL	Y
101	Murrumbidgee	Darlington Point	300	N	Land Value		N
		Coleambally	250	N	Land Value		N
41	Muswellbrook	Muswellbrook, Denman	185	Y	Service Connection Size*(40mm:$740))	168 c/kL	Y
34	Nambucca	Nambucca	236	Y	Service Connection Size (40mm:$604))	186 c/kL	Y
46	Narrabri	Narrabri	469	Y	Uniform Access Charge	$71/Pedestal, $71/Cistern	N
		Wee Waa	478	Y	Uniform Access Charge	$72/Pedestal, $72/Cistern	
		Bogabri	364	Y	Uniform Access Charge	$55/Pedestal, $55/Cistern	
63	Narrandera	Narrandera	305	Y	Service Connection Size* (40mm:$1220))	117 c/kL	Y
62	Narromine	Narromine, Trangie	163	Y	Service Connection Size*(40mm:$652))	165 c/kL	Y
83	Oberon	Oberon	100	Y	Service Connection Size*(38mm:$361))	119 c/kL	Y
19	Orange	Orange	105	Y	Service connection Size 40mm:$416	137 c/kL	Y
71	Palerang	Bungendore	897	Y	Service connection Size 40mm:$3588	271 c/kL	Y
		Braidwood	1335	Y	Service connection Size 40mm:$5340	155 c/kL	
		Captaind Flat	1034	Y	Service connection Size 40mm:$4136	277 c/kL	

Table 7B: Sewerage – 2009-10 non-residential tariffs (continued)

	WATER UTILITY	Town	Access Charge (or Minimum) ($) (1)	Access Charge Independent of Land Value? (2)	Basis for Access Charge *Proportional to square of size of service connection or water meter (3)	Sewer Usage Charge (for estimated volume discharged to sewerage system = water usage x sewer discharge factor) (4)	Substantial Compliance with 2(b) of BPMG Yes/No (5)
36	Parkes	Parkes	145	Y	Meter Size* (40mm:$580))	104 c/kL	Y
17	Queanbeyan	Queanbeyan	271	Y	Service Connection Size (40mm:$1180)	64 c/kL	Y
33	Richmond Valley	all	100	Y	Service Connection Size*(40mm:$400), C=Water Cons in kL, SDF=0.95	162 c/kL	Y
3	Shoalhaven	Shoalhaven	585	Y	Meter Size (40mm:$1659))	91 c/kL	Y
35	Singleton	Singleton	184	Y	Service connection Size* 40mm:4x184	110 c/kL	Y
52	Snowy River	Snowy River	525	Y	Uniform Access Charge+usage ($1.75/kL)	100 c/kL	Y
13	Tamworth	Tamworth	571	Y	Meter Size (40mm: $1253.80)	60 c/kL Strata lot availability:$584	Y
69	Temora	Temora	193	Y	Meter Size* (40mm: $771.75)	25 c/kL	Y
68	Tenterfield	Tenterfield, Urbenville	340	Y	Service Connection Size*(40mm:$1360)	90 c/kL	Y
93	Tumbarumba	Tumbarumba	233	Y	Meter Size (40mm:$932)	83 c/kL	Y
		Khancoban	233	Y	Meter Size (40mm:$932)	83 c/kL	
43	Tumut	Tumut	504	Y	Meter Size* (40mm:$2016))	155 c/kL	Y
6	Tweed	Tweed	527	Y	Uniform Access Charge	95 c/kL for >200kL/y	Y
45	Upper Hunter	Murrurundi, Merriwa, Aberdeen/Scone	456	Y	Meter Size (40mm $916)	70 c/kL	Y
73	Upper Lachlan	Crookwell	600	Y	Uniform Access Charge	195 c/kL	Y
		Gunning	600	Y	Uniform Access Charge	195 c/kL	
		Taralga	390	Y	Uniform Access Charge	195 c/kL	
85	Uralla	Uralla	305	Y	Uniform Access Charge	100 c/kL	Y
107	Urana		221	Y	Uniform Access Charge		
9	Wagga Wagga	Wagga Wagga	760	Y	Access charge includes first 4 pan equivalent fixtures. Additional $95/equivalent fixture		N
88	Wakool	Wakool, Barham, Moulamein, Murray Downs	489	Y	Hotels: SC+20%SC/Cistern+10%SC/Room, Clubs: SC+20%SC/Cistern, Shops/Motels/Units: SC+10%SC		N
		Tooleybuc	454	Y	Hotels: SC+20%SC/Cistern+10%SC/Room, Clubs: SC+20%SC/Cistern, Shops/Motels/Units: SC+10%SC		
98	Walcha	Walcha	361	Y	Service Connection Size*(40mm:4x20mm Access Charge))	90 c/kL	Y
79	Walgett	Walgett	355	Y	Uniform Access Charge Additional SC/Pedestal, $55.55/Cistern		N
		Lightening Ridge	336	Y	Uniform Access Charge Additional SC/Pedestal, $52.34/Cistern		
		Collarenebri	384	Y	Uniform Access Charge Additional SC/Pedestal, $60.22/Cistern		
96	Warren	Warren	470	Y	Uniform Access Charge for multiple users:$235/WC/Urinal	$235/WC	N
		Nevertire	495	Y	Uniform Access Charge		
55	Warrumbungle	Coolah	346	Y	Meter Size* (40mm $1264.32)	9 c/kL	N
		Dunedoo	278		Meter Size* (40mm $1111.24)	13 c/kL	
		Coonabarabran	128	N	Meter Size* (40mm $512)	119 c/kL	
		Baradine	265	Y	Meter Size* (40mm $1060.84)	26 c/kL	
95	Weddin	Grenfell	225	Y	Uniform Access Charge		N
57	Wellington	Wellington, Mumbli, Guerie	279	Y	Meter Size* (40mm $1116) minimum charge:$492	72 c/kL	Y
74	Wentworth	Wentworth, Nimatjira	570	Y	Uniform Access Charge		N
16	Wingecarribee	Wingecarribee	468	Y	Meter Size* (40mm:$1872.58)	91.79 c/kL	Y
2	Wyong	Wyong	155	Y	Meter Size* (40mm:$618.37)	77 c/kL	Y
56	Yass Valley	Yass	515	Y	Uniform Access Charge	150 c/kL	Y
49	Young	Young	395	Y	Uniform Access Charge	after 2 WCs, $187.52/WC	N

Table 7C: Sewerage – Liquid trade waste fees and charges (2009-10)

	WATER UTILITY	Does LWU have complying Liquid Trade Waste Policy[1,2] ? (1) 2008-09	Complying Trade Waste Fees & Charges (Yes/No) (2)	All liquid trade waste approvals (Yes/No) (3)	ANNUAL TRADE WASTE FEE ($) Category 1 (4)	Category 2 (6)	Category 3 (7)	Reinspection Fee $/inspection Cat/1/2/3 (8)	Category 2 Trade Waste Usage Charge (c/kL) (9)	Category 2 Non Compliance Trade Waste Usage Charge ($/kL) (9A)	Excess Mass Charge (c/kg) BOD (10)	Suspended Solids (11)	Oil & Grease (12)	Non Compliance Excess Mass Charge for BOD (Yes/No) (13)
11	Albury City	Yes	Yes	Yes	64				135		26	16	42	
29	Armidale Dumaresq	Yes*	Yes	Yes	140	245	600		23		54	68	95	
24	Ballina	Yes	Yes	Yes	65	129	434	95	110	11	55	70	100	Yes
100	Balranald		Yes		110	110	495	75	125	12.5	62	79	111	
21	Bathurst Regional	Yes	Yes		74	74	494	69	150		63	80	112	
23	Bega Valley	Yes	Yes											
47	Bellingen	Yes	Yes		80			115	109					
53	Berrigan		No											
72	Bland		No											
78	Blayney	Yes	Yes	Yes	70	70	265	65	105	12	44	43	87	
89	Bogan		No											
97	Bombala		No											
104	Boorowa	Yes	Yes		130	130	130	60						
87	Bourke		No											
105	Brewarrina		No											
27	Byron	Yes	Yes	Yes	223				153	12.5				
91	Cabonne	Yes	Yes		75	149	500	70	140		60	80	110	Yes
92	Carrathool		No											
103	Central Darling		No											
14	Clarence Valley	Yes	Yes		87		582	75	167	15.33				
67	Cobar	Yes	Yes	Yes	250	500	100				10	25	20	
66	Cobar WB										18	18	32	
10	Coffs Harbour	Yes	Yes		165			80	40					
99	Coolamon		No											
50	Cooma-Monaro		No											
75	Coonamble		No											
58	Cootamundra		No											
42	Corowa	Yes	Yes		74	148	496	69	138	12.68	62	62	80	Yes
26	Country Energy	Yes	Yes		74	499		70	139	12.75	63	80	112	
39	Cowra	Yes	Yes								62	80	112	Yes
54	Deniliquin	Yes	Yes		74	150		70	139					
18	Dubbo	Yes*	Yes	Yes	134	668	668	125	130	12.25	120	100	220	
15	Eurobodalla	Yes	Yes	Yes	69	400	400	72	120	11				
51	Forbes	Yes	Yes		107	107		107	55		56	76	103	
84	Gilgandra	Yes*	Yes	Yes				75	143		54	69		
60	Glen Innes Severn	Yes	Yes		154	154	533	75	135	12				
82	Gloucester	Yes	Yes	Yes	275	275	650	91		14.35	59	76	109	
1	Gosford	Yes	Yes	Yes	73			124	141	12	141	141	702	
20	Goulburn Mulwaree	Yes	Yes	Yes	77	283	283	62	200		63	81	113	
80	Greater Hume		No											
30	Griffith	Yes	Yes	Yes	69	162	462	65	75		110	112		
94	Gundagai		No		76				140					
44	Gunnedah	Yes	No											
90	Guyra	Yes*	Yes	Yes	98						52	65	72	
81	Gwydir	Yes	Yes		64	64	430	60	120					
76	Harden		No											
7	Port Macquarie-Hastings	Yes*	Yes	Yes	165	165	508	90	140	13	65	80	115	
30A	Hawkesbury	Yes	No											
86	Hay	Yes*	No	Yes										

Table 7C: Sewerage – Liquid trade waste fees and charges (2009-10) (continued)

	WATER UTILITY	Does LWU have complying Liquid Trade Waste Policy[1,2] ? (1) 2008-09	Complying Trade Waste Fees & Charges (Yes/No) (2)	All liquid trade waste approvals (Yes/No) (3)	ANNUAL TRADE WASTE FEE ($) Category 1 (4)	Category 2 (6)	Category 3 (7)	Reinspection Fee $/inspection Cat/1/2/3 (8)	Category 2 Trade Waste Usage Charge (c/kL) (9)	Category 2 Non Compliance Trade Waste Usage Charge ($/kL) (9A)	Excess Mass Charge (c/kg) BOD (10)	Suspended Solids (11)	Oil & Grease (12)	Non Compliance Excess Mass Charge for BOD (Yes/No) (13)
37	Inverell	Yes	No											
106	Jerilderie		No											
77	Junee													
25	Kempsey	Yes	Yes	Yes	72	72	488	83	140	12.5	70	90	120	
70	Kyogle	Yes	Yes	Yes	72	72	477	68	100	11	54	69	97	Yes
59	Lachlan	Yes	Yes	Yes	75	75	575	75	120	12.8				
48	Leeton	Yes	Yes											Yes
22	Lismore	Draft - Yes*	Yes	Yes	176	176		90			60	77	108	
31	Lithgow	Yes	Yes	Yes	128	190	348	55	120					Yes
61	Liverpool Plains	Yes	Yes		70	70	468	66		11	100	100	200	
102	Lockhart		No											
5	MidCoast	Yes	Yes	Yes	80	120	430	80	200		49	49	68	
32	Mid Western Regional		No	Yes										
38	Moree Plains	Yes	Yes					65						
65	Murray	Yes	Yes		100	200	300	100	125		56	72	97	
101	Murrumbidgee	Yes	No											
41	Muswellbrook	Draft - Yes*	Yes	Yes	220	340	Variable	90						
34	Nambucca	Yes	Yes	Yes	75	125	125	110	120					
46	Narrabri	Yes*	Yes	Yes	440	680	770		175		175			
63	Narrandera		No											
62	Narromine	Yes	Yes		70	70	478	67	160					
83	Oberon	Draft	No											
19	Orange	Yes	Yes	Yes	66	65	443	62	137		42	46	82	Yes
71	Palerang		No		68		454	63	127		57	73	102	
36	Parkes	Yes	Yes	Yes	74	74	500	70	140					
17	Queanbeyan	Yes	Yes	Yes	70	70	471	65	135					
33	Richmond Valley	Yes	No											
3	Shoalhaven	Yes	Yes	Yes	42	124	480	62	139		32	80	58	
35	Singleton	Yes	Yes	Yes	76			88	40		55	71	97	
52	Snowy River	Yes	Yes		99									
13	Tamworth Regional	Yes	Yes	Yes	117	117	520	77	57		65	111	79	
69	Temora		No											
68	Tenterfield	Yes	Yes	Yes	110	110	495	75	125	12.5	62	79	111	
93	Tumbarumba	Yes	Yes	Yes	64			60	120		54	69	97	
43	Tumut	Yes	Yes	Yes	150	500	1000	163			125	115	205	
6	Tweed	Yes	Yes	Yes	78	155	524	72	112		65	84	118	
45	Upper Hunter	Yes	Yes		294			89			60	79	107	
73	Upper Lachlan		No											
85	Uralla		Yes	Yes	68			120						
107	Urana		No											
9	Wagga Wagga	Yes	Yes	Yes	73	49	700	73	66		58	39	57	
88	Wakool		No			145								
98	Walcha	Draft	Yes		71			71	134	12.4				
79	Walgett	Yes	No											
96	Warren	Yes	Yes											
55	Warrumbungle		No		68									
95	Weddin	Yes	No											
57	Wellington	Yes	Yes	Yes	68			67	127	11.75				
74	Wentworth		No											
16	Wingecarribee	Yes	Yes	Yes	69	137	461	65	135	12.25	60	75	110	
2	Wyong	Yes	Yes	Yes	75	300	504	70	31	12.9	63	80	113	
56	Yass Valley	Yes	Yes	Yes	80		450	75	120					
49	Young	Yes*	Yes		70			70			44	44	88	

Notes:

1. Yes* in column 1 indicates that the LWU has adopted a trade waste policy before 2006, which needs to be updated.
2. Draft in column 1 indicates that the LWU has prepared a draft trade waste policy which needs to be finalised.
3. 69% of LWUs have a complying trade waste policy and 67% of LWUs have complying trade waste fees and charges.

Table 8: 2008-09 NSW urban water supplied

	WATER UTILITY	POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)											NON-POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)				TOTAL URBAN WATER SUPPLIED	BULK WATER EXPORTS	RECYCLED URBAN + NON-URBAN		WATER SOURCES FOR URBAN WATER USE (ML)				
		REVENUE WATER (Potable)							NON REVENUE WATER (Potable) See Table 8A				Recycled Urban Water[11]		Non-potable Urban				NON-URBAN	TOTAL					
		Residential	Commercial	Industrial	Rural	Institutional	Public Parks & Gardens	Total Revenue Water (Potable)	Real Loss (Leakage)[7]	Apparent Loss (illegal use, meter error)	Unbilled (Fire Fighting, Flushing, Public Amenities)	Total Non Rev Water Sum (8) to (8b) See Table 8A	Total Potable Urban Water	Urban Res	Urban Non Res	Other than Recycled		TOTAL Non-Potable Urban Water	(Potable + Non-potable including Recycled Urban)	(Potable + Non-potable)	See Table 8A[11]	URBAN + NON-URBAN	Surface Water	Ground Water	Recycled Water	Bulk Purchase	Total Sourced Water
								Sum (1) to (6)					Revenue + Non Revenue Water (7) + (9)			Res	Non Res	(11)+(11a)+(12a)+(12b)	Excludes Bulk Water =(10)+(12c)		(11b)	(11) + (11a) + (11b)	Urban Use Only				Excluding Non Urban Recycled
		(1) [W8]	(2) [W9]	(3) [W9]	(4) [W9]	(5) [W9]	(6) [W9]	(7)	(8) [W10]	8a) [W10]	(8b) [W10]	(9) [W10]	(10) [W11]	(11) [W8] W20	(11a) W21, W25	(12a) [W8]	(12b) [W9]	(12c)	(13) W11	(14) W14	W22, W23, W24	(11c) W26	(15) W1	(16) W2	(16b) W4	(17) W5	=Sum (15) to (17) (17b) W7
	Sydney Water Corporation													1,704	5,155				491,968	0	18,583	25,442	5,885		8,264	491,727	505,876
	Hunter Water Corporation													0	2,289				67,020	161	2,803	5,092	61,814	5,504	2,872		70,190
	Sydney Catchment Authority																			490,491			490,283			208	490,491
LWUs with > 10,000 Properties																											
1	Gosford	9,356	1,156	447	9	420	88	11,476	694	261	120	1,075	12,551		68			68	12,619		216	284	9,209	108	229	3,310	12,856
2	Wyong	7,970	3,288					11,258	624	608		1,232	12,490		865			865	13,355	4,766	431	1,296	15,369	286	1,295	1,603	18,553
3	Shoalhaven	6,484	1,792	2,315	575	123	201	11,490	982	*463*	57	*1,502*	*12,992*		125		2,012	2,137	*15,129*		1,777	1,902	14,854		161	82	15,097
4	Rous (Bulk Supplier) (NO SGE)	291	72					363	139			139	502						502	10,362			10,501				10,501
5	MidCoast (Unfiltered)	5,067	1,406	694		128	107	7,402	1,204	376	183	1,763	9,165		4			4	9,169		155	159	8,537	628	4		9,169
6	Tweed	5,441	1,142	212	110	436	162	7,503	518	486	53	1,057	8,560		645			645	9,205	79	98	743	9,564		645		10,209
7	Port Macquarie-Hastings (Unfiltered)	4,072	953	25	42	301	55	5,448	*363*	*239*	3	*605*	*6,053*		137			137	*6,190*		129	266	6,117		64		6,181
8	Riverina (Groundwater) (NO SGE)	9,710	2,429	1,110	1,134	806	495	15,684	502	194	697	1,393	17,077						17,077				6,055	11,287		24	17,366
10	Coffs Harbour (Unfiltered)	3,675	980	119		135	164	5,073	393	*160*	68	*621*	*5,694*		107			107	*5,801*	649	1,465	1,572	5,153				5,153
11	Albury	4,486	619	277	32	443	341	6,198	*413*	*275*		*689*	*6,887*			2	4	6	*6,893*	389	3,589	3,589	6,319				6,319
12	Fish River WS (Unfiltered, Bulk Supplie			14	86	1		101	583			583	684						684	4,829			5,999				5,999
13	Tamworth Regional	4,110	892	1,392	132	326	415	7,267	1,308	106	434	1,848	9,115		81		76	157	9,272	18	1,685	1,766	7,239	1,455			8,694
14	Clarence Valley	3,151	1,062	379	574		90	5,256	419	301	60	780	6,036		127	59		186	6,222			127	7,987		127		8,114
15	Eurobodalla (Unfiltered)	2,362	521		51	201	39	3,174	565	67	19	651	3,825		171			171	3,996		66	237	3,825		237		4,062
16	Wingecarribee	3,088	562	5	139	140	36	3,970	683	84	24	791	4,761		64			64	4,825			64	876		64	4,379	5,319
17	Queanbeyan (Reticulator)	2,925	265	243		47	168	3,648	*243*	*152*	10	*405*	*4,053*						*4,053*		47	47				3,658	3,658
18	Dubbo	4,724	643	141	21	819	429	6,777	939	165	324	1,428	8,205						8,205		2,576	2,576	5,984	1,807			7,791
19	Orange	3,696	292	134	42	328	34	4,526	334	*203*		*537*	*5,063*		3,218		73	3,291	*8,354*		29	3,247	4,125	67	3,218		7,410
20	Goulburn Mulwaree	1,262	226	364	8	248	21	2,129	150	200		350	2,479		62			62	2,541	1	3,104	3,166	2,433				2,433
21	Bathurst Regional	3,208	1,067	837	30	61		5,203	*347*	*231*		*578*	*5,781*			2		2	*5,783*	4	3,539	3,539	7,528				7,528
22	Lismore (Reticulator)	2,023	772		111			2,906	500	102	14	616	3,522						3,522		10	10	115			3,406	3,521
23	Bega Valley (Unfiltered)	1,999	443	80	137	127	54	2,840	244	337	13	594	3,434		556			556	3,990	4	257	813	1,634	1,855			3,489
24	Ballina (Reticulator)	2,217	610		8		6	2,841	529	61	18	608	3,449		119			119	3,568		33	152	129	4	119	3,316	3,568
25	Kempsey (Groundwater)	1,642	362	199	365	99	16	2,683	329	474	107	910	3,593		32			32	3,625	17	8	40	1,628	1,966	32		3,626
26	Country Energy	2,675	319	1,011		279	29	4,313	258	*190*		*448*	*4,761*		523	37	439	999	*5,760*			523	3,212		523	1,633	5,368
27	Byron (Reticulator)	1,712	653		138			2,503	171	*106*	5	*282*	*2,785*		235			235	*3,020*		252	487	349		235	2,286	2,870
28A	Goldenfields (Reticulator) (NO SGE)	2,032	467	102	1,854	162	255	4,872	384	117	40	541	5,413			23	98	121	5,534							5,561	5,561
28B	Goldenfields (Bulk Supplier) (NO SGE)																			9,115			3,957	4,779		379	9,115
	Totals (excluding bulk suppliers) for LWUs with >10,000 Properties												*168,900*	*0*	*7,139*	*123*	*2,702*	*9,964*	*178,900*	*30,233*	*19,466*	*26,605*	*148,698*	*24,242*	*6,953*	*29,637*	*209,530*
LWUs with 3,001 - 10,000 Properties																											
29	Armidale Dumaresq	1,630	287			443	38	2,398	*160*	*107*		*266*	*2,664*			50		50	*2,714*		603	603	2,607				2,607
30	Griffith	3,643	908		415		507	5,473	328	*242*		570	*6,043*			198	432	630	*6,673*		229	229				7,795	7,795
31	Lithgow	1,289		675		131		2,095	*140*	*86*	7	*233*	*2,328*						*2,328*				1,382			720	2,102
32	Mid-Western Regional	1,022	564					1,586	*106*	*70*		*176*	*1,762*						*1,762*		92	92	1,586				1,586
33	Richmond Valley	1,077	404	995	29		24	2,529	496	48	15	559	3,088						3,088		288	288	2,406			636	3,042
34	Nambucca (Groundwater)	764	463	25	88	49	1	1,390	100	*54*	8	*162*	*1,552*						*1,552*		125	125		1,585			1,585
35	Singleton	1,490	428	286	41	169		2,414	*161*	*107*		*268*	*2,682*						*2,682*		451	451	2,476				2,476
36	Parkes	1,535	226	3,265	79	132	450	5,687	465	92	148	705	6,392		99	23		122	6,514		376	475	3,070	2,693	98	335	6,196

Table 8: 2008-09 NSW urban water supplied (continued)

	WATER UTILITY	POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)											NON-POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)					TOTAL URBAN WATER SUPPLIED	BULK WATER EXPORTS (Potable + Non-potable)	RECYCLED URBAN + NON-URBAN		WATER SOURCES FOR URBAN WATER USE (ML)				
		REVENUE WATER (Potable)							NON REVENUE WATER (Potable) See Table 8A				Total Potable Urban Water	Recycled Urban Water[11]		Non-potable Urban		TOTAL Non-Potable Urban Water			NON-URBAN	TOTAL					Total Sourced Water
		Residential	Commercial	Industrial	Rural	Institutional	Public Parks & Gardens	Total Revenue Water (Potable)	Real Loss (Leakage)[7]	Apparent Loss (illegal use, meter error)	Unbilled (Fire Fighting, Flushing, Public Amenities)	Total Non Rev Water Sum (8) to (8b) See Table 8A	Revenue + Non Revenue Water (7) + (9)	Urban Res	Urban Non Res	Other than Recycled Res	Other than Recycled Non Res	(11)+(11a)+(12a)+(12b)	Excludes Bulk Water =(10)+(12c)	See Table 8A[11]	URBAN + NON-URBAN	Surface Water	Ground Water	Recycled Water	Bulk Purchase	Excluding Non Urban Recycled
								Sum (1) to (6)						(11)	(11a)					(11b)	(11) + (11a) + (11b)			Urban Use Only		=Sum (15) to (17)
		(1) [W8]	(2) [W9]	(3) [W9]	(4) [W9]	(5) [W9]	(6) [W9]	(7)	(8) [W10]	8a) [W10]	(8b) [W10]	(9) [W10]	(10) [W11]	[W8] W20	W21, W25	(12a) [W8]	(12b) [W9]	(12c)	(13) W11	(14) W14	W22, W23, W24	(11c) W26	(15) W1	(16) W2	(16b) W4	(17) W5	(17b) W7
37	Inverell	1,400	200	350			150	2,100	*140*	100		*240*	*2,340*						*2,340*					32		2,200	2,232
38	Moree Plains (Groundwater)	3,480	545	115			100	4,240	*283*	90	100	*473*	*4,713*		200	4,000	300	4,500	*9,213*	5	600	800	463	2,150			2,613
39	Cowra	921	305	280	310	32	238	2,086	156	*93*		*249*	*2,335*			85		85	*2,420*	6	672	672	2,490			138	2,628
40	Central Tablelands (NO SGE)	768	220	468	267	34	26	1,783	173	13	127	313	2,096						2,096	143			1,937	284			2,221
41	Muswellbrook	1,246	445	9		108	62	1,870	113	*74*	9	*196*	*2,066*		960			960	*3,026*			960	2,059	27			2,086
42	Corowa	1,075	190	428	2	32	135	1,862	118	*75*	8	*201*	*2,063*						*2,063*		343	343	1,968				1,968
43	Tumut	847	86	257	59	89	5	1,343	*90*		68	*158*	*1,501*		10		33	43	*1,544*		23	33	1,522	135	46		1,703
44	Gunnedah (Groundwater)	1,150	215	230	30	150	218	1,993	215	44	20	279	2,272						2,272	140	546	546		2,153		2,153	4,306
45	Upper Hunter	896	150	323	67	9	82	1,527	*102*	*68*		*170*	*1,697*		167			167	*1,864*		6	173	2,771	340			3,111
46	Narrabri (Groundwater)	2,017						*3,164*	*209*	*139*		*348*	*3,512*						*3,512*		37	37		2,165			2,165
47	Bellingen (Unfiltered)	604	302			117		1,023	107	9	55	171	1,194						1,194	1			157	980			1,137
48	Leeton	1,500	350	150	40	60	325	2,425	500	110	51	661	3,086						3,086	30	20	20	2,506				2,506
49	Young (Reticulator)	795	180	210		41	85	1,311	160	27	10	197	1,508		99			99	1,607		407	506			99	1,340	1,439
50	Cooma-Monaro	963	321					1,284	*86*	*57*		*143*	*1,427*						*1,427*		22	22					
51	Forbes	1,105	256	35	9	108	19	1,532	119	70	8	197	1,729				137	137	1,866	342	7	7					
52	Snowy River (Unfiltered)	549	76	60	7	12	75	779	*52*	*35*		*87*	*866*						*866*				1,370				1,370
53	Berrigan (Dual Supply)	533	93	1	30	25	15	697	106	13		119	816		93	365	228	686	1,502			93	1,734		30		1,764
	Totals (excluding bulk suppliers) for 3,000 - 10,000 Properties												*61,700*	*0*	*1,628*	*4,721*	*1,130*	*7,479*	*69,200*	*667*	*4,847*	*6,475*	*32,504*	*12,544*	*273*	*15,317*	*60,638*
	LWUs with 1,501 - 3,000 Properties																										
54	Deniliquin	1,860	150	40	50	15	50	2,165	*144*	*46*	50	*241*	*2,406*			200	400	600	*3,006*	1	410	410	2,295	23			2,318
55	Warrumbungle	528	160		31	41	9	769	*51*	*34*		*85*	*854*						*854*		56	56	530	521			1,051
56	Yass Valley	505	110				40	655	105	20	75	200	855						855	3	116	116	827	28			855
57	Wellington	526	178	9		81	52	846	299	36	3	338	1,184						1,184				1,111	73			1,184
58	Cootamundra (Reticulator)	501	76	9	2	34	6	628	77			77	705		202			202	907			202				705	705
59	Lachlan	739	149	46	137	39	47	1,157	171	31	51	253	1,410		121	31	8	160	1,570	23	17	138	1,453	3	121	126	1,703
60	Glen Innes Severn	395	104			22	1	522	*35*	*20*	3	*58*	*580*		50			50	*630*		24	74	621				621
61	Liverpool Plains	508	69	28	16	52	91	764	55	24	5	84	848						848	35			207	718			925
62	Narromine (Groundwater)	843	51		214	605	105	1,818	202	54	91	347	2,165				2	2	2,167	31	29	29	15	2,181			2,196
63	Narrandera (Groundwater)	673	371					1,044	*70*	*46*		*116*	*1,160*						*1,160*					1,594			1,594
65	Murray (Dual Supply)	409	174	1	7	6	1	598	77	16		93	691		25	272	139	436	1,127	2	147	172	1,276		25		1,301
66	Cobar WB (NO SGE)	*0*						0				0	0							1,147			6,000	40			6,040
67	Cobar	789	291	20	360		3	1,463	*98*	*65*		*163*	*1,626*		110	48		158	*1,784*			110			100	1,147	1,247
68	Tenterfield	237						*372*	*25*	*16*		*41*	*413*						*413*		126	126					
70	Kyogle	269	42	22	29	18	6	386	*26*	*17*		*43*	*429*		20			20	*449*		508	528	332			53	385
71	Palerang	278	153				1	432	47			47	479						479		7	7	204	275			479
73	Upper Lachlan	120	40	2	1	20	40	223	*18*	30	25	*73*	*296*						*296*				361	12			373
74	Wentworth (Dual Supply)	245	55			1		301	*55*		559	*614*	*915*			528	*96*	*624*	*1,539*				1,619		2		1,621
76	Harden (Reticulator)	398	65	1	25	10		499	*33*	*16*	6	*55*	*554*		248			248	*802*			248				505	505
75	Coonamble (Groundwater)	608	59	24	43	120	110	964	90	12	10	112	1,076		37			37	1,113	23	42	79		951	37		988
	Totals (excluding bulk suppliers) for 1,500 - 3,000 Properties												*18,600*	*0*	*813*	*1,079*	*645*	*2,537*	*21,200*	*1,265*	*1,482*	*2,295*	*16,851*	*6,419*	*285*	*2,536*	*26,091*

Table 8: 2008-09 NSW urban water supplied (continued)

WATER UTILITY	POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)											NON-POTABLE URBAN WATER SUPPLIED (ML) (Excludes bulk water)					TOTAL URBAN WATER SUPPLIED	BULK WATER EXPORTS (Potable + Non-potable)	RECYCLED URBAN + NON-URBAN		WATER SOURCES FOR URBAN WATER USE (ML)				
	REVENUE WATER (Potable)							NON REVENUE WATER (Potable) See Table 8A				Recycled Urban Water[11]		Non-potable Urban		TOTAL Non-Potable Urban Water			NON-URBAN	TOTAL					
	Residential	Commercial	Industrial	Rural	Institutional	Public Parks & Gardens	Total Revenue Water (Potable)	Real Loss (Leakage)[7]	Apparent Loss (illegal use, meter error)	Unbilled (Fire Fighting, Flushing, Public Amenities)	Total Non Rev Water Sum (8) to (8b) See Table 8A	Urban Res	Urban Non Res	Other than Recycled			(Potable + Non-potable including Recycled Urban)		See Table 8A[11]	URBAN + NON-URBAN	Surface Water	Ground Water	Recycled Water	Bulk Purchase	Total Sourced Water
							Sum (1) to (6)				Revenue + Non Revenue Water (7) + (9)			Res	Non Res	(11)+(11a)+(12a)+(12b)	Excludes Bulk Water =(10)+(12c)		(11b)	(11) + (11a) + (11b)	Urban Use Only				Excluding Non Urban Recycled =Sum (15) to (17)
	(1) [W8]	(2) [W9]	(3) [W9]	(4) [W9]	(5) [W9]	(6) [W9]	(7)	(8) [W10]	8a) [W10]	(8b) [W10]	(9) [W10]	(11) [W8] W20	(11a) W21, W25	(12a) [W8]	(12b) [W9]	(12c)	(13) W11	(14) W14	W22, W23, W24	(11c) W26	(15) W1	(16) W2	(16b) W4	(17) W5	(17b) W7
LWUs with 200 - 1,500 Properties																									
79 Walgett (Dual Supply)	272						*426*	*28*	*19*		*47*					*473*			517	517					
80 Greater Hume	333	60	2	61	6	4	466	*33*	34	21	*88*		90			90	*644*	6	16	106		175	90	352	617
81 Gwydir	194	20	3	7	22	45	291	*21*	45		*66*		27			27	*384*		12	39	264	338	27		629
82 Gloucester	255	28	50	37	9	10	389	24	*15*	2	*41*						*430*				418				418
83 Oberon (Reticulator)	195	11	310			14	530	*35*	12	12	*59*						*589*	1			565			565	1,130
84 Gilgandra (Groundwater)	520	120	40	10	15	20	725	85	16	10	111						836	10	280	280		736			736
85 Uralla	145	26	19			14	204	30	4		34						238	1			279				279
86 Hay (Dual Supply)	211	115					326	23	*15*		*38*			1,096		1,096	*1,460*				1,422				1,422
87 Bourke (Dual Supply)	547	55	5				607	*40*	*27*		*67*			2,670	155	2,825	*3,499*								
88 Wakool (Dual Supply)	160	118		43		8	329	49			49			715		715	1,093				827			70	897
89 Bogan	278	71			23	19	391	130	16	39	185						576				2,650				2,650
90 Guyra	225	140	2		1	5	373	*25*	*15*	2	*41*						*414*				360			56	416
91 Cabonne	130	39					169	53	5	5	63		119	34	5	158	390		4	123	272	8			280
92 Carrathool (Groundwater)	378	208					586	*39*	*26*		*65*			651		651	*1,302*					1,059			1,059
93 Tumbarumba	223						*349*	*23*	*15*		*38*						*388*								
94 Gundagai	254	124	61	50	8	5	502	50	60	5	115		117			117	734	3		117	580		100		680
96 Warren (Dual Supply)	139	21			6	5	171	61	35	13	109			160	31	191	471		5	5	332	294			626
97 Bombala	196	10	8		7	1	222	27	1		28		35			35	285			35	400				400
98 Walcha	132	41	1	2	9	10	195	*13*	*9*		*22*						*217*	2			195				195
## Balranald (Dual Supply)	180	5					185	*12*	*8*		*21*			536		536	*742*		95	95	846				846
## Murrumbidgee (Groundwater)	382						*600*	*40*	*26*		*66*						*666*		15	15					
## Central Darling (Dual Supply)	93	10					103	*7*	*3*	2	*11*			245		245	*359*				910	75			985
## Boorowa	152	20	25			20	*217*	*14*	*10*		*24*	1	2			3	*244*	2	2	4	223				223
## Brewarrina	143	79					222	*15*	*10*		*25*			591		591	*838*		170	170		100			100
## Jerilderie (Dual Supply)	87	28	2		1		118	*8*	*5*		*13*		20	280		300	*431*			20	399				399
Totals (excluding bulk suppliers) for 200 - 1,500 Properties											*10,100*	*1*	*410*	*6,978*	*191*	*7,580*	*17,700*	*25*	*1,116*	*1,526*	*10,942*	*2,785*	*217*	*1,043*	*14,987*
LWUs without Water Supply																									
9 Wagga Wagga (NO WS)													294			294	294		278	572					
30A Hawkesbury																			316	316					
69 Temora													71			71	71		42	113					
72 Bland																			104	104					
77 Junee													158			158	158		8	166					
78 Blayney													190			190	190			190					
95 Weddin													39			39	39			39					
99 Coolamon													65			65	65		23	88					
## Lockhart													2			2	2			2					
## Urana																									
Total for the 88 LWUs reporting cols (1) & (2) or cols (1) & (3)	145,000	33,800	19,000	8,100	8,500	6,500		20,000			32,400		10,000	12,900	4,700	27,600	280,400	6,700	26,200	36,200	183,000	39,000	7,700	48,200	277,400
% of Total Potable Supply (Col(10))	57%	13%	8%	3%	3%	3%		8%			13%														
TOTAL for all LWUs (excluding metropolitan LWUs)[3]											259,300		10,800	12,900	4,700	28,400	288,000	32,200	27,700	38,500	209,000	46,000	8,000	49,000	311,000

Table 8: 2008-09 NSW urban water supplied (continued)

Notes:

1. Source: Data provided by the 106 non-metropolitan NSW water utilities for the *2008-09 NSW Water Supply and Sewerage Benchmarking Repor*t. 97 of these utilities are responsible for water supply.
   Columns (11) and (11a) report the volume of recycled water use and include a further 9 utilities which are responsible for sewerage only.
2. The volumes of water supplied by Sydney and Hunter Water Corporations and Sydney Catchment Authority were obtained from the *National Performance Report 2008-09* and have not been included in the totals shown above.
3. The total water supplied for all non-metropolitan water utilities shown in the bottom line of the above table excludes double counting where water is supplied by a bulk supplier.
4. Incomplete Data: Where a water utility has not reported its total potable Urban Water Supplied (col (10) or its residential use (col 1), the previous years' reported value has been used and is shown in ***italics bold*** (see also Note 6).
5. Where an LWU has only reported data for 'residential' use but not for 'commercial' or for 'industrial' use, the reported 'residential' value has been reduced and a 'commercial/industrial' component has been included.
   In this case, the 'residential' component has been calculated based on the average percentage of 57% of the Total Urban Water Supplied shown in Note 8.
6. Non Revenue Water: Non Revenue Water includes Unbilled Water (Unbilled Authorised Supply), Real Losses (mostly Leakage) and Apparent Losses (under registration of customer meters and illegal use).
   Leakage studies for over 40 NSW LWUs together with Statewide analysis of Non Revenue Water for NSW water utilities, indicate Leakage is a minimum of 6% of potable Urban Water Supplied (range 6% to 35%) while
   Non Revenue Water is a minimum of 10% (comprising Leakage [minimum 6%] and Apparent Loss plus Unbilled Water [minimum 4%]). Recent analysis of reported data for utilities with over 10,000 connected properties
   tends to corroborate these minimum values. Therefore, for those utilities reporting Non Revenue Water of less than 10% (col (9)), the Non-revenue Water has been increased
   to 10% of the Urban Water Supplied (col 10) (shown in ***italics bold***), unless the LWU has provided evidence of a lower value of Leakage under Note 7.
   In such a case, the adopted value for Non Revenue Water is the reported Leakage plus 4%.
7. Real Losses (mostly Leakage): Leakage is a component of Non Revenue Water. As described in Note 6 above, a minimum of 6% of the Total Urban Water Supplied (potable) has been adopted for Leakage, unless evidence of
   a lower value has been provided by the LWU. Therefore, unless corroborated by evidence, (eg. a reservoir drop test, detailed waste metering or night flow analysis of district meter areas (see Table 10)),
   reported Leakage of less than 6% (column (8)) has been increased to 6% (shown in ***italics bold***).
8. Potable Water Supplied: The above analysis shows that the total 2008-09 urban water supplied for non-metropolitan NSW was 288,000 ML (column (13)), of which 259,300 ML (column (10)) was potable water.
   The average uses as a percentage of the total potable water supply were:
   - Residential - 57% (column (1))
   - Commercial - 13% (column (2))
   - Industrial - 8% (column (3))
   - Non Revenue Water - 13% (column (9c))
9. Non-Potable Water Supplied: The total non-potable urban water supplied was 28,400 ML (column (12c)) which included 10,800 ML recycled urban water supply (column (11)+(11a)).
   The non-potable supply was mainly for outdoor uses in dual water supplies, but also includes supplies to industry and other outdoor uses.
10. The total urban water supplied (column (13)) comprises the sum of the potable water supplied (column (10)) and non-potable water supplied (column (12c)) which includes recycled urban water (columns (11) & (11a)).
11. Recycled water used for non-potable urban water supply is shown in columns (11) & (11a). Recycled water used for non-potable non-urban water supply (agriculture, environmental and on-site use) is shown in column (11b).
    The total volume of recycled water for NSW non-metropolitan water utilities is shown in column (11c). For those utilities that did not report this year but reported >10% recycled water in previous years,
    the percentage recycled is assumed to be the same as that of previous years. This results in a volume of recycled water of 38,000 ML (see also Table 15) which is about 23% of the total volume of sewage collected.
12. All LWUs recorded nil for Volume Sourced from Desalination (W3), Bulk Recycled Water Purchased (W6), Water Supplied for Environmental Flows (W13) and Bulk Recycled Water Exports (W15).

Table 8A: 2008-09 potable water losses and non-revenue water

	WATER UTILITY	NON-REVENUE WATER[2] - Potable (ML)														REVENUE WATER[1] Potable (ML)	TOTAL URBAN WATER SUPPLIED Potable (ML)		BULK WATER EXPORTS (ML)	NON URBAN RECYCLED WATER		
		REAL LOSS[4] (Leakage)			APPARENT LOSS			UNBILLED WATER[2]	APPARENT LOSS + UNBILLED				TOTAL NON-REVENUE WATER Potable (Real Loss + Apparent Loss + Unbilled)			Excl Bulk Sales	Non Revenue Water + Revenue Water			Agricultural + Other	Environ-mental	On-site
		Reported	Adopted		Reported			Reported	Reported		Adopted		Reported	Adopted								
				% of Total Potable (2)/(19)	Illegal Use	Under-registration of meters	Total (4)+(5)	Fire Fighting, Mains Flushing	(6) + (9)	% of Total Potable (10)/(19)		% of Total Potable (12)/(19)	(1) + (10)	(2) + (12)	% of Total Potable (15)/(19)	Metered and Unmetered (See Table 8)	Total Reported (14) + (17)	Total Adopted (Table 8 Col (10)) (15)+(17)	Potable and Nonpotable (See Table 8)	(ML)	(ML)	(ML)
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20) W14	(21) W22 + W25	(22) W23	(23) W24
	Sydney Water Corporation																		0	3,034	0	15,549
	Hunter Water Corporation																		161	2,623	0	180
LWUs with > 10,000 Properties																						
1	Gosford City Council	694	694	6%	-	261	261	120	381	3%	381	3%	1,075	1,075	9%	11,476	12,551	12,551				216
2	Wyong Shire Council	624	624	5%	608	-	608	-	608	5%	608	5%	1,232	1,232	10%	11,258	12,490	12,490	4,766	9		422
3	Shoalhaven City Council	982	982	8%	12	100	112	57	169	1%	*520*	*4%*	1,151	*1,502*	*12%*	11,490	12,641	*12,992*		1,753		24
4	Rous County Council	139	139										139	139		363	502	502	10,362			
5	MidCoast County Council	1,204	1,204	13%	193	183	376	183	559	6%	559	6%	1,763	1,763	19%	7,402	9,165	9,165		151		4
6	Tweed Shire Council	518	518	6%	377	109	486	53	539	6%	539	6%	1,057	1,057	12%	7,503	8,560	8,560	79	40		58
7	Port Macquarie-Hastings (Unfiltered)	190	*363*	*6%*	5	110	115	3	118	2%	*242*	*4%*	308	*605*	*10%*	5,448	5,756	*6,053*		93		36
8	Riverina Water County Council	502	502			194	194	697	891	5%	891	5%	1,393	1,393	8%	15,684	17,077	17,077				
10	Coffs Harbour City Council	393	393	7%	-	-		68	68	1%	*228*	*4%*	461	*621*	*11%*	5,073	5,534	*5,694*	649	1,403		62
11	Albury City Council		*413*	*6%*	6	90	96		96	1%	*275*	*4%*	96	*689*	*10%*	6,198	6,294	*6,887*	389	3,589		
12	Fish River Water Supply	583	583										583	583		101	684	684	4,829			
13	Tamworth Regional Council	1,308	1,308	14%	6	100	106	434	540	6%	540	6%	1,848	1,848	20%	7,267	9,115	9,115	18	1,678		7
14	Clarence Valley Council	419	419	7%	1	300	301	60	361	6%	361	6%	780	780	13%	5,256	6,036	6,036				
15	Eurobodalla Shire Council	565	565	15%	4	63	67	19	86	2%	86	2%	651	651	17%	3,174	3,825	3,825				66
16	Wingecarribee Shire Council	683	683	14%	5	79	84	24	108	2%	108	2%	791	791	17%	3,970	4,761	4,761				
17	Queanbeyan City Council	10	*243*	*6%*	4		4	10	14	0%	*162*	*4%*	24	*405*	*10%*	3,648	3,672	*4,053*				47
18	Dubbo City Council	939	939	11%	8	157	165	324	489	6%	489	6%	1,428	1,428	17%	6,777	8,205	8,205		2,576		
19	Orange City Council	334	334	7%	4	82	86		86	2%	*203*	*4%*	420	*537*	*11%*	4,526	4,946	*5,063*		27		2
20	Goulburn Mulwaree Council	150	150	6%		200	200		200	8%	200	8%	350	350	14%	2,129	2,479	2,479	1	1,521		1,583
21	Bathurst Regional Council	-	*347*	*6%*	-	-		-			*231*	*4%*		*578*	*10%*	5,203	5,203	*5,781*	4	2,949		590
22	Lismore City Council	500	500	14%	90	12	102	14	116	3%	116	3%	616	616	17%	2,906	3,522	3,522		10		
23	Bega Valley Shire Council	244	244	7%	40	297	337	13	350	10%	350	10%	594	594	17%	2,840	3,434	3,434	4	257		
24	Ballina Shire Council	529	529	15%	4	57	61	18	79	2%	79	2%	608	608	18%	2,841	3,449	3,449		33		
25	Kempsey Shire Council	329	329	9%	223	251	474	107	581	16%	581	16%	910	910	25%	2,683	3,593	3,593	17	7		1
26	Country Energy	258	258	5%	5	86	91		91	2%	*190*	*4%*	349	*448*	*9%*	4,313	4,662	*4,761*				
27	Byron Shire Council	171	171	6%	3	26	29	5	34	1%	*111*	*4%*	205	*282*	*10%*	2,503	2,708	*2,785*		210		42
28A	Goldenfields Water Reticulator	384	384	7%	8	109	117	40	157	3%	157	3%	541	541	10%	4,872	5,413	5,413				
28B	Goldenfields Water County Council	539	539																9,115			
	Medians (% of LWUs basis) for LWUs with >10,000 Properties			*7%*								*4%*			*12%*							
LWUs with 3,001 - 10,000 Properties																						
29	Armidale Dumaresq Council	10	*160*	*6%*		37	37		37	1%	*107*	*4%*	47	*266*	*10%*	2,398	2,445	*2,664*		603		
30	Griffith City Council	328	328	5%	5	109	114		114	2%	*242*	*4%*	442	*570*	*9%*	5,473	5,915	*6,043*				229
31	Lithgow City Council	-	*140*	*6%*	-	-		7	7	0%	*93*	*4%*	7	*233*	*10%*	2,095	2,102	*2,328*				
32	Mid-Western Regional Council	-	*106*	*6%*	-	-		-			*70*	*4%*		*176*	*10%*	1,586	1,586	*1,762*		92		
33	Richmond Valley Council	496	496	16%	3	45	48	15	63	2%	63	2%	559	559	18%	2,529	3,088	3,088		288		
34	Nambucca Shire Council	100	100	6%	2	28	30	8	38	2%	*62*	*4%*	138	*162*	*10%*	1,390	1,528	*1,552*		125		
35	Singleton Shire Council	37	*161*	*6%*	25	-	25	-	25	1%	*107*	*4%*	62	*268*	*10%*	2,414	2,476	*2,682*		451		-
36	Parkes Shire Council	465	465	7%		92	92	148	240	4%	240	4%	705	705	11%	5,687	6,392	6,392		376		
37	Inverell Shire Council	100	*140*	*6%*		100	100		100	4%	100	4%	200	*240*	*10%*	2,100	2,300	*2,340*				
38	Moree Plains Shire Council	160	*283*	*6%*	50	40	90	100	190	4%	190	4%	350	*473*	*10%*	4,240	4,590	*4,713*	5	600		
39	Cowra Shire Council	156	156	7%				-			*93*	*4%*	156	*249*	*11%*	2,086	2,242	*2,335*	6	672		
40	Central Tablelands Water	173	173	8%	3	10	13	127	140	7%	140	7%	313	313	15%	1,783	2,096	2,096	143			
41	Muswellbrook Shire Council	113	113	5%	2	19	21	9	30	1%	*83*	*4%*	143	*196*	*9%*	1,870	2,013	*2,066*				
42	Corowa Shire Council	118	118	6%	2	22	24	8	32	2%	*83*	*4%*	150	*201*	*10%*	1,862	2,012	*2,063*				

Table 8A: 2008-09 potable water losses and non-revenue water (continued)

	WATER UTILITY	NON-REVENUE WATER[2] - Potable (ML)													REVENUE WATER[1] Potable (ML)	TOTAL URBAN WATER SUPPLIED Potable (ML)		BULK WATER EXPORTS (ML)	NON URBAN RECYCLED WATER		
		REAL LOSS[4] (Leakage)			APPARENT LOSS			UNBILLED WATER[2]	APPARENT LOSS + UNBILLED				TOTAL NON-REVENUE WATER Potable (Real Loss + Apparent Loss + Unbilled)		Excl Bulk Sales	Non Revenue Water + Revenue Water			Agricultural + Other	Environ-mental	On-site
		Reported	Adopted		Reported			Reported	Reported		Adopted		Reported	Adopted							
				% of Total Potable (2)/(19)	Illegal Use	Under-registration of meters	Total (4)+(5)	Fire Fighting, Mains Flushing	(6) + (9)	% of Total Potable (10)/(19)		% of Total Potable (12)/(19)	(1) + (10)	(2) + (12)	% of Total Potable (15)/(19)	Metered and Unmetered (See Table 8)	Total Reported (14) + (17)	Total Adopted (Table 8 Col (10)) (15)+(17)	Potable and Nonpotable (See Table 8)	(ML)	(ML)	(ML)
		(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20) W14	(21) W22 + W25	(22) W23	(23) W24
43	Tumut Council	-	*90*	*6%*	-	-		68	68	5%	68	5%	68	*158*	*11%*	1,343	1,411	*1,501*				23
44	Gunnedah Shire Council	215	215	9%	22	22	44	20	64	3%	64	3%	279	279	12%	1,993	2,272	2,272	140	546		
45	Upper Hunter Shire Council	-	*102*	*6%*	5	25	30	-	30	2%	*68*	*4%*	30	*170*	*10%*	1,527	1,557	*1,697*		6		
46	Narrabri Shire Council	200	*209*	*6%*	-	-		-			*139*	*4%*	200	*348*	*10%*	*3,164*	3,364	*3,512*		37		
47	Bellingen Shire Council	107	107	9%	2	7	9	55	64	5%	64	5%	171	171	14%	1,023	1,194	1,194	1			
48	Leeton Shire Council	500	500	16%	10	100	110	51	161	5%	161	5%	661	661	21%	2,425	3,086	3,086	30			20
49	Young Shire Council	160	160	11%	15	12	27	10	37	2%	37	2%	197	197	13%	1,311	1,508	1,508		405		2
50	Cooma-Monaro Council	-	*86*	*6%*	-	-					*57*	*4%*		*143*	*10%*	1,284	1,284	*1,427*				22
51	Forbes Shire Council	119	119	7%	20	50	70	8	78	5%	78	5%	197	197	11%	1,532	1,729	1,729	342			7
52	Snowy River Shire Council	-	*52*	*6%*							*35*	*4%*		*87*	*10%*	779	779	*866*				
53	Berrigan Shire Council	106	106	13%	3	10	13		13	2%	13	2%	119	119	15%	697	816	816				
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties			*6%*								*4%*			*10%*							
	LWUs with 1,501 - 3,000 Properties																					
54	Deniliquin Council	50	*144*	*6%*	5	10	15	50	65	3%	*96*	*4%*	115	*241*	*10%*	2,165	2,280	*2,406*	1	400		10
55	Warrumbungle Shire Council	-	*51*	*6%*	-	-					*34*	*4%*		*85*	*10%*	769	769	*854*		56		
56	Yass Valley Council	105	105	12%	6	14	20	75	95	11%	95	11%	200	200	23%	655	855	855	3	116		
57	Wellington Council	299	299	25%		36	36	3	39	3%	39	3%	338	338	29%	846	1,184	1,184				
58	Cootamundra Shire Council	77	77	11%	-	-							77	77	11%	628	705	705				
59	Lachlan Shire Council	171	171	12%	4	27	31	51	82	6%	82	6%	253	253	18%	1,157	1,410	1,410	23	7		10
60	Glen Innes Severn Shire Council	-	*35*	*6%*	-	-		3	3	1%	*23*	*4%*	3	*58*	*10%*	522	525	*580*		23		1
61	Liverpool Plains Shire Council	55	55	6%	9	15	24	5	29	3%	29	3%	84	84	10%	764	848	848	35			
62	Narromine Shire Council	202	202	9%	13	41	54	91	145	7%	145	7%	347	347	16%	1,818	2,165	2,165	31	29		
63	Narrandera Shire Council	-	*70*	*6%*	-	-		-			*46*	*4%*		*116*	*10%*	1,044	1,044	*1,160*		-		-
65	Murray Shire Council	77	77	11%	2	14	16		16	2%	16	2%	93	93	13%	598	691	691	2	147		
66	Cobar Water Board																		1,147			
67	Cobar Shire Council	35	*98*	*6%*							*65*	*4%*	35	*163*	*10%*	1,463	1,498	*1,626*				
68	Tenterfield Shire Council	-	*25*	*6%*	-	-		-			*16*	*4%*		*41*	*10%*	*372*	372	*413*		-		
70	Kyogle Council	4	*26*	*6%*		15	15		15	3%	*17*	*4%*	19	*43*	*10%*	386	405	*429*		508		
71	Palerang Council	47	47	10%									47	47	10%	432	479	479		7		
73	Upper Lachlan Council	15	*18*	*6%*	5	25	30	25	55	19%	55	19%	70	*73*	*25%*	223	293	*296*				
74	Wentworth Shire Council		*55*	*6%*				559	559	61%	559	61%	559	*614*	*67%*	301	860	*915*				
75	Coonamble Shire Council	90	90	8%	10	2	12	10	22	2%	22	2%	112	112	10%	964	1,076	1,076	23	37		5
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties			*6%*								*4%*			*10%*							
	LWUs with 200 - 1,500 Properties																					
76	Harden Shire Council	13	*33*	*6%*		2	2	6	8	1%	*22*	*4%*	21	*55*	*10%*	499	520	*554*		-		-
79	Walgett Shire Council	-	*28*	*6%*	-	-		-			*19*	*4%*		*47*	*10%*	*426*	426	*473*		-		
80	Greater Hume Shire Council	6	*33*	*6%*	24	10	34	21	55	10%	55	10%	61	*88*	*16%*	466	527	*554*	6	14		2
81	Gwydir Shire Council	-	*21*	*6%*	15	30	45	-	45	13%	45	13%	45	*66*	*19%*	291	336	*357*		10		2
82	Gloucester Shire Council	24	24	6%				2	2	0%	*17*	*4%*	26	*41*	*10%*	389	415	*430*				
83	Oberon Council	11	*35*	*6%*	-	12	12	12	24	4%	24	4%	35	*59*	*10%*	530	565	*589*	1			
84	Gilgandra Shire Council	85	85	10%	6	10	16	10	26	3%	26	3%	111	111	13%	725	836	836	10	280		
85	Uralla Shire Council	30	30	13%	1	3	4		4	2%	4	2%	34	34	14%	204	238	238	1			
86	Hay Shire Council	23	23	6%							*15*	*4%*	23	*38*	*10%*	326	349	*364*				
87	Bourke Shire Council		*40*	*6%*	5	3	8		8	1%	*27*	*4%*	8	*67*	*10%*	607	615	*674*				

Table 8A: 2008-09 potable water losses and non-revenue water (continued)

	WATER UTILITY	NON-REVENUE WATER[2] - Potable (ML)														REVENUE WATER[1] Potable (ML)	TOTAL URBAN WATER SUPPLIED Potable (ML)		BULK WATER EXPORTS (ML)	NON URBAN RECYCLED WATER		
		REAL LOSS[4] (Leakage)			APPARENT LOSS			UNBILLED WATER[2]	APPARENT LOSS + UNBILLED				TOTAL NON-REVENUE WATER Potable (Real Loss + Apparent Loss + Unbilled)			Excl Bulk Sales	Non Revenue Water + Revenue Water			Agricultural + Other	Environ-mental	On-site
		Reported	Adopted		Reported			Reported	Reported		Adopted		Reported	Adopted								
		(1)	(2)	% of Total Potable (2)/(19)	Illegal Use (4)	Under-registration of meters (5)	Total (4)+(5) (6)	Fire Fighting, Mains Flushing (9)	(6) + (9) (10)	% of Total Potable (10)/(19) (11)	(12)	% of Total Potable (12)/(19) (13)	(1) + (10) (14)	(2) + (12) (15)	% of Total Potable (15)/(19) (16)	Metered and Unmetered (See Table 8) (17)	Total Reported (14) + (17) (18)	Total Adopted (Table 8 Col (10)) (15)+(17) (19)	Potable and Nonpotable (See Table 8) (20) W14	(ML) (21) W22 + W25	(ML) (22) W23	(ML) (23) W24
88	Wakool Shire Council	49	49	13%									49	49	13%	329	378	378				
89	Bogan Shire Council	130	130	23%	1	15	16	39	55	10%	55	10%	185	185	32%	391	576	576				
90	Guyra Shire Council	11	*25*	*6%*	2	7	9	2	11	3%	*17*	*4%*	22	*41*	*10%*	373	395	*414*				
91	Cabonne Council	53	53	23%	1	4	5	5	10	4%	10	4%	63	63	27%	169	232	232		4		
92	Carrathool Shire Council	-	*39*	*6%*	3	10	13	-	13	2%	*26*	*4%*	13	*65*	*10%*	586	599	*651*		-		
93	Tumbarumba Shire Council	-	*23*	*6%*	-	-		-			*15*	*4%*		*38*	*10%*	*349*	349	*388*		-		
94	Gundagai Shire Council	50	50	8%	10	50	60	5	65	11%	65	11%	115	115	19%	502	617	617	3	-		-
96	Warren Shire Council	61	61	22%	5	30	35	13	48	17%	48	17%	109	109	39%	171	280	280		5		
97	Bombala Council	27	27	11%		1	1		1	0%	1	0%	28	28	11%	222	250	250				
98	Walcha Council	2	*13*	*6%*							*9*	*4%*	2	*22*	*10%*	195	197	*217*	2			
100	Balranald Council	2	*12*	*6%*		1	1		1	0%	*8*	*4%*	3	*21*	*10%*	185	188	*206*		95		
101	Murrumbidgee Shire Council	-	*40*	*6%*	-	-		-			*26*	*4%*		*66*	*10%*	*600*	600	*666*		-		
103	Central Darling Shire Council	2	*7*	*6%*	1	1	2	2	4	3%	*5*	*4%*	6	*11*	*10%*	103	109	*114*				
104	Boorowa Council	10	*14*	*6%*							*10*	*4%*	10	*24*	*10%*	217	227	*241*	2	1		
105	Brewarrina Shire Council		*15*	*6%*							*10*	*4%*		*25*	*10%*	222	222	*247*		-		
106	Jerilderie Shire Council		*8*	*6%*							*5*	*4%*		*13*	*10%*	118	118	*131*				
	Medians (% of LWUs basis) for 200 to 1,500 Properties			*6%*								*4%*			*10%*							
	Median All LWUs (% of LWUs basis)	*Real Loss (leakage)*		*6%*									*Non-revenue Water*		*10%*							
	Median All LWUs (Statewide basis)			*6%*											10%							

Notes:

1. **Revenue water** (potable) = Billed, Authorised water supplied (metered and unmetered).
2. **Non-revenue water** (potable) = Real Losses (mostly Leakage) + Apparent Losses (under registration of customer meters and illegal use) + Unbilled Water (authorised Unbilled consumption for firefighting and mains flushing)
3. **Real Losses** (Leakage) in column (2) above are the same as those shown in column (8) of Table 8. They relate only to Total Urban Water Supplied (potable) and exclude bulk water exports.
4. **Total Urban Water Supplied** (Revenue Water (potable) plus Non-Revenue Water (potable)) in column (18) above is the same as that shown in column (10) of Table 8.
5. **Minimum Losses:** The minimum adopted in this report for Real Loss (Leakage) is 6% of the Total Urban Water Supplied (potable) and the minimum adopted for (Apparent Loss plus Unbilled Water) is 4%, unless the utility has provided evidence for the adoption of a lower Leakage (eg. a reservoir drop test, detailed waste metering or night flow analysis of district meter areas (see Table 10)). This results in a minimum Non Revenue Water of 10% of Urban Water Supplied (potable). Therefore, for those utilities reporting Non Revenue Water of less than 10% (col (14)), the Non-revenue Water has been increased to 10% of the Urban Water Supplied (col 15) (shown in italics bold), unless the LWU has provided evidence of a lower value of Leakage under Note 6. In such a case, the adopted value for Non Revenue Water is the reported Leakage plus 4%.
6. **Real Losses (Leakage):** As described in Note 5 above, a minimum of 6% of the Total Urban Water Supplied (potable) has been adopted for Leakage. Therefore, unless corroborated by evidence (eg. a reservoir drop test, detailed waste metering or night flow analysis of district meter areas (see Table 10)), reported Leakage of less than 6% (column (8)) has been increased to 6% (shown in italics bold).
7. **Leakage Reduction Programs:** As shown in column 7 of Table 8C, 52 of the 94 reticulating local water utilities have recently carried out a leakage reduction program. In addition, Table 10 indicates that 42 LWUs have reported carrying out recent leakage testing.

Table 8B: 2008-09 water supplied from source catchments in non-metropolitan NSW

SOURCE CATCHMENT	Source Catchment	POTABLE URBAN WATER SUPPLIED (ML)									RECYCLED WATER		Non-Potable Urban Water Supplied	Total Urban Water Supplied Excluding BULK Exports Including Recycled	BULK	WATER SOURCE (ML)					
		Residential	Commercial	Industrial	Rural	Institutional	Public Parks & Gardens	Unbilled Water	Water Losses	Potable Urban Water Supplied = SUM (1) to (9)	For Urban Water Supply	For Non-urban Water Supply	(Excluding Bulk Exports & Recycled)	=(10)+(11)+(12)	Bulk Water Exports	Surface Water W1	Ground Water W2	Desalination W3	Recycling W4	Bulk Purchases W5	Bulk Recycled Water Purchased W6
		(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)	(10)	(11)	(11b)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Bega	Bega	2,000	443	80	137	127	54	13	581	3,435	556	257	0	3,991	4	1,630	1,860	1,860	000	000	
Bellinger	Bellinger	604	302			117		55	116	1,194				1,194	1	157	980	980			
Castlereagh/Macquarie	Castlereagh/Macquarie	16,820	3,410	1,550	413	2,120	815	502	4,171	29,801	3,260	6,818	859	33,920	4,900	30,430	6,730	6,730	3,260	565	
Clarence	Clarence	7,100	2,080	520	603	153	260	128	1,316	12,160	254	1,973	59	12,473	649	13,470			127	53	
Clyde	Clyde	2,360	521		51	201	39	19	632	3,823	171	66	0	3,994		3,830	000	000	237	000	
Darling	Darling	4,350	730	1,040	360	280	32	561	743	8,096	633		4,220	12,949	1,150	11,740	115	115	625	2,780	
Gwydir	Gwydir	5,440	931	489	7	23	314	102	753	8,059	227	612	4,300	12,586	6	1,370	2,520	2,520	27	2,260	
Hastings	Hastings	4,070	953	25	42	301	55	3	602	6,051	137	129		6,188		6,120			64		
Hawkesbury (Country Towns only)	Hawkesbury	15,000	1,940	1,490	156	939	145	151	2,298	22,119	194	3,636	0	22,313	1	13,900	108	108	293	8,410	
Hunter (Country Towns only)	Hunter	3,630	1,020	618	108	286	144	9	625	6,440	1,130	457		7,570		7,310	367	367			
Lachlan	Lachlan	5,470	1,260	4,120	803	365	840	364	1,513	14,735	641	1,224	323	15,699	516	9,810	3,000	3,000	219	599	
Macleay	Macleay	3,270	649	199	365	542	54	107	1,069	6,255	32	611	50	6,337	17	4,240	1,970	1,970	32		
Manning	Manning	5,320	1,430	744	37	137	117	185	1,619	9,589	4	155	0	9,593		8,960	628	628	004	000	
Moonie/Macintyre	Moonie/Macintyre	632	159	31	13	36	12	3	96	982	50	150		1,032		621					
Murray	Murray	9,170	1,480	780	237	541	564	79	1,451	14,303	228	4,505	2,610	17,141	398	14,820	198	198	145	422	
Murrumbidgee	Murrumbidgee	27,250	6,580	2,500	1,920	1,300	1,790	962	3,906	46,208	1,200	1,290	3,070	50,478	9,150	17,920	19,200	19,200	245	20,000	
Nambucca	Nambucca	764	463	25	88	49	1	8	154	1,552	0	125	0	1,552		000	1,590	1,590	000	000	
Namoi	Namoi	8,190	1,750	1,950	308	671	836	459	2,168	16,332	81	2,785	76	16,489	195	7,640	6,490	6,490		2,150	
Shoalhaven	Shoalhaven	6,484	1,792	2,315	575	123	201	57	1,445	12,992	125	1,777	2,010	15,127		14,850	000	000	161	82	
Snowy	Snowy	745	86	68	7	19	76		115	1,116	35			1,151		1,770					
Tuggerah Lake	Tuggerah Lake	7,970	3,290					0	1,232	12,492	865	431	0	13,357	4,770	15,370	286	286	1,300	1,600	
Tweed/Richmond	Tweed/Richmond	12,760	3,650	1,210	396	436	192	105	3,156	21,905	999	681		22,904	10,440	23,060	4	4	999	9,640	
	Totals	149,000	34,900	19,800	6,600	8,800	6,500	3,900	29,800	260,000	10,800	27,700	17,600	288,000	32,000	209,000	46,000	46000	8,000	49,000	0

Note:
For water utilities which did not report their residential consumption together with commercial and/or industrial consumption, the percentages tabulated in *Table 8* were applied to their total potable urban water supplied (column 10) and the consumptions for each category summed for each catchment to obtain the above values.

Table 8C: 2008-09 water conservation initiatives

	WATER UTILITY	CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED		OTHER MEASURES					WATER SUPPLIED					IWCM	
		Customer Education Program	Retrofit Program	Rebates for Water Efficient Appliances	Rebates for Water Tanks	Max Rainwater Tank Rebate	Effluent or Stormwater Reuse	Leakage Reduction Program	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge per kL		Residential Revenue from Usage Charges	Average Annual Residential Water Supplied	Total Urban Water Supplied	Total Non Revenue Water	Real Losses (Leakage)		Status of IWCM	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)	Evaluation	Strategy
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)	(14) F4 2007/08	(15) W12 2007/08	(16) W11 2007/08	(17) 2007/08	(18) 2007/08	(19) A10 2007/08	(20) 2007/08	(21) 2007/08
11	Albury City	Yes	Yes	No	No		Yes	Yes	Full pay-for-use pricing, public education program, customer billing 3 times/a, Waterwise program, water conservation and loss management strategy, leak reduction program, reservoir drop test, effluent reuse, separate metering (new & existing multi-unit developments), monitoring programs & customer surveys, free water audits (non-residential), review of conservation initiatives.	Yes	Yes	54	109	64	222	6,893	689	413	50	Y	Y
29	Armidale Dumaresq	Yes	No	No	No		No	Yes	Full pay-for-use pricing, demand management plan, member of waterwise, public education program.	Yes	Yes	148	196	68	208	2,714	266	160	60		
24	Ballina (Reticulator)	Yes	Yes	Yes	Yes	500	Yes	Yes		Yes	Yes	132	198	66	175	3,568	608	529	120	Y	Y
100	Balranald (Dual Supply)	Yes	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, restrictions.	Yes	Yes	70	105	81*	241	742	21	12	40		
21	Bathurst Regional	Yes	No	No	Yes	1500	No	Yes	Member of waterwise, public education program.	Yes	Yes	125	188	56*	240	5,783	578	347	80	Y	Y
23	Bega Valley (Unfiltered)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, customer billing 3-times/a, member of waterwise, public education, water restrictions, effluent reuse, water demand management officer.		Yes	210		73	154	3,990	594	244	60	Y	
47	Bellingen (Unfiltered)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, retrofit program, public education program.	Yes	Yes	98	147	51	168	1,194	171	107	70	Y	Y
53	Berrigan (Dual Supply)	Yes	No	No	No		Yes	No	Public education.	Yes	Yes	100		39	173	1,502	119	106	90		
72	Bland (No WS)																				
78	Blayney (No WS)															190				Y	
89	Bogan	Yes	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.			90	130	54	309	576	185	130	330		
97	Bombala								Full pay-for-use pricing, member of waterwise, public education program.	Yes	Yes	49	108	28	266	285	28	27	90		
104	Boorowa	Yes	Yes	Yes	Yes		Yes	Yes	Full pay-for-use pricing, public education program.	Yes		165	280	57*	270	244	24	14			
87	Bourke (Dual Supply)	No	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, public education program, waterwise program with local schools.	Yes	Yes	155		86*	539	3,499	67	40	110		
105	Brewarrina	No	No	No	No		Yes	No		Yes	Yes				335	838	25	15	70		
27	Byron (Reticulator)	Yes	Yes	Yes	Yes	1800	Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, retrofit program, public education program, pressure reduction.	Yes	Yes	170	250	73*	181	3,020	282	171	50	Y	
91	Cabonne	Yes	No	No	No		Yes	Yes	Member of waterwise, public education program.	Yes	Yes	130	310	69	131	390	63	53	130		
92	Carrathool (Groundwater)	No	No	No	Yes	500	No	No	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, other.	Yes	Yes	82	93	50*	446	1,302	65	39	100		
103	Central Darling (Dual Supply)								Full Pay-for-use pricing, customer billing 3 times/a, water restrictions.	Yes	Yes	300		89*	145	359	11	7	30		
40	Central Tablelands (No Sge)	Yes	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, public education program, free showerhead exchange program.	Yes	Yes	158	237	72	196	2,096	313	173	90	Y	
14	Clarence Valley	Yes	Yes	Yes	Yes	1,100	Yes	Yes	Full pay-for-use pricing, restrictions, retrofit program, public education program.	Yes	Yes	130	195	69	172	6,222	780	419	50	Y	Y
67	Cobar	Yes	Yes	No	No		Yes	No	Full Pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes	Yes	85	150	65*	438	1,784	163	98	120	Y	
66	Cobar WB (Bulk Supplier) (No Sg				No												0			Y	
10	Coffs Harbour (Unfiltered)	Yes	Yes	Yes	No		Yes	Yes	Full pay-for-use pricing, customer billing 3 times/a, member waterwise, building code program, restrictions, public education program, rebate for water efficient appliances, rebate for water audits, effluent reuse, separate metering of new and existing multi-unit developments, leakage reduction program, reservoir drop test, monitoring program, review of conservation measures.	Yes	Yes	214	300	76	165	5,801	621	393	50	Y	Y
99	Coolamon (No WS)															65					
50	Cooma-Monaro	Yes	Yes	No	No		Yes	No	Full pay-for-use pricing, member waterwise, public education program, restrictions, rainwater tank rebate, rebate for water efficient appliances, rebate for water audits, separate metering for new multi-unit developments, reservoir drop test, monitoring to review effectiveness of conservation measures.	Yes	Yes	100	150	49*	289	1,427	143	86	60		
75	Coonamble (Groundwater)	No	Yes	No	No		Yes	No	Public education program.	Yes		40	61	73	419	1,113	112	90	160		
58	Cootamundra (Reticulator)	No	Yes	No	No		Yes	No	Member of waterwise, public education program.	Yes		147	293	78	198	907	77	77	70		
42	Corowa	No	No	No	Yes	500	Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	83		56*	245	2,063	201	118	70	Y	Y
26	Country Energy	Yes	Yes	Yes	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, public education program.	Yes	Yes	105	236	57*	280	5,760	448	258	70	Y	Y
39	Cowra	Yes	No	No	No		No	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	120	217	48	193	2,420	249	156	60		
54	Deniliquin	Yes	No	No	Yes		Yes	No	Member of waterwise, public education program, integrated water cycle management study.	Yes	Yes	27	61	29*	640	3,006	241	144	110	Y	
18	Dubbo	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, member waterwise, public education program, quarterly billing, effluent reuse schemes, stormwater reuse schemes, leakage reduction program, park irrigation controls, separate metering for new multi-unit developments, restrictions, reservoir drop test, draft drought management plan, demand management strategy, demonstration waterwise garden.	Yes	Yes	94	175	75	331	8,205	1,428	939	180	Y	Y
15	Eurobodalla (Unfiltered)	Yes	Yes	Yes	Yes	1500	Yes	Yes	Member of waterwise, public education program, restrictions, integrated water cycle management study.	Yes	Yes	195	290	45*	129	3,996	651	565	90	Y	Y
12	Fish River WS (Bulk Supplier) (N	Yes	No	No	No		No	Yes		Yes	Yes					684	583	583			
51	Forbes	Yes	No	No	No		No	Yes	Full pay-for-use pricing, customer billing 4 times/a, public education program, water restriction, free garden mulch, considering rebate for water efficient shower head, building code program, effluent reuse.	Yes	Yes	68	100	63	363	1,866	197	119	90		
84	Gilgandra (Groundwater)	Yes	No	No	Yes	1020	Yes	Yes	Full pay-for-use pricing, member of waterwise, public education program.	Yes		84		66*	428	836	111	85	170		
60	Glen Innes Severn	Yes	No	No	Yes	500	Yes	Yes	Full pay-for-use pricing, rainwater tank subsidy, restrictions, ad hoc public education.	Yes	Yes	160	240	74*	157	630	58	35	30	Y	
82	Gloucester	Yes	No	No	No		No	No	Full pay-for-use pricing, restrictions, retrofit program, public education program.	Yes	Yes	196	255	64*	179	430	41	24	40	Y	
28B	Goldenfields (Bulk Supplier) (No																0	539			
28A	Goldenfields (Reticulator) (No Sg	Yes		No	No				Full pay-for-use pricing, customer billing 3 times/a, member waterwise, public education program, restrictions, separate metering of new multi-unit developments, monitoring program, review conservation measures.			152	230	78*	294	5,534	541	384	100		

Table 8C: 2008-09 water conservation initiatives (continued)

	WATER UTILITY	CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED		OTHER MEASURES						WATER SUPPLIED					IWCM	
		Customer Education Program	Retrofit Program	Rebates for Water Efficient Appliances	Rebates for Water Tanks	Max Rainwater Tank Rebate	Effluent or Stormwater Reuse	Leakage Reduction Program	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge per kL		Residential Revenue from Usage Charges	Average Annual Residential Water Supplied	Total Urban Water Supplied	Total Non Revenue Water	Real Losses (Leakage)		Status of IWCM	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)	Evaluation	Strategy
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)	(14) F4 2007/08	(15) W12 2007/08	(16) W11 2007/08	(17) 2007/08	(18) 2007/08	(19) A10 2007/08	(20) 2007/08	(21) 2007/08
1	Gosford	Yes	No	Yes	Yes	1000	Yes	Yes	Full pay-for-use pricing, rainwater tank subsidy, mandatory rain water tanks for new houses and extensions, restrictions, retrofit program, major water user audits, public education program, promoting effluent reuse schemes, leakage reduction program, main replacement program.	Yes	Yes	178		75	140	12,619	1,075	694	30	Y	Y
20	Goulburn Mulwaree	Yes	Yes	Yes	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, AAA washing machine rebates.	Yes	Yes	145	200	46*	134	2,541	350	150	40	Y	
80	Greater Hume	Yes	Yes	No	No		Yes	Yes	Full pay-for-use pricing, restrictions, public education program.	Yes	Yes	80	95	71	240	644	88	33	50		
30	Griffith	Yes	No	Yes	No		No	Yes	Full pay-for-use pricing, restriction policy in place, public education program.	Yes	Yes	55	90	77*	537	6,673	570	328	100		
94	Gundagai	Yes	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	80	100	72	281	734	115	50	130		
44	Gunnedah (Groundwater)	No	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	90	130	65	282	2,272	279	215	140	Y	
90	Guyra	No	No	No	No		No	Yes	Full pay-for-use pricing, restrictions, public education program.	Yes	Yes	108	124	55	215	414	41	25	60		
81	Gwydir	Yes	No	No	No		Yes	Yes		Yes	Yes	95	195	37	154	384	66	21	40	Y	Y
76	Harden (Reticulator)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing.		Yes	200	300	77*	330	802	55	33	50		
7	Port Macquarie-Hastings (Unfilter	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, public education program, water restrictions, encourage use of rainwater tank, water audit free of charge for large users, retrofit program, effluent reuse program, separate metering for new and encourage separate metering for existing multi-unit development, leakage reduction program, permanent water conservation measures, meter replacement program.	Yes	Yes	197	394	74	151	6,190	605	363	40	Y	
30A	Hawkesbury (No WS)																				
86	Hay (Dual Supply)	Yes	No	No	No		No	Yes	Full pay-for-use pricing, public education program, other.	Yes	Yes	95	140	83*	184	1,460	38	23	30		
	Hunter Water	Yes	Yes	Yes	Yes	1500		Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, leakage reduction, effluent reuse.	Yes	Yes	157		66	180	67,020	0	0	94		
37	Inverell								Full pay-for-use pricing, member of waterwise, public education program.	Yes	Yes	100	120	50*	290	2,340	240	140	70		
106	Jerilderie (Dual Supply)	Yes	No	No	No		Yes	No	Full pay-for-use pricing, customer billing 3 times/a, member waterwise, building code program, restrictions, public education, retrofit program, effluent reuse, reservoir drop test, review conservation measures.	Yes	Yes	115	140	83*	245	431	13	8	40		
77	Junee (No WS)															158					
25	Kempsey (Groundwater)	Yes	Yes	No	No		Yes	Yes	Subsidised water audits, public education, rainwater tank rebates, waterwise member, leakage reduction, retrofit rebates, dual flush toilet program, Integrated Water Cycle Management Strategy, reviewing drought policy.	Yes	Yes	120	175	42*	156	3,625	910	329	80	Y	Y
70	Kyogle	Yes	Yes	No	Yes	670	Yes	Yes	Full pay-for-use pricing, member waterwise, investigating rainwater tank subsidies, restrictions, non-potable water supplies, quarterly billing (commercial), 90% effluent reuse at Bonalbo and Woodenbong.	Yes	Yes	114	175	51	180	449	43	26	40	Y	Y
59	Lachlan	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, restrictions, retrofit program under investigation, public education program .	Yes	Yes	130	180	66*	337	1,570	253	171	170		
48	Leeton	Yes	No	Yes	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program (waterweek), separate metering of new multi unit developments; converting town parks to raw water; restricting all new residential meters to 20mm.	Yes	Yes	72	108	64*	444	3,086	661	500	320		
22	Lismore (Reticulator)	Yes	Yes	Yes	Yes	670	Yes	No	Full pay-for-use pricing, customer billing 3 times/a, building code program, member of waterwise, water restrictions, public education program, rainwater tank rebate, rebate for water efficient appliance, rebate on water audits (special projects), retrofit program, effluent reuse, separate metering of new and some existing multi-unit developments, reservoir drop test, leakage reduction program, monitoring program, review water conservation measures every 2 years.	Yes	Yes	190		73	159	3,522	616	500	110	Y	
31	Lithgow	Yes	Yes	Yes	Yes	800	No	Yes	Full pay-for-use pricing, member of waterwise, public education program, water restrictions implemented from Drought Management Plan.	Yes	Yes	102	176	43*	173	2,328	233	140	50	Y	
61	Liverpool Plains	No	Yes	No	No		No	No				92	141	45	223	848	84	55	60	Y	
102	Lockhart (No WS)															2					
5	MidCoast (Unfiltered)	Yes	Yes	Yes	Yes	1500	Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, other.	Yes	Yes	202	224	75	150	9,169	1,763	1,204	100	Y	Y
32	Mid Western Regional			Yes	Yes	1500				Yes	Yes	165	247	72	158	1,762	176	106	40	Y	
38	Moree Plains (Groundwater)	Yes	No	No	Yes	1500	Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program (media).	Yes	Yes	80	110	78*	946	9,213	473	283	160	Y	
65	Murray (Dual Supply)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, restrictions, public education.	Yes	Yes	74		56*	156	1,127	93	77	80	Y	
101	Murrumbidgee (Groundwater)								Full pay-for-use pricing, rainwater tank guidelines, encouraging retrofit program.			25	30	55	474	666	66	40	110		
41	Muswellbrook	Yes	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	133	200	67*	263	3,026	196	113	60	Y	Y
34	Nambucca (Groundwater)	No	No	Yes	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes	Yes	138		79	137	1,552	162	100	40	Y	
46	Narrabri (Groundwater)	Yes	Yes	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes	Yes	60		60	548	3,512	348	209	140		
63	Narrandera (Groundwater)	Yes	Yes	Yes	Yes		Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	62		60	384	1,160	116	70			
62	Narromine (Groundwater)	No	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	80		69*	430	2,167	347	202	250		
83	Oberon (Reticulator)	Yes	No	No	No		No	Yes	Full pay-for-use pricing, restrictions.		Yes	123		69*	179	589	59	35	70		
19	Orange	Yes	Yes	No	Yes	650	No	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, public education program.	Yes	Yes	154	231	77*	259	8,354	537	334	60	Y	
71	Palerang	Yes	Yes	Yes	Yes	500	Yes	Yes		Yes	Yes	120	195	42	163	479	47	47	60		
36	Parkes	Yes	No	Yes	Yes	500	Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program, non-potable supply for stock, roadworks and swimming pools, IWCM Strategy.	Yes	Yes	95	200	51	310	6,514	705	465	200	Y	Y

Table 8C: 2008-09 water conservation initiatives (continued)

	WATER UTILITY	CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED		OTHER MEASURES					WATER SUPPLIED					IWCM	
		Customer Education Program	Retrofit Program	Rebates for Water Efficient Appliances	Rebates for Water Tanks	Max Rainwater Tank Rebate	Effluent or Stormwater Reuse	Leakage Reduction Program	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge per kL		Residential Revenue from Usage Charges	Average Annual Residential Water Supplied	Total Urban Water Supplied	Total Non Revenue Water	Real Losses (Leakage)		Status of IWCM	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)	Evaluation	Strategy
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)	(14) F4 2007/08	(15) W12 2007/08	(16) W11 2007/08	(17) 2007/08	(18) 2007/08	(19) A10 2007/08	(20) 2007/08	(21) 2007/08
17	Queanbeyan (Reticulator)	Yes	Yes	Yes	Yes	1100	No	Yes	Full pay-for-use pricing, quarterly billing, member waterwise, public education program, restrictions, rainwater tank rebate, rebate for water efficient appliances, subsidised garden mulch, free water audits, effluent reuse, retrofit program, review conservation measures, reservoir drop test.	Yes	Yes	181	244	58*	198	4,053	405	243	60		
33	Richmond Valley	Yes	Yes	Yes	Yes	670	Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program.	Yes	Yes	153	203	73*	175	3,088	559	496	200	Y	Y
8	Riverina (Groundwater) (No Sge)	Yes		No	No		No		Full pay-for-use pricing, customer billing 3 times/a, member waterwise, building code program, restrictions, public education program, separate metering of new & existing multi-unit developments, reservoir drop test, leakage reduction program, monitoring program, review of conservation measures, meter replacement program.	Yes	Yes	86	129	80*	374	17,077	1,393	502	60		
4	Rous (Bulk Supplier) (No Sge)	Yes	Yes	Yes	Yes	670	Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program, appliance rebates, residential tune up program, school grants.	Yes	Yes					502	139	139		Y	Y
3	Shoalhaven	Yes	No	Yes	Yes	150	Yes	Yes	Full pay-for-use pricing, quarterly billing, member waterwise/AWA, rainwater tank subsidy, rainwater tank subsidy (toilet/washing machine), restrictions, public education program, Water conservation Tapstar Show, retrofitting of showerheads, leak reduction program, monitoring demand, effluent reuse for agriculture.	Yes	Yes	130	195	75*	152	15,129	1,502	982	60	Y	Y
35	Singleton	Yes		Yes	Yes	450	Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	89	166	58	269	2,682	268	161	70		
52	Snowy River (Unfiltered)	No	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, subsidy, restrictions, DCP rainwater tanks required in new developments.	Yes		70		21	156	866	87	52	50		
	Sydney Water	Yes	Yes	Yes	Yes	1500	Yes	Yes	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, leakage reduction, effluent reuse.	Yes	Yes	187		78	198	491,968	0	0	81		
13	Tamworth Regional	Yes	Yes	Yes	Yes	500	Yes	No	Full pay-for-use pricing, billing 4 times/a, member of waterwise, water restrictions, public education program, separate metering for new multi-unit developments, water management plan for premises. Under development - price control, community awarness, residential refit program, water loss management, water conservation including rainwater tank, outdoor watering, effluent reuse and stormwater harvesting .	Yes	Yes	106	159	61	226	9,272	1,848	1,308	190		
69	Temora No WS)								Effluent reuse.							71					
68	Tenterfield	Yes	No	No	No		Yes	No	Full pay-for-use pricing, member of waterwise, water restrictions, public education program, effluent reuse, leakage reduction program, retrofit program.	Yes	Yes	159	183	49	140	413	41	25	30		
93	Tumbarumba	No	Yes	Yes	No		No	No	Full pay-for-use pricing, restrictions, public education program.	Yes	Yes	104	174	50*	221	388	38	23		Y	
43	Tumut	Yes		No	No		Yes	Yes	Full pay-for-use pricing, restrictions, public education program, metering.	Yes	Yes	111	167	73	219	1,544	158	90	50	Y	
6	Tweed	Yes	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	150	225	73*	180	9,205	1,057	518	60	Y	
45	Upper Hunter	Yes	Yes	Yes	Yes	400	Yes	Yes		Yes	Yes	116	166	52*	230	1,864	170	102	70	Y	
73	Upper Lachlan	Yes	No	No	No		No	Yes		Yes	Yes	195	260	40	72	296	73	18	30		
85	Uralla	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, restrictions, considering retrofit program.			125		41	102	238	34	30			
107	Urana (No WS)																				
9	Wagga Wagga (No WS)															294					
88	Wakool (Dual Supply)	Yes	Yes	Yes	No		Yes	No	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	86	135	72*	153	1,093	49	49	100		
98	Walcha	Yes	No	No	No		No	No	Full pay-for-use pricing, member of waterwise, restrictions.			195	287	72*	176	217	22	13	40		
79	Walgett (Dual Supply)								Introducing full pay-for-use pricing, member of waterwise, considering rainwater tank subsidy, restrictions, public education program, proposing introduction of water meters.	Yes	Yes				195	473	47	28	50	Y	
96	Warren (Dual Supply)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	83	125	46	164	471	109	61	180		
55	Warrumbungle	No	No	No	No		No	No		Yes		100	120	49	192	854	85	51	50		
95	Weddin (No WS)															39					
57	Wellington	Yes	Yes	No	No		No	Yes	Full Pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	164	197	67	202	1,184	338	299	270		
74	Wentworth (Dual Supply)	Yes	No	No	No		No	No	Full pay-for-use pricing, restrictions.	Yes	Yes	115	270	60*	119	1,539	614	55	80		
16	Wingecarribee	Yes	Yes	No	No		Yes	Yes	Full pay-for-use pricing, customer billing 4 times/a, member of waterwise, restrictions, showerhead retrofit program, public education program.	Yes	Yes	131	196	71	183	4,825	791	683	110	Y	
2	Wyong	Yes	Yes	Yes	Yes	1000	Yes	Yes	Full pay-for-use pricing,residential retrofit program,industrial/commercial water usage audits,retrofit of Council owned facilities,leak detection program,restrictions,improved operational procedures,promotion of effluent reuse schemes,development of groundwater schemes,rainwater tank retrofitting (residential, schools - both subsidised and Council properties), require rainwater tanks for new residential properties and public education programs.	Yes	Yes	178		74	141	13,355	1,232	624	30	Y	Y
56	Yass Valley	Yes	Yes	Yes	Yes	200	No	No	Full pay-for-use pricing, higher access charges for larger services, member of waterwise, rainwater tank rebate, water restrictions, free supply of water restrictors, customer billing 3 times/a, public education, compulsary rainwater tanks for new dwellings and encourages retrofitting etc.	Yes	Yes	195		63*	184	855	200	105	100	Y	Y
49	Young (Reticulator)	Yes	No	No	No		Yes	Yes	Full pay-for-use pricing, billing 4 times/a, building code program, member of waterwise, public education program, some stormwater reuse, separate metering of new and some existing multi-unit developments, leak reduction program proposed for 2006/07.	Yes	Yes	170	265	69*	207	1,607	197	160	110		
	Percent "Yes" (Retail)	79%	36%	31%	32%		64%	55%	Percent reporting "YES" (Retail ie. excluding Bulk Suppliers)	90%	87%			Percent reporting completion of IWCM Evaluation Strategy						43%	23%

Table 9: Water supply – utility characteristics

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION																ASSETS												WORKFORCE						
		Total No of Assessments			No. of Service Connections	Connected Properties - Total		Connected Properties - Residential			New Residential Dwellings Connected			Population				Transfer Mains	Trunk + Retic Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Undergoing Training	Out-sourcing	Injuries	Days Lost			
					(Single + Mult + Non-res Dwellings + Fire) To Calc Losses	(Ratio of Connected Properties to Assessment	Connected Properties (18) x (19)	(Ratio of Residential Assessments to Total Assessments	(Ratio of Residential Connections to Residential Assessments	Connected Residential Properties (18)x(21)x(22)				(Permanent)			(Peak) (% of Permanent)	(km)	(km)	(20) / (25a)	(Providing Full Treatment) (No.)	(No.)	(No.)	(No.)	(30) / [(25) / 100]	$/prop	Total $M	($'000)	Employees/1 000 properties	(2 or more days per year)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No.	Due to Injuries (%)
		(18)			(18a)	(19)	(20) C 4	(21)	(22)	(22a) C2	(22b)			(23) C1			(24)	(25)	(25a) A 2	(26) A 3	(27) A 1	(28)	(29)	(30)	(30a)	(31) F28	(31a) F14	(31b) F26	(32)	(34)	(37)	(38)	(39)	(40a)	(40b)
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09
	Sydney Water						1,755,000			1,623,000				4,344,000					20,936	84	9					828	1,453	0								
	Hunter Water						222,000			207,000				516,000					4,822	46	6					306	68	0								
	Sydney Catchment Authority																									80										
	LWUs with > 10,000 Properties																																			
1	Gosford	68,530	66,980	67,400	59,400	1.04	70,070	0.95	1.04	66,990	0.3	0.3	0.3	159,000	158,400	159,900		228	1,014	69	2	2	35	24	2	278	19.5	1,471	1.4	80	10	15	3	68	0
2	Wyong	60,250	61,180	61,660	59,630	0.97	59,500	0.95	0.97	56,530	0.0	2.9	0.7	145,400	143,200	145,300	170		1,136	52	1	1	12	21	2	261	15.6	321	1.3	100		11	1	116	1
3	Shoalhaven	48,680	49,350	49,640	45,420	0.92	45,670	0.92	0.93	42,560	0.9	0.7	0.9	87,600	88,400	89,300	360	42	1,471	31	4	4		25	2	36	1.7	4	1.2	100	4	10	4	3	0
4	Rous (Bulk Supplier) (NO SGE)	46,800	46,800	47,570	42,890	0.96	45,660	0.89	0.96	40,470				113,100	113,100	113,100		305	80		2	2	3	4	5	80	3.7		1.4	75		2	3	17	0
5	MidCoast (Unfiltered)	37,280	37,580	37,780	32,580	0.96	36,270	0.93	0.96	33,820	0.8	0.8	0.6	76,600	77,200	77,600	120	21	1,234	29	2	2	15	26	2	1,007	36.5	3,124	1.3	100		4	2	50	0
6	Tweed	31,770	34,590	34,790	22,510	0.91	31,660	0.94	0.93	30,270	1.5	1.1	1.9	70,600	71,600	72,500	120	3	726	44	3	1		27	4	1,622	51.4		1.7	94	9	7	1	72	1
7	Port Macquarie-Hastings (Unfiltered)	30,690	30,110	31,450	25,800	0.95	29,880	0.90	0.95	26,980	1.1	1.5	1.0	75,000	76,500	78,000	130		771	39	4	2	1	19	2	132	4.0		1.3	100	10	25	2	48	1
8	Riverina (Groundwater) (NO SGE)	28,400	28,940	29,450	24,730	0.96	28,280	0.92	0.96	25,980	1.9	1.5	1.3	64,100	64,700	69,100	110	17	1,623	17	5	3	28	37	2	306	8.7		2.1	100		4	5	107	1
10	Coffs Harbour (Unfiltered)	24,800	25,090	25,350	21,970	0.94	23,830	0.94	0.94	22,300	1.2	1.6	1.3	61,600	62,700	64,900	120	12	611	39	1	2	-	7	1	1,334	31.8	574	2.0	96		2	3	3	0
11	Albury City	21,960	21,300	21,560	20,730	1.03	22,210	0.91	1.03	20,180	1.1	1.0	1.3	47,700	47,700	49,800	120	7	536	41	1			21	4	185	4.1		0.5	130	55				
12	Fish River WS (Unfiltered, Bulk Supplier)	25,000	25,000	25,000	240	0.94	23,500	0.88	0.94	20,680				62,000	62,000	62,000		10	231		1	2		3	1				0.6	100	10		2	58	2
13	Tamworth Regional	19,880	20,170	20,350	19,040	1.00	20,350	0.90	1.00	18,220	1.4	1.8	1.4	42,500	43,000	43,600	180	60	644	32	5	2	8	16	2	316	6.4	223	1.7	57		3	3	6	0
14	Clarence Valley	20,700	20,980	21,240	21,350	0.98	20,810	0.88	0.98	18,280	1.2	1.4	1.5	49,500	49,500	49,500	140		1,195	17	0			15	1	423	8.8	353	1.3	100		8	0	-	
15	Eurobodalla (Unfiltered)	20,100	20,190	20,430	17,520	0.94	19,200	0.95	0.94	18,260	1.0	0.9	1.3	35,000	36,800	36,200	330		886	22	0	1	7	13	1	746	14.3	7,650	2.1	100		1	4	113	1
16	Wingecarribee	18,510	18,810	18,940	16,770	0.95	18,000	0.93	0.96	16,910	1.0	0.8	0.7	35,900	36,200	38,000	110	9	648	28	3	2		16	2	489	8.8				11	2		3	
17	Queanbeyan (Reticulator)	15,070	15,500	15,320	11,470	1.03	15,780	0.93	1.04	14,760	1.9	2.1	1.2	35,600	35,700	36,000	100		279	57	0			4	1	45	0.7		0.4	100			1		
18	Dubbo	14,080	14,080	14,530	14,500	1.11	16,120	0.88	1.11	14,260	1.0	1.2	4.7	35,100	36,100	36,100	100	8	456	35	1		7	9	2	110	1.8	5				-		-	
19	Orange	15,600	16,080	15,890	15,370	1.00	15,890	0.90	1.00	14,290	1.3	3.0	1.7	35,300	35,700	38,000	100		497	32	2	3	2	7	1	360	5.7	2,782	0.9	100		1		20	1
20	Goulburn Mulwaree	9,090	9,400	10,240	9,480	1.03	10,540	0.89	1.03	9,400	0.8	1.7	0.7	20,800	21,100	21,800	100	12	242	44	2	2	2	8	3	185	2.0		1.9	65	2	4	1	24	1
21	Bathurst Regional	13,570	13,890	14,100	12,360	1.06	14,940	0.89	1.07	13,380	1.0	1.4	1.0	30,700	32,700	33,000	180		361	41	1	2	2	10	3	189	2.8	30	1.3	100		1	0	2	0
22	Lismore (Reticulator)	13,040	13,200	13,300	12,970	1.05	13,970	0.90	1.06	12,720	0.3	0.9	0.7	34,600	34,900	35,100	100		340	41	0	1		5	1	81	1.1		1.1	67	25	1	0		
23	Bega Valley (Unfiltered)	14,190	14,230	14,330	11,530	0.98	14,050	0.92	0.98	12,960	1.3	0.9	0.6	28,000	28,500	29,100	150	51	576	24	0	3	11	19	3	209	2.9	428	1.5	100		3	4	81	2
24	Ballina (Reticulator)	14,450	14,970	15,070	11,950	0.93	14,020	0.90	0.93	12,670	1.0	1.1	0.6	33,400	32,400	35,600			341	41	1	1	2	4	1	45	0.6		0.6	89					
25	Kempsey (Groundwater)	11,620	11,770	11,820	11,210	1.04	12,290	0.86	1.03	10,520	0.8	0.9	0.6	24,500	23,200	24,500	130	59	544	23	2	2	38	20	4	222	2.7	43	1.3	100	10	1	0	12	0
26	Country Energy	10,720	10,790	10,450	10,340	1.00	10,450	0.91	1.00	9,550	0.1	0.2	0.2	19,700	18,700	18,700	110	156	362	29	3	3		11	3	1,798	18.8		7.3	66			1		
27	Byron (Reticulator)	10,900	10,940	11,090	9,490	0.96	10,650	0.89	0.96	9,470	0.6	0.7	0.9	28,800	28,800	28,800	120		233	46	1			7	3	39	0.4		0.9	100	4		4		
28A	Goldenfields (Reticulator) (NO SGE)	11,280	10,550	10,620	10,620	0.94	9,990	0.69	0.94	6,910	1.3	0.8	0.6	20,800	20,800	20,800	110		1,829	5	1			22	1	134	1.3		5.6	11	5	7	4	47	0
28B	Goldenfields (Bulk Supplier) (NO SGE)	18,950	18,950	19,780	10,500	0.94	18,590	0.75	0.94	13,970				37,600	37,600	37,600	100		315	59	3	-	6	15	5	209	3.9								
	Medians (% of LWUs basis excl bulk suppliers) or Totals for >10,000 Properties			*689,150*			*672,170*									*1,393,200*		*999*	*19,181*	*37*						*242*	*260*		*1.3*			*4*	*2*		
	LWUs with 3,001 - 10,000 Properties																																			
29	Armidale Dumaresq	8,340	8,440	8,640	7,810	0.98	8,460	0.93	0.98	7,840	1.3	1.9	0.9	20,300	20,500	21,000	110	75	251	34	2	3		11	4	436	3.7		2.0	0	5	2	4	30	1
30	Griffith	9,260	9,540	9,680	8,690	0.85	8,230	0.83	0.84	6,780	3.9	3.6	2.0	24,000	22,000	24,000	110		491	17	2			4	1	254	2.1		2.9	75	10	2	0	4	0
31	Lithgow	7,860	7,980	7,980	8,180	0.98	7,820	0.95	0.98	7,440	0.0		0.6	20,000	20,000	19,800	100	5	460	17	1	1		1	0	67	0.5	45	1.4	100		1	0	1	0
32	Mid-Western Regional	6,670	6,920	6,960	6,810	1.02	7,100	0.90	1.03	6,460	1.9	1.5	1.3	13,200	13,800	13,800	140		331	21	3	2	37	11	3	174	1.2	251	2.1			-		-	
33	Richmond Valley	6,690	6,720	7,180	6,850	0.97	6,960	0.88	0.97	6,140	0.8	0.8	0.8	15,100	15,800	15,800	110	2	189	37	1			7	4	266	1.9	134	2.3	100	5	3	5	52	1
34	Nambucca (Groundwater)	6,440	6,450	6,530	6,590	0.95	6,210	0.90	0.95	5,560	2.4	0.6	4.3	13,000	13,300	13,300	150		200	31	1		8	2	1	90	0.6		1.0		10				
35	Singleton	6,330	6,570	6,630	6,320	0.95	6,300	0.88	0.95	5,550	2.0	3.8	0.2	18,400	17,600	17,900	100		260	24	1			7	3	130	0.8		1.0	67			4		
36	Parkes	6,220	6,160	6,150	6,500	0.95	5,840	0.85	0.95	4,950	0.8	1.6	0.7	11,400	11,500	11,500	110	70	454	13	1	2	5	8	2	115	0.7	68	2.1	100	3		1	15	1
37	Inverell	5,430	5,430	5,380	5,300	0.98	5,270	0.91	0.99	4,820	1.0	1.0	1.0	11,700	11,700	11,700	110			21	2	-	-	-		451	2.4		1.5	50	8		2		
38	Moree Plains (Groundwater)	4,560	4,560	4,550	4,780	0.97	4,420	0.87	0.96	3,820	0.4	0.1	0.8	11,400	10,300	11,400	100	9	150	29	4	2	14	4	3	1,295	5.7		2.5	100	10	1			
39	Cowra	5,500	5,520	5,520	6,650	0.95	5,250	0.91	0.95	4,770	0.6	0.4	1.0	8,600	8,600	8,600	100	2	452	12	2		2	18	4	109	0.6	40	0.4	100	1	4	3	8	2
40	Central Tablelands (NO SGE)	5,410	5,520	5,540	5,500	0.95	5,260	0.74	0.95	3,910	1.6	0.6	0.5	11,200	11,300	11,500	110	24	532	10	3	2	7	32	6	225	1.2					-		-	
41	Muswellbrook	5,430	5,600	5,630	5,300	0.94	5,310	0.88	0.96	4,740	1.5	2.0	3.5	15,900	16,100	16,600			166	32	3		3	9	5	202	1.1		2.3	92		2	0	5	0

Table 9: Water supply – utility characteristics (continued)

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION															ASSETS											WORKFORCE						
		Total No of Assessments			No. of Service Connections	Connected Properties - Total		Connected Properties - Residential			New Residential Dwellings Connected			Population				Transfer Mains	Trunk + Retic Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Undergoing Training	Out-sourcing	Injuries	Days Lost		
					(Single + Mult + Non-res Dwellings + Fire) To Calc Losses	(Ratio of Connected Properties to Assessment	Connected Properties (18) x (19)	(Ratio of Residential Assessments to Total Assessments	(Ratio of Residential Connections to Residential Assessments	Connected Residential Properties (18)x(21)x(22)				(Permanent)			(Peak) (% of Permanent)	(km)	(km)	(20) / (25a)	(Providing Full Treatment) (No.)	(No.)	(No.)	(No.)	(30) / [(25) / 100]	$/prop	Total $M	($'000)	Employees/1 000 properties	(2 or more days per year)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No.	(%)
		(18)			(18a)	(19)	(20) C 4	(21)	(22)	(22a) C2	(22b)			(23) C1			(24)	(25)	(25a) A 2	(26) A 3	(27) A 1	(28)	(29)	(30)	(30a)	(31) F28	(31a) F14	(31b) F26	(32)	(34)	(37)	(38)	(39)	(40a)	(40b)
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09
42	Corowa	5,030	5,160	5,150	4,790	0.93	4,790	0.91	0.93	4,380	1.7	1.7	1.2	10,100	10,200	10,200	180		158	30	3			8	5	388	1.9		1.0	60		2	5	10	1
43	Tumut	4,480	4,470	4,640	5,010	0.95	4,410	0.88	0.95	3,860	0.0	2.1	5.5	11,700	11,700	11,700	100		172	26	5	1	4	12	7	1,320	5.8		1.6	57		3	1	25	2
44	Gunnedah (Groundwater)	4,250	4,440	4,440	4,340	1.02	4,530	0.90	1.02	4,070	0.6	0.8	0.5	10,300	10,500	10,600	110	42	154	29	0		17	21	14	289	1.3		1.1	120	5	1	5		
45	Upper Hunter	4,400	4,560	4,560	4,030	0.92	4,200	0.92	0.93	3,900	1.4	3.6	3.5	8,100	9,000	9,100	100		141	30	4	1	8	11	8	363	1.5		2.1	100	5	5	18	365	18
46	Narrabri (Groundwater)	4,420	4,420	4,460	3,980	0.98	4,370	0.84	0.98	3,680	0.7	0.5	0.6	10,700	10,700	10,700	100		112	39		-	11	12	11	99	0.4	7	3.0	100	5	13	0	3	0
47	Bellingen (Unfiltered)	4,210	4,210	4,230	4,310	0.95	4,010	0.90	0.95	3,600	0.8	0.6	0.6	9,200	9,200	9,200	100	4	163	25	2	1	4	6	4	245	1.0		1.7	100	5	1	3	28	2
48	Leeton	4,320	4,320	4,250	4,250	0.92	3,910	0.86	0.92	3,380	0.0	1.5	0.9	8,400	8,600	8,700	110	2	145	27	3	3		6	4	170	0.7		1.8	57		5			
49	Young (Reticulator)	4,110	4,170	4,410	4,110	1.04	4,580	0.84	1.04	3,830	1.5	1.6	1.3	9,000	9,100	9,200	110		145	32	0			3	2	24	0.1		1.1	100	30	4	1	10	1
50	Cooma-Monaro	3,760	3,760	4,030	3,780	0.95	3,830	0.87	0.95	3,330	0.0	0.3	0.5	7,600	7,600	7,600	130		129	30	1		4	7	5	184	0.7	15	1.8	86		-		-	
51	Forbes	3,430	3,340	3,500	3,540	1.01	3,530	0.86	1.01	3,040	0.5	0.7	0.8	7,600	7,800	7,700	100	10	121	29	1		2	6	5	95	0.3		2.0	29	25	1	3	4	0
52	Snowy River (Unfiltered)	2,720	2,730	2,860	2,750	1.43	4,090	0.86	1.43	3,520	5.6	0.8	3.9	4,700	4,700	4,000	510	15	137	30	6			9	7	43	0.2	471	1.7	100	20				
53	Berrigan (Dual Supply)	3,460	3,560	3,560	3,220	0.98	3,490	0.88	0.98	3,080	1.7	3.3	2.7	6,800	6,900	6,600	110	4	215	16	4	4		8	4	319	1.1		2.0	100	7		4		
	Medians (% of LWUs basis) or totals 3,001 to 10,000 Properties			*136,460*			*132,170*									*302,200*		*263*	*5,728*	*29*					*202*			*1.8*			*2*	*3*		
	LWUs with 1,501 - 3,000 Properties																																	
54	Deniliquin	3,320	3,320	3,480	3,560	0.96	3,340	0.88	0.95	2,910	0.7	0.9	0.3	8,000	8,000	8,000	150	1	158	21	1		1	4	3	142	0.5	352	1.8	100			4		
55	Warrumbungle	3,960	3,310	3,330	3,110	0.99	3,300	0.85	0.97	2,740	0.5	0.6	0.4	7,000	5,900	5,900	100		148	22	3	1	6	8	5	721	2.4	890	3.0	100			0	7	0
56	Yass Valley	3,060	3,070	3,100	2,900	0.98	3,040	0.90	0.98	2,740	0.9	2.0	1.9	6,800	6,700	6,800	110	2	155	20	1	1	5	12	8	474	1.4	993	1.6	60	10		2		
57	Wellington	2,920	2,920	2,970	3,070	0.98	2,910	0.90	0.98	2,600	1.1	0.4	0.4	6,300	6,300	6,500	100	10	99	29	2			7	7	452	1.3		2.1	33	3		0		
58	Cootamundra (Reticulator)	2,980	2,910	2,930	2,940	0.99	2,900	0.87	0.99	2,530	1.2	0.5	0.8	7,600	7,300	7,500	110		92	31	0				0	18	0.1		0.7	50		1	1	10	2
59	Lachlan	2,500	2,620	2,760	2,700	1.02	2,810	0.78	1.02	2,200	1.4		0.9	5,500	5,500	5,500	100	3	224	13	3	4	1	8	4	141	0.4		1.8	100	18				
60	Glen Innes Severn	3,170	3,180	3,200	3,310	0.90	2,880	0.86	0.91	2,520	0.0	0.6	0.6	6,600	6,500	6,500	120	5	100	29	1			2	2	60	0.2		1.0	100					
61	Liverpool Plains	2,580	2,580	2,580	2,540	0.98	2,530	0.90	0.98	2,280	0.0		1.5	5,000	5,000	5,700	110	31	99	26	1	1	10	14	14	288	0.7	180	2.4	100	1			-	
62	Narromine (Groundwater)	2,160	2,200	2,330	2,220	0.95	2,220	0.88	0.95	1,960	0.7	0.3	0.4	4,800	5,400	5,400	120	5	60	37	3	2	15	3	5	64	0.1		1.8	25					
63	Narrandera (Groundwater)	2,190	2,190	2,240		0.92	2,060	0.85	0.92	1,750	0.0		0.3	4,800	4,800	4,800	110		65	32	0		3	3	5	213	0.4		1.9	100		2			
65	Murray (Dual Supply)	2,740	2,800	3,090	2,600	0.95	2,940	0.89	0.95	2,610	2.4	8.3	2.2	5,800	5,900	6,000	210	5	135	22	2			8	6	111	0.3	73	1.4	100					
67	Cobar	2,210	2,270	2,300	2,160	0.95	2,190	0.82	0.95	1,800	0.0	3.8	0.3	5,200	4,500	7,000	110	212	116	19	1	5	1	6	5	167	0.4		4.6	20	10		0		
66	Cobar WB					0.98		0.90	0.98	35			2.8	4,800	5,500	5,500	110	336			0	3		3							100				
68	Tenterfield	2,030	1,880	2,090	2,020	0.95	1,990	0.85	0.95	1,690	1.3	1.9	0.8	3,600	3,600	3,600				29	1	-	-	-		162	0.3	41				-		-	
70	Kyogle	1,920	2,000	1,930	2,010	0.95	1,830	0.82	0.95	1,500	0.4	0.7	0.6	3,700	3,700	3,800	110	15	56	33	1	1	3	4	7	347	0.6	197	3.8	100	5	1	2	5	0
71	Palerang	1,880	1,980	2,020	2,020	0.95	1,920	0.89	0.95	1,700	0.0	5.0	1.6	3,500	3,800	4,500	100	6	45	43	2	2	4	3	7	360	0.7	420	1.6	100					
73	Upper Lachlan	1,850	1,850	1,920	1,790	1.00	1,920	0.87	1.00	1,670	1.6	0.6	0.3	3,500	2,900	2,900	110	2	63	30	1	2	7	3	5	299	0.6				2	2		4	
74	Wentworth (Dual Supply)	2,290	2,350	2,360	1,820	0.95	2,240	0.92	0.95	2,060	0.0		0.7	4,000	4,000	4,000	130		166	13	3			8	5	47	0.1		3.1	100			2		
75	Coonamble (Groundwater)	1,560	1,570	1,640	1,570	1.02	1,670	0.87	1.02	1,450	0.1	0.1	0.4	3,200	3,200	3,200	110		64	26		-	6	-		209	0.3		3.6	100		2	2	6	0
	Medians (% of LWUs basis) or totals 1,501 to 3,000 Properties			*46,270*			*44,690*									*97,600*		*633*	*1,845*	*27*					*188*			*1.9*			*2*	*2*		

Table 9: Water supply – utility characteristics (continued)

WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION																ASSETS												WORKFORCE						
	Total No of Assessments			No. of Service Connections	Connected Properties - Total		Connected Properties - Residential			New Residential Dwellings Connected			Population				Transfer Mains	Trunk + Retic Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Undergoing Training	Out-sourcing	Injuries	Days Lost		
				(Single + Mult + Non-res Dwellings + Fire) To Calc Losses	(Ratio of Connected Properties to Assessment	Connected Properties (18) x (19)	(Ratio of Residential Assessments to Total Assessments	(Ratio of Residential Connections to Residential Assessments	Connected Residential Properties (18)x(21)x(22)	(%)			(Permanent)			(Peak) (% of Permanent)	(km)	(km)	(20) / (25a)	(Providing Full Treatment) (No.)	(No.)	(No.)	(No.)	(30) / [(25) / 100]	$/prop	Total $M	($'000)	Employees/1 000 properties	(2 or more days per year)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No.	Due to Injuries (%)
	(18)			(18a)	(19)	(20) C 4	(21)	(22)	(22a) C2	(22b)			(23) C1			(24)	(25)	(25a) A 2	(26) A 3	(27) A 1	(28)	(29)	(30)	(30a)	(31) F28	(31a) F14	(31b) F26	(32)	(34)	(37)	(38)	(39)	(40a)	(40b)
	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09
LWUs with 200 - 1,500 Properties																																			
76 Harden (Reticulator)	1,570	1,830	1,820	1,850	0.96	1,750	0.70	0.95	1,210	1.0	0.7	1.2	3,900	3,900	3,900	100		170	10	0			3	2	18	0.0		1.1	100	1	2	0	2	0
79 Walgett (Dual Supply)	1,680	1,870	1,870	1,460	0.85	1,590	0.88	0.85	1,400	0.6			6,600	6,600	6,600				16	2	-	-	-								-		-		
80 Greater Hume	1,500	1,750	1,780	1,700	0.95	1,690	0.82	0.95	1,390	1.5	1.5	1.7	4,200	4,300	4,500	100		148	11	1		2	2	1	65	0.1		1.2	100	15					
81 Gwydir	1,450	1,530	1,530	1,670	0.95	1,450	0.87	0.95	1,260	0.3	0.4	0.2	2,600	2,600	2,600	130		87	17	1		9	1	1	65	0.1		2.8	100	10					
82 Gloucester	1,440	1,790	1,760	1,660	0.95	1,670	0.85	0.95	1,430	3.6	2.3	2.9	3,100	3,100	3,200	120		62	27	1		1	6	10	95	0.2				75					
83 Oberon (Reticulator)	1,340	1,290	1,300	1,300	1.01	1,310	0.82	1.02	1,090	0.7	0.5	0.6	3,000	3,000	3,000	130		36	36	1				0	77	0.1		0.8	300	8					
84 Gilgandra (Groundwater)	1,370	1,400	1,400	1,350	0.98	1,370	0.89	0.98	1,220	0.4	0.4	0.4	2,900	2,900	2,900	110	3	50	27	1	-	5	1	2	239	0.3	64	1.5	50			1		
85 Uralla	1,300	1,560	1,560		1.01	1,570	0.90	1.02	1,430	0.0	1.8	0.6	2,600	2,600	2,600	100		37	42	1	1		1	3	19	0.0		1.3	100	22					
86 Hay (Dual Supply)	1,320	1,330	1,330	2,430	0.98	1,310	0.88	0.98	1,150	0.5	0.4	0.4	2,900	2,900	2,900		2	47	28	1			3	6	281	0.4	79	1.5	100	30					
87 Bourke (Dual Supply)	1,700	1,180	1,200	1,020	1.00	1,200	0.85	1.00	1,020	0.5	0.4	0.5	2,500	2,100	2,000	100		46	26	1			2	4	295	0.4		2.5	100	3	12				
88 Wakool (Dual Supply)	1,330	1,470	1,480	1,390	0.95	1,410	0.74	0.95	1,040	0.0	1.2	0.0	2,800	2,600	2,800	120		161	9	5	1		8	5	155	0.2		3.5	40	10					
89 Bogan	1,190	1,030	1,020	1,070	1.01	1,030	0.87	1.01	900	0.3	0.3	0.1	2,500	2,500	2,500	140	3	47	22	1			1	2	5	0.0		2.9	0	2					
90 Guyra	1,190	1,230	1,230	1,120	0.95	1,170	0.89	0.95	1,050	1.0		0.8	2,900	2,900	3,000	110	10	62	19	1	2		1	2	92	0.1		2.6	67	2		1			
91 Cabonne	1,130	1,210	1,210	1,120	0.95	1,150	0.86	0.95	990	2.6	0.6	0.4	2,200	2,200	2,200	100	50	41	28	1	3	5	4	10	190	0.2		4.4				1		
92 Carrathool (Groundwater)	1,130	1,070	1,070	1,070	0.95	1,010	0.83	0.95	850	0.3	0.6	0.8	2,000	2,000	2,000	110		474	2	3	3	9	20	4				3.9	75		-		-	
93 Tumbarumba	1,080	1,200	1,200		0.95	1,140	0.88	0.95	1,010	0.0		0.8	2,000	2,000	2,000	170		65	18	0	1	1	2	3	323	0.4		5.2	33						
94 Gundagai	1,000	1,030	1,030	1,080	1.02	1,050	0.86	1.02	900	0.8	1.9	1.8	2,400	2,400	2,400	210		36	29	1			2	6	12	0.0		1.9	100	5		2			
96 Warren (Dual Supply)	1,060	1,060	1,060	950	0.91	960	0.89	0.90	850	0.1	0.2	0.8	2,000	1,800	1,800	100		53	18	0		5	2	4				2.1	100		1	4	2	0
97 Bombala	900	890	890	850	0.95	840	0.87	0.95	740	0.4	0.4	0.1	1,900	1,900	1,900	110	4	70	12	2			3	4				2.4	100			2		
98 Walcha	810	880	880	880	1.01	890	0.84	1.01	750	0.7	0.5	0.7	1,700	1,700	1,700	110	17	56	16	1	1		3	5				2.2	100			1		
100 Balranald (Dual Supply)	840	850	910	880	0.95	860	0.87	0.95	750	0.6	3.0	0.7	2,000	2,000	2,000	110	2	30	29	2			3	10	59	0.1		2.3	100	10					
101 Murrumbidgee (Groundwater)	770	820	880	990	1.03	900	0.89	1.03	810	3.1	2.5		1,800	1,700	1,700				31	1	-	-	-		1	0.0					-		-		
103 Central Darling (Dual Supply)	720	690	690	680	1.00	690	0.93	1.00	640	0.3	0.3	0.2	1,400	1,400	1,400	110		63	11	2	4	2	8	13				4.4	67			2			
104 Boorowa	610	660	660		0.94	620	0.91	0.94	560	0.0	2.0	1.8	1,200	1,200	700	100		47	13	1		1	1	2	230	0.1		4.9	67						
105 Brewarrina	550	560	560	540	0.86	480	0.88	0.86	430	0.2	0.0	0.5	1,500	1,500	1,500	110		38	13	2	1	1	2	5				6.2	100			1		
106 Jerilderie (Dual Supply)	490	500	500	510	0.93	460	0.77	0.93	360	0.6	0.6	0.8	970	770	900	100		43	11	1			1	2	65	0.0	25	4.3	100					
Medians (% of LWUs basis) or totals 200 to 1,500 Properties			*30,820*			*29,570*									*64,700*		*91*	*1,969*	*18*						*77*			*2.5*			*2*	*1*		
Median All LWUs (% of LWUs basis)											*New res dwellings*	*0.8 %*							*Properties served per km of main*	*28*					*Capital Expenditure/prop*	*$185*			*1.8*					
Median All LWUs (Statewide basis)												*0.9 %*								*32*							*$266*			*1.4*				

Totals (excluding bulk suppliers)

810,000 assessments

791,000 connected properties

719,000 residential connected properties

Total Population 1.8 M

28,700 km of main (includes bulk suppliers)

170 water treatment works (Note 1)

100 dams

Total WS Capital Expenditure $310 M (including bulk suppliers)

Reported No. of WS employees 1,310

Notes: 1. In addition to these 170 water treatment works, the LWUs also have 105 chlorinators/aerators (see Appendix D1 on page 233).

Table 10: Water supply – asset management and water resource management

WATER UTILITY		ASSET MANAGEMENT																			WATER RESOURCE MANAGEMENT																	
		Real Losses (Leakage) (see col (9) Table 8)								Main Breaks			Unplanned Interruptions to Supply			Rehabilitations			Renewals		Mains Maintenance Cost	Total Urban Water Supplied			Non-potable Urban Water Supplied			% Water Recycled (from Table 8)		Peak Week to Average Consumption	Average Annual Residential Water Supplied								
		(L/d per connection)			(kL/km/d)	(ILI)	Reservoir Drop Test (RDT) Waste Metering (WM) or Night Flow Metering (NF[Z]) Z is No. of District Meter Areas			(per 100km of Main)			(per '000 properties)			Mains (km per 100 km)	Service Connections (%)	Water Meters (%)	($'000 per 100km of Main)	(% of CRC)	($'000 per 100km of Main)	Potable + Non-potable + Recycled (Excluding Bulk Water Exports) (ML) (from Table 8)			For outdoor uses or industry (Including Recycled) (ML) (from Table 8)			(Total Vol Recycled (Urban + Ag Use)/Total Urban Water Supplied		(%)	From Tables 8 & 9 (1) ÷ [(22a)] Potable (kL/property)			From Tables 8 & 9 [(1)+(11)+(12a)] ÷ [(22a)] Potable+Nonpotable (kL/property)		
		(41) A 10			(41a) A 11	(41b) A 9	Type (41c)	Year (41d)	Result % (41e)	(42) A 8			(43) C 17			(44)	(45)	(45a)	(46)	(47)	(48)	(49) W 11			(50)			(51)		(53)	(56a)			(56) W12					
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09		2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2007/08	2008/09	2007/08	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09
	Sydney Water	94	91	81	5.0	1.4				35	30	34	6	5	5							509,930	481,701	491,968										199	182	198
	Hunter Water	85	80	94	3.7	1.3				37	30	33	370	225	271							70,600	66,009	67,020										195	177	180
	Sydney Catchment Authority																																						
LWUs with > 10,000 Properties																																							
1	Gosford		20	30	1.9	1.0		-	-	36	29	27	280	181	203	0.3	0.4	14.7			42	13,600	12,100	12,600			68	2	2	113	126	147	135	140	147	135	140
2	Wyong	30	30	30	1.5	1.0	RDT	2004	5.0	4	4	9	33	39	61	0.1	1.0	3.2			380	12,600	12,800	13,400	1,233	832	865	8	9	113	126	139	146	141	139	146	141
3	Shoalhaven	40	80	60	1.8	1.0	WM	2009	8.0	14	9	14		59	-	0.1		1.9	46	0.1	71	13,000	12,400	15,100	109	147	2,137	20	29	148	151	165	144	152	165	144	152
4	Rous (Bulk Supplier) (NO SGE)				4.8			-		10	24	16	2	2	2	3.8	0.0	0.6	1645	0.3	459	810	630	500													
5	MidCoast (Unfiltered)	60	90	100	2.7	1.3	NF[34]	2008	11.0	10	9	5			-	0.1	-	-			187	9,510	8,940	9,170			4	1	2	138	158	167	149	150	167	149	150
6	Tweed	70	70	60	2.0	1.0		-	-	10	10	5	47	34	9	0.3	0.2	0.3	415	0.6	144	9,840	9,030	9,210	316	262	645	4	8	119	125	214	174	180	214	174	180
7	Port Macquarie-Hastings (Unfiltered)	100	40	40	1.3	1.0		-	-	4	2	3	12	7	11	0.4	0.2	2.8	244	0.4	65	6,510	6,090	6,190		158	137	3	3		122	157	154	151	157	154	151
8	Riverina (Groundwater) (NO SGE)	140	130	60	0.8	1.0		-	-	20	13	14	83	54	34	0.6	0.1	11.1	186	1.2	47	17,600	14,800	17,100						195	194	410	327	374	410	327	374
10	Coffs Harbour (Unfiltered)	50	50	50	1.8	1.0	WM	2008	-	9	7	11	37	20	24	0.1	0.1	3.5	75	0.1	183	5,800	5,630	5,800	5	93	107	11	23	118	116	179	169	165	179	169	165
11	Albury City	100	50	50	2.1	1.4	RDT	2006	-	15	8	12			-	0.7	0.1	4.6	370	0.6	148	8,240	5,730	6,890			6	98	96	187	201	276	193	222	276	193	222
12	Fish River WS (Unfiltered, Bulk Supplier)				6.9			-	-	3	2	5	0		0		-	-				1,210	1,270	680													
13	Tamworth Regional	150	200	190	5.6	6.6		-	-	12	28	12		7	-	0.1	0.3	11.4			155	8,710	8,470	9,270	90	150	157	35	36	165	218	229	192	226	229	192	226
14	Clarence Valley		100	50	1.0	1.0		-	-	10	19	10	51		-	0.1	-	2.2	19	0.1	82	9,310	6,650	6,220	103	176	186	4	4	126	136	184	174	172	184	174	176
15	Eurobodalla (Unfiltered)	130	170	90	1.7	1.1		-	-	2	3	4	2	3	2	0.2		4.0	161	0.6	82	4,060	4,440	4,000		184	171	8	8	153	176	126	119	129	126	119	129
16	Wingecarribee		70	110	2.9	1.5	WM	2008	19.0		9	8	59	60	46	0.4	0.0	1.7	109	0.2	95	4,940	4,240	4,830		54	64	2	2	139	212	214	168	183	214	168	183
17	Queanbeyan (Reticulator)		50	60	2.4	1.0	RDT	2007	-	6	5	1			6	0.2		7.8	256	0.4	68	4,530	3,780	4,050				1	1	135	136	211	188	198	211	188	198
18	Dubbo	290	150	180	5.6	3.7	WM	2009	-	5	7	7	26	20	24	0.5		6.1			128	10,400	7,350	8,210				99	97	163	220	431	322	331	431	322	331
19	Orange	70	140	60	1.8	1.0		-	-		30	28	123	116	175	-	0.5	3.4			170	9,000	8,170	8,350	2,836	3,394	3,291	100	87	126	103	323	177	259	323	177	259
20	Goulburn Mulwaree	50	40	40	1.7	1.0		-	-	12	28	14			-	1.2	1.4	9.5	484	0.5	298	2,560	2,360	2,540			62	74	100	146	122	137	147	134	137	147	134
21	Bathurst Regional		80	80	2.6	1.0		-	-	20	11	9	5	3	2	0.3	0.7	1.4	152	0.3	261	7,140	5,780	*5,780*	2	2	2	24	100	192	232	291	241	240	291	241	240
22	Lismore (Reticulator)	140	40	110	4.0	1.6		-	-	22	20	20	48	42	49	0.3	0.2	2.2	314	0.8		3,560	3,330	3,520				1	0			174	163	159	174	163	159
23	Bega Valley (Unfiltered)	80	80	60	1.2	1.0	WM	2008	7.0	7	7	5			-	0.9	0.2	4.2	314	1.1	92	3,740	3,700	3,990		457	556	33	46	153	158	161	144	154	161	144	154
24	Ballina (Reticulator)	170	40	120	4.3	2.1	RDT	2005	19.0	3	4	9	7		-	0.4	0.5	2.5	96	0.2	94	4,270	3,550	3,570	386	107	119	2	3			198	186	175	198	186	175
25	Kempsey (Groundwater)	300	120	80	1.7	1.3		2008	11.0	9	12	24		69	114	0.4	0.2	3.7	243	0.4	151	4,060	3,730	3,630	119	34	32	2	1	127	158	184	169	156	184	169	156
26	Country Energy		80	70	2.0	1.2		-	-	10	18	11			-	0.7	0.0	1.1	455		449	6,480	6,730	5,760	1,733	1,790	999	49	41	154	187	278	280	280	278	280	284
27	Byron (Reticulator)	60	50	50	2.0	1.3	WM	2009	8.0	9	8	8	0	10	9	0.6	0.1	2.4			42	2,850	2,930	3,020	340	340	235	22	13			181	181	181	181	181	181
28A	Goldenfields (Reticulator) (NO SGE)	70	100	100	0.6	1.0	RDT	2009	-	15	7	6	105	159	150	0.3	-	-	14		48	5,970	4,940	5,530	169	130	121			285	326	294	252	294	294	252	298
28B	Goldenfields (Bulk Supplier) (NO SGE)				4.7							0							1143		85																
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties			*60*	*1.9*	*1.0*	Note: ILI < 1.0 is meaningless & has been increased to 1.0			10	9	*9*	42	39	*29*				*214*		*112*							*8*	*9*			*184*	*174*	*175*	*184*	*174*	*176*
LWUs with 3,001 - 10,000 Properties																																							
29	Armidale Dumaresq	70	70	60	1.7	1.0		-	-	24	24	12			-	0.4	1.2	4.8			379	3,150	3,140	2,710	53	40	50	13	33	128	215	248	254	208	248	254	214
30	Griffith	150	110	100	1.8	1.0	WM	2009	6.0	14	15	16	25	27	24	1.6	0.1	0.1	187	0.8	49	8,670	7,010	6,670	682	629	630		11	186	264	675	548	537	675	548	566
31	Lithgow			50	0.8	1.0		-	-			6			13	-	0.3	0.2			150	2,010	2,050	2,330								160	160	173	160	160	173
32	Mid-Western Regional	80	50	40	0.9			-	-	9	8	2	41	34	49	0.2	0.2	2.7			225	2,650	2,210	1,760				2	7	247	201	316	199	158	316	199	158
33	Richmond Valley	200	110	200	7.2	6.1		-	-	12	9	5		4	-	3.4	1.5	-	665	1.6	111	3,170	3,010	3,090				15	13			254	189	175	254	189	175
34	Nambucca (Groundwater)	100	40	40	1.4	1.0	RDT	2008	-	2	2	6		8	-	0.2		4.8	100	0.3		1,740	1,550	*1,550*				9	7	121	131	156	146	137	156	146	137
35	Singleton	140	120	70	1.7	1.0		-	-	11	12	12	333	320	318	0.3	1.8	8.9	43	0.1	69	2,770	2,320	2,680				33	33	132	187	269	211	269	269	211	269
36	Parkes	240	240	200	2.8	5.2	RDT	2004	6.0	16	15	11				0.1		0.1			12	5,060	6,760	6,510	212	344	122	19	54	146	137	239	212	310	239	212	315
37	Inverell	70	70	70	1.5			-		6	6	4	4	4	2	-	-	-	171	0.6		2,310	2,350	2,340						122	123	294	294	290	294	294	290

Table 10: Water supply – asset management and water resource management (continued)

	WATER UTILITY	ASSET MANAGEMENT																			WATER RESOURCE MANAGEMENT																	
		Real Losses (Leakage) (see col (9) Table 8)								Main Breaks			Unplanned Interruptions to Supply			Rehabilitations			Renewals		Mains Maintenance Cost	Total Urban Water Supplied			Non-potable Urban Water Supplied			% Water Recycled (from Table 8)		Peak Week to Average Consumption		Average Annual Residential Water Supplied								
		(L/d per connection)			(kL/km/d)	(ILI)	Reservoir Drop Test (RDT) Waste Metering (WM) or Night Flow Metering (NF[Z]) Z is No. of District Meter Areas			(per 100km of Main)			(per '000 properties)			Mains (km per 100 km)	Service Connections (%)	Water Meters (%)	($'000 per 100km of Main)	(% of CRC)	($'000 per 100km of Main)	Potable + Non-potable + Recycled (Excluding Bulk Water Exports) (ML) (from Table 8)			For outdoor uses or industry (Including Recycled) (ML) (from Table 8)			(Total Vol Recycled (Urban + Ag Use)/Total Urban Water Supplied		(%)		From Tables 8 & 9 (1) ÷ [(22a)] Potable (kL/property)			From Tables 8 & 9 [(1)+(11)+(12a)] ÷ [(22a)] Potable+Nonpotable (kL/property)		
		(41) A 10			(41a) A 11	(41b) A 9	Type (41c)	Year (41d)	Result % (41e)	(42) A 8			(43) C 17			(44)	(45)	(45a)	(46)	(47)	(48)	(49) W 11			(50)			(51)		(53)		(56a)			(56) W12		
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09		2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2007/08	2008/09	2007/08	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09
38	Moree Plains (Groundwater)	160	160	160	5.2	4.7		-	-	78	46	45	706	453	739	0.7		4.4			339	3,180	9,720	9,210	75	4,944	4,500	63	76	103	102	592	936	946	592	936	1960
39	Cowra	70	90	60	0.9	1.0		-	-	11	8	10		8	1	0.1	0.2	4.2			134	2,510	2,060	2,420	95		85		100	177	196	256	198	193	256	198	211
40	Central Tablelands (NO SGE)	60	50	90	0.9	1.0		-	-	11	11	10	60	60	49	1.1	1.8	4.7	126	0.6	43	1,740	1,770	2,100						251	209	204	190	196	204	190	196
41	Muswellbrook	70	60	60	1.9	1.1		-	-	32	22	35	83	10	11		0.1	3.1	56	0.1	148	2,900	2,870	3,030	654	959	960	84	75			278	240	263	278	240	263
42	Corowa	130	150	70	2.0	1.9		-	-	29	19	19	43	30	15	2.1	1.1	1.1	315	1.0	104	3,600	2,690	2,060		682		33			228	319	207	245	319	207	245
43	Tumut	60	50	50	1.4		WM	2009	-		4	6			-	0.1	-	3.4			62	1,460	1,470	1,540	42	25	43	3.5	4		132	165	224	219	165	224	219
44	Gunnedah (Groundwater)	130	100	140	3.8	1.6		-	10.0	14	13	15	4	3	3	1.3	0.4	5.7			305	2,980	2,190	2,270				41	42	152	184	393	247	282	393	247	282
45	Upper Hunter	70	60	70	2.0			-	-	57	74	28	25	17	33	2.1	-	-	428	1.7	331	1,830	1,680	1,860	138	167	167	11	11			270	216	230	270	216	230
46	Narrabri (Groundwater)		130	140	5.1	5.1		-	-	182	81	96	23	90	23	3.6	96.5	3.7	79	0.2	154	2,280	3,480	3,510				57	4		202	544	773	548	544	773	548
47	Bellingen (Unfiltered)	180	120	70	1.8	1.0		-	-	5	7	6			-	1.8	0.1	5.8			46	1,330	1,280	1,190						122	105	183	173	168	183	173	168
48	Leeton		380	320	9.4	8.7	RDT	2007	22.0		35	21		40	26	1.6	2.6	7.0			393	2,820	2,790	3,090				6	1	187	182	482	384	444	482	384	444
49	Young (Reticulator)	100	110	110	3.0	1.7	RDT	2008	9.0	21	17	17	20	25	26	0.4	1.3	8.7			103	1,770	1,570	1,610		129	99	19	73	199	201	221	217	207	221	217	207
50	Cooma-Monaro		70	60	1.8			-	-		22	16			-	0.7	0.2	0.3	364	1.1	193	1,080	1,700	1,430				6	3			314	320	289	314	320	289
51	Forbes	120	80	90	2.7	2.5		-	-	33	34	49	134	123	88	0.6	0.5	2.9			335	2,450	1,890	1,870	225	166	137	1.1	1.1	212	290	499	356	363	499	356	363
52	Snowy River (Unfiltered)	150	130	50	1.0	1.0	RDT	2007	6.0	7	10	7	3	1		-	-	-			30	900	860	870	6					193	398	133	126	156	133	126	156
53	Berrigan (Dual Supply)	100	90	90	1.4	1.5		-	-	35	29	22	46	11	59	0.5	0.2	1.5	4	0.0		1,920	1,330	1,500	857	626	686	28	20	339	460	236	131	173	465	215	292
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties			*70*	*1.8*	*1.3*	Note: ILI < 1.0 is meaningless & has been increased to 1.0			14	15	*12*	41	25	*26*				*149*		*141*			69,200				17	*13*			*269*	*216*	*230*	*270*	*216*	*245*
	LWUs with 1,501 - 3,000 Properties																																				
54	Deniliquin	150	70	110	2.5	3.1	RDT	2005	8.0	25	13	18	6	2	15	0.3			103	0.4	174	3,100	1,870	3,010	952	380	600	69	74	158	163	489	403	640	489	403	709
55	Warrumbungle	50	30	50	0.9			-	-	10	3	5			-			0.6	92	0.3	214	980	590	850				15	10		232	225	148	192	225	148	192
56	Yass Valley	110	90	100	1.9	2.2		-	-	8	8	12	11	27	36	0.2	0.8	4.9			73	840	740	860				36	33	155	140	197	165	184	197	165	184
57	Wellington	250	130	270	8.3	3.9	RDT	2004	23	26	9	12	62	29	45	7.1	7.6	0.9	1145	4.3	346	1,220	1,120	1,180						195	167	279	304	202	279	304	202
58	Cootamundra (Reticulator)	70	50	70	2.3	1.2		-	-	39	27	66		9	9	0.2	1.4	5.2			89	930	950	910		199	202	51	52			224	208	198	224	208	198
59	Lachlan	100	90	170	2.1	2.3	RDT	2009	14.0	6	12	8	11	23	16	0.3	0.2	4.5	71	0.3	103	1,360	1,470	1,570	32	129	160	26	24	218	200	364	360	337	364	360	351
60	Glen Innes Severn		100	30	1.0	1.0		-	-		7	4		70	42	1.5	0.5	1.2	173	0.5	150	820	680	630			50	2	100	107		188	164	157	188	164	157
61	Liverpool Plains			60	1.5	1.0		-	-			9			28	2.1	1.5	3.6	621	2.4		930	950	850							234	238	242	223	238	242	223
62	Narromine (Groundwater)		100	250	9.2	5.4		-	-		20	18		64	51	2.5	5.1	4.3	232	0.9	280	1,280	1,380	2,170		134	2		5	323		374	490	430	374	490	430
63	Narrandera (Groundwater)				2.9			-	-		9	-		75	-	0.2	-	-			258	1,430	1,400	1,160					-	239	355	487	419	384	487	419	384
65	Murray (Dual Supply)	50	40	80	1.6	1.7	WM	2009	14.0	9	7	9	12	50	28	1.1	2.8	2.6	133	0.5	67	1,500	930	1,130	691	220	436	29	26	175	181	233	179	156	439	225	260
67	Cobar			120	2.3		RDT	2008	6.0		10	6		2	1	2.6	0.7	2.3				2,310	2,260	1,780		220	158	30	35		154	709	721	438	709	721	465
66	Cobar WB																																				
68	Tenterfield	40	40	30	1.0			-	-	7	9	-	36	39	-	-	-	-	61	0.1		440	410	*410*					-	128		177	199	140	177	199	140
70	Kyogle	40	30	40	1.3	1.0		-	-	7	9	5	14	3	4		0.4	2.2	239	0.7	186	500	390	450		13	20	5	100	124	109	197	134	180	197	134	180
71	Palerang		30	60	2.9	1.0		-	-		29	24		33	31	0.9	0.5	1.0	531	1.0	162	510	410	480				1	2		185	170	141	163	170	141	163
73	Upper Lachlan	50	40	30	0.8	1.0		-	-	5	5	3	3	3	3	1.6	1.0	2.6	827	2.4	17	530	460	300						101	159	219	179	72	219	179	72
74	Wentworth (Dual Supply)			80	0.9			-	-			12			9		0.5	0.4			86	1,870	1,980	1,540		1,690	624					83	83	119	560	560	376
75	Coonamble (Groundwater)	250	190	160	3.9	4.3		-	-	39	39	27	63	63	60	2.5	2.4	5.9				1,210	1,060	1,110		41	37	16	32	179	213	462	408	419	462	408	419
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties			*80*	*2.0*	*1.7*	Note: ILI < 1.0 is meaningless & has been increased to 1.0			10	9	*10*	13	29	*28*				*202*		*156*			20,400				26	*33*			*229*	*204*	*195*	*258*	*234*	*213*

Table 10: Water supply – asset management and water resource management (continued)

WATER UTILITY		ASSET MANAGEMENT																			WATER RESOURCE MANAGEMENT																	
		Real Losses (Leakage) (see col (9) Table 8)								Main Breaks			Unplanned Interruptions to Supply			Rehabilitations			Renewals		Mains Maintenance Cost	Total Urban Water Supplied			Non-potable Urban Water Supplied			% Water Recycled (from Table 8)		Peak Week to Average Consumption		Average Annual Residential Water Supplied							
		(L/d per connection)			(kL/km/d)	(ILI)	Reservoir Drop Test (RDT) Waste Metering (WM) or Night Flow Metering (NF[Z]) Z is No. of District Meter Areas			(per 100km of Main)			(per '000 properties)			Mains (km per 100 km)	Service Connections (%)	Water Meters (%)	($'000 per 100km of Main)	(% of CRC)	($'000 per 100km of Main)	Potable + Non-potable + Recycled (Excluding Bulk Water Exports) (ML) (from Table 8)			For outdoor uses or industry (Including Recycled) (ML) (from Table 8)			(Total Vol Recycled (Urban + Ag Use)/Total Urban Water Supplied		(%)		From Tables 8 & 9 (1) ÷ [(22a)] Potable (kL/property)			From Tables 8 & 9 [(1)+(11)+(12a)] ÷ [(22a)] Potable+Nonpotable (kL/property)		
		(41) A 10			(41a) A 11	(41b) A 9	Type (41c)	Year (41d)	Result % (41e)	(42) A 8			(43) C 17			(44)	(45)	(45a)	(46)	(47)	(48)	(49) W 11			(50)			(51)		(53)		(56a)			(56) W12				
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09		2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09	2007/08	2008/09	2007/08	2008/09	2006/07	2007/08	2008/09	2006/07	2007/08	2008/09
LWUs with 200 - 1,500 Properties																																							
76	Harden (Reticulator)	60	60	50	0.5	1.0	RDT	2006	-	7	7	9	1	3	6	1.5	0.7	2.3	18	0.1	97	540	550	800			248		70		103	317	322	330	317	322	330
79	Walgett (Dual Supply)	50	50	50	0.8			-	-	91		-			-	-	-	-			131	1,350	1,510	470	1,042	1,042			-			189	189	195	935	938	938
80	Greater Hume	70	50	50	0.6	1.0	RDT	2006	-	21	3	7	63	30	30	0.1	0.6	3.0			9	640	530	640		61	90	20	25	168	207	300	223	240	300	223	240
81	Gwydir	230	260	40	0.7	1.0	RDT	2009	12.0	22	13	40	10	11	13	0.8	2.0	6.8	109	0.7	337	750	680	380	1	24	27	12	16	167	365	260	219	154	260	219	154
82	Gloucester	40	50	40	1.1	1.0		-	-	12	7	6	96	62	185	0.8	3.2	1.4	202	0.8	245	390	400	430						117	133	165	166	179	165	166	179
83	Oberon (Reticulator)	90	100	70	2.7			-	-	22		17	36	31	14	1.1	0.5	1.8	131	0.6	128	750	760	590								155	175	179	155	175	179
84	Gilgandra (Groundwater)	130	140	170	4.7	13.7	RDT	2000	15.0	41	30	30	22	37	36	1.2	0.7	0.7	310	1.1	210	960	820	840				89	100	159	162	455	413	428	455	413	428
85	Uralla				2.2	1.3		-	-	27	19	14	25	29	17	0.3	0.5	0.4	81	0.1	232	340	270	240						292	329	161	123	102	161	123	102
86	Hay (Dual Supply)	50	50	30	1.3			-	-	32	32	32	11	11	11		0.8	0.8			130	1,520	1,320	1,460	1,277	963	1,096			117	115	181	179	184	1,290	1021	1140
87	Bourke (Dual Supply)	100	110	110	2.4	2.8		-		87	57	78	826	823	815		0.3	1.1	596	1.2	226	2,900	3,670	3,500	2,414	2,999	2,825			180	162	412	383	539	2,820	3350	3169
88	Wakool (Dual Supply)	120	100	100	0.8	2.1	RDT	2004	7.0	0	0	0							104	0.51	29	1,480	1,020	1,090	920	623	715					373	173	153	1,260	853	839
89	Bogan	130	80	330	7.6	9.4	RDT	2009	17.0	30	32	32		19	10		0.1	3.4			119	630	520	580						290		515	479	309	515	479	309
90	Guyra	70	60	60	1.1	1.0	RDT	2009	3.0	17		10	51		19	0.1	0.7	1.0			132	450	410	*410*						151		221	227	215	221	227	215
91	Cabonne	140	140	130	3.5	3.0		-	-	11	37	29	18	25	-		0.6	0.7			185	330	380	390	47	145	158	45	46		157	161	131	131	161	131	166
92	Carrathool (Groundwater)	80	110	100	0.2	1.0		-	-		10	12		394	-		5.2	-				780	1,320	1,300	24	618	651		-		184	378	482	446	378	482	1215
93	Tumbarumba				1.0			-	-		6	9		13	22	0.9	1.1	0.2	208	0.8	23	370	380	390					-			214	219	221	214	219	221
94	Gundagai	110	140	130	3.8	1.5		-	-	8	8	11	28	28	29	0.8	1.9	2.9			64	560	680	730		111	117	100	100	155	194	244	230	281	244	230	281
96	Warren (Dual Supply)	270	260	180	3.2	5.4	RDT	2008	33.0	58	42	51		3	3		0.2	4.2			117	580	580	470	246	256	191	6	3	163	186	178	172	164	415	412	352
97	Bombala	80	80	90	1.1			-	-	31	26	26					1.9	0.7			37	230	230	290			35		100		104	242	249	266	242	249	266
98	Walcha	40	50	40	0.6	3.0		-	-	2	4	4	2	6	7	0.9	0.6	4.5			123	230	250	220						170	168	189	204	176	189	204	176
100	Balranald (Dual Supply)	30	20	40	1.1	1.0		-	-	13	17	13							170	0.4	137	780	660	740	599	458	536		73		609	226	257	241	1,080	910	958
101	Murrumbidgee (Groundwater)	170	240	110	3.7			-	-	45	7	-	8		-	-	-	-			31	1,030	670	*670*	12	10		17	-			760	550	474	760	550	474
103	Central Darling (Dual Supply)	20	20	30	0.3	1.0		-	-	30	32	32	75	87	29		1.5	1.5			111	340	350	360	260	270	245				228	96	140	145	470	601	526
104	Boorowa				0.8			-	-		28	21		44	8	2.3	0.8	0.3	23	0.1	40	360	220	240			3		5			375	216	270	375	216	271
105	Brewarrina	80	130	70	1.1	2.4		-	-	82	39	50					0.4				321	1,060	830	840		540	591		-	125	169	366	400	335	366	400	1721
106	Jerilderie (Dual Supply)	40	40	40	0.5	1.0		-	-	19	30	21	11	9			1.1	1.1			81	360	390	430	239	269	300	6	26		159	231	208	245	886	942	1033
Medians (% of LWUs basis) for 200 to 1,500 Properties				*70*	*1.1*	*1.3*	Note: ILI < 1.0 is meaningless & has been increased to 1.0			22	19	*19*	*24*	28	*17*	*0.9*			*131*		*123*			18,500					19	*46*			*237*	*219*	*231*	*371*	*361*	*319*
Median All LWUs (% of LWUs basis)		*Leakage*		*70*	*1.8*	*1.2*				*Main Breaks per 100km of main*		*12*	*Interruptions*		*24*		*Mains*	*0.6*	*Renewals 0.6% of CRC*					*% of Total Urban Water Recycled*		*25%*					*Av Annual Res Water Supplied*			*225*		
Median All LWUs (Statewide basis)				*60*								*10*			*33*		*Rehabilitations*			*0.5 %*																*175*
Totals for all LWUs (excluding bulk suppliers)			*33 LWUs reported recent leakage testing*																		*Total Urban Water Supplied 288,000 ML*			*Non-potable Urban Water Supplied 28,400 ML*														

+ There are 11 LWUs with a dual water supply in 2008-09; Balranald, Berrigan, Bourke, Central Darling, Hay, Jerilderie, Murray, Wakool, Walgett, Warren, Wentworth.
For these 11 LWUs, note 12 on page 20 reports the approximate total potable annual residential water supplied per property. This is lower than the value reported in Column 56 as it is calculated only for those towns with a dual supply.

Note: 1. The reported Real Losses shown above for NWI indicator A10 have been rounded in recognition of the significant inherent errors in the determination of distribution system leakage.
2. LWUs with >20 connections/km should use Real Losses (L/connection/day) (column (41)) for comparison purposes.
LWUs with <20 connections/km should use Real Losses (L/km water main/day) (column (41a)) for comparison purposes.
3. Leakage relates only to Total Urban Water Supplied (potable) and excludes bulk water exports.
4. 42 LWUs have reported carrying out recent leakage testing. (columns (41c), (41d), (41e))

Table 11: Water supply – financial and efficiency

WATER UTILITY	WATER SUPPLY FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																								EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)							
	Total Revenue Water (excl. Capital Works Grants)		Revenue per property	Residential Revenue			Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Return on Assets			Operating Result		Cross Subsidies		Externalities (Fees to State Water)	Loan Payment			Operating Cost (OMA)				Management Cost			
	($'000)		($)	Res Revenue (% of rates & charges) (%)*	Res Water Supplied (% of water supplied excluding water	Res Revenue (% of Usage Charges) (%)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			see also Table 6 Col (12)						($/property)		Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)	($/property)			($/property)				($/property)			
	(57) F 1		(57a) F5	(58)	(59)	(58a) F4	(60)	(61) F9	(62)	(63) F22			(63a) F 17			(63b)			(65)		(64a)	(64b)	(66)	(66a)			(67) F 11**				(68)+			
	07/08	08/09		08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	08/09	08/09	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
Sydney Water	738,000	907,503	*517*							45	62	103	1.9	-0.5	1.7												224	260	336	299				
Hunter Water	87,300	90,099	*406*							23	30	32	3.5	2.0	2.5												147	210	186	184				
Sydney Catchment Authority	160,000	176,278																																
LWUs with > 10,000 Properties																																		
1 Gosford	23,600	28,900	412	*90*	75	75	463	581	8,620	2	5	8	-0.4	-0.3	0.3	-0.1	-0.4	0.2	-53	-36			0.003	14	25	43	277	285	270	284	156	138	130	127
2 Wyong	29,200	31,200	524	*90*	71	74	463	649	10,523	10	15	18	3.2	0.0	-0.6	2.8	-0.9	-1.8	-291	-189			0.02	134	169	137	236	314	276	360	116	124	107	152
3 Shoalhaven	15,200	16,500	362	64	56	75*	286	458	9,222	-8	-8	-2	0.6	-0.3	-0.3	1.1	-0.1	-0.8	-17	-65			0.02	12	15	21	203	219	233	260	110	113	119	124
4 Rous (Bulk Supplier) (NO SGE)	12,300	13,800	303	9			316	451	9,492	6	10	11	0.3	-0.2	-0.4	0.4	-1.2	-1.1	-248	-115			0.05	37	84	89	187	143	159	182	95	67	73	85
5 MidCoast (Unfiltered)	18,200	18,900	522	77	68	75	297	478	12,647	-4	6	23	2.4	0.2	0.8	3.7	-3.3	-1.7	-257	-181			0.29	72	120	203	260	258	326	285	51	53	79	84
6 Tweed	20,800	18,300	578	77	73	73*	343	528	15,176	-8	-5	6	1.4	1.3	0.2	1.9	1.6	-0.2	143	-54			0.02		475	78	257	289	287	303	138	142	142	153
7 Port Macquarie-Hastings (Unfiltered)	16,700	21,500	719	86	75	74	348	492	15,636	1	1	1	1.1	0.7	1.7	0.9	0.5	0.3	-62	-77	55		0.03	62	54	55	339	282	239	251	104	94	100	109
8 Riverina (Groundwater) (NO SGE)	16,700	17,700	626	73	62	80*	144	247	8,388	-8	-7	0.0	5.1	3.4	3.4	4.3	3.9	3.7	165	140				253		0	255	277	283	303	73	75	81	85
10 Coffs Harbour (Unfiltered)	16,500	16,200	680	76	72	76	295	379	14,940	-5	13	27	2.9	3.7	1.7	3.5	1.6	-0.9	129	-117			0.004	333	353	579	215	227	236	277	102	106	115	117
11 Albury City	7,790	7,860	354	72	72	64	187	324	15,034	-3	-2	0.0	-0.3	-0.8	-1.6	0.0	-0.7	-1.5	-140	-123	34		3.9	3	3	0	222	228	270	270	101	94	114	115
12 Fish River WS (Unfiltered, Bulk Suppli	7,154	*7,154*				0		*100*	*4,000*	-13						0.1																31	31	*31*
13 Tamworth Regional	14,000	15,100	740	65	57	61	156	279	13,698	-14	-8	-8	2.7	3.0	2.1	3.5	3.3	2.6	240	204			12.4	32	35	42	346	340	333	396	105	115	109	129
14 Clarence Valley	30,300	15,300	735	67	60	69	218	249	11,737	2	10	7	1.1	9.9	1.7	10.2	9.7	1.1	1018	138			0.03	49	54	171	291	246	244	290	171	143	153	116
15 Eurobodalla (Unfiltered)	12,100	12,900	670	83	74	45*	178	255	12,497	-10	0	-2	1.5	2.4	2.3	2.2	3.0	2.2	177	140			0.04	13	8	11	317	329	326	312	171	155	160	158
16 Wingecarribee	7,980	9,050	503	81	75	71	164	292	15,436	-18	-16	-7	3.8	0.4	0.0	4.6	1.4	0.3	-21	-11				13	0	3	199	249	292	297	101	108	120	127
17 Queanbeyan (Reticulator)	10,300	9,670	613	*90*	75	58*	105	168	10,979	-7	-11	-11	0.6	2.2	-0.7	1.1	2.6	-0.5	152	-81			0.02	0	0	0	375	363	349	497	96	97	110	112
18 Dubbo	8,470	9,220	572	75	70	75	167	195	13,443	10	11	12	1.1	-0.3	0.2	0.8	-1.0	-0.5	-107	-76			5.4	64	89	112	385	444	437	419	149	162	150	159
19 Orange	10,200	12,600	793	*90*	75	77*	131	230	14,479	-6	-8	-7	4.6	1.0	2.5	5.1	1.2	2.5	-40	85			0.1	22	27	61	325	300	317	333	113	109	128	144
20 Goulburn Mulwaree	6,790	7,150	678	73	59	46*	131	217	21,248	4	3	3	1.2	0.5	0.3	0.6	1.5	-0.5	-175	-84			0.1	93	134	172	276	340	330	360	109	108	92	106
21 Bathurst Regional	8,990	10,600	712	67	62	56*	126	202	14,307	-6	-6	-7	0.5	1.1	1.9	0.9	-1.6	2.3	133	210			0.1	31	11	15	360	403	373	390	139	147	138	143
22 Lismore (Reticulator)	6,360	7,010	502	74	70	73	74	140	10,542	-4	-1	0.1	0.6	-1.6	-1.7	0.8	2.7	-1.8	-117	-101			0.02	6	3	4	309	306	340	377	77	80	97	91
23 Bega Valley (Unfiltered)	7,980	8,660	617	76	70	73	100	164	11,472	-14	-15	-15	12.8	1.6	1.5	0.8	-0.2	2.4	185	168			1.3	1	1	1	336	348	336	371	177	167	162	174
24 Ballina (Reticulator)	5,980	6,150	439	74	75	66	83	141	9,346	-10	-11	-11	0.1	-1.2	-2.4	0.7	-0.8	-1.6	-17	-97			0.1	0	0	0	321	317	317	383	88	90	102	108
25 Kempsey (Groundwater)	6,710	7,300	594	68	61	42*	224	317	26,800	5	3	4	1.1	-0.4	-0.5			-0.9	-135	-223			1.6	123	134	164	264	277	305	334	94	120	114	118
26 Country Energy	12,300	12,500	1,193	51	62	57*		*60*	*5,600*							0.7	-0.5		62	97				0	0	0	944	869	800	800	385	366	210	216
27 Byron (Reticulator)	4,620	5,680	533	75	68	73*	49	75	6,741	-19	-16	-16	0.2	-1.3	0.2	1.6	0.1	0.0	-59	-31			0.02	2	2	2	340	353	375	390	107	132	126	130
28A Goldenfields (Reticulator) (NO SGE)	5,500	6,190	620	67	42	78*	109	*182*	*16,100*	-13		0.0	-0.3	-1.3	-0.9	0.4	-0.5	-0.1	-2	-18							748	700	657	632	96	83	107	144
28B Goldenfields (Bulk Supplier) (NO SGE	5,430	5,690					104	*152*	*8,000*	-12		0.0	0.4	-0.5	-0.8	1.3	0.5	-0.5	-30	-30							220	254	216	234	43	40	49	50
Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties										-6	-2	0	1.1	0.5	0.3				-19	-60							300	303	317	334	108	114	117	125
LWUs with 3,001 - 10,000 Properties																																		
29 Armidale Dumaresq	4,480	4,730	559	*90*	68	68	102	108	12,543	-2	1	6	-0.9	-0.3	0.3	-0.7	-0.2	-0.1	-262	-198	4		0.1	31	35	58	402	467	526	474	174	211	264	249
30 Griffith	6,090	6,060	736	69	67	77*	99	115	11,920	-14	-7	0	3.5	0.4	0.1	4.4	0.0	-0.2	1	-24						0	503	562	551	594	205	219	228	252
31 Lithgow	4,030	3,710	474	85	62	43*	27	57	7,113	-9	-8	-9	-5.2	-1.4	1.0	-4.0	-0.2	1.5	-6	51					155	8	338	467	473	358	189	218	173	47
32 Mid-Western Regional	4,510	4,080	574	79	64	72	63	100	14,369	2	1	0	1.3	0.7	-0.8	1.2	0.6	-0.9	4	-79				91	86	84	397	419	403	450	131	128	118	173
33 Richmond Valley	4,270	4,130	593	56	43	73*	49	79	11,014	-8	-9	0	2.3	0.4	-0.6	2.9	1.1	-0.6	-7	-225			0.1		0	0	390	458	439	448	164	208	206	221
34 Nambucca (Groundwater)	2,350	2,950	476	64	55	79	44	74	11,359	-16	-15	-12	2.1	0.9	1.5	3.0	0.9	1.2	55	84			0.7	3	1	9	169	186	200	226	70	73	80	101
35 Singleton	4,110	4,240	674	69	62	58	47	80	12,140	-26	-25	0	4.7	0.9	0.2	6.8	2.4	2.2	147	134			14.4		0	0	315	352	371	432	97	98	109	135
36 Parkes	5,400	6,180	1,057	75	27	51	184	126	20,482	-22	-20	0	1.9	0.7	0.6	4.0	-4.7	-0.2	-582	-67			8.4		0	0	483	551	570	557	77	72	70	78

Table 11: Water supply – financial and efficiency (continued)

	WATER UTILITY	WATER SUPPLY FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																						EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)							
		Total Revenue Water (excl. Capital Works Grants)		Revenue per property	Residential Revenue			Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Return on Assets			Operating Result		Cross Subsidies		Externalities (Fees to State Water)	Loan Payment			Operating Cost (OMA)				Management Cost			
		($'000)		($)	Res Revenue (% of rates & charges) (%)*	Res Water Supplied (% of water supplied excluding water	Res Revenue (% of Usage Charges) (%)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			see also Table 6 Col (12)			($/property)			($/property)		Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)	($/property)			($/property)				($/property)			
		(57) F 1		(57a) F5	(58)	(59)	(58a) F4	(60)	(61) F9	(62)	(63) F22			(63a) F 17			(63b)			(65)		(64a)	(64b)	(66)	(66a)			(67) F 11**				(68)+			
		07/08	08/09		08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	08/09	08/09	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
37	Inverell	3,570	3,470	659	79	67	50*	44	73	13,478	-7	-6	-4	3.1	1.0	0.6	3.4	-0.6	1.4	-48	119	10		0.6	52	52	52	369	390	479	486	119	123	140	138
38	Moree Plains (Groundwater)	2,850	3,710	839	74	75	78*	42	65	14,187	1	5	16	1.7	-0.2	0.6	2.0	-3.3	-0.3	-279	-98			1.3	23	276	120	593	474	496	596	197	151	183	252
39	Cowra	4,170	4,340	826	66	44	48	40	93	16,882	1	3	4	1.4	0.8	-1.4	1.5	0.3	-1.9	-16	-202			9.2	8	53	60	510	524	557	679	288	281	273	366
40	Central Tablelands (NO SGE)	3,440	4,070	773	45	43	72	55	109	19,593	6	6	5	0.9	-0.2	0.3	0.4	-0.6	-0.7	-91	-110				113	111	110	465	401	383	439	201	184	186	221
41	Muswellbrook	5,090	4,680	881	66	67	67*	42	64	11,348	-15	-15	-16	3.8	4.5	2.3	5.1	5.8	2.6	463	218				27	78	78	435	549	424	503	117	131	128	149
42	Corowa	2,090	3,600	752	69	58	56*	36	52	10,152	-13	-9	-5	-1.7	-2.7	2.6	-0.7	-2.7	0.8	-265	44			12.9		0	0	269	352	422	366	123	130	185	189
43	Tumut	2,060	2,030	459	76	63	73	34	51	11,008	-7	-5	0	0.3	-0.7	-1.2	0.9	-0.2	-1.1	-12	-122			2.6		3	0	262	321	340	342	83	88	78	58
44	Gunnedah (Groundwater)	2,350	2,640	584	84	58	65	31	50	11,330	-12	-11	0	3.9	2.6	2.8	4.8	2.3	2.9	147	189			0.2	15	15	7	232	237	244	240	71	69	63	69
45	Upper Hunter	3,170	3,310	789	79	59	52*	23	35	7,681	-28	-26	0	6.7	3.6	1.9	9.6	6.0	4.6	229	244			0.1		0	0	364	369	441	532	139	151	157	162
46	Narrabri (Groundwater)	1,370	1,470	335	90	64	60	11	48	10,834	-35	-35	-33	-1.2	-2.5	-2.9	2.9	-6.0	-2.1	-870	-64			1.5	2	4	4	195	292	297	304	58	92	97	81
47	Bellingen (Unfiltered)	1,880	2,070	515	90	59	51	24	40	9,569		-30	0		0.1	0.9		1.9	3.0	88	155			0.5		0	0	235		319	304	125		189	174
48	Leeton	2,130	2,550	651	74	62	64*	23	51	12,049	-15	-17	-18	3.5	-1.4	-0.7	3.9	0.1	0.3	-15	-28				6	6	4	357	413	436	500	93	166	191	114
49	Young (Reticulator)	2,320	2,410	526	64	61	69*	15	25	5,718	-17	-18	-18	4.0	3.0	0.7	5.3	3.8	0.6	20	5				9	9	8	313	362	294	246	35	35	35	49
50	Cooma-Monaro	2,160	2,670	698	82	75	49*	23	43	10,693	-26	-18	0	6.7	0.7	2.4	9.2	0.4	3.2	16	183					0	0	334	372	428	438	147	118	170	175
51	Forbes	1,850	2,010	571	87	72	63	20	50	14,354	-21	-23	-25	2.2	-1.3	-0.9	3.4	0.7	1.3	37	73			13.1	33	34	29	298	355	410	400	46	61	59	52
52	Snowy River (Unfiltered)	1,970	2,070	506	90	70	21	25	38	13,355	1	1	-3	0.6	-1.8	0.1	0.8	-1.9	0.1	-125	8			0.2	17	37	34	267	264	432	314	117	81	134	130
53	Berrigan (Dual Supply)	2,450	2,580	741	82	75	39	28	41	11,458	-6	-7	-5	1.7	1.9	2.3	2.1	2.2	2.5	128	138			4.6	65	94	57	338	379	411	415	97	97	97	100
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties										*-12*	*-9*	*0*	*2.0*	*0.4*	*0.6*				*-6*	*8*							*338*	*385*	*424*	*438*	*119*	*125*	*140*	*138*
	LWUs with 1,501 - 3,000 Properties																																		
54	Deniliquin	2,040	2,030	607	80	75	29*	25	40	11,651	-18	-16	-13	-0.1	-0.3	0.2			1.2	-177	-263			11.0	25	23	21	446	444	489	443	200	216	249	228
55	Warrumbungle	1,450	2,100	636	90	69	49	20	49	14,838	-13		-5	-4.0		-0.5	0.0	1.3	-0.3		-79					0	5		383	383	466		60	60	96
56	Yass Valley	1,630	1,640	539	90	75	63*	23	50	16,177		-14	0		-0.7	-0.7	-2.9		-0.7	-69	-69			0.3		2	1			345	356			149	156
57	Wellington	1,750	2,140	735	67	62	67	16	26	8,830	17	26	33	4.4	-0.3	1.1		-0.7	-0.5	-101	-55			1.4	185	218	167	412	430	483	503	120	149	175	171
58	Cootamundra (Reticulator)	1,110	1,300	448	82	75	78	3	13	4,486	-20	-21	0	-1.4	-5.8	-6.8	3.6	-1.9	-6.5	-64	-74					0	0	318	310	265	245	55	42	45	49
59	Lachlan	1,860	2,060	731	75	64	66*	80	52	18,783		-12	0		-0.4	-0.3	-1.2	-5.5	0.0	34	-9			10.8		0	0	402		574	491	70		77	77
60	Glen Innes Severn	1,180	1,030	357	90	75	74*	16	33	10,271	-12	-12	-12	-0.1	-0.7	-3.4		0.4	-2.4	-45	-159				1	1	1	295	287	293	364	103	99	107	172
61	Liverpool Plains	1,100	1,190	471	90	66	45	44	25	9,764	-9	-6	-6	-3.7	-2.5	-0.7	0.0	-0.4	-0.4	-235	-70				12	26	32	293	379	331	321	84	119	88	*88*
62	Narromine (Groundwater)	970	1,110	502	90	46	69*	27	16	6,812	-40	-40	0	6.5	2.1	0.9	-2.1	-2.1	1.3	93	151			2.2		0	0	322	357	345	328	103	110	101	140
63	Narrandera (Groundwater)	1,150	1,380	669	80	64	60	8	15	6,583	-38	-32	0	5.5	3.0	4.5	11.1	4.7	4.9	-168	147			5.2		0	0	336	370	362	402	91	114	118	138
65	Murray (Dual Supply)	1,470	1,680	573	78	68	56*	29	39	12,462	3	3	2	2.3	0.2	0.5	9.9	3.0	0.3	-23	27			5.1	76	115	63	306	319	340	353	98	108	127	112
67	Cobar	1,330	1,700	778	90	54	65*	15	23	9,966	-8	-4	0	3.5	-1.1	0.9			1.0	-25	123			0.3		0	0		527	546	538	37	47	34	27
66	Cobar WB (Bulk Supplier)	1,400													-2.1		2.2	-0.1																	
68	Tenterfield	920	1,140	574	78	64	49	12	36	16,977	-7	-4	-3	-0.9	-2.6	-2.3			-2.6	-271	-166			0.3		0	5	374	384	451	406	179	171	191	182
70	Kyogle	810	880	481	64	70	51	7	19	9,721	-13	-10	0	4.1	2.2	2.3	3.6	0.0	2.6	61	61			0.2		0	0	259	304	292	292	112	117	104	140
71	Palerang	1,580	1,730	900	90	64	42	14	25	12,460		-14	-19		4.3	5.1		-2.1	5.9	372	421			0.1		20	10	372		354	339	85		128	118
73	Upper Lachlan	1,400	1,270	665	90	54	40	11	22	11,555	-3	-4	-2	3.4	4.7	1.6	-0.4	-3.9	1.0	218	50				64	64	62	324	368	376	417	94	103	116	113
74	Wentworth (Dual Supply)	1,820	1,680	751	89	75	60*	17	21	8,744	0	-5	-6	2.5	2.8	1.4	5.1	3.0	1.5	160	85			16.8	145	135	161	472	438	360	401	93	92	90	74
75	Coonamble (Groundwater)	380	410	247	90	63	73	6	14	8,463	-45	-45	0	-2.9	-8.3	-5.0		5.2	-0.4	-101	-12			0.4		0	0	186	262	377	263	20	28	154	48
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties										*-12*	*-12*	*0*	*2.1*	*-0.3*	*0.3*				*-45*	*-11*							*324*	*374*	*361*	*382*	*96*	*106*	*112*	*116*

Table 11: Water supply – financial and efficiency (continued)

		WATER SUPPLY FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																						EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)							
	WATER UTILITY	Total Revenue Water (excl. Capital Works Grants)		Revenue per property	Residential Revenue			Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Return on Assets			Operating Result		Cross Subsidies		Externalities (Fees to State Water)	Loan Payment			Operating Cost (OMA)				Management Cost			
		($'000)		($)	Res Revenue (% of rates & charges) (%)*	Res Water Supplied (% of water supplied excluding water	Res Revenue (% of Usage Charges) (%)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			see also Table 6 Col (12)						($/property)		Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)	($/property)			($/property)				($/property)			
		(57) F 1		(57a) F5	(58)	(59)	(58a) F4	(60)	(61) F9	(62)	(63) F22			(63a) F 17			(63b)			(65)		(64a)	(64b)	(66)	(66a)			(67) F 11**				(68)+			
		07/08	08/09		08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	07/08	08/09	08/09	08/09	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
LWUs with 200 - 1,500 Properties																																			
76	Harden (Reticulator)	1,330	1,460	833	43	75	77*	14	28	15,511	-1	-2	-3	0.6	-0.6	-0.3			-0.2	-51	-20			0.1	37	107	107	589	558	557	387	74	80	103	78
79	Walgett (Dual Supply)	1,190	1,280	804	*90*	64		42	27	14,467	-17	-19	-21	-1.7	-2.1	-0.1	1.6	-3.0	0.0	-145	-13			21.6	30	17	13	684	582	664	545	125	209	252	128
80	Greater Hume	610	840	500	71	71	71	15	23	13,138	-5	-6	0	-0.3	-1.8	-0.7	2.1	-0.1	-0.2	-117	-21			0.9		0	0	246	379	374	388	88	77	78	79
81	Gwydir	1,180	1,100	758	86	67	37	5	13	8,773		19	12		2.1	3.6			1.9	-364	58			1.8		116	181	366		562	496	82		116	114
82	Gloucester	1,060	1,090	653	82	66	64*	8	17	9,396	-3	-5	0	0.0	-2.0	1.2	0.6	-0.6	1.4	-102	48			0.3		0	0	397	468	543	423	47	103	94	88
83	Oberon (Reticulator)	910	810	615	45	37	69*	7	8	6,219	-2	4	2	2.6	-0.1	-1.7	-1.6	-2.0	-1.7	-301	-55		58		84	87	86	240	378	567	586	52	65	89	141
84	Gilgandra (Groundwater)	670	690	504	80	72	66*	9	14	9,967	-13	-16	0	3.7	1.2	0.1			1.0	118	34			2.4	8	0	0	252	235	251	335	30	30	31	59
85	Uralla	590	580	368	*90*	71	41	15	23	14,744	-5	-3	0	-2.3	-0.5	-0.6	0.1	-1.3	-0.5	-214	-76			0.1		0	0	333	417	401	393	134	88	148	129
86	Hay (Dual Supply)	660	720	548	71	65	83*	8	15	11,115	-16	-17	-16	-0.1	-0.9	-0.5		1.0	0.5	24	8			10.2		0	0	338	355	410	410	85	83	93	132
87	Bourke (Dual Supply)	1,160	1,230	1,027	*90*	75	86*	38	22	18,480	1	0	-1	1.4	-3.3	-0.3	0.5	-2.0	-0.2	-177	-77			0.7	132	177	154	613	646	725	670	129	70	92	179
88	Wakool (Dual Supply)	1,110	1,230	870	64	49	72*	27	33	22,350	4	3	1	2.1	0.4	0.2	2.6	0.2	0.1	10	-36			10.4	278	223	182	390	479	448	525	62	74	73	71
89	Bogan	810	700	675	*90*	71	54	10	25	24,154	-1	0	0	-2.3	-3.0	-3.8	4.5	2.3	-3.6	-277	-368			0.2	41	8	0	708	923	771	735	256	290	176	182
90	Guyra	880	810	688	*90*	60	55	12	15	12,152	-5	-4	-5	2.1	2.1	0.9	-1.9	-0.1	1.0	-271	121			0.1	2	2	2	342	370	420	430	61	100	93	88
91	Cabonne	750	870	757	75	75	69	18	40	33,024	-13	-14	0	-0.5	-1.7	-0.6	1.0	0.4	0.2	-154	-10			1.8	18	0	0	372	557	515	424	112	119	128	151
92	Carrathool (Groundwater)	920	*920*			64	50*		*63*	*54,500*	-2	-1		0.0	-1.7					-662				8.4	34	37		721	752	782	*782*	65	133	190	*190*
93	Tumbarumba	630	*630*	*552*	72	64	50*	10	18	14,590	-6	-5	-4	1.8	0.8	0.4	1.4	-3.3	0.4	72	8			0.6	9	9	54	224	258	300	323	80	112	121	129
94	Gundagai	440	560	531	52	51	72	8	14	13,548	-9	-10	0	1.2	-2.0	-1.6			-0.9	-102	-63			6.0		0	0	342	356	355	416	81	80	80	90
96	Warren (Dual Supply)	430	450	468	88	75	46	6	12	11,060	-3	-4	-5	-0.4	-0.8	-1.1	1.9	0.2	-0.9	-57	-73			9.1	30	25	19	323	340	349	379	70	91	93	101
97	Bombala	460	480	573	86	75	28	6	13	14,105	-14	-16	0	1.1	1.1	-0.1			0.5	138				0.6		0	0	343	366	271	396	114	137	71	92
98	Walcha	480	460	516	*90*	68	72*	14	15	16,771	-3	-3	0	0.8	-0.5	-1.1	0.0	-2.7	-0.9	-213	-239			0.1		0	0	422	442	478	558	98	106	126	188
100	Balranald (Dual Supply)	630	460	536	82	75	81*	10	14	15,010	11	13	13	13.1	0.3	-1.6	2.1	2.6	-2.3	-51	-272			12.3	214	185	145	397	489	479	479	67	126	124	128
101	Murrumbidgee (Groundwater)	310	330	362	79	64	55	2	5	5,816	-23	-28	0	2.1	-1.9	-2.9	1.5	-0.8	-0.6	4	-22					0	0	195	211	254	282	100	93	101	93
103	Central Darling (Dual Supply)	590	670	971	*90*	75	89*		*15*	*19,900*	-8	-7	0	0.3	0.0	0.9	0.1	-1.6	0.0	-187	-73							560	514	565	575	75	75	75	*75*
104	Boorowa	550	*550*	*884*	*90*	70	57*	5	11	17,346	3	-2	-3	3.6	3.1	2.1	2.3	1.4	2.1	245	71			0.3	97	97	96	292	292	385	460	37	37	42	44
105	Brewarrina	610	640	1,329	76	64	0	5	11	19,822	-10	-12	0	4.4	-0.2	-1.5	1.8	-1.4	-1.2	-8	-137	401		0.7		0	0	802	821	1001	1173	71	96	233	265
106	Jerilderie (Dual Supply)	320	340	736	64	74	83*	4	8	15,454	-12	-14	0	1.4	0.8	0.5	-0.4	-0.7	1.6	104	97			6.8		0	0	480	425	412	462	87	86	84	101
	Medians (% of LWUs basis) for 200 to 1,500 Properties										-7	-5	0	1.1	-0.5	-0.3				108	-22							381	425	463	445	80	91	93	108
Median All LWUs (% of LWUs basis)							*Current Replacement Cost $/Assessment*			*12,050*		*Net D/E*	*0.0*		*ERRR*	*0.2*							*Loan payment $/prop*		*6*		*OMA $ per property*		*$400*		*Management Cost*		*$130*	
Median All LWUs (Statewide basis)										*11,900*			*0.0*			*0.3*									*52*			*$330*				*$127*	
	Totals for all LWUs (including bulk suppliers)			*$490 M Total Water Supply Revenue*					*Total CRC $10,700 M*																										

* Where the residential revenue from usage charges is reported to be greater than 90%, a maximum value of 90% has been adopted. This is shown in ***italics bold*** in column (58).

** The Operating Cost and Total Cost shown in the table exclude the purchase cost of water but include part of the operating cost of the bulk water provider, apportioned according to the ratio of water purchased to total water supplied to all customers. This differs from the NWI definition, as indicated in Note 15 on page 27.

\+ If the reported management cost is less than $20/property or not reported, the previous year's management cost has been adopted in column (68) and is shown in ***italics bold***. In such cases, the OMA cost per property has not been increased to include this adopted management cost.

Table 12: Water supply – health and levels of service

WATER UTILITY		HEALTH													LEVELS OF SERVICE																	
		Risk Based Drinking Water Quality Plan		Water Quality Compliance (%)											Water Quality Complaints (per 1000 properties) (73) C 9			Water Service Complaints (per 1000 properties) (74) C 10			Customers with Restrictions or Legal Action for non-payment of Bills per 1000 props		Average Frequency of Unplanned Interruptions (No./1000 properties) (77) C 17			Average Duration of Interruptions (Minutes) (78) C 15			Drought Water Restrictions (% of time) (78A)		
				Physical (69)			Chemical (70)			No. zones compliant (70a) H 4	Microbiological (E. coli) (71)			No. zones compliant (71a) H 2	% Pop'n with compliance (71b) H 3							Restrictions (75a) C18	Legal Action (75b) C19										
		Basis? (69a)	External Assessmnt (69b)	1996 NHMRC/ARMCANZ Guidelines			1996 NHMRC/ARMCANZ Guidelines				1996 NHMRC/ARMCANZ Guidelines																					
		H6	H5	*06/07*	*07/08*	*08/09*	*06/07*	*07/08*	*08/09*	*08/09*	*06/07*	*07/08*	*08/09*	*08/09*	*08/09*	*06/07*	*07/08*	*08/09*	*06/07*	*07/08*	*08/09*	*08/09*	*08/09*	*06/07*	*07/08*	*08/09*	*06/07*	*07/08*	*08/09*	*06/07*	*07/08*	*08/09*
	Sydney Water	ISO 9001	Yes				100	100	100	13 of 13	100	100		13 of 13	100	1	1	1	0	0.5	0.4	2.4	0	6	6	5	119	167	141			
	Hunter Water	ADWG	No				100	100	100	5 of 5	100	100		4 of 5	100	4	3	3	8	4	0.2	5.4	0.3	372	225	271	176	118	121			
	Sydney Catchment Authority																															
LWUs with > 10,000 Properties																																
1	Gosford			100	100	100	92	100	100	2 of 2	100	100	100	2 of 2	100	56	94	25			-	0	5.9	280	181	203	224	232	238	100	100	100
2	Wyong			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	7	3	5	2	2	4	0	0.7	33	39	61	150	202	210	100	100	100
3	Shoalhaven	HACCP		100	100	100	100	100	100	4 of 4	100	100	100	4 of 4	100	3	3	3		6	1	1	0		59	-		180	-	29	0	33
4	Rous (Bulk Supplier) (NO SGE)	ADWG		100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100		0.1	0.2		0	0.1	0	0	2	2	2	180	180	180	0	43	0
5	MidCoast (Unfiltered)	ADWG	Yes	100	100	100	91	92	93	3 of 4	100	100	100	4 of 4	100	31	27	9	52	27	2	6	2.1			-		348	-	0	0	0
6	Tweed	ADWG		100	100	100	93	100	100	3 of 3	100	100	100	3 of 3	100	1	1	0.8	32	23	20	0	0	47	34	9	120	120	120	0	0	0
7	Port Macquarie-Hastings (Unfiltered)	ADWG		100	100	100	91	100	87	4 of 5	100	100	100	5 of 5	100	6	6	9	22	22	18	0.1	0.1	12	7	11	180	210	178	100	100	100
8	Riverina (Groundwater) (NO SGE)	HACCP	Yes	100	100	100	100	100	100	13 of 14	100	100	100	14 of 14	100	3	4	2	3	9	13	1	0	83	54	34		114	334	42	75	100
10	Coffs Harbour (Unfiltered)	ADWG		100	100	100	100	100	100	3 of 3	100	100	100	3 of 3	100	3	3	8	25	26	40	2	0	37	20	24		120	120	100	0	0
11	Albury City	ADWG		100	100	100	100	100	100	4 of 4	100	95	100	4 of 4	100		0	0.5	8	8	5	0	0			-		227	180	66	100	100
12	Fish River WS (Unfiltered, Bulk Supplier)			100	100	100	94	100	100	1 of 1	100	100	100	1 of 1	100		0	0.5		0	0	0	0	0		0.3	780	2550	2160	100	100	100
13	Tamworth Regional			100	100	100	94	100	100	6 of 7	100	100	100	7 of 7	100	2	0	-	43	44	43	2	0		7	-			-	90	100	26
14	Clarence Valley			100	100	100	80	100	100	5 of 5	100	97	100	4 of 5	99	8	9	3		0	12.4	0	0	51		-		120	120	0	0	0
15	Eurobodalla (Unfiltered)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	0	0.3	-	0	0	0.3	0	0	2	3	2		300	-	56	0	61
16	Wingecarribee			100	100	100	93	100	92	1 of 2	100	100	100	2 of 2	100	19	10	5	44	31	36	7	3	59	60	46		240	120	100	100	100
17	Queanbeyan (Reticulator)				100	100		100	100	1 of 1	100	100	100	1 of 1	100	0	0	0	34	39	5	0	12			6		210	240	100	100	100
18	Dubbo			100	100	100	100	100	100	1 of 1	97	100	100	1 of 1	100	0	0	0.4	1	3	2	0	0	26	20	24	112	179	138	0	50	25
19	Orange			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	2	1	2	53	81	62	0.8	0	123	116	175		180	180	100	100	100
20	Goulburn Mulwaree			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100		11	6	75	42	35	5	0			-	240	90	180	100	100	100
21	Bathurst Regional			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	11	24	14	79	55	74	-	-	5	3	2		120	120	0	0	0
22	Lismore (Reticulator)			100	100	100	100	100	100	0 of 1	100	100	100	1 of 1	100	3	0	2	4	58	72	0	0	48	42	49	150	208	351		0	0
23	Bega Valley (Unfiltered)			100	100	100	100	100	100	6 of 6	100	100	100	6 of 6	100	4	2	2	10	4	3	0	1			-		180	180	17	0	0
24	Ballina (Reticulator)				100	100		100	100	1 of 1	100	100	100	1 of 1	100		0.0	0	15	0	0.9	0	-	7		-	120	120	120	0	0	0
25	Kempsey (Groundwater)	NHMRC		100	100	100	100	100	100	6 of 8	100	100	100	7 of 8	100	1	0	0.5	1	0	0.2	1	0		69	114		111	100	0	0	0
26	Country Energy			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	0	0	0.1	1	0	0.2	1	0			-		60	60	0	0	0
27	Byron (Reticulator)	ADWG		100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	4	0	0.4	4	1	0	1.7	0	0	10	9		120	120	0	41	0
28A	Goldenfields (Reticulator) (NO SGE)	ADWG		100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	4	7	7	68	66	46	5	0	105	159	150		180	191	43	98	100
28B	Goldenfields (Bulk Supplier) (NO SGE)	ADWG		100	100	100	100	100	100	3 of 3	100	100	100	3 of 3	100						0									0	0	0
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties			*100*	*100*	*100*	*100*	*100*	*100*		*100*	*100*	*100*			3	*2*	*2*	5	5	*5*			37	*36*	*24*	150	*179*	*158*	42	*20*	*25*
LWUs with 3,001 - 10,000 Properties																																
29	Armidale Dumaresq			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	1	0	0		0	0	0	0			-			-	0	0	0
30	Griffith	ADWG		100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	1	1	0.6	4	6	39	2.4	36	25	27	24	180	180	180	49	100	100
31	Lithgow			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100			6			2	0	0			13			120	100		100
32	Mid-Western Regional			100	100	100	100	100	100	3 of 3	100	96	100	2 of 3	31		1	2	41	34	49	-	-	41	34	49	120	120	120		0	0
33	Richmond Valley			100	100	100	90	90	100	1 of 1	100	100	100	1 of 1	100	4	17	0	6	1	1	-	-		4	-	120	120	-	5	40	0
34	Nambucca (Groundwater)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	3	1	1.3	9	10	10	2	0		8	-	120	120	120	100	100	100
35	Singleton			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	1	2	1.0	2	30	6	-	15	333	320	318	120	120	120	100	95	0
36	Parkes			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100		4	0.9	15	6	7	0	1				120	120	120	100	100	100
37	Inverell			100	100	100	100	100	100	2 of 3	100	100	100	3 of 3	100	2	2	0.9	4	4	3	4	0	4	4	2	60	60	50	0	0	0
38	Moree Plains (Groundwater)	aster Directora		100	100	100	100	100	100	5 of 6	97	100	100	3 of 6	95		3	10	97	95	56	0	0	706	453	739	60	65	60	0	0	8
39	Cowra			100	100	100	100	100	100	1 of 1	100	100	97	0 of 1		37	39	80	27	56	25	0	0		8	1	180	180	180	100	100	100
40	Central Tablelands (NO SGE)			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	10	4	2	7	21	9	5	-	60	60	49	240	240	240	71	16	0
41	Muswellbrook	ADWG		100	100	100	100	86	100	2 of 3	100	100	100	3 of 3	100	2	32	14	59	44	47	0	0	83	10	11	60	103	167	100	51	0

Table 12: Water supply – health and levels of service (continued)

	WATER UTILITY	HEALTH														LEVELS OF SERVICE																	
		Risk Based Drinking Water Quality Plan		Water Quality Compliance (%)												Water Quality Complaints			Water Service Complaints			Customers with Restrictions or Legal Action for non-payment of Bills per 1000 props		Average Frequency of Unplanned Interruptions			Average Duration of Interruptions			Drought Water Restrictions		
				Physical			Chemical				Microbiological (E. coli)					(per 1000 properties)			(per 1000 properties)					(No./1000 properties)			(Minutes)			(% of time)		
		Basis? (69a)	External Assessmnt (69b)	(69)			(70)			No. zones compliant	(71)			No. zones compliant	% Pop'n with compliance	(73) C 9			(74) C 10			Restrictions (75a) C18	Legal Action (75b) C19	(77) C 17			(78) C 15			(78A)		
		H6	H5	1996 NHMRC/ARMCANZ Guidelines			1996 NHMRC/ARMCANZ Guidelines			(70a) H 4	1996 NHMRC/ARMCANZ Guidelines			(71a) H 2	(71b) H 3																	
				06/07	07/08	08/09	06/07	07/08	08/09	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
42	Corowa			100	100	100	95	100	100	3 of 4	100	100	100	3 of 4	100	7	4	4	3	3	2	-	-	43	30	15	120	120	120	100	100	100
43	Tumut	ADWG		100	100	100		100	100	5 of 5	100	100	100	4 of 5	99		0	5		6	2	0	-			-	240	240	120	25	75	100
44	Gunnedah (Groundwater)			100	100	100	100	100	100	4 of 4	100	94	96	2 of 4	14	0	0	0.2	2	4	8	0	0	4	3	3	120	120	120	47	100	100
45	Upper Hunter			100	100	100	100	100	100	3 of 4	97	100	100	3 of 4	14	2	1	0.2	6	6	71	-	-	25	17	33	60	60	45	100	62	10
46	Narrabri (Groundwater)			100	100	100	100	100	100	6 of 6	100	100	100	5 of 6	99	23	30	19	9	30	30	-	-	23	90	23	180	120	120	27	0	23
47	Bellingen (Unfiltered)			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	2	1	2	23	29	23	0	0			-	120	120	120	0	0	0
48	Leeton			100	100	100	100	100	100	3 of 4	100	100	100	2 of 4	96	3	0	0			0	0	0		40	26		120	120	90	100	100
49	Young (Reticulator)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	4		0	5	6	9	7	1	20	25	26	120	120	120	0	100	100
50	Cooma-Monaro			100	100	100	100	100	100	3 of 3	100	100	100	2 of 3	5		3	1.3		6	22	2	-			-		180	180		100	100
51	Forbes	ADWG	Yes	100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	2	1	1.4	72	3	7	9	0	134	123	88	180	127	135	100	100	100
52	Snowy River (Unfiltered)			100	100	100	100	100	100	5 of 5	100	95	100	4 of 5	91		1	0	5	5	0	0	0	3	1		120	120		0	1	0
53	Berrigan (Dual Supply)			100	100	100	100	100	100	4 of 4	100	100	100	4 of 4	100	1	0	0	27	9	22	0	29	46	11	59	120	60	120	19	100	100
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties			*100*	*100*	*100*	*100*	*100*	*100*		*100*	*100*	*100*			*2*	*1*	*1*	*7*	*7*	*7*			*41*	*25*	*26*	*120*	*120*	*120*	*49*	*85*	*100*
LWUs with 1,501 - 3,000 Properties																																	
54	Deniliquin			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	17	4	3	94	17	33	0	0	6	2	15	180	60	60	96	100	100
55	Warrumbungle			41	100		100	100	100	1 of 8	96	100	100	7 of 8	90	38	1	0.9	2		0	0	-			-		120	120	100	100	100
56	Yass Valley			100	100	100	100	100	100	1 of 1	100	100	96	0 of 1		1	1	2	10	6	11	3	0	11	27	36	240	240	240	72	100	100
57	Wellington			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100		0	0	17	84	18	8	0	62	29	45	120	120	120	0	33	0
58	Cootamundra (Reticulator)					100			100				100						124	52	65	0	41		9	9	120	120	120	100	100	100
59	Lachlan	ADWG		100	100	100	78	100	100	1 of 3	100	100	100	2 of 3	89		7	6	4	7	6	28	0	11	23	16	60	90	85	100	100	100
60	Glen Innes Severn			100	100	100	100	100	100	2 of 2	95	100	97	1 of 2		4	8	4		5	3	-	-		70	42		180	180		0	8
61	Liverpool Plains			40	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100			0			41	0	0			28			85			100
62	Narromine (Groundwater)			100	100	100	50	100	100	2 of 2	100	100	100	2 of 2	100		0	0		151	199	0	5		64	51		180	180		13	0
63	Narrandera (Groundwater)			100	100	100	75	100	100	1 of 1	95	100	100	1 of 1	100		0	0.5		2	1	-	-		75	-		90	90		0	0
65	Murray (Dual Supply)				100	100		100	100	2 of 2	100	100	100	2 of 2	100	0	0	0			0	0	3	12	50	28	120	130	120	73	100	100
67	Cobar		Yes		100	100	100	100	100	1 of 1	100	100	100	1 of 1	100		0	0		6	5	0	0		2	1		120	60		100	100
66	Cobar WB (Bulk Supplier)																					0	0								100	100
68	Tenterfield			100	45	100	63	100	100	1 of 2	96	97	100	1 of 2	71	12	9	0	10	14	-	2	0	36	39	-	120	130	-	100	100	100
70	Kyogle			100	100	100	100	100	100	2 of 3	100	100	100	1 of 3	89	2	3	2	22	28	19	0	0	14	3	4	120	120	120	100	100	100
71	Palerang			25	100	100	100	94	100	3 of 3	100	93	100	3 of 3	100		3	4		70	59	0	0		33	31		100	100		100	100
73	Upper Lachlan			100	100	100	50	100	70	3 of 4	97	100	100	3 of 4	88		3	5	2	3	2	0	0	3	3	3	120	120	100	55	0	0
74	Wentworth (Dual Supply)			33	100	100	100	100	100	3 of 3	100	100	100	3 of 3	100		4	5			11	0	0			9			60			100
75	Coonamble (Groundwater)			100	100	100	100	100	100	3 of 3	100	100	97	2 of 3	19	13	19	0	119	100	91	0	6	63	63	60	60	60	60	0	0	0
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties			*100*	*100*	*100*	*100*	*100*	*100*		*100*	*100*	*100*			*8*	*3*	*1*	*18*	*18*	*18*			*13*	*29*	*28*	*120*	*120*	*100*	*84*	*100*	*100*

Table 12: Water supply – health and levels of service (continued)

	WATER UTILITY	HEALTH													LEVELS OF SERVICE																	
		Risk Based Drinking Water Quality Plan		Water Quality Compliance (%)											Water Quality Complaints			Water Service Complaints			Customers with Restrictions or Legal Action for non-payment of Bills per 1000 props		Average Frequency of Unplanned Interruptions			Average Duration of Interruptions			Drought Water Restrictions		
				Physical			Chemical			No. zones compliant	Microbiological (E. coli)			No. zones compliant	% Pop'n with compliance	(per 1000 properties)			(per 1000 properties)			Restrictions	Legal Action	(No./1000 properties)			(Minutes)			(% of time)		
		Basis? (69a)	External Assessmnt (69b)	(69)			(70)			(70a)	(71)			(71a)	(71b)	(73)			(74)			(75a)	(75b)	(77)			(78)			(78A)		
		H6	H5	1996 NHMRC/ARMCANZ Guidelines			1996 NHMRC/ARMCANZ Guidelines			H 4	1996 NHMRC/ARMCANZ Guidelines			H 2	H 3	C 9			C 10			C18	C19	C 17			C 15					
				06/07	07/08	08/09	06/07	07/08	08/09	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
LWUs with 200 - 1,500 Properties																																
76	Harden (Reticulator)					100			100	1 of 1			100	1 of 1	100		0	14	24	21	18	0	0	1	3	6	60	50	60	12	11	100
79	Walgett (Dual Supply)			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100			0			-	-	-			-			-	100		-
80	Greater Hume			100	100	100	100	100	100	2 of 2	100	97	100	2 of 2	100		0	0	6	6	6	0	-	63	30	30	180	180	90	41	100	100
81	Gwydir	ADWG		100	100	100	29	100	100	3 of 3	100	100	97	2 of 3	54	8	3	0			0	0	38	10	11	13	180	180	180	0	0	0
82	Gloucester			100	100	100	100	100	100	2 of 2	100	92	100	2 of 2	100	3	3	1	78	29	60	0	0	96	62	185	240	300	230	0	0	0
83	Oberon (Reticulator)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	2	3	3	11		7	0	0	36	31	14	120	120	120	100	100	100
84	Gilgandra (Groundwater)	ADWG		100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	11	7	7	22	26	29	0	0	22	37	36	120	100	100	0	0	0
85	Uralla			100	100	100	100	100	100	2 of 2	96	100	97	1 of 2	16	20	4	2	2	1	1	0	0	25	29	17	120	120	120	0	0	0
86	Hay (Dual Supply)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100		0	0	11	11	11	0	0	11	11	11	300	300	300	58	100	100
87	Bourke (Dual Supply)			100	100	100	100	100	100	1 of 1	90	95	100	1 of 1	100	4	0	4	31		29	0	0	826	823	815	180	180	120	38	0	0
88	Wakool (Dual Supply)			100	100	100	100	100	100	5 of 5	100	100	100	4 of 5	87		0	0			0	0	0							100	100	100
89	Bogan			100		100	100	100	100	1 of 1	100	100	92	0 of 1		1	1	0		19	48	0	0		19	10		180	180	100	100	0
90	Guyra			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	1		0.9	10		4	0	0	51		19	120		180	0		0
91	Cabonne			100	100	100	88	100	100	3 of 4	100	100	100	3 of 4	86	5	3	3	14	54	32	0	0	18	25	-	240	240	240	0	100	74
92	Carrathool (Groundwater)			100	100	100	71	100	100	2 of 5	100	96	94	3 of 5	87	3	2	4	5	28	39	0	0		394	-		180	180	0	100	100
93	Tumbarumba			100	100	100	80	100	100	2 of 2	100	100	91	0 of 2				9		2	3	-	-		13	22		100	120			100
94	Gundagai			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	6	5	5	5	9	5	0	11	28	28	29	60	120	60	100	100	100
96	Warren (Dual Supply)				100	100	50	100	100	3 of 3	100	100	97	1 of 3	89	18	11	18	32	23	71	0	4		3	3		240	120	0	8	0
97	Bombala			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100	4	1	1.2	2	1	2	0	0					18	20	48	53	-
98	Walcha			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100	2	0	1.1	5	5	4	0	0	2	6	7	120	60	70	48	0	0
100	Balranald (Dual Supply)			100	100	100	100	100	100	2 of 2	100	100	100	2 of 2	100		1	2	5	7	6	0	0					60	60	100	100	100
101	Murrumbidgee (Groundwater)			100	100	100	100	100	100	2 of 2	100	100	96	1 of 2				0	26	24	-	-	-	8		-	60		-	0	0	-
103	Central Darling (Dual Supply)			100	100	100	100	100	100	2 of 2	100	97	100	1 of 2	65	7	12	13	62	44	30	-	-	75	87	29	120	150	120	76	58	55
104	Boorowa			100	100	100	83	100	100	1 of 1	96	100	100	1 of 1	100		0	0		5	3	0	-		44	8		180	120		100	100
105	Brewarrina			25	100	100	100	100	100	2 of 2	97	100	100	2 of 2	100	4	2	0	4	4	2	-	-						30	0	0	0
106	Jerilderie (Dual Supply)			100	100	100	100	100	100	1 of 1	100	100	100	1 of 1	100		0	0	2		0	0	0	11	9		120	120	120	0	84	100
	Medians (% of LWUs) for 200 to 1,500 Properties			*100*	*100*	*100*	*100*	*100*	*100*		*100*	*100*	*100*			*4*	*2*	*1*	*10*	*10*	*10*			*24*	*28*	*17*	*120*	*150*	*120*	*25*	*58*	*74*
	Median All LWUs (% of LWUs basis)				*Physical*	*100*		*Chemical*	*100*			*Microbiological*	*100*				*Quality Complaints*	*1*		*Service*	*8*		*Interruption Frequency*	*24*		*Duration*	*120*		*Restrictions*	*100*	
	Median All LWUs (Statewide basis)					*100*			*100*				*100*					*3*		*Complaints*	*6*			*33*			*167*			*55*	
	Totals for all LWUs (including bulk suppliers)			*Physical 95 LWUs complied*			*Chemical 92 LWUs complied*				*E. coli 84 LWUs complied*											*26 LWUs applied restrictions*										
				(99% of 96 LWUs)			*(96% of 96 LWUs)*				*(88% of 96 LWUs)*											*for non payment of bills*										
				98% of 26500 samples complied			*98% of 23600 samples complied*				*99% of 20500 samples complied*																					
				18 LWUs reported having a Water Quality Plan																												
																								57 LWUs reported applying water restrictions (ie. 61% of LWUs reported water restrictions)										

NOTES:

1. *Where the compliance for physical or chemical water quality is equal to or greater than 95%, compliance is deemed to be 100%. Refer also to Note 6 on page 237.*
2. *Where the compliance for microbiological water quality is equal to or greater than 98%, compliance is deemed to be 100%. Refer also to Note 6 on page 237.*

Table 13: Water supply – benchmarking cost data (operation, maintenance and management)

WATER UTILITY		OPERATION & MAINTENANCE (O&M) COST[2]												MANAGEMENT COST				OMA[1]			O & M Cost Components for TYPE of ASSET															
		Total O&M Cost	Components (1) - Process					Components (2) - Type of Asset						Components				Total OMA Cost	Components		PUMPING STATION					WATER MAIN					TREATMENT				
			Maintenance	Operation	Energy	Chemicals	Bulk Purchase	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other Excl Bulk Purchas	Admin	Engineering & Supervision	Total Management Cost			Head works	Distri-bution	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical
		$/prop	($/property)					($/property)						($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($'000/pumping station)				(c/kL)	($'000/100km)			($/ML)	($/property)			
		(79a)	(79)	(80)	(81)	(82)	(82a)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91a)	(91)	(91b)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)
		2008/09						2008/09						2008/09				2008/09	2008/09		2008/09					2008/09				2008/09			
LWUs with > 10,000 Properties																																				
1	Gosford	157	47	87	11	10	2	25	44	13	21	25	27	116	11	127	71	284			11	60	10	18	32	24	305	263	42	140	9	7	10
2	Wyong	208	102	89	13	1	3	8	113	8	33	38	5	152		152	50	360	90	270	11	93	31	25	37	37	593	213	380	125	30	7	1
3	Shoalhaven	136	37	75	13	10	0	6	47	6	19	37	22	95	29	124	37	260	70	190	6	34	6	4	24	14	145	74	71	111	20	7	10
4	Rous (Bulk Supplier) (NO SGE)	96	35	34	10	17		15	8	4	12	40	18	57	28	85	36	182	100	82	5	135	2	13	120	3	459		459	169	14	10	17
5	MidCoast (Unfiltered)	201	83	89	21	8	0	1	79	11	30	26	54	60	24	84	33	285	114	171	12	42	4	8	30	31	233	46	187	104	15	4	8
6	Tweed	151	70	47	20	13	1	12	33	5	30	32	39	113	40	153	52	303	121	182	10	35	5	6	24	11	144		144	109	17	2	13
7	Port Macquarie-Hastings (Unfiltered)	142	53	65	20	4		8	18	2	49	9	55	76	32	109	53	251	100	150	24	78	17	29	32	9	71	6	65	42	0	4	4
8	Riverina (Groundwater) (NO SGE)	217	72	56	65	23	0		31	6	99	39	42	62	24	85	14	303	203	100	16	76	12	14	50	5	53	7	47	64	12	3	23
10	Coffs Harbour (Unfiltered)	160	69	62	12	9	8	21	57	11	22	20	21	70	47	117	43	277	105	169	8	74	27	5	42	21	224	41	183	75	10	1	9
11	Albury City	154	56	38	48	7	6		36	5	54	32	21	108	7	115	35	270	105	165	17	57	0	7	50	11	148		148	99	16	9	7
12	Fish River WS (Unfiltered, Bulk Supplier)																																			
13	Tamworth Regional	268	107	118	5	15	23	27	72	9	13	124		25	103	129	28	396	242	154	3	16	4	6	7	16	228	73	155	271	69	40	15
14	Clarence Valley	174	61	94	2	12	5	0	47	8	7	21	85	82	34	116	39	290	15	276	2	10	2	5	3	16	82	1	82	69	7	2	12
15	Eurobodalla (Unfiltered)	153	49	81	23	0		3	73	18	46	0	12	158		158	76	312	118	193	22	68	25	8	34	35	159	77	82	2	0	0	0
16	Wingecarribee	170	56	23	21	19	50	1	34	9	23	52	0	94	33	127	47	297	246	50	9	26	1	1	24	13	95		95	194	16	17	19
17	Queanbeyan (Reticulator)	385	18	64	1		302		71	6	4		1	112		112	44	497		497	2	16	2	10	5	28	403	335	68				
18	Dubbo	260	67	123	19	50			40	7	24	130	59	137	22	159	31	419			5	43	4	5	34	8	140	12	128	255	56	23	50
19	Orange	189	70	85	23	11		22	74		31	62		98	46	144	27	333	183	150	6	71	18		53	14	235	65	170	118	45	7	11
20	Goulburn Mulwaree	254	100	112	21	20	1	20	110	2	24	76	21	77	29	106	44	360	22	130	10	31		3	28	46	480	183	298	317	50	7	20
21	Bathurst Regional	247	102	103	6	37		30	97	6	7	100	8	92	51	143	37	390			2	10		2	9	25	402	141	261	257	46	16	37
22	Lismore (Reticulator)	286	26	73	0		186		51	2	6		40	70	21	91	36	377		377	2	16	12	3	1	20	211	211				
23	Bega Valley (Unfiltered)	197	74	100	23			20	79	18	52	29		108	66	174	61	371	163	208	18	38	11	10	17	28	192	100	92	101	21	8	
24	Ballina (Reticulator)	275	29	64	2		181		45	6	9	3	32	97	11	108	43	383	12	372	3	31	24		7	18	185	91	94	12	3		
25	Kempsey (Groundwater)	217	101	80	26	10		6	68	6	42	93	2	61	56	118	40	334	227	107	14	26	1	9	16	23	154	3	151	313	67	16	10
26	Country Energy	584	269	200	62	53			183	27	150	225		166	50	216	39	800	520	280	27	142	40	43	59	33	527	79	449	408	121	51	53
27	Byron (Reticulator)	259	33	58		4	164		22	18		18	38	110	20	130	46	390	23	366						8	98	56	42	63	13	2	4
28A	Goldenfields (Reticulator) (NO SGE)	488	155	56	28	1	249		125	11	57	1	45	72	72	144	26	632			10	26	3	11	13	23	68	20	48	2	0	0	1
28B	Goldenfields (Bulk Supplier) (NO SGE)	184	58	33	72	18	3		21	2	100	39	20	25	25	50	10	234	232	2	19	124	6	29	89	4	121	36	85	75	14	7	18
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties	*205*	*68*	*81*	*20*	*10*	*6*	*10*	*54*	*7*	*24*	*35*	*24*	*96*	*32*	*125*	*41*	*334*	*114*	*182*	*10*	*38*	*10*	*7*	*28*	*19*	*188*	*74*	*128*	*110*	*17*	*7*	*10*
LWUs with 3,001 - 10,000 Properties																							4													
29	Armidale Dumaresq	225	190		4	30		18	112	4	11	71	8	227	22	249	78	474	190	284	4	9		5	3	35	379		379	221		40	30
30	Griffith	342	74	170	7	36	55		83	1	8	150	45	209	43	252	31	594	588	6	1	17		3	14	10	139	90	49	184	95	19	36
31	Lithgow	311	173	4	3	4	128		88	19	11	59	5	47		47	16	358	54	304	4	87		64	23	30	150		150	199		55	4
32	Mid-Western Regional	276	126	107	11	25	8		105	20	21	122		101	72	173	70	450			9	14	6	0	7	42	225		225	493	98		25
33	Richmond Valley	227	44	68	10	35	70		45	5	12	79	16	121	100	221	50	448	246	202	3	12	0	1	10	10	166	54	111	179	37	7	35
34	Nambucca (Groundwater)	125	60	41	24			29		7	30	14	44	73	27	101	40	226	90	136	12	94		18	76					57		14	
35	Singleton	297	101	166	11	10	9		66	5	56	130	31	46	89	135	32	432	246	186	13	51	3	38	10	15	159	90	69	305	95	25	10
36	Parkes	479	112	161	143	29	34	11	47	7	235	85	61	68	10	78	7	557	139	418	21	171	32	35	105	4	60	48	12	76	45	12	29
37	Inverell	349	21	229	65	34			42	7	79	114	108	78	59	138	31	486	389	97	18					9	89	89		256	79		34
38	Moree Plains (Groundwater)	344	177	132	4	31		54	118	4	13	136	19	229	22	252	12	596	77	113	1	15	1	9	5	6	346	7	339	65	78	27	31
39	Cowra	313	132	77	37	28	39		115	15	49	95		363	3	366	79	679			11	14	3		11	25	134		134	206	56	11	28

Table 13: Water supply – benchmarking cost data (operation, maintenance and management) (continued)

	WATER UTILITY	OPERATION & MAINTENANCE (O&M) COST[2]												MANAGEMENT COST				OMA[1]			O & M Cost Components for TYPE of ASSET															
		Total O&M Cost	Components (1) - Process					Components (2) - Type of Asset						Components				Total OMA Cost	Components		PUMPING STATION					WATER MAIN				TREATMENT						
			Maintenance	Operation	Energy	Chemicals	Bulk Purchase	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other Excl Bulk Purchas	Admin	Engineering & Supervision	Total Management Cost			Head works	Distri-bution	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical
		$/prop	($/property)					($/property)						($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($'000/pumping station)				(c/kL)	($'000/100km)			($/ML)	($/property)					
		(79a)	(79)	(80)	(81)	(82)	(82a)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91a)	(91)	(91b)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)				
		2008/09						2008/09						2008/09				2008/09	2008/09		2008/09					2008/09				2008/09						
40	Central Tablelands (NO SGE)	218	126	31	28	32		31	43	7	38	85	13	193	28	221	52	439	233	206	9	6		2	5	10	43		43	201	26	28	32				
41	Muswellbrook	354	239	13	26	45	30		48	11	46	163	55	86	63	149	26	503			8	27	1	11	15	8	154	7	148	286	7	111	45				
42	Corowa	177	99	47	9	10	12		34	1	18	109	3	70	119	189	44	366	274	91	4	11		5	6	8	104		104	253	44	55	10				
43	Tumut	284	214	35	17	18			24	14	32	168	46	41	16	58	16	342	144	198	9	12	1	5	6	7	62		62	481	30	121	18				
44	Gunnedah (Groundwater)	171	135		36				104	3	64			30	39	69	13	240	60	180	12	14		6	8	19	305		305								
45	Upper Hunter	370	231	100	34	6		28	119	20	51	35	119	75	87	162	36	532			11	19	2	4	13	27	355	24	331	78	13	16	6				
46	Narrabri (Groundwater)	223	161	24	33	5			45	6	103	14	54	52	29	81	10	304	167	122	13	38	4	22	12	6	178	23	154	18	8	2	5				
47	Bellingen (Unfiltered)	131	48	47	24	11			36	5	37	43	10	117	57	174	58	304	46	259	12	25	1	8	16	12	88	42	46	145	25	7	11				
48	Leeton	386	283	1	29	30	42		146		36	148	15	53	61	114	14	500	300	200	4	23		4	19	18	393		393	186		118	30				
49	Young (Reticulator)	197	34	31	1		130		50	5	1		10	35	14	49	14	246	20	226	0	2	0		1	14	159	57	103								
50	Cooma-Monaro	264	152	95	2	15			73	26	5	110	50	96	79	175	47	438			1	3	0	2	1	19	216	22	193	296	54	42	15				
51	Forbes	348	155	103	1	59	29		118	5	5	191		42	10	52	8	400	208	192	1	3		2	0	19	345	10	335	306	97	35	59				
52	Snowy River (Unfiltered)	184	33	112	34	5			42	4	72	24	42	104	26	130	61	314	236	79	34	33	10	7	15	20	126	96	30	114	15	4	5				
53	Berrigan (Dual Supply)	315		315					84		8	217	6	43	57	100	23	415	120	295	2	3	3			20	137	137		503	217						
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties	*284*	*129*	*77*	*21*	*28*	*36*	*28*	*69*	*6*	*32*	*109*	*31*	*75*	*41*	*138*	*31*	*438*	*178*	*195*	*9*	*14*	*2*	*5*	*10*	*15*	*157*	*48*	*141*	*201*	*45*	*26*	*28*				
LWUs with 1,501 - 3,000 Properties																																				
54	Deniliquin	214	129	75	10				82	0	23	108		214	15	228	25	443	266	177	3	19		11	9	9	174		174	120	75	34					
55	Warrumbungle	370	194	129	30	18	0		106	25	68	125	46	70	26	96	37	466			26	28	5	11	12	41	237	24	214	481	75	32	18				
56	Yass Valley	201	65	100	13	22		4	37	18	27	91	25	100	55	156	55	356	196	160	9	7	3	1	3	13	73		73	322	64	5	22				
57	Wellington	332	194	78	13	32	15		121	12	22	162		87	84	171	42	503	297	206	5	9		4	5	30	356	9	346	398	75	55	32				
58	Cootamundra (Reticulator)	196	29	58			109		64	1			23	16	33	49	16	245	49	196						20	200	111	89								
59	Lachlan	414	146	173	23	50	21		82	18	29	168	96	37	40	77	14	491	241	250	5	10	1	1	8	14	103		103	297	118		50				
60	Glen Innes Severn	191	123	10	27	31		2	52	1	38	78	20	76	96	172	79	364	145	218	17	54	15		40	24	150		150	359		48	31				
61	Liverpool Plains	482		482				82	160	102	53	79	5	126	-286	-160	-46	321			15	10	10			46	409	409		228	79						
62	Narromine (Groundwater)	188	106	54	28				79	24	54	13	17	71	69	140	14	328	203	125	5	40	12	7	21	8	292	12	280	13	1	12					
63	Narrandera (Groundwater)	264	154	9	94	7			89	1	164	7	1	63	75	138	24	402	233	169	29	113		48	64	16	283	25	258	13			7				
64	Dungog (Reticulator)																																				
65	Murray (Dual Supply)	241	100	98	20	14	9		60	10	54	109		56	55	112	29	353	261	92	14	20	6	6	8	16	130	63	67	283	47	48	14				
67	Cobar	510	252	36	4	43	175			22	99	191	23		27	27	3	538	269	269	12	36	5	30	1					234		148	43				
66	Cobar WB (Bulk Supplier)																																				
68	Tenterfield	224		199	14	6	5	19	58	5	31	98	9	120	62	182	89	406			15					28	167	167		474	91		6				
70	Kyogle	153	71	38	23	2	19		57	7	23	38	9	99	41	140	57	292	190	102	10	11			11	23	186		186	156	36		2				
71	Palerang	221	69	117	31	4		5	38	6	90	65	16	62	57	118	47	339	258	81	36	58	33	4	20	15	162		162	261	46	16	4				
73	Upper Lachlan	304	38	208	30	28		24	48	16	78	101	37	71	42	113	73	417	209	209	51	50	26	5	19	31	144	127	17	656	64	9	28				
74	Wentworth (Dual Supply)	327	133	137	35		22		63	13	69	121	39	51	22	74	11	401			10	19	4	6	10	9	86		86	176	94	27					
75	Coonamble (Groundwater)	215	65	121	29				121	14	66		14	25	23	48	7	263	131	131	10					18	314	314									
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties	*232*	*114*	*99*	*25*	*20*	*19*	*12*	*64*	*12*	*54*	*99*	*19*	*71*	*42*	*116*	*27*	*382*	*221*	*173*	*12*	*20*	*6*	*6*	*10*	*18*	*174*	*87*	*156*	*272*	*75*	*32*	*20*				

Table 13: Water supply – benchmarking cost data (operation, maintenance and management) (continued)

	WATER UTILITY	OPERATION & MAINTENANCE (O&M) COST[2]												MANAGEMENT COST				OMA[1]			O & M Cost Components for TYPE of ASSET															
		Total O&M Cost	Components (1) - Process					Components (2) - Type of Asset						Components				Total OMA Cost	Components		PUMPING STATION					WATER MAIN				TREATMENT					
			Maintenance	Operation	Energy	Chemicals	Bulk Purchase	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other Excl Bulk Purchas	Admin	Engineering & Supervision	Total Management Cost			Head works	Distri-bution	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical
		$/prop	($/property)					($/property)						($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($'000/pumping station)				(c/kL)	($'000/100km)			($/ML)	($/property)			
		(79a)	(79)	(80)	(81)	(82)	(82a)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91a)	(91)	(91b)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)				
		2008/09						2008/09						2008/09				2008/09	2008/09		2008/09					2008/09				2008/09							
LWUs with 200 - 1,500 Properties																																					
76	Harden (Reticulator)	309	141	26	1	11	129		94	33	9	11	31	41	37	78	17	387	58	387	2	5		5	1	21	97		97	25			11				
79	Walgett (Dual Supply)	417	186	174		29	28		130	7	84	166	3	86	42	128	13	545			9					14	202	71	131	175	67	70	29				
80	Greater Hume	310	50	62	30		168		70		48	9	15	52	27	79	20	388		35	12	41		15	26	18	80	70	9	25		9					
81	Gwydir	382	241	61	39	41			208	4	107	63		108	6	114	43	496	124	372	40	155	74	25	56	79	347	10	337	239	4	19	41				
82	Gloucester	335	220	91	7	16			91	8	60	132	43	30	58	88	34	423	233	190	23	17	3	12	2	35	245		245	514	76	41	16				
83	Oberon (Reticulator)	445	72	89		37	248		35	4		158		76	64	141	31	586	340	246						8	128		128	351	89	33	37				
84	Gilgandra (Groundwater)	276	137	86	43	10			77	4	102	65	29	37	22	59	10	335	117	218	17	140	34	47	59	12	210		210	105	32	23	10				
85	Uralla	264	227		3	34		4	55	7	8	186	4	80	48	129	85	393	310	82	5	13		8	5	36	232		232	1222		151	34				
86	Hay (Dual Supply)	277	148	34	51	34	11		47	7	65	63	84	129	4	132	12	410	279	131	6	28		6	22	4	130		130	57		29	34				
87	Bourke (Dual Supply)	491	490		1				87	1	41	262	100	28	151	179	6	670	101	570	1	25		24	1	3	226		226	89		262					
88	Wakool (Dual Supply)	454	139	200	24	33	57		54	62	65	199	16	34	37	71	9	525	499	26	8	11	5	2	4	7	47	18	29	257	133	33	33				
89	Bogan	553	352	56	17	77	50	2	54		37	151	258	182		182	33	735	588	147	7	38	7	13	18	10	119		119	271	49	25	77				
90	Guyra	342	70	131	54	43	45	33	70		54	140		88		88	25	430	250	181	15	63			63	20	132		132	396	97		43				
91	Cabonne	273	229	22	11	11		38	66	24	55	88	3	91	60	151	44	424	326	98	16	16		13	3	19	185		185	259	19	57	11				
92	Carrathool (Groundwater)																																				
93	Tumbarumba	194	76	104	14				93	60	24	16	1	46	83	129	39	323			7	14	4	3	8	28	163	140	23	47		16					
94	Gundagai	326	76	164	62	24			64		62	200		90		90	13	416	187	229	9	33			33	9	186	122	64	285	122	54	24				
96	Warren (Dual Supply)	278	164	48	35	19	12		88	11	117	39	9	54	47	101	21	379	152	227	24	57	4	36	17	18	160	43	117	81	4	17	19				
97	Bombala	303	132	121		51			31	1	109	151	12	92		92	27	396			32	31	8	23		9	37		37	446	82	18	51				
98	Walcha	370	290		71	9		48	77	2	88	153		152	36	188	77	558	418	139	36	26		5	21	32	123		123	627		144	9				
100	Balranald (Dual Supply)	351	262	3	49	21	16		51	12	215	21	36	128		128	15	479	144	335	25	62		48	14	6	147	10	137	24			21				
101	Murrumbidgee (Groundwater)	189	108	21	60				15	25	148				93	93	13	282			20					2	48	17	31								
103	Central Darling (Dual Supply)	566	406	54	46	60		28	106	6	112	293	22	9		9	2	575	460	115	21	10	3	3	4	20	116	5	111	562		234	60				
104	Boorowa	416	36	340	40				139	3	118	155		10	34	44	11	460			30	73	47	1	25	35	183	143	40	390	155							
105	Brewarrina	908	406	338	75	89			265	19	174	450		151	114	265	15	1173			10	42	19	5	18	15	337	16	321	259	230	131	89				
106	Jerilderie (Dual Supply)	361	248	11	56	30	15		78		80	177	11	58	43	101	11	462	217	245	9	37		11	26	8	84	2	81	190		147	30				
	Medians (% of LWUs basis) for 200 to 1,500 Properties	*342*	*164*	*74*	*39*	*32*	*45*	*30*	*77*	*7*	*72*	*151*	*16*	*78*	*43*	*101*	*17*	*430*	*241*	*190*	*14*	*32*	*7*	*12*	*18*	*15*	*147*	*18*	*123*	*258*	*79*	*37*	*32*				

NOTES:

1. Operating cost is the OMA cost (operation, maintenance & administration (Col 91b)) which comprises the O & M Cost (operation & maintenance cost (Cols 79 to 82 or Cols 83 to 88)) PLUS Management Costs (Col 91a) which is made up of the Administration cost (Col 89) plus Engineering and Supervision cost (Col 90).
2. O & M cost includes a proportion of the OMA cost of the bulk supplier if appropriate or the purchase cost of water if no bulk supplier (Col 82a).

Table 14: Sewerage – utility characteristics

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION										ASSETS								WORKFORCE						
		Total No of Assessments			Connected Properties - Total		Connected Properties - Residential			Population		Sewer Mains	Properties Served per km of Main	Sewage Treatment Works	Pumping Stations	Pumping Stations per 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Female	Outsourcing	Injuries	Days Lost		
			(1)		(Ratio of Connected Properties to Assessments)	Connected Properties (1) x (2)	(Ratio of Residential Assessments to Total Assessments)	(Ratio of Residential Connections to Residential Assessments)	Connected Residential Properties (1)x(4)x(5)	Permanent	Peak (% of Permanent)	(km)	(3) / (8)	(No.)	(No.)	(11) / [(8) x 100]	$/prop	$M	($'000)	(Employees /1000 props)	(%)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	Due to Injury (%)
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	(8) A 5 2008/09	(9) A 6 2008/09	(10) A4 2008/09	(11) 2008/09	(12) 2008/09	(13) F29 2008/09	(13a) F15 2008/09	(13b) F 27 2008/09	(14) 2008/09	(15) 2008/09	(19) 2008/09	(20) 2008/09	(21) 2008/09	(22) 2008/09	(22a) 2008/09
	Sydney Water					1,707,000			1,586,000	4,240,000		23,817	72	29			231	394,703	0							
	Hunter Water					211,000			199,000	496,000		4,626	46	18			337	71,165	0							
LWUs with > 10,000 Properties																										
1	Gosford	66182	64,800	65,100	1.05	68,469	0.95	1.06	65,552	156,400	-	1,401	49	2	184	13	224	15.3	1,811	1.4	15	18	15	3	68	0
2	Wyong	59156	60,150	60,450	0.97	58,635	0.95	0.97	55,989	143,300	170	1,220	48	6	149	12	69	4.0		1.6	3		1	0	1	0
3	Shoalhaven	41773	43,460	44,480	0.89	39,409	0.95	0.90	38,053	80,100	400	1,117	35	12	219	20	526	20.7	4,516	2.1	7	2	11	4	8	0
5	MidCoast	33388	33,670	33,910	0.96	32,556	0.92	0.96	30,104	76,500	110	965	34	12	203	21	706	23.0	1,426	1.3	37	-	4	2	51	1
6	Tweed	29952	32,090	32,620	0.91	29,682	0.94	0.93	28,645	68,800	130	706	42	8	178	25	439	13.0	107	2.0	3	11	6	1	76	1
9	Wagga Wagga	21836	22,150	22,700	1.04	23,609	0.92	1.05	22,044	57,000	110	566	42	5	37	7	1,306	30.8		1.3	6	10	3	3	23	0
7	Port Macquarie-Hastings	27157	27,340	28,620	0.95	27,192	0.93	0.95	25,317	70,000	120	600	45	6	155	26	966	26.3	5	1.3	3	2	6	6	2	0
11	Albury	21195	20,570	20,830	0.99	20,619	0.91	0.99	18,859	49,800	120	495	42	4	65	13	238	4.9		-		55	0		0	
10	Coffs Harbour	23503	23,890	24,160	0.93	22,466	0.94	0.93	21,071	63,900	120	653	34	5	116	18	1,515	34.0	4,134	2.1		5	11	6	169	2
13	Tamworth Regional	17985	18,210	18,380	1.00	18,382	0.91	1.00	16,753	42,400	190	504	36	5	22	4	1,110	20.4		-			3		14	
15	Eurobodalla	18441	18,540	18,710	0.94	17,590	0.95	0.94	16,693	35,100	340	508	35	5	126	25	228	4.0	3,320	2.3	2	-	2	4	35	0
17	Queanbeyan	15071	15,500	15,560	1.03	16,027	0.93	1.04	15,018	36,000	100	326	49	1	15	5	204	3.3		0.6	11		0	3	0	
19	Orange	14851	14,900	15,130	1.00	15,125	0.92	1.00	13,877	38,000	100	393	38	2	25	6	50	0.8		1.0	7	-	3	3	101	3
20	Goulburn Mulwaree	9657	9,010	9,820	1.03	10,113	0.90	1.03	9,092	21,100	100	239	42	2	27	11	232	2.3		2.4	8	2	2	1	46	1
18	Dubbo	12992	13,310	13,450	1.11	14,926	0.90	1.12	13,629	32,500	110	374	40	1	11	3	287	4.3	1	1.0	20		1	0	2	0
16	Wingecarribee	14702	14,890	15,040	0.95	14,283	0.94	0.96	13,524	33,500	120	509	28	5	69	14	791	11.3	3,335	2.0	7	8	2	0	5	0
14	Clarence Valley	13021	14,880	15,240	0.94	14,328	0.94	0.94	13,421	27,600	190	329	44	8	87	26	2,969	42.5	9,279	1.9	4		5		55	1
21	Bathurst Regional	12964	13,290	13,450	1.08	14,529	0.89	1.08	12,978	33,000	180	371	39	1	16	4	184	2.7		0.7	10	4	1	1	1	0
24	Ballina	13486	13,470	13,670	0.93	12,711	0.93	0.93	11,883	34,200	-	312	41	4	113	36	397	5.0		1.3		-	0	0	0	
22	Lismore	11550	11,650	11,710	1.05	12,290	0.91	1.06	11,242	33,400	100	346	36	3	33	10	155	1.9		1.2		25	0	0	0	
Medians (% of LWUs basis) and totals for >10,000 Properties				*493,030*		*482,942*				*1,132,600*		*11,934*	*40*				*342*	*271*		*1.4*	*7*		*3*	*2*		
LWUs with 3,001 - 10,000 Properties																										
23	Bega Valley	11133	11,970	12,100	0.98	11,855	0.94	0.98	11,112	22,700	150	390	30	10	967	248	665	7.9	3,792	1.9		5	3	4	81	2
27	Byron	10250	10,410	10,260	0.96	9,847	0.92	0.96	9,015	28,800	120	252	39	5	81	32	803	7.9	767	2.6	4	3	2	4	10	0
26	Country Energy	9615	9,680	9,700	1.00	9,696	0.93	1.00	9,002	18,700	110	195	50	2	11	6	95	0.9		1.1			0	1	0	
25	Kempsey	8562	8,570	8,630	1.04	8,974	0.92	1.04	8,219	19,000	120	267	34	7	78	29	900	8.1		2.0	11	15	1	0	12	0
31	Lithgow	7274	7,380	7,380	0.98	7,231	0.95	0.98	6,876	19,800	85	364	20	3	32	9	192	1.4	156	1.4	10		7	1	12	1
29	Armidale Dumaresq	7804	7,970	8,110	0.98	7,948	0.92	0.98	7,329	20,400	110	255	31	1	1	0	57	0.5		1.9	7	6	1	2	10	0
30A	Hawkesbury	7279	7,660	7,660	0.98	7,487	0.88	0.99	6,677	24,000	100	169	44	2	24	14	151	1.1		2.0			2	0	8	0
30	Griffith	8560	7,790	7,920	0.85	6,735	0.91	0.84	6,070	21,500	110	227	30	3	29	13	372	2.5		2.7	11		0	0	0	
33	Richmond Valley	6685	6,730	6,780	0.95	6,440	0.90	0.95	5,801	15,000	120	185	35	4	31	17	514	3.3	157	3.3			2	5	40	1
32	Mid-Western Regional	6200	6,350	6,470	1.00	6,465	0.90	1.00	5,837	13,100	150	186	35	4	12	6	160	1.0		2.3		-	1		-	
34	Nambucca	6222	5,860	5,740	0.95	5,449	0.90	0.95	4,905	12,800	140	155	35	4	51	33	117	0.6		1.8		20	2	0	6	0
35	Singleton	5397	5,530	5,560	0.96	5,337	0.92	0.93	4,757	15,000	100	136	39	1	14	10	129	0.7		1.1			0	4	0	
37	Inverell	4735	4,740	4,750	0.97	4,609	0.96	0.97	4,423	11,300	110	126	37	4	21	17	156	0.7		1.5	-	8	0	4	0	
41	Muswellbrook	5131	5,180	5,270	0.96	5,033	0.93	0.96	4,698	16,000	-	141	36	2	12	9	188	0.9		1.8	33	-	5	0	10	0

Table 14: Sewerage – utility characteristics (continued)

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION										ASSETS								WORKFORCE						
		Total No of Assessments			Connected Properties - Total		Connected Properties - Residential			Population		Sewer Mains	Properties Served per km of Main	Sewage Treatment Works	Pumping Stations	Pumping Stations per 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Female	Outsourcing	Injuries	Days Lost		
					(Ratio of Connected Properties to Assessments)	Connected Properties (1) x (2)	(Ratio of Residential Assessments to Total Assessments)	(Ratio of Residential Connections to Residential Assessments)	Connected Residential Properties (1)x(4)x(5)	Permanent	Peak (% of Permanent)	(km)	(3) / (8)	(No.)	(No.)	(11) / [(8) x 100]	$/prop	$M	($'000)	(Employees /1000 props)	(%)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	Due to Injury (%)	
			(1)		(2)	(3) C 8	(4)	(5)	(5a) C6	(6) C5	(7)	(8) A 5	(9) A 6	(10) A4	(11)	(12)	(13) F29	(13a) F15	(13b) F 27	(14)	(15)	(19)	(20)	(21)	(22)	(22a)	
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09
36	Parkes	5068	5,230	5,230	0.95	4,968	0.87	0.95	4,316	11,400	140	98	51	3	2	2	424	2.1	2,538	0.8		3	5	2	0	
42	Corowa	4780	4,690	4,870	0.95	4,623	0.92	0.95	4,242	10,200	180	142	33	3	67	47	318	1.5	817	1.3			3	1	51	4
38	Moree Plains	3938	3,940	3,870	0.97	3,749	0.84	0.96	3,103	9,500	100	88	43	4	28	32	82	0.3		2.1	25	30	0	0	0	
44	Gunnedah	3690	3,890	3,890	1.03	4,007	0.87	1.03	3,502	10,600	110	96	42	2	2	2	76	0.3		1.5		5	0	2	0	
46	Narrabri	3608	3,740	3,740	0.98	3,661	0.94	0.98	3,457	10,700	100	97	38	3	22	23	55	0.2		3.6	8	5	13	0	3	0
43	Tumut	4019	4,200	4,320	0.95	4,107	0.89	0.95	3,657	8,400	120	134	31	5	16	12	1,479	6.1	500	1.9	13		3	5	76	4
49	Young	3450	3,510	3,540	1.04	3,684	0.89	1.04	3,281	8,500	110	88	42	1	5	6	148	0.5		1.6	-	20	3	1	7	1
39	Cowra	3725	3,730	3,740	0.95	3,552	0.88	0.95	3,116	8,700	100	100	36	2	9	9	344	1.2		1.7			0	2	0	
45	Upper Hunter	4046	3,750	3,950	0.92	3,636	0.92	0.92	3,334	9,100	100	115	32	4	13	11	177	0.6		0.8		5	1	53	365	53
52	Snowy River	2140	2,430	2,520	1.43	3,605	0.86	1.43	3,102	4,000	510	75	48	4	19	25	353	1.3	74	1.9	29	15	0	0	0	
51	Forbes	3166	3,010	3,170	1.00	3,166	0.89	1.00	2,821	7,700	100	89	36	1	17	19	81	0.3		1.6	20	20	1	2	3	0
50	Cooma-Monaro	3387	3,390	3,380	0.95	3,208	0.88	0.95	2,829	7,600	130	227	14	2	7	3	248	0.8	28	2.5		-	0	0	3	0
53	Berrigan	3253	3,420	3,340	0.98	3,270	0.88	0.98	2,893	6,600	110	107	31	4	47	44	113	0.4		1.2		12	0	7	0	
Medians (% of LWUs basis) and totals for 3,000 to 10,000 Properties				*155,890*		*152,342*				*371,100*		*4,504*	*36*				*177*	*53*		*1.8*	*11*		*1*	*1*		
LWUs with 1,501 - 3,000 Properties																										
48	Leeton	3220	3,300	3,310	0.94	3,111	0.89	0.94	2,755	7,700	110	90	35	3	31	34	175	0.5		2.2			3	1	0	
54	Deniliquin	3261	3,280	3,290	0.96	3,158	0.88	0.95	2,749	7,500	150	70	45	1	23	33	216	0.7		1.6			0	6	44	4
47	Bellingen	3078	3,080	3,090	0.95	2,939	0.91	0.95	2,665	7,400	100	89	33	3	27	30	121	0.4		2.4	14	5	0	14	0	
60	Glen Innes Severn	2729	2,730	2,970	0.91	2,704	0.88	0.91	2,382	6,400	120	92	29	2	5	5	16	0.0		1.1			0	0	0	
58	Cootamundra	2903	2,910	2,800	0.98	2,748	0.88	0.98	2,409	7,500	110	66	42	1	4	6	12	0.0		1.1			0	4	0	
57	Wellington	2480	2,420	2,430	0.98	2,379	0.91	0.98	2,158	5,800	100	61	39	2	12	20	640	1.5	518	-		5	0		0	
91	Cabonne	2499	2,560	2,570	0.92	2,363	0.88	0.92	2,069	3,700	100	56	42	3	10	18	1,526	3.6	2,147	-	-		0		0	
80	Greater Hume	2486	2,580	2,640	0.95	2,504	0.87	0.95	2,190	5,900	100	75	33	6	19	25	107	0.3	248	1.2		15	1	1	0	
59	Lachlan	2178	2,180	2,090	1.03	2,157	0.87	1.03	1,886	5,100	100	75	29	3	21	28	34	0.1		1.9		6	0	0	0	
65	Murray	2695	2,800	3,090	0.95	2,937	0.89	0.95	2,614	5,900	210	88	33	2	41	47	63	0.2	20	0.3			1	16	0	
62	Narromine	2017	2,050	2,190	0.95	2,081	0.87	0.95	1,815	5,400	110	49	42	2	13	27	9	0.0		1.9	25		0	0	0	
56	Yass Valley	2278	2,280	2,350	0.94	2,204	0.90	0.94	1,994	5,600	120	69	32	2	9	13	2,455	5.4	1,332	0.9		15	0	2	0	
61	Liverpool Plains	1892	1,890	1,850	0.98	1,808	0.91	0.98	1,649	4,800	110	58	31	2	9	16	113	0.2		1.7		2	-		-	
55	Warrumbungle	2350	2,510	2,520	0.99	2,495	0.84	0.92	1,949	4,900	99	78	32	4	9	12	38	0.1		4.4			-		-	
69	Temora	2082	2,080	2,100	1.00	2,099	0.86	1.00	1,795	4,500	150	47	45	1	4	9	41	0.1		-			0		0	
71	Palerang	1870	1,900	1,970	0.95	1,867	0.91	0.95	1,707	3,700	120	46	41	3	14	30	1,355	2.5	1,660	1.6			0	0	0	
72	Bland	1924	1,920	1,920	0.95	1,821	0.86	0.95	1,564	4,000	100	48	38	3	10	21	882	1.6		1.6			0	0	0	
63	Narrandera	1777	1,780	1,820	0.92	1,673	0.88	0.92	1,465	4,800	110	36	46	1	4	11	131	0.2	75	1.2			0	0	0	
67	Cobar	1815	1,820	1,820	0.95	1,726	0.91	0.95	1,571	5,500	150	52	33	2	4	8	94	0.2	100	-	-	-	-		-	
74	Wentworth	1881	1,940	1,910	0.95	1,814	0.88	0.95	1,601	5,100	120	100	18	5	25	25	53	0.1		3.9			0	0	0	
75	Coonamble	1325	1,340	1,430	1.02	1,460	0.87	1.02	1,269	2,900	-	46	32	2	12	26				4.1		-	2	2	7	1
Medians (% of LWUs basis) and totals for 1,500 to 3,000 Properties				*50,160*		*48,049*				*114,100*		*1,391*	*33*				*110*	*18*		*1.6*	*20*		*0*	*1*		

Table 14: Sewerage – utility characteristics (continued)

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION										ASSETS								WORKFORCE						
		Total No of Assessments			Connected Properties - Total		Connected Properties - Residential			Population		Sewer Mains	Properties Served per km of Main	Sewage Treatment Works	Pumping Stations	Pumping Stations per 100km of Main	Capital Expenditure (Assets, Renewals, Plant/Equip)		Capital Works Grants	Total Work Force	% Female	Outsourcing	Injuries	Days Lost		
			(1)		(Ratio of Connected Properties to Assessments)	Connected Properties (1) x (2)	(Ratio of Residential Assessments to Total Assessments)	(Ratio of Residential Connections to Residential Assessments)	Connected Residential Properties (1)x(4)x(5)	Permanent	Peak (% of Permanent)	(km)	(3) / (8)	(No.)	(No.)	[(8) x 100]	$/prop	$M	($'000)	(Employees /1000 props)	(%)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	(%)	
					(2)	(3) C 8	(4)	(5)	(5a) C6	(6) C5	(7)	(8) A 5	(9) A 6	(10) A4	(11)	(11) / [(8) x 100]	(13) F29	(13a) F15	(13b) F 27	(14)	(15)	(19)	(20)	(21)	(22)	(22a)	
		2006/07	2007/08	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09	2008/09
LWUs with 200 - 1,500 Properties																										
70	Kyogle	1673	1,760	1,770	0.95	1,682	0.89	0.95	1,495	3,600	120	62	27	3	9	15	834	1.4	948	4.2	14		1	2	5	0
77	Junee	1683	1,740	1,660	0.95	1,578	0.93	0.95	1,463	4,000	110	91	17	1			110	0.2		1.3		20	1	1	3	1
78	Blayney	1505	1,710	1,750	1.03	1,805	0.86	1.03	1,547	3,700	100	75	24	1	7	9				1.1			0	0	0	
79	Walgett	1786	1,790	1,790	0.85	1,518	0.88	0.85	1,341	6,300	-	50	30	3	-	-				-	-	-	-		-	
68	Tenterfield	1559	1,500	1,740	0.95	1,657	0.86	0.95	1,433	3,400	100	65	25	2	-	-	3,639	6.0	2,867	-	-	-	-		-	
84	Gilgandra	1372	1,380	1,390	0.98	1,360	0.89	0.98	1,215	2,900	110	36	38	1	13	36	404	0.6	56	1.5			0	3	0	
73	Upper Lachlan	1382	1,410	1,420	1.00	1,417	0.87	1.00	1,227	2,800	110	42	34	2	7	17	1,056	1.5		2.1		2	0	0	0	
82	Gloucester	1588	1,630	1,640	0.95	1,553	0.83	0.95	1,292	2,800	130	53	29	1	6	11	86	0.1		0.6		75	0	0	0	
87	Bourke	1065	1,070	1,070	1.00	1,069	0.85	1.00	909	2,000	98	35	31	1	8	23	94	0.1		2.8		8	0	0	0	
86	Hay	1298	1,300	1,300	0.98	1,274	0.87	0.98	1,114	2,900	-	37	34	1	8	22	97	0.1		1.6		30	0	0	0	
83	Oberon	1178	1,330	1,340	1.02	1,362	0.82	1.02	1,111	3,000	130	38	36	1	3	8	93	0.1		1.5		10	0	0	0	
81	Gwydir	1159	1,210	1,210	0.95	1,147	0.90	0.95	1,030	2,600	140	41	28	2	8	20	53	0.1		2.6		10	0	0	0	
85	Uralla	1016	1,020	1,020	1.00	1,016	0.88	1.01	901	2,600	100	30	34	1	4	13	50	0.1		1.0		30	0	0	0	
95	Weddin	1029	1,090	1,090	0.94	1,026	0.87	0.93	886	2,000	120	31	33	1	0					1.0			0	0	0	
89	Bogan	1046	1,030	1,040	1.01	1,047	0.86	1.01	906	2,500	140	20	52	1	4	20	177	0.2		1.0	-		0	0	0	
76	Harden	1017	1,050	980	0.95	935	0.92	0.94	848	2,100	100	38	25	1	0					2.1		5	0	0	2	0
88	Wakool	1169	1,120	1,120	0.95	1,065	0.78	0.95	835	2,100	120	47	23	4	14	30	16	0.0		3.8		10	0	0	0	
93	Tumbarumba	1039	1,040	1,030	0.95	974	0.86	0.95	841	2,000	170	47	21	2	3	6	62	0.1		4.1	25	-	0	0	0	
94	Gundagai	872	880	890	1.01	900	0.90	1.01	814	2,400	130	73	12	1	5	7	76	0.1		2.2			0	0	0	
92	Carrathool	852	920	920	0.95	876	0.81	0.95	708	1,900	120	22	40	3	12	55				2.3	-	-	-		-	
96	Warren	902	900	860	0.92	793	0.90	0.92	711	1,800	100	17	47	2	8	47				2.5			1	25	1	0
99	Coolamon	1012	1,020	1,040	0.95	985	0.89	0.95	878	2,400	100	44	22	2	7	16	387	0.4		1.0			0	0	0	
102	Lockhart	875	880	870	0.95	825	0.87	0.95	721	1,800	100	42	20	3	6	14	81	0.1	65	1.2		-	-		-	
98	Walcha	783	790	790	1.01	802	0.79	1.01	637	1,700	120	30	27	1	1	3	71	0.1		1.2			0	0	0	
100	Balranald	802	830	830	0.95	790	0.89	0.95	701	2,000	110	38	21	2	10	26	84	0.1		1.3			0	0	0	
97	Bombala	797	800	800	0.95	757	0.86	0.95	651	1,800	110	35	22	2	5	14				2.6			0	0	0	
101	Murrumbidgee	716	710	720	1.03	746	0.94	1.05	711	1,700	-	21	36	2	-	-	146	0.1		-	-	-	-		-	
90	Guyra	1010	1,010	1,010	0.95	960	0.85	0.95	815	2,700	150	56	17	2	2	4	21	0.0		2.1		5	0	0	0	
104	Boorowa	560	640	640	0.94	601	0.91	0.94	545	1,200	50	33	18	1	2	6	45	0.0		-			0		2	
105	Brewarrina	558	560	560	0.86	482	0.88	0.85	421	1,500	120	16	30	3	8	50	60	0.0		10.4			0	0	0	
106	Jerilderie	447	450	450	0.95	425	0.78	0.95	330	900	100	12	35	1	5	42				4.7			0	0	0	
103	Central Darling	195	190	190	1.00	194	0.91	1.00	176	710	99	13	15	1	4	31				5.2			0	0	0	
107	Urana	317	330	330	0.95	315	0.87	0.95	275	720	210	15	21	2	9	60				3.2			0	7	0	
Medians (% of LWUs basis and totals for 200 to 1,500 Properties			*35,260*			*33,933*				*78,530*		*1,305*	*27*				*86*	*11*		*2.1*	*20*		*0*	*0*		
Median All LWUs (% of LWUs basis)												*Properties served per km of main*	*35*				*Capital Expenditure*	*$160 per property*		*1.7 employees per 1000 properties*						
Median All LWUs (Statewide basis)													*40*					*$248 per property*		*1.6 employees per 1000 properties*						
Totals for all LWUs		*Connected properties*	*717,000*		*Total Sge populaton 1.7M*		*19,130*	*km of mains*		*Total Capital Expenditure*	*$353M*		*Total Days Lost Due to Injury*	*1,418*												
		Total no. of Assessments	*734,000*		*Reported No. of Sewage Treatment Works*	*295*		*Pumping Stations*	*3867*		*Reported No. of Sge Employees*	*1,096*														

Table 15: Sewerage – asset management and resource management

ASSET MANAGEMENT

No.	WATER UTILITY	Infiltration (ML per 100km of Main) (23) 06/07	Infiltration (23) 07/08	Infiltration (23) 08/09	Breaks & Chokes (No. per 100 km of Main) (24) A 12 06/07	Breaks & Chokes (24) 07/08	Breaks & Chokes (24) 08/09	Overflows see also Col (31a) (No. per 100 km of Main) (25) 06/07	Overflows (25) 07/08	Overflows (25) 08/09	Rehabilitations (% of Total Length) (27) 08/09	Rehabilitations (Service Connections %) (28) 08/09	Renewals ($'000 per 100 km of Main) (29) 08/09	Renewals (% of CRC) (30) 08/09	Mains Maintenance Cost ($'000 per 100 km of Main) (31) 08/09	Overflows Reported to Regulator (No. per 100km of main) (31a) E13 07/08	Overflows Reported to Regulator (31a) 08/09
	Sydney Water				90	64	51	90	64				-	-			0.1
	Hunter Water				63	50	88	53	43				-	-			1.5
	LWUs with > 10,000 Properties																
1	Gosford	141	197	47	68	55	44	48	35	28	0.0	0.0	0	0.0	64		1
2	Wyong				41	50	54	18	28	28	0.1	-	0	0.0	129		0
3	Shoalhaven				49	47	47	26	15	13	0.3	0.2	205	0.4	18		0
5	MidCoast	59	81	100			1	7	2	1	1.0	-	0	0.0	92		1
6	Tweed	29	133	241	15	13	9	6	8	6	0.2	0.0	104	0.1	203		0
9	Wagga Wagga	701			369	367	317	37	37	35	0.9	0.4	0		101		0
7	Port Macquarie-Hastings			283			26	19	1	4	0.0	0.0	69	0.1	45		1
11	Albury City				195	196	204	8	3	1	0.5	0.8	511	0.9	160		0
10	Coffs Harbour	3	195		102	117	103	1	3	27	0.0	0.3	80	0.1	77		0
13	Tamworth Regional					77	80	49	23	14	0.1	0.1	0	0.0	93		0
15	Eurobodalla	61	37	9	77	44	39	48	7	7	0.7	0.0	178	0.4	51		5
17	Queanbeyan	112	115	113		103	48	13	2	6	0.0	0.0	987	1.6	118		0
19	Orange	68		73	111	123	159	20	13	66	0.5	-	147	0.3	47		3
20	Goulburn Mulwaree		17	32			161	0	0	8	1.7	0.3	600	1.2	294		1
18	Dubbo	25	81	31	132	109	97	13	5	4	0.1	0.1	51	0.1	6		2
16	Wingecarribee	135	292	66	151	110	68	53	33	23	0.4	0.4	109	0.2	124		3
14	Clarence Valley	84	83	95	68	56	41	13	21	21	0.1	-	155	0.3	163		1
21	Bathurst Regional	20	20	19	125	30	83	18	40	29	0.4	0.3	92	0.3	225		-
24	Ballina	82			26	37	24	4	5	5	0.2	0.0	290	0.5	259		3
22	Lismore	202			172	196	82	4	6	1	0.5	0.5	522	0.6	173		1
	Medians (% of LWUs basis) for >10,000 Properties			*70*			*61*			*10*	*0.3*	*0.2*	*107*	*0.3*	*110*		
	LWUs with 3,001 - 10,000 Properties																
23	Bega Valley				35	7	25	26	21	23	0.5	0.2	114	0.2	131		1
27	Byron	122	363	316	63	41	59	12	13	14	0.8	0.2	0	0.0	214		14
26	Country Energy				442	337	314	25	7	11	0.1	0.0	211		317		0
25	Kempsey	57	157	572	34	16	11	26	30	60	0.0	0.1	203	0.3	138		1
31	Lithgow				4		5	0		22	0.0	0.0	0	0.0	107		1
29	Armidale Dumaresq		129	193	268	232	251	50	55	45	0.1	0.2	0	0.0	236		0
30A	Hawkesbury					142	86		23	12	1.5	2.2	669	1.0	114		12
30	Griffith				176	122	92	6	3	0	0.4	0.5	287	0.5	30		0
33	Richmond Valley				39	24	32	2	4	6	3.5	0.1	1,253	2.0	34		1
32	Mid-Western Regional				91	125	119	32	37	60	0.3	0.4	0	0.0	225		-
34	Nambucca		286	334	17	22	13	5	12	35	0.3	0.0	11	0.0	76		1
35	Singleton			-	29	35	41	13	10	10	0.0	0.6	354	0.9	325		0
37	Inverell	49	49	2	358	358	279	4	4	3	0.0	0.0	475	1.3	164		0
41	Muswellbrook				219	60	57	16	12	2	0.0	0.3	1	0.0	118		0

RESOURCE MANAGEMENT

No.	WATER UTILITY	Total Vol of Sewage Collected (Res, NonRes + Trade Waste) (ML) (32) W18 06/07	Total Vol (32) 07/08	Total Vol (32) 08/09	Volume of Trade Waste (ML) (32a) W17 08/09	% Sewage Treated (%) (33) 08/09	% Sge Treated that was compliant (33a) E 4 08/09	STWs compliant at all times (33b) E 5 08/09	Percentage of Total Sewage Collected: Infiltration /inflow (34) 08/09	Res (35) 08/09	Non-Res (36) 08/09	Trade Waste (37) 08/09	Other (38) 08/09	Level of Treatment (%): Primary Level (39a) E 1 08/09	Secondary Level (39b) E 2 08/09	Tertiary Level (39c) E 3 08/09	Vol of Sewage Collected per Property (kL/property) (39) W 19 06/07	Vol per Property (39) 07/08	Vol per Property (39) 08/09	Biosolids Reused (%) (40) E 8 06/07	Biosolids (40) 07/08	Biosolids (40) 08/09	Effluent Recycled: Total Volume Recycled (ML) (41a) W 26 08/09	Volume Recycled for Urban Water (ML) (41b) 08/09	% of Total Effluent that is Recycled (41c) W 27 06/07	(41c) 07/08	(41c) 08/09
	Sydney Water	487,100	546,381	475,692	24,617		96	27 of 29						74	3	22	291	324	279	100	100	100	25,442		4	4	5
	Hunter Water	76,338	74,383	64,815	3,226		91	12 of 18						0	58	42	372	356	307	100	100	88	5,092		8	6	8
	LWUs with > 10,000 Properties																										
1	Gosford	14,220	14,768	13,212	1,545	100	100	2 of 2	5	77	6	12		0.2	98.1	2	210	217	193	100	100	100	284	68	2	2	2
2	Wyong	13,034	14,195	15,141	-	100	100	6 of 6		75	25	-			91	9	227	243	258	100	100	100	1,296	865	9	8	9
3	Shoalhaven	7,068	7,223	6,507	230	100	83	9 of 12		80	15	4	1		42	58	191	188	165	100	100	100	1,902	125	27	20	29
5	MidCoast	7,652	8,018	7,510	132	100	100	12 of 12	13	69	16	2			12	88	239	248	231	100	100	100	159	4	10	1	2
6	Tweed	7,254	7,892	8,957	1,315	100	91	3 of 8	19	62	4	15			6	94	266	270	302	58	57	61	743	645	5	4	8
9	Wagga Wagga	5,673	5,443	5,374	747	100	95	3 of 5		86		14			3	97	250	236	228	100	100	100	572	294	15	11	11
7	Port Macquarie-Hastings	8,336	8,229	9,082	-	100	90	4 of 6	19	76	6	-				100	323	317	334	89	93	100	266	137	4	3	3
11	Albury City	4,285	4,291	3,787	178	99	86	3 of 4		95		5			0.3	100	204	211	184				3,589		100	98	96
10	Coffs Harbour	2,425	6,703	6,794	875	100	100	5 of 5		87		13			54	46	280	302	302	100	100	100	1,572	107	10	12	23
13	Tamworth Regional	4,254	4,305	4,741	1,029	100	99	4 of 5		69	9	22			100		237	236	258	96	97	99	1,766	81	34	35	36
15	Eurobodalla	3,349	3,187	2,875		100	100	5 of 5	2	93	5				92	8	193	183	163	0	5		237	171	8	8	8
17	Queanbeyan	3,716	3,990	3,991	300	89	100	1 of 1	9	73	10	8				100	239	250	249	100		100	47		2	1	1
19	Orange	3,036	3,697	4,008	137	93	45	1 of 2	7	88	1	3	1	4	1	96	202	248	265	79	100	100	3,247	3,218	91	95	87
20	Goulburn Mulwaree	1,558	1,680	1,660	-	98	58	1 of 2	5	85	10	-				100	157	181	164	100	100	100	3,166	62	42	85	100
18	Dubbo	2,717	2,956	2,715	715	98	75	0 of 1	4	55	15	26				100	188	200	182	100	100	100	2,576		97	99	97
16	Wingecarribee	3,085	4,106	3,118	108	100	100	5 of 5	11	72	13	3	1			100	240	290	218		100		64	64	3	2	2
14	Clarence Valley	2,626	2,995	3,262		100	83	2 of 8	10	85	6				15	85	215	214	228		35		127	127	4	4	4
21	Bathurst Regional	3,510	3,607	2,949	512	100	100	1 of 1	2	58	22	17	1			100	251	251	203	100	95	96	3,539		16	24	100
24	Ballina	3,502	2,249	4,579	-	100	93	3 of 4				-	100			100	279	180	360	100	100	100	152	119	6	5	3
22	Lismore	3,263	3,263	4,189	-	100	100	3 of 3		100		-		4	13	83	269	267	341		82		10		6	1	0
	Medians (% of LWUs basis) for >10,000 Properties																*238*	*240*	*229*			*Total Vol*	*25,314*		*10*	*8*	*8*
	LWUs with 3,001 - 10,000 Properties																										
23	Bega Valley	1,979	1,869	1,764	-	100	97	9 of 10		65	35	-			70	30	190	161	149				813	556	31	33	46
27	Byron	2,818	3,250	3,302	294	100	100	3 of 5	24	49	18	9			27	73	287	325	335	100	100	100	487	235	29	22	13
26	Country Energy	1,344	1,316	1,240		100	100	2 of 2		61	39					100	140	136	128		100		523	523	48	49	41
25	Kempsey	2,012	2,614	2,986	90	100	82	6 of 7	51	36	10	3			19	81	226	293	333	100			40	32	6	2	1
31	Lithgow	2,186	1,620	2,187		100	73	0 of 3		100					9	91	307	224	302				0				0
29	Armidale Dumaresq	1,722	1,926	1,819	127	100	100	1 of 1	27	54	12	7				100	225	247	229	100	100	-	603		44	39	33
30A	Hawkesbury	2,390	2,390	*2,398*		-	84	0 of 2	-	-	-	-	-			100		319	*320*				316			8	13
30	Griffith	1,848	2,042	2,064	220	100	76	1 of 3		78	11	11			8	92	254	308	306				229		18	18	11
33	Richmond Valley	1,808	2,106	*2,141*		-	100	4 of 4	-	-	-	-	-			100	285	330	*332*				288		18	13	13
32	Mid-Western Regional	1,884	2,048	1,251		100	22	3 of 3		100						100	304	323	193				92			3	7
34	Nambucca	1,568	1,703	1,848		100	99	3 of 4	28	66	6				73	27	265	306	339		100	100	125		8	9	7
35	Singleton	1,292	1,278	1,353	-	100	100	1 of 1	-	100	-	-				100	249	241	254				451		50	33	33
37	Inverell	795	795	*795*		100	100	2 of 2		8			92		8		173	173	*172*				0		0		0
41	Muswellbrook	1,253	1,142	1,279	8	100	55	0 of 2		99		1				100	256	231	254				960	960	74	84	75

Table 15: Sewerage – asset management and resource management (continued)

ASSET MANAGEMENT

	WATER UTILITY	Infiltration (ML per 100km of Main) (23)			Breaks & Chokes (No. per 100 km of Main) (24) A 12			Overflows see also Col (31a) (No. per 100 km of Main) (25)			Rehabilitations (% of Total Length) (27)	Rehabilitations (Service Connections %) (28)	Renewals ($'000 per 100 km of Main) (29)	Renewals (% of CRC) (30)	Mains Maintenance Cost ($'000 per 100 km of Main) (31)	Overflows Reported to Regulator (No. per 100km of main) (31a) E13	
		06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	07/08	08/09
36	Parkes		10	12	64	48	36	31	24	12	0.5	0.0	0	0.0	202		0
42	Corowa	25	26	26	77	60	51	13	21	14	0.0	0.0	118	0.4	137		1
38	Moree Plains				118	152	158	54	28	26	4.5	0.9	0	0.0	286		0
44	Gunnedah	52	52	52	157	106	131	97	28	72	2.1	0.4	0	0.0	169		1
46	Narrabri				82	162	-	8	2	-	2.1	0.5	195	0.2	166		-
43	Tumut					157	100		32	43	0.1	-	0	0.0	104		-
49	Young		57	57	351	301	189	219	110	80	2.4	1.8	0	0.0	69		0
39	Cowra				14	27	100	54	67	100	0.3	0.2	0	0.0	267		0
45	Upper Hunter	511	607	607	172	129	63			-	0.9	0.0	385	0.9	187		-
52	Snowy River					104	71		3	-	0.0	-	0	0.0	17		-
51	Forbes	6	107		294	632	231	6	1	4	0.0	0.0	0	0.0	109		0
50	Cooma-Monaro						113		40	39	0.3	0.2	249	1.4	97		0
53	Berrigan				131	108	186	0	0	0	0.1	0.1	2	0.0			0
Medians (% of LWUs basis) for 1,500 to 3,000 Properties				*125*			*89*			*18*	*0.3*	*0.2*	*2*	*0*	*138*		
LWUs with 1,501 - 3,000 Properties																	
48	Leeton		56	44		111	98		8	6	0.4	1.6	0	0.0	183		0
54	Deniliquin	71	64	64	259	94	79	0	0	0	0.0	0.1	696	1.3	256		-
47	Bellingen	147	66	156	42	34	44	30	18	40	0.0	0.2	0	0.0	65		4
60	Glen Innes Severn		27	326		67	-		0	-	0.3	0.0	0	0.0	58		-
58	Cootamundra		594	-	147	83	145	0	2	2	0.0	0.1	0	0.0			0
57	Wellington	2	2	3	38	15	64	0	0	0	0.0	0.0	0	0.0	400		0
91	Cabonne					64	38	9	25	7	0.0	0.0	0	0.0	121		0
80	Greater Hume	7	7	8	83	82	53	0	0	0	0.0	0.2	0	0.0			0
59	Lachlan	19	13	15		111	112	0	0	0	0.4	0.3	47	0.1	75		0
65	Murray	28	26	27	16	28	36	0	0	0	0.3	1.0	184	0.6	91		0
62	Narromine						31		0	0	0.0	0.0	39	0.1	45		0
56	Yass Valley	13	13	14	104	94	103	3	0	0	0.0	0.3	0	0.0			0
61	Liverpool Plains						66			5	0.0	0.7	178	1.0			3
55	Warrumbungle					288	153	86	0	0	0.5	0.0	47	0.1	109		0
69	Temora	16	14	6		818	426		9	4	0.0	0.5	0	0.0			4
71	Palerang		2	4		117	152		13	17	0.0	0.2	2,959	4.7	143		0
72	Bland		21	21			125			0	2.1	0.0	0	0.0			0
63	Narrandera			-		150	150		6	0	0.3	0.2	0	0.0	306		0
67	Cobar					1	2		0	0	0.0	0.0	0				0
74	Wentworth						38		0	0	0.0	0.2	96	0.3	37		0
75	Coonamble	28	48	37	67	117	-	0	2	0	0.0	0.3	0	0.0	189		0
Medians (% of LWUs basis) for 1,500 to 3,000 Properties				*21*			*79*			*0*	*0.0*	*0.2*	*0.0*	*0.0*	*115*		

RESOURCE MANAGEMENT

	WATER UTILITY	Total Vol of Sewage Collected (Res, NonRes + Trade Waste) (ML) (32) W18			Volume of Trade Waste (ML) (32a) W17	% Sewage Treated (%) (33)	% Sge Treated that was compliant (33a) E 4	STWs compliant at all times (33b) E 5	Percentage of Total Sewage Collected: Infiltration /inflow (34)	Res (35)	Non-Res (36)	Trade Waste (37)	Other (38)	Level of Treatment (%): Primary Level (39a) E 1	Secondary Level (39b) E 2	Tertiary Level (39c) E 3	Vol of Sewage Collected per Property (kL/property) (39) W 19			Biosolids Reused (%) (40) E 8			Effluent Recycled: Total Volume Recycled (ML) (41a) W 26	Volume Recycled for Urban Water (ML) (41b)	% of Total Effluent that is Recycled (41c) W 27		
		06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09
36	Parkes	760	851	874	9	100	57	2 of 3	1	71	26	1	1		1	99	158	171	176				475	99	21	19	54
42	Corowa	776	718	706	10	100	93	2 of 3	5	85	8	1	1		67	33	171	161	153				343		68	49	49
38	Moree Plains	1,500	1,468	1,118		94	100	2 of 2		100						100	393	384	298				800	200		63	76
44	Gunnedah	547	550	655		100	75	1 of 2	8	81	11			50	50		144	137	163				546		83	83	42
46	Narrabri	962	903	866		100	37	2 of 3		100					21	79	272	247	237		57	57	37		58	57	4
43	Tumut	962	761	761		-	100	4 of 5	-	-	-	-	-		11	89	252	191	0		100	96	33	10		4	4
49	Young	742	685	695	10	100	100	1 of 1	7	87	4	1	1		100		207	188	189		50		506	99	15	19	73
39	Cowra	694	714	672		-	45	1 of 2	-	-	-	-	-			100	196	201	189				672		0		100
45	Upper Hunter	897	937	937		100	60	3 of 4	74	25			1		60	40	241	272	258				173	167	51	18	11
52	Snowy River	474	474	474		-	54	2 of 4	-	-	-	-	-		4		155	136	131			-	0		0	0	0
51	Forbes	600	644	636		100	100	1 of 1		85	15				0	100	190	214	201				7		1.3	1	1
50	Cooma-Monaro	479	479	665		-	100	2 of 2	-	-	-	-	-		3	97	149	149	207		100	2	22			9	3
53	Berrigan	538	334	466	-	100	100	4 of 4		100		-					169	100	143				93	93	10	28	20
Medians (% of LWUs basis) for 1,500 to 3,000 Properties																	*225*	*224*	*207*			*Total Vol*	*8,634*		*21*	*19*	*13*
LWUs with 1,501 - 3,000 Properties																											
48	Leeton	3,815	1,200	2,820	134	100	98	2 of 3	4	74	7	14	1	33	33	33	1,260	387	305	100	100	100	20			6	1
54	Deniliquin	650	595	555	10	100	100	1 of 1	8	85	5	2			100		208	189	176				410		77	69	74
47	Bellingen	614	834	975		86	100	3 of 3	14	86						100	210	285	332				0		0	0	0
60	Glen Innes Severn	861	510	800	-	64	100	2 of 2	38	62	1	-			3		347	205	296		100	100	74	50	2	2	100
58	Cootamundra	478	392	387		100	100	1 of 1	-	100	-					100	168	138	141				202	202	39	51	52
57	Wellington	437	472	449		100	100	2 of 2		91	9				100		180	199	189				0		0	0	0
91	Cabonne	281	238	270		100	93	2 of 3		95	5				100		122	101	114				123	119	25	45	46
80	Greater Hume	414	382	366		100	66	3 of 6	2	97	1					100	175	156	146	100	27	100	106	90	24	20	25
59	Lachlan	531	536	523	37	100	35	0 of 3	2	75	15	7	1			100	237	239	242				138	121	21	26	24
65	Murray	517	505	528	93	100	58	1 of 2	5	64	14	18			92	8	202	189	180				172	25	18	32	26
62	Narromine	570	570	570		100	100	2 of 2		100					100		297	292	274				29		0	0	5
56	Yass Valley	330	351	352	20	99	100	2 of 2	3	88	3	6			100		154	164	160	100	100	100	116		52	36	33
61	Liverpool Plains	368	368	365		100	22	0 of 2		70	30				100		198	198	202				0				0
55	Warrumbungle	440	453	475		100	84	2 of 4		70	30				100		189	183	190				56		25	15	10
69	Temora	340	345	113		100	75	0 of 1	3	88	9					100	163	166	54				113	71	91	28	100
71	Palerang	254	367	308		100	100	3 of 3	1	96	3					100	143	203	165				7			1	2
72	Bland	289	295	234		100	100	3 of 3	4	94	2				100		158	161	128				104		45	45	45
63	Narrandera	335	335	630	-	-	80	0 of 1	-	-	-	-	-		100		205	205	377			-			0	0	0
67	Cobar	423	365	318		100	100	2 of 2		100					100		245	211	184				110	110	25	30	35
74	Wentworth	826	2,129	2,129		25	38	3 of 3		100				21	21	58	462	1,154	1,174				0		3	0	0
75	Coonamble	274	284	247		100	78	0 of 2	7	80	13				15	85	203	207	169				79	37	18	16	32
Medians (% of LWUs basis) for 1,500 to 3,000 Properties																	*202*	*199*	*184*			*Total Vol*	*1,859*		*23*	*18*	*25*

Table 15: Sewerage – asset management and resource management (continued)

ASSET MANAGEMENT

	WATER UTILITY	Infiltration (ML per 100km of Main) (23)			Breaks & Chokes (No. per 100 km of Main) (24) A 12			Overflows see also Col (31a) (No. per 100 km of Main) (25)			Rehabilitations (% of Total Length) (27)	Rehabilitations (Service Connections %) (28)	Renewals ($'000 per 100 km of Main) (29)	Renewals (% of CRC) (30)	Mains Maintenance Cost ($'000 per 100 km of Main) (31)	Overflows Reported to Regulator (No. per 100km of main) (31a) E13	
		06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	07/08	08/09
LWUs with 200 - 1,500 Properties																	
70	Kyogle	11	244	376	53	66	47	0	0	0	0.0	0.2	68	0.2	60		5
77	Junee			-	111	108	74	0	0	0	0.3	0.6	0	0.0	54		0
78	Blayney	14	13	13	27	67	43	0	0	0	0.3	0.2	0	0.0			0
79	Walgett				20		-	0		-	-	-	0	0.0	222		-
68	Tenterfield				234	142	-	0	0	-	-	-	74	0.2			-
84	Gilgandra	129	114	111	149	166	197	9	6	8	0.6	0.7	492	1.2	208		8
73	Upper Lachlan	95	95	95	148		107	0		0	1.2	0.4	138	0.4	38		0
82	Gloucester	38	60	38	53	94	64	32	43	34	0.4	0.3	202	0.7	294		0
87	Bourke						189	0	0	0	0.0	1.0	57	0.2	257		0
86	Hay	54	54	54	151	151	149	0	0	0	1.4	0.6	0	0.0			0
83	Oberon			53	37	32	29	18	3	0	0.8	0.8	129	0.9	163		0
81	Gwydir	27	51	76		115	141	85	49	51	1.2	1.9	149	0.5	83		2
85	Uralla	43	50	40	50	77	27	7	17	7	0.3	0.3	0	0.0	100		0
95	Weddin		3	3	165	129	97	0	0	0	0.0	0.0	0	0.0	100		0
89	Bogan		50	100		10	20		0	0	0.0	0.0	0	0.0	110		0
76	Harden			-	35	42	79	0	0	0	0.0	0.4	0	0.0	92		0
88	Wakool						0	0	0	0	0.0	0.0	34	0.1	21		0
93	Tumbarumba						43			2	0.2	0.2	96	0.3			2
94	Gundagai	1	3	3	22	18	22	1	1	3	0.0	0.2	0	0.0	71		0
92	Carrathool						282		0	27	-	-	-	-			-
96	Warren				271	153	176	0	6	0	0.0	0.0	0	0.0	494		0
99	Coolamon		5	7			16			0	0.0	0.0	0	0.0	25		0
102	Lockhart						0		0	0	0.0	0.0	0	0.0	17		0
98	Walcha	63	93	50	53	23	23	27	17	17	0.7	0.0	0	0.0			0
100	Balranald	11	8	8		24	21		0	0	0.0	0.5	0	0.0	26		0
97	Bombala				54	31	123	0	0	34	0.0	0.0	0	0.0	51		0
101	Murrumbidgee		14		152	95	-	5	0	-	-	-	0	0.0	33		-
90	Guyra	44	94	27	50	39	21	6	6	7	0.0	0.1	0	0.0			0
104	Boorowa			6			39			3	-	-	0	0.0	61		0
105	Brewarrina				138	131	156	0	0	0	0.0	0.4	0	0.0	156		0
106	Jerilderie	742	708	83	17	25	0	0	0	0	0.0	0.0	0	0.0	83		0
103	Central Darling				85	231	123	31	31	54	0.0	3.6	0		377		-
107	Urana				7		0	0	0	0	0.0	0.0	0	0.0	33		0
Medians (% of LWUs basis) for 200 to 1,500 Properties				*45*			*45*			*0*	*0.0*	*0.2*	*0*	*0.0*	*83*		
Median All LWUs (% of LWUs basis)					*Breaks & Chokes*		*68*	*Overflows*		*5*			*Renewals 0% of CRC*				
Median All LWUs (Statewide basis)							*53*			*12*			*Renewals 0.1 % of CRC*				

RESOURCE MANAGEMENT

	WATER UTILITY	Total Vol of Sewage Collected (Res, NonRes + Trade Waste) (ML) (32) W18			Volume of Trade Waste (ML) (32a) W17	% Sewage Treated (%) (33)	% Sge Treated that was compliant (33a) E 4	STWs compliant at all times (33b) E 5	Percentage of Total Sewage Collected: Infiltration /inflow (34)	Res (35)	Non-Res (36)	Trade Waste (37)	Other (38)	Level of Treatment (%): Primary Level (39a) E 1	Secondary Level (39b) E 2	Tertiary Level (39c) E 3	Vol of Sewage Collected per Property (kL/property) (39) W 19			Biosolids Reused (%) (40) E 8			Effluent Recycled: Total Volume Recycled (ML) (41a) W 26	Volume Recycled for Urban Water (ML) (41b)	% of Total Effluent that is Recycled (41c) W 27		
		06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09
LWUs with 200 - 1,500 Properties																											
70	Kyogle	310	478	533	18	85	84	1 of 3	44	39	14	3		25	69	6	195	286	317	100	100	100	528	20	18	5	100
77	Junee	225	251	294	-	86	100	1 of 1	-	86	14	-				100	141	152	186				166	158	60	54	65
78	Blayney	284	284	270	15	93	100	1 of 1	4	85	6	6			100		183	162	150				190	190	48	70	76
79	Walgett	622	622	*622*		-	-	-	-	-	-	-	-				410	410	*410*			-	*517*		*83*	*83*	*83*
68	Tenterfield	323	323	*323*		-	-	-	-	-	-	-	-				218	226	*195*			-	*126*		*39*	*39*	*39*
84	Gilgandra	265	280	285	30	98	100	1 of 1	14	61	14	11				100	197	207	210				280		81	89	100
73	Upper Lachlan	240	240	*240*	5	96	100	2 of 2	17	71	10	2				100	174	170	*169*				0		0	0	0
82	Gloucester	220	385	468		98	100	1 of 1	4	80	16					100	146	249	301	100		100	0		0	0	0
87	Bourke	141	175	189		100	25	0 of 1		100					100		132	164	177				0		0	0	0
86	Hay	304	277	287	5	97	100	1 of 1	7	88	3	2			100		239	218	225				0		0	0	0
83	Oberon	384	384	254	52	100	50	0 of 1	8	68	4	20				100	320	283	187				0		0	0	0
81	Gwydir	173	214	242		100	100	2 of 2	13	76	11					100	157	187	211	12	14	14	39	27	17	12	16
85	Uralla	142	164	137	1	100	-	0 of 1	9	88	3	1				100	140	161	135				0		0	0	0
95	Weddin	162	160	153		100	100	1 of 1	1	84	16				100		168	156	149				39	39		18	25
89	Bogan	622	622	*622*	6	28	100	1 of 1	3	23	1	1	72			100	589	596	*594*				0		0	0	0
76	Harden	566	566	352	-	100	66	0 of 1	-	100	-	-			100		585	565	377			100	248	248	15	15	70
88	Wakool	366	296	331		98	100	4 of 4		91	9			42	8	51	329	277	311				0		0	0	0
93	Tumbarumba	278	278	293		100	100	2 of 2		100					24	76	282	282	301								0
94	Gundagai	106	111	117	-	100	100	1 of 1	2	73	26	-			100		120	125	130				117	117	99	100	100
92	Carrathool	103	167	105		100	100	3 of 3		100					100		127	191	120			-			*8*	0	*1*
96	Warren	153	173	172		100	100	2 of 2		100					100		184	208	217				5		3.9	6	3
99	Coolamon	95	95	98		100	100	2 of 2	3	93	4				31	69	99	98	99				88	65	74	89	90
102	Lockhart	136	171	158		100	100	3 of 3		100					56	44	164	206	192				2	2	41	40	1
98	Walcha	159	196	166		100	100	1 of 1	9	73	17		1			100	201	246	207				0		0	0	0
100	Balranald	132	223	196		67	100	2 of 2	2	98					100		173	282	248				95		0	0	73
97	Bombala	173	173	*173*		-	100	2 of 2	-	-	-	-	-		100		228	228	*228*				35	35	20	20	100
101	Murrumbidgee	160	86	*86*		-	-	-	-	-	-	-	-				216	117	*115*	100		-	*15*		*5*	*17*	*17*
90	Guyra	127	284	168		80	100	1 of 2	9	80	11			0	100		132	296	175	100	100	100	0		0	0	0
104	Boorowa	90	88	*88.0*		98	65	0 of 1	2	98					100		172	147	*147*				4	3			5
105	Brewarrina	210	210	*210*	-	-		2 of 2	-	-	-	-	-				438	438	*436*				*170*		*81*	*81*	*81*
106	Jerilderie	89	85	77		100	100	1 of 1	13	87					100		210	200	181				20	20	6	6	26
103	Central Darling	100	100	100		100	100	1 of 1		100					100		513	515	515				0		0	0	0
107	Urana	90	90	*90*		100	100	2 of 2		100					100		299	286	*285*				0		0	0	0
Medians (% of LWUs basis) for 200 to 1,500 Properties																	*196*	*218*	*207*		*Total Vol*		*2,684*		*5*	*6*	*5*
Median All LWUs (% of LWUs basis)					*Median % sge treated that was compliant was 100%*																		*Median % of Effluent Recycled*				*13*
Median All LWUs (Statewide basis)																											*10*

Totals for all LWUs

Total volume of sewage collected = 172,000 ML

No. of LWUs Reporting Biosolids Reuse 29 (ie. 29% of LWUs)

No. of LWUs Reporting Recycling for Urban use 47 (ie. 47% of LWUs)

No. of LWUs Reporting Effluent Recycling 79 (ie. 79% of LWUs)

Total volume of effluent recycled = 38,000 ML

Effluent Recycled % of total volume collected = 23%

NOTE: 1. For those councils that did not report the current year's volume of sewage collected (column (32)), either the previous year's value or the current year's volume of sewage treated has been adopted, whichever is the larger. These adopted values are shown in bold italics in columns (32) and (39).

2 The number of LWUs reporting effluent recycling = 79 (ie. 79% of LWUs providing sewerage services)
The number of LWUs reporting effluent recycling for Urban Water Supply (ie. not for irrigation, environmental use or agriculture) = 47 (ie. 47% of LWUs providing sewerage services)

3 For those councils that did not report the current year's volume of effluent recycled (column (41)), where the previous years' value of percent effluent recycled was at least 10%, the previous year's value has been adopted. For such councils, the adopted value is shown in bold italics in column (41).

Table 16: Sewerage – financial and efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)																				EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)							
		Total Revenue - Sewerage (excl. Capital Works Grants) ($'000)		Revenue per property ($)	Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity (%)			Return on Assets			ERRR see also Table 7 Col (11)			Cross Subsidies		Operating Result ($/property)		Externalities (Annual Fees to EPA) ($/property)	Loan Payment ($/property)			Operating Cost (OMA) ($/property)				Management Cost ($/property)			
					Res Revenue (% of rates and charges)	Res Vol collectd (% total excl infiltration & inflow)	Written Down Cost ($'M)	Current Replacement Cost ($'M)	Current Replacement Cost per Assessmnt ($)										Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)												
		(42) F 2		(42a) F6	(43)	(44)	(45)	(46) F10	(47)	(48) F 22			(48a)			(48b) F 18			(49a)	(49b)	(50)		(51)	(51a)			(52) F12				(54)			
		07/08	08/09		08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
	Sydney Water	908,622	995,675	583						45	62	103				1.9	1.2	0.9									131	190	261	240				
	Hunter Water	110,102	111,359	528						24	30	32				1.5	2.3	2.0									217	228	259	271				
LWUs with > 10,000 Properties																																		
1	Gosford	29,100	30,200	441		81	381	455	6,985	-2	-7	-5	1.8	1.1	1.4	1.4	1.3	1.1			66	64	0.6	18	6	6	287	266	261	282	160	109	105	133
2	Wyong	25,700	25,500	435	85	75	396	552	9,127	6	-1	-1	1.4	-1.2	-1.6	1.4	-1.2	-1.6			-132	-107	0.8	60	67	111	251	284	300	319	76	90	84	112
3	Shoalhaven	28,800	30,400	771	86	80	457	611	13,738	1	8	8	1.9	1.1	0.8	2.2	1.6	1.3			112	75	1.1	101	122	135	335	369	397	424	128	132	143	153
5	MidCoast	25,700	26,600	817	85	79	427	624	18,412	9	23	26	0.9	-1.9	-1.8	1.2	-0.1	-0.2			-299	-259	1.0			330	383	416	404	415	57	56	70	80
6	Tweed	29,600	27,500	926	87	77	454	689	21,109	-6	-2	-3	0.5	0.9	-0.2	0.2	1.0	-0.2			77	-69	1.3	26	27	43	335	333	372	413	117	125	132	141
9	Wagga Wagga	12,300	13,600	576	73	86		*230*	*10,500*	-10	-9	4	4.3	1.2	0.9	3.6	1.0	1.0			89	74	0.7	2	8	18	189	211	253	270	53	46	50	54
7	Port Macquarie-Hastings	15,400	19,200	706	88	*90*	206	312	10,894	-5	-8	3	2.1	0.5	-0.7	0.1	0.3	2.1		208	-46	-178	0.6	32	31	60	354	344	376	349	90	95	107	108
11	Albury City	11,600	12,100	587	74	*90*	158	276	13,264	2	9	11	-0.4	0.8	1.2	0.1	1.3	2.1		28	48	83	0.8	86	96	104	300	330	319	254	119	112	133	31
10	Coffs Harbour	21,500	20,500	912	80	87	298	371	15,342	-4	13	25	3.3	0.9	-0.7	3.0	2.8	2.1			65	-113	0.7	393	420	685	377	388	415	429	119	117	126	130
13	Tamworth Regional	14,300	18,500	1,006	80	69	102	192	10,471	-18	-17	-10	8.1	7.5	8.8	6.4	6.9	7.8			401	671	0.6	41	47	158	284	322	269	277	98	132	91	105
15	Eurobodalla	11,900	13,500	767		*90*	163	257	13,746	-2	5	2	0.7	0.4	1.3	1.2	0.7	1.6			-22	80	0.9	80	84	151	384	394	441	403	108	103	106	157
17	Queanbeyan	7,600	5,800	362	88	80	111	204	13,092	-14	-21	-20	1.7	1.3	-0.5	0.0	0.1	-1.0			94	-41		1	1	0	251	227	274	249	90	96	138	104
19	Orange	10,700	13,600	899	76	*90*	105	171	11,303	-11	-17	0	2.4	3.1	6.8	1.0	3.3	5.8		838	113	403	0.5	0	0	0	254	261	318	296	103	103	136	123
20	Goulburn Mulwaree	8,200	8,300	821	73	89	78	121	12,361	10	14	12	4.7	0.4	1.8	6.2	4.2	3.6			42	134	0.6	191	234	190	259	290	350	352	122	124	107	110
18	Dubbo	9,500	9,700	650	69	57	137	164	12,221	4	-5	-5	1.6	1.7	1.2	1.4	1.7	1.4			147	89	0.6	26	20	20	338	324	335	370	134	145	137	151
16	Wingecarribee	9,700	9,700	679	88	81	185	257	17,089	-7	3	4	2.3	2.0	0.7	2.7	2.2	1.0			80	43	1.4	128	127	130	312	325	324	323	157	128	140	142
14	Clarence Valley	10,000	10,400	726	82	*90*	116	154	10,106	-8	-26	4	7.4	1.9	-0.1	5.4	3.6	1.2			83	-56	1.3	82	162	370	369	344	356	357	151	151	141	124
21	Bathurst Regional	6,700	7,800	537	64	59	70	133	9,890	-9	-15	-15	1.7	1.8	2.7	1.2	1.2	2.2			77	123	0.4	13	13	13	291	324	317	342	137	142	136	134
24	Ballina	8,900	8,600	677	80	0	91	182	13,305	-13	-14	-11	2.4	0.8	-1.2	1.1	-0.7	-2.3			38	-126	1.4	2	2	2	366	383	456	537	118	133	137	179
22	Lismore	8,700	7,900	643	87	*90*	175	318	27,145	-6	-5	-5	1.3	-1.2	-1.8	0.9	-0.9	-1.3			-187	-275	1.1	6	5	15	305	331	386	366	61	77	107	110
Medians (% of LWUs basis) for >10,000 Properties									*12,727*	*-5.4*	*-5*	*1*			*0.8*	*1.3*	*1.3*	*1.2*			*71*	*54*		*32*	*31*	*82*	*308*	*328*	*342*	*350*	*118*	*115*	*129*	*124*
LWUs with 3,001 - 10,000 Properties																																		
23	Bega Valley	11,800	12,200	1,029	84	65	116	227	18,789	-3	19	19	1.2	1.3	0.4	0.6	2.1	1.5	7		119	35	1.3	86	201	197	480	511	574	596	187	184	208	213
27	Byron	9,900	11,000	1,117	76	64	156	223	21,738	2	12	16	1.4	0.6	0.4	1.9	1.3	1.4			15	-77	1.7	182	206	242	489	516	529	571	143	138	148	163
26	Country Energy	4,100	4,600	474	79	61		*35*	*3,600*			0	0.0								63	31	0.9	0	0	0	245	234	268	337	113	107	87	83
25	Kempsey	6,100	6,400	713	75	73	113	189	21,884	3	-2	4	1.3	0.2	0.0	1.6	0.5	0.4			-22	-57	2.4	59	82	120	401	346	365	381	129	126	127	128
31	Lithgow	3,700	3,400	470		*90*	20	59	7,945	-7	-6	-2	-11.1	0.5	-1.4	-12.2	-0.3	-1.6			11	30	1.1	0	144	7	349	630	390	379	142	178	35	42
29	Armidale Dumaresq	3,800	4,000	503	62	74	62	65	8,017	-11	-5	0	0.6	1.5	1.3	0.0	0.9	1.3		1171	-411	-146	0.8	0	0	0	358	342	369	357	178	135	171	186
30A	Hawkesbury	4,000	5,200	695	72	-	62	115	14,964	-4	-4	0	-0.1	-1.6	0.1	-0.3	-1.6	0.0			-131	27	0.8	1	1	1	379	443	415	429				
30	Griffith	4,400	4,800	713	72	78	103	126	15,877	-7	-2	0	2.4	-0.1	0.1	1.8	0.2	0.3			-15	8	1.3	63	68	63	482	424	442	464	146	126	141	145
33	Richmond Valley	5,800	6,100	947	88	-	66	117	17,237	2	3	6	3.5	2.4	1.1	3.1	2.6	2.2			-230	-77	2.2	110	181	197	381	375	417	482	161	175	187	198
32	Mid-Western Regional	3,300	3,100	480		*90*	31	72	11,093	-16	-18	-17	3.4	1.7	0.1	2.6	0.6	-1.0			41	2	1.0	18	17	17	308	298	315	337	110	98	105	133
34	Nambucca	3,000	3,300	606	72	*90*	59	84	14,637	-7	-8	-7	1.0	0.1	0.5	0.8	0.4	0.9			1	56	1.2	59	63	77	285	280	312	352	91	90	97	115
35	Singleton	2,700	2,500	468	85	*90*	28	55	9,843	-26	-25	0	5.8	3.6	2.3	3.9	2.0	0.5			159	106	1.2	0	0	0	223	200	247	275	72	70	80	85
37	Inverell	1,700	1,800	391		8	34	47	9,929	-9	-7	0	1.9	-2.4	-1.0	1.3	-0.5	0.7			-202	-114	0.9	0	1	0	224	242	316	250	91	92	90	97
41	Muswellbrook	3,600	3,300	656	82	*90*	37	63	12,009	-14	-14	-15	7.0	4.4	1.9	6.1	3.3	1.4			323	145	1.0	24	24	23	309	311	313	394	82	81	99	135

Table 16: Sewerage – financial and efficiency (continued)

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)																				EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)							
		Total Revenue - Sewerage (excl. Capital Works Grants) ($'000)		Revenue per property ($)	Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity (%)			Return on Assets			ERRR see also Table 7 Col (11)			Cross Subsidies		Operating Result ($/property)		Externalities (Annual Fees to EPA) ($/property)	Loan Payment ($/property)			Operating Cost (OMA) ($/property)				Management Cost ($/property)			
		(42) F 2		(42a) F6	Res Revenue (% of rates and charges) (43)	Res Vol collectd (% total excl infiltration & inflow) (44)	Written Down Cost ($'M) (45)	Current Replacement Cost ($'M) (46) F10	Current Replacement Cost per Assessmnt ($) (47)	(48) F 22			(48a)			(48b) F 18			Annual Fees & Charges ($/assessment) (49a)	Developer Charge ($/assessment) (49b)	(50)		(51)	(51a)			(52) F12				(54)			
		07/08	08/09		08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
36	Parkes	1,800	2,000	403	74	72	73	52	9,958	-19	-16	0	2.7	-3.1	-0.2	1.0	1.5	0.4			-191	-122	1.3	0	0	0	162	218	168	210	34	35	32	34
42	Corowa	2,600	2,600	562	84	89	27	41	8,405	-21	3	4	2.7	1.8	0.5	0.7	1.9	1.4			72	-55	1.1	1	31	55	254	269	335	367	94	102	160	155
38	Moree Plains	2,800	3,000	800	67	*90*	26	47	12,219	11	17	13	3.5	-0.6	1.8	3.5	1.7	2.3			-54	25	1.7	63	205	98	455	396	432	423	143	62	90	93
44	Gunnedah	1,300	1,400	349		88	21	49	12,693	-15	-15	0	2.3	-0.4	-0.2	1.3	-0.2	-0.3			-56	-28	0.6	0	0	0	123	140	133	181	37	37	37	66
46	Narrabri	1,800	1,700	464		*90*	17	88	23,427	-3	-2	-3	1.1	0.0	-1.0	1.0	1.5	-0.6			-6	-85	0.7	42	37	48	220	282	239	272	59	98	56	48
43	Tumut	3,500	2,600	633	77	-	23	40	9,246	-3	-5	0	13.2	3.9	1.1	12.1	3.3	0.9			-363	38		29	3	0	240	326	407	364	27	47	99	69
49	Young	1,500	1,500	407	80	*90*	8	27	7,669	-37	-29	-30	15.3	10.1	5.8	12.2	7.6	5.4			-47	135	0.6	11	11	11	101	107	112	146	20	20	20	59
39	Cowra	2,500	2,600	732	80	-	22	37	9,823	-28	-12	-11	8.5	5.3	4.0	8.8	5.6	4.2			309	251	0.7	13	41	40	190	242	298	393	117	137	161	221
45	Upper Hunter	2,100	1,800	495	86	*90*	26	50	12,701	-15	-15	0	1.4	0.6	-1.2	-0.1	-0.7	-2.6			12	-81	0.9	0	0	0	304	345	422	416	131	150	173	163
52	Snowy River	1,900	2,200	610		-	20	36	14,268	-20	-14	0	3.6	-0.3	1.8	2.3	-1.7	0.9			-20	104	1.6	0	0	0	290	290	460	377	73	78	153	139
51	Forbes	1,800	1,900	600	78	85	27	38	11,866	8	4	1	0.4	1.2	1.4	1.1	1.6	1.6			100	122	2.1	244	305	338	257	257	297	310	38	37	37	33
50	Cooma-Monaro	2,200	2,400	748	83	-	27	41	12,217	-3	-3	-3	2.8	-0.8	0.4	2.7	-0.4	0.3			-79	20	0.9	116	82	45	367	355	470	474	112	111	152	163
53	Berrigan	1,600	1,400	428	81	*90*	16	39	11,733	-13	-8	0	1.2	2.5	-1.9	-0.1	1.2	-3.1			95	-127	0.8	0	0	0	254	216	215	368	88	87	85	90
Medians (% of LWUs basis) for 3,000 to 10,000 Properties									*12,009*	*-8*	*-5*	*0*			*0.4*	*1.5*	*1.2*	*0.8*			*-6*	*20*		*13*	*24*	*17*	*285*	*298*	*335*	*368*	*102*	*98*	*99*	*121*
LWUs with 1,501 - 3,000 Properties																																		
48	Leeton	1,900	2,200	707		77	19	44	13,241	-24	-24	-25	4.0	2.4	1.4	2.7	1.2	0.7			130	122	1.6	16	15	115	298	365	358	420	120	140	156	113
54	Deniliquin	1,800	1,700	538		*90*	10	37	11,336	-21	-20	-16	2.1	3.8	2.0	0.3	1.8	0.8			-61	-28	0.8	21	18	21	320	412	385	391	101	131	171	196
47	Bellingen	1,600	1,700	578		*90*	18	34	11,023		-27	-22	0.0	0.8	0.3		-0.7	-1.7			33	-3	2.0	0	1	1	327		402	451	126		181	184
60	Glen Innes Severn	1,100	1,200	444		*90*	20	27	9,063	5	3	3	0.7	0.3	-0.1	0.9	1.1	1.2			19	-11	0.9	46	98	91	174	236	246	229	62	118	115	125
58	Cootamundra	897	952	346	74	*90*	17	29	10,173	0	-1	-3	0.2	-0.4	0.3	0.4	-0.3	0.4			-28	15	0.9	13	31	38	187	192	185	201	45	50	51	58
57	Wellington	1,400	1,400	588	79	*90*	20	30	12,275	10	12	17	3.3	0.8	-1.1	3.9	1.8	0.0			59	-104	1.1	193	168	168	255	296	312	421	106	134	159	154
91	Cabonne	1,200	1,400	592	82	*90*	24	35	13,555	-14	-13	-7	5.3	1.5	1.2	4.6	0.7	0.9			133	82	2.1	100	65	64	188	204	214	240	45	50	48	69
80	Greater Hume	832	830	331	78	*90*	20	31	11,798	-8	-7	-8	-0.9	-0.5	-0.6	-1.4	-1.1	-1.2			-40	-49	2.0	25	23	24	239	255	282	282	90	78	79	81
59	Lachlan	721	732	339	83	77	41	27	12,809		-24	0	0.0	1.1	-0.4		-0.6	-1.0			61	-75	1.2	0	0	0	197		224	284	27		54	78
65	Murray	1,300	1,400	477	76	67	19	26	8,497	0	-1	-4	1.7	0.9	1.7	1.7	1.0	1.7			35	109	0.9	131	45	36	243	237	294	241	110	98	145	96
62	Narromine	970	1,000	480	83	*90*	29	18	8,020	-32	-31	0	1.0	3.3	1.0	0.3	2.2	0.8			116	140	1.2	0	0	0	279	280	308	280	146	152	139	149
56	Yass Valley	1,500	1,500	680		*90*	13	23	9,870		-35	0	0.0	5.6	2.7		5.5	2.6			199	142	1.1	0	0	0			340	371			150	156
61	Liverpool Plains	667	694	384	78	70	27	10	5,650	-17	-18	0	1.1	-1.3	0.0	-1.3	-2.3	-0.1			-83	7	2.8	0	0	0	220	232	230	205	62	94	86	76
55	Warrumbungle	1,100	*1,100*	441	83	70	15	28	11,212	-17		-19	0.6		0.4	-0.6		0.6				24	2.3	89		11		301	301	285		70	70	73
69	Temora	481	534	254	79	*90*	9	14	6,822	-5	-6	0	1.0	0.8	1.5	0.7	0.4	1.0			33	62	1.2	0	0	0	157	155	159	155	33	37	33	32
71	Palerang	2,100	2,300	1,232		*90*	16	29	14,797		-17	-17	0.0	6.7	6.6		6.0	6.0			515	583	3.1	0	149	110	328		395	386	129		175	*162*
72	Bland	840	*897*	493		*90*	8	18	9,286	-25		0	1.5		0.1	-0.2		0.5				4	1.4	0		22	257	324	324	312	75	141	141	64
63	Narrandera	884	961	575	79	-	6	11	5,964	-32	-25	0	5.6	-1.2	0.8	2.4	-1.2	0.9			-239	-13	1.5	0	0	8	491	409	406	355	128	145	169	134
67	Cobar	547	520	301		*90*		*9*	*5,100*	-36	-3	0	6.2	0.6	1.2	3.9	0.3	1.1			30	67	1.4	0	0	0	185	142	165	137	20	20	55	*20*
74	Wentworth	917	986	544		*90*	24	28	14,694	3	2	3	-0.7	-1.0	-0.9	-0.1	-0.7	-0.5			-147	-133	2.5	106	110	120	253	279	260	276	62	56	54	57
75	Coonamble	468	471	323	85	86	4	18	12,263	-43	-45	-28	0.4	-2.2	-2.5	-3.5	-6.9	-7.5			-62	-65	2.3	8	7	7	143	215	296	275	20	23	85	44
Medians (% of LWUs basis) for 1,500 to 3,000 Properties									*11,023*	*-17*	*-17*	*0*			*0.4*	*0.4*	*0.4*	*0.7*			*33*	*7*		*8*	*15*	*21*	*241*	*255*	*296*	*282*	*69*	*94*	*115*	*81*

Table 16: Sewerage – financial and efficiency (continued)

WATER UTILITY		FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)																						EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)							
		Total Revenue - Sewerage (excl. Capital Works Grants) ($'000)		Revenue per property ($)	Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity (%)			Return on Assets			ERRR see also Table 7 Col (11)			Cross Subsidies		Operating Result ($/property)		Externalities (Annual Fees to EPA) ($/property)	Loan Payment ($/property)			Operating Cost (OMA) ($/property)				Management Cost ($/property)			
					Res Revenue (% of rates and charges)	Res Vol collectd (% total excl infiltration & inflow)	Written Down Cost ($'M)	Current Replacement Cost ($'M)	Current Replacement Cost per Assessmnt ($)										Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)													
		(42) F 2		(42a) F6	(43)	(44)	(45)	(46) F10	(47)	(48) F 22			(48a)			(48b) F 18			(49a)	(49b)	(50)		(51)	(51a)			(52) F12				(54)			
		07/08	08/09		08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	05/06	06/07	07/08	08/09	05/06	06/07	07/08	08/09
LWUs with 200 - 1,500 Properties																																		
70	Kyogle	923	1,000	595	79	70	16	27	15,236	-3	1	3	13.7	0.9	0.9	13.7	1.1	1.1			72	83	2.4	2	27	54	313	298	319	332	104	101	88	103
77	Junee	563	587	372	87	86	11	19	11,650	-7	-9	0	0.7	0.4	0.7	0.5	-0.1	0.1			25	47	1.6	0	0	0	218	230	221	238	53	54	57	53
78	Blayney	980	933	517	90	89	14	21	12,213	-10	-10	-11	2.2	-2.0	-0.4	2.0	0.3	-0.2			-164	-29	1.4	71	41	64	298	301	341	335	127	129	150	153
79	Walgett	602	628	414		-	21	15	8,660	-12	-13	-15	-1.1	1.9	0.5	-1.2	1.8	0.5			121	76		25	13	5	194	248	194	221	73	124	73	32
68	Tenterfield	1,100	1,200	724	81	-	20	32	18,174	-14	-9	10	1.9	-2.0	-2.4	0.8	1.3	-1.2			-241	-308	2.0	0	11	139	406	410	421	569	213	214	221	260
84	Gilgandra	524	523	384	81	71	7	14	10,279	-9	-12	-8	4.3	1.8	1.3	3.8	1.0	0.7			49	21	1.8	16	0	0	144	170	180	186	20	23	23	34
73	Upper Lachlan	787	1,800	1,270	83	86	9	16	11,061	0	-3	1	2.9	0.2	10.5	3.3	1.4	12.0			8	699	2.3	138	159	159	279	290	319	318	87	91	107	109
82	Gloucester	796	726	467	74	83	9	16	9,681	-20	-20	0	0.4	0.1	0.3	-1.0	0.1	-0.2			-45	-17	1.6	0	0	0	391	421	392	360	64	78	74	85
87	Bourke	623	638	597	88	*90*	15	11	10,069	-14	-16	-17	-1.1	0.5	0.2	-2.0	-0.8	-0.4			28	22	2.3	64	63	64	326	472	374	477	114	58	67	162
86	Hay	579	663	520	83	*90*	5	17	13,077	-18	-22	-24	1.8	-1.1	2.1	0.6	-2.7	0.9			-40	64	0.4	1	0	0	249	246	255	300	69	69	77	94
83	Oberon	627	598	439	58	74	4	6	4,188	-16	-8	0	-0.3	1.9	0.7	-2.3	0.2	-0.3		13	-302	-8	1.8	0	0	0	323	375	368	399	67	87	105	112
81	Gwydir	712	663	578	81	87	5	13	10,662		-15	-17	0.0	-3.3	2.0		-4.2	0.9	13118		-129	62	2.2	0	10	7	285		581	336	62		358	100
85	Uralla	468	470	463		*90*	7	8	7,609	-11	-9	-9	1.2	1.6	1.3	1.1	0.7	1.4			-214	59	2.5	0	0	2	319	261	400	350	156	82	165	125
95	Weddin	205	213	208		85	3	11	9,701	-42	-15	0	-10.4	0.7	-1.6	-13.2	-0.1	-1.9			-17	-151	2.4	0	0	0	127	124	133	185	27	27	25	25
89	Bogan	302	473	452		24	7	10	9,357	-17	-14	-14	1.1	-0.3	2.0	0.6	-1.0	1.2			-19	133	2.4	18	19	20	237	275	281	293	149	186	187	178
76	Harden	468	558	597	79	*90*	3	11	11,639	-3	-3	-11	4.2	-1.9	2.3	4.3	-2.0	2.2			-63	78	2.5	76	116	137	293	271	320	285	77	72	75	79
88	Wakool	559	567	532	76	*90*	14	25	22,436	-4	-5	-6	1.2	-1.0	-0.9	1.1	-1.1	-1.0			-142	-123	0.7	115	118	55	204	231	257	266	47	60	67	68
93	Tumbarumba	456	460	472	75	*90*	6	13	12,932	-21	-21	0	2.7	2.7	1.7	0.9	0.7	1.4			139	79	3.4	0	0	112	244	221	237	217	70	78	75	77
94	Gundagai	281	364	404	60	74	6	13	14,065	-1	-1	0	0.2	-1.7	-1.1	0.1	-1.8	-1.2			-104	-71	0.9	0	0	0	243	266	309	317	51	56	69	77
92	Carrathool	151	151			*90*		*9*	*10,200*	0	0		-1.4	-2.0		-1.5	-2.1				-138		0.0	0	0		145	194	147	*147*	25	26	24	*24*
96	Warren	458	458	578	78	*90*	3	11	12,933	-31	-33	0	4.6	1.8	1.1	2.1	-1.3	-1.8			43	10	3.2	24	25	26	230	290	378	414	64	86	93	100
99	Coolamon	413	576	585	80	*90*	8	11	10,218	-9	-10	0	3.0	1.6	3.0	2.3	1.0	2.4			132	269	0.5	0	0	0	148	147	189	197	59	57	65	62
102	Lockhart	300	336	407	83	*90*	6	11	12,554	-15	-17	0	-1.4	-0.5	0.2	-2.2	-1.5	-0.8			-41	5	1.9			0		330	274	266		30	34	63
98	Walcha	367	344	429		80	7	8	9,917	-3	-4	-6	1.1	1.3	1.0	0.9	1.1	1.1			19	62	3.1	6	6	6	301	254	284	254	54	51	75	60
100	Balranald	251	227	287	85	*90*	9	13	16,195	-7	-8	0	-0.4	0.5	0.1	-0.7	-0.1	-0.3			53	15	0.6	0	0	0	161	172	159	152	34	50	44	43
97	Bombala	327	340	449	81	-	7	12	15,294	1	-10	-11	2.2	1.4	-0.1	1.8	0.5	-0.4			48	-41	3.3	30	8	16	180	168	173	287	74	61	62	120
101	Murrumbidgee	197	217	291		-	2	5	6,488	-36	-41	0	6.0	4.6	3.0	2.2	0.2	-0.9			103	67	1.1	0	0	0	165	155	136	188	58	54	59	54
90	Guyra	510	516	538	90	88	13	14	13,917	2	3	3	0.4	1.3	0.6	0.9	1.5	1.1			-123	63	2.6	170	492	116	228	334	300	362	54	189	107	108
104	Boorowa	257	316	526		*90*	2	9	13,872	-8	-14	-20	4.7	-0.4	1.4	4.3	-1.1	0.7			-27	32	0.8	17	37	37	171	163	170	200	21	21	23	*23*
105	Brewarrina	299	313	650	83	-	7	11	19,280	-5	-5	-5	1.1	-1.1	-1.1	1.0	-1.1	-1.2	82		-156	-154		6	6	6	363	444	508	523	21	48	108	139
106	Jerilderie	249	248	584	69	*90*	3	6	13,850	-25	-27	0	5.1	3.5	3.4	3.1	0.9	1.0			231	233	1.9	24	12	0	311	311	334	313	104	120	85	80
103	Central Darling	94	97	500		*90*		*3*	*13,900*	-9	-9	0	-2.3	-0.3	-0.5	-2.5	-0.6	-0.7			-258	-62		0	0	0	436	528	392	428				
107	Urana	161	153	485		*90*	6	7	19,985	-5	-6	-7	0.7	0.5	0.0	0.5	0.1	-0.2			22	-22		229	219	216	325	309	280	320	116	116	111	111
Medians (% of LWUs basis) for 200 to 1,500 Properties									*12,213*	*-9*	*-10*	*0*			*0.7*	*0.9*	*0.1*	*-0.1*			*-19*	*27*		*4*	*7*	*6*	*247*	*271*	*284*	*300*	*67*	*71*	*75*	*83*
Median All LWUs (% of LWUs basis)		*Revenue/prop*		*$540*			*CRC $/Assessment*		*$12,300*	*Net D/E*		*0*			*0.5*	*ERRR*		*0.7*					*Loan Payment per property*			*$18*	*OMA $ per property*			*$330*	*Mngmnt $/prop*			*$105*
Median All LWUs (Statewide basis)				*$650*					*$12,300*			*0*			*0.5*			*1.1*							*$55*				*$340*				*$123*
Totals for all LWUs		*Total Sge Revenue $460 M*					*Total CRC $9,200 M*																											

NOTE: 1. If the reported management cost is <$20/property or not reported, the previous year's management cost has been adopted and is shown in ***italics bold***. In such cases, the OMA cost per property has not been increased to include this adopted management cost.

2. If the OMA cost is not reported, the previous year's value has been adopted and is shown in ***italics bold***.

3. Where the residential revenue or residential volume is reported to be greater than 90%, a maximum value of 90% has been adopted. This is shown in ***italics bold***.

Table 17: Sewerage – environmental and levels of service

	WATER UTILITY	ENVIRONMENTAL																	LEVELS OF SERVICE								
		DEC DISCHARGE LICENCE COMPLIANCE												Sewage Treated that was Compliant			STWs Compliant at all times	Compliance with Environmental Regulator	Odour Complaints			Service Complaints			Average Sewerage Interruption		
		BOD				SS				N	P	Oil & Grease	Faecal Coli-form															
		Compliance			90 %-ile Limit	Compliance			90 %-ile Limit					(%)					(per 1000 properties)			(per 1000 properties)			(minutes)		
		(%) (55)			(mg/L) (56)	(%) (57)			(mg/L) (58)	(%) (59a)	(%) (59b)	(%) (59c)	(%) (59d)	(59e) E4			(59f) E5	(60) E 7	(61)			(62) C 11			(65) C 16		
		06/07	07/08	08/09	08/09	06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
	Sydney Water													100	96	96	27 of 29	No				1	0.9	0.4	137	143	240
	Hunter Water													99	87	91	12 of 18	No				35	27	2	151	144	0
LWUs with > 10,000 Properties																											
1	Gosford	100	100	100	30	100	100	100	50	100	100	100	100	100	100	100	2 of 2	Yes	1.5	1.4	2.0	1	1	-	120	134	116
2	Wyong	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	6 of 6	Yes	0.5	0.7	0.8	9	11	12	186	165	156
3	Shoalhaven	100	100	100	40	100	88	88	40	100	100	100	100	92	86	83	9 of 12	No	1.0	0.2	1.2		23	7	120	120	-
5	MidCoast	100	100	100	30	100	100	100	30	100	100	100	100	97	98	100	12 of 12	Yes	2.3	1.6	1.3	15	12	2		330	-
6	Tweed	100	100	100	15	100	100	99	20	100	100	100	92	91	89	91	3 of 8	No	2.3	1.0	0.4	7	8	4	180	180	180
9	Wagga Wagga	100	100	100	20	100	88	99	30	100	100	100	100	35	88	95	3 of 5	No	0.1	0.2	0.2	0	89	76	60	90	83
7	Port Macquarie-Hastings	100	89	91	10	84	100	99	15	100	100	100	100	55	89	90	4 of 6	No	2.8	0.3	0.4	7	3	6		60	60
11	Albury City	100	100	100	12	100	100	100	15	100	100	100	86	86	87	86	3 of 4	No	0.4	0.2	0.0	43	47	49	120	133	120
10	Coffs Harbour	89	100	100	50	100	100	100	50	100	100	100	100	87	100	100	5 of 5	Yes	0.3	0.3	0.3	26	34	27		120	120
13	Tamworth Regional	100	100	99	30	100	100	100	25	100	100	100	100	98	100	99	4 of 5	No	0.0	0.0	0.1	15	25	25			-
15	Eurobodalla	100	100	100	20	100	100	100	30	100	100	100	100	100	100	100	5 of 5	Yes	0.1	1.0	1.3	0	1	1			-
17	Queanbeyan	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	1 of 1	Yes	0.0	0.3	0.0	26	27	17		60	240
19	Orange	100	100	100	20	100	100	100	25	45	100	100	100	81	100	45	1 of 2	No	0.0	0.9	1.1	30	21	25			-
20	Goulburn Mulwaree	100		83	20	100		58	30	100	100	100	100	100	100	58	1 of 2	No	0.0	0.1	0.0	54	89	38		90	90
18	Dubbo	100	100	100	20	100	100	100	25	100	100	100	75	57	70	75	0 of 1	No	0.0	0.3	0.2	16	11	13	60	91	93
16	Wingecarribee	100	100	100	10	100	100	100	15	100	100	100	100	92	100	100	5 of 5	Yes	1.9	1.4	1.1	54	40	22	120	120	120
14	Clarence Valley	100	100	90	20	74	89	87	30	100	100	100	100	86	94	83	2 of 8	No	0.9	1.6	0.8	14	15	10	120	120	120
21	Bathurst Regional	100	100	100	20	85	88	100	25	100	100	100	100	73	88	100	1 of 1	Yes	0.1	0.1	0.1	29	29	27	120	120	120
24	Ballina	100		100	20	100		100	30	100	100	93	100	100	89	93	3 of 4	No	0.7	0.4	1.0	7	10	11	120	120	120
22	Lismore	100	100	100	15	100	100	100	20	100	100	100	100	100	100	100	3 of 3	Yes	2.4	0.4	0.8	34	33	26		60	60
Medians (% of LWUs basis) for >10,000 Properties		*100*	*100*	*100*		*100*	*100*	*100*						*92*	*99*	*97*			*0.5*	*0.4*	*0.6*	*16*	*22*	*17*	*90*	*120*	*120*
LWUs with 3,001 - 10,000 Properties																											
23	Bega Valley	100	100	100	20	100	100	100	30	100	100	100	100	100	100	97	9 of 10	No	0.4	1.7	0.4	1	4	8	120	120	120
27	Byron	100	100	100	NL	100	100	100	NL	100	100	100	100	91	90	89	3 of 5	No	3.7	1.9	1.2	4	2	2	120	60	60
26	Country Energy	100		100	50	100		100	50	100	100	100	100	100		100	2 of 2	Yes	0.3	0.0	0.8	0	0	1		60	60
25	Kempsey	100	100	100	15	85	74	82	20	100	100	100	93	70	74	82	6 of 7	No	0.6	2.0	0.3	1	2	1		175	146
31	Lithgow	100		95	15	89		100	25	100	100	100	76	40		73	0 of 3	No	0.3		0.6	10	0	9			60
29	Armidale Dumaresq	100	100	100	20	100	100	100	30	100	100	100	100	100	100	100	1 of 1	Yes	0.1	0.0	0.0	0	1	0	60	136	105
30A	Hawkesbury		100	100	10		100	96	15	87	100	100	92		91	84	0 of 2	No		0.0	0.0	0	20	19			60
30	Griffith	77	100	100	30	70	61	76	30	100	100	100	100	61	61	76	1 of 3	No	1.6	2.3	0.4	48	53	23	180	120	120
33	Richmond Valley	100	100	100	20	100	86	100	30	100	100	100	100	98	86	100	4 of 4	Yes	1.1	0.6	0.0	4	4	0	120	120	120
32	Mid-Western Regional	81	100	100	20	83	100	100	50	55	22	100	100	20	53	22	3 of 3	No	0.0	0.0	0.0	27	24	17	120	120	120
34	Nambucca	100	100	99	20	100	100	99	30	100	100	100	100		96	99	3 of 4	No	0.0	0.2	0.0	4	8	13		45	45
35	Singleton	100	100	100	30	100	100	100	30	100	100	100	100	58	100	100	1 of 1	Yes	0.0	0.4	0.2	2	9	13	180	180	180
37	Inverell	100	100	100	20	100	100	100	30	100	100	100	100	99	99	100	2 of 2	Yes	0.0	0.0	-	65	65	43	60	60	50
41	Muswellbrook	83	65	74	20	74	78	55	30	100	100	69	100	78	62	55	0 of 2	No	1.0	4.0	6.6	59	67	53	60	91	101
36	Parkes	100	100	100	30	66	56	57	50	100	100	100	100	14	56	57	2 of 3	No	1.7	1.0	0.0	15	17	14	60	50	50
42	Corowa	50		100	-	50		100	-	100	100	100	100	84	23	93	2 of 3	No	7.7	3.6	0.9	37	31	23	120	120	120

Table 17: Sewerage – environmental and levels of service (continued)

	WATER UTILITY	ENVIRONMENTAL																LEVELS OF SERVICE								
		DEC DISCHARGE LICENCE COMPLIANCE																								
		BOD				SS				N	P	Oil & Grease	Faecal Coli-form	Sewage Treated that was Compliant			STWs Compliant at all times	Compliance with Environmental Regulator	Odour Complaints			Service Complaints			Average Sewerage Interruption		
		Compliance			90 %-ile Limit	Compliance			90 %-ile Limit					(%)					(per 1000 properties)			(per 1000 properties)			(minutes)		
		(%) (55)			(mg/L) (56)	(%) (57)			(mg/L) (58)	(%) (59a)	(%) (59b)	(%) (59c)	(%) (59d)	(59e) E4			(59f) E5	(60) E 7	(61)			(62) C 11			(65) C 16		
		06/07	07/08	08/09	08/09	06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
38	Moree Plains			100	20			100	30	100	100	100	100		5	100	2 of 2	Yes	0.0	6.5	0.0	43	51	38	180	130	250
44	Gunnedah	100	100	100	20	59	60	75	30	100	100	100	100	59	60	75	1 of 2	No	0.0	0.0	0.0	1	25	32	60	60	60
46	Narrabri	50	55	76	20	100	35	37	-	100	100	100	100	23	35	37	2 of 3	No	0.8	0.5	0.3	7	37	33	120	120	19
43	Tumut	100	100	100	10	100	100	100	15	100	100	100	100		98	100	4 of 5	No	0.0	0.0	0.0		47	41	240	112	90
49	Young			100	20			100	25	100	100	100	100			100	1 of 1	Yes	0.0	0.0	0.8	26	29	21	120	120	100
39	Cowra	100	100	100	20	100	75	75	30	100	100	100	45	60	40	45	1 of 2	No	0.0	0.0	0.0	19	25	0		240	240
45	Upper Hunter	100	100	100	20	100	100	60	30	100	100	100	100	100	100	60	3 of 4	No	2.1	0.0	0.0	44	22	10	120	120	131
52	Snowy River		100	54	20		100	66	30	100	100	100	100		80	54	2 of 4	No	0.0	0.0	-		20	14		120	-
51	Forbes	100		100	10	100		100	50	100	100	100	100	100		100	1 of 1	Yes	0.0	0.0	0.0	4	8	18	60	105	103
50	Cooma-Monaro		100	100	10		100	100	15	100	100	100	100		100	100	2 of 2	Yes		0.0	0.6		59	82		120	120
53	Berrigan	100	100	100	NL	25	100	100	NL	100	100	100	100	82	100		4 of 4	No	0.9	0.0	0.3	43	35	57	120	120	120
Medians (% of LWUs basis) for 3,000 to 10,000 Properties		100	*100*	*100*		*100*	*100*	*100*						*80*	*86*	*91*			*0.3*	*0.0*	*0.2*	*10*	*22*	*17*	*120*	*120*	*104*
LWUs with 1,501 - 3,000 Properties																											
48	Leeton	100	100	100	70	100	84	100	70	100	100	100	100	100	82	98	2 of 3	No	2.0	0.0	0.0		0	2	120	120	120
54	Deniliquin	100	100	100	20	100	83	100	30	100	100	100	100	100	83	100	1 of 1	Yes	3.5	2.2	3.2	75	42	54	180	120	120
47	Bellingen	100	89	100	NL	90	82	100	NL	100	100	100	100	95	78	100	3 of 3	Yes	1.0	2.4	1.4	15	10	15	60	60	60
60	Glen Innes Severn		100	100	NL		100	100	NL	100	100	100	100	100	100	100	2 of 2	Yes		0.0	0.0		34	11		120	40
58	Cootamundra		100	100	30		85	100	40	100	100	100	100		85	100	1 of 1	Yes	0.0	0.4	0.4	77	55	71	120	120	120
57	Wellington	100	100	100	15	100	100	100	30	100	100	100	100	100	100	100	2 of 2	Yes	0.0	1.7	1.3	2	5	13		30	50
91	Cabonne	100	100	100	30	85	100	93	30	100	93	100	100	93	82	93	2 of 3	No	0.4	0.0	0.0		10	7		480	360
80	Greater Hume	100	100	100	20	100	68	70	30	100	100	100	100	92	68	66	3 of 6	No	0.0	0.0	0.0	25	24	16	180	180	100
59	Lachlan		59	60	20		35	35	30	60	60	60	60	72	35	35	0 of 3	No	0.0		0.0		24	32	60	55	50
65	Murray	100	100	100	-	100	100	58	-	100	100	100	100	79	100	58	1 of 2	No	0.4	1.1	0.3	0	2	0	180	80	60
62	Narromine	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	2 of 2	Yes		0.0	0.0		17	7		120	90
56	Yass Valley	100	100	100	20	100	100	100	30	100	100	100	100	100	100	100	2 of 2	Yes	0.0	0.0	0.0	34	30	32	180	180	180
61	Liverpool Plains			92	20			22	30	100	100	100	100			22	0 of 2	No			0.0		0	21			60
55	Warrumbungle	100		94	20	100		94	25	90	100	100	100	89		84	2 of 4	No	0.0	0.0	0.0	82	89	48		120	120
69	Temora		100	100	30		100	100	40	100	100	100	75		100	75	0 of 1	No	1.0	0.0	0.0		58	48		60	60
71	Palerang		100	100	10		87	100	15	100	100	100	100		87	100	3 of 3	Yes		0.0	0.0		23	34		60	60
72	Bland		100	100	20		100	100	30	100	100	100	100	100	100	100	3 of 3	Yes			0.0		0	66			-
63	Narrandera		100	100	20		100	100	30	100	100	100	80		80	80	0 of 1	No		0.0	0.0		73	103		90	90
67	Cobar		100	100	-		100	100	-	100	100	100	100		100	100	2 of 2	Yes		0.0	0.0		0	3		120	120
74	Wentworth		100	100	30		100	100	45	100	100	63	45		100	38	3 of 3	No		12.5	7.2		12	24		0	60
75	Coonamble	100	100	100	20	55	87	86	50	100	100	100	100	57	91	78	0 of 2	No	0.0	0.0	0.0	23	23	0		60	60
Medians (% of LWUs basis) for 1,500 to 3,000 Properties		*100*	*100*	*100*		*100*	*100*	*100*						*98*	*91*	*98*			*0.0*	*0*	*0*	*25*	*23*	*21*	*120*	*120*	*75*

Table 17: Sewerage – environmental and levels of service (continued)

	WATER UTILITY	ENVIRONMENTAL																	LEVELS OF SERVICE								
		DEC DISCHARGE LICENCE COMPLIANCE																									
		BOD				SS				N	P	Oil & Grease	Faecal Coli-form	Sewage Treated that was Compliant			STWs Compliant at all times	Compliance with Environmental Regulator	Odour Complaints			Service Complaints			Average Sewerage Interruption		
		Compliance			90 %-ile Limit	Compliance			90 %-ile Limit					(%)					(per 1000 properties)			(per 1000 properties)			(minutes)		
		(%) (55)			(mg/L) (56)	(%) (57)			(mg/L) (58)	(%) (59a)	(%) (59b)	(%) (59c)	(%) (59d)	(59e) E4			(59f) E5	(60) E 7	(61)			(62) C 11			(65) C 16		
		06/07	07/08	08/09	08/09	06/07	07/08	08/09	08/09	08/09	08/09	08/09	08/09	06/07	07/08	08/09	08/09	08/09	06/07	07/08	08/09	06/07	07/08	08/09	06/07	07/08	08/09
LWUs with 200 - 1,500 Properties																											
70	Kyogle	100	100	86	20	81	100	98	30	100	100	100	100	76	98	84	1 of 3	No	0.0	0.6	0.6	21	19	17	60	60	60
77	Junee	100	100	100	30	100	100	100	30	100	100	100	100	100	100	100	1 of 1	Yes	0.0	0.0	0.0	89	0	0	60	45	30
78	Blayney	100	100	100	20	100	100	100	25	100	100	100	100	100	100	100	1 of 1	Yes	0.0	0.0	0.0	0	23	13	60	60	60
79	Walgett	100		-	-	100		-	-	-	-			100		-	-	No			-		0	-			-
68	Tenterfield	100		-	-	88		-	-	-	-			98		-	-	No	0.0	0.0	-	60	64	-	120	90	-
84	Gilgandra	100	100	100	20	100	100	100	50	100	100	100	100	100	100	100	1 of 1	Yes	3.0	3.0	2.2	33	47	50	60	60	60
73	Upper Lachlan	100	100	100	20	84	100	100	30	100	100	100	100	74	100	100	2 of 2	Yes	0.0	0.0	0.0	36	28	28	60	60	40
82	Gloucester	100	100	100	30	100	100	100	40	100	100	100	100	100	100	100	1 of 1	Yes	2.0	0.0	0.0	35	16	12		120	120
87	Bourke	25	25	25	15	33	33	25	20	75	100	100	100	25	25	25	0 of 1	No	1.9	4.7	2.8	158	134	148		120	120
86	Hay		100	100	-		100	100	-	100	100	100	100	100	100	100	1 of 1	Yes	0.0	0.0	0.0	39	39	39		0	-
83	Oberon	100		100	20	100		50	25	100	42	100	100			50	0 of 1	No	0.0	0.0	0.0	7	6	7	120	120	120
81	Gwydir	100	100	100	20	38	46	100	30	100	100	100	100	32	46	100	2 of 2	Yes	0.0	0.0	0.0	0	0	0			-
85	Uralla	100	100	-	15	100	100	-	20	-	-		100	75	100	-	0 of 1	No	1.0	0.0	0.0	13	23	13		120	120
95	Weddin	100	100	100	20	100	100	100	30	100	100	100	100	100	100	100	1 of 1	Yes	0.0	0.0	0.0	35	29	20	120	120	120
89	Bogan	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	1 of 1	Yes	0.0	2.9	7.6	1	27	27		180	180
76	Harden			66	20			100	30	100	100	100	100			66	0 of 1	No	0.0	0.0	0.0	16	26	30	120	50	60
88	Wakool	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	4 of 4	Yes	0.9	0.9	0.0	1	1	0		0	-
93	Tumbarumba	100		100	NL	100		100	NL	100	100	100	100			100	2 of 2	Yes		0.0	0.0		0	16			60
94	Gundagai	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	1 of 1	Yes	1.1	0.0	1.1		6	11		30	30
92	Carrathool	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	3 of 3	Yes	2.5	0.0	0.0		55	54		120	120
96	Warren	100	100	100	45	100	69	100	65	100	100	100	100	100	75	100	2 of 2	Yes	3.6	0.0	0.0	58	30	34	120	120	120
99	Coolamon		100	100	30		100	100	20	100	100	100	100		90	100	2 of 2	Yes			0.0		0	8			-
102	Lockhart	100	100	100	20	100	100	100	30	100	100	100	100	100	100	100	3 of 3	Yes	0.0	0.0	2.4		24	10			35
98	Walcha	100	100	100	20	100	75	100	30	100	100	100	100	100	75	100	1 of 1	Yes	0.0	0.0	0.0	21	10	6	60	70	70
100	Balranald	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	2 of 2	Yes		0.0	0.0		11	13		60	60
97	Bombala		100	100	NL		100	100	NL	100	100	100	100		100	100	2 of 2	Yes	0.0	5.3	7.9	0	20	65		120	95
101	Murrumbidgee	100	25	-	-	100	25	-	-	-	-			100	25	-	-	No	1.4	0.0	-	62	18	-	300	120	-
90	Guyra	100	100	100	15	75	100	100	20	100	100	100	100	75	100	100	1 of 2	Yes	0.0	0.0	0.0	16	13	10	120	120	120
104	Boorowa		100	100	20		55	65	30	100	100	100	100		55	65	0 of 1	No		3.3	3.3		3	7		60	60
105	Brewarrina			-	-			-	-	-	-			100			2 of 2	No	0.0	0.0	0.0	44	21	10		60	60
106	Jerilderie	75	25	100	20		25	100	30	100	100	100	100	75	25	100	1 of 1	Yes	0.0	0.0	11.8	2	5	19	300	300	300
103	Central Darling	100	100	100	NL	100	100	100	NL	100	100	100	100	100	100	100	1 of 1	Yes	0.0	15.5	0.0	92	196	227	120	110	60
107	Urana	100	39	100	NL	100	100	100	NL	100	100	100	100	100	100	100	2 of 2	Yes	6.6	6.4	6.3	20	19	19	60	60	60
Medians (% of LWUs basis) for 200 to 1,500 Properties		*100*	*100*	*100*		*100*	*100*	*100*						*100*	*100*	*100*			*0*	*0*	*0*	*21*	*19*	*15*	*60*	*80*	*60*
Median All LWUs (% of LWUs basis)			*BOD*	*100*	*%*		*SS*	*100*	*%*											*Odour*	*0.0*		*Service*	*17*		*Duration*	*100*
Median All LWUs (Statewide basis)				*100*	*%*			*100*	*%*												*0.4*			*12*			*116*

Totals for all LWUs

88 LWUs complied with BOD licence (88% of LWUs complied) 98% of sample days complied (3989 sample days)

76 LWUs complied with SS licence (76% of LWUs complied) 94% of sample days complied with SS licence (3989 sample days)

51 LWUs fully complied with regulator 282 STWs were reported to be in use by LWUs 210 of these STWs were compliant at all times

16 LWUs had no discharge licence and 5 LWUs did not report BOD or SS

Notes:

1. Where there is no limit (NL) for BOD or SS licences, compliance is deemed to be 100%.
2. Where an LWU has 100 percentile licence limits rather than 90 percentile licence limits, the 100 percentile limits are shown.
3. An LWU is deemed to comply with its BOD or SS licence if it achieves >=90% compliance with the 90 percentile limit.

Table 18: Sewerage – benchmarking cost data (operation, maintenance and management)

WATER UTILITY	OPERATION & MAINTENANCE (O&M) COST*										MANAGEMENT COST (A)*				OMA*	O&M COST COMPONENTS for TYPE of ASSET															
		Components (1) - Process					Components (2) - Type of Asset				Components					Components		Pumping					Sewer Main				Treatment				
	Total O&M Cost	Maintenance	Operation	Energy	Chemicals	Effluent & Biosolids	Mains	Pumping Stations	Sewage Treatment	Other	Admin	Engineering & Supervision	Total Management Cost		Total OMA Cost	Treatment	Reticulation	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical
	($/prop)	($/property)				($/prop)	($/property)				($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($/'000/pumping station)				(c/kL)	($/'000/100km)			($/ML)	($/property)			
	(66a)	(66)	(67)	(68)	(69)	(69a)	(70)	(71)	(72)	(73)	(74)	(75)	(76a)	(76)	(76b)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)
	2008/09						2008/09				2008/09				2008/09	2008/09		2008/09					2008/09				2008/09			
LWUs with > 10,000 Properties																															
1 Gosford	149	50	43	18	1	37	31	51	68		115	18	133	69	282	68	81	26	19	2	13	3	16	150	86	64	345	20	0	1
2 Wyong	207	99	86	20	2		34	72	96	5	112		112	44	319	96	106	28	28	11	14	3	13	163	35	129	372	48	34	2
3 Shoalhaven	272	45	189	19	3	16	57	73	101	40	119	34	153	93	424	101	130	44	13	8	3	2	35	203	185	18	612	57	14	3
5 MidCoast	335	93	167	32	7	35	32	54	131	119	60	20	80	35	415	131	86	23	9	2	4	2	14	108	17	92	566	42	26	7
6 Tweed	272	106	110	35	10	11	50	71	117	34	108	34	141	47	413	117	120	23	12	4	5	2	16	209	7	203	389	54	22	10
9 Wagga Wagga (NO WS)	216	28	181	6	0	2	44	21	122	29	54		54	24	270	122	65	9	13	8	2	3	20	185	84	101	538	120		
7 Port Macquarie-Hastings	241	81	92	35	2	32	17	72	125	27	72	36	108	32	349	125	89	21	13	4	6	2	5	78	33	45	376	36	34	2
11 Albury City	223	83	77	30	7	27	38	35	101	49	25	6	31	17	254	101	74	19	11	0	8	3	21	160		160	557	28	18	7
10 Coffs Harbour	299	77	114	47	6	56	36	94	160	9	68	62	130	43	429	160	130	31	18	9	6	3	12	125	47	77	529	45	24	6
13 Tamworth Regional	171	65	61	13	14	19	26	20	126		7	99	105	41	277	126	45	8	16	5	9	3	10	93		93	489	55	29	14
15 Eurobodalla	245	55	144	31	15		15	96	128	6	157		157	96	403	128	111	59	13	8	3	2	9	51		51	784	81	17	15
17 Queanbeyan	145	46	44	14	28	13	24	24	93	4	104		104	42	249	93	48	10	25	12	10	3	10	118		118	420	31	9	28
19 Orange	173	25	97	21	20	11	30	19	125		86	37	123	46	296	125	48	7	11	6	4	2	11	114	67	47	507	70	6	20
20 Goulburn Mulwaree	242	76	84	23	5	53	77	22	143		82	28	110	67	352	143	99	14	8	7		2	47	326	31	294	888	59	7	5
18 Dubbo	219	35	149	27	9		9	28	130	52	115	36	151	83	370	130	37	16	38	14	16	8	5	36	30	6	728	81	20	9
16 Wingecarribee	181	67	61	23	21	8	44	31	105		127	15	142	65	323	105	76	14	6	3	2	2	20	124		124	481	44	15	21
14 Clarence Valley	232	65	135	16	5	10	38	37	91	67	94	30	124	55	357	91	75	16	6	2	2	1	17	166	4	163	399	54	14	5
21 Bathurst Regional	208	98	66	27	8	10	63	20	125		82	52	134	66	342	125	82	10	18	1	15	2	31	245	20	225	617	59	24	8
24 Ballina	358	190	90	43		35	64	121	162	12	127	53	179	50	537	162	184	34	14		11	2	18	259		259	450	89	15	
22 Lismore	256	131	57	8	41	18	53	40	157	6	71	39	110	32	366	157	93	12	15	1	11	3	15	188	14	173	461	50	48	41
Medians (% of LWUs basis) for >10,000 Properties		*72*	*91*	*23*	*7*	*18*	*37*	*38*	*125*	*28*	*90*	*35*	*124*	*47*	*350*	*125*	*84*	*18*	*13*	*5*	*6*	*2*	*16*	*155*	*32*	*110*	*498*	*54*	*18*	*7*
LWUs with 3,001 - 10,000 Properties																															
23 Bega Valley	382	72	290	8		12	62	71	250		148	65	213	143	596	250	133	47	1	0	0	0	42	189	58	131	1684	235	2	
27 Byron	408	118	158	50	37	44	68	61	233	47	138	25	163	49	571	233	128	18	7	3	2	3	20	265	51	214	695	79	47	37
26 Country Energy	254	202	30	10	2	11	64	25	165		66	17	83	65	337	165	89	20	22		18	4	50	317		317	1293	30	118	2
25 Kempsey	254	128	59	37	11	19	41	70	140	3	128		128	38	381	140	111	21	8		6	2	12	138		138	419	57	33	11
31 Lithgow	338	283		19		36	54	84	200		42		42	14	379	200	138	28	19		16	3	18	107		107	661		159	
29 Armidale Dumaresq	171	149		5		17	76	2	71	22	160	26	186	81	357	71	78	1	16		16		33	236		236	310		49	
30A Hawkesbury (NO WS)	247	63	145			39	39	35	172	1	99	84			247	172	73		11		11			172	57	114	538	131	3	
30 Griffith	320	56	210	20	18	15	74	114	111	21	99	46	145	47	464	111	188	37	26	19	5	2	24	219	189	30	362	46	21	18
33 Richmond Valley	284	124	118	22	12	9	29	53	129	73	127	71	198		482	129	82		11	4	5	2		99	66	34	388	77	19	12
32 Mid-Western Regional	204	71	125	8	0		65	23	116		99	34	133	69	337	116	88	12	13	10	1	2	33	225		225	598	106	5	
34 Nambucca (Groundwater)	238	139	57	36		6	22	59	100	57	83	32	115	34	352	100	80	17	6		4	2	6	76		76	294		79	
35 Singleton	191	107	66	16	2		105	14	67	4	30	55	85	33	275	67	120	6	6	0	5	0	42	414	89	325	265	39	10	2
37 Inverell	153	45	88	20			45	29	79		54	43	97	56	250	79	74	17	6	5		1	26	164		164	459	65		
41 Muswellbrook	258	173	62	21	0	1	39	55	164		74	62	135	53	394	164	94	22	23	2	18	3	15	138	20	118	646	51	97	

Table 18: Sewerage – benchmarking cost data (operation, maintenance and management) (continued)

WATER UTILITY	OPERATION & MAINTENANCE (O&M) COST*										MANAGEMENT COST (A)*				OMA*	O&M COST COMPONENTS for TYPE of ASSET																
	Total O&M Cost	Components (1) - Process					Components (2) - Type of Asset				Components				Total OMA Cost	Components		Pumping					Sewer Main				Treatment						
		Maintenance	Operation	Energy	Chemicals	Effluent & Biosolids	Mains	Pumping Stations	Sewage Treatment	Other	Admin	Engineering & Supervision	Total Management Cost			Treatment	Reticulation	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical			
	($/prop)	($/property)				($/prop)	($/property)				($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($/property)				(c/kL)	($/property)			($/ML)	($/property)					
	(66a)	(66)	(67)	(68)	(69)	(69a)	(70)	(71)	(72)	(73)	(74)	(75)	(76a)	(76)	(76b)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)			
	2008/09						2008/09				2008/09				2008/09	2008/09		2008/09					2008/09				2008/09						
36 Parkes	176	42	126	3	3	2	53		123		30	4	34	20	210	123	53						30	269	67	202	698	113	2	3			
42 Corowa	212	132	40	21		20	42	60	108	2	39	116	155	102	367	108	102	39	4		3	1	28	137		137	710	40	43				
38 Moree Plains	330	142	141	45		3	67	75	79	109	89	4	93	31	423	79	142	25	10	3	5	2	23	286		286	284	9	37				
44 Gunnedah	115	103		4		8	40	14	60		24	42	66	41	181	60	55	9	29		26	3	25	169		169	182		49				
46 Narrabri	224	113	90	21			44	84	96		18	30	48	20	272	96	128	36	14	4	7	3	19	166		166	404	63	29				
43 Tumut	295	213	11	35	35	1	34	36	213	13	42	27	69		364	213	69		9	1	6	2		104		104	1055	8	143	35			
49 Young	87	25	53	5	0	4	17	6	38	26	44	15	59	31	146	38	22	3	4	4		1	9	69		69	203	23	8	0			
39 Cowra	173	118	43	12			75	23	74		205	15	221		393	74	98		9	1	6	2		267		267	393	40	28				
45 Upper Hunter	252	102	123	19		9	69	62	107	14	80	83	163	63	416	107	131	24	17	9	4	5	27	218	31	187	249	68	30				
52 Snowy River	238	29	161	32	15		27	61	115	34	120	19	139		377	115	89		12	6	3	3		132	115	17	1152	74	9	15			
51 Forbes	277	68	150	30	29		81	19	174	3	23	10	33	17	310	174	100	10	4	1		2	40	289	180	109	867	91	37	29			
50 Cooma-Monaro	310	107	122	39	8	35	98	35	177	1	86	78	163		474	177	133		16	7	7	2		138	41	97	854	77	22	8			
53 Berrigan	278		278				20	100	150	7	39	51	90	63	368	150	120	70	7	7			14	63	63		1056	150					
Medians (% of LWUs basis) for 3,000 to 10,000 Properties		*110*	*120*	*20*	*10*	*11*	*53*	*54*	*116*	*14*	*80*	*34*	*121*	*47*	*367*	*116*	*98*	*20*	*10*	*4*	*5*	*2*	*25*	*169*	*63*	*138*	*538*	*65*	*30*	*10*			
LWUs with 1,501 - 3,000 Properties																																	
48 Leeton	307	108	132	37	30						53	60	113	37	420	179	96				4					183		112		30			
54 Deniliquin	195	174		20			57	32	105	1	161	35	196	111	391	105	88	18	4		3	1	32	256		256	600		92				
47 Bellingen	267	103	82	33	28	21	27	76	160	5	125	59	184	55	451	160	102	23	8	2	5	2	8	88	22	65	563	56	36	28			
60 Glen Innes Severn	104	34	31	21	17		20	3	72	9	63	62	125	42	229	72	22	1	1		0	1	7	58		58	384	31	4	17			
58 Cootamundra	143	53	36	21	2	30	26	9	104	4	16	42	58	41	201	104	35	6	6	0	5	1	18	108	108		742	10	43	2			
57 Wellington	267	192	33	26	16		103	52	113		65	89	154	82	421	113	154	27	10		9	2	54	400		400	597	33	45	16			
91 Cabonne	171	90	66	15			29	53	73	16	28	41	69	60	240	73	82	47	13	11		2	25	121		121	641	3	61				
80 Greater Hume	201	149	26	21	6		26	34	125	16	53	28	81	55	282	125	60	23	5		4	1	18	87	87		858		105	6			
59 Lachlan	205	57	126	22			26	53	112	14	39	39	78	32	284	112	79	22	5	4	1	1	11	75		75	461	76	20				
65 Murray	144	89	39	16			29	86	29		54	42	96	54	241	29	115	48	6	2	3	1	16	97	6	91	152	7	20				
62 Narromine	131	11	104	16			11	47	44	29	85	64	149	55	280	44	58	17	8	5		3	4	45		45	161	44					
56 Yass Valley	215	3	170	24		18	12	41	151	11	79	76	156	97	371	151	53	26	10	7	1	2	8	39	39		951	116	1				
61 Liverpool Plains	129		129				11	25	91	1	76		76	38	205	91	37	13	5	5			5	34	34		452	91					
55 Warrumbungle	211	75	115	17	2	2	34	40	133	4	49	24	73	39	285	133	75	21	11	3	4	3	18	109		109	571	100	24	2			
69 Temora (NO WS)	122	20	35	10		57	35	7	81		32		32	60	155	81	42	13	4		4		65	155	155		1496		13				
71 Palerang	224	66	137	21			35	49	131	8	88	74	162	98	386	131	85	30	7	3	2	1	21	143		143	795	103	13				
72 Bland (NO WS)	249	3	225	21			29	30	191		51	13	64	50	312	191	58	23	5	5		0	22	108	108		1295	168	3				
63 Narrandera	221	72	132	17			66	39	116		53	81	134		355	116	105		17	17				306		306	308	93	7				
67 Cobar	125	49	39	16		21		64	61			12	12	6	137	61	64	35	28		21	7					330	39					
74 Wentworth	219	91	44	23		62	40	90	68	20	41	17	57	5	276	68	131	8	7	1	4	2	3	73	36	37	229		6				
75 Coonamble	232	153	62	16			60	73	99		23	21	44	26	275	99	132	43	9	2	5	2	35	189		189	587	45	50				
Medians (% of LWUs basis) for 1,500 to 3,000 Properties		*73*	*74*	*21*	*16*	*21*	*29*	*44*	*105*	*9*	*53*	*42*	*81*	*52*	*282*	*105*	*79*	*23*	*7*	*4*	*4*	*2*	*18*	*108*	*39*	*115*	*579*	*56*	*20*	*16*			

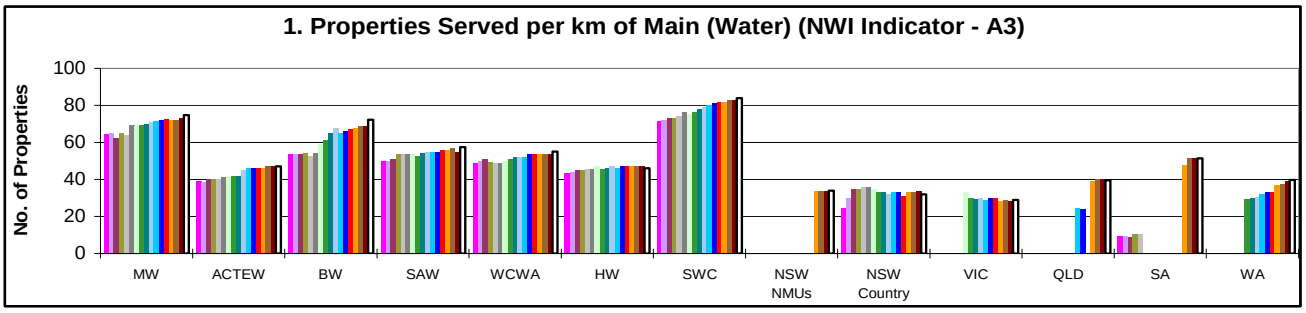
Table 18: Sewerage – benchmarking cost data (operation, maintenance and management) (continued)

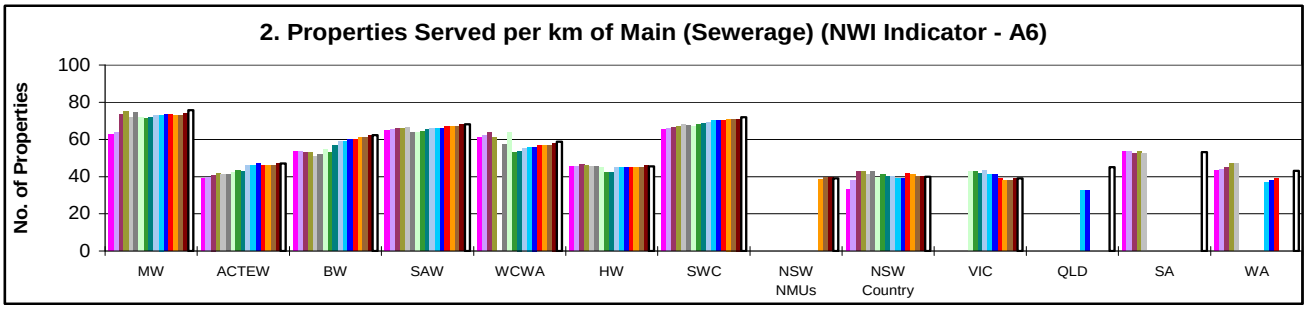
WATER UTILITY	OPERATION & MAINTENANCE (O&M) COST*										MANAGEMENT COST (A)*				OMA*	O&M COST COMPONENTS for TYPE of ASSET															
	Total O&M Cost	Components (1) - Process					Components (2) - Type of Asset				Components				Total OMA Cost	Components		Pumping					Sewer Main				Treatment				
		Maintenance	Operation	Energy	Chemicals	Effluent & Biosolids	Mains	Pumping Stations	Sewage Treatment	Other	Admin	Engineering & Supervision	Total Management Cost			Treatment	Reticulation	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	O&M Cost	O&M Cost	Operation Cost	Maintenance Cost	O&M Cost	Operation Cost	Maintenance Cost	Chemical
	($/prop)	($/property)				($/prop)	($/property)				($/property)		($/prop)	(c/kL)	($/prop)	($/property)		(c/kL)	($/property)				(c/kL)	($/property)			($/ML)	($/property)		
	(66a)	(66)	(67)	(68)	(69)	(69a)	(70)	(71)	(72)	(73)	(74)	(75)	(76a)	(76)	(76b)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)
	2008/09						2008/09				2008/09				2008/09	2008/09		2008/09					2008/09				2008/09			
LWUs with 200 - 1,500 Properties																														
70 Kyogle	229	28	146	23	32		22	54	153		67	36	103	32	332	153	76	17	10	6	1	3	7	60		60	570	112		32
77 Junee (NO WS)	184	139		29		17	31		153		44	9	53	29	238	153	31						17	54		54	953		108	
78 Blayney (NO WS)	182		162	18		2	14	13	136	20	153		153	102	335	136	27	9	3	2		1	9	33	33		980	120		
79 Walgett	189	109	80				73	45	63	8	18	14	32		221	63	118							222		222		40	24	
68 Tenterfield	309		261	14	13	22	86	42	182		153	106	260		569	182	127							218	218		135		13
84 Gilgandra	152	67	79	7			64	37	51		32	1	34	16	186	51	101	18	4	2	1	1	31	242	33	208	246	48	3	
73 Upper Lachlan	208	44	123	16	11	15	32	37	138	2	66	43	109	65	318	138	68	22	7	4	1	2	19	107	69	38	848	79	28	11
82 Gloucester	275	158	87	19	1	10	100	46	129		37	48	85	28	360	129	146	15	12	4	6	2	33	294		294	436	71	34	1
87 Bourke	315	201	80	31		4	84	197	34		22	139	162	92	477	34	282	112	26	7	16	4	48	257		257	190	30		
86 Hay	205	69	116	20	0		43	58	104		94		94	42	300	104	102	26	9	4	4	1	19	149	149		476	47	46	
83 Oberon	286	90	160	21	16		46	21	218	2	28	84	112	60	399	218	66	11	9	7		3	24	163		163	1169	145	42	16
81 Gwydir	235	75	130	23	8		38	30	168		100		100	48	336	168	67	14	4	2	3		18	105	22	83	778	112	26	8
64 Dungog																														
85 Uralla	225	154		42	11	19	30	10	186		122	3	125	93	350	186	39	7	3		2	1	22	100		100	1380		116	11
95 Weddin (NO WS)	160	48	107	5			30		65	64	8	18	25	17	185	65	30						20	100		100	438	58	3	
89 Bogan	116	43	28	13		32	21	36	58		178		178	108	293	58	57	22	10	4	3	2	13	110		110	355	12	10	
76 Harden	205	64	118	13		11	37		168		37	42	79	21	285	168	37						10	92		92	446	118	27	
88 Wakool	198	54	107	37			18	76	96	8	33	35	68	22	266	96	94	24	6	2	3	1	6	40	19	21	313	61	11	
93 Tumbarumba	140	101	35	4			32	2	106		29	48	77	26	217	106	34	1	1		1		11	66	66		352	3	99	
94 Gundagai	240	117	83	18	13	9	74	43	122		77		77	59	317	122	118	33	8	4	2	2	57	92	21	71	940	46	46	13
92 Carrathool																														
96 Warren	314	190	110	14			131	74	108		44	55	100	46	414	108	206	34	7	1	6	1	60	612	118	494	500	79	28	
99 Coolamon (NO WS)	135	29	87	16		2	11	18	106		24	38	62	62	197	106	29	18	3		3		11	25		25	1061	87		
102 Lockhart (NO WS)	203	154	16	33			8	23	146	25	39	24	63	33	266	146	32	12	3		3		4	17		17	759		113	
98 Walcha	195	20	163	9	2		34	26	135		57	2	60	29	254	135	60	13	21		16	5	16	90	90		651	130		2
100 Balranald	109	65	20	15	9		33	67	9		43		43	17	152	9	100	27	5		4	1	13	68	42	26	53			9
97 Bombala	166	77	90				24	54	88		120		120		287	88	78		8	3	5			51		51	1914	70	18	
101 Murrumbidgee	134	103		17	13		9	63	62			54	54		188	62	72							33		33	535		42	13
90 Guyra	253		110	46	50	47	28	22	203		51	57	108	62	362	203	50	12	11			11	16	48	48		1443	82		50
104 Boorowa	176	50	115	12			33	20	123		2	22	23	16	200	123	53	14	6		5	1	23	61		61	860	115		
105 Brewarrina	384	93	247	31	12		52	147	185		71	69	139		523	185	199		9	5	2	2		156		156		162	8	12
106 Jerilderie	233	205	5	24			24	61	144	5	49	31	80	44	313	144	85	34	5		4	1	13	83		83	792		130	
103 Central Darling	428	407		21			253	165		10					428		418	32	8		7	1	49	377		377				
107 Urana (NO WS)	209	171	29	10			22	146	41		22	89	111	39	320	41	168	51	5	0	4	0	8	47	13	33	144	13	29	
Medians (% of LWUs basis) for 200 to 1,500 Properties		*90*	*107*	*18*	*12*	*13*	*32*	*43*	*123*	*8*	*44*	*40*	*85*	*40*	*306*	*123*	*74*	*18*	*7*	*4*	*3*	*1*	*17*	*92*	*45*	*83*	*610*	*79*	*28*	*12*

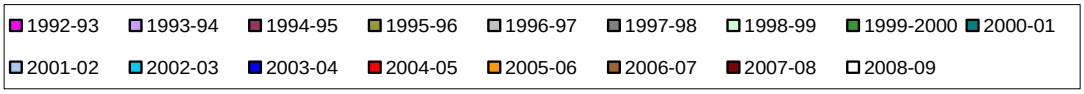
* Operating cost is the OMA cost (operation, maintenance & administration (Col 91b)) which comprises the O & M Cost (operation & maintenance cost (Cols 66 to 69 or Cols 70 to 73)) PLUS Management Costs (Col 76a) which is made up of the Administration cost (Col 74) plus Engineering and Supervision cost (Col 75).

Appendix A: National performance comparisons 1992-93 to 2008-09

Performance comparisons – utility characteristics







Metropolitan Water Utilities

MW	Melbourne Water Consolidated (see note 1)
ACTEW	ACT Electricity and Water
BW	Brisbane Water
SAW	SA Water Corporation (Adelaide)
WCWA	WA Water Corporation (Perth)
HW	Hunter Water Corporation
SWC	Sydney Water Corporation

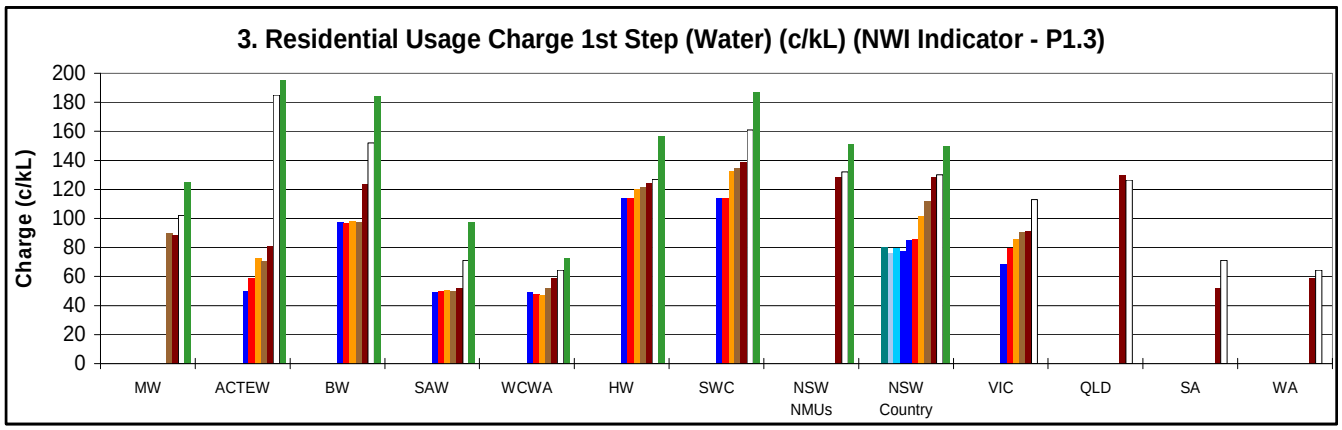
Country Water Utilities

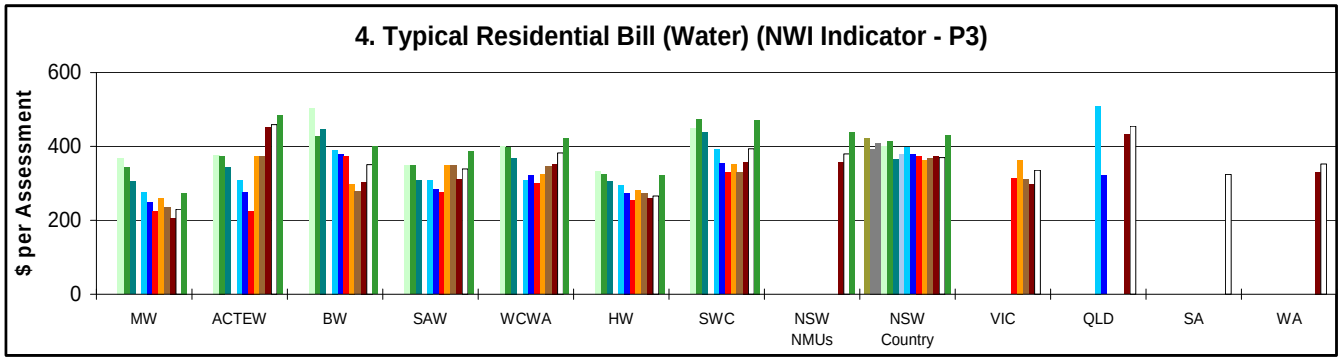
NSW NMUs	Median of NSW non-metropolitan LWUs with > 10,000 connected properties
NSW Country	Statewide median for all NSW non-metropolitan LWUs
VIC	VIC Country (see note 3)
QLD	QLD Country (see note 5)
SA	SA Country (see note 4)
WA	WA Country (see note 6)

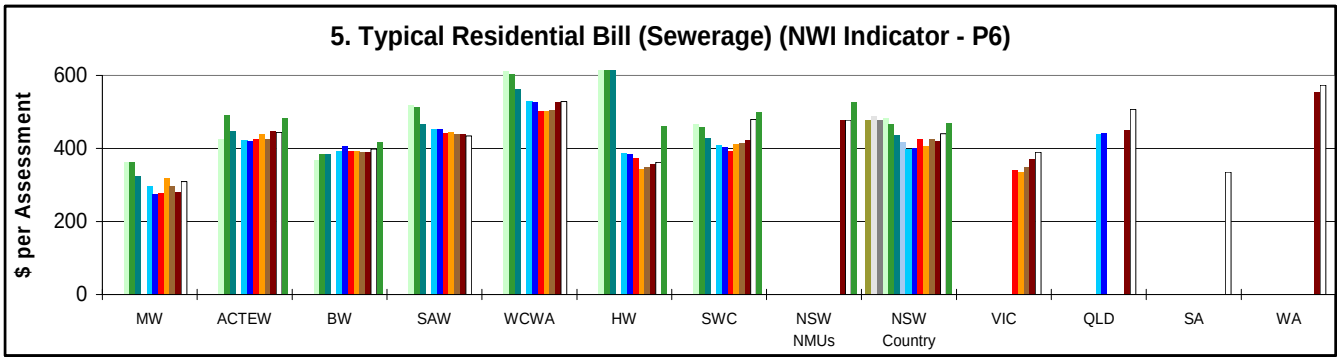
NOTES:

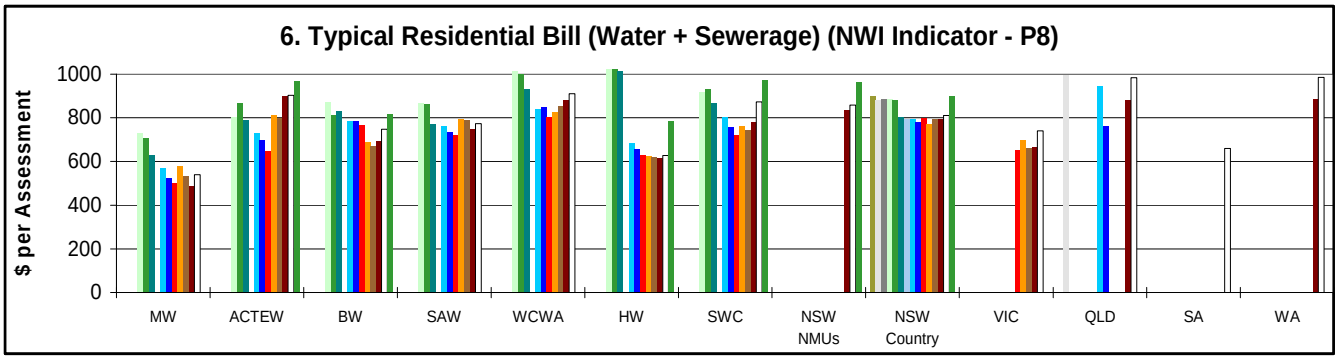
1. Melbourne Water was disaggregated into 4 constituent utilities in 1994. Melbourne Water Consolidated results for 1994/95 to 2008/09 are either aggregated results of the constituent utilities or consolidated results reported in the *National Performance Report 2008-09*, *WSAA Facts* (note 2) or reported in *Urban Water Review* (note 3).
2. Metropolitan Utilities - *National Performance Report 2008-09* used to obtain results from 2001-02 to 2008-09. *WSAA Facts 2005* and *WSAA Facts 1999* (published by the Water Services Association of Australia) used to obtain results from 1994-95 to 1999-00.
3. Victorian Country - *Urban Water Review 1998* and *2004-2005*, (published by the Victorian Water Industry Association). used to obtain results for Victoria Country from 1996-97 to 2004-05. Results from 2005-06 to 2008-09 obtained from median of Victorian utilities (excluding Melbourne Water and its constituents) published in the *2008-09 National Performance Report*.
4. SA Country - *Government Trading Enterprises Performance Indicators 1992-93 to 1996-97 and 1990-91 to 1994-95,* (published by Steering Committee on National Performance Monitoring of Government Trading Enterprises), used to obtain results for 1990-91 to 1996-97. Results from 2005-06 to 2008-09 obtained from median of SA NMUs (Whyalla and Mt Gambier) published in the *National Performance Report 2008-09*. **The results shown from 2005-06 do not report the overall performance of SA country utilities.**
5. QLD Country - *Urban Water Service Providers Queensland Report 2003-2004,* (published by Queensland Department of Natural Resources and Mines), used to obtain results from 2002-03 and 2003-04. These results are for 18 large and medium utilities and exclude Brisbane City Council. Results from 2005-06 to 2008-09 obtained from median of QLD NMUs (Cairns, Logan, Ipswich, Mackay, Townsville) published in the *National Performance Report 2008-09*. **The results shown from 2002-03 report a maximum of 5 of the 72 Queensland country utilities**
6. WA Country - *Government Trading Enterprises Performance Indicators 1992-93 to 1996-97 and 1990-91 to 1994-95,* (published by Steering Committee on National Performance Monitoring of Government Trading Enterprises), used to obtain results for 1990-91 to 1996-97. Results from 1999-2005 obtained from *Water Performance Information on 32 Major WA Towns 1999-2003* and *2001-2005* prepared by the Western Australia Economic Regulation Authority. The results are for regional towns and do not include Perth. Results from 2005-06 to 2008-09 obtained from median of WA NMUs (Albany, Bunbury, Busselton, Geraldton, Kalgoorlie-Boulder, Mandurah) published in the *National Performance Report 2008-09*. **The results shown from 1999 do not report the overall performance of WA country utilities.**
7. Financial data is presented in real 2008-09 dollars.

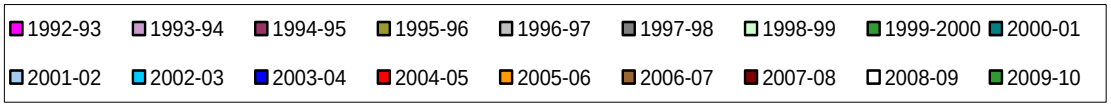
Performance comparisons – social (bills)







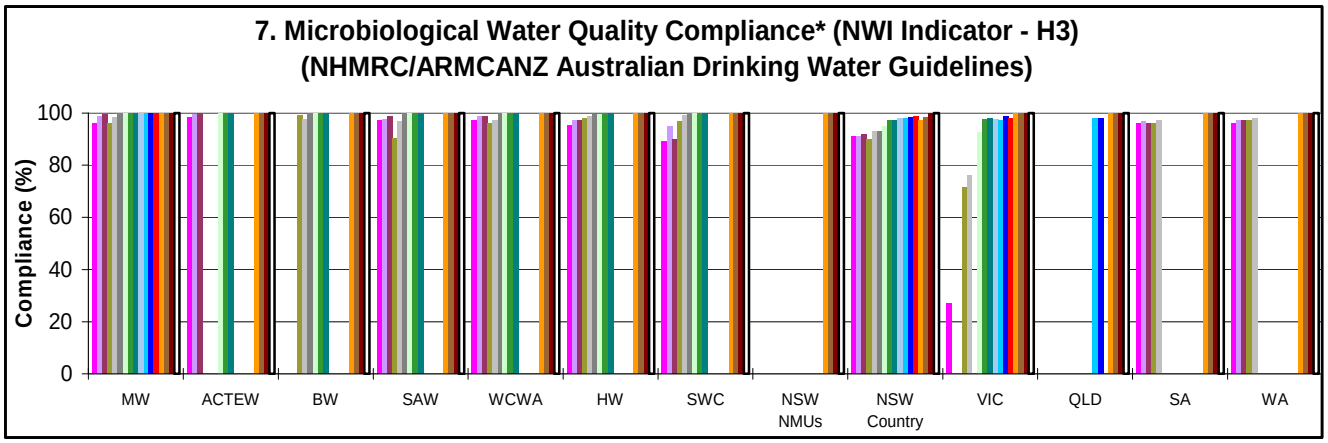


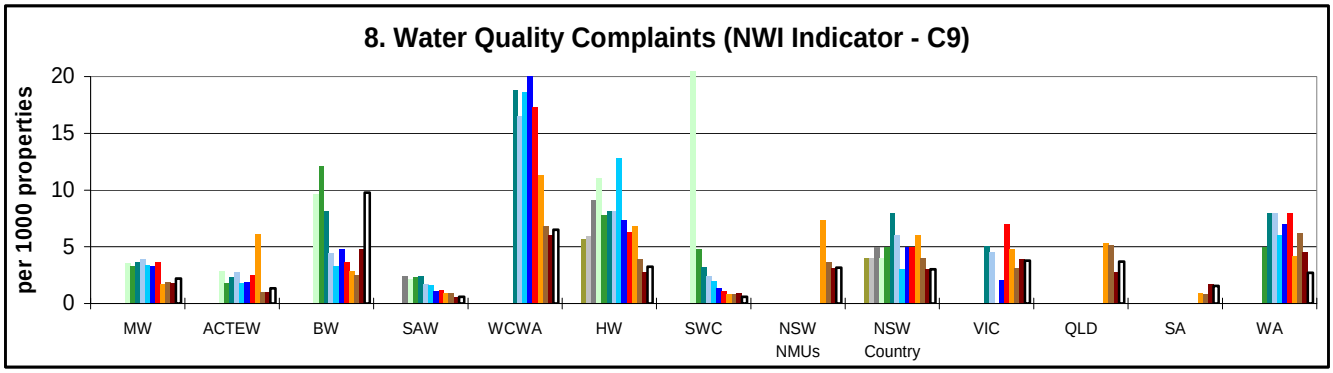


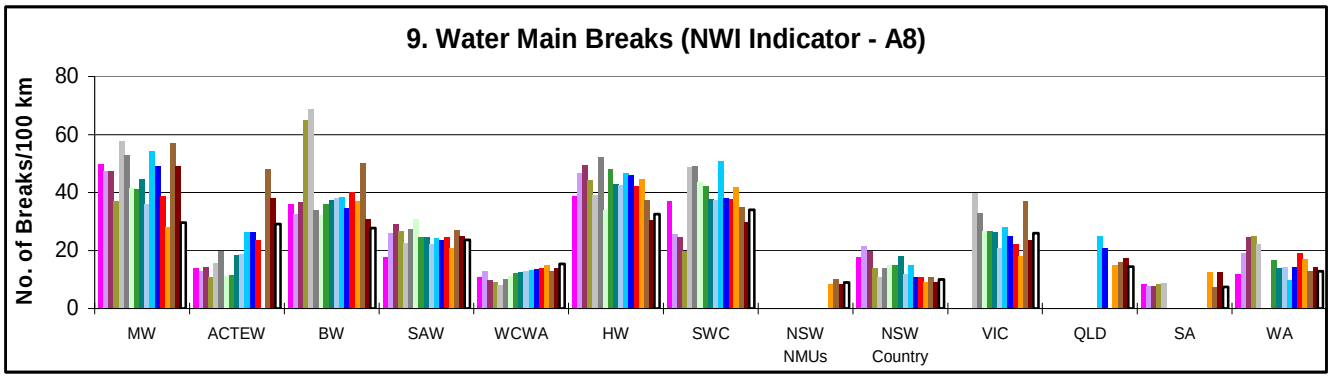
NOTES

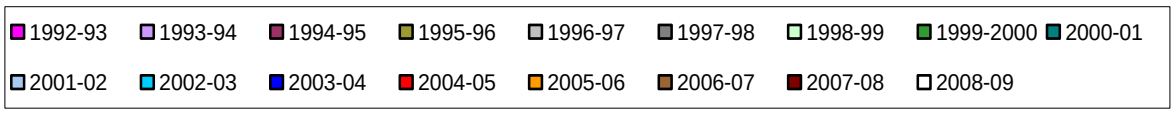
1. The Typical Residential Bill (TRB) is the annual bill paid by a residential customer using the utility's average annual residential water supplied.
2. The TRB is the principal indicator of the overall cost of a water supply or sewerage system.
3. The 2009-10 Usage Charge and TRB (graphs 3 to 6) for the capital city utilities have been determined from data published on each utility's website.

Performance comparisons – social (water)









*** Microbiological Water Quality Compliance**

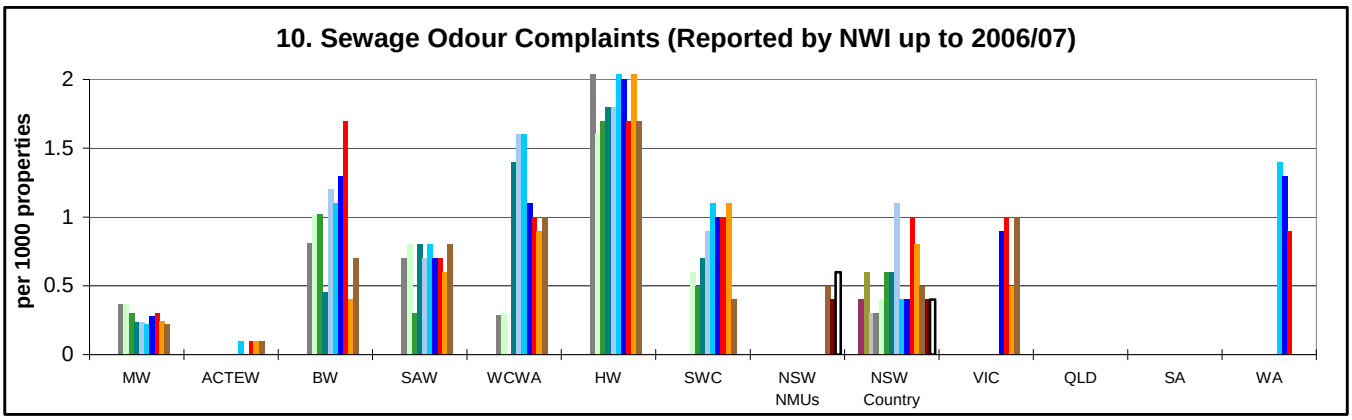
1991 to 1998 results are generally on the basis of the *1987 NHMRC/AWRC Drinking Water Quality Guidelines*.

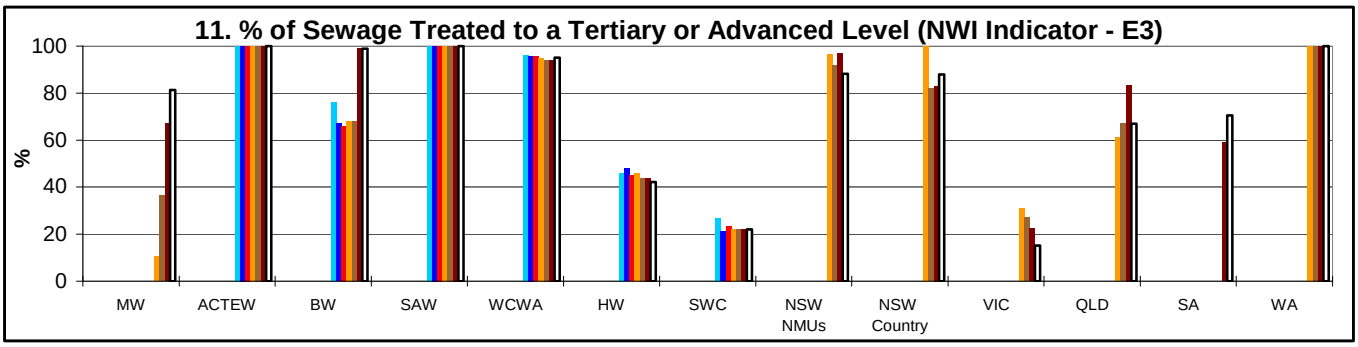
1998-99 and subsequent results are generally on the basis of E. coli in the more stringent 1996 and 2004 *NHMRC/ARMCANZ Australian Drinking Water Guidelines* (ADWG).

The exceptions are Victorian country utilities where results up to 2003-04 are on the basis of the less stringent *1984 World Health Organisation Guidelines* and which are now on the basis of the Victorian Safe Drinking Water Regulations 2005, and also Melbourne Water where prior to 2004-05 the results are on the basis of the above 1987 Guidelines and which are now on the basis of the 2004 ADWG.

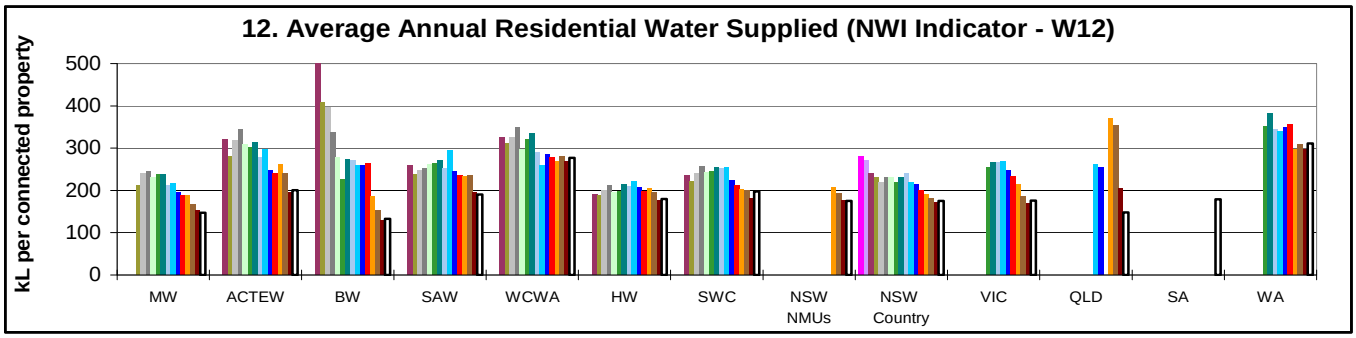
For 2005-06 to 2008-09, the results shown are for "% of population where microbiological compliance was achieved", in accordance with NWI Indicator H3.

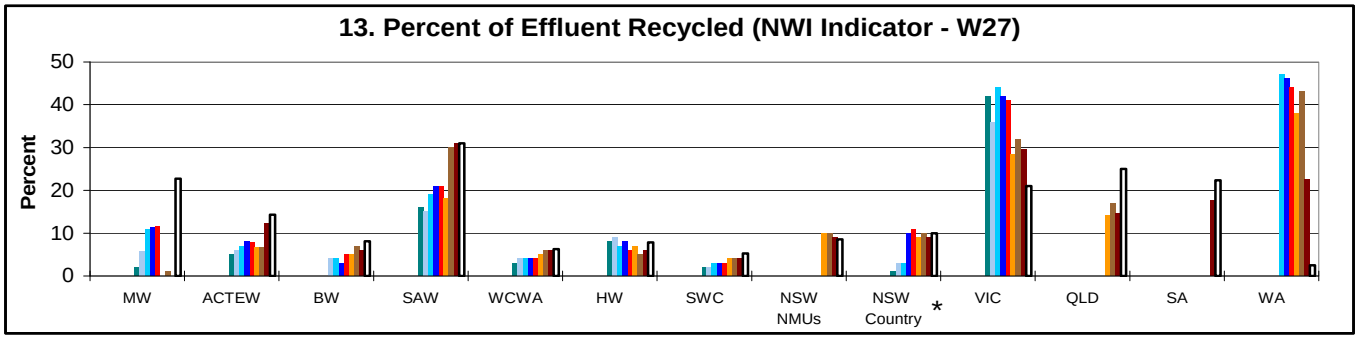
Performance comparisons – social (sewerage)

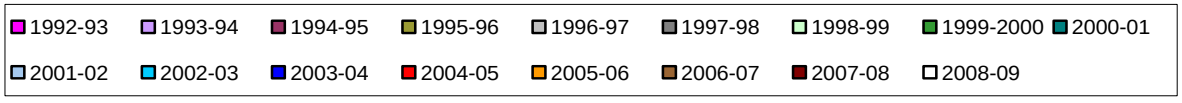




Performance comparisons – environmental (water)



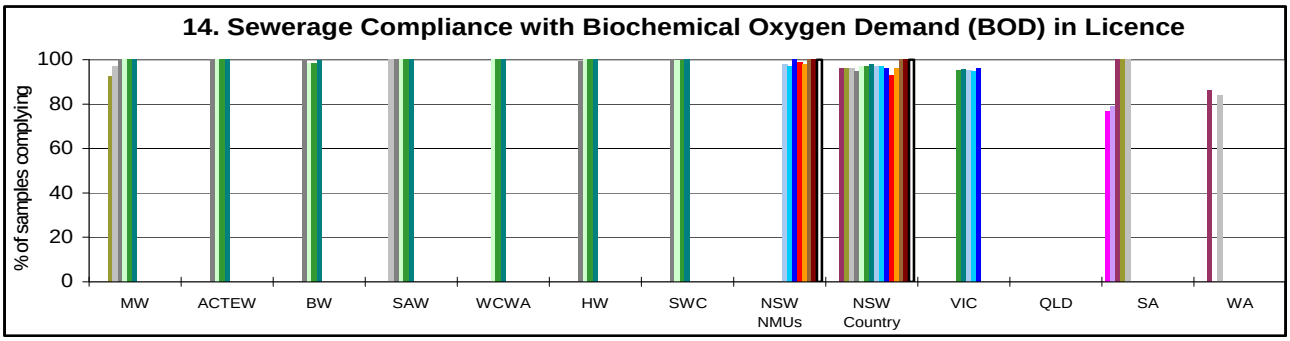


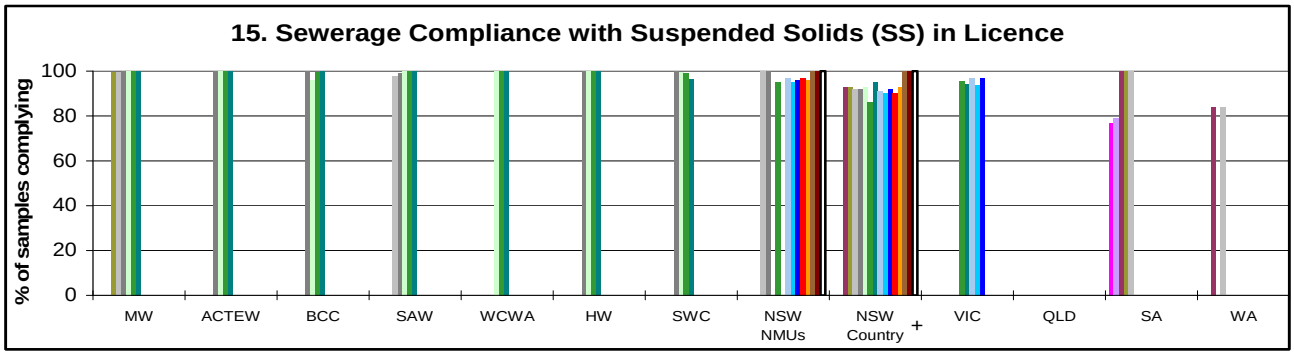


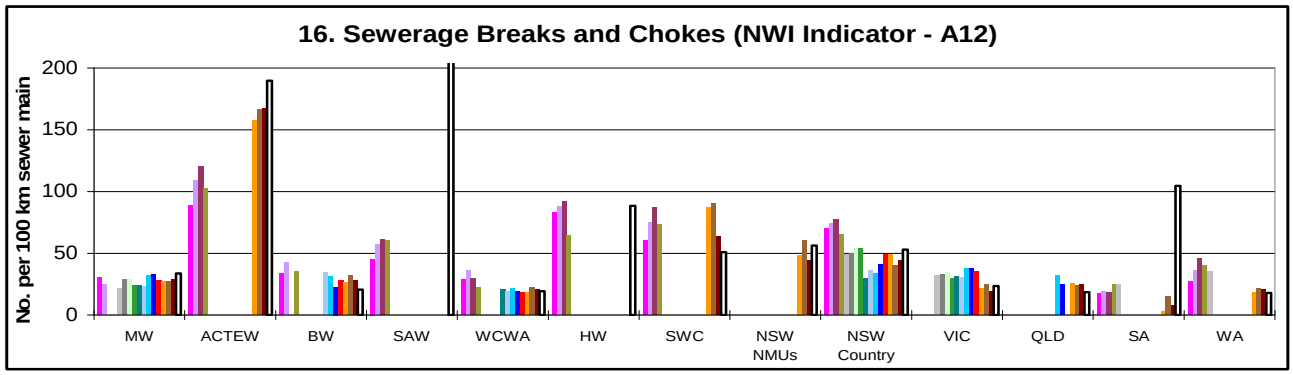
*** NSW Effluent Result**

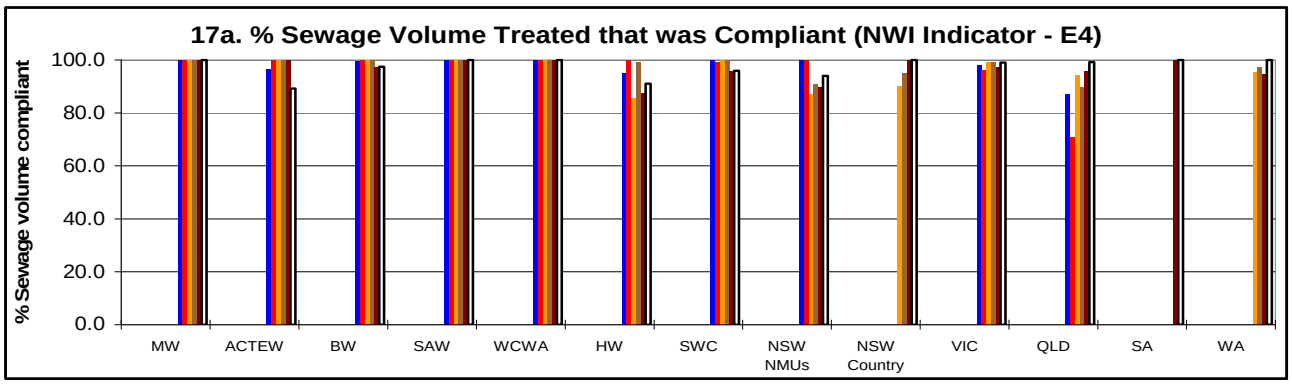
For country NSW, 38,000 ML of wastewater was recycled in 2008-09, which is 23 per cent of the total volume of sewage collected and was carried out by 79 per cent of the utilities, mostly for agriculture.

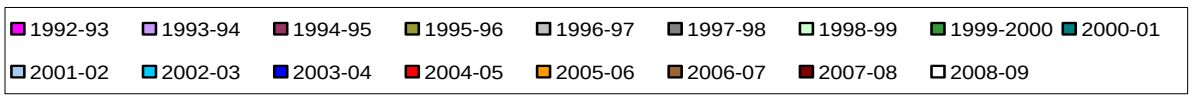
Performance comparisons – environmental (sewerage)



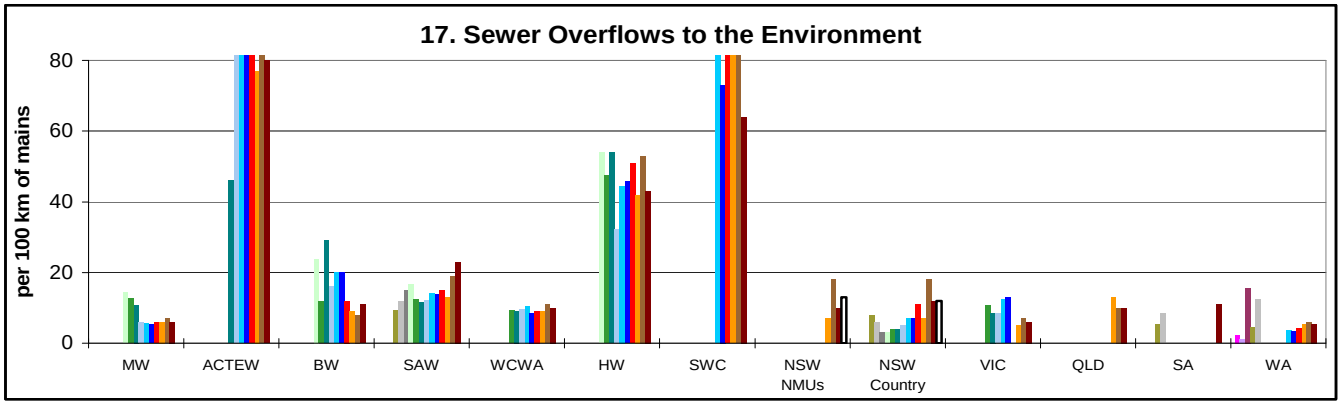




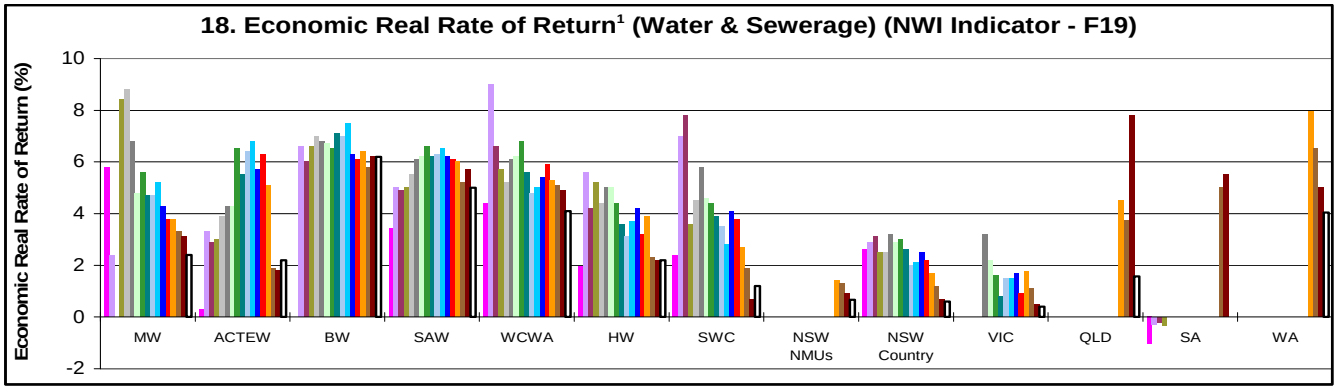


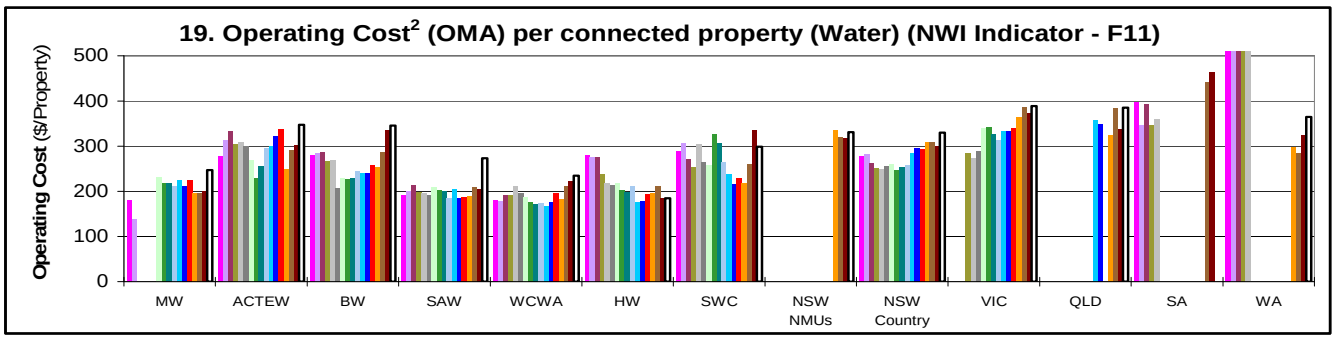


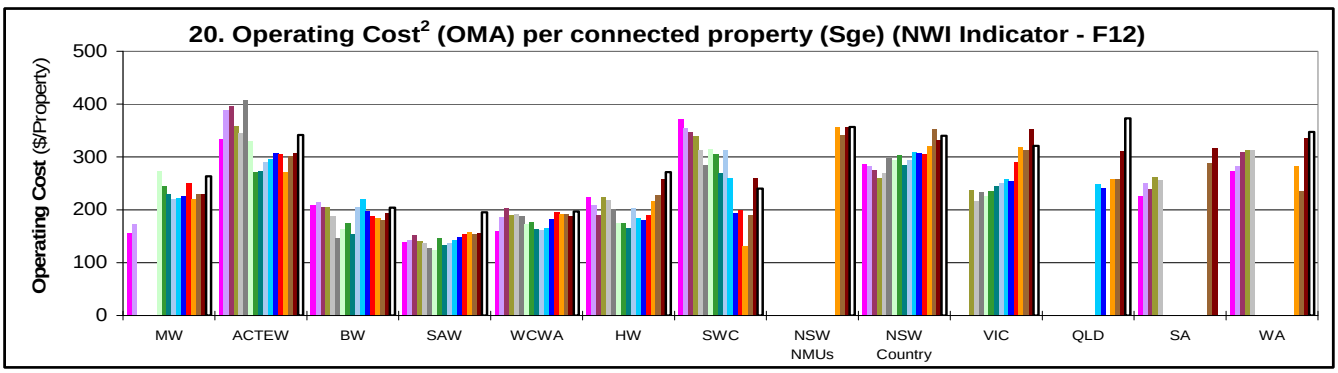
+ The major cause of non-compliance in non-metropolitan NSW is due to the growth of algae in maturation ponds being measured as suspended solids (SS). Most treatment works in non-metropolitan NSW have maturation ponds due to previous Department of Environment and Conservation (DEC) preference for ponding over chlorination. Negotiations with the DEC to develop an appropriate licencing method when maturation ponds are used for disinfection have favoured an option to test for SS prior to the maturation ponds. For new installations and major augmentations, Ultra Violet (UV) disinfection is being used rather than maturation ponds to overcome this problem.

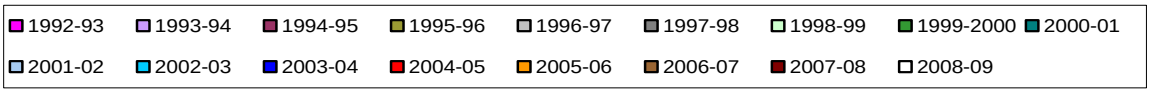


Performance comparisons – economic



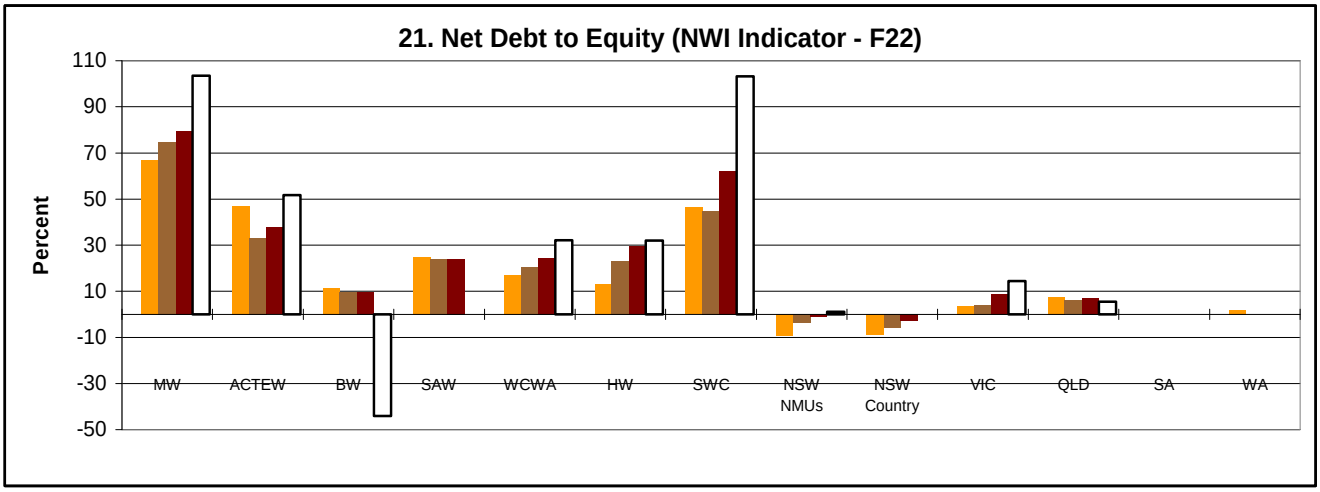


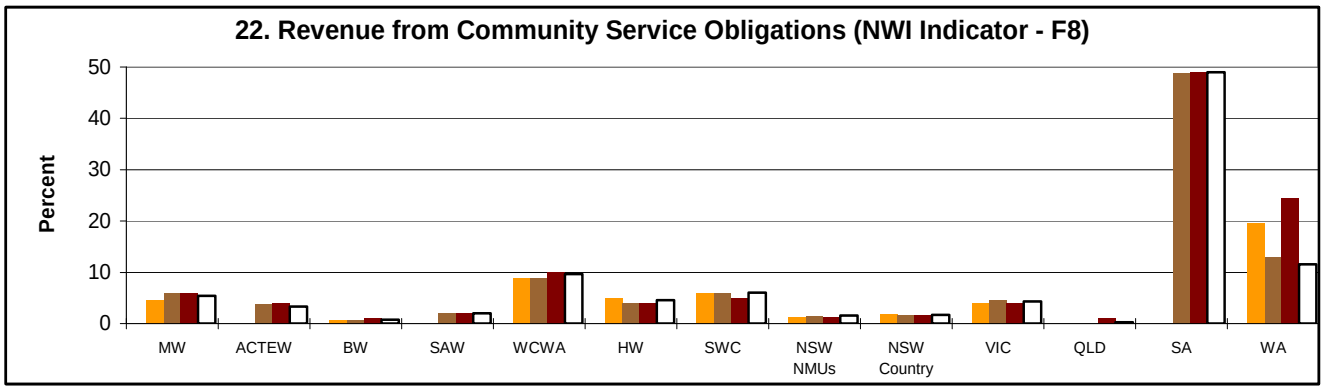


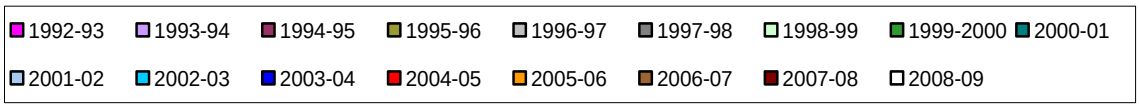


NOTES:
1. As the economic real rate of return (ERRR) was not reported by utilities other than NSW NMUs and Country NSW in 2001/02 to 2004/05, the reported values for "return on assets" has been shown in graph 16 for all the other utilities for these years.
2. Operating Cost (OMA) is the Operation, Maintenance and Administration Cost in 2008/09$.

Performance comparisons – economic (continued)







Appendix B: NSW annual water supply and sewerage reporting forms

Water business data

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
1	C1	Population served	Permanent			n	Population supplied with water in June this reporting year	Exclude population in non-serviced areas
2		Population served	Peak			n	Maximum population supplied anytime this reporting year	Permanent population plus temporary influx (tourists, seasonal workers). Exclude population in non-serviced areas
7		Dams	Number			n	Dams owned by the utility for seasonal water storage as distinct from daily balancing storages for distribution systems	Include on and off-stream storages
8		Dams	Capacity			ML		
9		Service reservoirs	Number			n	Distribution storage facilities used in the delivery of potable water to customers such as steel or concrete tanks used as daily balancing storages	Include clear water tanks at water treatment works
10		Service reservoirs	Capacity			ML		
11		Weirs	Number			n	Low barriers, generally within the stream banks, to divert flow to an offtake	
12		Weirs	Capacity			ML		
13		Bores	Number			n	Bore holes connecting to an aquifer from which water is drawn	
14		Bores	Capacity			ML/d		
15		Pumping stations - potable and nonpotable	Number			n	Pumping stations for headworks and distribution systems	Include potable and non-potable pumping stations. Include pumping stations at treatment works that are used to deliver treated water into the distribution system. A pump station may include multiple pumps
16		Pumping stations - potable and nonpotable	Capacity			ML/d		
17	A1	Treatment works	Number			n	Treatment works providing comprehensive water treatment to achieve high quality water	Include facilities that remove colour and/or turbidity as well as filtration, disinfection and pH adjustment. Exclude facilities that do not provide filtration and disinfection. Exclude secondary or booster disinfection plants. Exclude flouridation plants.
18		Treatment works	Capacity			ML/d		
20a		Water mains - potable and nonpotable	Headworks transfer length			km	Trunk mains which are part of the headworks (eg. dam, river) for delivery of water either from scheme to scheme or to treatment works. Bulk suppliers should inlcude trunk mains to other urban centres or schemes. Exclude disused pipe even if maintained for future use.	Include potable and non-potable mains
20	[A2]	Water mains - potable and nonpotable	Trunk main length			km	A transfer main delivering water from a treatment works or service reservoir to a distribution area.	Include potable and non-potable gravity and rising (pressure) mains. Exclude disused pipe even if maintained for future use.
21	[A2]	Water mains - potable and nonpotable	Reticulation length			km	A reticulation main is relatively small pipework distributing supply to a network of customers.	Include potable and non-potable reticulation. Exclude non-potable reticulation to non-urban areas (eg. for agriculture). Exclude disused pipe even if maintained for future use. Exclude pipework associated with property water services (mains to property meter or service connections). Exclude private mains.
22	A2	Water mains - potable and nonpotable	Total length			km	Sum of (20) and (21). Excludes (20a)	
23		Renewals - potable and nonpotable	Mains renewed			km	Existing water mains renewed or replaced in the reporting period	Exclude maintenance work (refer to Section 5 of NSW Local Government Asset Accounting Manual, 1999)
24		Renewals - potable and nonpotable	Property service connections			n	Existing service connections renewed or replaced in the reporting period	
25		Renewals - potable and nonpotable	Customer water meters			n	Existing customer water meters renewed or replaced in the reporting period	
30		Service connections	Service connections			n	A service connection is not the same as a connected property. The number of service connections is the number of metered accounts minus the total of any submeters (after master meters eg. to shops or flats) plus the estimated service connections (eg fire connections). The number of service connections includes residential and non-residential and is only used to calculate the Infrastructure Leakage Index and real losses (L / connection / d)	The number of metered units and their configuration are not material for determining the number of service connections. Examples: a block of 30 units with a single shared connection is one service connection; a block of 30 units with sub-meters and separate bills for each unit but with a single shared connection to the water main is also one service connection; retirement villages, where there is a single shared connection to the water main that services the whole of the retirement village are also counted as one service connection
31		New residential connections	New residences connected			n	Number of new residences connected this reporting year	Include each individual house, flat, villa, unit, townhouse etc whether separately metered or not
32	[C2]	Assessments	Residential assessments			n	Residential assessments for water supply services	Include vacant lots
33	[C3]	Assessments	Non-residential assessments			n	Non-residential assessments for water supply services	Include vacant lots
36	[C4]	Assessments	Total assessments			n	Sum of (32) and (33)	
37		Connected Property-Assessment ratios	Connected properties / total assessments			n	See notes for (38)	
37a		Connected Property-Assessment ratios	Residential assessments / total assessments			n	See notes for (38)	

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
38		Connected Property-Assessment ratios	Connected residential properties / residential assessments			n	These ratios do not vary significantly from year to year for water supply systems. DWE has worked with LWUs to establish these ratios and will continue to use the existing ratio shown. If you consider that another ratio is more appropriate, you will need to provide detailed evidence to DWE to support such a change. Evidence that would be required includes the number of residential (single and multi) and non-residential assessments and connected properties from your financial, water and sewerage reports over the last 3 years together with details of vacant lots and new properties connected. Note that ratios are stored as floating decimals but are displayed on this page to two decimal places only	Connected properties are not the same as assessments. Connected properties rather than assessments are used for consistency with the National Performance Framework 2007-08. A connected property is one which is connected to the water supply system but which may or may not have a separate assessment
39		Unserved properties and population	Unserved urban properties			n	Number of properties in urban zoned land in towns and villages in your utility's area of operations not served by a reticulated public water supply scheme	Only applies to properties in urban zoned land. Use recent planning maps, photographs, house counts or from census data to estimate the number of unserved urban properties. Exclude vacant land and rural properties. Exclude premises in land zoned rural residential
40		Unserved properties and population	Unserved urban population			n	Estimated permanent population occupying unserved urban properties	
41	[W1]	Water sources	Off-stream dams			ML	Volume of water abstracted from off-stream dams.	Measured at the point of abstraction. Include volumes pumped from open channels supplied by these dams.
42	[W1]	Water sources	On-stream dams			ML	Volume of water abstracted from on-stream dams.	Measured at the point of abstraction. Include volumes pumped from open channels fed by these dams. Exclude volumes fed to off-stream dams for storage.
43	[W1]	Water sources	Run-of-river pumping excluding volumes pumped to dams			ML	Volume of water abstracted from run-of-river pumping.	Measured at the point of abstraction. Exclude volumes pumped to an off-stream dam or desalination plant
44	[W1]	Water sources	River release from State Water dams			ML	Volume of water drawn as a release from a State Water dam.	
45	W2	Water sources	Groundwater extraction			ML	Volume abstracted from groundwater.	Measured at the point of abstraction, not delivery. Exclude desalinated groundwater. Exclude volumes from artificial recharge by sources counted elsewhere eg. river abstraction and greywater/stormwater collection systems (Recycled water, W47).
46	W3	Water sources	Desalinated water			ML	Volume of water sourced from desalination.	
47	W4	Water sources	Recycled water			ML	Volume of non-potable water for urban supply sourced from recycling. Include treated sewage effluent and water sourced from greywater and stormwater systems.	Include recycled water supplied for residential, industrial/commercial and municipal/institutional uses; Exclude: recycled water supplied for agriculture. This volume will not necessarily equal the volume of recycled treated sewage (entered as sewage treatment works indicator T25) if greywater and stormwater are also sourced.
48		Water sources	Total water from utility's sources			ML	Sum of (41) to (47)	
49	[W5]	Water sources	Bulk purchase: potable			ML	Volume of potable water purchased from a bulk supplier outside your utility's geographic area of responsibility.	
50	[W5]	Water sources	Bulk purchase: non-potable			ML	Volume of non-potable water purchased from a bulk supplier outside your utility's geographic area of responsibility.	
51		Water sources	Potable bulk supplier/supply scheme				Select the name of bulk supplier or bulk supply scheme, or leave as "unknown" if no purchase was made	If a bulk supplier or scheme is not included in the pick list, please notify the Manager, Performance, DWE
52		Water sources	Purchase price potable bulk water			c/kL		
53	W7	Water sources	Total water from all sources			ML	Sum of (48), (49) and (50)	
54	[W8]	Authorised potable supply	Residential			ML	Total metered and estimated non-metered potable water supplied to residential properties.	Internal use includes bathroom, kitchen & laundry use. External use includes garden watering. Include metered and estimated unmetered water supplied
55	[W9]	Authorised potable supply	Commercial			ML	Total metered and estimated non-metered potable water supplied to commercial customers.	Include offices, shops, clubs, hotels, motels, caravan parks etc. Include metered and estimated unmetered water supplied
56	[W9]	Authorised potable supply	Industrial			ML	Total metered and estimated non-metered potable water supplied to manufacturing and industrial customers.	For industrial consumers within urban zoned land or industrial consumers that are supplied with potable water outside of urban zoned land. Include factories, mills (eg flour, paper, timber) poultry farms, feed lots, sale yards, abattoirs, mining etc. Include metered and estimated unmetered water supplied
57	[W9]	Authorised potable supply	Rural			ML	Total metered and estimated non-metered potable water supplied to farms and hobby farms outside urban zoned land.	Include potable water supplied for stock and domestic uses outside of urban zoned land including market gardens, agricultural irrigation. Include metered and estimated unmetered water supplied
58	[W9]	Authorised potable supply	Institutional			ML	Total metered and estimated non-metered potable water supplied to institutional customers.	Include hospitals, schools, nursing homes, colleges, universities, gaols etc. Include metered and estimated unmetered water supplied

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
59	W14	Authorised potable supply	Bulk sales			ML	Total volume of potable water sold to other utilities or entities outside your utility's geographic area of responsibility. Include water sourced from another geographic area.	
60	[W9]	Authorised potable supply	Public parks			ML	Total metered and estimated non-metered potable water supplied for watering public parks and gardens.	Include watering of public parks, gardens and ovals etc. Include metered and estimated unmetered water supplied
61	[W10]	Authorised potable supply	Unbilled			ML	Metered and estimated unmetered authorised supply for which a bill is not issued to the consumer.	Include firefighting and mains flushing as this is authorised supply and is not a water loss. The National Performance Framework default value for unmetered, unbilled authorised supply is 0.5% of total water supplied. Examples: firefighting (customer fire connections and street hydrants); mains flushing; public parks and gardens etc
62	[W11]	Authorised potable supply	Total authorised potable supply			ML	Sum of (54) to (58), (60) and (61)	
63	[W8]	Authorised non-potable supply	Residential			ML	Non-potable water reticulated to residential customers as part of a dual supply.	Include metered and estimated unmetered supply. Exclude recycled water
64	[W9]	Authorised non-potable supply	Non-residential			ML	Non-potable water for town water supply reticulated to non-residential customers as part of a dual supply.	Include metered and estimated unmetered supply. Exclude recycled water
64b	[W8]	Authorised non-potable supply	Recycled residential			ML	Recycled water for town water supply reticulated to residential customers as part of a dual supply.	Include metered and estimated unmetered recycled water supplied
64c	[W9]	Authorised non-potable supply	Recycled non-residential			ML	Recycled water for town water supply reticulated to non-residential customers as part of a dual supply.	Include metered and estimated unmetered recycled water supplied
64d	[W11]	Authorised non-potable supply	Total authorised non-potable			ML		
82		Peak water supplied	Peak day			ML	The maximum 24 hour potable water supplied in the reporting year	
83		Peak water supplied	Peak week			ML	The maximum 7 day potable water supplied in the reporting year	
65		Apparent potable losses	Unauthorised supply			ML	Include theft and illegal use (illegal connections, illegal use of unmetered fire connections).	Exclude firefighting and mains flushing - this is included in unbilled authorised potable supply (indicator 61). The National Performance Framework default value for unauthorised consumption is 0.1% of total water supplied
66		Apparent potable losses	Meter inaccuracies			ML	Under-registration of customer meters and errors in system meters.	Your utility should have in place a meter testing program and appropriate statistical analysis to determine metering error. Retail meter error defaults are: 2.0% of BACMR (billed authorised consumption, metered residential) or 2.0% of indicator 54 less estimated non-metered supply (Note: an additional sum of 0.5% of BACMR may be added to the residential meter error to account for meter non-registration); 2% of BACMN (billed authorised consumption, metered non-residential) or 2% of summed indicators 55, 56, 57, 58, 60, 61 less non-metered water supplied
67		Apparent potable losses	Total apparent losses			ML	Apparent losses are the sum of unauthorised potable supply plus meter inaccuracies	
68	[A10]	Real potable losses	Leakage			ML	Leakage from mains, reservoirs and connections including property service connections to customer meters.	If leakage is less than 6% of total water supplied, your data should be carefully re-examined as leakage studies have found 6% to be a minimum for leakage for other than bulk water suppliers. Losses of less than 6% should be supported by evidence (eg. waste metering or reservoir drop tests). Real losses represent a wasted resource and reduce the effective capacity of the supply system resulting in uneccessary operating costs
69		Total potable losses	Total potable losses			ML	Sum of real plus apparent losses	
77		Leakage factors	Average system pressure			m	Estimated average operating pressure in the distribution system.	Pressures should be averaged over 24 hours. For multiple zones report a weighted average using average pressures and the number of connections in each zone
78		Leakage factors	Average length of property service			m	Estimated average length of property service from the reticulation main to the customer meter.	Assumed to be zero if the customer meter is normally located at or close to the property boundary. If the customer meter is normally located some distance from the boundary, estimate the average length by randomly sampling an appropriate number of property service connections
74		Leakage testing	Leakage test method				Select the test used or leave as "unknown" if no test was carried out	
75		Leakage testing	Year of test			year	Year that latest leakage measurement was carried out or leave as "unknown" if no test was carried out	Enter the last year if testing was undertaken over several years (eg if 2003 to 2004, enter 2004)
76		Leakage testing	Result of test: percent leakage			%	If leakage is less than 6% of total water consumption, this data should be carefully examined as leakage studies have found 6% to be a minimum for leakage for other than bulk water suppliers. Losses of less than 6% should be supported by evidence (eg. waste metering or reservoir drop tests)	
84		Demand management initiatives	Customer education program			Y/N		
85		Demand management initiatives	Permanent water savings measures			Y/N	Permanent water savings measures in place to conserve water	Example: no hosing of concrete or hard surfaces at any time

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
86		Demand management initiatives	Effluent or stormwater reuse			Y/N		
87		Demand management initiatives	Leakage reduction program			Y/N		
88		Demand management initiatives	Retrofit program			Y/N		
89		Demand management initiatives	Rebates for water efficient appliances			Y/N		
90		Demand management initiatives	Customer billing interval			mths	Interval between customer bills this reporting year	
91		Demand management initiatives	Other initiative					
92		Demand management initiatives	Other initiative					
93		Rainwater tanks	Rebate for tanks			Y/N		
94		Rainwater tanks	Maximum rebate available			$		
95		Drought restrictions	Days water restrictions due to drought			days	Include all days of water restriction regardless of the level of restriction.	
96	[C10]	Complaints	Service complaints			n	Complaints relating to service quality and reliability, including leaks. Exclude water quality complaints and billing complaints. Exclude queries about service quality and reliability.	Include bursts, leaks, service interruptions, adequacy of service, water pressure, affordability, behaviour of staff or agents. Exclude complaints about tariff structure. A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints. Include complaints received by the water utility in person, by mail, by fax, phone, email or text message. Exclude complaints about planned service interruptions unless the customer expresses dissatisfaction about the interruption. Australian Standard AS ISO 10002-2006 refers. Examples: Include complaints about pressure when found to be caused by a leaking mains or when a customer expresses dissatisfaction with the normal pressure.
97		Complaints	Common service complaint 1				A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the utility, its employees or contractors	Include complaints in person, by mail, email, fax, phone, or text messaging.
98		Complaints	Common service complaint 2					
99	[C12]	Complaints	Billing complaints			n	Complaints concerning account payment, financial loss or overcharging and billing errors. Exclude queries.	Do not include complaints on government pricing policy or complaints about the tariff or queries about how the tariff is calculated. A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints. Includes complaints received by the water utility in person, by mail, by fax, phone, email or text message. When a customer queries an account, this is not counted as a complaint unless the customer identifies that they have rung to make a complaint. If the customer rings to make an enquiry but remains dissatisfied or the enquiry identifies an error in the bill, this should be recorded as a complaint. If a customer makes repeated contact on the same billing issue this should be recorded as a complaint. If an operator is doubtful whether the customer is making an enquiry or complaint they should ask the customer whether they want a complaint to be recorded.
100	[C10]	Complaints	Other complaints			n	Complaints other than water quality, service or billing. Exclude queries.	A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints. Include complaints received by the water utility in person, by mail, by fax, phone, email or text message. Exclude complaints on government pricing policy or tariff structures
101a	C9	Complaints	Water quality complaints (bulk supplies)			n	Customer complaints concerning the quality of reticulated bulk potable supplies. Exclude queries.	Water quality complaints for areas where your utility did not carry out water treatment (where the supply is obtained from a bulk supplier).
101b	[C9]	Complaints	Water quality complaints (treated supplies)			n	Complaints relating to water treated by your utility's treatment plants. Exclude queries.	Sum of water quality complaints for your treatment plants (entered under Water Treatment/Service Levels NSW Reference T37)
102	[C13]	Complaints	Total complaints			n	Sum of (96), (97), (99), (100), (101a) and (101b)	

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
103	C14	Telephone connect time	Percent of calls answered by an operator within 30 seconds			%	Percentage of calls answered by an operator within 30 seconds. If a percentage is provided for Sewerage indicator 41, do not provide a percentage here	If your utility does not record the "time to connect to telephone" leave this indicator blank. Exclude calls resolved by automated systems, hang-ups or where the customer has selected an incorrect dialing option. Examples: if a customer elects to speak with an operator via automatic dialling, the connect time is from the time when the customer was connected by the system until it is answered by an operator. The connect time starts when the call gets connected by person, (in which case the connect time would be zero), by an auto attendant (IVR) or by a message informing the caller they have been put in a queue. The connect time finishes when the caller is answered by a person. If the caller hangs up before they speak to a person, the call is not counted. Similarly, if the caller's question is answered by an IVR, meaning they dont need to speak to an operator, the call is not counted
104	[A8]	Unplanned supply interruptions	Water main breaks			n	Unplanned incidents where potable or non-potable water is lost due to failure of a pipe, fitting or joint material	Exclude: Breaks in the property service connection; bursts or leaks which causes no discernable impact on customers; property or the environment; breaks in above-ground mains that can be fixed without shutting down the main; leaks in fire hydrants, leaks in valves that can be repaired without shutting down the main. Include: bursts causing a large amount of damage to surroundings; invisible leaks in a main which cause interruptions to customer service or subsidence in a road, footpath etc.; visible bursts or leaks in a main or valve.
105		Unplanned supply interruptions	Property service connection failures			n	Unplanned incidents where water is lost due to to failure of a property service connection	Exclude a burst or leak which causes no discernable impact on customers, property or the environment
106		Unplanned supply interruptions	Properties affected			n	Unplanned interruptions are a total loss of water supply due to failure of the water asset	An unplanned interruption is when the customer has not received at least 24 hours notification of the interruption. Interruptions include both potable and recycled interruptions. Include each occurrence of interruption. Exclude interruptions caused by burst or leaks in the property service connection and interruptions where there is some reduction to service but where normal activities (eg. shower, washing machine, toilet flushing etc) are still possible
107	[C15]	Unplanned supply interruptions	Average duration			min	Measured from time of notification of interruption to time of restoration of normal service. Include: interruptions due to bursts or leaks in property service connections; all the period of planned interruptions where the duration exceeds planned duration. Exclude planned interruptions where planned duration is not exceeded.	For this indicator, include interruptions caused by bursts or leaks in property service connections as this indicator reports the average duration that customers are without a water supply service. This is different to indicators 103 to 105. If the utility responds to notification of a broken main, unless the notification also indicates a loss of supply, duration commences once the break is isolated. Examples - A utility advises customers an interruption will occur and will last 3 hours. The actual duration is 5 hours. The unplanned interruption duration is 5 hours. - A customer calls advising they are without water. The interruption commences at the time of notification. - A customer calls advising of a broken main. Unless the notification also indicates a loss of supply, the interruption commences when staff arrive at the main and isolate the break. - Mains are shut down due to fire fighting requirements. This interruption is included and commences at the time the mains are shut down. Include un-notified interruptions caused by third parties.
113	H6	Water quality management	Risk-based drinking water quality plan?			Y/N	Minimum requirement for answering "yes" is a documented water quality management plan in accordance with page 2-1 of the Australian Drinking Water Quality Guidelines 2004. Any other more rigorous requirements are also satisfactory	
113a		Water quality management	Specify planning framework				State the basis for your Drinking Water Quality Management Plan	Examples: Framework for Management of Drinking Water Quality, HACCP, ISO 9001, WSAA (National Water Quality Framework Continuous Improvement Tool)
114	H5	Water quality management	External assessment of plan				State the basis for the external accreditation	For each external assessment, external third party accredited assessments must have taken place within the last 12 months. The scope of these quality systems must cover the entire water business water quality management system. If the quality system covers a more limited area, the indicated quality system must be footnoted with a description of the area covered
115		Public health incidents	Category 1 incidents			n	Incidents with nil or inconsequential public health effects	Example: a minor failure of a water treatment process or asset that results in a limited boil water notice
116		Public health incidents	Category 2 incidents			n	Incidents with a limited public health impact	Examples: non-compliance with health parameters (E. coli) of ADWG, 2004 for more than 7 days; system-wide boil water notice; failure of a disinfection system of more than 3 days; failure of a major treatment process or asset at a treatment works of more than 4 days; chlorine or ammonia gas leak (chlorination/chloramination); non-pathogenic/toxic contamination of the potable water supply due to a cross connection; an incident resulting in unplanned interruptions to supply of more than 2 days (if more than 7 days report as Category 3)

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
117		Public health incidents	Category 3 incidents			n	Incidents with a major impact on public health	Examples: outbreak of water borne disease and/or hospitalisation from water supplied by your utility's water supply system; an incident resulting in unplanned interruptions to supply of more than 7 days; pathogenic contamination of the potable water supply due to a cross connection; toxic contamination of water supply
118		Public health incidents	Category 3 incidents detail					
119		Public health investment	Capital investment to improve health performance			$k	Capital expenditure with the principal outcome of improved health performance	This indicator highlights public health improvement and innovation. Include expenditure undertaken for compliance purposes having IMPROVED performance as an outcome. Include new treatment works. Exclude renewals. (Enter $111,500 as 111.5, $3,999,000 as 3999 etc)
120		Workforce and training	Total workforce in water business			FTE	A full-time employee has an FTE of 1. Part-time and casual employees will have an FTE of less than one based on hours employed.	Include water supply business workforce engaged in operation, maintenance and management including billing as well as contracted staff. Exclude staff engaged on design and construction
121		Workforce and training	Female workforce			FTE		
122		Workforce and training	Workforce receiving 2 or more training days			FTE	The training days FTE of water supply business employees that have undertaken at least 2 days of training in the reporting year. This number will be less than or equal to the workforce FTE	The training days FTE of a casual or part-time employee is the FTE of that employee multiplied by the number of days that employee trained in the reporting year
123		Days lost	Total days lost			FTE	Total FTE days lost for water supply business	Include days lost due to workplace injury, disease and industrial action. Exclude recreation leave, long-service leave, public holidays, rostered days off or flexi-leave, maternity leave, jury duty, leave for Army Reserve training, etc. Exclude days lost for staff engaged in design or construction
124		Days lost	Confirmed injuries			n	Include water supply business injuries that resulted in a fatality, permanent disability or time lost from work of one day or more. Include injuries for equivalent contractor employees. Exclude injuries for employees engaged in design or construction	
125		Days lost	Days lost due to injury			FTE	Total FTE days lost due to injury	Include days lost for injuries for equivalent contractor employees. Exclude days lost for injuries for employees engaged in design or construction
128		Workforce outsourced	Management costs outsourced			%	The percentages expended by the water supply business on outsourcing of management, operational and maintenance costs	
129		Workforce outsourced	Operational costs outsourced			%		
130		Workforce outsourced	Maintenance costs outsourced			%		Outsourcing is subcontracting part of the operation and/or management of a utility's business to a third party, where the subcontractor undertakes work that would normally be done by the utility's workforce. Include legal work, electrical maintenance, operation of a treatment works etc.
131		Community	Reduction in fees and charges to community organisations			$k	The value of reductions in fees or charges permitted by legislation which are provided by your water supply business to the community. Exclude pensioner rebates	Utiilities may elect to provide reduced fees and charges for certain non-profit and community organisations and charities (including non-rateable properties) as permitted by legislation. This indicator reports the total amount of reductions provided to such community organisations in comparison with the standard fees and charges for non-residential customers
131a		Community	Progress towards implementing the National Guidelines for Residential Customers' Water Accounts			%	Estimate your utility's percent progress toward implementing the National Guidelines for Residential Customers' Water Accounts, 2006 (available at www.mincos.gov.au)	
132a	C18	Community	Restrictions for non-payment of water bill			n	Restrictions and disconnections applied for non-payment of water bills in the reporting period	Include: all cases where restriction devices are fitted to reduce water flows to a customer (residential and non-residential). Multiple restrictions for one customer are to be counted as separate restrctions. Exclude: customers who choose to disconnect from the water supply; disconnections carried out due to unsafe infrastructure connected to the water utility's system; instances where your utility elects not to restrict supply due to non-payment.
132b	C19	Community	Legal action for non-payment of water bill			n	Legal actions for non-payment of water bills in the reporting period.	Legal action commences from issue of summons. Include action taken against both residential and non-residential customers. Multiple actions against one customer are to be counted as separate actions. Exclude cases where your utiltiy threatens to take legal action but does not proceed
133		Operation and Maintenance expenses	Headworks			%	Financial data is provided by your utility in Special Schedule No.3 to the Annual Financial Statement, specifically "Operation and Maintenance Expenses". Divide this total into "headworks" and "distribution and reticulation"	

Water business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
134		Operation and Maintenance expenses	Distribution and reticulation			%		
135		Developer charges	Typical developer charge for this reporting year			$	This is the typical developer charge determined by your utility to recover part of the cost of water supply infrastructure for new development.	
136		Developer charges	Typical developer charge for next reporting year			$		
137		Environmental incidents	Category 1 incidents			n	Incidents with little or no impact on the environment	Examples: a reportable incident but not a breach of environmental regulations; an incident resulting in under 4 days of odour or noise complaints; a minor spillage of non-toxic chemicals or sludge to waterway or land
138		Environmental incidents	Category 2 incidents			n	Incidents with limited and non-permanent impact on the environment	Examples: a minor breach of environmental regulations eg. non maintenance of the required environmental flows, an incident resulting in over 4 days of odour or noise complaints, a major soil erosion incident requiring remediation, a significant chemical or sludge spill to waterway or land
139		Environmental incidents	Category 3 incidents			n	Incidents with major and irreversible impact on the environment	Examples: a major breach of environmental regulations, a dam failure, a severe algal outbreak in storages/waterways, a major toxic chemical or sludge spill into waterways, widespread destruction of native forests/ecosystems
140		Environmental incidents	Category 3 incidents detail					
141		Environmental management	Environmental management plan?			Y/N		
142		Environmental management	Plan developed in consultation with other bodies including Catchment Management Board			Y/N		
143		Environmental management	Environmental consultative process in place			Y/N		
144		Environmental management	Capital investment to improve environmental performance			$k	Capital expenditure with the principal outcome of improved environmental performance	This indicator highlights environmental improvement and innovation. Include expenditure undertaken for compliance purposes having IMPROVED performance as an outcome. Include new treatment works. Exclude renewals. (Enter $111,500 as 111.5, $3,999,000 as 3999 etc).
144a	W13	Environmental flows supplied	Environmental flows (new indicator 2008/09)			ML	Wholesale flow allocations to the environment, generally upstream of the master meter, as specified in the environmental flow management regime as required by the environmental regulator. Exclude unplanned releases unless these can be incorporated into the environmental flow regime.	
145		Energy	Non-renewable energy			MWh	Energy derived from non-renewable sources used by your water supply business	
146		Energy	Renewable energy			MWh	Energy derived from accredited renewable sources used by your water supply business	
147		Energy	Total energy			MWh	Sum of (145) and (146)	
148	E9	Greenhouse gas emissions - water supply	Operating emissions			t CO2 eq	Greenhouse gas emissions for all operations relating to water supply	Include tonnes of CO2 equivalent emissions generated directly and indirectly through all your operations relating to your water supply business. Exclude transport and office accommodation. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to your utiliity's location
148b	E11	Greenhouse gas emissions - water supply	Net administrative emissions			t CO2 eq	Net greenhouse gas emissions for other water supply activities (transport, office buildings and sequestration)	Exclude scope 3 emissions. Include tonnes of CO2 equivalent emissions generated directly and indirectly through all your operations relating to your water supply business. Exclude transport and office accommodation. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to your utiliity's location (www.climatechange.gov.au)

Water treatment data

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
TT1		Works parameters	Year commissioned / augmented			year	Year of commissioning or latest major augmentation	
TT2		Works parameters	Design capacity			ML/d		
TT3		Works parameters	Type of works				For multiplie processes, hold the Control key and select the processes used	
TT5		Works parameters	Percentage of population served			%	Estimated percent of your utility's permanent population supplied by this treatment works	
TT4		Works parameters	Comments					
TT7a		Qualifications	Operator 1 qualification				Highest qualification obtained by this operator	
TT7e		Qualifications	Year of qualification / update			year	Year qualification obtained or updated	
TT7b		Qualifications	Operator 2 qualification				Highest qualification obtained by this operator	
TT7f		Qualifications	Year of qualification / update			year	Year qualification obtained or updated	
TT7c		Qualifications	Operator 3 qualification				Highest qualification obtained by this operator	
TT7g		Qualifications	Year of qualification / update			year	Year qualification obtained or updated	
TT7d		Qualifications	Operator 4 qualification				Highest qualification obtained by this operator	
TT7h		Qualifications	Year of qualification / update			year	Year qualification obtained or updated	
TT6		Volume treated	Volume treated			ML	Volume treated by this treatment works this reporting year	
TT26		E.coli	Number of system samples			n	Include samples taken at this treatment works for system performance monitoring. Exclude samples for operational monitoring.	System performance monitoring is a wide ranging assessment of the quality of the water supplied to customers. Operational monitoring is used as a trigger for immediate corrective action to improve water quality and to check equipment is working properly. Sampling location and frequency should be scheduled sampling on the basis of Attachment 2 and ADWG 2004. The number of samples reported should be those taken for system performance monitoring from representative locations in the water supply system and not those taken for operational monitoring
TT27	H2	E.coli	Percent complying			%	Number of samples taken for system compliance monitoring divided by the total number of such samples. Water quality compliance data for each treatment works will be used to determine NWI indicators H2, H3 and H4	It is neither physically nor economically feasible to test on an ongoing basis for all substances in a water supply system. Each water supply system will have its own key characteristics. It is therefore common for water utilities to monitor regularly for contaminants such as disinfection by-products whereas a wide range of other non-key characteristics will only be monitored irregularly.
TT16		Physical	Number of system performance samples			n	Include samples taken at this treatment works for system performance monitoring. Exclude samples for operational monitoring.	System performance monitoring is a wide ranging assessment of the quality of the water supplied to customers. Operational monitoring is used as a trigger for immediate corrective action to improve water quality and to check equipment is working properly. Sampling location and frequency should be scheduled sampling on the basis of Attachment 2 and ADWG 2004. The number of samples reported should be those taken for system performance monitoring from representative locations in the water supply system and not those taken for operational monitoring
TT17		Physical	Percent complying			%	Number of samples taken for system compliance monitoring divided by the total number of such samples.	It is neither physically nor economically feasible to test on an ongoing basis for all substances in a water supply system. Each water supply system will have its own key characteristics. It is therefore common for water utilities to monitor regularly for contaminants such as disinfection by-products whereas a wide range of other non-key characteristics will only be monitored irregularly.
TT18		Chemical	Number of system samples			n	Include samples taken at this treatment works for system performance monitoring. Exclude samples for operational monitoring.	System performance monitoring is a wide ranging assessment of the quality of the water supplied to customers. Operational monitoring is used as a trigger for immediate corrective action to improve water quality and to check equipment is working properly. Sampling location and frequency should be scheduled sampling on the basis of Attachment 2 and ADWG 2004. The number of samples reported should be those taken for system performance monitoring from representative locations in the water supply system and not those taken for operational monitoring

Water treatment data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
TT19	H4	Chemical	Percent complying			%	Number of samples taken for system compliance monitoring divided by the total number of such samples. Water quality compliance data for each treatment works will be used to determine NWI indicators H2, H3 and H4	It is neither physically nor economically feasible to test on an ongoing basis for all substances in a water supply system. Each water supply system will have its own key characteristics. It is therefore common for water utilities to monitor regularly for contaminants such as disinfection by-products whereas a wide range of other non-key characteristics will only be monitored irregularly.
TT22		pH	Number of system samples			n	Include samples taken at this treatment works for system performance monitoring. Exclude samples for operational monitoring	System performance monitoring is a wide ranging assessment of the quality of the water supplied to customers. Operational monitoring is used as a trigger for immediate corrective action to improve water quality and to check equipment is working properly. Sampling location and frequency should be scheduled sampling on the basis of Attachment 2 and ADWG 2004. The number of samples reported should be those taken for system performance monitoring from representative locations in the water supply system and not those taken for operational monitoring
TT23		pH	Percent complying			%	Number of samples taken for system compliance monitoring divided by the total number of such samples	It is neither physically nor economically feasible to test on an ongoing basis for all substances in a water supply system. Each water supply system will have its own key characteristics. It is therefore common for water utilities to monitor regularly for contaminants such as disinfection by-products whereas a wide range of other non-key characteristics will only be monitored irregularly.
TT8		Colour	Raw water maximum			HU	For this treatment works only	
TT9		Colour	Raw water average			HU	For this treatment works only	
TT10		Colour	Treated water maximum			HU	For this treatment works only	
TT11		Colour	Treated water average			HU	For this treatment works only	
TT24		Colour	Number of system performance samples			n	For this treatment works only	
TT25		Colour	Percent complying			%	For this treatment works only	
TT12		Turbidity	Raw water maximum			NTU	For this treatment works only	
TT13		Turbidity	Raw water average			NTU	For this treatment works only	
TT14		Turbidity	Treated water maximum			NTU	For this treatment works only	
TT15		Turbidity	Treated water average			NTU	For this treatment works only	
TT20		Turbidity	Number of system performance samples			n	For this treatment works only	
TT21		Turbidity	Percent complying			%	For this treatment works only	
TT30		Non-compliance	Common reason for non-compliance					
TT31		Chemical usage	Alum			tonnes	For this treatment works only	
TT32		Chemical usage	Alkali			tonnes	For this treatment works only	
TT33		Chemical usage	Chlorine			tonnes	For this treatment works only	
TT34		Chemical usage	Flouride			tonnes	For this treatment works only	
TT35		Malfunctions	Number of days chlorination system failed			days	For this treatment works only	
TT36		Malfunctions	Number of days of major treatment process failure			days	For this treatment works only	
TT37	[C9]	Water quality complaints	Number of complaints			n	Include only water quality complaints from customers supplied by this treatment works. Exclude complaints about adequacy and interruptions to supply, water pressure etc.	Include complaints about discolouration, taste, odour, stained washing, illness or cloudy water. Example: complaints about milky water caused by mains flushing.
TT38		Water quality complaints	Common complaint 1				Most frequent water quality complaint from customers supplied by this treatment works only	
TT39		Water quality complaints	Common complaint 2					

Sewerage business data

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
1	C5	Population served	Permanent			n	Population served with sewerage service in June this reporting year	Exclude population in non-serviced areas
2		Population served	Peak			n	Maximum population served anytime this reporting year	Permanent population plus temporary influx (toursts, seasonal workers). Exclude population in non-serviced areas
3	A4	Treatment works	Number			n	Include all primary, secondary and tertiary treatment works	
4		Treatment works	Capacity			EP		
5		Pumping stations	Number			n		
6		Pumping stations	Capacity			ML/d		
7	A5	Sewage mains	Gravity / reticulation length			km	Length of mains, including trunk and reticulation mains, aqueducts etc. of all diameters.	Exclude pressure (rising) mains. Exclude property or house connections and conduits carrying treated effluent
8	A5	Sewage mains	Pressure / Rising length			km	Length of pressure (rising) mains.	
9	A5	Sewage mains	Total length			km		
10		Renewals	Mains renewed / replaced in reporting year			km	Include existing mains renewed or replaced in the reporting year. Exclude maintenance work (Sect 5 of NSW Local Government Asset Accounting Manual, 1999)	
11		Renewals	Property connections renewed / replaced in reporting year			n	A house or property connection is a short sewer owned and operated by your utility which connects the main sewer and the customer sanitary drain	
12		New residential connections	New residences connected			n	Number of new residences connected this reporting year	Include each individual flat, villa, unit, townhouse etc. whether separately metered or not
13	[C6]	Assessments	Residential			n	Residential assessments for sewerage services. Include vacant lots	
14	[C7]	Assessments	Non-residential			n	Non-residential assessments for sewerage services. Include vacant lots	
17	[C8]	Assessments	Total assessments			n	Sum of (13) and (14)	
18	[C8]	Connected Property-Assessment ratios	Connected properties / total assessments			n	See notes for (19)	
18a	[C6]	Connected Property-Assessment ratios	Residential assessments / total assessments			n	See notes for (19)	
19	[C6]	Connected Property-Assessment ratios	Connected residential properties / residential assessments			n	These ratios do not vary significantly from year to year for sewerage systems. DWE has worked with LWUs to establish these ratios and will continue to use the existing ratio shown. If you consider that another ratio is more appropriate, you will need to provide detailed evidence to DWE to support such a change. Evidence that would be required includes the number of residential (single and multi) and non-residential assessments and connected properties from your financial, water and sewerage reports over the last 3 years together with details of vacant lots and new properties connected. Note that ratios are stored as floating decimals but are displayed on this page to two decimal places only	Connected properties are not the same as assessments. Connected properties rather than assessments are used for consistency with the National Performance Framework 2007-08. A connected property is one which is connected to the sewerage system but which may or may not have a separate assessment
20		Unserved in reporting year	Unserved urban properties			n	Number of properties in urban zoned land in towns and villages in your utility's area of operations that are not served by a reticulated public sewerage service	Exclude premises in land zoned rural residential. Use recent planning maps, photographs, house counts or from census data to estimate the number of unserved urban properties
21		Unserved in reporting year	Unserved urban population			n	Estimated permanent population in unserved urban properties	
34	[C13]	Complaints	Sewage chokes			n	Complaints relating to sewage chokes. Exclude odour, billing and sewerage service complaints. Exclude queries.	
38	[C11]	Complaints	Service			n	Complaints other than chokes, odour or billing. Exclude queries.	Include complaints concerning sewerage system reliability, trade waste services, behaviour of staff and all other sewerage issues. Exclude complaints about chokes, odour or billing. Australian Standard AS ISO 10002-2006 refers.
35		Complaints	Common service complaint 1				Most frequent service complaints should be entered in these two fields	
36		Complaints	Common service complaint 2					
37	[C12]	Complaints	Billing			n	Complaints concerning account payment, financial loss or overcharging and billing errors. Exclude queries.	Exclude complaints about government pricing policy, the tariff structure or queries about how the tariff is calculated
39	[C11]	Complaints	Odour			n	Sum of odour complaints for treatment works, pumping stations and pipe network in your sewerage business	see Sewage Treatment/Service Levels NSW References 68 and 69
40	[C13]	Complaints	All complaints			n	Sum of complaints	A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water utility, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints. Includes complaints received by the utility in person, by mail, by fax, phone, email or text message

Sewerage business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
41	C14	Telephone connect time	Percent of calls answered by an operator within 30 seconds			%	Percentage of calls answered by an operator within 30 seconds. If a percentage is provided for Water indicator 103, do not provide a percentage here.	If your utility does not record the "time to connect to telephone" leave this indicator blank. Exclude calls resolved by automated systems, hang-ups or where the customer has selected an incorrect dialing option. Examples: if a customer elects to speak with an operator via automatic dialling, the connect time is from the time when the customer was connected by the system until it is answered by an operator. The connect time starts when the call gets connected by person, (in which case the connect time would be zero), by an auto attendant (IVR) or by a message informing the caller they have been put in a queue. The connect time finishes when the caller is answered by a person. If the caller hangs up before they speak to a person, the call is not counted. Similarly, if the caller's question is answered by an IVR, meaning they dont need to speak to an operator, the call is not counted
43	[C16]	Unplanned interruptions	Average sewerage interruption			min	Measured from time when utility is aware that sewerage services are no longer available. This is an average based on the total minutes of all interruptions divided by the total number of interruptions.	Exclude planned interruptions, repair times relating to breaks, chokes and leaks in the property connection and time for site restoration. Include un-notified interruptions caused by third parties
44		Public health incidents	Category 1 incidents			n	Incidents with no or inconsequential public health effects	Example: minor failure of sewage treatment processes
45		Public health incidents	Category 2 incidents			n	Incidents with a limited public health impact	Examples: an algal outbreak in receiving waters attributable to sewerage system; issue of public no-contact notice with receiving waters; sewer overflow affecting public access to land or water; sewage contamination of fishing or recreational water areas; a failure of effluent disinfection system; a failure of major treatment processes at a treatment works of more than 4 days; an incident resulting in unplanned interruptions to service of more than 3 days (if more than 20 days, report as Category 3); a chlorine leak
46		Public health incidents	Category 3 incidents			n	Incidents with a major impact on public health	Examples: an outbreak of water borne disease due to sewerage system; hospitalisations from water borne disease due to sewerage system; contamination of an oyster farming area; sewer overflow into a water supply catchment; an incident resulting in unplanned interruptions to service of more than 20 days
47		Public health incidents	Category 3 incidents detail					
48		Public health investment	Capital investment to improve health performance			$k	Capital expenditure with the principal outcome of improved health performance	This indicator highlights public health improvement and innovation. Include expenditure undertaken for compliance purposes having IMPROVED performance as an outcome. Include new treatment works. Exclude renewals. (Enter $111,500 as 111.5, $3,999,000 as 3999 etc)
49		Resources and training	Total workforce in sewerage business			FTE	A full-time employee has an FTE of 1. Part-time and casual employees will have an FTE of less than one based on hours employed.	Include sewerage business employees engaged in operation, maintenance and management including billing. Include equivalent contractor employees. Exclude employees engaged on design and construction
50		Resources and training	Female workforce			FTE		
51		Resources and training	Workforce receiving 2 or more training days			FTE	The training days FTE of sewerage business employees that have undertaken at least 2 days of training in the reporting year. This number will be less than or equal to the workforce FTE	The training days FTE of a casual or part-time employee is the FTE of that employee multiplied by the number of days that employee trained in the reporting year
52		Days lost	Total days lost			FTE	Total FTE days lost for sewerage business	Include days lost due to workplace injury, disease and industrial action. Exclude recreation leave, long-service leave, public holidays, rostered days off or flexi-leave, maternity leave, jury duty, leave for Army Reserve training, etc. Exclude days lost for staff engaged in design or construction
53		Days lost	Confirmed injuries			n	Include sewerage business injuries that resulted in a fatality, permanent disability or time lost from work of one day or more. Include injuries for equivalent contractor employees. Exclude injuries for employees engaged in design or construction	
54		Days lost	Days lost due to injury			FTE	Total FTE days lost due to injury	Include days lost for injuries for equivalent contractor employees. Exclude days lost for injuries for employees engaged in design or construction
57		Workforce outsourced	Management costs outsourced			%	The percentages expended by the sewerage business on outsourcing of management, operational and maintenance costs	
58		Workforce outsourced	Operational costs outsourced			%		
59		Workforce outsourced	Maintenance costs outsourced			%		Outsourcing is subcontracting part of the operation and/or management of a utility's business to a third party, where the subcontractor undertakes work that would normally be done by the utility's workforce. Include legal work, electrical maintenance, operation of a treatment works etc.
60		Community	Reduction in fees and charges to community organisations			$k	The value of reductions in fees or charges permitted by legislation which are provided by the sewerage business to the community. Exclude pensioner rebates	Utilities may elect to provide reduced fees and charges for certain non-profit and community organisations and charities (including non-rateable properties) as permitted by legislation. This indicator reports the total amount of reductions provided to such community organisations in comparison with the standard fees and charges for non-residential customers.
61		Developer charges	Typical developer charge for this reporting year			$	The typical developer charge per equivalent tenement determined to recover part of the cost of sewerage infrastructure for new developments.	

Sewerage business data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
62		Developer charges	Typical developer charge for next reporting year			$		
63a		Overflows and chokes	Overflows			n	Include all overflows/surcharges in utility sewers, access chambers and pumping stations in any weather	Include contained and uncontained spills. Count each access chamber, pumping station etc. overflow as one overflow. Exclude spills or overflow caused by a blockage in the property connection sewer or customers house drains. Exclude overflows contained within emergency storages where there is no pollution of the environment
63b	[E13]	Overflows and chokes	Reported overflows (new indicator 2008/09)			n	Overflows/surcharges reported to the environmental regulator	Exclude overflows/surcharges not reported to the environmental regulator
64	[A12]	Overflows and chokes	Gravity / reticulation main chokes and breaks			n	Confirmed partial or total blockages, or failures in a reticulation (gravity) sewer resulting in an interruption to the sewerage service	Exclude breaks and chokes in rising mains, property connections or chokes within customers house drains
65	[A12]	Overflows and chokes	Rising / pressure main chokes and breaks			n	Confirmed chokes, breaks and leaks in sewer rising (pressure) mains resulting in a significant interruption to the sewerage service	
66		Overflows and chokes	Sewer chokes and breaks attended within 5 hours			n		
67		Overflows and chokes	Chokes or breaks in property connections			n	Chokes, breaks or leaks in property connections resulting in an interruption to the sewerage service	Exclude blockages in customer's house drains (internal drains)
69		Environmental incidents	Category 1 incidents			n	Incidents with little or no impact on the environment	Examples: a reportable incident but not a breach of environmental regulations; an incident resulting in under 4 days of odour or noise complaints; a minor spillage of non-toxic chemicals or sludge to waterway or land
70		Environmental incidents	Category 2 incidents			n	Incidents with limited and non-permanent impact on the environment	Examples: a minor breach of environmental regulations eg. non maintenance of the required environmental flows; an incident resulting in over 4 days of odour or noise complaints; a major soil erosion incident requiring remediation; a significant chemical or sludge spill to waterway or land
71		Environmental incidents	Category 3 incidents			n	Incidents with major and irreversible impact on the environment	Examples: a dry weather sewer overflow; a major breach of environmental regulations; a major wet weather sewer overflow or an overflow for more than 3 hours; a failure of STW resulting in discharge of large volumes of untreated sewage to the environment; a major toxic chemical or sludge spill into waterways; widespread destruction of native forests/ecosystems; embankment failure of a sludge lagoon
72		Environmental incidents	Category 3 incidents detail					
73		Environmental management	Environmental management plan?			Y/N		
74		Environmental management	Plan developed in consultation with other bodies including Catchment Management Board			Y/N		
75		Environmental management	Environmental consultative process in place			Y/N		
76		Environmental management	Capital investment to improve environmental performance			$k	Capital expenditure with the principal outcome of improved environmental performance	This indicator highlights environmental improvement and innovation. Include expenditure undertaken for compliance purposes having IMPROVED performance as an outcome. Include new treatment works. Exclude renewals. (Enter $111,500 as 111.5, $3,999,000 as 3999 etc)
77		Energy	Non-renewable energy			MWh		
78		Energy	Renewable energy			MWh	Energy derived from accredited renewable sources used by the sewerage business	
79		Energy	Total energy			MWh	Sum of (77) and (78)	
80a	E10	Greenhouse gas emissions - sewerage service	Operating emissions			t CO2 eq	Greenhouse gas emissions for all operations relating to sewerage service	Include tonnes of CO2 equivalent emissions generated directly and indirectly through all your operations relating to sewerage service. Exclude transport and office accommodation. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to your utiliity's location
80b	E11	Greenhouse gas emissions - sewerage service	Net administrative emissions			t CO2 eq	Net greenhouse gas emissions for other sewerage service activities (transport, office buildings and sequestration). If your utility cannot split this value between sewerage and water, leave this field blank and place the consolidated value under water business at NSW Reference 148b	Exclude scope 3 emissions. Include net tonnage of CO2 equivalent emissions generated by your sewerage service business, directly and indirectly for transport (vehicles and air travel) and office accommodation. Include all sequestratrion activities. A negative figure is acceptable for this indicator for the case where the amount of carbon sequestration is greater than the carbon emissions. Conversion factors should be based on those provided by the Department of Climate Change - National Greenhouse Accounts (NGA) Factors specific to your utiliity's location (www.climatechange.gov.au)

Sewage treatment data

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
TT1		Works parameters	Year built / augmented			year	Year of commissioning or latest major augmentation	
TT10		Works parameters	Design capacity			EP		
TT2		Works parameters	Type of works				For multiplie processes, hold the Control key and select the processes used	
TT3		Works parameters	Standard of treatment					
TT5		Works parameters	Nitrogen removal			Y/N	Select yes only if at least 90% of nitrogen is removed from effluent	
TT6		Works parameters	Phosphorus removal			Y/N	Select yes only if this treatment works operates either a chemical dosing facility to precipitate phosphorus or a carefully managed biological nutrient removal (BNR) system	
TT7a		Qualifications	Operator 1 qualification				Highest qualification obtained by this operator	
TT7e		Qualifications	Year of qualification /			year	Year qualification obtained or updated	
TT7b		Qualifications	Operator 2 qualification				Highest qualification obtained by this operator	
TT7f		Qualifications	Year of qualification /			year	Year qualification obtained or updated	
TT7c		Qualifications	Operator 3 qualification				Highest qualification obtained by this operator	
TT7g		Qualifications	Year of qualification /			year	Year qualification obtained or updated	
TT7d		Qualifications	Operator 4 qualification				Highest qualification obtained by this operator	
TT7h		Qualifications	Year of qualification /			year	Year qualification obtained or updated	
TT67		Malfunctions	Number of days of major treatment process failure			days	Include days when a significant treatment process was not operating. Exclude periods due to routine maintenance	Include loss of MLSS and odour production
TT68	[C11]	Odour complaints	Number of odour complaints from this treatment works			n	Exclude complaints that have been investigated and can be shown not to arise from this treatment works	A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the utility, its employees or contractors. Complaints from separate customers arising from the same cause count as separate complaints. Includes complaints received by the water business in person, by mail, fax, phone, email or text message
TT69	[C11]	Odour complaints	Number of odour complaints from pumping stations and the sewerage network in this			n	Exclude complaints that have been investigated and can be shown not to arise from the network or pumping stations	
TT8		Compliance summary	Licence expiry date			date		
TT9		Compliance summary	Volume licenced			ML/d		
TT64	E7	Compliance summary	Compliance with environmental regulators			Y/N	Compliance occurs when the licence conditions prescribed for the treatment plant and all attached system components (network, treatment, recycling and disposal) have been met.	Non-compliance is where your utility did not meet licence conditions, or received a financial penalty (>$10,000) or had any successful litigation against it, by the environmental regulator. Include: penalties relating to infringements occuring in a previous reporting year.
TT65		Compliance summary	Penalty or litigation for non-compliance			Y/N	Include successful litigation against your utility by an environmental regulator, a financial penalty, any other penalty imposed by an enviromental regulator	
TT66		Compliance summary	Details of penalty or				Provide brief details of penalties and litigation	
TT49		Biochemical oxygen demand	90th percentile limit			mg/L	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	
TT50		Biochemical oxygen demand	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT51		Total suspended solids	90th percentile limit			mg/L	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	
TT52		Total suspended solids	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT53		Nitrogen (total)	90th percentile limit			mg/L	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	

Sewage treatment data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
TT54		Nitrogen (total)	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT57		Oil and grease	90th percentile limit			mg/L	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	
TT58		Oil and grease	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT59		Phosphorus (total)	90th percentile limit			mg/L	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	
TT60		Phosphorus (total)	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT61		Faecal coliforms	90th percentile limit			cfu/100mL	The limit shown is reproduced from this plant's EPA licence. 100 percentile limits are shown where 90th percentiles are not specified. Absence of a value indicates that no limit is specified.	
TT62		Faecal coliforms	Percent compliance			%	Where the licence specifies a 90th percentile limit and the number of complying samples divided by the total number of scheduled samples is greater than 90%, compliance is deemed to be 100%	
TT63		Sampling days	Number of scheduled sampling days			days	The scheduled sampling days are those specified in the treatment work's licence	
TT32	[W16]	Volumes collected by this works	Network residential			ML	Estimated network residential sewage	
TT33	[W16]	Volumes collected by this works	Network non-residential			ML	Estimated network non-residential sewage	
TT31	[W16]	Volumes collected by this works	Network infiltration / inflow			ML	Estimated groundwater infiltration and stormwater inflow	
TT34	W17	Volumes collected by this works	Network trade waste			ML	Estimated non-metered and metered network trade waste	
TT12	[W16]	Volumes collected by this works	Tankered septic tank effluent			kL	Enter volume in kilolitres not Megalitres	
TT13	[W16]	Volumes collected by this works	Tankered septic sludge / pan			kL	Enter volume in kilolitres not Megalitres	
TT14	[W16]	Volumes collected by this works	Tankered grease trap waste			kL	Enter volume in kilolitres not Megalitres	
TT15	W18	Volumes collected by this works	Total sewage collected			ML	Sum of (20) to (24a)	
TT16		Volumes treated by this works	No treatment			ML		
TT17	E1	Volumes treated by this works	Primary treatment only			ML	Include only volume treated to remove suspended solids (primary standard). Exclude volumes treated to secondary or tertiary standard.	Primary treatment may include screening, clarification and grease removal.
TT18	E2	Volumes treated by this works	Secondary treatment only			ML	Include only volume treated to primary standard with further polishing of effluent to reduce at least 85% of biochemical oxygen demand and suspended solids (secondary standard). Exclude volume treated to primary standard only or tertiary standard.	Secondary treatment may include a polishing step, activated sludge, anaerobic/aerobic processes, biological/sand filtration and lagoon sedimentation.
TT19	E3	Volumes treated by this works	Tertiary treatment only			ML	Include only volume treated to secondary standard with further disinfection of effluent and filtering to remove nutrients and nitrogen using artificial wetland, ponds, chlorination, ozonation or UV treatment (tertiary standard). Exclude volume treated to primary or secondary standard only	Tertiary treatment may include biological/chemical dosing nutrient removal, reverse osmosis, advanced filtration systems, membrane bioreactors and secondary treatment with wetland nutrient removal.

Sewage treatment data (continued)

NSW Ref	NWI Ref	Group	Indicator	2008/09	Acc/ Rel	Unit	Definition	Instruction
TT20	W22	Volumes recycled by this works	Agriculture			ML	Total metered and estimated non-metered supply. Include horticulture, viticulture, forestry and pasture improvement. Exclude environmental flows.	
TT21	[W21]	Volumes recycled by this works	Municipal / Institutional			ML	Total metered and estimated non-metered supply. Include supply to race-courses, parks, gardens, ovals and golf-courses.	
TT22	[W21]	Volumes recycled by this works	Industrial / Commercial			ML	Total metered and estimated non-metered supply. Include supply to mine sites.	
TT23	[W20]	Volumes recycled by this works	Residential			ML	Total metered and estimated non-metered supply. Include supply to all urban zone residences.	
TT24a	W25	Volumes recycled by this works	Other			ML	Total metered and estimated non-metered supply. Include recycled water used for fire fighting, mains flushing and other uses. Include estimated leakage and customer meter error.	
TT24	[W24]	Volumes recycled by this works	Sewage treatment works			ML	Total metered and estimated non-metered supply. Include supply for on-site reuse . Exclude volumes used to support the treatment process. Exclude evaporation loss.	On-site reuse includes landscape watering and toilet flushing. Exclude treatment process maintenance such as screen and filter cleaning etc.
TT24b	[W21]	Volumes recycled by this works	Environmental (new indicator 2008/09)			ML	Include discharge to a waterway for environmental purposes. Such discharge must be approved by the environmental regulator as meeting the definition of environmental flow.	To provide a net benefit to the environment, recycled water must meet quality standards determined by the environmental regulator. Exclude volumes disposed to forest and bushland unless otherwise endorsed by the regulator.
TT24c	[W21]	Volumes recycled by this works	Bulk sales (recycled)			ML	Include recycled water sold to another utility or entity outside your utility's geographic area of responsibility.	
TT25	W26	Volumes recycled by this works	Total volume reused			ML		
TT25a		Charges	Usage charge for recycled town water			c/kL		
TT26 X	[E8]	Biosolids produced by this works	Mass extracted			tonnes	Include stabilised organic solids extracted from effluent. Exclude screened inorganic material	
TT27	E8	Biosolids produced by this works	Percentage of mass reused			%	Include application as a soil conditioner on land used for agriculture or forestry, rehabilitation of mine and industrial sites and general landscaping. Include use in manufacturing other products. Include energy generation. Exclude landfill	
TT29		Biosolids produced by this works	Percent of total disposed to landfill			%	Include injection below ground level, burial and disposal to tip or treatment works site.	
TT30		Biosolids produced by this works	Percent to other			%	Include incineration	
TT36		Large trade waste dischargers	Number of LTWDs			n	A large trade waste discharger (LTWD) is one approved to discharge over 20 kL/d into the sewerage system	
TT37		Large trade waste dischargers	Maximum daily volume			kL/d		
TT38		Large trade waste dischargers	Equivalent BOD load			EP	Total approved trade waste BOD-5 concentration converted to EP	EP = (concentration (mg/L) x discharge volume (kL/d))/70
TT39		Large trade waste dischargers	Equivalent TSS load			EP	Total approved trade waste SS concentration converted to EP	EP = (concentration (mg/L) x discharge volume (kL/d))/70
TT40		Discharge	Volume disposed to			ML	Include effluent disposed within estuaries	
TT41		Discharge	Volume disposed to river / creek			ML	Include effluent disposed to wetlands connected to a river or creek. Exclude disposal within estuaries	
TT42		Discharge	Volume disposed to land			ML	Include effluent disposed to evaporation basins, dunes and exfiltration beds	
TT43		Flow data	Average dry weather flow permanent population			L/s		Summed values of dry weather flows outside peak population periods divided by number of these records
TT44		Flow data	Average dry weather flow peak population			L/s		Summed values of dry weather flows during peak population periods divided by number of these records
TT45		Flow data	Peak dry weather flow - permanent population			L/s	Maximum flow rate recorded during dry weather outside peak population periods	
TT46		Flow data	Peak dry weather flow - peak population			L/s	Maximum flow rate recorded during dry weather during peak population periods	
TT48		Flow data	Peak 1 hour wet weather flow			L/s	Maximum volume recorded in any 1 hour period follwing a wet weather event during the reporting year.	
TT47		Flow data	Peak 24 hr wet weather volume			ML	Maximum volume recorded in any 24 hour period follwing a wet weather event during the reporting year.	

Australian Drinking Water Guidelines 2004 – Sampling location and frequency

Guidelines

The Australian Drinking Water Guidelines 2004 (NHMRC/NRMMC) supersede the 1996 Guidelines. The **main difference** between the 2004 Guidelines and those of 1996 is that the new Guidelines include the Framework for Management of Drinking Water Quality. The Framework incorporates a preventative risk management approach to water supply system management.

The Guidelines outline the aesthetic and health characteristics required for good quality drinking water. It is recommended that NSW local water utilities (LWUs) adopt a 'best practice' approach for the supply of drinking water using the Framework for Management of Drinking Water Quality. In addition, the *Best-Practice Management of Water Supply and Sewerage Guidelines*, 2007 strongly encourage all LWUs to prepare and implement a risk based drinking water quality management plan using relevant elements of the Framework (refer also to page 7 of the *2008-09 NSW Water Supply and Sewerage Benchmarking Report*). The measurable characteristics fall into the following categories:

- Microbiological
- Physical
- Chemical
- Radiological.

For each characteristic, the Guidelines identify three parameters, namely location of sampling, frequency of sampling and acceptable performance measures. Compliance requires that all three parameters be satisfied.

Table I indicates the number of microbiological samples required annually for systems supplying populations of 5,000, 10,000, 20,000, 50,000 and 100,000 respectively is 52, 64, 88, 160 and 280. See note to Table 1.

Sampling location

Samples for system performance monitoring should be taken from representative locations within the system. These should include headworks, service reservoirs, the start of the distribution system and at representative points throughout the distribution system. Suggested locations for each characteristic are shown on pages 10.16 to 10.19 (all references to page numbers below refer to the 2004 Guidelines). NSW Health recommends that drinking water quality monitoring rotate amongst designated sample sites throughout the distribution system. Sample sites should give good geographical representation of the water supply system and enable the comparison of water quality over time for particular sections of the system.

Sampling frequency

The frequency of sampling is dependent on the type of characteristic. The suggested sampling frequency for various water supply characteristics are shown on pages 10.16 to 10.19.

The sampling frequency required for microbiological quality is provided on page 10.5 and summarised in Table 1. The frequency should be increased following repair work, interruptions to supply, at times of flooding or during/after emergency operations. With small water supply systems, periodic sanitary surveys are likely to yield more information than infrequent sampling.

Table 1 – Microbiological quality sampling frequency*

Population	Recommended no. of samples
<1,000	Refer to pages 10.14 to 10.15 of the Guidelines.
1,000 to 5,000	1 sample per week.
5,000 to 100,000	1 sample per week plus 1 per month for each 5,000 above 5,000 population.
>100,000	6 samples per week plus 1 per month for each 10,000 above 100,000 population.

* Note: the actual sample numbers recommended under the NSW Health Drinking Water Monitoring Program reflect the complexity of the system as well as population.

Sampling tor the key physical characteristics should be carried out as shown in Table 2 where these are significant.

Table 2 – Physical Quality Sampling Frequency+

Characteristic	Sampling frequency
pH, turbidity, colour	Fortnightly at water treatment works or chlorinator. Monthly sample to lab in systems serving a population of 5,000 or more, otherwise biannually.
Hardness	Quarterly.

+ All of these are aesthetic (non-health related). However, turbidity >1 may reduce the effectiveness of disinfection.

Sampling for the full range of chemical characteristics should be carried out biannually. In addition, tests for key characteristics of a particular water supply should be undertaken more frequently as shown in Table 3 where these are significant.

Table 3 – Chemical quality sampling frequency#

Characteristic	Sampling frequency
Fluoride	Daily if the water supply is fluoridated
Aluminium, antimony, arsenic, barium, boron, cadmium, calcium, chloride, chromium, copper, fluoride, iodine, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, nitrate, nitrite, selenium, silver, sodium, sulfate, zinc	Monthly in systems serving a population of 5,000 or more, otherwise biannually.

All of these chemicals are health related with the exception of:

- aluminium, calcium, chloride, iron, magnesium and zinc
- sodium which may be of concern to people on a low-sodium diet.

Radiological sampling should be assessed when a new water supply is brought into service, and then every two years for groundwater supplies and every five years for surface water supplies (page 10.14).

In order to satisfy the guidelines it may be necessary to carry out more frequent monitoring for some characteristics. Each water utility should carry out a detailed assessment of its water supply system when planning a monitoring program.

Performance

Performance is regarded as satisfactory if over the preceding 12 months sampling location and frequency have complied with the Guidelines, and all guideline values for each characteristic have been met. Guideline values for microbiological characteristics are shown on page 10.21 and are summarised in Table 4.

Table 4 – Microbiological performance

Indicator	Guideline value
Performance is regarded as satisfactory if, over the preceding 12 months:	
E.coli	At least 98% of scheduled samples contain no E. coli

Guideline values for physical and chemical characteristics are shown on pages 10.22 to 10.26. Health related physical and chemical water quality is satisfactory if, over the preceding 12 months, 95 per cent of the results are less than the guideline value (page 10.20). For non health related characteristics, water quality is satisfactory if the mean of results is less than the guidelines value (page 10.20).

Examples of environmental and public health incidents

Water supply

Environmental incidents(NSW Ref 137 to 140 on page 191)

Category 1 – Minor incidents with inconsequential effects

- A reportable incident but not a breach of environmental regulations.
- An incident resulting in under four days of odour or noise complaints.
- A minor spillage of non-toxic chemicals or sludge to waterway or land.

Category 2 – Incident with limited environmental effects

- A minor breach of environmental regulations, e.g. non maintenance of the required environmental flows.
- An incident resulting in over four days of odour or noise complaints.
- A major soil erosion incident requiring remediation.
- A significant chemical or sludge spill to waterway or land.

Category 3 – Severe incident with irreversible environmental effects

- A major breach of environmental regulations.
- A dam failure.
- A severe algal outbreak in storages/waterways.
- A major toxic chemical or sludge spill into waterways.
- Widespread destruction of native forests/ecosystems.

Public health incidents(NSW Ref 115 to 118 on pages 189 and 190)

Category 1 – Minor incidents with inconsequential effects

- A minor failure of water treatment processes.
- An incident resulting in a limited boil water notice.

Category 2 – Incidents with limited health effects

- Non-compliance with health parameters (faecal coliforms) of 2004 NHMRC/NRMMC water quality guidelines for over seven days.
- A system-wide boil water notice.
- A failure of a disinfection system for over three days.
- A failure of major treatment processes at a treatment works for over four days.
- A chlorine or ammonia gas leak (chlorination/chloramination).
- Non-pathogenic/toxic contamination of the potable water supply due to a cross connection.
- An incident resulting in unplanned interruptions to supply for over two days (if over seven days report as Category 3).

Category 3 – Incidents with major health effects

- An outbreak of water borne disease due to water supply system.
- Hospitalisations from water borne disease due to water supply.
- An incident resulting in unplanned interruptions to supply for over seven days.
- A pathogenic contamination of the potable water supply due to a cross connection.
- A toxic contamination of water supply.

Notes:

1. Environmental regulations include any licence conditions.
2. An incident with both environmental and public health impacts should be reported in both categories.

Sewerage

Environmental incidents (NSW Ref 69 to 72 on page 196)

Category 1 – Minor Incidents with Inconsequential Effects

- A reportable incident but not a breach of environmental regulations
- An incident resulting in under 4 days of odour or noise complaints
- A minor spillage of non-toxic chemicals or sludge to waterway or land

Category 2 – Incident with limited environmental effects

- A minor breach of environmental regulations, e.g.:
  - discharge of partially treated effluent to receiving waters
  - embankment failure of an effluent pond.
- A wet weather sewer overflow for under trhee hours.
- An incident resulting in over four days of odour or noise complaints.
- A major soil erosion incident requiring remediation.
- A significant chemical or sludge spill to waterways or land.

Category 3 – Severe incident with irreversible environmental effects

- A dry weather sewer overflow
- A major breach of environmental regulations, e.g.:
  - a major wet weather sewer overflow or an overflow for over three hours
  - a failure of STW, resulting in discharge of large volume of untreated sewage to environment
  - a major toxic chemical or sludge spill into waterways
  - widespread destruction of native forests/ecosystems
  - embankment failure of a sludge lagoon.

Public health incidents(NSW Ref 44 to 47 on page 195)

Category 1 – Minor Incidents with Inconsequential Effects

- A minor failure of sewage treatment processes.

Category 2 – Incidents with limited health effects

- An algal outbreak in receiving waters attributable to sewerage system.
- Issue of public no-contact notice with receiving waters.
- Sewer overflow affecting public access to land or water.
- Sewage contamination of fishing or recreational water areas.
- A failure of effluent disinfection system.
- A failure of major treatment processes at a treatment works for over four days.
- An incident resulting in unplanned interruptions to service for over three days (if over 20 days, report as Category 3).
- A chlorine leak.

Category 3 – Incidents with major health effects

- An outbreak of water borne disease due to sewerage system.
- Hospitalisations from water borne disease due to sewerage system.
- Contamination of an oyster farming area due to sewerage system.
- A sewer overflow into a water supply catchment.
- An incident resulting in unplanned interruptions to service for over 20 days.

NSW Council

Special Schedule No. 3
Water Supply Income Statement
(Gross including Internal Transactions)
for the year ended 2009
$'000

		2009	2008
A	**Expenses and Income**		
	Expenses		
1	Management expenses		
	a. Administration		
	b. Engineering and Supervision		
2	Operation and Maintenance		
	- Dams and Weirs		
	a. Operation expenses		
	b. Maintenance expenses		
	- Mains		
	c. Operation expenses		
	d. Maintenance expenses		
	- Reservoirs		
	e. Operation expenses		
	f. Maintenance expenses		
	- Pumping Stations		
	g. Operation expenses (excluding energy costs)		
	h. Energy costs		
	i. Maintenance expenses		
	- Treatment		
	j. Operation expenses (excluding chemical costs)		
	k. Chemical costs		
	l. Maintenance expenses		
	- Other		
	m. Operation expenses		
	n. Maintenance expenses		
	o. Purchase of water		
3.	Depreciation		
	a. System assets		
	b. Plant and equipment		
4.	Miscellaneous expenses		
	a. Interest expenses		
	b. Revaluation decrements		
	c. Other expenses		
5.	**Total expenses**		
	Income		
6.	Residential charges		
	a. Access (including rates)		
	b. Usage charges		
7.	Non-residential charges		
	a. Access (including rates)		
	b. Usage charges		
8.	Extra charges		
9.	Interest income		
10.	Other income		
11.	Grants		
	a. Grants for acquisition of assets		
	b. Grants for pensioner rebates		
	c. Other grants		

NSW Council

Special Schedule No. 3 (continued)
Water Supply Income Statement
(Gross including Internal Transactions)
for the year ended 2009
$'000

		2009	2008
A	**Expenses and Income (continued)**		
12.	Contributions		
	a. Developer charges		
	b. Developer provided assets		
	c. Other contributions		
13.	**Total income**		
14.	Gain or loss on disposal of assets		
15.	Operating result		
15a.	**Operating result** (less grants for acquisition of assets)		
B	**Capital transactions**		
	Non-operating expenditures		
16.	Acquisition of Fixed Assets		
	a. Subsidised scheme		
	b. Other new system assets		
	c. Renewals		
	d. Plant and equipment		
17.	Repayment of debt		
	a. Loans		
	b. Advances		
	c. Finance leases		
18.	Transfer to sinking fund		
19.	**Totals**		
	Non-operating funds employed		
20.	Proceeds from disposal of assets		
21.	Borrowing utilised		
	a. Loans		
	b. Advances		
	c. Finance leases		
22.	Transfer from sinking fund		
23.	**Totals**		
C	**Rates and charges**		
24.	Number of assessments		
	a. Residential (occupied)		
	b. Residential (unoccupied ie vacant land)		
	c. Non-residential (occupied)		
	d. Non-residential (unoccupied ie vacant land)		
25.	Number of ETs for which developer charges were received	ET	
26.	Total amount of pensioner rebates	$	

NSW Council

Special Schedule No. 3 (continued)
Water Supply – Cross-subsidies
as at 30 June 2009
$'000

		Yes	No	Amount
D	**Best practice annual charges and developer charges#**			
27.	**Annual charges**			
	a. Does Council have best-practice water supply annual charges and usage charges*?			
	If Yes, go to 28a.			
	If No, please report if council has removed **land value** from access charges (ie rates)?			
	* Such charges for both residential customers and non-residential customers comply with section 3.2 of *Water Supply, Sewerage and Trade Waste Pricing Guidelines*, Department of Water and Energy, December, 2002. Such charges do not involved significant cross-subsidies.			
	b. Cross-subsidy **from** residential customers using less than allowance (page 25 of Guidelines)			
	c. Cross-subsidy **to** non-residential customers (page 24 of Guidelines)			
	d. Cross-subsidy **to** large connections in unmetered supplies (page 26 of Guidelines)			
28.	**Developer charges**			
	a. Has council completed a water supply Development Servicing** Plan?			
	b. Total cross-subsidy in water supply developer charges for 2008/09 (page 47 of Guidelines)			
	** In accordance with page 9 of *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater*, Department of Water and Energy, December, 2002.			
29.	**Disclosure of cross-subsidies**			
	Total of cross-subsidies (27b +27c + 27d + 28b)			

Councils which have not yet implemented best practice water supply pricing should disclose cross-subsidies in items 27b, 27c and 27d above.

However, disclosure of cross-subsidies is **not** required where a Council has implemented best practice pricing and is phasing in such pricing over a period of three years.

NSW Council

Special Schedule No. 4
Water Supply – Balance sheet
(Gross including Internal Transactions)
as at 30 June 2009
$'000

		Current	Non current	Total
	ASSETS			
30.	Cash and investments			
	a. Developer charges			
	b. Special purpose grants			
	c. Accrued leave			
	d. Unexpended loans			
	e. Sinking fund			
	f. Other			
31.	Receivables			
	a. Specific purpose grants			
	b. Rates and charges			
	c. Other			
32.	Inventories			
33.	Property, plant and equipment			
	a. System assets			
	b. Plant and equipment			
34.	Other assets			
35.	**Total assets**			
	LIABILITIES			
36.	Bank overdraft			
37.	Creditors			
38.	Borrowings			
	a. Loans			
	b. Advances			
	c. Finance leases			
39.	Provisions			
	a. Tax equivalents			
	b. Dividend			
	c. Other			
40.	**Total liabilities**			
41.	**Net assets committed**			
	EQUITY			
42.	Accumulated surplus			
43.	Asset revaluation reserve			
44.	**Total equity**			
	Note to system assets:			
45.	Current replacement cost of system assets			
46.	Accumulated current cost depreciation of system assets			
47.	Written down current cost of system assets			

NSW Council

Special Schedule No. 5
Sewerage Income Statement
(Gross including Internal Transactions)
as at 30 June 2009
$'000

		2009	2008
A	**Expenses and Income**		
	Expenses		
1.	Management expenses		
	a. Administration		
	b. Engineering and Supervision		
2.	Operations and Maintenance Expenses		
	- Mains		
	a. Operation expenses		
	b. Maintenance expenses		
	- Pumping Stations		
	c. Operation expenses (excluding energy costs)		
	d. Energy costs		
	e. Maintenance expenses		
	- Treatment		
	f. Operation expenses (excluding chemical, energy, effluent and biosolids management costs)		
	g. Chemical costs		
	h. Energy costs		
	i. Effluent management		
	j. Biosolids management		
	k. Maintenance expenses		
	- Other		
	l. Operation expenses		
	m. Maintenance expenses		
3.	Depreciation		
	a. System assets		
	b. Plant and equipment		
4.	Miscellaneous		
	a. Interest expenses		
	b. Revaluation decrements		
	c. Other expenses		
5.	**Total expenses**		
	Income		
6.	Residential charges (including rates)		
7.	Non-residential charges		
	a. Access (including rates)		
	b. Usage charges		
8.	Trade Waste Charges		
	a. Annual fees		
	b. Usage fees		
	c. Excess mass charges		
	d. Re-inspection fees		
9.	Extra charges		
10.	Interest income		
11.	Other income		
12.	Grants		
	a. Grants for acquisition of assets		
	b. Grants for pensioner rebates		
	c. Other grants		

NSW Council

Special Schedule No. 5 (continued)
Sewerage Income Statement
(Gross including Internal Transactions)
as at 30 June 2009
$'000

		2009	2008
A	**Expenses and Income (continued)**		
13.	Contributions		
	a. Developer charges		
	b. Developer provided assets		
	c. Other contributions		
14.	**Total income**		
15.	Gain or loss on disposal of assets		
16.	Operating result		
16a.	**Operating result** (less grants for acquisition of assets)		
B	**Capital transactions**		
	Non-operating expenditures		
17.	Acquisition of Fixed Assets		
	a. Subsidised scheme		
	b. Other new system assets		
	c. Renewals		
	d. Plant and equipment		
18.	Repayment of debt		
	a. Loans		
	b. Advances		
	c. Finance leases		
19.	Transfer to sinking fund		
20.	**Totals**		
	Non-operating funds employed		
21.	Proceeds from disposal of assets		
22.	Borrowing utilised		
	a. Loans		
	b. Advances		
	c. Finance leases		
23.	Transfer from sinking fund		
24.	**Totals**		
C	**Rates and charges**		
25.	Number of assessments		
	a. Residential (occupied)		
	b. Residential (unoccupied ie vacant land)		
	c. Non-residential (occupied)		
	d. Non-residential (unoccupied ie vacant land)		
26.	Number of ETs for which developer charges were received	ET	
27.	Total amount of pensioner rebates	$	

NSW Council

Special Schedule No. 5 (continued)
Sewerage – Cross-subsidies
as at 30 June 2009
$'000

		Yes	No	Amount
D	**Best practice annual charges and developer charges#**			
28.	**Annual charges**			
	a. Does Council have best-practice sewerage annual charges, usage charges and trade waste fees and charges*?			
	If Yes, go to 29a.			
	If No, please report if council has removed **land value** from access charges (ie rates)?			
	* Such charges for both residential customers and non-residential customers comply with sections 4.2 and 4.3 of *Water Supply, Sewerage and Trade Waste Pricing Guidelines*, Department of Water and Energy, December, 2002. Such charges do not involved significant cross-subsidies.			
	b. Cross-subsidy **to** non-residential customers (page 45 of Guidelines)			
	c. Cross-subsidy **to** trade waste discharges (page 46 of Guidelines)			
29.	**Developer charges**			
	a. Has council completed a sewerage Development Servicing** Plan?			
	b. Total cross-subsidy in sewerage developer charges for 2008/09 (page 47 of Guidelines)			
	** In accordance with page 9 of *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater*, Department of Water and Energy, December, 2002.			
30.	**Disclosure of cross-subsidies**			
	Total of cross-subsidies (28b +28c + 29b)			

Councils which have not yet implemented best practice sewerage pricing and liquid trade waste pricing should disclose cross-subsidies in items 28b and 28c above.

However, disclosure of cross-subsidies is **not** required where a Council has implemented best practice sewerage and liquid trade waste pricing and is phasing in such pricing over a period of three years.

NSW Council

Special Schedule No. 6
Sewerage service – Balance sheet
(Gross including Internal Transactions)
as at 30 June 2009
$'000

		Current	Non current	Total
	Assets			
31.	Cash and investments			
	a. Developer charges			
	b. Special purpose grants			
	c. Accrued leave			
	d. Unexpended loans			
	e. Sinking fund			
	f. Other			
32.	Receivables			
	a. Specific purpose grants			
	b. Rates and charges			
	c. Other			
33.	Inventories			
34.	Property, plant and equipment			
	a. System assets			
	b. Plant and equipment			
35.	Other assets			
36.	**Total assets**			
	Liabilities			
37.	Bank overdraft			
38.	Creditors			
39.	Borrowings			
	a. Loans			
	b. Advances			
	c. Finance leases			
40.	Provisions			
	a. Tax equivalents			
	b. Dividend			
	c. Other			
41.	**Total liabilities**			
42.	**Net assets committed**			
	Equity			
43.	Accumulated surplus			
44.	Asset revaluation reserve			
45.	**Total equity**			
	Note to system assets:			
46.	Current replacement cost of system assets			
47.	Accumulated current cost depreciation of system assets			
48.	Written down current cost of system assets			

Notes to Special Schedules 3 and 5

Administration[1] (item 1a of Special Schedules 3 and 5) comprises the following:

- Administration staff:
  - Salaries and allowance
  - Travelling expenses
  - Accrual of leave entitlements
  - Employment overheads.
- Meter reading.
- Bad and doubtful debts.
- Other administrative/corporate support services.

Engineering and supervision[1] (item 1b of Special Schedules 3 and 5) comprises the following:

- Engineering staff:
  - Salaries and allowance
  - Travelling expenses
  - Accrual of leave entitlements
  - Employment overheads.
- Other technical and supervision staff:
  - Salaries and allowance
  - Travelling expenses
  - Accrual of leave entitlements
  - Employment overheads.

Operation expenses (item 2 of Special Schedules 3 and 5) comprise the day to day operational expenses excluding maintenance expenses.

Maintenance expenses (item 2 of Special Schedules 3 and 5) comprise the day to day repair and maintenance expenses. (Refer to Section 5 of the Local Government Asset Accounting Manual regarding capitalisation principles and the distinction between capital and maintenance expenditure).

Other expenses (item 4c of Special Schedules 3 and 5) include all expenses not recorded elsewhere.

Revaluation decrements (item 4b of Special Schedules 3 and 5) is to be used when infrastructure assets have decreased in fair value.

Residential charges[2] (items 6a, 6b and item 6 of Special Schedules 3 and 5 respectively) include all income from residential charges. Item 6 of Schedule 3 should be separated into 6a Access Charges (including rates if applicable) and 6b User Charges. Exclude non-residential charges.

Non-residential charges[2] (items 7a, 7b of Special Schedules 3 and 5) include all income from non-residential charges separated into 7a Access Charges (including rates if applicable) and 7b User Charges. Exclude residential charges.

Trade waste charges (item 8 of Special Schedule 5) include all income from trade waste charges separated into 8a Annual Fees, 8b Usage Charges, 8c Excess Mass Charges and 8d Re-inspection Fees.

Other income (items 10 and 11 of Special Schedules 3 and 5 respectively) include all income not recorded elsewhere.

Other contributions (items 12c and 13c of Special Schedules 3 and 5 respectively) include capital contributions for water supply or sewerage services received by Council under Section 565 of the Local Government Act.

Notes:

(1) Administration and engineering costs for the development of capital works projects should be reported as part of the capital cost of the project and not as part of the recurrent expenditure (ie. in item 16 for water supply and item 17 for sewerage, and **not** in items 1a and 1b).

(2) To enable accurate reporting of **residential revenue from usage charges**, it is essential for councils to accurately separate their residential (item 6) and non-residential (item 7) charges.

(3) Particular attention should be paid to the underlined items above, which have been incorrectly reported by a number of councils.

Note 2 Water Supply Business best practice management disclosure requirements

			2009
1. Calculation and Payment of Tax-Equivalents			
(i)	Calculated Tax Equivalents	$	
(ii)	No of assessments multiplied by $3/assessment	$	
(iii)	Amounts payable for Tax Equivalents *(lesser of (i) and (ii))*	$	0
(iv)	Tax Equivalents paid	$	
2. Dividend from Surplus			
(i)	50% of Surplus before Dividends *(Calculated in accordance with Best Practice Management for Water Supply and Sewerage guidelines.)*	$	
(ii)	No of assessments multiplied by $30/assessment, less tax equivalent charges/assessment	$	
(iii)	Cumulative Surplus before Dividends for 3 years to 30 June 2009, less cumulative dividends paid for 2 years to 30 June 2008	$	
(iv)	Maximum Dividend from Surplus *(least of (i), (ii) and (iii))*	$	0
(v)	Dividend paid from Surplus	$	
3. Required Outcomes for 6 Criteria			
(i)	Complete current Strategic Business Plan (including Financial Plan)	Yes/No	
(ii)	Full cost-recovery, without significant cross subsidies *(Item 2(a) in Table 1 on page 22 of Best Practice Management Guidelines)*	Yes/No	
	Complying charges *(Item 2(b) in Table 1)*	Yes/No	
	DSP with Commercial Developer Charges *(Item 2(e) in Table 1)*	Yes/No	
	If Dual Water Supplies, Complying Charges *(Item 2(g) in Table 1)*	Yes/No	
(iii)	Sound Water Conservation & Demand Management implemented	Yes/No	
(iv)	Sound Drought Management implemented	Yes/No	
(v)	Complete Performance Reporting *(by 15 September each year)*	Yes/No	
(vi)	a. Complete Integrated Water Cycle Management Evaluation	Yes/No	
	b. Complete and implement Integrated Water Cycle Management Strategy	Yes/No	
National Water Initiative (NWI) Financial Performance Indicators			
NWI F1	Total Revenue (Water) *= Total income (w13))* *- Grants for acquisition of assets (w11a) - Interest income (w9)*	$ ('000)	
NWI F4	Revenue from Residential Usage Charges (Water) *= Income from residential usage charges (w6b) x 100* */* *(Income from residential usage charges (w6a)* *+ Income from residential access charges (w6b))*	%	
NWI F9	Written Down Replacement Cost of Fixed Assets (Water) *= Written down current cost of system assets (w47)*	$ ('000)	
NWI F11	Operating Cost (OMA) (Water) *= Management expenses (w1) + Operation and maintenance expenses (w2)*	$ ('000)	
NWI F14	Capital Expenditure (Water) *= Acquisition of fixed assets (w16)*	$ ('000)	
NWI F17	Economic Real Rate of Return (Water) *= (Total income (w13) - Interest income (w9) - Grants for acquisition of assets (w11a)* *– Operating cost (NWI F11) – Current cost depreciation (w3)) x 100* */* *(Written down current cost of system assets (w47) + Plant and equipment (w33b)).*	%	
NWI F26	Capital Works Grants (Water) *= Grants for acquisition of assets (w11a)*	$ ('000)	

Notes:

1. References to w (eg. w12) refer to item numbers in Special Schedules Nos. 3 and 4 of each Council's Annual Financial Statements.
2. The NWI performance indicators are based on the National Performance Framework handbook for Urban Performance Reporting Indicators and Definitions.
   The NWI indicators are to be calculated using the formulae shown above.

Note 3 Sewerage Business best practice management disclosure requirements

			2009
1. Calculation and Payment of Tax-Equivalents			
(i)	Calculated Tax Equivalents	$	
(ii)	No of assessments multiplied by $3/assessment	$	
(iii)	Amounts payable for Tax Equivalents *(lesser of (i) and (ii))*	$	0
(iv)	Tax Equivalents paid	$	
2. Dividend from Surplus			
(i)	50% of Surplus before Dividends *(Calculated in accordance with Best Practice Management for Water Supply and Sewerage guidelines.)*	$	
(ii)	No of assessments multiplied by $30/assessment, less tax equivalent charges/ assessment	$	
(iii)	Cumulative Surplus before Dividends for 3 years to 30 June 2009, less cumulative dividends paid for 2 years to 30 June 2008	$	
(iv)	Maximum Dividend from Surplus *(least of (i), (ii) and (iii))*	$	**0**
(v)	Dividend paid from Surplus	$	
3. Required Outcomes for 4 Criteria			
(i)	Complete current Strategic Business Plan (including Financial Plan)	Yes/No	
(ii)	Pricing with full cost-recovery, without significant cross subsidies *(Item 2(a) in Table 1 on page 22 of Best Practice guidelines)*	Yes/No	
	Complying charges (a) Residential *(Item 2(c) in Table 1)*	Yes/No	
	(b) Non-Residential *(Item 2(c) in Table 1)*	Yes/No	
	(c) Trade Waste *(Item 2(d) in Table 1)*	Yes/No	
	DSP with Commercial Developer Charges *(Item 2(e) in Table 1)*	Yes/No	
	Liquid Trade Waste Approvals & Policy *(Item 2(f) in Table 1)*	Yes/No	
(iii)	Complete Performance Reporting Form *(by 15 September each year)*	Yes/No	
(iv)	a. Complete Integrated Water Cycle Management Evaluation	Yes/No	
	b. Complete and implement Integrated Water Cycle Management Strategy	Yes/No	
National Water Initiative (NWI) Financial Performance Indicators			
NWI F2	Total Revenue (Sewerage) *= Total income (s14)* *- Grants for acquisition of assets (s12a) - Interest income (s10)*	$ ('000)	
NWI F10	Written Down Replacement Cost of Fixed Assets (Sewerage) *= Written down current cost of system assets (s48)*	$ ('000)	
NWI F12	Operating cost (Sewerage) *= Management expenses (s1) + Operation and maintenance expenses (s2)*	$ ('000)	
NWI F15	Capital Expenditure (Sewerage) *= Acquisition of fixed assets (s17)*	$ ('000)	
NWI F18	Economic Real Rate of Return (Sewerage) *=((Total income (s14) - Interest income (s10) - Grants for acquisition of assets (s12a)* *- Operating cost (NWI F12) – Current cost depreciation (s3)) x 100* */* *(Written down current cost (WDCC) of system assets (s48) + Plant and equipment (s34b))*	%	
NWI F27	Capital Works Grants (Sewerage) *= Grants for acquisition of assets (s12a)*	$ ('000)	
NWI F3	Total Income (Water and Sewerage) *= Total income (w13+s14) + Gain/loss on disposal of assets (w14+s15)* *- Grants for acquisition of assets (w11a+s12a) - Interest income (w9+s10)*	$ ('000)	
NWI F8	Revenue from Community Service Obligations (Water and Sewerage) *= Community service obligations (NWI F25) x 100* */* *Total income (NWI F3)*	%	
NWI F16	Capital Expenditure (Water and Sewerage) *= Acquisition of fixed assets (w16 + s17)*	$ ('000)	
NWI F19	Economic Real Rate of Return (Water and Sewerage) *= (Total income (w13 + s14) - Interest income (w9 + s10)* *- Grants for acquisition of assets (w11a + s12a) – Operating cost (NWI F11 + NWI F12)* *- Current cost depreciation (w3 + s3)) x 100* */* *(Written down replacement cost of fixed assets (NWIF9 + NWIF10)* *+ Plant and equipment (w33b +s33b))*	%	
NWI F20	Dividend (Water and Sewerage) *= Dividend paid from surplus (2(v) of Note 2 + 2(v) of Note 3)*	$ ('000)	
NWIF21	Dividend Payout Ratio (Water and Sewerage) *= Dividend (NWI F20) x 100* */* *Net profit after tax (NWI F24)*	%	
NWI F22	Net Debt to Equity (Water and Sewerage) *= (Overdraft (w36 + S37) + Borrowings (w38 + s39) - Cash and investments (w30 + s31)) x 100* */* *(Total assets (w35 + s36) - Total liabilities (w40 + s41))*	%	
NWI F23	Interest Cover (Water and Sewerage) *= EBIT / NI* ***Earnings before Interest and Tax (EBIT)** = Operating result (w15a+s16a) + Interest expense (w4a + s4a) – Interest income (w9 + s10) – Gain/loss on disposal of assets (w14 + s15) + Miscellaneous expenses (w4b + w4c + s4b + s4c)* ***Net Interest (NI)** = Interest expense (w4a+s4a) – Interest income (w9+s10)* ***Note:** If EBIT >0 AND Net Interest <=0 THEN Interest Cover is to be reported as ">100"* *If EBIT <0 THEN Interest Cover = 0*		
NWI F24	Net Profit After Tax (Water and Sewerage) *=(Surplus before dividends (w15a + s16a) - Tax paid (1(iv) of Note 2 + 1(iv) of Note 3))*	$ ('000)	
NWI F25	Community Service Obligations (Water and Sewerage) *= Grants for pensioner rebates (w11b + s12b)*	$ ('000)	

Notes:

1. References to s (eg s12) refer to item numbers in Special Schedules Nos. 5 and 6 of each Council's Annual Financial Statements.
2. The NWI performance indicators are based on the National Performance Framework handbook for Urban Performance Reporting Indicators and Definitions.
   The NWI indicators are to be calculated using the formulae shown above.

Formulae for calculation of performance indicators in tables 5 to 18

Formulae for calculation of performance indicators in table 5

5. 2008/09 NSW Water Utility Performance Summary

Column No.	Performance Indicator	Background to Formula	Formula
	Water Supply		
(1)	Water Supply Connected Properties (No.)	Total number of water supply connected properties (Residential plus Non-residential).	From Col (20) Table 9
(2)	Total Water Supplied (Potable + Non-potable + Recycled Excl. Bulk Supply) (ML)	Total annual water supplied (Potable plus Non-potable plus recycled. Excludes bulk water supplied). Where a Local Water Utility (LWU) has not reported the total water supplied, the previous year's value has been used and is shown in italics bold.	From Col (49) Table 10
(3)	Average Annual Residential Water Supplied (Potable + Nonpotable) (kL/ connected property)	Where an LWU has not reported potable residential water supplied, the residential water supplied has been estimated as 58% of the reported annual potable water supplied. As shown in Note 8 of Table 8, the average reported residential water supplied is 58% of the total potable water supplied.	From Col (56) Table 10 ÷ 1000
(3a)	Water Main Breaks (per 100km of main)		From Col (42) Table 10
(3b)	Average Duration of an Unplanned Interruption (mins)		From Col (78) Table 12
(4)	Revenue ($M)	Total Revenue including gain/loss on disposal of assets, less grants for acquisition of assets, less interest income [Residential Charges + Non-residential Charges + Extra Charges + Grants (excluding grants for Acquisition of Assets) + Contributions (Developer Charges + Developer Provided Assets + Other Contributions)] + Gain/loss on disposal of assets.	From Col (57) Table 11
(7)	Water Quality Compliance - Chemical (%)	Chemical water quality compliance	From Col (70) Table 12
(7a)	Zones Compliant		From Col (70a) Table 12
(8)	Water Quality Compliance - Microbiological - E. coli (%)	Number of samples tested that meet the water quality requirements divided by the total number of samples tested. Note that this is the number of samples not tests, one sample may have a number of tests performed.	From Col (71) Table 12
(8a)	Zones Compliant		From Col (71a) Table 12
(8b)	% Population with Microbiological Compliance		From Col (71b) Table 12
(8c)	Water Quality Complaints (per 1000 properties)		From Col (73) Table 12
	Sewerage		
(9)	Revenue ($M)	Total Revenue including gain/loss on disposal of assets, less grants for acquisition of assets and less revenue from investment activities. [Residential Charges + Non-residential Charges + Trade Waste Charges + Extra Charges + Other Revenues + Grants (less receipts from government for Acquisition of Assets) + Contributions (Developer Charges + Developer Provided Assets + Other Contributions)] + Gain/loss on disposal of assets.	From Col (42) Table 16
(10)	% Sewage that was Compliant		From Col (33a) Table 15
(10a)	Sewer Overflows (per 100km of main)	All overflows, whether reported to environmental regulator or not.	From Col (25) Table 15
(11)	Sewage Odour Complaints (per 1000 properties)	Sum of odour complaints from all sewage treatment works.	From Col (61) Table 17
(12)	Recycled Water (%)	Percent of Effluent Recycled	From Col (41c) Table 15
(12a)	Recycled Water (ML)	Total Effluent Recycled	From Col (41a) Table 15
	Water Supply and Sewerage		
(13a)	Net Profit After Tax ($M)		Col (32) Table 5A ÷ 1000
(13b)	Typical Residential Bill ($/assessment)	Sum of water and sewerage Typical Residential Bills.	Col (8) Table 6 + Col (8) Table 7
(14)	Typical Developer Charge ($/ET)	Sum of water and sewerage Typical Developer Charges.	Col (7) Table 6 + Col (7) Table 7
(15)	Current Replacement Cost per Assessment ($)		Col (62) Table 11 + Col (47) Table 16
(17)	OMA Cost ($/connected property)	Total water supply and sewerage operation, maintenance and administration (OMA) costs (excluding cost of purchasing water) divided by number of connected properties. OMA includes engineering and supervision costs.	Col (67) Table 11 + Col (52) Table 16
(18)	Management Cost ($/connected property)	Total water supply and sewerage management costs divided by number of connected properties.	Col (68) Table 11 + Col (54) Table 16
(19)	Economic Real Rate of Return (%)		Col (25) Table 5A
(19a)	Net Debt to Equity		Col (26) Table 5A
(19b)	Capital Expenditure ($/property)		Col (24B) Table 5A
(19c)	Capital Expenditure ($M)		Col (31a) Table 9 + Col (13a) Table 14
(21)	Strategic Business Plans Prepared? (Yes/No)		

Notes:

A. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement. Similarly, references to S (eg. S_{16}) refer to each LWU's Special Schedules Nos 5 and 6.

B. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data or previous year's data).

Formulae for calculation of performance indicators in tables 5A and 5B

5A. 2008/09 NSW Water Utility Performance Summary

Column No.	Performance Indicator	Background to Formula	Formula
	Water Supply & Sewerage		
(23)	Operating Cost (OMA) ($/property)	Total water supply and sewerage operation, maintenance and administration (OMA) costs (excluding cost of purchasing water) divided by number of connected properties. OMA includes engineering and supervision costs.	Col (67) Table 11 + Col (52) Table 16
(24)	Income per Property ($/property)	Total income divided by total connected properties (water or sewerage)	(24a) ÷ Col (15) Table 6
(24a)	Total Income ($M)	Total income plus gain/loss on disposal of assets less grants for acquisition of assets less interest income.	$[(W_{13} + W_{14} - W_{11a} - W_9) + (S_{14} + S_{15} - S_{12a} - S_{10})]$
(24b)	Capital Expenditure ($/property)	Assets, Renewals, Plant/Equipment.	Col (24B) Table 5A
(24c)	Return on Assets (%)		
(25)	Economic Real Rate of Return (%)	Revenue from operations (water supply and sewerage) less operating expenses (OMA + current cost depreciation) divided by written down replacement value of water supply and sewerage operational assets. Revenue from operations excludes interest income, grants for acquisition of assets or gain/loss on disposal of assets. Operational assets include system assets and plant and equipment.	$[(W_{15} - W_9 - W_{11a} - W_{14} + W_{4a} + W_{4b} + W_{4c}) + (S_{16} + S_{4a} + S_{4b} + S_{4c} - S_{10} - S_{12a} - S_{15})]$ x 100 ÷ $(S_{34}+W_{33})$
(26)	Net Debt to Equity	Net debt (water supply and sewerage) divided by equity (water supply and sewerage). Net debt is borrowings plus bank overdrafts less cash and investments. Equity is Total Assets less Total Liabilities.	$[(W_{36} + W_{38} - W_{30}) + (S_{37} + S_{39} - S_{31})]$ x 100 ÷ $(W_{44}+ S_{45})$
(27)	Interest Cover	Earnings before interest and tax (EBIT) for the whole water utility (water supply and sewerage) divided by net interest expense for the whole water utility (water supply and sewerage). The interest cover is nil for a loss making utility. Net interest expense is interest expenses less interest income and is zero for interest income greater than interest expense.	$[(W_{15} - W_9 - W_{11a} + W_{4a}) + (S_{16} - S_{10} - S_{12a} + S_{4a})] \div (W_{4a} - W_9 + S_{4a} - S_{10})$
(29)	Dividend Payable		From SPFR Notes 2 & 3
(30)	CSOs ($'000)	Subsidy provided by government to allow for the provision of a service at less than the total cost. Eg. If legislation requires a utility to provide a $100 reduction to the water bills for pensioners for which the government provides $60, the CSO is $60.	
(31)	% Revenue from CSOs	Revenue from CSOs divided by the total revenue (including CSOs).	
(32)	Net Profit After Tax (NPAT) ($'000)	Surplus before dividends less tax paid.	$(W_{15a} + S_{16a})$ - Tax paid
(32a)	NPAT Ratio	Net profit after tax divided by Total Income.	(32) ÷ [(24a) x 1000] x 100

5B. 2008/09 NSW Water Utility Performance Summary

Column No.	Performance Indicator	Background to Formula	Formula
	Water Supply & Sewerage		
(33)	Billing Complaints (per 1000 properties)	Billing complaints for both water supply and sewerage businesses.	$(Q_{99\ Water} + Q_{37\ sewerage})$ ÷ Col (20) Table 9
(34)	% of calls answered by Operator within 30 seconds	Proportion of calls that, where the customer has selected a relevant operator option, are answered by an operator within 30 seconds.	W_{103}
(35a)	Greenhouse Gas Emissions - Water (tonnes CO2 per 1000 properties)		W_{148}
(35b)	Greenhouse Gas Emissions - Sewerage (tonnes CO2 per 1000 properties)		S_{80a}
(35c)	Greenhouse Gas Emissions - Other (tonnes CO2 per 1000 properties)		$W_{148b} + S_{80b}$
(35d)	Greenhouse Gas Emissions - Total (tonnes CO2 per 1000 properties)		$W_{148} + S_{80a} + W_{148b} + S_{80b}$

Notes:

A. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement. Similarly, references to S (eg. S_{16}) refer to each LWU's Special Schedules Nos 5 and 6.

B. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data or previous year's data).

C. References to Q (eg. $Q_{99\ Water}$) refer to questions in each LWU's Water Supply or Sewerage Performance Reporting database.

Formulae for calculation of performance indicators in tables 6 and 7

6. Water Supply - 2008/09 Charges, 2009/10 Bills

Column No.	Performance Indicator	Background to Formula	Formula
(2)	Fixed Charge (or Minimum) ($)	Fixed charge component of tariff.	From Council's Schedule of Fees and Charges
(5)	Usage Charge for Steps 1 and 2 (c/kL)	Includes first two steps of usage charges ("All" if no steps or "N/A" if not applicable)	From Council's Schedule of Fees and Charges
(6)	Operating Cost (OMA) c/kL	Total operation, maintenance and administration cost (excluding purchase of water) divided by total annual town water consumption (potable + non-potable - recycled).	$[W_1 + W_{2a\ to\ n}] \div$ [Col (13) Table 8]
(7)	Typical Developer Charge 2009/10 ($/Equivalent Tenement (ET))	Upfront infrastructure contribution for new developments.	Q_{136} (see notes C & D)
(8)	Typical Residential Bill 2009/10 ($/assessment) (see note D)	Calculated using the average residential water supplied for 2008/09 multiplied by the usage charges for 2009/10 plus the access charge for 2009/10.	Col(5) x Col(14) ÷ 100 + Col(2) Table 6
(11)	Return on Assets (%)	Total revenue less grants for acquisition of assets less total expenses plus revaluation decrements plus other expenses divided by written down replacement value of operational assets. Total revenue excludes gain/loss on disposal of assets. Operational assets include system assets plus plant and equipment.	$[(W_{13} - W_{11a} - W_5 + W_{4b} + W_{4c})] \times 100 \div (W_{47})$
(12)	Economic Real Rate of Return (%)	Revenue from operations less operating expenses (OMA + current cost depreciation) plus interest expenses divided by written down replacement value of operational assets. Revenue from operations excludes interest income and grants for acquisition of assets and gain/loss on disposal of assets. Operational assets include system assets plus plant and equipment.	$[(W_{15} + W_{4a} + W_{4b} + W_{4c} - W_9 - W_{11a} - W_{14})] \times 100 \div (W_{47})$
(13)	Residential Revenue from Usage Charges (% of residential bills)	Revenue from residential usage charges divided by total residential revenue (residential usage plus access charges including any rates).	$W_{6b} \times 100 \div [W_{6a} + W_{6b}]$
(14a)	Average Annual Residential Water Supplied (potable) (kL/property)	Average annual residential water supplied (potable). Where an LWU has not reported residential water supplied and at least one of commercial and industrial consumption, 58% of the total potable supply has been used.	From Table 8 Col(1) ÷ [Cols(18) x (21) x (22) Table 9]
(14b)	Average Annual Residential Water Supplied (potable + non potable) (kL/property)	Average annual residential water supplied (potable and non potable).	[Col(1) + Col(11) + Col(12a) Table 8] ÷ [Cols(18) x (21) x (22) Table 9]
(14c)	Average Annual Residential Water Supplied (potable + non potable) (L/c/d)	Average annual residential water supplied per capita per day.	[Col(1) + Col(11) + Col(12a) Table 8] ÷ [Col(23) Table 9]
(14d)	Full Cost Recovery? (N / Y* / Y)		
(15)	Total Connected Properties	Total connected properties (residential plus non-residential). Calculated from number of assessments multiplied by the ratio of connected properties to assessments.	from Col(20) Table 9

7. Sewerage - 2008/09 Charges, 2009/10 Bills

Column No.	Performance Indicator	Background to Formula	Formula
(1)	Fixed Charge (or Minimum) ($)	Fixed charge component of tariff.	From Council's Schedule of Fees and Charges
(2)	Operating Cost (OMA) c/kL	Total operation, maintenance and administration cost divided by total volume of sewage collected.	$[S_1 + S_{2a\ to\ m}] \times 100 \div$ [Col(32) Table 15]
(3)	Access Charge Independent of Land Value? (Yes/No)		From Council's Schedule of Fees and Charges
(3a)	Non-residential Sewer Usage Charge (c/kL)	Non-residential sewer usage charges not including sewer discharge factor.	From Council's Schedule of Fees and Charges
(3b)	Trade Waste Usage Charge (c/kL)		From Council's Schedule of Fees and Charges
(4)	Complying Liquid Trade Waste Fees & Charges? (Yes/No)		From Council's Schedule of Rates, Fees and Charges
(5)	Non-residential & Trade Waste Charges (% of Annual Rates and Charges)	Non-residential charges plus trade waste charges divided by (residential charges + non-residential charges + trade waste charges).	$[S_7 + S_8] \times 100 \div [S_6 + S_7 + S_8]$
(6)	Non-residential & Trade Waste Volume (% of Total Volume of Sewage Collected)		(36) + (37) Table 15
(7)	Typical Developer Charge 2009/10 ($/Equivalent Tenement(ET))	Upfront infrastructure contribution for new developments.	Q_{62} (see notes C & D)
(8)	Typical Residential Bill 2009/10 ($/assessment) (see note D)	Calculated using the access charge for 2009/10 plus, if council has residential sewer usage charges, the average residential water consumption for 2008/09 multiplied by the usage charges and usage factor for 2009/10.	(1)
(9)	Return on Assets (%)	Total revenue less grants for acquisition of assets less total expenses plus revaluation decrements plus other expenses divided by written down replacement value of operational assets. Total revenue excludes gain/loss on disposal of assets. Operational assets include system assets plus plant and equipment.	$[(S_{14} - S_5 - S_{12a} + S_{4b} + S_{4c})] \times 100 \div (S_{48})$
(11)	Economic Real Rate of Return (%)	Revenue from operations less operating expenses (OMA + current cost depreciation) plus interest expenses divided by written down replacement value of operational assets. Revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal. Operational assets include system assets plus plant and equipment.	$[(S_{16} + S_{4a} + S_{4b} + S_{4c} - S_{10} - S_{12a} - S_{15})] \times 100 \div (S_{48})$
(11a)	Full Cost Recovery? (N / Y* / Y)		
(11b)	Recycled Water Usage Charge in place? (c/kL)		
(12)	Connected Properties (No.)	Total connected properties (residential plus non-residential). Calculated from number of assessments multiplied by the ratio of connected properties to assessments.	from Col (3) Table 14

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Water Supply or Sewerage Performance Reporting database.

B. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement.

C. Developer Charges under $400/ET have not been included in Table 6.

D. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Special Schedule No.3, previous year's data).

Formulae for calculation of performance indicators in tables 8 and 9

8. 2008/09 Water Supplied in Non-Metropolitan NSW

Column No.	Performance Indicator	Background to Formula	Formula
(1)	Residential	Domestic (inhouse and ex-house) potable water consumption.	Q_{54}
(2)	Commercial	Offices, shops, clubs, hotels, motels, caravan parks potable consumption.	Q_{55}
(3)	Industrial	Factories, mills, poultry, feed lots, sale yards, abbatoirs, mining potable consumption.	Q_{56}
(4)	Rural	Farms or hobby farms outside urban zoned land, includes stock and domestic uses, market gardens, agricultural irrigation potable consumption.	Q_{57}
(5)	Institutional	Hospitals, schools, colleges etc potable consumption.	Q_{58}
(6)	Public Parks and Gardens	Watering of public parks, gardens, ovals etc using potable water.	Q_{60}
(7)	Total Revenue Water (potable)		Sum (1) to (6)
(8)	Real Loss (Leakage) (see note C)	Leakage. Real loss is included in water losses.	Q_{68}
(8a)	Apparent Loss	Illegal use plus meter inaccuracies	Q_{67}
(8b)	Unbilled Authorised Consumption (see note C)	Includes fire fighting and flushing.	Q_{61}
(9)	Total Non-revenue Water	Sum unbilled authorised consumption plus water losses	(8b) + (8a) + (8) or (7) / 0.9 - (7)
(10)	Total Potable Urban Water Supplied	Sum of Total Revenue water plus Total Non-revenue water.	(7) + (9)
(11)	Recycled Water for Non-Potable Urban Residential Water Supply	The volume of recycled water should be consistent with the volume shown in Q22 and Q23 of the Sewerage Treatment Report.	$Q_{22} + Q_{22}$ (sewerage treatment)
(11a)	Recycled Water for Urban Non-Residential	The volume of recycled water should be consistent with the volume shown in Q21 to Q22 of the Sewerage Treatment Report.	$Q_{20} + Q_{21}$ (sewerage treatment)
(11b)	Recycled Water - Non-Urban		Col(11b) Table 8
(11c)	Recycled Water - Total		Col(11) + Col(11a) + Col(11b) Table 8
(12a)	Non-Potable Urban Residential Water Supplied		Col(11) + Col(12a) Table 8
(12b)	Non-Potable Urban Non-Residential Water Supplied		Col(11a) + Col(12b) Table 8
(12c)	Non-Potable Urban Water Supplied	Includes untreated water for industry or non-potable water component in a dual water supply system and may also include recycled water .	Q_{72}
(13)	Total Annual Urban Water Supplied	Total consumption equals the sum of potable consumption plus non-potable supply for industry or non-potable component in a dual supply system less recycled water for non-potable supply.	$Q_{71} + Q_{72} - Q_{22} - Q_{23}$
(14)	Bulk Water Exports	Sales to other Local Water Utilities (LWUs) of potable and non-potable water.	Q_{59}
(15)	Surface Water	Surface water plus ground water plus bulk purchases should equal total annual water consumption.	Q_{41} to Q_{44}
(16)	Groundwater		Q_{45}
(16b)	Recycled Water		
(17)	Bulk Purchase	Potable plus non-potable	$Q_{48} + Q_{49}$
(17b)	Total Sourced Water	Excluding non-urban recycled.	Col(15) + Col(16) + Col(16b) + Col(17) Table 8

9. Water Supply - 2008/09 Utility Characteristics

Column No.	Performance Indicator	Background to Formula	Formula
(18)	Total No. of Assessments (see note C)	Where this data is ambiguous or missing, it has been estimated from other supporting information (financial data, previous year's data).	Q_{36}
(18a)	Number of Connections	Number of physical connections to the water supply system (ie. A multiple dwelling with a single metered connection to the water supply system is counted as one	Q_{30}
(19)	Ratio of Connected Properties to Assessments (see note C)	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor	
(20)	Connected Properties	Total connected properties (residential plus non-residential). Calculated from number of assessments multiplied by the ratio of connected properties to assessments.	Col(18) x Col(19) Table 9
(21)	Ratio of Residential Assessments to Total Assessments (see note C)	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor	
(22)	Ratio of Residential Connections to Residential Assessments (see note C)	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor	
(22a)	Connected Residential Properties (No.)		Col(18) x Col(21) x Col(22) Table 9
(22b)	New Residential Dwellings Connected (%)		Q_{31} ÷ Col(22a) Table 9
(23)	Permanent Population	Where this data is ambiguous or missing, it has been estimated from other supporting information (financial data, previous year's data).	Q_{1}
(24)	Peak Population (% of permanent)		Q_{2}
(25)	Transfer Mains (km)		Q_{20a}
(25a)	Trunk and Reticulation Mains (km)	Total length of mains including trunk mains and reticulation.	Q_{22}
(26)	Properties Served per km of main	Total number of connected properties divided by length of mains.	Col(20) ÷ Col(25) Table 9
(27)	Water Treatment Works	Number of works providing full treatment.	Q_{17}
(28)	Dams	Number of dams.	Q_{7}
(29)	Bores	Number of water supply bores.	Q_{13}
(30)	Pumping Stations	Number of pumping stations.	Q_{15}
(30a)	Pumping Stations per 100km of main	Number of pumping stations divided by length of main.	Col(30) ÷ [Col(25) ÷ 100] Table 9
(31)	Capital Expenditure ($/property)		Col(31a) x 1,000,000 ÷ Col(20) Table 9
(31a)	Capital Expenditure (Total $M)		Col(31a) Table 9
(31b)	Capital Works Grants ($'000)		Col(31b) Table 9
(32)	Total Workforce (water supply) (Employees/1000 properties)	Equivalent full time employees involved with water supply.	Q_{120}
(34)	% Undergoing Training	% of employees in water supply workforce undergoing training for 2 or more days during the year.	Q_{122} x 100 ÷ Q_{120}
(37)	Outsourcing % of Maintenance Cost	% expended on outsourcing for maintenance of water supply business.	Q_{130}
(38)	Number of Injuries	Number of injuries (fatality, permanent disability or time loss of one or more days) in water supply business.	Q_{124}
(39)	Total Days Lost (%)	Number of days lost for all reasons (disputes, sick leave, accidents) in water supply business expressed as a percentage of the total number of days worked.	Q_{123} ÷ (230 x Q_{120})
(40)	Days Lost due to Injuries	Number of days lost due to injuries (time loss of one or more days) in water supply business.	Q_{125}
(40a)	Days Lost due to Injuries (% of Total Days Lost)	Number of days lost due to injuries (time loss of one or more days) as a percentage of number of days lost for all reasons in water supply business.	(Q_{125} x 100) ÷ Q_{123}

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Water Supply Performance Reporting database.

B. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data, previous year's data).

Formulae for calculation of performance indicators in tables 10 and 11

10. Water Supply - 2008/09 Asset Management

Column No.	Performance Indicator	Background to Formula	Formula
(41)	Real Losses (Leakage) (L/d/c)	Real loss or leakage L per day per connection.	Q_{68} ÷ 365 ÷ column (18a) Table 9
(41a)	Real Losses (Leakage) (kL/km/d)		
(41b)	Infrastructure Leakage Index (ILI)	Ratio of Current Annual Real Loss to Unavoidable Annual Real Loss	
(41c) (41d) (41e)	Reservoir Drop Test (Type) (Year) (Result %)	Whether Drop Test undertaken, the year and the result of the test.	
(42)	Main Breaks (per 100km of main)	Number of main breaks per 100km of main. A main break is where the water main has to be shut down. Excludes service connection breaks.	Q_{104} ÷ (Q_{22} ÷ 100)
(43)	Unplanned Interruptions to Supply (per 1000 properties)	Number of properties affected by unplanned interruptions to supply per 1000 properties. Includes each occurrence. Excludes breaks in service connections or instances of low pressure.	Q_{106} x 1000 ÷ Col(20) Table 9
(44)	Rehabilitation of mains (km/100km)	Length of mains rehabilitated per 100km of main.	Q_{23} ÷ (Q_{22} ÷ 100)
(45)	Rehabilitation of service connections (%)	Number of service connections rehabilitated as % of total.	Q_{24} x 100 ÷ Col(20) Table 9
(45a)	Rehabilitation of water meters (%)	Number of water meters rehabilitated as % of total.	
(46)	Renewals ($'000 per 100km of main)	Expenditure on renewals of mains per 100km of main.	W_{16c} ÷ (Q_{22} ÷ 100)
(47)	Renewals (% of CRC)	Expenditure on renewals of mains as percentage of Current Replacement Cost (CRC) of systems assets.	W_{16c} x 100 ÷ (Col(61) Table 11 x 1000)
(48)	Mains Maintenance Cost ($'000/100km of main)	Expenditure on maintenance of mains per 100km of main.	W_{2d} ÷ (Q_{22} ÷ 100)
(49)	Total Urban Water Supplied (ML)	Where an LWU has not reported total potable consumption, the previous year's consumption has been adopted and is shown in italics bold.	see column (12) on Table 8
(50)	Non-potable Urban Water Supplied (ML)	Where an LWU has not reported total potable consumption, the previous year's consumption has been adopted and is shown in italics bold.	see column (11) on Table 8
(51)	% Water Recycled	For non-potable urban water supplied.	see column (13) on Table 8
(53)	Peak Week to Average Consumption (%)	Average daily consumption over peak week (ML/d) divided by average daily consumption .	W_{13b} ÷ [Col(49) ÷ 365]
(56)	Average Annual Residential Water Supplied (Potable + Non Potable) (kL/property)	Average annual residential consumption (potable + non potable).	[Col(1) + Col(11) + Col(12a) Table 8] ÷ [Cols(18) x (21) x (22) Table 9]
(56a)	Average Annual Residential Water Supplied (Potable) (kL/property)	Average annual residential consumption (potable). Where an LWU has not reported residential consumption and at least one of commercial and industrial consumption, 57% of the total potable supply has been used.	From Table 8 Col(1) ÷ [Cols(18) x (21) x (22) Table 9]

11. Water Supply - 2008/09 Financial, Efficiency

Column No.	Performance Indicator	Background to Formula	Formula
(57)	Total Revenue (excl Capital Works Grants) ($'000)	Total Revenue excluding grants for acquisition of assets, interest income and gain/loss from disposal of assets [Residential Charges + Non-residential Charges + Extra Charges + Other Revenues + Grants (excluding for Acquisition of Assets) + Contributions (Developer Charges + Developer Provided Assets + Other Contributions)].	(W_{13} - W_9- W_{11a}) ÷ 1000
(57a)	Revenue per property ($)		
(58)	Residential Revenue (% of rates and charges total)	Where an LWU has not reported a breakdown of revenue from rates and charges and sales into residential and non-residential, the percentage revenue for such LWUs has been estimated from the reported percentages of similar LWUs.	(W_{6a} + W_{6b}) x 100 ÷ (W_6 + W_7)
(58a)	Residential Revenue (% of usage charges)		
(59)	Residential Water Supplied (% of potable water supplied excluding water losses)	% of potable water excluding water losses.	(Q_{54} ÷ (Q_{62})) x 100
(60)	Written Down Replacement Cost ($M)	Written down replacement cost of system assets.	W_{47} ÷ 1,000
(61)	Current Replacement Cost (CRC) of System Assets ($M)	The value of the infrastructure assets expressed in terms of how much it would cost to construct modern assets to provide the same function (ie. MEERA - Modern Engineering Equivalent Replacement Asset).	W_{45} ÷ 1,000
(62)	Current Replacement Cost per Assessment ($)	The value of the infrastructure assets divided by the number of assessments.	W_{45} ÷ Col(18) Table 9
(63)	Net Debt to Equity (%)	All overdrafts, repayable borrowings, interest bearing non-repayable borrowings, advances and leases less cash and investments divided by total equity.	(W_{36} + W_{38} - W_{30}) x 100 ÷ W_{44}
(63a)	Economic Real Rate of Return (%)	From column (12) Table 6.	
(63b)	Return on Assets (%)	From column (11) Table 6.	
(64a)	Cross Subsidies (Annual Charges & Fees) ($/assessment)	Cross subsidies from residential customers using less than allowance to non-residential customers and to large connections in unmetered supplies.	(W_{27b} + W_{27c} + W_{27d}) ÷ Col(18) Table 9
(64b)	Cross Subsidies (Developer Charges) ($/assessment)	Cross subsidies in water supply developer charges.	(W_{28b}) ÷ Col(18) Table 9
(65)	Operating Result ($/property)	Total revenue less total expenses less grants for acquisition of assets divided by total number of connected properties.	(W_{15a}) ÷ Col(20) Table 9
(66)	Externalities ($/property)	Water fees paid by LWUs to DEUS.	From DEUS records
(66a)	Loan Payment ($/property)		
(67)	Operating Cost OMA ($/property)	Total operation, maintenance and administration costs (plus proportion of bulk supplier OMA or purchase cost of water if no bulk supplier) divided by total number of connected properties.	[W_1 + $W_{2(a\ to\ n)}$] ÷ Col(20) Table 9 plus bulk suppliers OMA
(68)	Management Cost ($/property)	Total management costs divided by total number of connected properties.	W_1 ÷ Col(20) Table 9

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Water Supply Performance Reporting database.

B. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data, previous year's data).

Formulae for calculation of performance indicators in table 12

12. Water Supply - 2008/09 Health, Levels of Service

Column No.	Performance Indicator	Background to Formula	Formula
(69)	Water Quality Compliance - Physical (%)	Overall compliance with physical requirements including the key characteristics of turbidity, pH and colour. Compliance refers to the number of samples taken for system performance monitoring and not the number of tests. Excludes samples taken for operational monitoring.	see note C
(69a)	Risk Based Drinking Water Quality Plan - Basis (e.g. ADWG, HACCP)		
(69b)	Risk Based Drinking Water Quality Plan - External Assessment? (Y/N)		
(70)	Water Quality Compliance - Chemical (%)	Overall compliance with chemical requirements. Compliance refers to the number of samples taken for system performance monitoring and not the number of tests. Excludes samples taken for operational monitoring.	see note C
(70a)	No. of Zones where Chemical Compliance was Achieved	Assessment with the chemical requirements of the water quality guidelines for each zone of the system.	Report as number of zones complying out of the total number of zones
(71)	Water Quality Compliance - E. coli (%)	E.coli contamination is the primary health-related indicator. Compliance refers to the number of samples taken for system performance monitoring and not the number of tests. Excludes samples taken for operational monitoring.	see note D
(71a)	No. of Zones where Microbiological Compliance was Achieved	Assessment with the microbiological requirements of the water quality guidelines for each zone of the system.	Report as number of zones complying out of the total number of zones
(71b)	% of Population with Microbiological Compliance	From population served and compliance achieved by each zone.	
(73)	Water Quality Complaints (per 1000 properties)	Complaints are any expression of customer dissatisfaction reported in person, by phone, fax, letter or email. Water quality complaints are reported under the relevant source water treatment works.	Q_{101} x 1000 ÷ Col(20) Table 9
(74)	Water Service Complaints (per 1000 properties)	Complaints are any expression of customer dissatisfaction reported in person, by phone, fax, letter or email.	Q_{96} x 1000 ÷ Col(20) Table 9
(75a)	Customers with Restrictions for Non-payment of Bills (per 1000 properties)		Q_{132} x 1000 ÷ Col(20) Table 9
(75b)	Customers with Legal Action for Non-payment of Bills (per 1000 properties)		
(77)	Customer Interruption Frequency (No./1000 properties)	Includes each occurrence of unplanned interruptions to supply. Excludes reduced levels of service or breaks in service connections.	[Q_{106} x 1000] ÷ Col(20) Table 9
(78)	Average Duration of Interruptions (minutes)	Average duration of unplanned interruptions.	Q_{107}
(78a)	Drought Water Restrictions (% of time)	Percent of time that water restrictions apply.	(Q_{95} ÷ 365) x 100

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Water Supply Performance Reporting database.

B. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement.

C. Physical compliance - sum for all treatment works, the product of T16 multiplied by T17 for each treatment works. Divide the total by the sum of T16 for all treatment works.
Chemical compliance - sum for all treatment works, the product of T18 multiplied by T19 for each treatment works. Divide the total by the sum of T18 for all treatment works.

D. Sum for all treatment works, the product of T26 multiplied by T27 for each treatment works. Divide the total by the sum of T26 for all treatment works.
An LWU complied with the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines for E. coli if the required number of samples was tested and:

At least 98% of the samples contained no E. coli

For LWUs which did not comply, the percentage of samples complying is shown.

E. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Special Schedule No.3, previous year's data).

Formulae for calculation of performance indicators in table 13

13. Water Supply - 2008/09 Benchmarking Cost Data

Column No.	Performance Indicator	Background to Formula	Formula
(79)	Operating Cost Components - Maintenance ($/property)	Maintenance cost of all water system assets.	$[W_{2b} + W_{2d} + W_{2f} + W_{2i} + W_{2l} + W_{2n}]$ ÷ Col (20) Table 9
(79a)	Total O&M Cost ($/property)		Col(79) + Col(80) + Col(81) + Col(82) + Col(82a) Table 13
(80)	Operating Cost Components - Operation ($/property)	Operation cost of all water system assets.	$[W_{2a} + W_{2c} + W_{2e} + W_{2g} + W_{2j} + W_{2m}]$ ÷ Col (20) Table 9
(81)	Operating Cost Components - Energy ($/property)	Energy cost of water pumping and treatment.	$[W_{2h}]$ ÷ Col(20) Table 9
(82)	Operating Cost Components - Chemicals ($/property)	The chemicals cost for water treatment.	$[W_{2k}]$ ÷ Col(20) Table 9
(82a)	Operating Cost Components - Bulk Purchase ($/property)		
(83)	Operating Cost Components - Dams & Weirs ($/property)	Operation and Maintenance cost of dams and weirs.	$[W_{2a} + W_{2b}]$ ÷ Col(20) Table 9
(84)	Operating Cost Components - Mains ($/property)	Operation and Maintenance cost of water mains.	$[W_{2c} + W_{2d}]$ ÷ Col(20) Table 9
(85)	Operating Cost Components - Reservoirs ($/property)	Operation and Maintenance cost of reservoirs.	$[W_{2e} + W_{2f}]$ ÷ Col(20) Table 9
(86)	Operating Cost Components - Pumping Stations ($/property)	Operation and Maintenance cost of water pumping stations.	$[W_{2g} + W_{2h} + W_{2i}]$ ÷ Col(20) Table 9
(87)	Operating Cost Components - Water Treatment ($/property)	Operation and Maintenance cost of water treatment works.	$[W_{2j} + W_{2k} + W_{2l}]$ ÷ Col(20) Table 9
(88)	Operating Cost Components - Other ($/property)	Operation and Maintenance cost of other water system assets.	$[W_{2m} + W_{2n} + W_{2o}]$ ÷ Col(20) Table 9
(89)	Management Cost Components - Administration ($/property)	From special schedule No. 3.	$[W_{1a}]$ ÷ Col(20) Table 9
(90)	Management Cost Components - Engineering & Supervision ($/property)	From special schedule No. 3.	$[W_{1b}]$ ÷ Col(20) Table 9
(91)	Management Cost Components - Total (c/kL)	From special schedule No. 3.	$[W_{1a} + W_{1b}]$ x 100 ÷ Col(49) Table 10
(91a)	Management Cost Components - Total ($/property)		
(91b)	Total OMA Cost ($/property)		Col(92) + Col(93) Table 13
(92)	Headworks Component ($/property)	From the headworks component estimated in the reporting forms.	$[W_1 + W_2]$ x Q_{18a} ÷ Col(20) Table 9
(93)	Distribution Component ($/property)	From the distribution component estimated in the reporting forms.	$[W_1 + W_2]$ x Q_{18b} ÷ Col(20) Table 9
(94)	Pumping Cost Components - Total Water Pumping Cost (c/kL)	From special schedule No. 3.	$[W_{2g} + W_{2h} + W_{2i}]$ x 100 ÷ Col(49) Table 10
(95)	Pumping Cost Components - Total Water Pumping Cost ($'000/pumping station)	From special schedule No. 3.	$[W_{2g} + W_{2h} + W_{2i}]$ ÷ 1000 ÷ Col(30) Table 9
(96)	Pumping Cost Components - Operation ($'000/pumping station)	From special schedule No. 3.	$[W_{2g}]$ ÷ 1000 ÷ Col(30) Table 9
(97)	Pumping Cost Components - Maintenance ($'000/pumping station)	From special schedule No. 3.	$[W_{2i}]$ ÷ 1000 ÷ Col(30) Table 9
(98)	Pumping Cost Components - Energy ($'000/pumping station)	From special schedule No. 3.	$[W_{2h}]$ ÷ 1000 ÷ Col(30) Table 9
(100)	Water Main Cost Components - Total Water Main Cost (c/kL)	From special schedule No. 3.	$[W_{2c} + W_{2d}]$ x 100 ÷ Col(49) Table 10
(101)	Water Main Cost Components - Total Water Main Cost ($'000/100km)	From special schedule No. 3.	$[W_{2c} + W_{2d}]$ x 100 ÷ Col(25) Table 9
(102)	Water Main Cost Components - Operation ($'000/100km)	From special schedule No. 3.	$[W_{2c}]$ x 100 ÷ Col(25) Table 9
(103)	Water Main Cost Components - Maintenance ($'000/100km)	From special schedule No. 3.	$[W_{2d}]$ x 100 ÷ Col(25) Table 9
(104)	Treatment Cost Components - Total Water Treatment Cost ($/ML)	From special schedule No. 3.	$[W_{2j} + W_{2k} + W_{2l}]$ x 1000 ÷ Col (49) Table 10
(105)	Treatment Cost Components - Operation ($/property)	From special schedule No. 3.	$[W_{2j}]$ ÷ Col(20) Table 9
(106)	Treatment Cost Components - Maintenance ($/property)	From special schedule No. 3.	$[W_{2l}]$ ÷ Col(20) Table 9
(107)	Treatment Cost Components - Chemical ($/property)	From special schedule No. 3.	

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Water Supply Performance Reporting database.

B. References to W (eg. W_{15}) refer to items in Special Schedules Nos 3 and 4 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data or previous year's data).

Formulae for calculation of performance indicators in table 14

14. Sewerage - Utility Characteristics

Column No.	Performance Indicator	Background to Formula	Formula
(1)	Total No. of Assessments (see note C)	Where this data is ambiguous or missing, it has been estimated from other supporting information (financial data, previous year's data).	(Q_{17})
(2)	Ratio of Connected Properties to Assessments (see note C)	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor should be provided by the LWU.	
(3)	Connected Properties	Total connected properties (residential plus non-residential). Calculated from number of assessments multiplied by the ratio of connected properties to assessments.	Col(1) x Col(2)
(4)	Ratio of Residential Assessments to Total Assessments	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor should be provided by the LWU.	
(5)	Ratio of Residential Connections to Residential Assessments	This ratio has been determined from previous performance reports. It does not normally change from year to year and will be continued unless change is considered warranted by the LWU, in which case evidence of a different factor should be provided by the LWU.	
(5a)	Connected Residential Properties		Col(1) x Col(4) x Col(5) Table 14
(6)	Permanent Population	Where this data is ambiguous or missing, it has been estimated from other supporting information (financial data, previous year's data).	Q_{1}
(7)	Peak Population (% of permanent)		Q_{2}
(8)	Mains (km)	Total length of sewer mains including reticulation, gravity and rising mains.	Q_{9}
(9)	Properties Served per km of main	Total number of connected properties divided by length of mains.	Col(3) ÷ Col(8)
(10)	Sewage Treatment Works (No.)	Number of treatment works.	Q_{3}
(11)	Pumping Stations	Number of sewage pumping stations.	Q_{5}
(12)	Pumping Stations per 100km of main	Number of pumping stations divided by length of main.	Col(11) ÷ Col(8) ÷ 100
(13)	Capital Expenditure ($/property)	Assets, renewals, plant/equipment.	
(13a)	Capital Expenditure ($M)	Assets, renewals, plant/equipment.	
(13b)	Capital Works Grants ($'000)		
(14)	Total Workforce (water supply) (Employees/1000 properties)	Equivalent full time employees involved with water supply.	Q_{49}
(15)	% Female	% of equivalent full time female employees in total water supply workforce.	Q_{50} x 100 ÷ Q_{49}
(19)	Outsourcing % of Maintenance Cost	% expended on outsourcing for maintenance of sewerage business.	Q_{59}
(20)	Number of Injuries	Number of injuries (fatality, permanent disability or time loss of one or more days) in water supply business.	Q_{53}
(21)	Total Days Lost (%)	Number of days lost for all reasons (disputes, sick leave, accidents) in sewerage business expressed as a percentage of the total number of days worked	Q_{52} ÷ (230 x Q_{49})
(22)	Days Lost due to Injuries	Number of days lost due to injuries (time loss of one or more days) in sewerage business.	Q_{54}
(22a)	Days Lost due to Injuries (% of Total Days Lost)	Number of days lost due to injuries (time loss of one or more days) as a percentage of number of days lost for all reasons in sewerage business.	(Q_{54} x 100) / Q_{52}

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Sewerage Performance Reporting database.

B. References to S (eg. S_{15}) refer to items in Special Schedules Nos 5 and 6 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data, previous year's data).

Formulae for calculation of performance indicators in table 15 and 16

15. Sewerage - 2008/09 Asset Management

Column No.	Performance Indicator	Background to Formula	Formula
(23)	Infiltration (ML per 100km of main)	Estimated groundwater infiltration and stormwater inflow into the system per 100km of main.	$Q_{22} \div (Q_9 \div 100)$
(24)	Breaks and Chokes (No. per 100km of main)	Breaks and chokes are partial or total blockages resulting in an interruption to sewerage services or overflows at gully traps. Blockages in risers and sidelines are excluded.	$Q_{64} \div (Q_9 \div 100)$
(25)	Overflows (No. per 100km of main)	Recorded overflows in sewers, access chambers and pumping stations. Overflows in risers and sidelines are excluded.	$Q_{63a} \div (Q_9 \div 100)$
(27)	Rehabilitation of mains (% of total length)	Length of mains rehabilitated as % of total length of main.	$Q_{10} \div (Q_9 \div 100)$
(28)	Rehabilitation of service connections (%)	Number of service connections rehabilitated as % of total.	Q_{11} x 100 ÷ Col(3) Table 14
(29)	Renewals ($'000 per 100km of main)	Expenditure on renewals of mains per 100km of main.	$S_{17c} \div (Q_9 \div 100)$
(30)	Renewals (% of CRC)	Expenditure on renewals of mains as % of Current Replacement Cost (CRC) of systems assets.	S_{17c} x 100 ÷ (Col(61) Table 11 x 1000)
(31)	Mains Maintenance Cost ($'000 per 100km of main)	Expenditure on maintenance of mains per 100km of main.	$S_{2b} \div (Q_9 \div 100)$
(31a)	Overflows Reported to Regulator (No. per 100km of main)		$Q_{63b} \div (Q_9 \div 100)$
(32)	Total Volume of Sewage Collected (ML)	Total volume transported through sewerage network.	Q_{26}
(32a)	Volume of Trade Waste (ML)		Q_{34}
(33)	Percentage of Sewage Treated (%)	% of total sewage collected.	$(Q_{18} + Q_{19})$ x 100 ÷ Q_{26}
(33a)	% Sewage Treated that was Compliant		
(33b)	STWs Compliant at all times		
(34)	Percentage of Total Sewage Collected - Infiltration	% of total sewage collected.	Q_{31} x 100 ÷ Q_{26}
(35)	Percentage of Total Sewage Collected - Residential	% of total sewage collected.	Q_{32} x 100 ÷ Q_{26}
(36)	Percentage of Total Sewage Collected - Non-residential	% of total sewage collected.	Q_{33} x 100 ÷ Q_{26}
(37)	Percentage of Total Sewage Collected - Trade Waste	% of total sewage collected.	Q_{34} x 100 ÷ Q_{26}
(38)	Percentage of Total Sewage Collected - Other	Remainder not reported under columns (34), (35), (36) or (37). % of total sewage collected.	100 - (34) - (35) - (36) - (37)
(39)	Volume of Sewage Collected per property (kL/property)		$(Q_{18} + Q_{19})$ x 100 ÷ Col(3) Table 14
(39a)	Level of Treatment - Primary Level (%)		
(39b)	Level of Treatment - Secondary Level (%)		
(39c)	Level of Treatment - Tertiary Level (%)		
(40)	Biosolids Reused (%)	% of biosolids (sludge) to farmland, landfill etc.	Q_{27}
(41a)	Effluent Recycled - Total (ML)		Q_{25}
(41b)	Effluent Recycled - Urban Water (ML)		$Q_{21} + Q_{22} + Q_{23} + Q_{24} + Q_{24a}$
(41c)	% of Effluent Recycled		100 x Q_{25} ÷ Col(32)

16. Sewerage - 2008/09 Financial, Efficiency

Column No.	Performance Indicator	Background to Formula	Formula
(42)	Total Revenue (excl Capital Works Grants) ($'000)	Total Revenue excluding grants for acquisition of assets, interest income and gain/loss on disposal of assets [Residential Charges + Non-residential Charges + Trade Waste Charges + Extra Charges + Other Revenues + Grants (excluding receipts from government for Acquisition of Assets) + Contributions (Developer Charges +	$(S_{14} - S_{10} - S_{12a}) \div 1000$
(42a)	Revenue per property ($)		[Col(42) Table 16] ÷ [Col(3) Table 14]
(43)	Residential Revenue (% of rates and charges total)	Where an LWU has not reported a breakdown of revenue from rates and charges and sales into residential and non-residential, the percentage revenue for such LWUs has been estimated from the reported percentages of similar LWUs.	(S_6) x 100 ÷ $(S_6 + S_7 + S_8)$
(44)	Residential Sewage (% of total collected excl infiltration/inflow)	% of total collected excluding infiltration and inflow.	$(Q_{32} \div (Q_{26} - Q_{31}))$ x 100
(45)	Written Down Replacement Cost ($M)	Written down replacement cost of system assets.	$S_{48} \div 1{,}000$
(46)	Current Replacement Cost (CRC) of System Assets ($M)	The value of the infrastructure assets expressed in terms of how much it would cost to construct modern assets to provide the same function (ie. MEERA - Modern Engineering Equivalent Replacement Asset).	$S_{46} \div 1{,}000$
(47)	Current Replacement Cost per Assessment ($)	The value of the infrastructure assets divided by the number of assessments.	$S_{46} \div$ Col(1) Table 14
(48)	Net Debt to Equity (%)	All overdrafts, repayable borrowings, interest bearing non-repayable borrowings, advances and leases less cash and investments divided by total equity.	$(S_{37} + S_{39} - S_{31})$ x 100 ÷ S_{45}
(48a)	Return on Assets (%)	From column 9 Table 7.	
(48b)	Economic Real Rate of Return (%)	From column 11 Table 7.	
(49a)	Cross Subsidies (Annual Charges & Fees) ($/assessment)	Cross subsidies from residential customers to non-residential customers and trade waste dischargers.	$(S_{28b} + S_{28c}) \div$ Col(1) Table 14
(49b)	Cross Subsidies (Developer Charges) ($/assessment)	Cross subsidies in sewerage developer charges.	$(S_{29b}) \div$ Col(1) Table 14
(50)	Operating Result ($/property)	Total revenue less total expenses less grants for acquisition of assets divided by total number of connected properties.	$(S_{16a}) \div$ Col(3) Table 14
(51)	Externalities ($/property)	Sewage treatment works licence fees paid by LWU.	From DEC records
(51a)	Loan Payment ($/property)		
(52)	Operating Cost OMA ($/property)	Total operation, maintenance and administration costs divided by total number of connected properties.	$[S_1 + S_{2(a\ to\ m)}] \div$ Col(3) Table 14
(54)	Management Cost ($/property)	Total management costs divided by total number of connected properties.	$S_1 \div$ Col(3) Table 14

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Sewerage Performance Reporting database.

B. References to S (eg. S_{15}) refer to items in Special Schedules Nos 5 and 6 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data, previous year's data).

Formulae for calculation of performance indicators in table 17

17. Sewerage - 2008/09 Environmental, Levels of Service

Column No.	Performance Indicator	Background to Formula	Formula
(55)	DEC Licence Compliance BOD (%)	Compliance refers to the number of samples taken for system performance monitoring and not the number of tests.	see note C
(56)	BOD 90 Percentile Discharge Licence Limit (mg/L)	Some councils only have 100 percentile licence limits for their treatment works. In this case the 100 percentile limits should be reported.	see note C
(57)	DEC Licence Compliance SS (%)	Compliance refers to the number of samples taken for system performance monitoring and not the number of tests.	see note D
(58)	SS 90 Percentile Discharge Licence Limit (mg/L)	Some councils only have 100 percentile licence limits for their treatment works. In this case the 100 percentile limits should be reported.	see note D
(59)	Sewer Main Chokes and Collapses	See Column (24) on Table 15.	$Q_{64} \div (Q_9 \div 100)$
(59a)	DEC Licence Compliance N (%)		see note C
(59b)	DEC Licence Compliance P (%)		see note C
(59c)	DEC Licence Compliance Oil & Grease (%)		see note C
(59d)	DEC Licence Compliance Faecal Coliform (%)		see note C
(59e)	Sewage Treated that was Compliant (%)	Percent of sewage volume treated that was compliant.	
(59f)	STWs Compliant at all times		
(60)	Compliance with Environmental Regulator (Y/N)		see note D
(61)	Odour Complaints (per 1000 properties)	Complaints are any expression of customer dissatisfaction reported in person, by phone, fax letter or email.	Q_{39} x 1000 ÷ Col(3) Table 14
(62)	Service Complaints (per 1000 properties)	Complaints are any expression of customer dissatisfaction reported in person, by phone, fax letter or email.	Q_{34} x 1000 ÷ Col(3) Table 14
(65)	Average Sewerage Interruption (minutes)	Sum of total minutes of interruption divided by the total number of interruptions.	Q_{43}

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Sewerage Performance Reporting database.

B. References to S (eg. S_{15}) refer to items in Special Schedules Nos 5 and 6 of each LWU's Annual Financial Statement.

C. For multiple treatment works, the Licence Compliance indicators are calculated as a weighted average on the basis of the number of sampling days for each treatment works.
ie. For BOD compliance, sum for all treatment works, the product of T50 multiplied by T63 for each treatment works.
Divide this total by the sum of T63 for all treatment works.

D. SS compliance is calculated in a similar manner to BOD compliance.
ie. For SS compliance, sum for all treatment works, the product of T52 multiplied by T63 for each treatment works.
Divide the total by the sum of T63 for all treatment works.

E. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Special Schedule No.5, previous year's data).

Formulae for calculation of performance indicators in table 18

18. Sewerage - 2008/09 Benchmarking Cost Data

Column No.	Performance Indicator	Background to Formula	Formula
(66a)	Total O&M Cost ($/property)		
(66)	Operating Cost Components - Maintenance ($/property)	Maintenance cost of all sewerage system assets.	$[S_{2b} + S_{2e} + S_{2k} + S_{2m}]$ ÷ Col(3) Table 14
(67)	Operating Cost Components - Operation ($/property)	Operation cost of all sewerage system assets.	$[S_{2a} + S_{2c} + S_{2f} + S_{2l}]$ ÷ Col(3) Table 14
(68)	Operating Cost Components - Energy ($/property)	Energy cost of sewage treatment and pumping	$[S_{2h}]$ ÷ Col(3) Table 14
(69)	Operating Cost Components - Chemical Treatment ($/property)	The chemical cost of sewage treatment.	$[S_{2g}]$ ÷ Col(3) Table 14
(69a)	Operating Cost Components - Effluent & Biosolids ($/property)		
(70)	Operating Cost Components - Mains ($/property)	Operation and Maintenance cost of sewage mains.	$[S_{2a} + S_{2b}]$ ÷ Col(3) Table 14
(71)	Operating Cost Components - Pumping Stations ($/property)	Operation and Maintenance cost of sewage pumping stations.	$[S_{2c} + S_{2d} + S_{2e}]$ ÷ Col(3) Table 14
(72)	Operating Cost Components - Sewage Treatment ($/property)	Operation and maintenance cost of sewage treatment.	$[S_{2f} + S_{2g} + S_{2h} + S_{2i} + S_{2j} + S_{2k}]$ ÷ Col(3) Table 14
(73)	Operating Cost Components - Other ($/property)	Operation and maintenance cost of other sewerage system assets.	$[S_{2l} + S_{2m}]$ ÷ Col(3) Table 14
(74)	Management Cost Components - Administration ($/property)	From special schedule No. 5.	$[S_{1a}]$ ÷ Col(3) Table 14
(75)	Management Cost Components - Engineering & Supervision ($/property)	From special schedule No. 5.	$[S_{1b}]$ ÷ Col(3) Table 14
(76)	Management Cost Components - Total (c/kL)	From special schedule No. 5.	$[S_{1a} + S_{1b}]$ x 100 ÷ Col(32) Table 15
(76a)	Management Cost Components - Total ($/property)		
(76b)	Total OMA Cost ($/property)		
(77)	Wholesale Component ($/property)	The cost of sewage treatment.	[S2f + S2g + S2h + S2i + S2j + S2k] ÷ Col(3) Table 14
(78)	Retail Component ($/property)	The cost of transportation and reticulation.	[S2a + S2b + S2c + S2d + S2e] ÷ Col(3) Table 14
(79)	Pumping Cost Components - Total Sewage Pumping Cost (c/kL)	From special schedule No. 5.	$[S_{2c} + S_{2d} + S_{2e}]$ x 100 ÷ Col(32) Table 15
(80)	Pumping Cost Components - Total Sewage Pumping Cost ($'000/pumping station)	From special schedule No. 5.	$[S_{2c} + S_{2d} + S_{2e}]$ ÷ 1000 ÷ Col(11) Table 14
(81)	Pumping Cost Components - Operation ($'000/pumping station)	From special schedule No. 5.	$[S_{2c}]$ ÷ 1000 ÷ Col(11) Table 14
(82)	Pumping Cost Components - Maintenance ($'000/pumping station)	From special schedule No. 5.	$[S_{2e}]$ ÷ 1000 ÷ Col(11) Table 14
(83)	Pumping Cost Components - Energy ($'000/pumping station)	From special schedule No. 5.	$[S_{2d}]$ ÷ 1000 ÷ Col(11) Table 14
(85)	Sewer Main Cost Components - Total Sewer Main Cost (c/kL)	From special schedule No. 5.	$[S_{2a} + S_{2b}]$ x 100 ÷ Col(32) Table 15
(86)	Sewer Main Cost Components - Total Sewer Main Cost ($'000/100km)	From special schedule No. 5.	$[S_{2a} + S_{2b}]$ x 100 ÷ Col(8) Table 14
(87)	Sewer Main Cost Components - Operation ($'000/100km)	From special schedule No. 5.	$[S_{2a}]$ x 100 ÷ Col(8) Table 14
(88)	Sewer Main Cost Components - Maintenance ($'000/100km)	From special schedule No. 5.	$[S_{2b}]$ x 100 ÷ Col(8) Table 14
(89)	Treatment Cost Components - Total Sewage Treatment Cost ($/ML)	From special schedule No. 5.	$[S_{2f} + S_{2g} + S_{2h} + S_{2i} + S_{2j} + S_{2k}]$ ÷ Col(32) Table 15
(90)	Treatment Cost Components - Operation ($/property)	From special schedule No. 5.	$[S_{2f}]$ ÷ Col(3) Table 14
(91)	Treatment Cost Components - Maintenance ($/property)	From special schedule No. 5.	$[S_{2k}]$ ÷ Col(3) Table 14
(92)	Treatment Cost Components - Chemical ($/property)	From special schedule No. 5.	$[S_{2g}]$ ÷ Col(3) Table 14

Notes:

A. References to Q (eg. $Q_{99Water}$) refer to questions in each LWU's Sewerage Performance Reporting database.

B. References to S (eg. S_{15}) refer to items in Special Schedules Nos 5 and 6 of each LWU's Annual Financial Statement.

C. Where LWU data is missing or ambiguous, the figure has been determined from other supporting information (eg. Financial data or previous year's data).

Appendix C: 2008-09 Local water utility TBL performance reports

Shoalhaven City Council water supply – page 1

Shoalhaven City Council **TBL Water Supply Performance** **2008-09**

WATER SUPPLY SYSTEM - Shoalhaven City Council serves a population of 87,600 (45,670 connected properties). Water is drawn from the Porters Creek and Shoalhaven River to supply Nowra, Bomaderry, St. Georges Basin, Shoalhaven Heads and Sussex Inlet. Bamarang, Cambewarra, Danjera and Porters Creek Dams have a total storage capacity of 13,360 ML. The Shoalhaven City Council system comprises 2 conventional water treatment works (103 ML/d), 1 microfiltration works at Kangaroo Valley (1.3 ML/d) and 1 direct filtration (10.5 ML/d), 44 service reservoirs (201 ML) and 25 pumping stations, 477 km of transfer and trunk mains and 1036 km of reticulation. 70% of the supply is fully treated (Northern areas) and 30% is unfiltered (chlorinated - Southern areas).

PERFORMANCE - Shoalhaven City Council achieved 100% compliance with Best Practice requirements. The typical residential bill was $263 which was less than the statewide median of $430 (Indicator 14). However, the economic real rate of return was negative (Indicator 43). The operating cost (OMA) per property was $260 which was below the statewide median of $330 (Indicator 49). Water quality complaints were similar to the statewide median of 3 (Indicator 25). Compliance with microbiological water quality was 100% with 4 of 4 zones compliant (Indicator 20), physical compliance was 100% (Indicator 19) and chemical compliance was 100% with 4 of 4 zones compliant (Indicator 19b). Current replacement cost of system assets was $458M ($9,200 per assessment), cash and investments were $9.2M, debt was $2.4M and revenue was $16.5M (excluding capital works grants).

COMPLIANCE WITH BEST- PRACTICE MANAGEMENT GUIDELINES REQUIREMENTS

(1) Complete Current Strategic Business Plan & Financial Plan	**YES**	**(3) Complete performance reporting (by 15 September)**	**YES**
(2) Pricing - Full Cost-recovery, without significant cross subsidies	Yes	**(4) Sound water conservation implemented**	**YES**
(2a) & (2b) Pricing - Complying Residential Charges	Yes	**(5) Sound drought management implemented**	**YES**
(2c) Pricing - Complying non-Residential Charges	Yes	**(6) Integrated water cycle management strategy commenced**	**YES**
(2d) Pricing - DSP with Commercial Developer Charges	Yes	**COMPLIANCE WITH ALL REQUIREMENTS**	**100%**

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

	NWI	No.			LWU RESULT		RANKING >10,000 properties	RANKING All LWUs	STATEWIDE MEDIAN
							Note 1	Note 2	Note 3
					Col 1		Col 2	Col 3	Col 4
UTILITY – CHARACTERISTICS	C1	1	**Population served: 89300**						
	C4	2	**Number of connected properties: 45670**	Number of assessments: 49640					
	C2	3	**Residential connected properties** (% of total)		92	%			92
		4	**New residences connected to water supply** (%)		0.9	%	1	2	0.9
	A3	5	**Properties served per kilometre of water main**	*Prop/km*	31				32
		6	**Rainfall** (% of average annual rainfall)		69	%	1	5	115
	W11	7	**Total urban water supplied at master meters** (ML)		15,100	*ML*			6,300
		8	**Peak week to average consumption** (%)		151	%	5	2	145
		9	**Renewals expenditure** (% of current replacement cost of system assets)		0.1	%	1	5	0.5
		10	**Employees per 1000 properties**	*per 1,000 prop*	1.2		5	2	1.4
SOCIAL – CHARGES & BILLS - 2009-10	P1		**Residential tariff structure:**	inclining block; independent of land value					
		12	**Residential water usage charge (c/kL) for usage <450 c/kL (Note 5)**		130	*c/kL*	1	2	150
		13	**Residential access charge per assessment** ($)	*$*	65		4	1	120
	P3	14	**Typical residential bill per assessment** ($)	*$*	263		4	1	430
		15	**Typical developer charge per equivalent tenement** ($)	*$*	6,020		1	2	4,600
SOCIAL – HEALTH		18	**Urban population without reticulated water supply** (%)		1.0	%	5	2	0.8
	H6	18a	**Risk based drinking water quality plan?**		Yes				
		19	**Physical water quality compliance** (%)		100	%	1	1	100
		19a	**Chemical water quality compliance** (%)		100	%	1	1	100
	H2	19b	**Number of zones with microbiological compliance**		4 of 4				
		20	**Microbiological (E. coli) water quality compliance** (%)		100	%	1	1	100
	H3	20a	**% population with microbiological compliance**		100	%	1	1	100
SOCIAL – SERVICE LEVELS	C9	25	**Water quality complaints per 1000 properties**	*per 1,000 prop*	3		5	4	3
	C10	26	**Water service complaints per 1000 properties**	*per 1,000 prop*	1		5	1	6
	C17	27	**Average frequency of unplanned interruptions per 1000 properties**	*per 1,000 prop*					33
	C15	28	**Average duration of interruption** (min)	*min*					167
	A8	30	**Number of water main breaks per 100 km of water main**	*per 100km*	14		5	4	10
		31	**Drought water restrictions** (% of time)		33	%	5	3	55
		32	**Total days lost** (%)		3.5	%	5	5	2.2
ENVIRONMENTAL – NATURAL RESOURCE MANAGEMENT	W12	33	**Average annual residential water supplied per property** (kL)		152	*kL*	5	1	175
		33a	**Average annual residential water supplied - COASTAL** (kL/property)		152	*kL*	5	1	150
		33b	**Average annual residential water supplied - INLAND** (kL/property)			*kL*			245
	A10	34	**Real losses** (leakage) (L/service connection/day)	*L/connectn/d*	60		5	2	60
		35	**Energy consumption per Megalitre** (kiloWatt hours)	*kWh*	754		5	4	640
		36	**Renewable energy consumption** (% of total energy consumption)			%			0
	E12	36a	**Net greenhouse gas emissions - WS & Sge** (net tonnes CO2 - equivalents per 1000 properties)		410		5	4	340
ECONOMIC – FINANCE	F5	40	**Revenue per property** - water ($)	*$*	360		1	1	578
	F4	41	**Residential revenue from usage charges** (% of residential bills)		75	%	1	1	73
	F17	43	**Economic real rate of return** - Water (%)		-0.3	%	5	4	0.3
		44	**Return on assets** - Water (%)		-0.8	%	5	4	-0.1
	F22	45	**Net Debt to equity** - Water (%)		-2	%	5	4	0.0
	F23	46	**Interest cover** - Water		0		5	5	0.7
		47	**Loan payment per property** - Water ($)	*$*	21		1	2	52
	F24	47b	**Net profit after tax** - WS & Sge ($'000)	*$'000*	-290		5	4	0
ECONOMIC – EFFICIENCY		48	**Operating cost (OMA) per 100km of main** ($'000)	*$'000*	808		4	2	1,070
	F11	49	**Operating cost (OMA) per property** ($) (Note 6)	*$/prop*	260		4	1	330
		50	**Operating cost (OMA) per kilolitre** (cents)	*c/kL*	79		4	2	111
		51	**Management cost per property** ($)	*$/prop*	124		5	3	127
		52	**Treatment cost per property** ($)	*$/prop*	37		5	2	35
		53	**Pumping cost per property** ($)	*$/prop*	19		5	1	29
		54	**Energy cost per property** ($)	*$/prop*	13		5	2	13
		55	**Water main cost per property** ($)	*$/prop*	47		5	2	51
	F14	56	**Capital Expenditure per property** ($)	*$/prop*	36		1	5	266

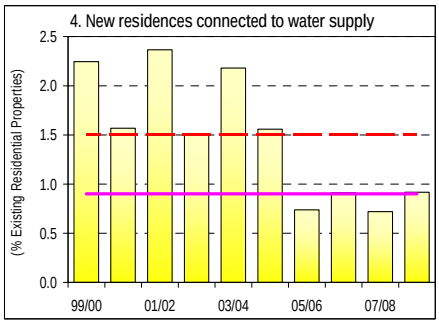
NOTES :

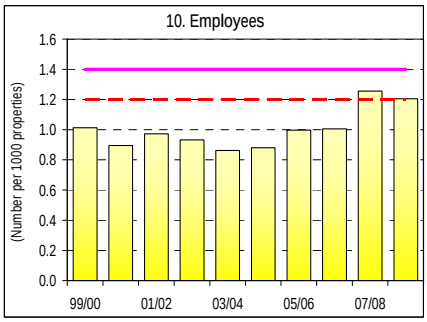
1. The ranking compared with LWUs with >10,000 properties connected properties (Col 2) is on a % of LWUs basis - relevant for comparing performance with similar sized LWUs - see attachment.
2. The ranking compared with all LWUs (Col 3) is on a % of LWUs basis - relevant for comparing performance with all other LWUs - see attachment.
3. The Statewide Median (Col 4) is on a % of connected properties basis. It best reveals statewide performance by giving due weight to larger LWUs & reducing the effect of smaller LWUs- see attachment.
4. Annual review of key projections and actions in LWU's Strategic Business Plan (SBP) are required, together with annual updating of LWU's financial plan. The SBP should be updated after 3 years.
5. Non-residential Tariff: Access Charge based on Service Connection Size(40mm:$260), Inclining Block; For usage up to 450 kL = 130 c/kL; for usage >450 kL = 195 c/kL.
   Water supplied to non-residential customers was 44% of potable water supplied excluding non-revenue water.
   Non-residential customers provided 36% of the revenue from annual charges and usage charges.
6. The operating cost (OMA)/property was $260. Components were: management ($124), operation ($75), maintenance ($37), energy ($13) & chemical ($10).

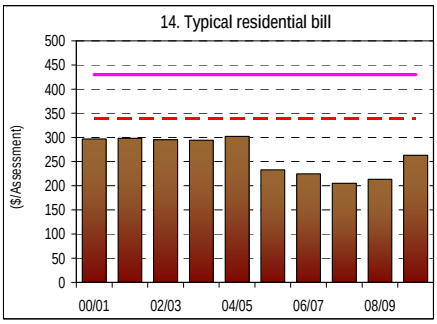
Shoalhaven City Council water supply – page 2

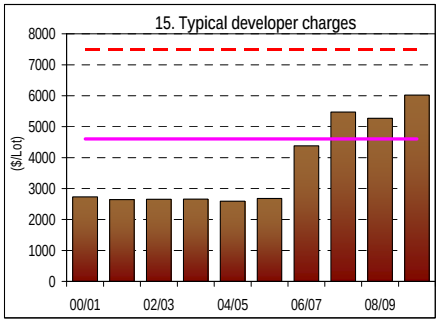
Shoalhaven City Council **TBL Water Supply Performance (page 2)** **2008-09**

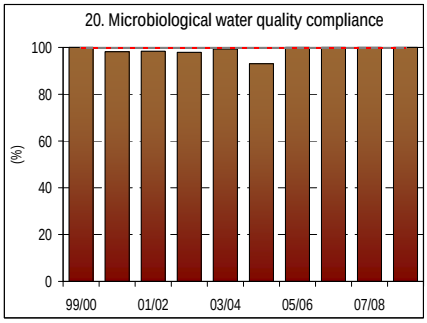
(Results shown for 10 years together with 2008-09 Statewide Median and Top 20%)

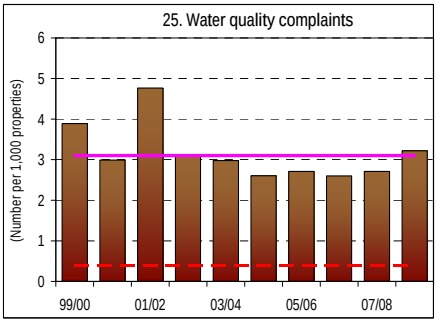


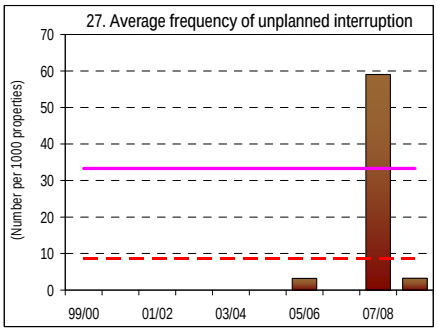


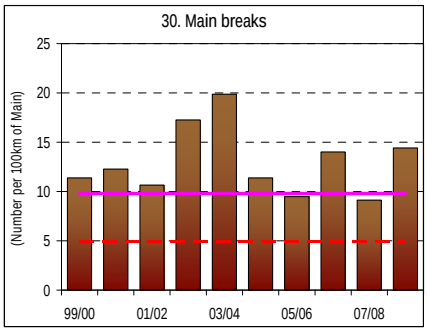


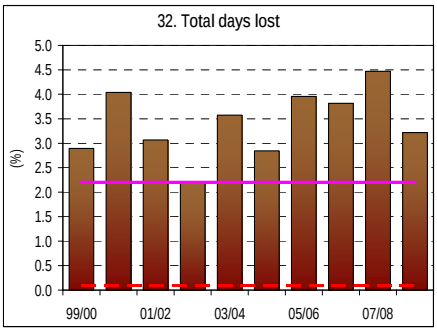


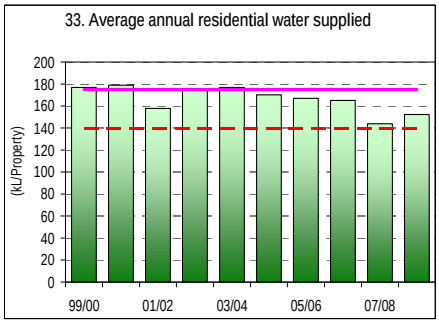


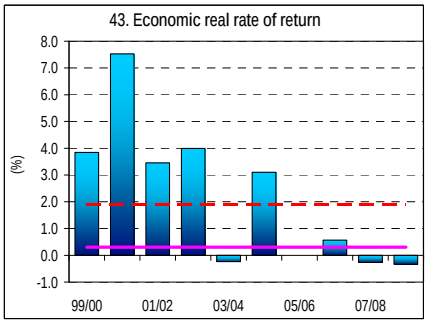


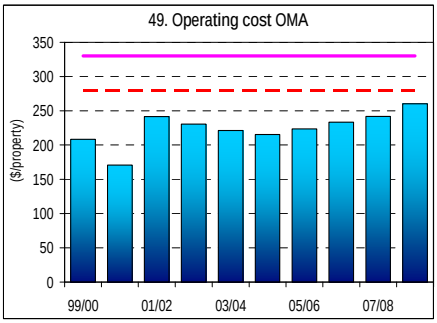


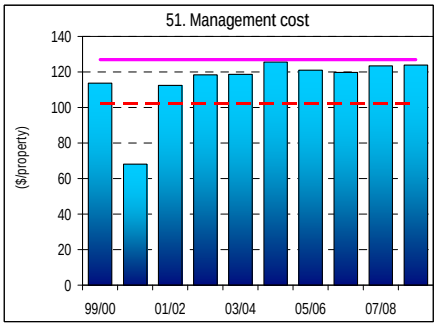


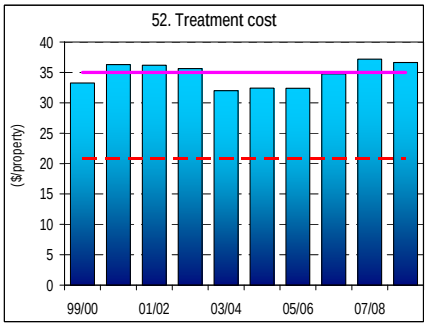


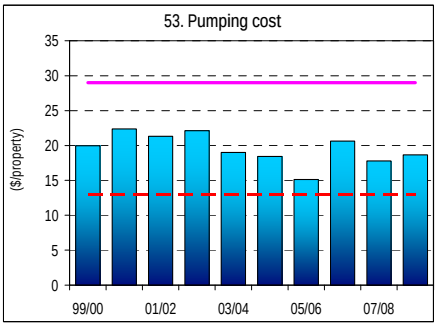












NOTES:

1. Costs are in Jan 2009$.
2. Microbiological water quality compliance 1998-99 to 2003-04 was on the basis of 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines for E. coli; from 2004-05 compliance was on the basis of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines.

LEGEND

2008-09 State Median

2008-09 Top 20%

Shoalhaven City Council sewerage – page 1

Shoalhaven City Council — TBL Sewerage Performance — 2008-09

SEWERAGE SYSTEM - Shoalhaven Council has 12 sewage treatment works providing advanced secondary and tertiary treatment. The system comprises 133,800 EP treatment capacity (Intermittent Extended Aeration (Activated Sludge) and Trickling Filter), 219 pumping stations (755 ML/d), 168 km of rising mains and 944 km of gravity trunk mains and reticulation. Treated effluent is recycled by Council's Regional Effluent Management Scheme (REMS). Excess is discharged to ocean and river.

PERFORMANCE - Residential growth for 2008-09 was 2.5% which is higher than the statewide median. Shoalhaven City Council achieved 100% compliance with Best Practice requirements. The typical residential bill was $585 which was above the statewide median of $470 (Indicator 12). The economic real rate of return was 1.3% which was greater than the statewide median (Indicator 46). The operating cost per property (OMA) was $424 which was above the statewide median of $340 (Indicator 50). Sewage odour complaints were above the statewide median of 0.4 (Indicator 21). Although Council did not comply with the environmental regulator for effluent discharge, 85% of Council's effluent was compliant. The current replacement cost of system assets was $611M ($13,700 per assessment), cash and investments were $14M, debt was $51M and revenue was $30.4M (excluding capital works grants). Council paid a dividend of $1.2M.

COMPLIANCE WITH BEST-PRACTICE MANAGEMENT GUIDELINES REQUIREMENTS

(1) Complete current strategic business plan & financial plan	YES	**(2d) Pricing** - DSP with commercial developer charges	Yes
(2) **Pricing** - full cost-recovery, without significant cross subsidies	Yes	**(2e) Pricing** - Liquid trade waste approvals & policy	Yes
(2a) Pricing - Complying Residential Charges	Yes	**(3) Complete performance reporting (by 15 September)**	YES
(2b) Pricing - Complying Non-Residential Charges	Yes	**(4) Integrated water cycle management strategy commenced**	YES
(2c) Pricing - Complying Trade Waste Fees and Charges	Yes	**COMPLIANCE WITH ALL REQUIREMENTS**	100%

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

		NWI	No.			LWU RESULT		RANKING >10,000 properties Note 1	RANKING All LWUs Note 2	STATEWIDE MEDIAN Note 3
		C5	1	Population served: 80,100	Number of assessments: 44,480					
		C8	2	Number of connected properties: 39,410						
UTILITY	CHARACTERISTICS	C6	3	Number of residential connected properties:	38,050	Col 1		Col 2	Col 3	Col 4
			4	New residences connected to sewerage (%)		2.5	%	1	1	0.8
		A6	5	Properties served per kilometre of main		35	%			40
		W18	6	Volume of sewage collected (ML)		6,510	ML			4,600
			7	Renewals expenditure (% of current replacement cost of system assets)		0.4	%	2	2	0.1
			8	Employees per 1000 properties		2.1	per 1,000 prop	5	4	1.6
SOCIAL	CHARGES & BILLS - 2009-10	P4		Description of residential tariff structure:	access charge per property; rate based on land value (Note 5)					
		P4.1	11	Residential access charge / assessment ($)		585	$	3	5	470
		P6	12	Typical residential bill / assessment ($)		585	$	3	5	470
			13	Typical developer charge / equivalent tenement ($)		7,630	$	1	1	3,900
			14	Non-residential sewer usage charge (c/kL)		91	c/kL	4	4	100
	HEALTH		16	Urban properties without reticulated sewerage service (%)		2.5	%	3	2	3.9
		E3	17	Percent of sewage treated to a tertiary level (%)		58	%	4	3	85
		E4	18	Percent of sewage volume treated that complied (%)		83	%	4	4	100
		E5	19	Sewage treatment works compliant at all times		9 of 12				
	SERVICE LEVELS		21	Odour complaints per 1000 properties		1.2	per 1,000 prop	5	5	0.4
		C11	22	Service complaints per 1000 properties		7	per 1,000 prop	2	2	12
		C16	23a	Average sewerage interruption (minutes)			min			116
			25	Total days lost (%)		3.5	%	4	5	2.4
ENVIRONMENTAL	NATURAL RESOURCE MANAGEMENT	W19	26	Volume of sewage collected per property (kL)		165	kL	5	5	230
		W26	26a	Total recycled water supplied (ML)		1,900	ML	2	1	320
		W27	27	Recycled water (% of effluent recycled)		29	%	2	2	10
		E8	28	Biosolids reuse (%)		100	%	1	1	100
			30	Energy consumption per Megalitre (kiloWatt hours)		1,272	kwh	5	5	710
			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)		410		4	4	350
	ENVIRONMENTAL PERFORMANCE		33	90 Percentile licence limits for effluent discharge: BOD 40 mg/L; SS 40 mg/L						
			34	Compliance with BOD in licence (%)		100	%	1	1	100
			35	Compliance with SS in licence (%)		88	%	5	5	100
		A12	36	Sewer main breaks and chokes per 100 km of main		47	per 100km main	2	2	53
		E13	37	Sewer overflows per 100 km of main		13	per 100km main	3	4	12
			39	Non res & trade waste % of total sge volume		19	%	3	3	16
ECONOMIC	FINANCE	F6	42	Revenue per property - Sge ($)		770	$			650
			43	Revenue from non-residential plus trade waste charges (% of total revenue)		14	%	4	4	16
			44	Revenue from trade waste charges (% of total revenue)		0.6	%	4	3	1.2
		F18	46	Economic real rate of return - Sge (%)		1.3	%	3	2	1.1
			46a	Return on assets - Sge (%)		0.8	%	3	3	0.5
		F22	47	Net Debt to equity - Sge (%)		8	%	2	1	0
		F23	48	Interest cover - Sge		3		4	4	2
			48a	Loan payment per property - Sge ($)		135	$	2	1	55
		F24	47b	Net profit after tax - WS & Sge ($'000)		-291	$'000			-173
	EFFICIENCY		49	Operating cost (OMA) per 100 km of main ($'000)		1,500	$'000	4	4	1,380
		F12	50	Operating cost (OMA) per property ($) Note 8		424	$	5	5	340
			51	Operating cost (OMA) per kilolitre (cents)		257	c/kL	5	5	145
			52	Management cost per property ($)		153	$	5	5	123
			53	Treatment cost per property ($)		101	$	2	3	108
			54	Pumping cost per property ($)		73	$	5	4	50
			55	Energy cost per property ($)		19	$	2	2	20
			56	Sewer main cost per property ($)		57	$	4	4	40
		F15	57	Capital Expenditure per property ($)		530	$	2	2	248

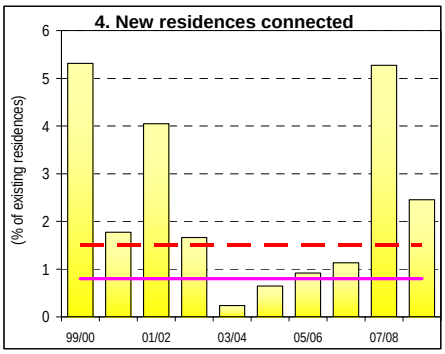
NOTES :

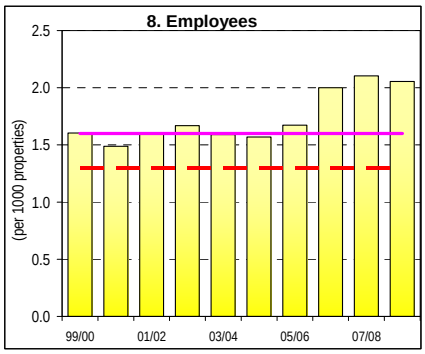
1. Council's ranking in Col 2 is based on a comparison of its result in Col 1 with the percentiles for LWUs with >10,000 properties. This is on a % of LWUs basis - see also Note 2.
2. Council's ranking in Col 3 is based on a comparison of its result in Col 1 with the percentiles for all LWUs. This is also on a % of LWUs basis as this is relevant for comparing the performance of an LWU with all other LWUs - see attachment.
3. The Statewide Median (Col 4) is on a % of connected properties basis. It best reveals statewide performance giving due weight to larger LWUs & reducing the effect of smaller LWUs.
4. Annual review of the key projections & actions in LWU's Strategic Business Plan (SBP) are required, together with annual updating of LWU's Financial Plan. The SBP should be updated after 3 years.
5. Non-residential: Access Charge based on square of meter size, sewer usage charge - 91c/kL.
6. Non-residential & trade waste volume was 19% of total sewage collected; these customers provided 14% of the revenue from annual charges, usage and trade waste charges.
7. Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
8. The operating cost (OMA)/property was $424. Components were: management ($153), operation ($189), maintenance ($45), energy ($19), chemical ($3) and effluent/biosolids ($16).

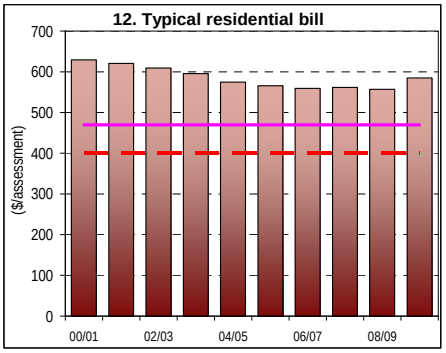
Shoalhaven City Council sewerage – page 2

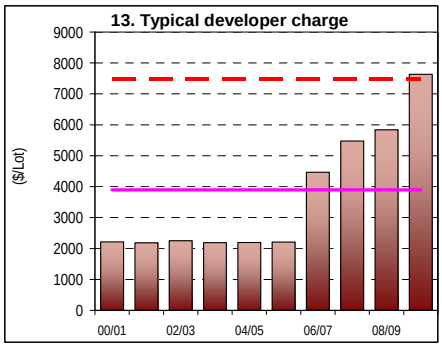
Shoalhaven City Council **TBL Sewerage Performance** **(page 2)** **2008-09**

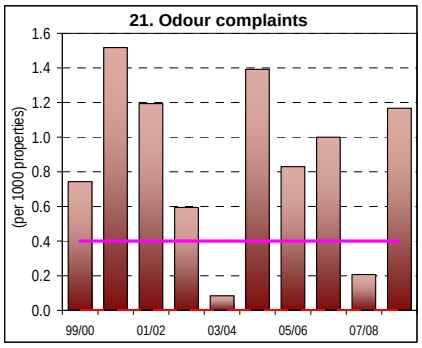
(Results shown for 10 years together with 2008/09 Statewide Median and Top 20%)

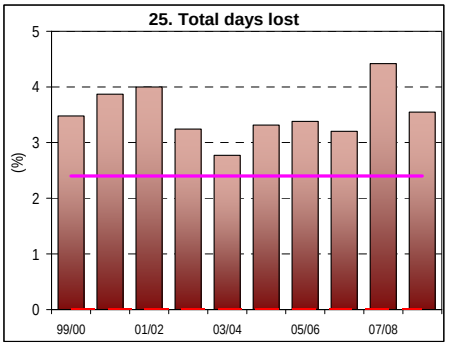


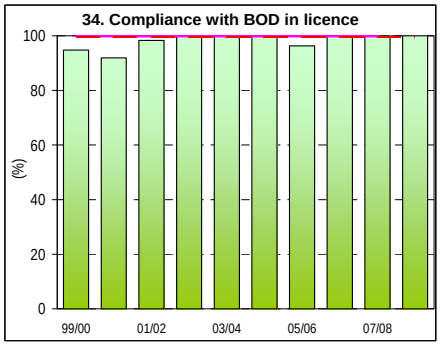


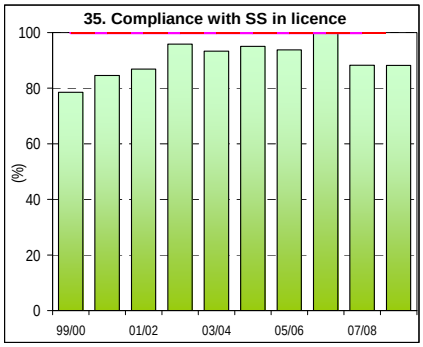


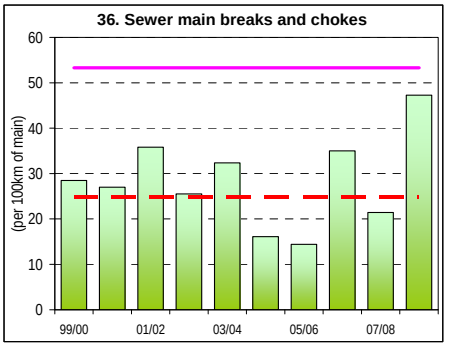


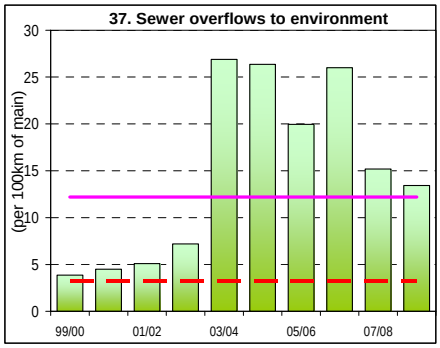


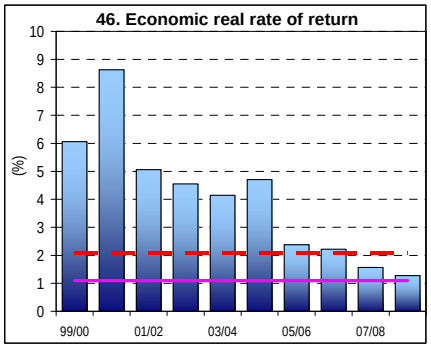


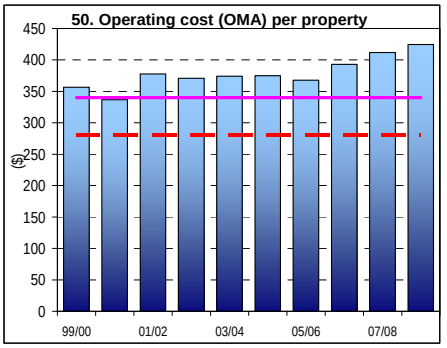


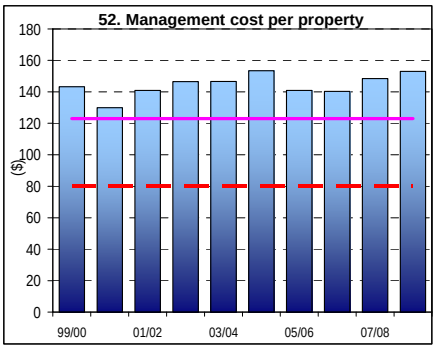


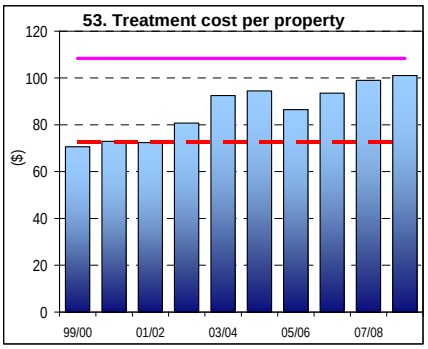


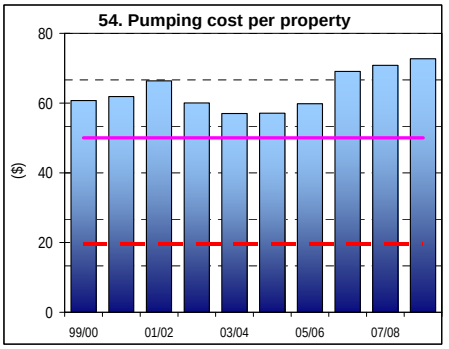












NOTES:

1. Costs are in Jan 2009$.

LEGEND

2008-09 State Median

2008-09 Top 20%

Water performance percentiles (% of LWUs basis) 2008-09

		NSW Non-metropolitan Utilities Percentiles					National Reporting Medians[3]		
		20%	40%	50%	60%	80%		>100,000	< 100,000
	UTILITY CHARACTERISTICS			Median			Indicator	properties	properties
3	Residential Assessments (% of total)	91	89	88	88	85			
4	New Residential Dwellings Connected to Water Supply (%)	1.5	0.9	0.8	0.7	0.4			
5	Properties Served per km of Main	34	29	28	24	17	A3	71	34
6	Rainfall (% of average annual rainfall)	127	104	101	93	82			
7	Total Urban Water Supplied (at Master Meters - ML)	5110	2340	1690	1330	640	W11	106,331	8,205
8	Peak Week to Average Consumption (%)	140	170	190	190	230			
9	Renewals Expenditure (% of current replacement cost of system assets)	1.0	0.6	0.5	0.4	0.2			
10	Employees (employees per 1000 properties)	1.2	1.6	1.8	2.1	2.9			
	SOCIAL - Charges/Bills (2009/10)								
12	Residential Water Usage Charge (c/kL)	165	130	120	105	85	P1.3	127	112
13	Residential Access Charge ($/assessment)	120	180	200	220	270	P1.2	109	133
14	Typical Residential Bill ($/assessment)	375	450	495	525	590	P3	339	376
15	Typical Developer Charge ($/equivalent tenement)	6100	4300	3800	3200	1600			
	SOCIAL - Health								
18	Urban Population without Reticulated Water Supply (%)	0.0	1.8	2.4	4.1	8.1			
19	Physical Water Quality Compliance (%)	100	100	100	100	100			
19a	Chemical Water Quality Compliance (%)	100	100	100	100	100			
20	Microbiological (E. coli) Water Quality Compliance (%)	100	100	100	100	100			
20a	Percent Population with Microbiological Compliance	100	100	100	100	92	H3	100	100
	SOCIAL - Levels of Service								
25	Water Quality Complaints (per 1000 properties)	0.0	0.9	1.4	2.3	5.4	C9	1.7	3.4
26	Water Service Complaints (per 1000 properties)	2.0	5.0	8.1	18.1	39.4	C10	0.6	4.1
27	Customer Interruption Frequency (per 1000 properties)	9	16	24	29	50	C17	168	87
28	Average Duration of Interruption (minutes)	95	120	120	120	180	C15	121	98
30	Number of Main Breaks (per 100 km of main)	6	10	12	14	26	A8	28	14
31	Drought Water Restrictions (% of time)	0	8	100	100	100			
32	Total Days Lost (%)	0	0	1	1	3			
	ENVIRONMENTAL								
33	Average Annual Residential Supplied (kL/property)	165	200	225	270	400	W12	166	180
33a	Average Annual Residential Supplied COASTAL (kL/property)	155	160	170	180	185			
33b	Average Annual Residential Supplied INLAND (kL/property)	210	265	290	345	520			
34	Real Loss (leakage) (L/service connection/day)	50	60	70	80	120	A10	74	69
35	Energy Consumption (kWh/ML)	230	440	490	580	840			
36	Renewable Energy Consumption (% of Total Energy)	0	0	0	0	0			
36a	Net Greenhouse Gas Emissions - WS & Sge (net tonnes CO2 - equivalents/1000 props)	200	310	340	360	440	E12	316	548
	ECONOMIC - Financial								
40	Revenue per property - Water ($)	750	670	620	570	500	F5	517	615
41	Residential Revenue from Usage Charges (% of total rates and charges)	75	70	65	60	50	F4	66	64
42	Current Replacement Cost per Assessment ($)	15,440	13,460	12,150	11,350	9,530			
43	Economic Real Rate of Return (%)	1.7	0.5	0.2	-0.2	-0.9	F17	2.6	1.7
44	Return on Assets (%)	1.6	0.4	0.0	-0.2	-0.9			
45	Net Debt to Equity (%)	1	0	0	0	-7	F22	52	6
46	Interest Cover	>100	2	1	0	0	F23	3	2
47	Loan Payment ($/property)	83	20	6	1	0			
47a	Net Profit After Tax Ratio - WS & Sge (%)	13	4	-1	-5	-14	F30	10	11
47b	Net Profit After Tax - WS & Sge ($'000)	640	105	45	-90	-520	F24	43,300	2,620
	ECONOMIC - Efficiency								
48	Operating Cost (OMA) per 100 km of Main ($'000)	695	880	1000	1125	1490			
49	Operating Cost (OMA) per property ($/property)	310	380	400	420	500	F11	299	366
50	Operating Cost (OMA) per kL (c/kL)	65	95	101	115	145			
51	Management Cost ($/property)	85	115	130	135	175			
52	Treatment Cost ($/property)	30	70	90	110	160			
53	Pumping Cost ($/property)	19	32	45	54	81			
54	Energy Cost ($/property)	7	19	23	27	39			
55	Water Main Cost ($/property)	44	57	70	78	106			
56	Capital Expenditure - Water Supply ($/property)	357	228	185	141	65	F14	67,461	8,727

Notes:

1. *20%* *top 20% of all NSW LWUs*
   Median (50%) median of all NSW LWUs
   80% bottom 20% of all NSW LWUs

2. The above performance indicators are on a ***percentage of LWUs*** basis as this is the most appropriate basis for comparing the performance of one LWU with other LWUs (throughout the rest of the report and in Table 1 the ***percentage of connected properties*** is used as this is the most appropriate for judging Statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs).

3. From the *National Performance Report* 2008-09 which shows performance indicators for 73 Australian urban water utilities with >10,000 properties [Note 19 on page 31].

Sewerage performance percentiles (% of LWUs basis) 2008-09

		NSW Non-metropolitan Utilities Percentiles					National Reporting Medians[3]		
		20%	40%	50%	60%	80%		>100,000	< 100,000
	UTILITY CHARACTERISTICS			Median			Indicator	properties	properties
3	Residential Assessments (% of Total)	87	88	89	90	92			
4	New Residential Dwellings Connected to Sewerage (%)	1.4	0.8	0.6	0.5	0.3			
5	Properties Served per km of Main	42	36	35	33	28	A6	68	40
6	Volume of Sewage Collected (ML)	2,990	940	640	450	240	W18	83,379	4,502
7	Renewals Expenditure (% of current replacement cost of system assets)	0.5	0.1	0.0	0.0	0.0			
8	Employees (per 1000 properties)	1.1	1.5	1.7	1.9	2.5			
	SOCIAL - Charges/Bills (2009/10)								
11	Residential Access Charge ($/assessment)	350	405	460	490	560	P4.1	321	419
12	Typical Residential Bill ($/assessment)	350	405	460	490	570	P6	398	440
13	Typical Developer Charge ($/equivalent tenement)	5,150	3,900	3,250	2,100	1,000			
14	Non-residential sewer usage charge (c/kL)	170	130	110	100	80			
	SOCIAL - Health								
16	Urban Properties without Reticulated Sewerage Service (%)	1	4	6	7	12			
17	Percent of sewage treated to a tertiary level (%)	100	94	76	33	0	E3	95	83
18	Percent of sewage volume treated that was compliant (%)	100	100	100	98	75	E4	100	99
	SOCIAL - Levels of Service								
21	Odour Complaints (per 1000 properties)	0.0	0.0	0.0	0.3	1.1			
22	Service Complaints (per 1000 properties)	7	13	17	21	38	C11	1	4
23a	Average Duration of Interruptions (min)	60	60	100	120	120	C16	167	94
25	Total Days Lost	0	0	1	1	4			
	ENVIRONMENTAL								
26	Volume of Sewage Collected per property (kL)	2,990	940	640	450	240	W19	209	219
26a	Total recycled water supplied (ML)	517	170	116	74	4	W26	5,118	877
27	Effluent Reclaimed for Recycling (% of total effluent)	73	26	13	5	0	W27	14	18
28	Biosolids Reuse (%)	100	0	0	0	0	E8	100	100
30	Energy Consumption (kWh/ML)	331	517	606	701	981			
31	Renewable Energy Consumption (% of total energy consumption)	0	0	0	0	0			
32	Net greenhouse gas emissions - WS & Sge (net tonnes CO2 equivalents per 1000 properties)	160	220	260	300	450	E12	316	548
	90 Percentile Licence Limits for Effluent Discharge: BOD 35 mg/L; SS 40 mg/L; Total N 25 mg/L; Total P 5 mg/L								
34	Compliance with BOD in Licence (%)	100	100	100	100	100			
35	Compliance with SS in Licence (%)	100	100	100	100	88			
36	Sewer Main Chokes and Collapses (per 100 km of main)	26	48	68	92	150	A12	39	32
37	Sewer Overflows to the Environment (per 100 km of main)	0	2	5	7	27	E13	0	1
38	Sewage treated that was compliant (%)	100	100	100	97	75			
	ECONOMIC - Financial								
42	Revenue per property - Sge ($)	710	590	540	490	430	F6	583	677
43	Revenue from Non-residential and Trade Waste Charges (% of total rates & charges)	25	20	19	17	12			
44	Revenue from Trade Waste Charges (% of total rates & charges)	4	1	0	0	0			
45	Current Replacement Cost per asssessment ($)	15,000	12,900	12,300	11,100	9,700			
46	Economic Real Rate of Return (%)	1.5	1.0	0.7	0.4	-0.7	F18	2.4	2.1
46a	Return on Assets (%)	1.8	1.0	0.5	0.3	-0.5			
47	Net Debt to Equity (%)	3	0	0	-2	-11	F22	52	6
48	Interest Cover	>100	7	2	1	0	F23	3	2
48a	Loan Payment ($/property)	116	38	18	7	0			
48b	Net Profit After Tax Ratio WS & Sge (%)	13	5	1	-5	-13	F30	10	11
48c	Net Profit After Tax WS & Sge ($'000)	613	95	13	-62	-384	F24	43,300	2,620
	ECONOMIC - Efficiency								
49	Operating Cost (OMA) per 100 km of Main ($'000)	675	1,030	1,115	1,230	1,500			
50	Operating Cost (OMA) per property ($/property)	250	300	330	360	410	F12	262	342
51	Operating Cost (OMA) per kL (c/kL)	110	140	145	160	210			
52	Management Cost ($/property)	60	85	105	115	150			
53	Treatment Cost ($/property)	70	100	120	130	160			
54	Pumping Cost ($/property)	25	40	45	55	75			
55	Energy Cost ($/property)	15	20	25	25	35			
56	Sewer Main Cost ($/property)	25	35	40	45	65			
57	Capital Expenditure ($/property)	660	220	160	120	70			

Notes:

1. *20%* *top 20% of LWUs*
   Median (50%) median of LWUs
   80% bottom 20% of LWUs

2. The above performance indicators are on a ***percentage of LWUs*** basis as this is the most appropriate basis for comparing the performance of one LWU with other LWUs (throughout the rest of the report and in Table 2 the ***percentage of connected properties*** is used as this is the most appropriate for judging Statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs).

3. From the *National Performance Report 2008-09* which shows performance indicators for 73 Australian urban water utilities with >10,000 properties [Note 19 on page 31].

Appendix D1: 2008-09 water treatment performance

Water Utility	Source/type (Bulk Supplier)	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated to Potable	Colour Units				Turbidity Units				Compliance with 2004 NHMRC/NRMMC Australian Drinking Water Guidelines[3, 6]												Water Quality Complaints		No. of Samples ÷ Allocation[5]		Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Colour		Turbidity		pH		Physical		Chemical		E. coli		E. coli Zones	E. coli % Pop Compliance			Chemical	E. coli		
		37a		ML/d 37b	38a	ML 38b	Max 39a	Avg 39b	Max 39c	Avg 39d	Max 40a	Avg 40b	Max 40c	Avg 40d	Samples 42a	% 42b	Samples 42c	% 42d	Samples 42e	% 42f	Samples 42g	% 42h	Samples 42i	% 42j	Samples 42k	% 42l	Compliant 42m	42n	No. 43	/ 1,000 Props	% 44a	% 44b	days 45	days 46
		Albury	1992	140	DF	6319	21	7	11	1	28	9	2	0	699	100	699	100	210	99	266	100	466	100	197	100			10		100	100		
		Lake Hume Chlorinator	1984	2	CH	2	5	3	5	3	5	3	5	2.6	2	100	2	100	51	98	59	100	150	100	49	100					100	94		
Albury City Council		Total/Weighted Average (Note 1)		142		6321	21	7	11	1	28	9	5	0.3	701	100	701	100	261	98	325	100	616	100	246	100	4 of 4	100	10	0.5			0	0
Armidale Dumaresq Council		Armidale	2009	29	C	2523	83	22	2	1	3	1	0	0	365	100	365	100	365	100	365	100	365	100	780	100	1 of 1	100			100	100	0	0
Ballina Shire Council	*bulk purchase (Rous W*	Marom Creek	1977	3	DF	129					26	5	1	0	-	-	101	100	100	100	68	100	50	100	260	100	1 of 1	100			100	100	0	0
	dual supply	Euston	1998	0.4	MF	29	320	80	1		42	16			52	99	52	99	52	99	52	100	52	100	52	100					100	100		
		Balranald	1988	1	C	179	300	120	2		40	25	2	1	365	95	365	95	52	100	52	100	52	100	52	100			2		100	100		
Balranald Council		Total/Weighted Average (Note 1)		2		208	320	381	2	12	42	40	2	2.4	417	95	417	95	104	100	104	100	104	100	104	100	2 of 2	100	2	2.3			0	0
Bathurst Regional Council		Bathurst	1989	60	C	5765	791	68	10	3	260	17	1	0	17	100	17	100	17	100	17	100	17	100	164	100	1 of 1	100	204	13.7	100	100	0	0
	unfiltered	Yellow Pinch	1988	25	CH	1081			2	2			2	1.1	11	100	11	100	11	100	55	100	286	100	136	100			2		100	97		
	unfiltered	Bega	1987	16	CH	1114			2	1			3	1	11	100	11	100	11	100	55	100	286	100	116	100			30		100	100		
	unfiltered	Brogo	1984	6	CH	368			14	10			1	1	7	100	7	100	8	88	36	100	182	100	75	100			1		100	83		
	unfiltered	Kiah	1972	6	CH	775			3	1			1	1	7	100	7	100	7	100	35	100	182	100	49	100			2		100	94		
	unfiltered	Bemboka	1988	1	CH	42			12	10			2	2	2	100	2	100	2	100	10	100	52	100	24	100					100	92		
	unfiltered	Tilba	1985	1	CH	9			10	7			1	0.8	4	100	4	100	4	25	20	100	104	100	45	100								
Bega Valley Shire Council		Total/Weighted Average (Note 1)		55		3389			14	2			3	0.9	42	100	42	100	43	91	211	100	1,092	100	445	100	6 of 6	100	35	2.5			0	0
	groundwater	Bellingen / Seaboard	1993	12	CH	980			1	1			2	0.4	8	100	8	100	8	100	8	100	8	100	93	100			7		67	100		
		Dorrigo	1993	3	LS	157			1	1			0	0.2	3	100	3	100	3	67	3	100	3	100	50	100					100	96		
Bellingen Shire Council		Total/Weighted Average (Note 1)		15		1137			1	1			2	0.4	11	100	11	100	11	91	11	100	11	100	143	100	2 of 2	100	7	1.7			0	0
		Tocumwal	1984	7	DAF	619	75	25	5	5	60	11.1	21	0.5	2	100	2	100	2	100	365	100	2	100	49	100					100	94		
		Finley	1977	2	C	176	74	70	5	5	251	75	20	0.6	2	100	2	100	2	100	365	100	2	100	49	100					100	94		
		Berrigan	1990	1	C	162	60	38	5	5	76	40	1	0.4	2	100	2	100	2	100	365	100	2	100	47	100					100	90		
		Barooga	2000	1	DAF	121	365	32	5	5	16	10	4	2.0	2	100	2	100	2	100	365	100	2	100	46	100					100	88		
Berrigan Shire Council	*dual supply*	Total/Weighted Average (Note 1)		11		1078	365	35	5	5	251	26	21	0.7	8	100	8	100	8	100	1,460	100	8	100	191	100	4 of 4	100					0	0
Bogan Shire Council	*river abstraction (State*	Nyngan	1984	9	C	772	40	37	5	5	16	12	1	1	365	100	365	100	365	98	52	100	6	100	52	92	0 of 1				100	100	0	0
		Bombala	1983	3	-	250									-	-	-	-	52	100	52	100	52	100	49	100			1		100	94		
		Delegate	-	1	CH	170									-	-	-	-	52	100	52	100	52	100	52	100					100	100		
Bombala Council		Total/Weighted Average (Note 1)		5		420													104	100	104	100	104	100	101	100	2 of 2	100	1	1.2			0	0
Boorowa Council		Boorowa	1993	3	C,LS	241									-	-	-	-	52	100	52	100	52	100	50	100	1 of 1	100			100	96	0	0
Bourke Shire Council	*dual supply*	Bourke	1988	3	C	231			5	2	1,500	500	2	0.9	12	95	12	95	12	100	14	100	14	100	52	100	1 of 1	100	5	4.2	100	100	0	0
		Brewarrina	1990	1	C	223	48	32	2	2	121	82	2	0.7	2	100	365	100	2	100	2	100	1	100	43	100					50	83		
	dual supply	Goodooga	1996	1	CH	100	5	3	1	1	1	0	1	0.3	2	100	2	100		-	1	100	1	100	23	100					50	88		
Brewarrina Shire Council		Total/Weighted Average (Note 1)		1		323	48	23	2	2	121	57	2	1	4	100	367	100	2	100	3	100	2	100	66	100	2 of 2	100					0	0
Byron Shire Council	*bulk purchase (Rous W*	Mullumbimby	1970	3	C	349	58	25	29	3	68	9	9	0	52	100	52	98	104	96	104	100	104	100	104	100	1 of 1	100	4	0.4	100	100	0	0
		Molong	1986	2	C	207			1	1	2	1	0	0	2	100	2	100	53	100	2	100	2	100	51	100			4		100	98		
	non-potable	Cumnock	1971	1	CH	24			1	1			0	0	1	100	1	100	11	100	1	100	1	94	12	100					50	100		
	non-potable groundwater	Yeoval	1964	1	CH	33			4	3			4	2	2	100	2	100	12	100	2	100	2	100	13	85					100	100		
	non-potable groundwater	Delgany	1977	0.3	CH	3			1	1			1	1	2	100	2	100	11	100	2	100	2	100	9	100					100	75		
Cabonne Council		Total/Weighted Average (Note 1)		2		267			1	1	2	1	0	0	7	100	7	100	87	100	7	100	7	100	85	100	3 of 4	86	4	3.5			0	0
		Hillston	-	6	CH	474			1	1			0	0.6	2	100	2	100	42	100	2	100	2	100	51	100			2		100	98		
		Rankins Springs	-	3	U	106									-	-	-	-	-	-					20	70			-			77		
	groundwater	Goolgowi/Merriwagga	1995	2	CH	187			1	1			1	1	1	100	1	100	22	100	1	100	1	95	25	100			2		50	96		
		Carrathool	1989		CH	45			1	1			5	5.1	1	100	1		12	100	1	100	1	100	12	100			-		50	100		
	groundwater	Melbergen	-		CH	-									-	-	-	-	-	-									-					
Carrathool Shire Council	*bulk purchase (Murrumb*	Total/Weighted Average (Note 1)		11		812			1	1			5	1	4	100	4	75	76	100	4	100	4	100	108	94	3 of 5	87	4	3.9			2	0
		Ivanhoe	1985	1	C	40					5	3	1	1	26	100	26	100	26	100	26	10	26	100	26	96			2		100	100		
		Wilcannia	1985	1	C	74					4	2	1.0	0.6	26	100	26	100	26	100	26	100	26	100	37	100			7		100	71		
Central Darling Shire Cour	*river abstraction (State*	Total/Weighted Average (Note 1)		1		114					5	2	1	0.6	52	100	52	100	52	100	52	100	52	100	63	100	1 of 2	65	9	13.1			0	0
		Carcoar	2002	9	DAF	1277	140	15	5	1	20	5	2.0	0.3	365	100	365	100	365	100	11	100	11	100	184	100			5		92	100		
		Blayney	1966	6	C	660	140	15	5	1	20	5	2	0.3	365	100	365	100	365	100	12	100	12	100	58	100			8		100	100		
Central Tablelands Water		Total/Weighted Average (Note 1)		15		1937	140	15	5	1	20	5	2	0.3	730	100	730	100	730	100	23	100	23	100	242	100	2 of 2	100	13	2.5			0	0
		Rushforth Road (North Coast Water)	1988	70	CH	6183			10	6	100	6	4	1.6	11	100	11	100	11	100	11	100	11	100	137	100			63		92	100		
		Wooli	-	20	CH	223			5	4			1	1.0	2	100	2	100	2	50	2	100	2	100	51	100					100	98		
		Coutts Crossing	-	1	CH	45			4	4			2	1.3	2	100	2	100	2	100	2	100	2	100	50	100					100	96		
		Glenreagh (North Coast Water)	2006	1	CH	44			6	4			1	0.9	2	100	2	100	2	100	2	100	2	100	30	97			1		100	100		
		Minnie Water	-	1	CH	55			10	10			1	1.0	2	100	2	100	2	100	2	100	2	100	25	100			1		100	96		
Clarence Valley Council		Total/Weighted Average (Note 1)		93		6550			10		100		4		19	100	19	100	19	95	19	100	19	100	293	100	4 of 5	99	65	3.1			3	0
		Cobar	1983	7	C	1460	100	44			12	2	1	0	365	100	365	100	365	100	52	100	365	100	52	100					100	100		
Cobar Shire Council		Total/Weighted Average (Note 1)		7	C	1460	100	44			12	2	1	0.4	365	100	365	100	365	100	52	100	365	100	52	100	1 of 1	100					0	0
	unfiltered	Karangi	1980	60	CH	5479	49	22	2	1	6	2	1	0.7	13	100	13	100	13	100	13	100	13	100	498	100			185		100	100		
	unfiltered	Nana Glen	1996	1	C	16	52	40	1	1	2	2	0	0.3	2	100	2	100	2	100	2	100	2	100	23	100					100	88		
	unfiltered	Coramba	1960	1	CH	38			5	4			1	1	2	100	2	100	2	100	2	100	2	100	26	100					100	100		
Coffs Harbour City Council		Total/Weighted Average (Note 1)		61		5533	52	22	5	1	6	2	1	1	17	100	17	100	17	100	17	100	17	100	547	100	3 of 3	100	185	7.8			0	0

Water Utility	Source/type (Bulk Supplier)	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated to Potable	Colour Units				Turbidity Units				Compliance with 2004 NHMRC/NRMMC Australian Drinking Water Guidelines[3,6]												Water Quality Complaints		No. of Samples ÷ Allocation[5]		Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Colour		Turbidity		pH		Physical		Chemical		E. coli		E. coli Zones	E. coli % Pop Compliance			Chemical	E. coli		
		37a		ML/d 37b	38a	ML 38b	Max 39a	Avg 39b	Max 39c	Avg 39d	Max 40a	Avg 40b	Max 40c	Avg 40d	Samples 42a	% 42b	Samples 42c	% 42d	Samples 42e	% 42f	Samples 42g	% 42h	Samples 42i	% 42j	Samples 42k	% 42l	Compliant 42m	42n	No. 43	/ 1,000 Props	% 44a	% 44b	days 45	days 46
		Cooma	1985	15	C	1190	70	29	5	2	71	8	1.4	0.3	12	100	13	100	416	100	12	100	12	100	68	97			5		100	100		
		Nimmitabel	2004	1	CH	29			5	3			3	2.2	3	100	3	100	3	100	3	100	3	100	26	100					100	100		
		Bredbo	2006	1	CH	32		1					0.1	0.1	1	100	1	100	1	100	1	100	1	100	25	100					50	96		
Cooma-Monaro Council		Total/Weighted Average (Note 1)		17		1251	70	28	5	2	71	7	3	0.3	16	100	17	100	420	100	16	100	16	100	119	100	2 of 3	5	5	1.3			0	0
		Coonamble	1993	8	CH	783	1	1	1	1	0	0	0	0.1	2	100	2	100	3	100	2	100	2	100	48	94			-		100	92		
		Gulargambone	-	2	CH	138	1	1	1	1	1	0	1	0.4	2	100	2	100	3	100	2	100	2	100	47	100					100	90		
		Quambone	-	2	CH	30	4	3	4	3	1	1	1	1	2	100	2	100	2	100	2	100	2	100	9	100					100	75		
Coonamble Shire Council		Total/Weighted Average (Note 1)		11		951	4	1	4	1	1	0	1	0.2	6	100	6	100	8	100	6	100	6	100	104	97	2 of 3	19					0	0
Cootamundra Shire Counc	*purchase (Goldenfields)*																				12	100	12	100	172	100				-				
		Corowa	2002	15	DAF	1080	65	40	5		43	18	1	0.3	180	100	161	100	365	100	365	100	13	100	48	100			12		100	92		
		Mulwala	1944	13	C	1081					36	10	2	0.2		-	365	100	365	100	365	100	12	100	49	100			3		100	94		
		Howlong	1989	5	LS	239	202	50			49	21	2	0.6	365	100	365	100	365	100	365	100	12	100	49	100			3		100	94		
		Balldale	-		-	-									-	-	-	-	-	-	1	100	1	94	12	83			-		50	100		
Corowa Shire Council		Total/Weighted Average (Note 1)		33		2400	202	23	5		49	15	2	0	545	100	891	100	1,095	100	1,096	100	38	100	158	100	3 of 4	100	18	3.8			0	0
		Broken Hill (Mica St)	2002	36	C	4354	35	11	4	0	241	52	1	0	365	100	365	100	12	100	64	100	64	100	124	100			1		100	100		
		Menindee	1997	1	C	117			2	1	1911	314	4.5	3.2	2	100	2	100	2	100	12	100	12	100	50	100					100	96		
Country Energy		Total/Weighted Average (Note 1)		37		4471	35	10.7	4	0.22	1911	58.9	4.5	0.28	367	100	367	100	14	100	76	100	76	100	174	100	2 of 2	100	1	0.1			0.1	0.1
Cowra Shire Council	*Menindee Lakes (State*	Cowra	1985	29	C	2160			5	1	156		10	1.7	21	100	21	100	21	100	21	100	21	100	175	97	0 of 1		422	80	100	100	0	0
Deniliquin Council		Deniliquin	1968	26	C	1718	90	46	5	3	56	27	1	0	12	100	12	100	12	100	60	100	12	100	71	100	1 of 1	100	10	3.0	100	99	0	0
Dubbo City Council		John Gilbert	2007	80	C	7832	420	19	398	1	143	6	3	0	365	100	365	100	132	82	132	100	132	100	132	100	1 of 1	100	6	0.4	100	100	0	0
Eurobodalla Shire Council	*unfiltered*	Eurobodalla	-		CH	3825					-	-	-	-	-	-	-	-	-	-	15	100	15	100	353	100	1 of 1	100	-	-	100	91	-	-
Fish River Water Supply		Duckmaloi	2003	11	MF	684	50	40	10	9	9	5	1	0.3	8	75	8	100	8	88	13	100	13	100	144	100	1 of 1	100	12	0.5	100	100	0	14
Forbes Shire Council		Forbes	1966	26	C	2071	50	20	5	3	58	19	2	0.4	12	100	17	100	15	100	51	100	425	100	67	100	1 of 1	100	5	1.4	100	100	0	0
Gilgandra Shire Council	*groundwater*	Gilgandra	1984	6	C	740	3	2	1	0	40	10	2	0.5	2	100	2	100	2	100	1	100	2	100	51	100	1 of 1	100	10	7.3	100	98	0	0
		Martins Lookout	1982	12	C	598	408	89	14	1	43	7	12	1	365	100	365	100	365	100	365	100	13	100	49	96			8		100	94		
		Deepwater	-	2	CH	-									-	-	-	-	12	-	3	100	3	100	23	100			4		100	88		
Glen Innes Severn Shire Council		Total/Weighted Average (Note 1)		14		598	408	89	14	1	43	7	12	1	365	100	365	100	377	97	368	100	16	100	72	97	1 of 2		12	4.2			0	0
		Gloucester	1981	5	C	418	400	37	5	5	195	7	8	1	2	100	2	100	1	100	1	100	1	100	50	100					50	96		
		Barrington	1981	1	CH	47	350	35	300	18	195	9	95	2.5	1	100	1	100	1	100	1	100	1	100	50	100			2		50	96		
Gloucester Shire Council		Total/Weighted Average (Note 1)		5		465	400	37	300	6	195	7	95	1	3	100	3	100	2	100	2	100	2	100	100	100	2 of 2	100	2	1.2			7	0
	groundwater	Oura	1975	26	A	4150									12	100	375	100	306	90	682	100	1,628	100	271	100			25		100	100		
		Jugiong	1991	40	C	3957	300	55	15	5	2,000	22	1	0	365	100	365	100	365	99	1,460	100	869	100	77	100			9		100	100		
	groundwater	Mount Arthur	-	4	CH	593									2	100	2	100	2	100	2	100	2	100	60	100			19		100	97		
	groundwater	Mount Daylight	-	1	CH	231									1	100	1	100	1	100	1	100	1	100	26	100					50	100		
Goldenfields Water County Council		Total/Weighted Average (Note 1)		46		4781	300	46	15	4	2,000	18	1	0	368	100	368	100	368	99	1,463	100	872	100	163	100	3 of 3	100	28				0	0
		Somersby	1986	140	C	9253	531	138	2	1	52	10	1	0	12	100	12	100	12	83	12	100	12	100	382	100			1,771		100	98		
		Woy Woy	2007	5	C	6	51	17	2	1	2	2	1	0	12	100	12	100	12	83	12	100	12	100	382	100					100	100		
Gosford City Council		Total/Weighted Average (Note 1)		145		9259	531	138	2	1	52	10	1	0	24	100	24	100	24	83	24	100	24	100	764	100	2 of 2	100	1,771	25.3			0	0
		Goulburn	1975	34	C	2360	572	127	8	4	37	5	1	0	365	100	365	100	365	100	1,446	100	2,136	100	266	100			58		100	100		
		Marulan	1997	2	MF	73	572	127	8	4	37	5	0.8	0.3	365	100	365	100	12	100	365	100	12	100	54	100			3		100	100		
Goulburn Mulwaree Council		Total/Weighted Average (Note 1)		35		2433	572	127	8	4	37	5	1	0	730	100	730	100	377	100	1,811	100	2,148	100	320	100	2 of 2	100	61	5.8			0	0
		Villages	2005	5	C,DF	352									-	-	-	-		-	52	100	2	100	52	100								
		Culcairn	2007	3	CH	175	1	1	1	1	0	0	0	0	2	100	12	100	52	100	365	100	2	100	51	100					100	98		
Greater Hume Shire Coun	*bulk purchase (Albury C*	Total/Weighted Average (Note 1)		7		527	1	1	1	1	0	0	0	0	2	100	12	100	52	100	417	100	4	100	103	100	2 of 2	100					0	0
		Griffith	1987	60	DAF	6457	42	18	2	1	42	18	2	0.5	12	100	12	100	12	100	12	100	12	100	74	100			5		100	97		
		Yenda	2001	2	MF	94	60	42	15	5	40	18	0	0	131	100	141	100	2	100	2	100	2	100	50	100					100	96		
Griffith City Council	*bulk purchase (Murrumt*	Total/Weighted Average (Note 1)		62		6551	60	18	15	1	42	18	2	0.5	143	100	153	100	14	100	14	100	14	100	124	100	2 of 2	100	5	0.6			0	0
Gundagai Shire Council		Gundagai	1988	5	C	580	500	107	145	12	272	15	12.0	0.3	365	100	365	100	45	100	43	100	2	100	52	100	1 of 1	100	5	4.8	100	100	0	0
	groundwater	Gunnedah	2009		U												-	-	4	100	12	100	7	100	49	100					58	77		
	good quality untreated groundwater	Curlewis	2004	1	CH	98									-	-	-	-	1	100	12	100	2	100	43	91			1		100	83		
	good quality untreated groundwater	Tambar Springs	2006	1	CH	14									-	-	-	-	1	100	12	100	2	100	11	91					100	92		
	good quality untreated groundwater	Mullaley	2006	1	CH	18									-	-	-	-	1	100	12	100	2	100	10	100					100	83		
Gunnedah Shire Council		Total/Weighted Average (Note 1)		2		130													7	100	48	100	13	100	113	96	2 of 4	14	1	0.2			0	0
Guyra Shire Council		Guyra	1983	6	C	416	500	100	4	4	12	3	1	0	260	100	260	100	4	100	4	100	10	100	58	100	1 of 1	100	1	0.9	100	100	0	0
		Bingara	1940	4	CH	264	17	13			15	4			11	82	11	55	16	100	12	100	12	100	77	95			-		100	100		
		Warialda	2003	3	CH	278			1	1			0	0	2	100	2	100	2	100	2	100	2	100	53	100					100	100		
	non-potable groundwater	Gravesend	2003	1	CH	32	1	1			0	0			2	100	2	100	2	100	2	100	2	100	26	96					100	100		
	good quality untreated groundwater	North Star	2007	0.2	MF	28							0	0	-	-	2	100	2	100	3	100	3	100	15	100					100	100		
Gwydir Shire Council		Total/Weighted Average (Note 1)		7		570	1	0	1	0	0	0	0	0	13	85	15	67	20	100	17	100	17	100	145	97	2 of 3	54					5	5
Harden Shire Council	*bulk purchase (Goldenfi*	Harden	-		Z	554									-	-	-	-	72	100	2	100	2	100	63	100	1 of 1	100	25	14.3	100	85	0	0
		Hastings	2005	151	CH	5608	2	2	1	1	2	1	7	1	8	100	567	100	582	93	582	100	14	71	304	100			271		100	100		
		Wauchope	2006	6	MF	647	14	7	1	1	11	4	2	0	3	100	87	99	89	91	89	100	12	100	425	100					100	81		
		Telegraph Point	2005	1	MF	53	299	51	35	7	31	6	1	0	23	87	66	100	107	97	107	100	2	100	65	100					100	100		
		Comboyne	2004	1	MF	22	68	33	30	4	16	5	1	0.3	26	96	104	100	105	94	106	100	2	100	65	100					100	100		
		Long Flat	2005	0.3	MF	10	142	25	26	5	21	4	2	0	24	92	52	98	54	98	52	100	2	100	50	100					100	100		
Port Macquarie-Hastings Council		Total/Weighted Average (Note 1)		159		6340	299	3	35	1	31	1	7	0.9	84	93	876	100	937	93	936	100	32	87	909	100	5 of 5	100	271	9.1			1	0
Hay Shire Council	*dual supply*	Hay	1988	2	CH,C	320	70	20	3	2	82	20	0	0		100		100		100	3	100	3	100	47	100	1 of 1	100			25	90	0	0
		Copeton	1982	18	C	1900	195	70	4	3	9	3	1	0.2	360	100	360	100	360	100	360	100	14	100	25	100			5		100	28		
		Ashford	1984	3	C	128	250	50	8	3	163	4	3	0	360	100	360	100	-	-	360	100	14	100	24	100					100	46		
	groundwater	Yetman	-	1	CH	30							0	0			1	100		100					14	100						54		
Inverell Shire Council	*river abstraction (State*	Total/Weighted Average (Note 1)		22		2058	250	68	8	2	163	3	3	0	720	100	721	100	360	100	720	100	28	100	63	100	3 of 3	100	5	0.9			0	0
Jerilderie Shire Council	*dual supply*	Jerilderie	1980	1	C	118	500	250	15		154	50	2	0	365	100	365	100	365	100	2	100	2	100	48	100	1 of 1	100			100	92	0	0

Water Utility	Source/type (Bulk Supplier)	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated to Potable	Colour Units				Turbidity Units				Compliance with 2004 NHMRC/NRMMC Australian Drinking Water Guidelines[3,6]												Water Quality Complaints		No. of Samples ÷ Allocation[5]		Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Colour		Turbidity		pH		Physical		Chemical		E. coli		E. coli Zones	E. coli % Pop Compliance			Chemical	E. coli		
		37a		ML/d 37b	38a	ML 38b	Max 39a	Avg 39b	Max 39c	Avg 39d	Max 40a	Avg 40b	Max 40c	Avg 40d	Samples 42a	% 42b	Samples 42c	% 42d	Samples 42e	% 42f	Samples 42g	% 42h	Samples 42i	% 42j	Samples 42k	% 42l	Compliant 42m	42n	No. 43	/ 1,000 Props	% 44a	% 44b	days 45	days 46
	groundwater	Sherwood	2000	38	CH	2692			8	2			6	1.5	11	100	11	91	234	91	22	100	740	100	230	100			3		100	93		
	groundwater	South West Rocks	2006	6	MF	508			2	1			0	0.2	7	100	7	100	53	100	14	100	278	100	47	100			1		100	90		
		Belgrave Falls	1938	6	CH																												
	groundwater	Stuarts Point	1999	3	DF	166			1	1			4	1	11	100	11	100	58	100	22	100	381	100	48	100					100	92		
	groundwater	Crescent Head	1988	3	CH	150			8	8			2.8	2.6	2	100	2	100	46	95	4	100	142	93	46	100			2		100	88		
	groundwater	Hat Head	2000	1	CH	67			6	6			1	1	2	100	2	100	24	88	4	100	99	100	24	100					100	92		
	groundwater	Willawarrin	1972	0.2	CH	11			8	2			5	1.1	11	100	11	91	34	97	22	100	333	100	24	100					100	92		
	groundwater	Bellbrook	2007	0.2	CH	8			7	2			5	1.5	11	100	11	100	35	89	22	100	334	100	24	100					100	92		
Kempsey Shire Council		Total/Weighted Average (Note 1)		57		3602			8	2			6	1.3	55	100	55	96	484	94	110	100	2,307	100	443	100	7 of 8	100	6	0.5			0	0
		Kyogle	1988	3	C	297	460	100	2	2	310	40	17	11.0	2	100	2		2	100	2	100	2	100	95	100			2		100	100		
	non-potable supply from Tenterfield	Woodenbong	-		-	-									-	-	-	-	-	-									-					
	non-potable	Bonalbo	1967	0.3	CH	35			19	16			8	7	2	50	2		2	50	2	100	2	100	51	96			2		100	98		
Kyogle Council		Total/Weighted Average (Note 1)		3		332	460	89	19	3	310	36	17	10.6	4	75	4		4	75	4	100	4	100	146	100	1 of 3	89	4	2.2			0	0
		Condobolin	1941	8	C	906	96	18	2	2	148	26	1	0.3	2	100	2	100	2	100	2	100	2	100	42	100			4		17	81		
		Lake Cargelligo	2004	5	MF	511									-	-	-	-	-	-					43	100			12			83		
		Tottenham	1994	1	LS	19									-	-	-	-	-	-					38	92						100		
Lachlan Shire Council		Total/Weighted Average (Note 1)		13		1436	96	11	2	1	148	16	1	0.2	2	100	2	100	2	100	2	100	2	100	123	100	2 of 3	89	16	5.7			0	1
		Leeton	1993	25	C	2389	85	38	1	1	52	20	1	0.1	300	100	300	100	365	100	365	100	11	100	55	100					92	86		
		Whitton	2003	1	C	96	204	116	95	1	138	74	8	0.2	300	100	300	100	365	100	365	100	2	100	25	96					100	96		
		Murrami	1993	0.3	LS	20	168	89	11	3	108	48	41	2	300	100	300	100	365	100	365	100	3	100	26	100					100	100		
		Yanco	-		-	-									-	-	-	-	-	-									-					
Leeton Shire Council		Total/Weighted Average (Note 1)		26		2505	204	41	95	1	138	22	41	0	900	100	900	100	1,095	100	1,095	100	16	100	106	100	2 of 4	96					0	0
Lismore City Council	*bulk purchase (Rous Wa*	Nimbin	-	0	CH	69					50	10	4	3	-	-	52		52	100	52	100	52	75	52	100	1 of 1	100	30	2.1	100	100	5	5
Lithgow City Council	*bulk purchase (Fish Riv*	Oakey Park	1985	15	C	1382	181	70	9	3	15	7	1	0.4	365	100	365	100	15	60	12	100	12	100	77	100	1 of 1	100	46	5.9	100	99	0	0
	groundwater	Werris Creek	1991	3	C	291	200	85	15	4	24	8	1	0	277	100	277	100	2	100	2	100	2	100	51	100					100	98		
		Willow Tree	-	1	CH	-									-	-	-	-	-	-	2	100	2	100	26	100			-		100	100		
Liverpool Plains Shire Council		Total/Weighted Average (Note 1)		3		291	200	85	15	4	24	8	1	0	277	100	277	100	2	100	4	100	4	100	77	100	2 of 2	100					2	0
	unfiltered	Bootawa Dam Chlorinator	1986	70	CH	8231	14	11	6	4	6	3	3	1.8	1,028	100	1,028	98	1,028	90	3,096	100	1,480	100	1,016	100			312		100	100		
	groundwater	Tea Gardens	1986	4	CH	628	15	12	26	13	3	1	2	1	185	91	185	100	185	97	569	100	475	62	183	100			4		100	100		
		Bulahdelah	1986	2	C	153	160	79	6	1	45	17	1	0	160	100	160	99	160	98	494	100	409	100	158	100			1		100	100		
		Stroud	1997	2	C	152	79	29			60	13	1	0.5	187	100	187	100	187	98	575	100	490	100	185	100			1		100	100		
MidCoast County Council		Total/Weighted Average (Note 1)		78		9164	160	13	26	5	60	3	3	2	1,560	99	1,560	99	1,560	93	4,734	100	2,854	93	1,542	100	4 of 4	100	318	8.8			2	0
		Mudgee	2005	10	C	1586			2	1			0	0.1	9	100	9	100	12	100	12	100	12	100	43	93			5		100	67		
		Rylstone	1962	4	C	337	65	40	2	1			1	0.2	2	100	2	100	2	100	2	100	2	100	43	100			4		17	69		
		Gulgong	2005	4	C	389			1	1			2	0.9	2	100	2	100	2	100	2	100	2	100	36	100			3		100	69		
Mid-Western Regional Council		Total/Weighted Average (Note 1)		18		2312	65	6	2	1			2	0	13	100	13	100	16	100	16	100	16	100	122	100	2 of 3	31	12	1.7			0	0
	groundwater	Broadwater Creek	1986	18	CH	2000									-	-	-	-	4	100	4	100	4	100	52	100					33	81		
	groundwater	Mash	1988	5	CH	800									-	-	-	-	2	100	2	100	2	100	52	100								
	groundwater	Industrial Drive	1988	1	CH	55									-	-	-	-		100	4	100												
	dual supply	Boggabilla	1986	0.4	C	106									-	-	-	-	52	100	4	100	4	100	52	96			35		100	100		
		Mungindi		1	C	-									-	-	-	-	4	100	4	100	4	100	51	96			10		100	98		
	groundwater	Pallmallawa	1986	1	CH	70									-	-	-	-	2	99	2	100	2	100	26	100					100	100		
Moree Plains Shire Council		Total/Weighted Average (Note 1)		27		3031													64	100	20	100	16	100	233	100	3 of 6	95	45	10.2			2	1
		Moama	1991	6	DAF	569	85	44	5	5	37	12	0	0	2	100	2	100	2	100	2	100	2	100	74	100					100	100		
	dual supply	Mathoura	1989	2	C	136	100	75	5	5	37	20	1	0.2	2	100	2	100	2	100	2	100	2	100	75	100					100	100		
Murray Shire Council		Total/Weighted Average (Note 1)		8		705	100	50	5	5	37	13	1	0.1	4	100	4	100	4	100	4	100	4	100	149	100	2 of 2	100					0	0
	groundwater	Coleambally	-	5	C	-									-	-	-	-	-	-	2	100	2	100	52	92			-		100	100		
	groundwater	Darlington Point	-	5	U	-									-	-	-	-	-	-	2	100	2	100	48	100			-		100	92		
Murrumbidgee Shire Council		Total/Weighted Average (Note 1)																			4	100	4	100	100	96	1 of 2						0	0
		Muswellbrook	1988	15	C	1804	13	6	1	1	268	36	5	1.1	12	100	48	90	108	100	94	100	45	100	314	100			64		100	100		
		Denman	2008	3	MF	266	25	6	1	1	158	29	2	0.4	12	100	55	100	111	96	93	100	26	100	224	100			8		100	100		
		Sandy Hollow	2002	1	CH	25	18	5	2	1	55	8	17.8	2.0	24	100	52	56	103	99	89	100	24	87	133	100					100	100		
Muswellbrook Shire Council		Total/Weighted Average (Note 1)		18		2095	25	6	2	1	268	35	18	1	48	100	155	82	322	98	276	100	95	100	671	100	3 of 3	100	72	13.6			0	0
Nambucca Shire Council		Nambucca	1988	23	CH	1585			2	1			6	1	13	100	13	92	114	100	13	100	13	100	105	100	1 of 1	100	8	1.3	100	83	0	0
	groundwater	Narrabri	2005	18	CH	1549	20	2	5	2	2	0	2	0.3	2	50	2	100	12	100	12	100	12	100	51	100			74		100	98		
	groundwater	Wee Waa	2006	10	CH	358	3	3	3	3	3	3	3	2.5	1	100	1	100	2	100	2	100	2	100	50	100					100	96		
	groundwater	Boggabri	2005	4	CH	128	1	1	1	1	1	1	1	1.2	1	100	1	100	4	100	2	100	2	100	49	100			1		100	94		
	groundwater	Gwabegar	2006	0.4	CH	14	4	3	4	3	0	0	0	0		100	2	100			2	100	2	100	26	100					100	100		
	groundwater	Bellata	2005	0.4	CH	29	1	1	1	1	1	1	1	1.2	1	100	1	100	1		1	100	1	100	26	96			6		50	100		
	groundwater	Pilliga	2006	1	CH	21	2	2	2	2	2	2	2	2	2	100	2	100	2	100	2	100	2	100	25	100			1		100	96		
Narrabri Shire Council		Total/Weighted Average (Note 1)		34		2099	20	2	5	2	3	1	3	0.8	7	86	9	100	21	95	21	100	21	100	227	100	5 of 6	99	82	18.7			0	0
Narrandera Shire Council	*groundwater*	Narrandera	-	23	CH	1594			1	1			9	1.5	12	100	12	92	12	100	12	100	12	100	72	100	1 of 1	100	1	0.5	100	100	0	0
		Tomingley	2005	0.1	DF	9			3	2			1	0.7	2	100	2	100	2	100	12	100	2	100	12	100					100	100		
	groundwater	Narromine	1989		DAF	928			1	1			2	0.7	3	100	3	100	3	100	43	100	3	100	43	100					100	83		
Narromine Shire Council		Total/Weighted Average (Note 1)		0.1		937			3	1			2	1	5	100	5	100	5	100	55	100	5	100	55	100	2 of 2	100					0	5
Oberon Council	*bulk purchase (Fish Riv*	Oberon	2002	7	MF	542	44	28			4	3	0	0	365	100	365	-	365	100	12	100	2	100	52	100	1 of 1	100	4	3.1	100	100	0	0
		Icely Road	1982	38	C	4135	9	8			23	4	0	0.1	12	100	12	100	12	100	12	100	12	100	187	100			36		100	100		
	groundwater	Spring Hill/Lucknow	-	1	CH	67							1	0.3	2	100	2	100	2	100	2	100	2	100	49	100					100	94		
Orange City Council		Total/Weighted Average (Note 1)		39		4202	9	7			23	4	1	0	14	100	14	100	14	100	14	100	14	100	236	100	2 of 2	100	36	2.3			0	0

Water Utility	Source/type (Bulk Supplier)	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated to Potable	Colour Units				Turbidity Units				Compliance with 2004 NHMRC/NRMMC Australian Drinking Water Guidelines[3,6]														Water Quality Complaints		No. of Samples ÷ Allocation[5]		Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Colour		Turbidity		pH		Physical		Chemical		E. coli		E. coli Zones	E. coli % Pop Compliance			Chemical	E. coli		
		37a		*ML/d 37b*	*38a*	*ML 38b*	*Max 39a*	*Avg 39b*	*Max 39c*	*Avg 39d*	*Max 40a*	*Avg 40b*	*Max 40c*	*Avg 40d*	*Samples 42a*	*% 42b*	*Samples 42c*	*% 42d*	*Samples 42e*	*% 42f*	*Samples 42g*	*% 42h*	*Samples 42i*	*% 42j*	*Samples 42k*	*% 42l*	*Compliant 42m*	*42n*	*No. 43*	*/ 1,000 Props*	*% 44a*	*% 44b*	*days 45*	*days 46*
	groundwater	Braidwood	1987	1	CH	152	26	21	4	3	4	5	1	0.9	3	100	3	100	52	98	52	100	3	100	51	100			6		100	98		
		Bungendore	2005	3	CH	275	1	1	1	1	0	0	2	0.1	3	100	3	100	44	100	3	100	3	100	51	100					100	98		
		Captains Flat	2002	1	MF	52	27	25	1	1	6	6	0	0	3	100	3	100	27	96	24	100	3	100	26	100			2		100	100		
Palerang Council		Total/Weighted Average (Note 1)		5		479	27	10	4	2	6	2	2	0.4	9	100	9	100	123	98	79	100	9	100	128	100	3 of 3	100	8	4.2			0	0
Parkes Shire Council		Parkes	1987	9	C	5763	50	20	2	1	80	10	2	0.4	12	100	12	100	12	100	12	100	12	100	115	100	1 of 1	100	5	0.9	100	100	0	0
Queanbeyan City Council	*bulk purchase (ACTEW)*	Weetalabah (No Wtw)	-	-	-	4053									-	-	-	-	-	-													-	-
		Casino	1985	23	C	2405	300	95	10	2	520	34	1	0.1	38	100	133	98	144	100	747	100	553	100	144	100					100	100		
Richmond Valley Council	*bulk purchase (Rous Wa*	Total/Weighted Average (Note 1)		23	C	2405	300	95	10	2	520	34	1	0.1	38	100	133	98	144	100	747	100	553	100	144	100	1 of 1	100					0	0
		Waterworks	1961	80	C	5359	1,084	154	2	1	120	18	5	0.5	12	100	194	100	193	98	194	100	12	100	188	100			24					
		West Wagga	1979	32	C	4726			2	1			5	0.5	12	100	194	100	193	98	188	100	12	100	188	100			22					
		North Wagga	1977	25	C	2602			1	1			1	0.4	12	100	63	100	62	100	63	100	12	100	377	100			12		100	98		
		Ralvona	1989	4	A	306			1	1			1	0.5	2	100	52	100	52	96	52	100	2	100	51	100			1		100	98		
		Bulgary	1983	3	A	573			1	1			3	0.4	2	100	53	100	53	96	52	100	2	100	52	100			4		17	100		
		Gardiners Crossing	1983	2	A	198			1	1			1	0.5	2	100	54	100	54	93	52	100	2	100	52	100								
		Urana	1964	1	A	-							2	0.5	-	-	52	100	52	98			2	100	52	100			-		17	100		
		Walbundrie	2005	1	C	38			1	1			1	0.4	2	100	28	100	28	100	28	100	2	94	26	100					100	100		
		Humula	2003	0.3	CH	14			2	2			4	0.6	2	100	28	100	28	96	28	100	2	100	26	100			1		100	100		
		Woomargama	1960	0.2	A	20			1	1			1	0.5	2	100	28	100	28	100	28	100	2	100	26	100			2		100	100		
		Collingullie	2006	0	A	76			1	1			1	0.4	2	100	15	100	15	100	15	100	2	100	13	100					100	100		
		Tarcutta	1955	1	A	51			1	1			1	0.5	2	100	28	100	28	100	28	100	2	100	26	100					100	100		
		Oura	1982	0	A	45			1	1			1	0.5	2	100	15	100	14	100	2	100	2	100	13	100					100	100		
		Morundah	1992	0.2	C	10			1	1	145	49	1	0.5	2	100	27	100	27	100	27	100	2	100	26	100					100	100		
Riverina Water County Council		Total/Weighted Average (Note 1)		602		14018	1,084	59	2	1	145	7	5	0.4	56	100	831	100	827	98	757	100	58	100	1,116	100	14 of 14	100	66	2.3			0	0
		Nightcap	2007	70	DF,DAF	10388	42	14	7	1	11	3	1	0.1	52	100	52	100	52	100	52	100	52	100	92	100			7		100	96		
			2008	8	MF	113	74	9	3	1	79	5	0	0.1	37	100	37	100	37	100	37	100	37	100	37	100								
Rous County Council	*bulk supplier, retailer*	Total/Weighted Average (Note 1)		78		10501	74	14	7	1	79	3	1	0.1	89	100	89	100	89	100	89	100	89	100	129	100	2 of 2	100	7	0.2			0	0
		Bamarang	1999	75	C	8618	40	22	5	1	3	1	0.8	0.5	11	100	93	99	93	99	295	100	761	100	578	100			70		100	100		
		Flatrock	1998	28	C	3228	40	22	3	1	3	1	1	0.5	8	100	43	98	43	100	145	100	427	100	65	100			30		100	98		
		Milton	2000	11	DF	713	30	25	3	2	3	2	1	0.3	32	100	61	100	61	100	207	100	619	100	143	100			46		100	98		
		Kangaroo Valley	1993	1	MF	82	85	42	5	1	10	3	1	0	7	100	21	100	21	100	76	100	263	100	53	100			1		100	100		
Shoalhaven City Council		Total/Weighted Average (Note 1)		115		12641	85	22	5	1	10	1	1	0.5	58	100	218	99	218	100	723	100	2,070	100	839	100	4 of 4	100	147	3.2			0	0
Singleton Shire Council		Obanvale	1993	30	DF	2476	5	5	5	5	5	3	2.0	0.3	600	100	600	100	600	100	600	100	600	100	137	100	1 of 1	100	6	1.0	100	100	0	0
	unfiltered	East Jindabyne	2007	9	CH	-									-	-	-	-			2	100	2	100	55	100			-		100	100		
	unfiltered	Jindabyne	2005	8	CH	210									-	-	-	-	12	100	12	100	12	100	79	100					100	100		
	unfiltered	Adaminaby	2005	2	CH	-									-	-	-	-	-	-	2	100	2	100	27	100			-		17	100		
	unfiltered	Kalkite	2007	2	CH	28									-	-	-	-	-	-	3	100	3	100	37	100			-		100	100		
	unfiltered	Dalgety	2004	1	CH,MF	24									-	-	-	-	-	-	3	100	3	100	28	96			-		100	100		
Snowy River Shire Council		Total/Weighted Average (Note 1)		21		262													12	100	22	100	22	100	226	100	4 of 5	91					0	0
		Calala	1991	80	C	7955	126	21	8	1	71	7	1	0.2	11	100	11	100	11	100	22	100	460	100	148	100			-		100	100		
		Manilla	1990	5	C	431	191	27	6	2	55	6	2	0.4	2	100	2	100	2	100	4	100	571	93	50	100			-		100	96		
		Barraba	1995	4	DAF	154	2,470	368	11	1	1,909	114	1	0.2	2	100	2	100	2	100	4	100	109	100	51	100			-		100	98		
	groundwater	Attunga	1991	3	CH	62			8	3			1	0.5	2	100	2	100	2	100	4	100	84	100	26	100			-		100	100		
	groundwater	Nundle	1995	1	LS	47	210	39	49	12	34	5	3	1.1	2	100	2	100	2	100	4	100	82	100	26	100			-		100	100		
		Bendemeer	2007	1	C	28	395	122	3	0	36	9	0	0	2	100	2	100	2	100	4	100	81	100	24	100			-		100	92		
	groundwater	Kootingal/Moonbi	1991		CH	285			5	1			0	0.3	2	100	2	100	2	100	4	100	109	100	53	100			-		100	100		
Tamworth Regional Council		Total/Weighted Average (Note 1)		92		8962	2,470	27	49	1	1,909	9	3	0.2	23	100	23	100	23	100	46	100	1,496	100	378	100	7 of 7	100		-			0	0
		Tenterfield	1986	5.5	C										-	-	-	-	-	-					40	100			-			77		
		Urbenville	-	1.8	CH										-	-	-	-	-	-	2	100	2	100	150	92			-		100	100		
		Jennings	-		C										-	-	-	-	-	-									-					
Tenterfield Shire Council		Total/Weighted Average (Note 1)		7		413															2	100	2	100	190	98	1 of 2	71					0	0
		Tumbarumba	-		CH	-									-	-	-	-	-	-	3	100	3	100	58	90			10		100	100		
		Khancoban	-		CH	88									3	67	3	67	3	100	3	100	3	100	21	95					100	81		
Tumbarumba Shire Council		Total/Weighted Average (Note 1)				88									3	67	3	67	3	100	6	100	6	100	79	91	0 of 2		10	8.7			0	0
		Tumut	1978	16	C	1150	250	15	15	5	52	4	5	0.2	365	100	365	100	12	100	13	100	12	100	69	100			24		100	100		
		Adelong	1996	3	LS	129	250	144	11	1	108	10	1	0.2	365	100	365	100	2	50	2	100	2	100	38	100					100	73		
		Batlow	2001	2	MF	170	261	142	10	8	8	4	1	0.3	261	100	261	100	4	100	4	100	4	100	41	100					100	79		
		Talbingo	1995	2	DF	40	40	20	5	3	3	1	0	0.1	365	100	365	100	2	100	2	100	2	100	20	100					100	77		
		Brungle	2003	0.3	MF	21	250	29	10	5	86	12	2	1.0	95	100	95	100	3	100	14	100	3	100	14	93					100	100		
Tumut Council		Total/Weighted Average (Note 1)		23		1510	261	41	15	5	108	4	5	0.2	1,451	100	1,451	100	23	96	35	100	23	100	182	100	4 of 5	99	24	5.4			0	0
		Bray Park	1983	60	C	8577	93	26	5	1	164	13	3	0.3	53	100	53	100	456	60	1,822	100	2,838	100	457	100			24		100	100		
		Uki	1998	1	C	43	90	33	5	2	68	10	4	0.5	52	100	52	100	104	91	416	100	413	100	104	100					100	100		
		Tyalgum	1969	0.3	DF	19	68	17	37	8	60	9	11	3.7	50	94	50	78	103	93	412	100	405	100	103	100			1		100	100		
Tweed Shire Council		Total/Weighted Average (Note 1)		61		8639	93	26	37	1	164	13	11	0.3	155	98	155	93	663	70	2,650	100	3,656	100	664	100	3 of 3	100	25	0.8			3	71

Water Utility	Source/type (Bulk Supplier)	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated to Potable	Colour Units				Turbidity Units				Compliance with 2004 NHMRC/NRMMC Australian Drinking Water Guidelines[3, 6]												Water Quality Complaints		No. of Samples ÷ Allocation[5]		Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Colour		Turbidity		pH		Physical		Chemical		E. coli		E. coli Zones	E. coli % Pop Compliance			Chemical	E. coli		
		37a		*ML/d 37b*	*38a*	*ML 38b*	*Max 39a*	*Avg 39b*	*Max 39c*	*Avg 39d*	*Max 40a*	*Avg 40b*	*Max 40c*	*Avg 40d*	*Samples 42a*	*% 42b*	*Samples 42c*	*% 42d*	*Samples 42e*	*% 42f*	*Samples 42g*	*% 42h*	*Samples 42i*	*% 42j*	*Samples 42k*	*% 42l*	Compliant *42m*	*42n*	*No. 43*	*/ 1,000 Props*	*% 44a*	*% 44b*	*days 45*	*days 46*
		Murrurundi	1983	2	CH	110									-	-	-	-	38	50					44	100						85		
	groundwater	Merriwa	1980	2	C	300			1	1			1	0.4	2	100	2	100	2	100	2	100	2	100	49	100					100	94		
	groundwater	Cassilis	2001	1	CH	20			1	1			0	0.1	2	100	2	100	2	100	2	100	2	100	27	100					100	100		
		Scone And Aberdeen	1982	12	CH	2641			5	1			1	0.3	7	100	7	100	8	100	2	100	2	100	95	96			1		100	100		
Upper Hunter Shire Council		Total/Weighted Average (Note 1)		17		3071			5	1			1	0.3	11	100	11	100	50	62	6	100	6	100	215	100	3 of 4	14	1	0.2			0	0
		Crookwell	1990	3	C	290	60	20	3	2	4	3	0	0.3	2	100	2	100	3	33	52	100	2	100	50	100			4		100	96		
	groundwater	Gunning	2005	2	CH	45	100	10	5	3	10	5	0.6	0.3	2	100	2	100	2	100	26	100	2	100	52	96			3		100	100		
		Dalton	1195	1	CH	20			1	1			1	1	3	100	3	100	3	100	3	100	3		26	100			2		100	100		
		Taralga	1985	2	U	35			8	8			5	2	3	67	3	67	3	67	3	100	3	100	26	100					100	100		
Upper Lachlan Council		Total/Weighted Average (Note 1)		8		390	100	16	8	2	10	3	5	0	10	90	10	90	11	73	84	100	10	70	154	100	3 of 4	88	9	4.7			0	0
		Kentucky Creek	1985	5	C	278	120	18	7	5	72	6	2	1.1	14	100	14	100	14	100	14	100	14	100	52	96			2		100	100		
		Bundarra	1994	1	LS	53	20	8	1	0	30	10	1	0.3	14	100	14	100	14	100	14	100	14	100	26	100			1		100	100		
Uralla Shire Council		Total/Weighted Average (Note 1)		6		331	120	16	7	4	72	7	2	1.0	28	100	28	100	28	100	28	100	28	100	78	97	1 of 2	16	3	1.9			0	0
	dual supply	Barham	1993	2	LS	135	550	310	1		120	35	1		26	100	26	100	26	100	365	100	26	100	48	100					100	92		
	unfiltered	Wakool Rural/Town	2004	1	MF	72	550	480			80	43			26	100	26	100	26	100	365	100	26	100	26	100								
		Moulamein	2002	1	MF	39	550	236			72	35			26	100	26	100	26	100	26	100	26	100	23	100					100	88		
	unfiltered	Koraleigh	2004	0.1	MF	16	230	140			60	25			26	100	26	100	26	100	26	100	26	100	26	100			-		100	100		
		Tooleybuc	2004	0.3	MF	39	325	130			185	22			26	100	26	100	26	100	26	100	26	100	22	95					100	85		
Wakool Shire Council	*bulk purchase (Murray I*	Total/Weighted Average (Note 1)		4		301	550	309	1		185	35	1		130	100	130	100	130	100	808	100	130	100	145	100	4 of 5	87					0	0
Walcha Council		Walcha	1985	5	C	195									-	-	-	-	400	100	400	100	2	100	48	100	1 of 1	100	1	1.1	100	92	0	0
	dual supply	Walgett	1964	1	C	-									-	-	-	-	-	-	2	100	2	100	44	100			-		100	85		
	dual supply	Collarenebri	1996	1	MF	-									-	-	-	-	-	-	3	100	3	100	44	100			-		100	85		
Walgett Shire Council		Total/Weighted Average (Note 1)				473															5	100	5	100	88	100	2 of 2						0	0
	dual supply	Warren Chlorinator	2000	4	CH	261	1	1	1	1	1	1	1	0.6	3	100	3	100	3	100	3	100	3	100	50	100			10		100	96		
	groundwater	Nevertire	2000	0.1	CH	28	2	2	2	2	0	0	0	0.3	2	100	-	100	2	100	2	100	2	100	25	92			4		100	96		
	groundwater	Collie	2000	0.1	CH	5	1	1	1	1	2	1	2	1.3	2	100	2	100	2	100	2	100	2	100	13	92			3		100	100		
Warren Shire Council	*bulk purchase (State Wa*	Total/Weighted Average (Note 1)		4		294	2	1	2	1	2	1	2	0.6	7	100	5	100	7	100	7	100	7	100	88	97	1 of 3	89	17	17.7			0	0
		Coonabarabran	1993	8	C	352	90	58	5	1	18	10	6	0.8	358	100	364	98	2	100					46	100			1			88		
		Binnaway	1993	1	C	85	40	20	10		38	2	6	0.5	295	100	295	100	7	100					23	100						88		
	groundwater	Dunedoo	1984	1	CH	208									-	-	-	-	318	100					46	100						88		
	groundwater	Coolah	1996	1	CH	131										-		-	337	100					46	100						88		
	groundwater	Baradine	1999	1	C	166							1	0.4		-	305	100	2	100			2	100	46	100					100	88		
		Mendooran	1968	0.3	CH	110										-		-	281	93					22	82			2			85		
	groundwater	Bugaldie	1960		CH	-										-		-		-					11	100						92		
	groundwater	Kenebri	1950		CH	6										-		-		-					11	100						92		
Warrumbungle Shire Council		Total/Weighted Average (Note 1)		12		1058	90	21	10	0	38	4	6	0.4	653	100	964	99	947	98			2	100	251	100	7 of 8	90	3	0.9			0	2
		Wellington	1993	15	LS	1099	8	5	4	1	51	5	4	1.0	365	100	365	100	365	100	365	100	12	100	51	100					100	98		
		Geurie	1994	2	LS	85	15	6	1	1	33	7	2	0.4	365	100	365	100	365	100	365	100	12	100	35	100					100	67		
Wellington Council		Total/Weighted Average (Note 1)		16		1184	15	5	4	1	51	5	4	1.0	730	100	730	100	730	100	730	100	24	100	86	100	2 of 2	100					0	0
		Buronga/Gol-Gol/Dareton	1994	4	LS	365	89	43			15	13	0	0.2	176	100	9	100	2		78	100	78	100	78	100			6		100	100		
		Wentworth	1991	1	C	226							0	0.1		-	4	100	4	100	52	100	52	100	52	100			6		100	100		
	dual supply	Pooncarie	1994	0.2	LS	11					96	96	1	1.1	-	-	3	100	26	100	26	100	26	100	26	100					100	100		
Wentworth Shire Council		Total/Weighted Average (Note 1)		5		602	89	26			96	9	1	0.2	176	100	16	100	32	94	156	100	156	100	156	100	3 of 3	100	12	5.4			0	0
		Bundanoon	1989	40	DAF	4137	60	44	1	1	15	7	7	1.2	11	100	11	91	11	82	11	100	11	82	283	100			79		100	100		
		Medway	1988	10	DAF	450	70	55	1	1	13	4	0	0.1	2	100	2	100	2	100	14	100	13	100	88	100			11		100	100		
Wingecarribee Shire Coun	*bulk purchase (SCA)*	Total/Weighted Average (Note 1)		50		4587	70	47	2	1	15	7	9	1.1	13	100	13	92	13	85	25	100	24	92	371	100	2 of 2	100	90	5.0			0	0
Wyong Shire Council		Mardi	1994	160	DF	16668	60	43	5	3	4	2	1	0.5	506	100	506	100	506	99	506	100	559	100	390	100	1 of 1	100	304	5.1	100	92	0	0
Yass Valley Council		Yass	1989	13	DAF	827	200	90	5	5	71	12	2	0.7	365	100	365	100	365	100	365	100	11	100	95	96	0 of 1		7	2.3	92	100	0	0
Young Shire Council	*bulk purchase (Goldenfields)*					1508															12	100	12	100	172	100	1 of 1	100						

Notes:

1. Where an LWU has more than one water treatment works, the reported compliance values have been pro-rated on the basis of the number of samples tested at each treatment works and are shown in bold in the final line for that LWU.
However, as Tenterfield Council collected 150 E. coli samples for the small Urbenville supply, the E. coli result for Tenterfield was pro-rated on the basis of the treatment capacity at Tenterfield (5.5 ML/d) and Urbenville (1.8 ML/d).
The capacity (37b), treated volume (38b), number of samples (eg. 42a) and number of water quality complaints (43) shown in the table are the totals for all treatment works for that LWU.
The days of chlorination system failure (45), and days o
2. For "Type of Treatment Works" (38a); A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, DF = Direct Filtration, DAF = Dissolved Air Flotation, LS = Lagoon Sedimentation, MF = Microfiltration, OZ = Ozonation, U = Ultra-Violet Disinfection.
3. Physical, Chemical and E. coli results are from the NSW Health Drinking Water Monitoring Program and also from NSW Performance Monitoring except for for the following LWUs which only have NSW Health results:
Eurobodalla, Murrumbidgee, Queanbeyan, Tenterfield, Walgett and Young.
4. The additional Physical, Chemical and E. coli results from the NSW Health Drinking Water Monitoring Program have also been included in Tables 5 and 12 and Figures 15 to 17.
5. NSW Health has provided Chemical and Microbiological monitoring allocations for each LWU. The sampling reported to NSW Health has been adjusted to include sampling reported by LWUs for NSW Performance Monitoring but not included in the Drinking Water Program (44a) and (44b). LWUs with reported sampling less than 100% of the allocation should increase their future sampling to comply with the NSW Health requirements.
6. An LWU has complied with the guidelines for microbiological water quality (ie. it is shown as 100% compliant) if at least 98% of samples had no E. coli.
Similarly, chemical water quality is satisfactory (shown as 100% compliant) if 95% of results meet the guidelines and physical (non-health related) water quality is satisfactory if the mean value of results meets the guideline values.

Appendix D2: 2008-09 sewage treatment performance

Water Utility	Comment	Sewage Treatment Works	Year built or Augmented	Capacity	Standard of Treatment[4]	Type of Treatment Works[2]	Nitrogen Removal	Phosphorus Removal	Effluent Discharge[3]	Volume of Sewage Receiving Treatment	90 Percentile Licence Limits[5] and DEC Licence Compliance												Odour Complaints		Sampling Days	Major Malfunction (Treatment Processes)
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms		No.	No./1000 props	
											mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	cfu /100mL	% Samples			
			1	EP 10	3	2	Yes/No 5	Yes/No 6		ML 15	49	50	51	52	53	54	55	56	57	58	59	60	61	62	68	69	days 63	days 67
		Albury	1987	40,000	T	BNR	Y	Y		1,449	15	100	20	100	15	100		15	10	100	1	100	NL	100			13	0
		Albury (Waterview)	1999	26,500	AT	CEA	Y	Y		2,260	12	100	15	100	15	100		12	2	100	1	100	300	77			13	0
		Hume Weir	1980	500	T	IEA			R	18	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			26	0
	No licence limits	Lara Lakes	1990	200	S	A			L	10	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			13	0
Albury City Council		Total/Weighted Average [1,6]		67,200		IEA, BNR			L R	3,737	12	100	15	100	15	100			2	100	1	100	300	86			65	0
Armidale Dumaresq Council		Armidale	1989	22,000	T	TF			L R	1,819	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
	100% limits	Ballina	1991	1,200	AS	TF	Y		O	1,665	20	100	15	100	NL	100		20	10	100	NL	100	300	100	2		26	0
	100% limits	Lennox Head	1994	18,000	AS	IEA	Y		O	2,206	20	100	30	100	NL	100		20	10	85	NL	100	200	100	7		26	0
	100% limits	Alstonville	1986	8,000	AS	IEA	Y	Y	R	504	20	100	30	100	NL	100		20	10	100	1	100	NL	100	4		13	0
	100% limits	Wardell	1997	1,750	AS	IEA	Y		R	204	15	100	20	100	NL	100		15	10	100	NL	100	200	100			26	0
Ballina Shire Council		Total/Weighted Average [1,6]		28,950		IEA, TF			R O	4,579	20	100	30	100	NL	100			10	93	NL	100	200	100	13	1.0	91	0
	No Discharge Licence	Balranald	1999	2,000	S					131	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			2	0
	No Discharge Licence	Euston	1995	1,100	S	A					NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			2	0
Balranald Council		Total/Weighted Average [1,6]		3,100		A				131	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
Bathurst Regional Council		Bathurst	1998	55,000	T	IEA, BNR	Y	Y	R	2,949	20	100	25	100	15	100		20	10	100	1	100	200	100	1	0.1	52	0
		Wolumla	2007	800	T	MBR	Y	Y		19	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
		Cobargo	2006	800	T	MBR	Y	Y		26	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
		Candelo	2007	800	T	MBR	Y	Y		16	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
		Kalaru	2008	800	T	MBR	Y	Y		9	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
		Tura Beach	2006	4,500	S	CEA	Y		L	165	10	100	20	100	10	100		10	2	100	NL	100	NL	100	1		12	0
		Eden	1998	8,000	AS	IEA	Y		O	290	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	0
		Tathra	2004	6,200	T	CEA	Y	Y		141	10	100	15	100	10	100		10	2	100	1	100	100	100			12	0
		Bega	2008	8,000	T	IEA	Y	Y	R	308	10	100	10	100	10	84		10	2	100	1	100	200	100	1		12	5
		Bermagui	2008	6,000	AS	CEA	Y		O	136	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	0
		Merimbula	2008	15,500	AS	IEA	Y		L O	647	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	0
Bega Valley Shire Council		Total/Weighted Average [1,6]		51,400		IEA, CEA			L R O	1,757	20	100	30	100	NL	100			10	100	NL	100	NL	100	5	0.4	72	5
		Urunga	1989	6,650	T	IEA	Y	Y	R	326	10	100	15	100	10	100		10	2	100	NL	100	200	100	1		26	0
		Bellingen	1994	5,000	T	IEA	Y	Y	R	364	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	3		26	0
		Dorrigo	1970	1,500	T	TF			R	146	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
Bellingen Shire Council		Total/Weighted Average [1,6]		13,150		IEA, TF			R	836	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	4	1.4	64	0
	No licence limits	Tocumwal	1944	4,000	T	TF			L		NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
		Finley	1967	3,200	T	TF			L		NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	1		4	0
	No licence limits	Barooga	1989	3,000	T	A			L		NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
	No licence limits	Berrigan	1966	1,500	T	TF			L		NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
Berrigan Shire Council		Total/Weighted Average [1,6]		11,700		TF, A			L		NL	100	NL	100	NL	100			NL	100	1	100	NL	100	1	0.3	16	0
		West Wyalong	1986	4,000	AS	C			L O	219	20	100	30	100	NL	100		20	NL	100	NL	100	NL	100			4	0
	No licence limits	Ungarie	1961	600	AS	C			L O	28	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
	No licence limits	Barmedman	1940	400	S	TF			L O	21	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Bland Shire Council		Total/Weighted Average [1,6]		5,000		IEA, TF			L O	268	20	100	30	100	NL	100			NL	100	NL	100	NL	100			4	0
Blayney Shire Council		Blayney	1991	7,000	AS	IEA	Y	Y	R	250	20	100	25	100	15	100		20	10	100	1	100	200	100			12	0
Bogan Shire Council	*No licence limits*	Nyngan	1991	3,735	S	A			L R	172	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	8	7.6	4	0
		Bombala		3,000	S	TF			L R O	-		20	100	30	100	NL	100		20	10	100	NL	100	NL	100	6		8	0
	No licence limits	Delegate	192	680	AS	IEA			L R O	35	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
Bombala Council		Total/Weighted Average [1,6]		3,680		IEA, TF			L R O	35	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	6	7.9	8	0
Boorowa Council	*No licence limits*	Boorowa		3,400	S	TF			L R	86	20	100	30	65	NL	100		20	10	100	NL	100	NL	100	2	3.3	12	0
Bourke Shire Council		Bourke	1982	5,000	S	A			L	189	15	25	20	25	15	75		15	10	100	10	100	NL	100	3	2.8	12	0
		Brewarrina	1971	1,600	S	TF			L	-		20	-	30	-		15	20	10		10						0
	No licence limits	Goodooga		1,600	S	A			L R O	-		NL		100	NL	100	NL		NL	100	NL	100	NL	100				0
	No licence limits	Barwon Four		-					L R O	-		NL		100	NL	100	NL		NL	100	NL	100	NL	100	-			-
Brewarrina Shire Council		Total/Weighted Average [1,6]		3,200		TF, A			L R O																		0
		Byron Bay West	2005	29,000	T	BNR	Y	Y	R	1,673	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	5		26	0
		Ocean Shores	1997	8,000	AS	IEA	Y	Y	R	589	15	100	20	100	15	100		15	10	100	1	100	200	100	5		26	0
		Mullumbimby	1999	3,200	AS	TF		Y	R	613	15	100	20	100	NL	100		15	10	100	1	88	200	58	2		26	0
		Brunswick Heads	1990	1,600	AS	TF		Y	R	282	30	70	30	100	NL	100		30	10	100	NL	100	200	62			26	0
		Bangalow	2007	3,500	AT	CEA	Y	Y	R	145	10	100	15	100	10	100		10	5	100	1	81	200	100			26	0
Byron Shire Council		Total/Weighted Average [1,6]		45,300		IEA, TF, BNR			R	3,302	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	12	1.2	130	0
		Canowindra	1978	2,500	S	TF			L	123	30	100	30	100	15	100		30	10	100	10	100	NL	100			12	0
		Molong	1979	2,000	AS	IEA			R	118	30	100	30	83	15	100		30	10	100	10	83	600	100			12	0
	No licence limits	Eugowra	1999	550	S	A			L	29	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
Cabonne Council		Total/Weighted Average [1,6]		5,050		IEA, TF			L R	270	30	100	30	93	15	100			10	100	10	93	NL	100			24	0
	No licence limits	Hillston	1978	1,000	AS	IEA			L R O	105	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
	No licence limits	Goolgowi	1973	400	S	A			L R O	-	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	-			4
	No licence limits	Rankins Springs	1986	150	S	A			L R O	-	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				4
Carrathool Shire Council		Total/Weighted Average [1,6]		1,550		IEA, A			L R O	105	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				8
Central Darling Shire Council	*No licence limits*	Wilcannia	1992	1,510	S	AL				100	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
		Grafton North	1989	14,700	S	TF			R	1,116	20	81	30	81	NL	100		20	10	100	NL	100	NL	100	3		27	0
		Yamba	1999	7,500	AS	IEA	Y	Y	L R O	880	15	100	20	100	15	100		15	10	100	1	100	200	85	6		14	0
		Grafton South	1989	6,400	T	TF			L R O	351	20	100	30	77	NL	100		20	10	100	NL	100	NL	100	3		27	0
		Clarenza	1988	5,000	T	IEA			L R O	408	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			27	0
		Maclean	1,976	3,000	T	TF			L R O	395	20	85	30	78	NL	100		20	10	100	NL	100	NL	100			14	0
		Coutts Crossing	1998	1,000	AS	IEA			L R	39	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			14	0
		Townsend	1983	500	S	A			L R O	67	50	35	50	21	NL	100		50	10	100	NL	100	NL	100			14	0
		Ilarwil	1991	160	S	A			L R O	4	50	83	50		NL	100		50	10	100	NL	100	NL	100			14	0
Clarence Valley Council		Total/Weighted Average [1,6]		38,260		IEA, TF			L R O	3,260	20	90	30	87	NL	100			10	100	NL	100	NL	100	12	0.8	151	0

Water Utility	Comment	Sewage Treatment Works	Year built or Augmented	Capacity	Standard of Treatment[3]	Type of Treatment Works[4]	Nitrogen Removal	Phosphorus Removal	Effluent Discharge[3]	Volume of Sewage Receiving Treatment	90 Percentile Licence Limits[5] and DEC Licence Compliance														Odour Complaints		Sampling Days	Major Malfunction (Treatment Processes)
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms		No.	No./1000 props		
			1	EP 10	3	2	Yes/No 5	Yes/No 6		ML 15	mg/L 49	% Samples 50	mg/L 51	% Samples 52	mg/L 53	% Samples 54	mg/L 55	% Samples 56	mg/L 57	% Samples 58	mg/L 59	% Samples 60	cfu /100mL 61	% Samples 62	68	69	days 63	days 67
		Cobar	1982	10,000	S	CEA				318	-	100	-	100	NL	100			NL	100	NL	100	NL	100			12	0
	No licence limits	Murrin Bridge		-					L R O		NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	-			-
Cobar Shire Council		Total/Weighted Average [1,6]		10,000		CEA			L R O	318	-	100	-	100	NL	100			NL	100	NL	100	NL	100			12	0
		Coffs Harbour	1986	42,000	S	IEA	Y		O	3,653	50	100	50	100	NL	100		50	10	100	NL	100	NL	100	3		52	4
		Sawtell	1896	18,000	S	IEA	Y		L R O	1,697	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			52	0
		Woolgoolga	2005	18,000	AS	IEA	Y	Y	L R O	1,139	10	100	15	100	15	100		10	2	100	2	100	NL	100	3		52	0
		Moonee/Emerald	1999	7,000	AT	BNR	Y	Y	O	206	10	100	15	100	15	100		10	2	100	2	100	NL	100			52	0
		Corindi Beach	2000	1,500	T	IEA	Y	Y	L	99	15	100	20	100	15	100		15	10	100	5	100	200	100			12	0
Coffs Harbour City Council		Total/Weighted Average [1,6]		86,500		IEA, TF, BNR			L R O	6,794	50	100	50	100	NL	100			10	100	NL	100	NL	100	6	0.3	220	4
		Coolamon	1965	1,200	T	TF			L	68	30	100	20	100	NL	100		30	NL	100	NL	100	10	100			4	0
	No licence limits	Ganmain	1998	100	S	A			L	30	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Coolamon Council		Total/Weighted Average [1,6]		1,300		TF, A			L	98	30	100	20	100	NL	100			NL	100	NL	100	10	100			4	0
		Cooma (The Glen)	1998	15,000	AT	IEA	Y	Y	R	646	10	100	15	100	10	100		10	2	100	NL	100	200	100			13	0
		Nimmitabel	2008	500	AS	IEA		Y	L R O	19	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	2		13	0
Cooma-Monaro Council		Total/Weighted Average [1,6]		15,500		IEA, TF			L R O	665	10	100	15	100	10	100			2	100	NL	100	200	100	2	0.6	26	0
		Coonamble	1956	4,000	T	TF			L	210	20	100	50	83	20	100		20	10	100	10	100	NL	100			12	0
		Gulargambone	1975	750	AS	IEA			L R	37	20	100	25	100	15	100		20	10	100	15	100	600	50			12	0
Coonamble Council		Total/Weighted Average [1,6]		4,750		IEA, TF			L R	247	20	100	50	86	20	100			10	100	10	100	NL	100			24	0
Cootamundra Council		Cootamundra	1992	14,000	AT	AL	Y	Y	R	387	30	100	40	100	20	100		30	10	100	1	100	200	100	1	0.4	5	0
		Corowa	1988	12,200	S	TF			L	345	-	100	-	100	NL	100			NL	100	NL	100	NL	100	2		12	0
		Mulwala	2008	5,316	T	IEA	Y	Y	R	231	20	100	30	100	40	100		20	10	80	10	100	NL	100	2		12	0
	No licence limits	Howlong	1990	2,500	S	A			L	130	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
Corowa Council		Total/Weighted Average [1,6]		20,016		TF, A			L R	706	-	100	-	100	NL	100			NL	100	NL	100	NL	100	4	0.9	24	0
		Broken Hill (Wills St)	1988	-	T	TF			L	967	50	100	50	100	NL	100		50	10	100	NL	100	NL	100	6		26	0
		Broken Hill South	1968	-	T	TF			L R O	273	50	100	50	100	NL	100		50	10	100	NL	100	600	100	2		26	0
Country Energy		Total/Weighted Average [1,6]				TF			L R O	1,240	50	100	50	100	NL	100			10	100	NL	100	NL	100	8	0.8	52	0
		Cowra	1977	8,000	S	TF			R	672	20	100	30	75	NL	100		20	10	100	NL	100	200	45			12	0
	No licence limits	Wyangala		-					L R O		NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	-			-
Cowra Council		Total/Weighted Average [1,6]		8,000		TF			L R O	672	20	100	30	75	NL	100			10	100	NL	100	200	45			12	0
Deniliquin Council		Deniliquin	1998	11,500	S	TF	Y	Y		555	20	100	30	100	40	100		20	10	100	10	100	200	100	10	3.2	12	0
Dubbo City Council		Dubbo (Troy Junction)	1985	40,000	AS	IEA	Y		L	2,663	20	100	25	100	15	100		20	10	100	10	100	200	75	3	0.2	12	0
		Batemans Bay	1984	15,000	AS	IEA			L R O	1,504	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	14		12	1
		Narooma	1984	12,000	AS	CEA			L R O	496	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	6		12	0
		Moruya	2000	8,000	T	IEA		Y	L R O	239	20	100	30	100	15	100		20	10	100	1	100	NL	100	2		12	0
		Tomakin	1984	8,000	AS	IEA			L R O	426	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
		Tuross Heads		4,000	AS	C			L R O	210	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
Eurobodalla Council		Total/Weighted Average [1,6]		47,000		IEA, CEA, TF			L R O	2,875	20	100	30	100	NL	100			10	100	NL	100	NL	100	22	1.3	60	1
Forbes Council		Forbes	2005	12,000	T	IEA	Y	Y	L R	636	10	100	50	100	10	100		10	10	100	NL	100	200	100			12	0
Gilgandra Council		Gilgandra	1980	3,000	T	TF			L	280	20	100	50	100	20	100		20	10	100	10	100	NL	100	3	2.2	5	3
	No licence limits	Deepwater	1987	500	S	A			L R	13	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
		Glen Innes	2007	8,000	S	IEA	Y	Y	R		10	100	15	100	10	100		10	2	100	NL	100	200	100			12	0
Glen Innes Severn Council		Total/Weighted Average [1,6]		8,500		C			L R	13	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			24	0
Gloucester Council		Gloucester	1985	4,600	T	TF	Y	Y	R	459	30	100	40	100	40	100		30	NL	100	NL	100	NL	100			13	0
		Kincumber	1983	180,000	AS	C	Y		L R O	10,587	30	100	50	100	NL	100		30	10	100	NL	100	NL	100	114		60	0
		Woy Woy	1989	50,000	AS	CEA	Y		L R O	2,854	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	26		60	0
Gosford City Council		Total/Weighted Average [1,6]		230,000		CEA, C			L R O	13,441	30	100	50	100	NL	100			10	100	NL	100	NL	100	140	2.0	120	0
		Goulburn	1989	31,500	T	TF		Y	L	1,623	20	83	30	58	NL	100		20	10	100	NL	100	NL	100			12	0
		Marulan	1990	1,100	S	A			L	-	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Goulburn Mulwaree Council		Total/Weighted Average [1,6]		32,600		A,TF			L	1,623	20	83	30	58	NL	100			10	100	NL	100	NL	100			12	0
		Holbrook	1969	1,600	T	TF			R	119	20	100	30	25	NL	100		20	10	100	NL	100	NL	100			4	0
	No licence limits	Jindera	2005	1,200	T	A			L	61	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	-			-
		Henty	1971	1,000	T	IEA			L	47	20	100	30	75	20	100		20	10	100	10	50	NL	100			4	0
		Culcairn	1996	1,200	T	IEA			L	97	20	100	30	100	20	100		20	10	100	10	100	NL	100			4	0
		Walla Walla	1981	1,000	T	IEA				40	20	100	30	75	20	100		20	10	100	10	100	NL	100			4	0
	No licence limits	Burrumbuttock	1990	100	T	A			L	2	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
Greater Hume Council		Total/Weighted Average [1,6]		6,100		IEA, A			L R	366	20	100	30	70	NL	100			10	100	NL	100	NL	100			16	0
		Griffith	1992	65,000	S	TF		Y	R	1,903	30	100	30	75	NL	100		30	10	100	NL	100	200	100	3		12	0
		Yenda	1981	34,000	S	AL			R	133	50	100	50	84	NL	100		50	NL	100	NL	100	600	100			6	0
	No licence limits	Bilbul	1990	310	S	A				27	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Griffith City Council		Total/Weighted Average [1,6]		99,310		AL, TF			R	2,063	30	100	30	76	NL	100			10	100	NL	100	200	100	3	0.4	18	0
Gundagai Council	*No licence limits*	Gundagai	1972	3,500	S	TF			L	117	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	1	1.1	10	0
		Gunnedah	1969	11,000	S	TF			L	1,310	20	100	30	75	NL	100		20	10	100	NL	100	NL	100			12	0
	No licence limits	Curlewis	1990	1,650	nil	A					NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Gunnedah Council		Total/Weighted Average [1,6]		12,650		TF, A			L	1,310	20	100	30	75	NL	100			10	100	NL	100	NL	100			12	0
		Guyra	2000	3,300	AS	CEA	Y	Y	R	135	15	100	20	100	15	100		15	10	100	1	100	NL	100			12	0
		Tingha	2005	963	S	A					-	-	-	-	-	-												0
Guyra Council		Total/Weighted Average [1,6]		4,263		CEA, A				135	15	100	20	100	15	100			10	100	1	100	NL	100			12	0
		Bingara	1970	2,000	T	TF			L	52	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
		Warialda	1969	1,500	T	TF			L R O	196	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
Gwydir Shire Council		Total/Weighted Average [1,6]		3,500		TF			L R O	248	20	100	30	100	NL	100			10	100	NL	100	NL	100			24	0
Harden Council		Harden Murrumburrah	1978	4,000	S	TF			L R O	352	20	66	30	100	NL	100		20	NL	100	NL	100	NL	100			12	0
		Port Macquarie	1993	52,000	AT	IEA	Y	Y	R	6,042	10	100	15	100	20	100		10	2	100	1	48	200	100	4		12	0
		Camden Haven (Dunbogan)	1991	9,000	AS	TF			O	975	20	20	30	100	NL	100		20	10	100	NL	100	NL	100	6		12	0
		Wauchope	1991	8,000	AS	IEA	Y		L R O	1,324	30	100	30	100	NL	100		30	NL	100	NL	100	NL	100	2		12	0
		Lake Cathie\Bonny Hills	2009	9,000	AT	IEA	Y	Y	L	604	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
		Kew/Kendall	2001	3,000	AS	IEA	Y			137	20	88	30	20	NL	100		20	NL	100	NL	100	500	100			12	0
		Lighthouse Beach	1998	-	AS	IEA			L R O	-	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	-			-
Port Macquarie-Hastings Council		Total/Weighted Average [1,6]		81,000		IEA, TF, BNR			L R O	9,082	10	91	15	99	20	100			2	100	1	100	200	100	12	0.4	60	0

Water Utility	Comment	Sewage Treatment Works	Year built or Augmented	Capacity	Standard of Treatment[3]	Type of Treatment Works[4]	Nitrogen Removal	Phosphorus Removal	Effluent Discharge[3]	Volume of Sewage Receiving Treatment	90 Percentile Licence Limits[5] and DEC Licence Compliance														Odour Complaints		Sampling Days	Major Malfunction (Treatment Processes)
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms		No.	No./1000 props		
				EP						ML	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	cfu /100mL	% Samples			days	days
			1	10	3	2	Yes/No 5	Yes/No 6		15	49	50	51	52	53	54	55	56	57	58	59	60	61	62	68	69	63	67
		McGraths Hill	1969	1,300	T	TF	Y	Y	R	810	30	100	75	89	NL	100		30	10	100	NL	100	NL	100			26	0
		South Windsor	2003	27,000	AT	C	Y	Y	R	1,588	10	100	15	100	10	81		10	NL	100	NL	100	200	88			26	0
Hawkesbury City Council		Total/Weighted Average [1,6]		28,300		unk			R	2,398	10	100	15	96	10	87			NL	100	NL	100	200	92			52	0
Hay Council		Hay	1942	3,000	S	TF				277	-	100	-	100	NL	100			NL	100	NL	100	NL	100				0
		Inverell	1986	12,000	AS	IEA			L R O	-	20	-	30	-				20	10					-			-
		Ashford	1970	1,000	AS	A			R	35	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			14	0
		Delungra		500	AS	IEA			L R O	30	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			14	0
	No licence limits	Gilgai	1990	500	S	A			L R O	-	-	-	-	-										-			-
Inverell Council		Total/Weighted Average [1,6]		14,000		IEA			L R O	65	20	100	30	100	NL	100			10	100	NL	100	NL	100	-	-	28	-
Jerilderie Council		Jerilderie	1966	2,000	S	A				77	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	5	11.8	4	0
Junee Council		Junee	1992	7,000	T	TF				254	30	100	30	100	NL	100		30	10	100	NL	100	600	100			4	0
		Kempsey West	1991	12,000	T	TF		Y	L R	1,428	15	100	20	62	15	100		15	10	100	1	100	600	85	2		26	5
		South West Rocks	1991	6,000	S	IEA			L	543	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	0
		Kempsey South	1987	5,400	T	TF		Y	L R	529	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			26	2
		Crescent Head	2002	4,000	T	IEA	Y	Y	L O	152	15	100	20	100	15	100		15	10	100	1	100	200	100			26	0
		Smithtown\Gladstone	1983	2,000	T	IEA			R	181	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
		Frederickton	1980	1,000	T	IEA			L R	114	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
		Hat Head	2003	2,500	AT	IEA		Y	L	38	10	100	15	100	10	100		10	2	100	NL	100	200	100			26	0
Kempsey Council		Total/Weighted Average [1,6]		32,900		IEA, TF			L R O	2,985	15	100	20	82	15	100			10	100	1	100	600	93	3	0.3	140	7
		Kyogle	1988	3,000	AS	TF		Y	R	363	20	83	30	100	NL	100		20	10	100	NL	100	NL	100			12	0
		Bonalbo	2002	500	AS	IEA	Y		L R	50	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	0
		Woodenbong	2007	662	AS	IEA	Y		L R	40	20	100	30	75	NL	100		20	10	100	NL	100	NL	100			12	0
Kyogle Council		Total/Weighted Average [1,6]		4,162		IEA, TF			L R	453	20	86	30	98	NL	100			10	100	NL	100	NL	100	1	0.6	36	0
		Condobolin	1982	4,000	AS	IEA			L	312	20	100	30	58	40	100		20	10	100	10	100	1500	100			12	0
		Tottenham	1979	1,000	AS	IEA	Y		L	57	-	-	-	-													0
		Lake Cargelligo	1981	2,000	AS	IEA	Y		L	154	-	-	-	-													0
Lachlan Council		Total/Weighted Average [1,6]		7,000		IEA, TF			L	523	20	60	30	35	40	60			10	60	10	60	1500	60			12	0
		Leeton	1999	27,000	T			Y	L	2,592	70	100	70	100	NL	100		70	NL	100	NL	100	NL	100			6	0
		Yanco	1980	1,000	T	IEA				165	30	100	40	100	NL	100		30	15	100	NL	100	600	67			4	0
	No licence limits	Whitton	2000	500	S	A				63	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
Leeton Council		Total/Weighted Average [1,6]		28,500		IEA, TF			L	2,820	70	100	70	100	NL	100			NL	100	NL	100	NL	100			10	0
		Lismore East	1996	30,500	AT	IEA	Y	Y	R	2,464	15	100	20	100	15	100		15	10	100	1	100	NL	100	5		52	0
		Lismore South	1996	22	T	TF	Y	Y	L R	1,678	15	100	20	100	15	100		15	10	100	1	100	NL	100	5		52	0
		Nimbin	1993	600	T	IEA	Y	Y	L R	47	20	100	30	100	15	100		20	10	100	1	100	NL	100			12	1
Lismore City Council		Total/Weighted Average [1,6]		31,122		IEA, TF, BNR			L R	4,189	15	100	20	100	15	100			10	100	1	100	NL	100	10	0.8	116	1
		Lithgow	2006	23,000	T	TF		Y	R	1,777	15	100	25	100	15	100		15	NL	100	1	8	200	75	4		12	0
		Portland	1990	2,500	S	TF			R	199	30	42	50	100	35	100		30	10	100	6	100	600	83			12	0
		Wallerawang	1990	2,500	T	TF			R	211	30	100	50	100	35	100		30	10	100	10	100	600	83			12	0
City of Lithgow		Total/Weighted Average [1,6]		28,000		TF			R	2,187	15	95	25	100	15	100			NL	100	1	100	200	76	4	0.6	36	0
		Quirindi	1984	7,000	AS	TF, IEA			R	255	20	100	30	10	NL	100		20	10	100	NL	100	NL	100			27	0
		Werris Creek	1969	3,200	AS	TF			R	110	20	75	30	50	NL	100		20	10	100	NL	100	NL	100			12	0
Liverpool Plains Council		Total/Weighted Average [1,6]		10,200		IEA, TF			R	365	20	92	30	22	NL	100			10	100	NL	100	NL	100			39	0
		Lockhart	1967	3,000	T	TF			L R O	70	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	2		4	0
		The Rock	1979	2,000	AS	C	Y	Y		83	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			4	0
	No licence limits	Yerong Creek	2004	250	S	A				5	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Lockhart Council		Total/Weighted Average [1,6]		5,250		IEA, TF			L R O	158	20	100	30	100	NL	100			10	100	NL	100	NL	100	2	2.4	8	0
		Dawson River	1999	30,000	T	CEA	Y		R	2,318	30	100	30	100	NL	100		30	NL	100	NL	100	NL	100	5		12	0
		Tea Gardens	1996	14,000	AT	IEA	Y	Y	L	448	10	100	15	100	10	100		10	5	100	1	100	10	100	2		26	0
		Forster	1995	32,000	AT	IEA	Y	Y	O	2,237	30	100	30	100	NL	100		30	10	100	NL	100	NL	100	17		12	0
		Harrington	1994	8,000	AS	CEA	Y		L	274	20	100	30	100	NL	100		20	NL	100	NL	100	NL	100	3		12	0
		Wingham	2008	7,500	AS	CEA	Y		R	488	30	100	30	100	NL	100		30	NL	100	NL	100	NL	100			12	0
		Old Bar	2004	7,000	T	C	Y	Y	L	333	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	3		12	0
		Hallidays Point	2007	25,000	T	CEA	Y	Y	L	1,098	30	100	20	100	NL	100		30	10	100	NL	100	NL	100	6		4	0
		Bulahdelah	1995	3,000	AT	IEA	Y	Y	R	152	10	100	15	100	NL	100		10	10	100	NL	100	200	100			17	0
		Stroud	2009	1,500	T	CEA	Y	Y	R	81	10	100	15	100	10	100		10	7	100	5	100	200	100			12	0
	No licence limits	Manning Point	2003	600	T	IEA	Y	Y	L	23	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	1			0
		Lansdowne	2002	600	AS	IEA	Y		R	27	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			6	0
	No licence limits	Coopernook	2002	600	AS	IEA	Y			31	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	5			0
MidCoast County Council		Total/Weighted Average [1,6]		129,800		IEA, CEA, TF			L R O	7,510	30	100	30	100	NL	100			NL	100	NL	100	NL	100	42	1.3	125	0
		Mudgee	1934	10,000	T	TF			R	970	20	100	50	100	20	42		20	10	100	6		NL	100			12	0
		Gulgong	1996	3,000	AS	IEA	Y		L	92	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
		Kandos	1972	2,500	T	TF			R	139	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
		Rylstone	1972	1,250	T	TF			R	49	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
Mid-Western Regional Council		Total/Weighted Average [1,6]		16,750		IEA, TF			L R	1,250	20	100	50	100	20	55			10	100	6	22	NL	100			48	0
		Ashley	2002	400	P	A			L R O	-	-	-	-	-													0
		Boggabilla	2008	1,106	P	A			L R O	-	-	-	-	-													0
		Moree	2001	1,500	AS	IEA				1,050	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			4	0
	No licence limits	Mungindi	1998	1,400	AS	IEA					NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Moree Plains Council		Total/Weighted Average [1,6]		4,406		IEA, TF			L R O	1,050	20	100	30	100	NL	100			10	100	NL	100	NL	100			4	0
	No licence limits	Moama	1997	10,000	S	A			L	479	-	100	-	50	NL	100			NL	100	NL	100	NL	100	1		12	0
	No licence limits	Mathoura	1997	1,600	S	A				88	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100			2	0
Murray Council		Total/Weighted Average [1,6]		11,600		A			L	567	-	100	-	58	NL	100			NL	100	NL	100	NL	100	1	0.3	14	0

Water Utility	Comment	Sewage Treatment Works	Year built or Augmented	Capacity	Standard of Treatment[3]	Type of Treatment Works[4]	Nitrogen Removal	Phosphorus Removal	Effluent Discharge[3]	Volume of Sewage Receiving Treatment	90 Percentile Licence Limits[5] and DEC Licence Compliance														Odour Complaints		Sampling Days	Major Malfunction (Treatment Processes)
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms		No.	No./1000 props		
				EP			Yes/No	Yes/No		ML	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	cfu /100mL	% Samples			days	days
				10	3	2	5	6		15	49	50	51	52	53	54	55	56	57	58	59	60	61	62	68	69	63	67
		Darlington Point	1982	1,000	T	C			LRO	-	10	-	15	-	10			10			10		200		-			-
		Coleambally	1975	600	P	AL			LRO	-	-	-	-	-											-			-
Murrumbidgee Council		Total/Weighted Average[1,6]		1,600		C			LRO																-	-		-
		Muswellbrook	1986	12,000	S	TF			LRO	1,068	20	77	30	55	NL	100		20	10	67	NL	100	NL	100	33		22	0
		Denman		1,500	AS	IEA				211	20	59	30	55	NL	100		20	10	82	NL	100	NL	100			22	-
Muswellbrook Council		Total/Weighted Average[1,6]		13,500		IEA, TF			LRO	1,279	20	74	30	55	NL	100			10	69	NL	100	NL	100	33	6.6	44	0
		Nambucca Heads	1986	10,000	AS			Y	LRO	1,051	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			27	0
		Macksville	1998	5,500	T	IEA	Y	Y	LRO	503	15	100	20	100	5	100		15	10	100	1	100	200	100			28	0
		Scotts Head	1985	2,000	AS	IEA			L	139	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			13	0
		Bowraville	1985	1,200	T	TF			LRO	155	20	83	30	83	NL	100		20	10	100	NL	100	NL	100			12	0
Nambucca Council		Total/Weighted Average[1,6]		18,700		IEA, TF			LRO	1,848	20	99	30	99	NL	100			10	100	NL	100	NL	100			80	0
		Narrabri	1996	8,300	S	TF			L	685	20	70	-	20	NL	100		20	10	100	NL	100	NL	100	1		12	0
	No licence limits	Wee Waa	1972	1,500	S	TF			L	137	NL	100	NL	100	NL	100				100	NL	100	NL	100				0
	No licence limits	Boggabri	1956	1,000	S	TF			L	44	NL	100	NL	100	NL	100				100	NL	100	NL	100				0
Narrabri Council		Total/Weighted Average[1,6]		10,800		TF			L	866	20	76	-	37	NL	100			10	100	NL	100	NL	100	1	0.3	12	0
Narrandera Council		Narrandera	2006	6,000	AS	C			LRO	630	20	100	30	100	NL	100		20	10	100	NL	100	200	80			12	0
	No licence limits	Narromine	2005	5,000	S	A			L	340	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			6	0
	No licence limits	Trangie	1997	1,000	AS	A			L	230	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			6	0
Narromine Council		Total/Weighted Average[1,6]		6,000		A			L	570	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			12	0
Oberon Council		Oberon	1989	7,000	S	TF		Y	R	254	20	100	25	50	15	100		20	10	100	1	42	200	100			12	0
		Orange	1988	60,000	AS	CEA	Y	Y	R	3,695	20	100	25	100	15	45		20	10	100	1	86	400	100	16		22	0
		Spring Hill	1990	1,000	AS	CEA			L	27	20	100	50	100	NL	100		20	NL	100	NL	100	NL	100			21	0
Orange City Council		Total/Weighted Average[1,6]		61,000		CEA			LR	3,722	20	100	25	100	15	45			10	100	1	100	400	100	16	1.1	43	0
		Braidwood	1966	2,000	S	TF			R	73	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			13	0
		Bungendore	1993	2,000	T	IEA	Y	Y	R	209	10	100	15	100	NL	100		10	10	100	NL	100	NL	100			4	0
		Captains Flat	1984	500	T	IEA	Y		R	26	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			4	0
Palerang Council		Total/Weighted Average[1,6]		4,500		IEA			R	308	10	100	15	100	NL	100			10	100	NL	100	NL	100			21	0
		Parkes	1994	14,500	AS	TF		Y	LR	755	30	100	50	50	40	100		30	10	100	10	100	NL	100			12	0
		Tullamore	2009	250	S	A				7	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
	No licence limits	Peak Hill	1983	2,000	AS	TF			L	112	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100				0
Parkes Council		Total/Weighted Average[1,6]		16,750		C			LR	874	30	100	50	57	40	100			10	100	10	100	NL	100			12	0
Queanbeyan City Council		Queanbeyan	1986	34,500	AS	CEA, TF			LR	3,546	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			365	0
		Casino	1986	13,300	T	TF	Y		LRO	1,332	20	100	30	100	NL	100		20	10	100	NL	100	NL	100			26	0
		Evans Head	2007	5,500	T	IEA	Y	Y	LRO	630	10	100	15	100	10	100		10	2	100	1	82	200	100			26	0
		Coraki	1968	1,200	T	TF			LRO	173	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			13	0
		Rileys Hill	1996	200	T	CEA	Y	Y	LRO	6	15	100	20	100	15	100		15	10	100	1	85	200	100			13	0
Richmond Valley Council		Total/Weighted Average[1,6]		20,200		IEA, TF			LRO	2,141	20	100	30	100	NL	100			10	100	NL	100	NL	100			78	0
		Nowra	1989	21,000	AS	TF	Y		LR	1,622	40	100	40	75	NL	100		40	10	100	NL	100	NL	100	8		12	-
		St Georges Basin	1992	16,000	AS	IEA	Y	Y	LRO	844	10	100	15	100	15	100		10	2	100	1		200	100	7		6	-
		Huskisson	2002	14,000	T	IEA	Y	Y	LRO	622	10	100	15	100	NL	100		10	2	100	NL	100	200	100	4		6	-
		Bomaderry	1990	12,500	AS	TF	Y		LRO	627	20	100	40	42	NL	100		20	10	100	NL	100	NL	100	2		12	-
		Milton Ulladulla	2006	31,500	T	IEA	Y		LRO	1,005	15	100	20	100	NL	100		15	2	100	NL	100	200	66	14		12	-
		Culburra	2005	10,500	T	IEA	Y		LRO	559	10	100	15	100	15	100		10	2	100	NL	100	200	100	3		6	-
		Sussex Inlet	2007	8,000	T	IEA	Y	Y	LRO	418	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	1		12	-
		Callala	2000	6,000	T	IEA	Y	Y	LRO	205	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	3		6	-
		Shoalhaven Heads	1983	4,000	AS	IEA	Y		LRO	251	30	100	30	100	NL	100		30	10	100	NL	100	NL	100			12	-
		Berry	2007	3,000	T	IEA	Y	Y	LRO	228	20	100	30	100	NL	100		20	10	100	NL	100	NL	100	-		12	-
Shoalhaven City Council		Total/Weighted Average[1,6]		126,500		IEA, TF			RO	6,508	40	100	40	88	NL	100			10	100	NL	100	NL	100	47	1.2	120	-
Singleton Council		Singleton	1988	20,000	AS	IEA	Y		LRO	1,353	30	100	30	100	15	100		30	10	100	10	100	NL	100	1	0.2	12	0
		Jindabyne	1984	2,900	AT	CEA	Y	Y	LRO	-	10	100	15	100	10	100		10	2	100	NL	100	200	100	-		17	-
		Berridale	2008	2,000	P	IEA			R	-	20	70	30	40	NL	100		20	10	100	NL	100	NL	100			13	0
		Adaminaby	1972	750	S	TF	Y	Y		16	20	54	30	66	NL	100		20	10	100	NL	100	NL	100			15	0
	No licence limits	Interlaken	1972	-	P				LRO	-	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	-			-
Snowy River Council		Total/Weighted Average[1,6]		5,650		IEA, CEA			LRO	16	20	54	30	66	NL	100			10	100	NL	100	NL	100	-	-	45	-
		Tamworth (Westdale)	1996	33,000	AS	IEA		Y	R	3,022	30	100	25	100	NL	100		30	NL	100	NL	100	NL	100			52	0
	No licence limits	Tamworth (Swan St)	1968	15,000	S	TF		Y	L	1,301	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	1		12	0
		Manilla	1955	2,850	S	TF			L	159	20	100	30	100	NL	100		20	NL	100	NL	100	NL	100			4	0
	No licence limits	Kootingal	1992	2,000	S	A			L	91	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100				0
		Barraba	1956	1,500	S	TF				168	20	82	30	100	NL	100		20	NL	100	NL	100	NL	100			12	0
Tamworth Regional Council		Total/Weighted Average[1,6]		54,350		IEA, TF			LR	4,741	30	99	25	100	NL	100			NL	100	NL	100	NL	100	1	0.1	80	0
Temora Council	*No licence limits*	Temora	2005	8,000	T	A			L	113	30	100	40	100	NL	100		30	10	100	NL	100	200	75			12	0
		Tenterfield	1983	1,900	T	TF			LRO	-	40	-	45	-				40							-			-
		Urbenville	1988	500	T	IEA			LRO	-	20	-	30	-				20	10						-			-
Tenterfield Council		Total/Weighted Average[1,6]		2,400		IEA, TF			LRO																-	-		-
	No licence limits	Khancoban	1998	5,000	S	TF			L	71	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			4	0
	No licence limits	Tumbarumba		3,500	T	TF			LRO	222	NL	100	NL	100	NL	100		20	NL	100	NL	100	NL	100			4	1
Tumbarumba Council		Total/Weighted Average[1,6]		8,500		TF			LRO	293	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100			8	1

Water Utility	Comment	Sewage Treatment Works	Year built or Augmented	Capacity	Standard of Treatment[3]	Type of Treatment Works[4]	Nitrogen Removal	Phosphorus Removal	Effluent Discharge[3]	Volume of Sewage Receiving Treatment	90 Percentile Licence Limits[5] and DEC Licence Compliance																Odour Complaints		Sampling Days	Major Malfunction (Treatment Processes)
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms				No.	No./1000 props		
				EP			Yes/No	Yes/No		ML	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	mg/L	% Samples	cfu /100mL	% Samples				days	days
			1	10	3	2	5	6		15	49	50	51	52	53	54	55	56	57	58	59	60	61	62			68	69	63	67
		Tumut	2007	1,200	AT	IEA	Y	Y	L R O	619	10	100	15	100	10	100		10	2	100	1	100	200	100					12	0
		Brungle	2007	140	AT	IEA	Y	Y	L R O	5	15	100	20	75	15	75		15	NL	100	1	75	200	100			-		4	1
		Batlow	1968	1,400	S	TF			L R O	94	40	100	45	100	NL	100		40	10	100	NL	100	NL	100					4	0
		Talbingo	1995	1,100	AT	CEA	Y	Y	L R O	41	25	100	35	100	25	100		25	10	100	2	100	NL	100					4	0
		Adelong	1967	1,400	AS	IEA	Y	Y	L R O	70	10	100	15	100	10	100		10	5	100	1	100	NL	100					4	0
Tumut Council		Total/Weighted Average [1,6]		5,240		IEA, CEA, TF			L R O	829	10	100	15	100	10	100			2	100	1	100	200	100					28	1
		Banora Point	1995	62,500	AT	BNR	Y	Y	R	4,825	15	100	20	100	NL	100		15	10	100	NL	100	10000	100	5				52	0
		Murwillumbah	2007	16,000	AT	IEA	Y	Y	R	1,630	10	100	15	100	10	100		10	2	100	1	74	200	81	2				26	0
		Kingscliff	2008	25,000	AT	BNR	Y	Y	R	1,013	10	100	15	100	5	100		10	5	100	NL	100	100	62					26	1
		Tweed Heads	1988	12,000	S	TF	Y		R	459	25	100	25	87	NL	100		25	10	100	NL	100	NL	100	1				26	0
		Hastings Point	2005	16,000	T	IEA	Y	Y	L	957	10	100	15	100	10	100		10	5	100	1	54	NL	100	3				26	0
		Tumbulgum	1996	700	AT	IEA	Y	Y	R	33	15	100	20	100	15	100		15	NL	100	1	100	200	81					26	0
		Tyalgum	1990	500	AS	IEA	Y	Y	L	24	25	100	50	100	NL	100		25	10	100	NL	100	NL	100					12	0
		Uki	2004	600	AS	CEA	Y	Y	L	16	15	100	20	75	25	100		15	10	100	3	25	600	84					12	0
Tweed Council		Total/Weighted Average [1,6]		133,300		IEA, TF, BNR			L R	8,957	15	100	20	99	NL	100			10	100	NL	100	10000	92	11	0.4			206	1
		Scone	1988	7,000	AS	TF			L	1,260	20	100	30	50	NL	100		20	10	100	NL	100	NL	100					12	0
		Aberdeen	1983	4,000	AS	C			R	177	20	100	30	100	NL	100		20	10	100	NL	100	NL	100					12	0
		Merriwa	1970	1,600	S	TF			L R	62	20	100	30	100	NL	100		20	10	100	NL	100	NL	100					4	0
	No licence limits	Murrurundi	1979	1,000	AS	IEA			R	68	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100						15
Upper Hunter Council		Total/Weighted Average [1,6]		13,600		IEA, TF			L R	1,567	20	100	30	60	NL	100			10	100	NL	100	NL	100					28	15
		Crookwell	1996	4,200	T		Y	Y	R	180	20	100	30	100	15	100		20	10	100	1	100	200	100					12	0
		Gunning	1976	1,000	T	IEA		Y	R	50	20	100	30	100	NL	100		20	10	100	NL	100	NL	100					12	0
Upper Lachlan Council		Total/Weighted Average [1,6]		5,200		IEA			R	230	20	100	30	100	15	100			10	100	1	100	200	100					24	0
Uralla Council		Uralla	1994	3,960	AS	CEA	Y	Y	R	137	15	-	20	-	10			15	10		1		200	100					12	0
	No licence limits	Urana	1996	754	S	A	Y	Y		55	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	2				51	0
	No licence limits	Oaklands	1996	520	S	A	Y	Y		35	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100					51	0
Urana Council		Total/Weighted Average [1,6]		1,274		A				90	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100	2	6.3			102	0
		Wagga (Narrung St)	1992	67,200	T		Y	Y	L R	3,762	20	100	30	100	NL	100		20	10	100	1	100	NL	100	2				12	0
		Wagga (Kooringal)	1992	20,000	T	CEA		Y	L R	1,195	20	100	30	100	30	84		20	10	100	1	100	NL	100	2				12	0
		Forest Hill	1974	6,000	T				L	278	20	100	30	75	NL	100		20	10	100	NL	100	NL	100					4	0
	No licence limits	Uranquinty	1984	1,000	S	A			L	118	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	1					0
	No licence limits	Tarcutta	1988	500	S	A			L	21	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
Wagga Wagga City Council		Total/Weighted Average [1,6]		94,700		IEA, CEA, TF			L R	5,374	20	100	30	99	NL	100			10	100	1	100	NL	100	5	0.2	28	0		
	No licence limits	Barham	1967	1,600	S				L	95	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
	No licence limits	Moulamein	1967	700	AS	IEA	Y	Y	L	25	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
	No licence limits	Murray Downs	2005	260	T	BNR		Y	L	70	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
	No licence limits	Tooleybuc	1967	500	P	A	Y	Y	L	136	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
Wakool Council		Total/Weighted Average [1,6]		3,060		IEA, BNR			L	326	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100						0
Walcha Council		Walcha	1971	2,400	S	TF			R	166	20	100	30	100	NL	100		20	10	100	NL	100	NL	100					12	0
		Walgett	1958	3,200	S	TF			L R O	-	-	-	-	-	-	-											-		-	-
		Lightning Ridge		-					L R O	-	-	-	-	-	-	-											-		-	-
		Collarenebri		-					L R O	-	-	-	-	-	-	-											-		-	-
Walgett Council		Total/Weighted Average 1,3		3,200		TF			L R O																		-	-		
		Warren	1958	1,630	S	TF			L	158	45	100	65	100	30	100		45	10	100	10	100	NL	100					4	0
		Nevertire	1983	200	P	A			L	14	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100						0
Warren Council		Total/Weighted Average [1,6]		1,830		TF			L	172	45	100	65	100	30	100			10	100	10	100	NL	100					4	0
		Coonabarabran	1964	3,500	S	TF		Y	R	322	20	100	25	100	20	82		20	10	100	10	100	NL	100					4	0
		Coolah	1970	1,000	S	AN			L	72	40	50	150	50	NL	100		40	3	100	3	100	NL	100					2	0
	No licence limits	Baradine	1997	1,000	P	A			L	83	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100						0
		Dunedoo	1970	800	S	CEA			R	105	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100					2	0
Warrumbungle Shire Council		Total/Weighted Average [1,6]		6,300		CEA, TF			L R	582	20	94	25	94	20	90			10	100	10	100	NL	100					8	0
Weddin Council	*No licence limits*	Grenfell	1943	2,500	S	TF			R	153	20	100	30	100	40	100		20	10	100	10	100	NL	100					3	0
		Wellington	2006	8,000	S	IEA	Y	Y	R	449	15	100	30	100	15	100		15	10	100	1	100	600	100	3				12	0
	No licence limits	Nanima		-					L R O	-	NL	100	NL	100	NL	100		100	NL	100	NL	100	NL	100	-					-
Wellington Council		Total/Weighted Average [1,6]		8,000		IEA			L R O	449	15	100	30	100	15	100			10	100	1	100	600	100	3	1.3	12	0		
		Buronga Gol Gol	1994	5,000	T	A					50	100	50	100	NL	100		50	10	100	NL	100	NL	100	2				4	0
		Wentworth	1964	3,500	T	TF			L	200	30	100	45	100	NL	100		30	10		NL	100	200		6				4	0
		Dareton	1984	2,000	T	TF			L	174	30	100	45	100	NL	100		30	10	100	NL	100	600	100	5				4	0
	No licence limits	Namatjira	1988	1,200	S	A			L	72	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100					4	0
		Wentworth (East)	1991	600	T	A			L	96	50	100	50	100	NL	100		50	10	100	NL	100	200						4	0
Wentworth Council		Total/Weighted Average [1,6]		12,300		TF, A			L	542	30	100	45	100	NL	100			10	63	NL	100	200	45	13	7.2	20	0		
		Mittagong	2002	14,000	AT	IEA	Y	Y	L R	806	10	100	15	100	10	100		10	10	100	NL	100	200	100	2				26	0
		Bowral	2006	14,600	AT	IEA	Y	Y	R	1,156	10	100	15	100	10	100		10	5	100	1	100	200	100	10				26	0
		Moss Vale	1995	9,000	AT	IEA	Y	Y	R	829	20	100	30	100	15	100		20	NL	100	1	100	200	100	3				26	0
		Bundanoon	1990	2,000	T	IEA	Y	Y	R	249	20	100	30	100	15	100		20	NL	100	2	100	NL	100					13	0
		Berrima	1990	200	T	IEA	Y	Y	R	78	20	100	30	100	15	100		20	NL	100	1	100	NL	100					13	0
Wingecarribee Council		Total/Weighted Average [1,6]		39,800		IEA			L R	3,118	10	100	15	100	10	100			5	100	1	100	200	100	15	1.1	104	0		
	No licence limits	Bateau Bay	1969	58,000	S	C			O	2,658	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	7				30	-
	No licence limits	Wyong South	1988	48,000	S	TF			O	4,764	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	10				30	0
	No licence limits	Charmhaven	1989	40,000	S	IEA			O	2,588	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	10				30	0
	No licence limits	Toukley	1973	41,500	S	TF			L R O	3,889	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	8				30	0
	No licence limits	Gwandalan	1989	12,000	S	IEA			O	384	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	2				30	0
	No licence limits	Mannering Park	1987	12,000	S	IEA			L R O	858	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	7				30	0
Wyong Council		Total/Weighted Average [1,6]		211,500		IEA, TF			L R O	15,141	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	NL	100	44	0.8	180	0		
		Yass No 2	1974	4,000	AS	IEA			L R O	249	NL	100	NL	100	NL	100			NL	100	NL	100	NL	100					6	0
		Yass	1935	3,500	AS	TF			L R O	101	30	100	30	100	NL	100		30	NL	100	NL	100	NL	100					6	0
Yass Valley Council		Total/Weighted Average [1,6]		7,500		IEA, TF			L R O	350	20	100	30	100	15	100			NL	100	2	100	NL	100					12	0
Young Council		Young	1970	7,000	S	TF			R	695	20	100	25	100	NL	100		20	10	100	NL	100	NL	100	3	0.8	12	0		

Notes:
1. Where an LWU has more than one treatment works, the reported Licence Compliance values have been pro-rated on the basis of the number of sampling days at each treatment works and are shown in **bold** in the final line for that LWU. Totals are also shown in **bold** for capacity (10), sewage volume treated (15), sampling days (63) and odour complaints (68). The days of major malfunction of treatment processes (67) are shown in **bold** and are the weighted average based on treatment work
2. For each licence limit, the value shown in the final line for each water utility is that required to be met for at least 50% of the utility's total licenced treatment works capacity.
3. For "Standard of Treatment" (3); P = Primary; S = Secondary; AS = Advanced Secondary; T = Tertiary; AT = Advanced Tertiary. For "Effluent Discharge"; L = Land, O = Ocean, R = River.
4. For "Type of Treatment Works" (2); A= Oxidation Pond, AL = Aerated Lagoons, AN = Anaerobic Pond, C = Conventional Activated Sludge, CEA = Continuous Extended Aeration (Activated Sludge), IEA = Intermittent Extended Aeration (Activated Sludge), TF = Trickling Filter, BNR = Biological Nutrient Removal.
5. 90 Percentile Licence Limits have been reported at columns (49), (51), (53), (55), (57), (59) and (61).
6. For odour complaints (69), the values shown are on the basis of the total odour complaints per 1,000 connected properties.

Appendix E: Maintaining effective disinfection of a water supply distribution system

Overview

This appendix highlights the key elements for maintaining effective disinfection of a water supply distribution system. It is recommended that each NSW Local Water Utility (LWU) review its present processes and practices to ensure its practices address each of these elements.

In addition, as indicated in the *2008-09 NSW Water Supply and Sewerage Benchmarking Report* (page 7) and the *Best-Practice Management of Water Supply and Sewerage Guidelines, 2007* (page 13), it is recommended that each utility develop and implement a risk based Drinking Water Quality Management Plan in accordance with the *Australian Drinking Water Guidelines*, 2004 (page 2-1). The NSW Office of Water (NOW) is preparing some worked examples to assist LWUs and these will be provided to LWUs shortly.

Monitoring of Chlorine Residual in a water supply distribution system is one of the essential controls for maintaining effective disinfection and ensuring consistently safe drinking water quality. Such monitoring provides the necessary data for the utility to carry out timely corrective action.

Developing a monitoring program

The monitoring program should include the following information:

- Parameters to be monitored (Chlorine Residual and pH); for unfiltered surface water supplies, Turbidity[1] should also be monitored.
- Sampling frequency and location, including system extremities.[2]
- Sampling methods and equipment.
- Shedules for sampling.
- Methods for quality assurance and validation of sampling results.
- Requirements for checking and interpreting results.
- Responsibilities and necessary training of staff.
- Requirements for documentation and management of records, including how monitoring results will be recorded and stored.
- Requirements for reporting and communication of results.
- Program should be designed to cover both random and regular variations in water quality.

Field testing

- Basic chemical test kits for chlorine residual, pH and turbidity are available.
- Free chlorine, combined chlorine, pH and turbidity, tests need to be done in the field.

Frequency of monitoring – chlorine residual should be monitored at least daily at the water treatment works and weekly at consumer supply points.[3]

[1] For filtered water supplies, all the treated water should normally have a turbidity of under 1 NTU, with 95 per cent of the supply having a turbidity of under 0.3 NTU.
[2] Each LWU's sampling locations for monitoring microbiological water quality for reporting in the NSW Water Quality Database would be suitable for this purpose.
[3] Table 10.7, *Australian Drinking Water Guidelines 2004.*

Maintaining effective disinfection is essential for controlling microbial quality in a water supply distribution system. Particular attention should be paid to:

- operational factors affecting microbial quality (e.g. chlorine residual, pH and turbidity) should be monitored as indicated above
- a minimum total chlorine residual of 0.5 mg/L[1] is recommended after 30 minutes contact time[2] and before water reaches the first consumer
- for filtered water, turbidity should be low (<1 NTU[3])
- pH should be <8.5[4]
- the reticulation system should be properly maintained. New mains and repaired mains should be super-chlorinated[5] before use.

Chlorine residual

- A minimum free chlorine residual of about 0.2mg/L[6,7] should be maintained throughout the distribution system
- Loss of chlorine residual may be an early warning indicator of a fault in the chlorination system or a change in the chlorine demand of the water. It will also result in lack of protection against any recontamination of the water supply.

If you wish to discuss implementation of the above elements for effective disinfection, please contact Bill Ho, Manager Water and Sewerage on tel: (02) 8281 7326 or email: Bill.Ho@water.nsw.gov.au

[1] Part IV Information Sheet I, Disinfection of Drinking Water, *Australian Drinking Water Guidelines 2004.*
[2] This should be sufficient to ensure microbial control, given a clean distribution system and no significant recontamination.
[3] Table 10.10, *Australian Drinking Water Guidelines 2004.*
[4] For effective disinfection pH should be as low as possible, but this needs to be tempered by the need for corrosion control. In most cases a pH of 7.8 to 8.2 is desirable.
[5] *Chlorine Fact Sheet under Drinking Water Treatment Chemicals, Australian Drinking Water Guidelines*, 2004.
[6] Example in Table A10 on page A-21 of *Australian Drinking Water Guidelines*, 2004.
[7] Re-chlorination may be necessary to maintain effective chlorine residual in very long water supply distribution mains.

Appendix F: NMUs – National performance report 2008-09

	WATER UTILITY	WATER RESOURCES																									
		SOURCES OF WATER																									
		Volume of water sourced from surface water				Volume of water sourced from groundwater				Volume of water sourced from desalination				Volume of water sourced from recycling (ie where potable water would normally be supplied)				Volume from bulk supplier				Volume bulk recycled purchased				Total sourced water			
		W1				W2				W3				W4				W5				W6				W7			
		(ML)				(ML)				(ML)				(ML)				(ML)				(ML)				(ML)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	6,441	6,395	5,486	5,885		0	0	0		0	0	0	3,473	7,777	10,101	8,264	522,464	502,692	475,156	491,727		0	0	0	532,378	516,864	490,743	505,876
	Hunter Water Corporation	60,934	63,711	64,311	61,814	11,971	11,158	3,025	5,504	0	0	0	0	1,860	2,055	2,174	2,872	0	0	0	0	0	0	0	0	74,765	76,924	69,510	70,190
	Sydney Catchment Authority	524,316	503,693	478,184	490,283		450	169	0									2,098	3,115	1,077	208					526,414	507,258	479,430	490,491
1	Gosford City Council	14,110	15,406	8,190	9,209	180	380	145	108	0	0	0	0	0	0	0	229	64	80	3,769	3,310	0	0	0	0	14,354	15,866	12,104	12,856
2	Wyong Shire Council	9,205	4,979	15,446	15,369	0	511	230	286	0	0	0	0	716	1,233	1,164	1,295	4,881	8,404	769	1,603	0	0	0	0	14,802	15,127	17,609	18,553
3	Shoalhaven City Council	16,182	14,616	14,140	14,854	0	0	0	0	0	0	0	0	214	109	125	161	80	78	74	82	0	0	0	0	16,476	14,803	14,339	15,097
4	Rous County Council	11,600	10,972	10,078	10,501	3	0	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,603	10,972	10,202	10,501
5	MidCoast County Council	10,014	9,098	8,566	8,537	726	662	665	628	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	10,740	9,760	9,231	9,169
6	Tweed Shire Council	10,148	10,121	9,429	9,564	0	0	0	0	0	0	0	0	181	310	262	645	0	0	0	0	0	0	0	0	10,329	10,431	9,691	10,209
7	Port Macquarie-Hastings Council	6,497	6,509	6,237	6,117	0	0	0	0	0	0	0	0	117	0	88	64	0	0	0	0	0	0	0	0	6,614	6,509	6,325	6,181
8	Riverina Water County Council	3,556	6,315	3,972	6,055	12,596	11,102	10,844	11,287	0	0	0	0	0	0	0	0	83	80	24	24	0	0	0	0	16,235	17,497	14,840	17,366
10	Coffs Harbour City Council	5,735	5,728	5,458	5,153				0	0	0	0	0				0	0	0	0	0	0	0	0	0	5,735	5,728	5,458	5,153
11	Albury City Council	9,705	8,752	5,534	6,319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,705	8,752	5,534	6,319
12	Fish River Water Supply	11,029	12,101	7,404	5,999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,029	12,101	7,404	5,999
13	Tamworth Regional Council	9,881	8,395	7,131	7,239	341	346	500	1,455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,222	8,741	7,631	8,694
14	Clarence Valley Council	7,287	11,025	6,949	7,987	0	0	0	0	0	0	0	0	138	103	79	127	0	0	0	0	0	0	0	0	7,425	11,128	7,028	8,114
15	Eurobodalla Shire Council				3,825				0				0				237				0				0				4,062
16	Wingecarribee Shire Council	1,560	1,205	672	876	0	0	0	0	0	0	0	0	2	0	49	64	3,912	4,644	4,601	4,379	0	0	0	0	5,474	5,849	5,322	5,319
17	Queanbeyan City Council	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,368	4,082	3,416	3,658	0	0	0	0	4,368	4,082	3,416	3,658
18	Dubbo City Council	6,931	8,501	5,952	5,984	1,779	2,056	2,050	1,807	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,710	10,557	8,002	7,791
19	Orange City Council	5,423	5,469	4,730	4,125	68	63	54	67	0	0	0	0	3,136	2,836	3,367	3,218	0	0	0	0	0	0	0	0	8,627	8,368	8,151	7,410
21	Bathurst Regional Council	11,673	7,163	6,155	7,528	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,673	7,163	6,155	7,528
22	Lismore City Council	144	148	148	115	0	0	0	0	0	0	0	0	0	0	0	0	3,776	3,409	3,202	3,406	0	0	0	0	3,920	3,557	3,350	3,521
23	Bega Valley Shire Council				1,634				1,855				0				0				0				0				3,489
24	Ballina Shire Council	116	0	123	129	6	0	0	4	0	0	0	0	222	193	107	119	3,867	3,753	3,299	3,316	0	0	0	0	4,211	3,946	3,529	3,568
25	Kempsey Shire Council	0	13	974	1,628	4,092	3,920	2,741	1,966	0	0	0	0	74	119	46	32	0	0	0	0	0	0	0	0	4,166	4,052	3,761	3,626
26	Country Energy	0	1,515	1,896	3,212	0	0	0	0	40	0	0	0	530	641	649	523	6,085	3,961	3,568	1,633	0	0	0	0	6,655	6,117	6,113	5,368
27	Byron Shire Council	428	444	368	349	0	0	0	0	0	0	0	0	222	340	315	235	2,481	2,366	2,189	2,286	0	0	0	0	3,131	3,150	2,872	2,870
28A	Goldenfields Water (Reticulation)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,974	5,970	4,749	5,561	0	0	0	0	5,974	5,970	4,749	5,561
28B	Goldenfields Water (Bulk Supply)				3,957				4,779				0				0				379				0				9,115
9	Wagga Wagga City Council																												
	LWU Range Max	16,182	15,406	15,446	15,369	12,596	11,102	10,844	11,287	40	0	0	0	3,136	2,836	3,367	3,218	6,085	8,404	4,749	5,561	0	0	0	0	16,476	17,497	17,609	18,553
	LWU Range Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,131	3,150	2,872	2,870
	Median of NMU Indicators shown in Table	6,714	6,412	5,743	5,984	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	8,669	8,555	6,677	6,319

Notes * Indicators shown are those published in the 2008/09 National Performance Report.

WATER UTILITY		WATER RESOURCES																													
		USES OF WATER SUPPLIED																													
		Volume of water supplied - Residential (incl nonpotable) W8 (ML)				Volume of water supplied - commercial, municipal, industrial (incl nonpotable) W9 (ML)				Volume of water supplied - other (incl nonpotable) W10 (ML)				Total Urban Water Supplied (Excl Bulk Water & Environmental Flows Incl Recycled & Losses) W11 (ML)				Average Annual Residential Water Supplied W12 (kL/prop)				Volume of water supplied - Environmental flows W13 (ML)				Volume of bulk water exports W14 (ML)				Volume of bulk recycled water exports W15 (ML)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	320,509	316,813	292,782	320,861	146,937	147,644	136,064	126,712	60,814	45,473	52,855	44,395	528,260	509,930	481,701	491,968	203	199	182	198		0	0	0		0	0	0		0	0	0
	Hunter Water Corporation	40,553	39,238	36,428	37,199	20,784	22,027	20,866	21,487	8,538	9,334	8,715	8,334	69,875	70,599	66,009	67,020	205	195	177	180	5,110	5,110	5,110	5,110	2,955	4,157	1,235	161	0	0	0	0
	Sydney Catchment Authority																					64,495	70,156	70,842	80,680	526,414	507,258	479,430	490,491				
1	Gosford City Council	11,280	9,800	8,990	9,356	2,098	2,401	2,161	2,188	984	1,356	905	1,075	14,362	13,557	12,056	12,619	179	147	135	140	0	0	0	0	0	3,545	0	0	0	0	0	0
2	Wyong Shire Council	9,089	7,568	8,184	7,970			3,434	4,153			1,210	1,232	14,802	12,551	12,828	13,355	163	139	146	141	0	0	0	0	0	1,966	4,451	4,766	0	0	0	0
3	Shoalhaven City Council	7,091	6,907	6,154	6,484			4,197	7,143			2,098	1,502	16,260	13,011	12,449	15,129	171	164	144	152	0	0	0	0	0	0	0	0	0	0	0	0
4	Rous County Council		513	388	291			214	72			67	139	867	805	668	502					0	0	0	0	10,736	10,051	10,000	10,362	0	0	0	0
5	MidCoast County Council	5,885	5,560	5,014	5,067			2,342	2,339			1,579	1,763	10,740	9,506	8,935	9,169	178	167	149	150	0	0	0	0				0	0	0	0	0
6	Tweed Shire Council		6,004	5,251	5,441			2,454	2,707			1,327	1,057	9,625	9,838	9,032	9,205	208	199	174	180	0	0	0	0	57	38	66	79	0	0	0	0
7	Port Macquarie-Hastings Council	4,415	4,303	4,015	4,072			1,480	1,513			593	605	6,615	6,514	6,088	6,190	171	157	154	151	0	0	0	0	0	0	0	0	0	0	0	0
8	Riverina Water County Council	8,886	10,252	8,329	9,710			5,172	5,974			1,339	1,393	15,911	17,559	14,840	17,077	362	410	327	374	0	0	0	0				0	0	0	0	0
10	Coffs Harbour City Council		3,887	3,743	3,675			1,441	1,505			447	621	6,370	5,798	5,631	5,801	184	178	169	165	0	0	0	0	0	0	0	649	0	0	0	0
11	Albury City Council	6,297	5,741	3,857	4,488			1,303	1,716			573	689	9,301	8,243	5,733	6,893	302	276	193	222	0	0	0	0	404	436	291	389	0	0	0	0
12	Fish River Water Supply		228	703				150	101			420	583			1,273	684					0	0	0	0	10,149	11,249	6,792	4,829	0	0	0	0
13	Tamworth Regional Council	5,480	4,088	3,484	4,110			3,172	3,314			1,813	1,848	10,435	8,708	8,469	9,272	319	230	192	226	0	0	0	0	30		19	18	0	0	0	0
14	Clarence Valley Council	3,937	3,324	3,222	3,210			2,331	2,232			1,096	780	7,525	9,307	6,649	6,222	238	184	178	176	0	0	0	0	5	4,232	0	0	0	0	0	0
15	Eurobodalla Shire Council		2,271	2,155	2,362			1,116	983			1,169	651	4,516	4,063	4,440	3,996		126	119	129	0	0	0	0	45	0	0	0	0	0	0	0
16	Wingecarribee Shire Council	3,107	3,532	2,820	3,088			927	946			497	791	4,739	4,939	4,244	4,825	192	214	168	183	0	0	0	0	0	3	0	0	0	0	0	0
17	Queanbeyan City Council	3,008	3,058	2,766	2,925			639	723			378	405	4,368	4,534	3,783	4,053	209	211	188	198	0	0	0	0				0	0	0	0	0
18	Dubbo City Council	5,232	5,976	4,458	4,724			1,755	2,053			1,132	1,428	8,853	10,378	7,345	8,205	385	431	322	331	0	0	0	0				0	0	0	0	0
19	Orange City Council		4,536	2,590	3,696			4,711	4,121			869	537	8,612	8,999	8,170	8,354				259	0	0	0	0				0	0	0	0	0
21	Bathurst Regional Council	3,526	3,805	3,190	3,210			2,010	1,995			577	578	7,386	7,136	5,777	5,783	267	290	241	240	0	0	0	0	0	0	4	4	0	0	0	0
22	Lismore City Council	2,461	2,176	2,057	2,023			942	883			333	616	4,009	3,557	3,332	3,522	196	174	163	159	0	0	0	0				0	0	0	0	0
23	Bega Valley Shire Council		2,067	1,860	1,999			1,239	1,397			600	594	4,243	3,742	3,699	3,990				154	0	0	0	0	5	9	4	4	0	0	0	0
24	Ballina Shire Council	2,450	2,394	2,243	2,217			737	743			567	608	3,348	4,265	3,547	3,568	209	198	186	175	0	0	0	0				0	0	0	0	0
25	Kempsey Shire Council	1,837	1,900	1,767	1,642			1,145	1,073			832	910	4,080	4,061	3,784	3,625	178	184	169	156	0	0	0	0	12	17	17	17	0	0	0	0
26	Country Energy	3,062	2,685	2,801	2,712			3,438	2,600			494	448	6,562	6,476	6,733	5,760	317	274	284	284	0	0	0	0	0	0	0	0	0	0	0	0
27	Byron Shire Council	1,767	1,744	1,707	1,712			1,013	1,026			214	282	2,946	2,851	2,934	3,020	190	186	181	181	0	0	0	0	0	0	0	0	0	0	0	0
28A	Goldenfields Water (Reticulation)		2,234	1,740	2,055			2,704	2,938			494	541	5,974	5,970	4,938	5,534	311	294	229	298	0	0	0	0	0	0	0	0	0	0	0	0
28B	Goldenfields Water (Bulk Supply)												539				539								0				9,115				0
9	Wagga Wagga City Council																294													0	0	0	0
	LWU Range Max	11,280	10,252	8,990	9,710			5,172	7,143			2098	1,848	16260	17559	14840	17,077	385	431	327	374	0	0	0	0	10736	11249	10000	10,362	0	0	0	0
	LWU Range Min	1,767	228	388	291			150	72			67	139	867	805	668	294	163	126	119	129	0	0	0	0	0	0	0	0	0	0	0	0
	Median of NMU Indicators shown in Table	4,176	3,669	3,005	3,210			1,618	1,856			597	621	6615	6514	5755	5,772	208	192	176	178	0	0	0	0	0	6	0	0	0	0	0	0

	WATER UTILITY	WATER RESOURCES															
		SEWAGE COLLECTED															
		Volume of sewage collected - Residential, nonresidential and nontrade waste				Volume of sewage collected - trade waste				Total Sewage collected				Sewage collected per property			
		W16				W17				W18				W19			
		(ML)				(ML)				(ML)				(kL/property)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	405,803	459,379	520,845	451,075	26,739	26,133	25,536	24,617	432,542	485,512	546,381	475,692	261	290	324	279
	Hunter Water Corporation	57,237	73,944	71,087	61,590	2,681	2,394	3,296	3,226	59,918	76,338	74,383	64,815	296	372	356	307
	Sydney Catchment Authority																
1	Gosford City Council	12,204	13,180	13,422	11,667	1,712	1,040	1,346	1,545	13,916	14,220	14,768	13,212	211	210	217	193
2	Wyong Shire Council			14,195	15,141				-	11,822	13,030	14,195	15,141	207	227	243	258
3	Shoalhaven City Council			7,223	6,277				230	6,569	7,069	7,223	6,507	176	191	188	165
4	Rous County Council																
5	MidCoast County Council		7,416	7,874	7,378		146	144	132	6,811	7,660	8,018	7,510	216	239	248	231
6	Tweed Shire Council		5,868	6,510	7,642		1,386	1,382	1,315	8,779	7,262	7,892	8,957	332	266	270	302
7	Port Macquarie-Hastings Council			8,229	9,082				-	6,733	8,333	8,229	9,082	269	323	317	334
8	Riverina Water County Council																
10	Coffs Harbour City Council			6,703	5,919				875	5,933	6,121	6,703	6,794	279	280	302	302
11	Albury City Council		3,386	4,137	3,609		900	154	178	5,326	4,284	4,291	3,787	245	204	211	184
12	Fish River Water Supply																
13	Tamworth Regional Council		3,319	3,253	3,712		935	1,052	1,029	4,774	4,266	4,305	4,741	280	237	236	258
14	Clarence Valley Council			2,957	3,262			38	0	3,403	2,623	2,995	3,262	263	215	214	228
15	Eurobodalla Shire Council		3,255	3,125	2,875		94	62	0	3,217	3,339	3,187	2,875	190	193	183	163
16	Wingecarribee Shire Council		2,967	4,004	3,010		118	102	108	3,220	3,360	4,106	3,118	242	240	290	218
17	Queanbeyan City Council		3,480	3,740	3,691		236	250	300	3,886	3,705	3,990	3,991	252	239	250	249
18	Dubbo City Council		2,394	2,409	2,000		323	547	715	2,852	2,711	2,956	2,715	198	188	200	182
19	Orange City Council		2,842	3,509	3,871		194	188	137	4,235	3,131	3,697	4,008	294	202	248	265
21	Bathurst Regional Council		2,983	3,069	2,437		526	538	512	3,686	3,514	3,607	2,949	271	251	251	203
22	Lismore City Council			3,263	4,189				-	3,825	3,263	3,263	4,189	318	269	267	341
23	Bega Valley Shire Council			1,869	1,764				-	2,024	2,052	1,869	1,764	195	190	161	149
24	Ballina Shire Council			2,249	4,579				-	3,907	3,509	2,249	4,579	314	271	180	360
25	Kempsey Shire Council		1,926	2,560	2,896		86	54	90	2,104	2,011	2,614	2,986	239	226	293	333
26	Country Energy			0	1,240				0	1,433	1,344	1,316	1,240	148	140	136	128
27	Byron Shire Council			3,025	3,008			225	294	3,341	2,813	3,250	3,302	338	287	325	335
28A	Goldenfields Water (Reticulation)																
28B	Goldenfields Water (Bulk Supply)																
9	Wagga Wagga City Council			4,827	4,627			616	747	5,061	5,675	5,443	5,374	214	250	236	228
	LWU Range Max		13,180	14,195	15,141		1,386	1,382	1,545	13,916	14,220	14,768	15,141	338	323	325	360
	LWU Range Min		1,926	0	1,240		86	38	0	1,433	1,344	1,316	1,240	148	140	136	128
	Median of NMU Indicators shown in Table		3,287	3,509	3,712		280	225	262	3,907	3,514	3,990	4,008	245	237	243	231

WATER UTILITY	WATER RESOURCES																											
	USES OF RECYCLED WATER																											
	Volume of Recycled water supplied (Residential) W20 (ML)				Volume of Recycled water supplied (Commercial, Industrial, Municipal) W21 (ML)				Volume of Recycled water supplied (Agricultural) W22 (ML)				Volume of Recycled water supplied (Environmental) W23 (ML)				Volume of Recycled water supplied (On-site) W24 (ML)				Volume of Recycled water supplied (Other) W25 (ML)				Total Recycled water supplied W26 (ML)				Recycled water (% of effluent recycled) W27 (%)			
	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
Sydney Water Corporation	1,678	1,652	1,402	1,704	879	5,995	7,212	5,155	916	130	632	3,034	0	0	0	0	11,809	13,352	14,917	15,549			0	0	15,282	21,129	24,163	25,442	4	4	4	5
Hunter Water Corporation	0	0	0	0	1,686	1,875	1,984	2,289	2,040	1,967	2,269	2,623	0	0	0	0	216	218	218	180	0	0	0	0	3,942	4,060	4,471	5,092	7	5	6	8
Sydney Catchment Authority																																
1 Gosford City Council	0	0	0	0	0	0	0	68	0	0	0	0	0	0	0	-	241	212	277	216	0	0	0	0	241	212	277	284	2	1	2	2
2 Wyong Shire Council		0	0	0		0	832	865		852	0	9			0	0		381	391	422			0	0	954	1,233	1,223	1,296	8	9	9	9
3 Shoalhaven City Council		0	0	0		109	147	125		1,742	1,313	1,753			0	-			20	24			0	0	1,939	1,919	1,480	1,902	30	27	20	29
4 Rous County Council																																
5 MidCoast County Council		0	0	0		0	0	4		75	57	151			0	0			2	4			0	0	56	75	59	159	1	1	1	2
6 Tweed Shire Council		0	0	0		255	257	645		80	41	40			0	0		5	5	58			0	0	292	340	303	743	3	5	5	8
7 Port Macquarie-Hastings Council	0	0	0	0		41	158	137		262	107	93			0	0			0	36			0	0		0	265	266			3	3
8 Riverina Water County Council																																
10 Coffs Harbour City Council		0	0	0		86	93	107		487	637	1,403			0	-		63	60	62		0	0	0	520	636	790	1,572	9	10	12	23
11 Albury City Council	0	0	0	0	0	0	0	0		2,114	1,056	2,522			0	1,067		2,354	3,137	0			0	0	3,911	4,468	4,193	3,589	73	104	98	96
12 Fish River Water Supply																																
13 Tamworth Regional Council		0	0	0		0	72	81		1,468	1,488	1,678			0	0			0	7			0	0	103	1,468	1,560	1,766	2	34	36	36
14 Clarence Valley Council	0	0	0	0		0	114	127		130	0	0		0	0	0		0	0	0			0	0	263	103	114	127	8	4	4	4
15 Eurobodalla Shire Council		0	0	0		23	184	171		142	0	0			0	0		0	59	66			0	0	324	273	243	237	10	8	8	8
16 Wingecarribee Shire Council		0	0	0		0	54	64		70	0	0			0	0		17	17	0			0	0	67	87	71	64	2	3	2	2
17 Queanbeyan City Council		0	0	0		0	0	0		20	0	0			0	0			56	47			0	0	100	81	56	47	3	2	1	1
18 Dubbo City Council		0	0	0		0	0	0		2,639	2,914	2,576			0	0		0	0	0			0	0	2,304	2,658	2,914	2,576	81	98	99	97
19 Orange City Council		0	0	0		2,836	3,367	3,218		0	25	27			0	0		190	104	2			0	0	3,136	2,836	3,496	3,247	74	91	95	87
21 Bathurst Regional Council	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,949	662	575	848	590	0	0	0	0	662	575	848	3,539	18	16	24	100
22 Lismore City Council		0	0	0		0	0	0		182	33	10			0	0	0	0	0	0			0	0	119	182	33	10	3	6	1	0
23 Bega Valley Shire Council		0	0	0		0	457	556		616	156	257			0	0		0	0	0			0	0	596	608	613	813	29	30	33	46
24 Ballina Shire Council		0	0	0		155	107	119		56	0	33			0	-			0	0			0	0	0	193	107	152			5	3
25 Kempsey Shire Council		0	0	0		15	34	32		96	11	7			0	0			1	1			0	0	240	119	46	40	11	6	2	1
26 Country Energy		0	0	0		641	649	523		0	0	0		0	0	0		0	0	0		0	0	0	530	641	649	523	37	48	49	41
27 Byron Shire Council	0	0	0	0		0	340	235		776	343	210			0	0		48	40	42			0	0	791	824	723	487	24	29	22	13
28A Goldenfields Water (Reticulation)																																
28B Goldenfields Water (Bulk Supply)																																
9 Wagga Wagga City Council		15	13	0		273	257	294		348	280	278			0	0		122	56	0			0	0	785	747	606	572	16	13	11	11
LWU Range Max	0	15	13	0	0	2,836	3,367	3,218	0	2,639	2,914	2,576	0	0	0	2,949	662	2,354	3,137	590	0	0	0	0	3,911	4,468	4,193	3,589	81	104	99	100
LWU Range Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	10	1	1	1	0
Median of NMU Indicators shown in Table	0	0	0	0	0	0	107	119	0	142	33	33	0	0	0	0	241	33	17	4	0	0	0	0	422	575	606	523	10	10	9	9

	WATER UTILITY	ASSETS																									
		WATER ASSETS												SGE ASSETS													
		No. of WTWs providing full treatment				Length of Water Mains (excluding source transfer mains & property connections)				Properties served per km of water main				Number of Sewage Treatment Plants				Length of sewerage mains & channels				Properties served per km of sewer main				Number of Recycled Water Treatment Plants			
		A1				A2				A3				A4				A5				A6				A7			
		(No.)				(km)				(no.)				(no.)				(km)				(no.)				(no.)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	9	9	9	9	20,753	20,824	20,896	20,936	82	83	83	84	30	30	31	29	23,404	23,520	23,708	23,817	71	71	71	72	2	2	2	2
	Hunter Water Corporation	5	5	5	6	4,548	4,638	4,692	4,822	47	47	47	46	17	17	17	18	4,477	4,523	4,556	4,626	45	45	46	46	0	0	0	0
	Sydney Catchment Authority																												
1	Gosford City Council	1	1	2	2	940	946	1,007	1,014	70	73	69	69	2	2	2	2	1,395	1,399	1,400	1,401	47	48	49	49	0	0	0	0
2	Wyong Shire Council	1	1	1	1	1,082	1,107	1,120	1,136	56	52	53	52		6	6	6	1,215	1,199	1,210	1,220	47	48	48	48	0	0	0	0
3	Shoalhaven City Council	4	4	4	4	1,500	1,462	1,469	1,471	30	31	31	31		10	10	12	1,028	1,034	1,112	1,117	36	36	35	35	0	0	0	0
4	Rous County Council	2	2	2	2	75	76	80	80																				0
5	MidCoast County Council	2	2	2	2	1,172	1,195	1,187	1,234	30	30	30	29	12	12	12	12	898	922	947	965	35	35	34	34	0	0	0	0
6	Tweed Shire Council	3	3	3	3	655	660	670	726	43	44	47	44		8	8	8	650	636	642	706	41	43	45	42	0	0	0	0
7	Port Macquarie-Hastings Council	3	4	4	4	753	753	768	771	36	39	37	39		6	6	6	582	580	595	600	43	44	44	45	0	0	0	0
8	Riverina Water County Council	4	4	4	5	1,519	1,593	1,631	1,623	18	17	17	17																0
10	Coffs Harbour City Council	1	1	1	1	596	668	603	611	38	35	39	39		5	5	5	596	602	649	653	36	36	34	34	0	0	0	0
11	Albury City Council	1	1	1	1	533	563	530	536	42	40	41	41	3	3	4	4	461	464	484	495	47	45	42	42	0	0	0	0
12	Fish River Water Supply	1	1	1	1	238	238	241	231																				0
13	Tamworth Regional Council	5	5	5	5	635	606	639	644	30	33	32	32		5	5	5	478	480	496	504	36	38	37	36	0	0	0	0
14	Clarence Valley Council	1	1	0	0	1,362	1,180	1,189	1,195	13	17	17	17	11	11	8	8	312	328	328	329	41	37	43	44	0	0	0	0
15	Eurobodalla Shire Council	1	1	0	0	762	871	877	886	25	22	22	22	5	5	5	5	522	402	505	508	33	43	35	35	0	0	0	0
16	Wingecarribee Shire Council	3	3	3	3	625	620	668	648	27	28	27	28		5	5	5	447	455	460	509	30	31	31	28	0	0	0	0
17	Queanbeyan City Council	0	0	0	0	267	272	279	279	58	57	57	57		1	1	1	324	321	326	326	48	48	49	49	0	0	0	0
18	Dubbo City Council	1	1	1	1	462	451	446	456	34	35	35	35	1	1	1	1	342	363	370	374	42	40	40	40	0	0	0	0
19	Orange City Council	2	2	2	2	461	481	481	497	33	32	33	32		2	2	2	385	405	382	393	37	38	39	38	0	0	0	0
21	Bathurst Regional Council	1	1	1	1	348	341	359	361	41	42	41	41	1	1	1	1	354	355	364	371	38	39	39	39	0	0	0	0
22	Lismore City Council	0	0	0	0	333	335	337	340	41	41	41	41		3	3	3	336	337	345	346	36	36	35	36	0	0	0	0
23	Bega Valley Shire Council	0	0	0	0	567	576	576	576	24	24	24	24	6	6	6	10	314	314	390	390	33	34	30	30	0	0	0	0
24	Ballina Shire Council	1	1	1	1	326	338	339	341	43	40	41	41	4	4	4	4	303	304	308	312	41	41	41	41	0	0	0	0
25	Kempsey Shire Council	1	1	2	2	592	539	542	544	20	22	23	23		7	7	7	255	255	270	267	35	35	33	34	0	0	0	0
26	Country Energy	2	2	3	3	362	362	362	362	30	30	30	29	2	2	2	2				195				50	0	0	0	0
27	Byron Shire Council	1	1	1	1	217	233	233	233	47	45	45	46	6	6	6	5	252	238	252	252	39	41	40	39	0	0	0	0
28A	Goldenfields Water (Reticulation)	1	1	1	1	1,824	1,825	1,829	1,829	5	6	6	5																0
28B	Goldenfields Water (Bulk Supply)	1	1	1	1	315	315	315	315																				0
9	Wagga Wagga City Council													5	5	5	5	543	540	559	566	43	42	41	42	0	0	0	0
	LWU Range Max	5	5	5	5	1,824	1,825	1,829	1,829	70	73	69	69	12	12	12	12	1,395	1,399	1,400	1,401	48	48	49	50	0	0	0	
	LWU Range Min	0	0	0	0	75	76	80	80	5	6	6	5	1	1	1	1	252	238	252	195	30	31	30	28	0	0	0	
	Median of NMU Indicators shown in Table	1	1	1	1	592	576	576	576	34	34	34	34	5	5	5	5	454	430	472	495	39	40	40	39	0	0	0	

	WATER UTILITY	ASSETS																							
		WATER ASSETS																SGE ASSETS							
		Water main breaks per 100km of main				Infrastructure Leakage Index (ILI)				Real lossses (L/connection/day)				Real lossses (kL/km main/day)				Sge Main Breaks and chokes per 100km of main (includes property connections)				Property Connection Breaks and chokes per 100km of main			
		A8				A9				A10				A11				A12				A13			
		(no./100km)																(per 100km of main)				(per 100km of main)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	42	35	30	34	1.5	1.5	1.5	1.4	91	94	91	81	5.6	5.8	5.6	5.0	87	90	64	51	1	1	1	1
	Hunter Water Corporation	45	37	30	33	1.2	1.3	1.2	1.3	81	85	80	94	3.8	4.2	3.9	3.7	58	63	50	88	64	62	51	45
	Sydney Catchment Authority																								
1	Gosford City Council	43	36	29	27			1.0	1.0			25	32			1	1.9	68.7	67.9	55.4	44.4	24	24	20	14
2	Wyong Shire Council	5	4	4	9	1.0	1.0	1.0	1.0	29	26	28	29	2	1	2	1.5	48.7	42.0	49.6	53.8		4	3	6
3	Shoalhaven City Council	9	14	9	14	1.0	1.0	1.0	1.0	49	39	80	59	2	1	3	1.8				47.3				27
4	Rous County Council	55	48	24	16								9	0	1	1	4.8								
5	MidCoast County Council	13	10	9	5	1.0	1.0	1.1	1.3	72	60	86	101	2	1	2	2.7				1.45				-
6	Tweed Shire Council	4	10	10	5				1.0				63				2.0	20.9	15.0	12.7	11.3		3	3	4
7	Port Macquarie-Hastings Council	5	4	2	3	1.0	1.8	1.0	1.0	49	95	52	39	2	3	2	1.3		15.0	12.8	25.5				-
8	Riverina Water County Council	13	20	13	14	1.0	1.6	1.3	1.0	103	143	126	56	2	2	2	0.8								
10	Coffs Harbour City Council	9	9	7	11		1.0	1.0	1.0	44	47	49	49	2	2	2	1.8	149.8	102.0	116.5	103.1		34	47	42
11	Albury City Council	14	15	8	12	2.2	2.6	1.8	1.4	85	99	68	55	3	4	3	2.1	198.3	194.0	195.7	203.8				0
12	Fish River Water Supply	4	3	2	5									7	9	5	6.9								
13	Tamworth Regional Council	13	12	28	12		5.4	7.0	6.6	94	154	202	188	3	4	6	5.6	56.7	57.0	76.5	79.6		0	8	8
14	Clarence Valley Council	6	10	19	10				1.0				54				1.0	28.2	67.6	56.2	40.7		13	12	16
15	Eurobodalla Shire Council	5	2	3	4		1.7	2.2	1.1		129	172	88	1	3	3	1.7	34.5	77.0	43.7	39.0		14	17	23
16	Wingecarribee Shire Council				8				1.5				112				2.9	115.7	152.0	109.1	67.6		19	48	23
17	Queanbeyan City Council	2	6	5	1				1.0				58				2.4	31.2	113.0	103.0	47.5			3	7
18	Dubbo City Council	5	5	7	7	1.4	5.8	3.2	3.7	98	292	155	177	3	8	5	5.6	131.3	132.0	108.8	97.3		67	65	45
19	Orange City Council				28	2.3	1.0	1.9	1.0	185	73	145	60	5	2	5	1.8	126.4	111.0	123.0	158.5				3
21	Bathurst Regional Council	6	20	11	9				1.0				77				2.6	30.3	125.0	30.1	83.0		12	12	21
22	Lismore City Council	9	22	20	20		2.2	1.0	1.6	52	144	43	106	2	5	2	4.0	125.2	172.0	195.2	82.1		64	72	41
23	Bega Valley Shire Council	8	7	7	5	1.9	1.1	1.1	1.0	131	76	77	58	3	2	2	1.2	58.9	35.0	6.8	24.9		10	4	2
24	Ballina Shire Council	3	3	4	9		2.9	1.0	2.1		169	37	121		6	1	4.3		26.0	38.0	24.0			10	5
25	Kempsey Shire Council	4	9	12	24	2.5	4.4	1.9	1.3	136	298	119	80	3	5	2	1.7	31.4	34.5	15.3	10.9		29	12	6
26	Country Energy	13	10	18	11				1.2				68				2.0	448.8	441.0	336.6	314.4		293	211	201
27	Byron Shire Council	38	9	8	8	1.0	1.2	1.0	1.3	38	59	53	49	2	2	2	2.0	63.1	62.0	41.1	58.7		39	26	33
28A	Goldenfields Water (Reticulation)	19	15	7	6		1.0	1.0	1.0	94	73	98	99	1	0	1	0.6								
28B	Goldenfields Water (Bulk Supply)			0	0									9	7	5	4.7								
9	Wagga Wagga City Council																	347.7	394.0	366.5	316.8		233	249	207
	LWU Range Max	55	48	29	28	2.5	5.8	7.0	6.6	185	298	202	188	9	9	6	7	449	441	367	317			249	207
	LWU Range Min	2	2	0	0	1.0	1.0	1.0	1.0	29	26	25	9	0	0	1	1	21	15	7	1			3	0
	Median of NMU Indicators shown in Table	8	10	8	9	1.0	1.6	1.1	1.0	85	95	78	60	2	2	2	2	63	77	56	54			15	16

	WATER UTILITY	ENVIRONMENTAL																									
		SEWAGE TREATMENT LEVELS												SEWAGE TREATMENT COMPLIANCE													
		% sge treated to primary level only				% sge treated to secondary level (but not tertiary)				% sge treated to tertiary level				% sge treated that was compliant				STWs compliant at all times				Public disclosure of STW performance				Compliance with environmental regulator - sewerage			
		E1				E2				E3				E4				E5				E6				E7			
		(%)				(%)				(%)				(%)				(no.)				(YES/NO)				(YES/NO)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	75	74	67	74	4	4	11	3	22	22	22	22	100	100	96	96	29 of 30	28 of 30	29 of 31	27 of 29	Yes	Yes	Yes	Yes	No	No	Yes	No
	Hunter Water Corporation	0	0	0	0	54	56	56	58	46	44	44	42	86	99	87	91	13 of 17	15 of 17	11 of 17	12 of 18	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
	Sydney Catchment Authority																												
1	Gosford City Council	0	1	1	0	100	99	99	98	0	0	0	2	100	100	100	100	2 of 2	1 of 2	2 of 2	2 of 2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
2	Wyong Shire Council					92	91	92	91	8	10	8	9	100	99	100	100	6 of 6	5 of 6	6 of 6	6 of 6	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
3	Shoalhaven City Council					49	38	40	42	51	62	60	58	85	92	86	83	5 of 10	8 of 10	7 of 10	9 of 12	Yes	Yes	Yes	Yes	No	No	No	No
4	Rous County Council																												
5	MidCoast County Council					53	44	13	12	47	56	87	88	86	95	98	100	3 of 10	9 of 12	10 of 12	12 of 12	Yes	Yes	Yes	Yes	No	No	No	Yes
6	Tweed Shire Council					0	11	11	6	100	89	89	94	95	91	89	91	4 of 8	4 of 8	3 of 8	3 of 8	Yes	Yes	Yes	Yes	No	No	No	No
7	Port Macquarie-Hastings Council									100	100	100	100	40	50	89	90	2 of 4	3 of 5	4 of 6	4 of 6	Yes	Yes	Yes	Yes	No	No	No	No
8	Riverina Water County Council																												
10	Coffs Harbour City Council						58	58	54	100	42	42	46				100				5 of 5	Yes	Yes	Yes	Yes	No	No	No	Yes
11	Albury City Council								0	100	100	100	100	88	86	87	86	3 of 3	2 of 3	3 of 4	3 of 4	Yes	Yes	Yes	Yes	No	No	No	No
12	Fish River Water Supply																												
13	Tamworth Regional Council					100	100	100	100								99	1 of 3	4 of 5	5 of 5	4 of 5	Yes	Yes	Yes	Yes	No	No	No	No
14	Clarence Valley Council					68	2	3	15	32	98	97	85				83	0 of 11	0 of 11	4 of 8	2 of 8	Yes	Yes	Yes	Yes	No	Yes	No	No
15	Eurobodalla Shire Council					91	99	91	92	9		9	8	99	100	100	100	3 of 5	5 of 5	5 of 5	5 of 5	Yes	Yes	Yes	Yes	No	Yes	No	Yes
16	Wingecarribee Shire Council									98	100	100	100	98	81	100	100	4 of 5	3 of 5	5 of 5	5 of 5	Yes	Yes	Yes	Yes	No	No	No	Yes
17	Queanbeyan City Council									100	100	100	100	100	100	100	100	1 of 1	1 of 1	1 of 1	1 of 1	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
18	Dubbo City Council									100	100	100	100	64	57	70	75	0 of 1	0 of 1	0 of 1	0 of 1	Yes	Yes	Yes	Yes	No	No	No	No
19	Orange City Council				4	1		1	1	97	100	99	96	94	81	100	45	1 of 2	1 of 2	2 of 2	1 of 2	Yes	Yes	Yes	Yes	No	Yes	No	No
21	Bathurst Regional Council									100	100	100	100	75	81	88	100	0 of 1	0 of 1	0 of 1	1 of 1	Yes	Yes	Yes	Yes	No	No	No	Yes
22	Lismore City Council				4	4	5	1	13	96	95	99	83				100	1 of 3	2 of 3	3 of 3	3 of 3	Yes	Yes	Yes	Yes	No	No	No	Yes
23	Bega Valley Shire Council					91	92	71	70	9	8	29	30	92	100	100	97	2 of 6	6 of 6	6 of 6	9 of 10	Yes	Yes	Yes	Yes	No	Yes	No	No
24	Ballina Shire Council												100		98	100	93		1 of 4	4 of 4	3 of 4	Yes	Yes	Yes	Yes		No	No	No
25	Kempsey Shire Council					27	26	19	19	73	74	81	81	87	70	74	82	3 of 7	5 of 7	5 of 7	6 of 7	Yes	Yes	Yes	Yes	No	No	No	No
26	Country Energy					100	100	100					100				100	0 of 2	0 of 2	0 of 2	2 of 2	Yes	Yes	Yes	Yes	No	No	No	Yes
27	Byron Shire Council					21	24	0	27	79	76	100	73	86	92	90	89	1 of 6	3 of 6	2 of 6	3 of 5	Yes	Yes	Yes	Yes	No	No	No	No
28A	Goldenfields Water (Reticulation)																												
28B	Goldenfields Water (Bulk Supply)																												
9	Wagga Wagga City Council						8	3	3	100	92	97	97	32	35	88	95	0 of 3	3 of 5	4 of 5	3 of 5	Yes	Yes	Yes	Yes	No	No	No	No
	LWU Range Max					100	100	100	100	100	100	100	100	100	100	100	100												
	LWU Range Min					0	2	0	0	0	0	0	2	32	35	70	45												
	Median of NMU Indicators shown in Table					61	44	30	23	97	92	97	91	88	92	94	97												

	WATER UTILITY	ENVIRONMENTAL																					
		BIOSOLIDS				GREENHOUSE GAS WS & SGE																	
		Biosolids reused				Greenhouse emissions WATER				Greenhouse emissions SEWERAGE				Net greenhouse emissions OTHER				TOTAL Net greenhouse emissions				Sewer overflows reported to environmental regulator			
		E8				E9				E10				E11				E12				E13			
		(%)				(t CO2 per 1,000 properties)				(t CO2 per 1,000 properties)				(t CO2 per 1,000 properties)				(t CO2 per 1,000 properties)				(number per 100km of main)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	100	100	100	100			83	68			150	192			11	-55			240	200	87	90	64	0
	Hunter Water Corporation	88	104	100	88	140	175	117	132	213	192	215	273	21	15	14	21	362	371	333	412	42	53	43	2
	Sydney Catchment Authority																								
1	Gosford City Council	100	100	100	100			205	128			179	298				13	432	386	380	439				1
2	Wyong Shire Council	100	100	100	100				-				-				-				-				0
3	Shoalhaven City Council	100	100	100	100		223	220	239		270	187	163		223	11	7		394	389	408				0
4	Rous County Council								-				-				-				-				
5	MidCoast County Council	100	100	100	100		190	188	165		212	136	138		190	12	12		324	321	315				1
6	Tweed Shire Council	58	58	57	61		207	190	150		219	199	189				0		408	375	339				0
7	Port Macquarie-Hastings Council	100	89	93	100								12								12				1
8	Riverina Water County Council								395				-				0				395				
10	Coffs Harbour City Council	0	100	100	100				104				278				76				458				0
11	Albury City Council	0	0	0	0			282	310				238					975	401	282	548				0
12	Fish River Water Supply								118				-				0				118				
13	Tamworth Regional Council	97	96	97	99				261				118								379				0
14	Clarence Valley Council	0	0	35	0				16				84				-				100				1
15	Eurobodalla Shire Council	64	0	5	0		181	180	186		197	181	159		181	0			347	346	345				5
16	Wingecarribee Shire Council	0	0	100	0				178				151				7				336				3
17	Queanbeyan City Council	100	100	0	100		13	13	15		13	154	160		13	37	39		210	204	214				0
18	Dubbo City Council	100	100	100	100		483	483	545		523	240	202		483	13	13		722	722	759				2
19	Orange City Council	2	79	100	100		289	280	241		291	243	186				0		521	505	428				3
21	Bathurst Regional Council	100	100	95	96				-				-				-				-				-
22	Lismore City Council			82	0				7				162				0				169				1
23	Bega Valley Shire Council	0	0	0	0				8				8				1		172		17				1
24	Ballina Shire Council	0	100	100	100				2				264				-				266				3
25	Kempsey Shire Council				0		209	207	173		285	180	150		209	1	1		344	340	324				1
26	Country Energy	0	0	100	0				549				55								604				0
27	Byron Shire Council	100	100	100	100				-				-				-				-				14
28A	Goldenfields Water (Reticulation)												-												
28B	Goldenfields Water (Bulk Supply)												-												
9	Wagga Wagga City Council	99	100	100	100								36				-				36				0
	LWU Range Max	100	100	100	100		483	483	549		523	243	298		483	37	76		722	722	759				14
	LWU Range Min	0	0	0	0		13	13	2		13	136	8		13	0	0		172	204	12				0
	Median of NMU Indicators shown in Table	97	100	100	100		208	206	169		245	181	160		200	12	4		386	361	338				1

	WATER UTILITY	CUSTOMERS																													
		WS CUSTOMERS																SGE CUSTOMERS															
		Population receiving water supply services C1 ('000)				Connected residential properties - water supply C2 ('000)				Connected nonresidential properties - water supply C3 ('000)				Total connected properties - water supply C4 ('000)				Population receiving sewerage services C5 ('000)				Connected residential properties - sewerage C6 ('000)				Connected nonresidential properties - sewerage C7 ('000)				Total connected properties - sewerage C8 ('000)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	4,267	4,308	4,322	4,344	1,582	1,595	1,608	1,623	124	126	129	132	1,706	1,721	1,737	1,755	4,140	4,181	4,195	4,240	1,543	1,557	1,570	1,586	113	115	118	121	1,656	1,672	1,688	1,707
	Hunter Water Corporation	506	506	511	516	198	202	205	207	16	14	15	15	214	216	221	222	487	486	491	496	192	191	194	199	10	14	14	12	202	205	209	211
	Sydney Catchment Authority																																
1	Gosford City Council	155	159	158	160	63	67	67	67	3	3	3	3	66	69	70	70	155	155	155	156	63	65	65	66	3	3	3	3	66	68	68	68
2	Wyong Shire Council		142	143	145	56	55	56	57		4	3	3	60	58	59	59		140	141	143		54	56	56		3	3	3	57	57	58	59
3	Shoalhaven City Council		88	88	89	41	42	43	43		3	3	3	45	45	45	46		77	82	80		35	37	38		2	1	1	37	37	39	39
4	Rous County Council		113	113	113				40				5				46																
5	MidCoast County Council		77	77	78	33	33	34	34		3	2	2	35	36	36	36		76	76	77		30	30	30		2	2	2	32	32	32	33
6	Tweed Shire Council		71	72	73	27	28	30	30		1	1	1	28	29	31	32		66	67	69		27	28	29		1	1	1	26	27	29	30
7	Port Macquarie-Hastings Council		75	77	78	26	27	26	27		2	3	3	27	29	29	30		69	69	70		24	24	25		2	2	2	25	26	26	27
8	Riverina Water County Council		64	65	69	25	25	26	26		2	2	2	27	27	28	28															
10	Coffs Harbour City Council		62	63	65	22	22	22	22		2	1	2	23	23	24	24		60	62	64		21	21	21		1	1	1	21	22	22	22
11	Albury City Council		48	48	50	21	21	20	20		2	2	2	23	23	22	22		48	47	50		19	19	19		2	2	2	22	21	20	21
12	Fish River Water Supply		62	62	62				21				3				24																
13	Tamworth Regional Council		43	43	44	17	18	18	18		2	2	2	19	20	20	20		42	42	42		16	17	17		2	2	2	17	18	18	18
14	Clarence Valley Council		50	50	50	17	18	18	18		1	2	3	18	20	21	21		32	28	28		10	13	13		2	1	1	13	12	14	14
15	Eurobodalla Shire Council		35	37	36	18	18	18	18		1	1	1	19	19	19	19		35	37	35		17	17	17		1	1	1	17	17	17	18
16	Wingecarribee Shire Council		36	36	38	16	17	17	17		1	1	1	17	18	18	18		32	32	34		13	13	14		1	1	1	13	14	14	14
17	Queanbeyan City Council		36	36	36	14	15	15	15		1	1	1	15	16	16	16		36	36	36		15	15	15		1	1	1	15	16	16	16
18	Dubbo City Council		35	36	36	14	14	14	14		2	2	2	16	16	16	16		33	34	32		13	13	14		1	1	1	14	14	15	15
19	Orange City Council		35	36	38	14	14	15	14		2	2	2	15	16	16	16		35	36	38		13	14	14		2	1	1	14	16	15	15
21	Bathurst Regional Council		31	33	33	13	13	13	13		1	1	2	14	14	15	15		31	33	33		13	13	13		1	1	2	14	14	14	15
22	Lismore City Council		35	35	35	13	13	13	13		1	1	1	14	14	14	14		32	32	33		11	11	11		1	1	1	12	12	12	12
23	Bega Valley Shire Council		28	28	29	12	13	13	13		1	1	1	13	14	14	14		22	24	23		10	11	11		1	1	1	10	11	12	12
24	Ballina Shire Council		33	33	36	12	12	12	13		1	2	1	14	13	14	14		33	31	34		12	12	12		1	1	1	12	13	13	13
25	Kempsey Shire Council		25	23	25	10	10	10	11		2	2	2	12	12	12	12		20	18	19		8	8	8		1	1	1	9	9	9	9
26	Country Energy		20	19	19	10	10	10	10		1	1	1	11	11	11	10		19	19	19		9	9	9		1	1	1	10	10	10	10
27	Byron Shire Council		29	29	29	9	9	9	9		1	1	1	10	11	11	11		29	29	29		9	9	9		1	1	1	10	10	10	10
28A	Goldenfields Water (Reticulation)		21	21	21	7	8	8	7		3	3	3	10	11	11	10															
28B	Goldenfields Water (Bulk Supply)		38	38	38																												
9	Wagga Wagga City Council																		57	57	57		21	22	22		2	2	2	24.0	23.0	23.0	23.6
	LWU Range Max		159	158	160	63	67	67	67		4	3	5	66	69	70	70.1		155	155	156		65	65	66		3	3	3	66	68	68	68.5
	LWU Range Min		20	19	19	7	8	8	7		1	1	1	10	11	11	10.0		19	18	19		8	8	8		1	1	1	9	9	9	9.0
	Median of NMU Indicators shown in Table		38	38	38	17	18	18	18		2	2	2	18	19	19	19.8		35	36	36		15	15	15		1	1	1	15	16	16	16.0

WATER UTILITY	COMPLAINTS & INTERRUPTIONS																																			
	WS								SGE				WS & SGE										WS				SGE				WS							
	Water quality complaints C9 (per 1000 properties)				Water service complaints C10 (per 1000 properties)				Sewage service complaints (including odour complaints) C11 (per 1000 properties)				Billing and account complaints - water supply & sewerage C12 (per 1000 properties)				Total water and sewerage complaints C13 (per 1000 properties)				% of calls answered by an operator within 30 secs C14 (%)				Av duration of unplanned interruptions C15 (min)				Av sewerage interruption C16 (min)				Average frequency of unplanned interruptions - water C17 (per 1000 props)				No. of restrictions applied for non-payment of bills C18 (per 1000 props)				No. of legal actions applied for non-payment of bills C19 (per 1000 props)			
	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09	05/06	06/07	07/08	2008/09
Sydney Water Corporation	0.8	0.8	0.9	0.6	0.4	0.4	0.5	0.4	1.0	0.8	0.9	0.4	2.4	2.5	5.3	4.2	4.9	4.7	8.1	6.0	84.3	83.2	88.5	84.7	130	141	167	141	112	137	143	240	6	6	5	5	1	1	2	2	0	0	0	0
Hunter Water Corporation	6.8	3.9	2.8	3.2	10.2	8.2	4.0	0.2	33.7	35.2	26.5	2.3	6.2	5.6	3.1	1.5	50	44	39	7	68	61	56	72	157	177	118	121	153	151	144	0	387	372	225	271	10	4	8	5	0	0	0	0
Sydney Catchment Authority																																										
1 Gosford City Council	57	56	94	25				-				-				-				-				-		224	232	238	132	120	134	116	293	280	181	203	0	0	0	0	0	1	7	6
2 Wyong Shire Council	9	7	3	5		2	2	4	10	9	11	12				0				21			88	92	180	150	202	210	120	186	165	156	0	33	39	61	0	0	0	0	0	0	0	1
3 Shoalhaven City Council	3	3	3	3				1				7				0				13			100	100				-				-				-	1	1	1	1	0	0	0	0
4 Rous County Council																				0			95	95																			
5 MidCoast County Council	32	31	27	9		52	27	2	11	13	12	2			0	0	96	97	65	15				-				-			330	-				-	1	7	5	6	0	0	0	2
6 Tweed Shire Council	2	1	1	1		32	23	20			8	4				0	49	34	31	26				-				120				180				9	0	0	0	0	0	0	0	0
7 Port Macquarie-Hastings Council	8	6	6	9		22	22	18	5	4	3	6	1	0	0		28	35	31	36			86	81	192	180	210	178	60		60	60	0	12	7	11	0	1	0	0	0	0	0	0
8 Riverina Water County Council	2	3	4	2		3	9	13						1	1				14	17			99	99				334								34	0	1	1	1	0	0	0	0
10 Coffs Harbour City Council	11	3	3	8		25	26	40	23	26	34	27	0	0	0		60	53	64	88				-				120				120			7	24	10	6	2	2			0	0
11 Albury City Council				0.5				5				49				0	42	49	51	55				-				180				120				-	0	0	0	0	0	0	0	0
12 Fish River Water Supply																				1			98	98																			
13 Tamworth Regional Council				-				43				25				0				72				-				-				-				-	0	6	4	2	0	0	0	0
14 Clarence Valley Council	6	8	9	3			0	12	7	13	15	10	1	2	1				22	37				-				120				120				-	0	0	0	0	0	0	0	0
15 Eurobodalla Shire Council				-				0				1				0				2				-				-				-				2	0	0	0	0	0	0	2	0
16 Wingecarribee Shire Council	7	19	10	5				36				22				3				79			100	75				120				120				46	7	6	7	7		0	2	3
17 Queanbeyan City Council		0	0	0		34	39	5	5	26	27	17	14	9	9		12	75	78	31				-				240				240				6	0	0	0	0				12
18 Dubbo City Council				0.4				2				13				1				18			82	87	132	112	179	138	60	60	91	93	0	26	20	24	0	0	0	0	0	0	0	0
19 Orange City Council				2				62				25				7				100				-				180				-				175	0	1	0	1				0
21 Bathurst Regional Council	11	11	24	14		79	55	74	19	29	29	27			0	0	30	119	107	117				-				120				120				2				-				-
22 Lismore City Council		4	0	2	3	4	58	72	21	31	33	26			0	0			87	111			75	75	150	150	208	351				60				49	0	0	0	0	0	0	0	0
23 Bega Valley Shire Council				2				3				8				2				16			87	72				180				120				-	2	2	0	0			1	1
24 Ballina Shire Council				0				1		6	10	11				0				12			99	99	120	120	120	120		120	120	120				-				0				-
25 Kempsey Shire Council	13	1	0	0.5		1	0	0	1	0	2	1			0	0	17	1	3	2				0				100				146				114	1	1	1	1	0	0	0	0
26 Country Energy	0.5	0.1	0.0	0.1		1	0	0				1	1	0	0					2				-				60				60				-	0	0	1	1	0	0	0	0
27 Byron Shire Council	1	4	1	0.4				0				2				7				10				-				120				60				9	0	2	0	2	0	0	0	0
28A Goldenfields Water (Reticulation)				7				46								0				51				-				191								150	4	1	5	5		0	0	0
28B Goldenfields Water (Bulk Supply)																								-																			
9 Wagga Wagga City Council									89		89	76				0				76				-																			
LWU Range Max	57	56	94	25		79	58	74	89.4	31.4	89.2	76			8.5	9	96	119	107	117			100	100	192	224	232	351	132	186	330	240	293	280	181	203	10	7	7	7	0	1	7	
LWU Range Min	1	0	0	0		1	0	0	0.9	0.3	2.4	1			0.0	0	12	1	3	0			75	0	120	112	120	60	60	60	60	60	0	12	7	2	0	0	0	0	0	0	0	
Median of NMU Indicators shown in Table	7	4	3	2		22	22	5	10.5	13.0	13.7	11			0.2	0	36	51	51	24			95	90	150	150	205	158	90	120	127	120	0	30	20	29	0	1	0	0	0	0	0	

WATER UTILITY		HEALTH																									
		WS												WS													
		Water quality guidelines H1				No. of zones with microbiological compliance H2				% population with microbiological compliance H3 (%)				No. of zones with chemical compliance H4				Risk based drinking water management plan externally assessed H5 (YES/NO)				Risk based drinking water plan H6				Public disclosure of WQ performance H7 (YES/NO)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	13 of 13	13 of 13	13 of 13	13 of 13	100	100	100	100	13 of 13	13 of 13	13 of 13	13 of 13	Yes	Yes	Yes	Yes	ISO 9001	ISO 9001	ISO 9001	ISO9001	Yes	Yes	Yes	Yes
	Hunter Water Corporation	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	3 of 3	3 of 3	4 of 4	4 of 5	99.6	99.8	100	100	3 of 3	3 of 3	4 of 4	5 of 5	No	No	No	No	ADWG	ADWG	ADWG	ADWG	Yes	Yes	Yes	Yes
	Sydney Catchment Authority	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004																								
1	Gosford City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	2 of 2	100	100	100	100				2 of 2	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
2	Wyong Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	100	100	100	1 of 1	1 of 1	1 of 1	1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
3	Shoalhaven City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	4 of 5	4 of 4	4 of 4	4 of 4	100	100	100	100	4 of 5	4 of 4	4 of 4	4 of 4	No	No	No	No	No	No	HACCP	HACCP	Yes	Yes	Yes	Yes
4	Rous County Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	2 of 2	2 of 2	1 of 2	2 of 2	100	100	100	100	2 of 2	2 of 2	1 of 2	2 of 2	No	No	No	No	Yes	ADWG	ADWG	ADWG	Yes	Yes	Yes	Yes
5	MidCoast County Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	4 of 4	4 of 4	2 of 4	4 of 4	100	100	91	100	2 of 4	2 of 4	2 of 4	3 of 4	No	No	Yes	Yes	No	No	ADWG	ADWG	Yes	Yes	Yes	Yes
6	Tweed Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	2 of 3	3 of 3	3 of 3	3 of 3		98	100	100	1 of 3	2 of 3	2 of 3	3 of 3	No	No	No	No	No	No	ADWG	ADWG	Yes	Yes	Yes	Yes
7	Port Macquarie-Hastings Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	4 of 4	4 of 5	5 of 5	5 of 5	100	100	100	100	4 of 4	4 of 4	4 of 4	4 of 5	No	No	No	No	No	No	ADWG	ADWG	Yes	Yes	Yes	Yes
8	Riverina Water County Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	13 of 14	13 of 15	13 of 14	14 of 14		99	99	100	13 of 14	14 of 15	12 of 14	13 of 14	Yes	Yes	Yes	Yes	Yes	ADWG	HACCP	HACCP	Yes	Yes	Yes	Yes
10	Coffs Harbour City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	3 of 3	3 of 3	3 of 3	3 of 3	100	100	100	100	3 of 3	3 of 3	3 of 3	3 of 3	No	No	No	No	No	No	ADWG	ADWG	Yes	Yes	Yes	Yes
11	Albury City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 2	2 of 2	3 of 4	4 of 4	100	100	75	100	2 of 2	2 of 2	4 of 4	4 of 4	No	No	No	No	No	No	No	ADWG	Yes	Yes	Yes	Yes
12	Fish River Water Supply	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	0 of 1	0 of 1	1 of 1	1 of 1			100	100	0 of 1	0 of 1	0 of 1	1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
13	Tamworth Regional Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	5 of 7	6 of 7	5 of 7	7 of 7	95	100	98	100	5 of 7	5 of 7	5 of 7	6 of 7	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
14	Clarence Valley Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	4 of 7	4 of 7	3 of 5	4 of 5			98	99			4 of 5	5 of 5	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
15	Eurobodalla Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1		1 of 1				100	1 of 1	1 of 1		1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
16	Wingecarribee Shire Council	ADWG2004	ADWG 2004	ADWG 2004	ADWG 2004	3 of 3	3 of 3	2 of 2	2 of 2	100	100	100	100	1 of 3	2 of 3	2 of 2	1 of 2	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
17	Queanbeyan City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	100	100	100				1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
18	Dubbo City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	0 of 1	0 of 1	1 of 1	1 of 1	100	99	100	100	0 of 1	0 of 1	1 of 1	1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
19	Orange City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	2 of 3	2 of 2	2 of 2	2 of 2	100	100	100	100	2 of 3	2 of 2	2 of 2	2 of 2	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
21	Bathurst Regional Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	99	100	100	1 of 1	1 of 1	1 of 1	1 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
22	Lismore City Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1		97	100	100	1 of 1	1 of 1	1 of 1	0 of 1	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
23	Bega Valley Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	6 of 6	6 of 6	6 of 6	6 of 6	100	100	100	100	6 of 6	3 of 6	6 of 6	6 of 6	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
24	Ballina Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	100	100	100	1 of 1	1 of 1	1 of 1	1 of 1	No	No	No	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
25	Kempsey Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	8 of 9	6 of 9	7 of 8	7 of 8	100	99	100	100	8 of 9	6 of 9	7 of 8	6 of 8	No	No	No	No	No	No	NHMRC	NHMRC	Yes	Yes	Yes	Yes
26	Country Energy	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	2 of 2	2 of 2	2 of 2	2 of 2	100	100	100	100	2 of 2	1 of 2	2 of 2	2 of 2	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes
27	Byron Shire Council	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	100	100	100	1 of 1	1 of 1	1 of 1	1 of 1	No	No	No	No	No	No	ADWG	ADWG	Yes	Yes	Yes	Yes
28A	Goldenfields Water (Reticulation)	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	1 of 1	1 of 1	1 of 1	1 of 1	100	100	100	100	1 of 1	1 of 1	1 of 1	1 of 1	No	No	No	No	No	ADWG	ADWG	ADWG	Yes	Yes	Yes	Yes
28B	Goldenfields Water (Bulk Supply)	ADWG 2004	ADWG 2004	ADWG 2004	ADWG 2004	2 of 4	4 of 4	2 of 3	3 of 3		100	95	100	2 of 4	3 of 4	1 of 1	3 of 3	No	No	No	No	No	ADWG	ADWG	ADWG	Yes	Yes	Yes	Yes
9	Wagga Wagga City Council																												
	LWU Range Max									100	100	100	100																
	LWU Range Min									95	97	75	99																
	Median of NMU Indicators shown in Table									100	100	100	100																

WATER UTILITY		RESIDENTIAL CHARGES AND BILLS WATER SUPPLY																							
		Tariff structure P1		Free water allowance P1-1		Fixed charge P1-2		Usage charge 1st step P1-3				Usage charge 2nd step P1-4				Usage charge 3rd step P1-5				Usage charge 4th step P1-6				Usage charge 5th step P1-7			
						Basis	$	kL limit		$/kL		kL limit		$/kL		kL limit		$/kL		kL limit		$/kL		kL limit		$/kL	
		2007/08	*2008/09*	*2007/08*	*2008/09*	*2008/09*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*	*2007/08*	*2008/09*
	Sydney Water Corporation	Inclining Block	Inclining Block			Connection size	76	<400	<400	1.34	1.61	>400	>400	1.83	1.83												
	Hunter Water Corporation	Inclining Block	Inclining Block			Connection size	41	<1000	All	1.20	1.27	>1000		1.18													
	Sydney Catchment Authority																										
1	Gosford City Council	Two Part	Two Part	0	0	Connection size	88	All	All	1.38	1.67																
2	Wyong Shire Council	Two Part	Two Part	0	0	Connection size	97	All	All	1.38	1.67																
3	Shoalhaven City Council	Inclining Block	Inclining Block	0	0	Connection size	61	<450	<450	0.95	1.00	>450	>450	1.43	1.50												
4	Rous County Council																										
5	MidCoast County Council	Inclining Block	Inclining Block	0	0	Meter size	124	<200	<200	1.45	1.75	>200	>200	1.65	1.95												
6	Tweed Shire Council	Two Part	Two Part	0	0	Meter size	98	All	All	1.23	1.36																
7	Port Macquarie-Hastings Council	Inclining Block	Inclining Block	0	0	Meter size	110	<270	<270	1.53	1.84	>270	>270	3.06	3.68												
8	Riverina Water County Council	Two Part	Two Part	0	0	Uniform charge	80	All	All	0.75	0.78																
10	Coffs Harbour City Council	Inclining Block	Inclining Block	0	0	Uniform charge	113	<365	<365	1.89	1.96	>365	>365	2.27	2.55												
11	Albury City Council	Inclining Block	Inclining Block	0	0	Meter size	87	<225	<225	0.50	0.52	>225	>225	1.00	1.04												
12	Fish River Water Supply																										
13	Tamworth Regional Council	Inclining Block	Inclining Block	0	0	Connection size	175	<400	<400	0.90	0.99	400-800	400-800	1.35	1.49	>800		2.03									
14	Clarence Valley Council	Inclining Block	Inclining Block	0	0	Connection size	112	<450	<450	1.13	1.22	>450	>450	1.70	1.83												
15	Eurobodalla Shire Council	Inclining Block	Inclining Block	0	0	Meter size	295	<450	<450	1.60	1.70	>450	>450	2.40	2.55												
16	Wingecarribee Shire Council	Inclining Block	Inclining Block	0	0	Meter size	102	<300	<225	1.24	1.28	>300	>225	1.85	1.92												
17	Queanbeyan City Council	Inclining Block	Inclining Block	0	0	Meter size	262	<176	<200	1.60	1.70	>176	>200	2.15	2.30												
18	Dubbo City Council	Inclining Block	Inclining Block	0	0	Meter size	121	<550	<550	0.87	0.91	>550	>550	1.38	1.45												
19	Orange City Council	Inclining Block	Inclining Block	0	0	Connection size	111	<450	<450	1.46	1.51	>450	>450	2.19	2.27												
21	Bathurst Regional Council	Inclining Block	Inclining Block	0	0	Connection size	235	<300	<250	0.45	0.76	>300	>250	0.90	1.15												
22	Lismore City Council	Two Part	Two Part	0	0	Connection size	100	All	All	1.35	1.70																
23	Bega Valley Shire Council	Two Part	Two Part	0	0	Connection size	130	All	All	2.10	2.10																
24	Ballina Shire Council	Inclining Block	Inclining Block	0	0	Connection size	110	<350	<350	1.07	1.18	>350	>350	1.60	1.77												
25	Kempsey Shire Council	Two Part	Inclining Block	0	0	Uniform charge	275	All	<250	0.99	1.10		>250		1.65												
26	Country Energy	Inclining Block	Inclining Block	0	0	Connection size	214	<400	<400	0.79	0.91	>400	>400	2.36	2.36												
27	Byron Shire Council	Two Part	Two Part	0	0	Connection size	123	All	All	1.27	1.44																
28A	Goldenfields Water (Reticulation)	Two part	Two part	0	0	Uniform charge	204	All	All	1.14	1.20																
28B	Goldenfields Water (Bulk Supply)																										
9	Wagga Wagga City Council																										
	NMU Range Max						295			2.10	2.10			3.06	3.68			2.03									
	NMU Range Min						61			0.45	0.52			0.90	1.04			2.03									
	Median of NMU Indicators shown in Table						113			1.24	1.32			1.70	1.88			2.03									

WATER UTILITY		RESIDENTIAL CHARGES AND BILLS																					
		WATER SUPPLY																					
		Special levies		Income retained from special levies		Annual Bill based on 200kL/a				Average Annual Residential Water Supplied				Typical Residential Bill (TRB)				Number of meter readings per annum				Number of bills per annum			
		P1-12		P1-13		P2				P2-1				P3				P3-1				P3-2			
		$		(Yes/No)		($ per assessment)				(kL)				($ per assessment)				(no.)				(no.)			
		2007/08	2008/09	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation				No			325	398			186	198			308	306	394				4	4	4			4	4	4
	Hunter Water Corporation		0					278	295			177	180			255	251	270				3	3	3			3	3	3
	Sydney Catchment Authority																												
1	Gosford City Council	15	15	No	No			361	0			135	140			248	271	321						2					2
2	Wyong Shire Council	15	15	No	No			371	0			146	141			264	296	332						2					2
3	Shoalhaven City Council	0	0	No	No			251	0			144	152			211	198	213				4	4	4			4	4	4
4	Rous County Council																												
5	MidCoast County Council	0	0	No	No			420	0			149	150			355	346	386				4	4	4			4	4	4
6	Tweed Shire Council	0	0	No	No			341	0			174	180			318	325	342				2	2	2			2	2	2
7	Port Macquarie-Hastings Council	0	0	No	No			416	0			154	151			327	346	388				4	4	4			4	4	4
8	Riverina Water County Council	0	0	No	No			230	0			327	374			375	325	372				4	4	4			4	4	4
10	Coffs Harbour City Council	0	0	No	No			486	0			169	165			430	428	436				4	4	4			4	4	4
11	Albury City Council	0	0	No	No			187	0			193	222			238	184	203						3			3	3	3
12	Fish River Water Supply																												
13	Tamworth Regional Council	0	0	No	No			350	0			192	226			345	343	398				4	4	4			4	4	4
14	Clarence Valley Council	0	0	No	No			330	0			178	176			289	331	322				4	4	4			4	4	4
15	Eurobodalla Shire Council	0	0	No	No			605	0			119	129			404	475	515						3					3
16	Wingecarribee Shire Council	0	0	No	No			347	0			168	183			364	307	336						3					3
17	Queanbeyan City Council	0	0	No	No			587	0			188	198			570	562	599						4					4
18	Dubbo City Council	0	0	No	No			290	0			322	331			485	395	423						4					4
19	Orange City Council	0	0	No	No			398	0			178	259			558	375	502						4					4
21	Bathurst Regional Council	0	0	No	No			359	0			241	240			384	377	417						4					4
22	Lismore City Council	0	0	No	No			370	0			163	159			312	320	370						4					4
23	Bega Valley Shire Council	0	0	No	No			550	0			144	154			361	433	454						3					3
24	Ballina Shire Council	0	0	No	No			314	0			186	175			273	299	316						4					4
25	Kempsey Shire Council	0	0	No	No			473	0			169	156			428	442	447						4					4
26	Country Energy	0	0	No	No			367	0			284	284			396	430	469						4					4
27	Byron Shire Council	0	0	No	No			369	0			181	181			320	344	383						4					4
28A	Goldenfields Water (Reticulation)	0	0	No	No			432	0			252	298			527	491	557				4	4	4			4	4	4
28B	Goldenfields Water (Bulk Supply)																												
9	Wagga Wagga City Council																												
	NMU Range Max							605	0			327	374			570	562	599				4	4	4			4	4	4
	NMU Range Min							187	0			119	129			211	184	203				2	2	2			2	2	2
	Median of NMU Indicators shown in Table							368	0			176	178			358	345	387				4	4	4			4	4	4

	WATER UTILITY	RESIDENTIAL CHARGES AND BILLS – SEWERAGE																			
		Tariff Structure P4 (Charge Type)				Fixed charge min P4-1 ($)				Usage charge P4-2 ($/kL)				Special Levies P4-3						Income from Special Levies Retained by Utility P4-4 (Yes/No)	
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	Description	2005/06	2006/07	2007/08	2008/09		2007/08	2008/09
	Sydney Water Corporation						389	408	480		0	0				0	0				No
	Hunter Water Corporation						284 + usage	303 + usage	321		0.44	0.46	0.47	Environmental		0	53	55		Yes	Yes
	Sydney Catchment Authority																				
1	Gosford City Council			Fixed	Fixed Charge		376	385	399		0	0	0			0	0	0		No	No
2	Wyong Shire Council			Fixed	Fixed Charge		381	394	398		0	0	0			0	0	0		No	No
3	Shoalhaven City Council			Fixed	Fixed Charge		526	541	557		0	0	0			0	0	0		No	No
4	Rous County Council																				
5	MidCoast County Council			Fixed	Fixed Charge		610	646	690		0	0	0			0	0	0		No	No
6	Tweed Shire Council			Fixed	Fixed Charge		473	492	509		0	0	0			0	0	0		No	No
7	Port Macquarie-Hastings Council			Fixed	Fixed Charge		421	484	556		0	0	0			0	0	0		No	No
8	Riverina Water County Council																				
10	Coffs Harbour City Council			Fixed	Fixed Charge		589	600	630		0	0	0			0	0	0		No	No
11	Albury City Council			Fixed	Fixed Charge		355	392	399		0	0	0			0	0	0		No	No
12	Fish River Water Supply																				
13	Tamworth Regional Council			Fixed	Fixed Charge		540	605	638		0	0	0			0	0	0		No	No
14	Clarence Valley Council			Fixed	Fixed Charge		480	530	585		0	0	0			0	0	0		No	No
15	Eurobodalla Shire Council			Fixed	Fixed Charge		520	553	617		0	0	0			0	0	0		No	No
16	Wingecarribee Shire Council			Fixed	Fixed Charge		500	515	530		0	0	0			0	0	0		No	No
17	Queanbeyan City Council			Fixed	Fixed Charge		305	314	323		0	0	0			0	0	0		No	No
18	Dubbo City Council			Fixed	Fixed Charge		434	455	478		0	0	0			0	0	0		No	No
19	Orange City Council			Fixed	Fixed Charge		273	283	292		0	0	0			0	0	0		No	No
21	Bathurst Regional Council			Fixed	Fixed Charge		351	363	381		0	0	0			0	0	0		No	No
22	Lismore City Council			Fixed	Fixed Charge		445	461	476		0	0	0			0	0	0		No	No
23	Bega Valley Shire Council			Fixed	Fixed Charge		648	890	890		0	0	0			0	0	0		No	No
24	Ballina Shire Council			Fixed	Fixed Charge		360	400	440		0	0	0			0	0	0		No	No
25	Kempsey Shire Council			Fixed	Fixed Charge		517	553	570		0	0	0			0	0	0		No	No
26	Country Energy			Fixed	Fixed Charge		298	328	361		0	0	0			0	0	0		No	No
27	Byron Shire Council			Fixed + Usage	Fixed + Usage Charge		510	544	576		1.20	1.08	1.08			0	0	0		No	No
28A	Goldenfields Water (Reticulation)																				
28B	Goldenfields Water (Bulk Supply)																				
9	Wagga Wagga City Council			Fixed	Fixed Charge		320	333	356		0	0	0			0	0	0		No	No
	NMU Range Max						648	890	890		1	1	1			0	0	0			
	NMU Range Min						273	283	292		0	0	0			0	0	0			
	Median of NMU Indicators shown in Table						445	484	494		0	0	0			0	0	0			

	WATER UTILITY	RESIDENTIAL CHARGES AND BILLS																	
		SEWERAGE										WS & SGE							
		Annual Bill based on 200kL/a			Typical Residential Bill (TRB)			Number of bills per annum				Annual Bill based on 200kL/a WS + Sge				Typical Residential Bill (TRB) WS + Sge			
		P5			P6			P6-1				P7				P8			
		($ per assessment)			($ per assessment)			(no.)				($ per assessment)				($ per assessment)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation				480		389	408	480		4	4	4				878			714	875
	Hunter Water Corporation			349	368		378	344	363		3	3	3			627	664			594	633
	Sydney Catchment Authority																				
1	Gosford City Council			385	399		376	385	399				2			746	821		624	656	721
2	Wyong Shire Council			394	398		381	394	398				2			765	829		644	691	730
3	Shoalhaven City Council			541	557		526	541	557		4	4	4			792	818		737	739	770
4	Rous County Council																				
5	MidCoast County Council			646	690		610	646	690		4	4	4			1066	1,164		965	992	1,076
6	Tweed Shire Council			492	509		473	492	509		2	2	2			833	879		791	817	851
7	Port Macquarie-Hastings Council			484	556		421	484	556		4	4	4			900	1,034		747	830	944
8	Riverina Water County Council																				
10	Coffs Harbour City Council			600	630		589	600	630		4	4	4			1086	1,135		1,019	1,028	1,066
11	Albury City Council			392	399		355	392	399		3	3	3			579	590		593	576	602
12	Fish River Water Supply																				
13	Tamworth Regional Council			605	638		540	605	638		4	4	4			955	1,011		885	948	1,036
14	Clarence Valley Council			530	585		480	530	585		4	4	4			860	941		769	861	907
15	Eurobodalla Shire Council			553	617		520	553	617				3			1158	1,252		924	1,028	1,132
16	Wingecarribee Shire Council			515	530		500	515	530				3			862	888		863	822	866
17	Queanbeyan City Council			314	323		305	314	323				4			901	925		875	876	922
18	Dubbo City Council			455	478		434	455	478				4			745	781		918	850	901
19	Orange City Council			283	292		273	283	292				4			680	705		831	658	794
21	Bathurst Regional Council			363	381		351	363	381				4			722	768		735	740	798
22	Lismore City Council			461	476		445	461	476				4			831	916		757	781	846
23	Bega Valley Shire Council			890	890		648	890	890				3			1440	1,440		1,009	1,323	1,344
24	Ballina Shire Council			400	440		360	400	440				4			714	786		633	699	756
25	Kempsey Shire Council			553	570		517	553	570				4			1026	1,065		945	995	1,017
26	Country Energy			328	361		298	328	361				4			695	757		694	758	830
27	Byron Shire Council			724	738		681	706	722				4			1093	1,149		1,002	1,051	1,106
28A	Goldenfields Water (Reticulation)																				
28B	Goldenfields Water (Bulk Supply)																				
9	Wagga Wagga City Council			333	356		320	333	356				4								
	NMU Range Max			890	890		681	890	890			4	4			1,440	1,440		1,019	1,323	1,344
	NMU Range Min			283	292		273	283	292			2	2			579	590		593	576	602
	Median of NMU Indicators shown in Table			484	509		445	484	509			4	4			847	902		811	826	883

	WATER UTILITY	FINANCIAL																													
		WS				SGE				WS & SGE				WS								SGE				WS & SGE							
		Total Revenue Water (excludes gain/loss on disposal of assets, grants for capital works & investment income) F1 ($'000)				Total Revenue Sewerage (excludes gain/loss on disposal of assets, grants for capital works & investment income) F2 ($'000)				Total Income WS + Sge (includes gain/loss on disposal of assets) (may not equal F1 + F2) F3 ($'000)				Residential Revenue from Usage Charges F4 (%)				Revenue per property for WS F5 ($/property)				Revenue per property for Sge F6 ($/property)				Income for Utility F7 ($/property)				Revenue from CSOs F8 (%)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	710,345	776,872	737,929	907,503	803,597	865,477	908,622	995,675	1,483,310	1,624,900	1,688,470	1,870,880	75	82	84		416	451	425	517	485	518	538	583	869	944	972	1,066	6.0	6.0	5.0	6.0
	Hunter Water Corporation	88,091	101,372	87,298	90,099	96,702	100,004	110,102	111,359	186,237	202,666	200,257	201,510	67	65	66	66	412	469	396	406	478	488	528	528	870	937	908	908	5.0	4.0	4.0	4.6
	Sydney Catchment Authority	138,057	151,160	160,107	176,278																												
1	Gosford City Council	24,797	26,454	23,586	28,860	35,321	30,629	29,076	30,221	57,037	57,226	52,662	58,791	68	68	70	75	376	382	339	412	535	453	427	441	864	825	756	839	2.0	2.0	2.0	2.0
2	Wyong Shire Council	30,527	40,320	29,151	31,173	24,821	29,365	25,736	25,464	52,549	69,685	54,887	56,637	68	66	69	74	508	694	494	524	434	511	441	434	874	1,200	930	952	3.0	2.0	2.0	2.2
3	Shoalhaven City Council	18,065	15,740	15,238	16,525	28,535	28,232	28,765	30,209	44,718	43,853	44,003	46,664	55	62	67	71	405	351	336	362	764	762	747	771	1,001	979	969	1,022	2.0	2.0	2.0	2.0
4	Rous County Council	11,586	9,762	12,320	13,844					10,404	9,913	12,320	13,403																	0.0	0.0	0.0	0.1
5	MidCoast County Council	23,011	18,639	18,178	18,918	28,016	24,809	25,740	26,577	46,974	42,935	43,918	45,251	70	72	71	75	649	521	504	522	888	774	796	816	1,325	1,200	1,217	1,248	1.0	2.0	2.0	1.8
6	Tweed Shire Council	15,063	21,358	20,829	18,305	19,711	23,885	28,067	27,527	29,585	44,959	48,896	44,639	68	72	70	72	534	739	676	578	746	875	1,014	927	1,049	1,556	1,553	1,410	3.0	2.0	2.5	1.6
7	Port Macquarie-Hastings Council	17,314	16,643	16,741	21,468	16,770	13,319	15,361	19,232	29,953	29,749	32,102	40,314	71	74	74	74	631	570	585	719	670	517	591	707	1,091	1,019	1,122	1,349	2.0	2.0	2.0	1.7
8	Riverina Water County Council	16,020	18,584	16,671	17,710					15,114	18,526	16,671	17,710	77	80	77	79	602	681	600	626					568	678	600	626	1.0	1.0	1.0	1.1
10	Coffs Harbour City Council	17,920	14,595	16,902	16,207	21,460	19,521	21,491	20,501	34,778	34,120	38,393	36,708	63	78	80	76	784	626	717	680	1,009	893	967	913	1,522	1,463	1,628	1,541	1.0	1.0	1.0	1.2
11	Albury City Council	9,768	9,175	7,790	7,861	11,278	10,683	11,623	12,109	20,627	19,858	19,413	19,970	72	70	52	64	432	406	355	354	518	508	571	587	912	879	885	899	2.0	2.0	1.0	1.5
12	Fish River Water Supply																																
13	Tamworth Regional Council	14,688	12,351	14,001	15,053	13,846	12,586	14,345	18,477	26,774	24,937	28,346	33,530	67	60	56	61	768	620	694	740	810	700	788	1,005	1,400	1,253	1,406	1,648	1.0	1.0	1.0	1.1
14	Clarence Valley Council	10,661	25,349	30,271	15,302	9,299	9,231	10,034	10,393	17,653	34,581	40,305	25,663	76	73	71	69	586	1,300	1,473	735	719	756	718	725	972	1,773	1,961	1,233	2.0	2.0	1.0	1.7
15	Eurobodalla Shire Council	10,461	10,397	12,091	12,872	9,811	11,273	11,890	13,501	19,217	21,227	23,981	24,702	46	44	40	40	556	551	637	670	579	651	682	768	1,023	1,123	1,264	1,287	2.0	2.0	2.0	1.5
16	Wingecarribee Shire Council	10,071	9,998	7,978	9,048	11,044	10,469	9,726	9,667	20,015	20,417	17,704	18,697	46	65	68	71	587	568	447	503	828	748	688	677	1,167	1,160	991	1,039	1.0	1.0	1.0	2.0
17	Queanbeyan City Council	9,136	10,679	10,326	9,673	7,525	5,847	7,565	5,766	14,359	16,566	17,891	15,270	55	61	57	56	594	689	647	613	487	378	474	360	933	1,069	1,121	968	1.0	1.0	1.0	1.0
18	Dubbo City Council	10,333	11,332	8,467	9,215	9,626	8,919	9,463	9,674	19,404	20,265	17,930	18,227	56	83	75	75	665	725	542	572	668	618	641	648	1,249	1,297	1,147	1,131	1.0	1.0	1.0	1.0
19	Orange City Council	13,052	12,636	10,246	12,604	9,228	7,891	10,654	13,572	20,354	20,537	20,900	26,177	75	75	72	72	858	810	637	793	641	509	715	897	1,338	1,316	1,300	1,647	1.0	1.0	1.0	0.9
21	Bathurst Regional Council	8,017	8,720	8,993	10,633	7,087	7,368	6,678	7,846	14,919	16,102	15,671	18,479	41	43	38	52	567	605	611	712	521	526	465	540	1,056	1,119	1,064	1,237	1.0	1.0	1.0	1.1
22	Lismore City Council	7,847	5,814	6,355	7,011	8,536	7,343	8,732	7,920	15,614	13,087	15,087	14,573	70	71	68	73	571	424	459	502	709	605	714	644	1,136	955	1,089	1,044	2.0	2.0	2.0	2.0
23	Bega Valley Shire Council	6,992	6,868	7,980	8,662	7,475	8,433	11,762	12,176	14,078	16,821	19,742	20,832	65	66	72	73	523	498	578	617	722	781	1,013	1,027	1,052	1,219	1,430	1,483	2.0	1.0	1.0	1.2
24	Ballina Shire Council	5,402	5,483	5,975	6,151	8,087	7,598	8,872	8,601	11,742	13,045	14,847	14,499	64	66	67	66	386	410	429	439	650	608	708	677	837	973	1,066	1,035	3.0	2.0	2.0	2.0
25	Kempsey Shire Council	7,396	6,814	6,708	7,297	5,835	5,869	6,118	6,414	13,221	12,768	12,826	13,215	33	38	38	41	615	563	548	594	662	660	686	715	1,099	1,055	1,048	1,075	2.0	1.0	2.0	1.8
26	Country Energy	13,095	12,101	12,312	12,468	3,848	3,688	4,138	4,554	16,942	15,795	16,450	17,022	62	59	56	57	1,207	1,131	1,141	1,193	397	384	428	470	1,562	1,477	1,524	1,629	2.0	2.0	2.0	1.6
27	Byron Shire Council	4,979	4,841	4,618	5,678	9,860	9,810	9,903	11,034	13,290	14,652	14,521	16,601	69	71	66	70	483	461	440	533	996	1,001	991	1,121	1,289	1,395	1,382	1,559	1.0	1.0	1.0	0.9
28A	Goldenfields Water (Reticulation)	10,610	6,444	5,502	6,193					8,773	6,399	5,502	6,118	65	66	61	65	1,086	608	519	620					898	604	519	613	1.0	2.0	2.0	1.6
28B	Goldenfields Water (Bulk Supply)	8,124	6,729	5,430	5,693					8,124	6,729	5,430	5,693																				0.0
9	Wagga Wagga City Council					12,966	11,824	12,309	13,556	12,069	11,824	12,309	13,556									549	521	534	574				574	1.0	1.0	1.0	1.1
	NMU Range Max	30,527	40,320	30,271	31,173	35,321	30,629	29,076	30,221	57,037	69,685	54,887	58,791	77	83	80	79	1,207	1,300	1,473	1,193	1,009	1,001	1,014	1,121	1,562	1,773	1,961	1,648	3.0	2.0	2.5	2.2
	NMU Range Min	4,979	4,841	4,618	5,678	3,848	3,688	4,138	4,554	8,124	6,399	5,430	5,693	33	38	38	40	376	351	336	354	397	378	427	360	568	604	519	574	0.0	0.0	0.0	0.0
	Median of NMU Indicators shown in Table	10,636	11,006	11,209	12,536	9,860	10,469	11,623	12,176	17,653	19,858	17,930	18,697	66	67	68	71	587	588	563	603	668	618	688	707	1,054	1,141	1,122	1,131	1.5	1.5	1.0	1.5

WATER UTILITY	FINANCIAL																							
	WS				SGE				WS				SGE				WS + SGE				WS				SGE			
	Written Down Replacement Cost of WS Assets				Written Down Replacement Cost of Sge Assets				Operating Cost OMA - Water Supply				Operating Cost OMA - Sewerage				Combined Operating Cost OMA - WS & Sge				Total Water Capital Expenditure				Total Sge Capital Expenditure			
	F9				F10				F11				F12				F13				F14				F15			
	($'000)				($'000)				($/prop)				($/prop)				($/prop)				($'000)				($'000)			
	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
Sydney Water Corporation	7,768,753	7,881,873	8,889,412	10,433,975	14,748,868	15,929,128	20,069,452	21,549,095	218	260	336	299	131	190	261	240	346	445	589	539	171,963	228,731	910,061	#######	327,251	406,755	443,610	394,703
Hunter Water Corporation	949,750	1,044,526	1,486,197	1,535,793	1,493,973	1,548,715	1,622,182	2,648,806	195	211	186	184	217	228	259	271	401	427	431	456	20,592	61,431	37,634	68,009	56,620	43,646	43,440	71,165
Sydney Catchment Authority																					138,039	87,824	72,890	79,757				
1 Gosford City Council	225,941	424,985	455,081	463,393	281,722	360,790	374,675	381,264	312	319	270	284	306	274	261	282	618	593	525	566	12174	29178	22074	19,498	4,151	4,060	14,839	15,342
2 Wyong Shire Council			454,986	463,165			388,314	395,968	269	323	276	360	267	292	300	319	535	614	573	679			15205	15,555			3,762	4,046
3 Shoalhaven City Council			281,440	286,281			432,546	456,966	217	224	233	260	356	380	397	424	571	605	569	685			8678	1,663			18,977	20,735
4 Rous County Council			308,562	316,043																			15622	3,675				
5 MidCoast County Council			259,957	296,643			393,492	427,448	276	265	326	285	407	428	410	415	683	694	693	700			33473	36,506			23,305	22,993
6 Tweed Shire Council			338,801	342,740			451,855	454,127	274	297	287	303	356	343	372	413	630	640	632	716			8400	51,352			51,605	13,037
7 Port Macquarie-Hastings Council			335,985	348,354			179,883	205,511	360	290	239	251	376	354	376	349	735	644	581	600			3481	3,952			9,585	26,270
8 Riverina Water County Council			136,485	144,122					271	285	285	304											8317	8,658				
10 Coffs Harbour City Council			192,169	295,363			260,582	298,375	228	234	237	277	400	399	418	429	629	633	631	706			23867	31,781			45,332	34,036
11 Albury City Council			180,156	187,189			142,000	157,832	239	235	270	270	319	340	319	254	559	575	567	524			3827	4,112			4,201	4,912
12 Fish River Water Supply																												
13 Tamworth Regional Council			152,295	155,993			98,447	101,886	367	350	333	396	302	331	269	277	668	681	576	673			10023	6,437			5,289	20,395
14 Clarence Valley Council			212,489	217,785			60,367	116,305	340	253	244	290	411	354	356	357	750	607	486	647			51726	8,802			7,112	42,535
15 Eurobodalla Shire Council			142,979	178,006			153,689	162,743	337	339	326	312	408	405	441	403	744	744	731	714			17247	14,317			4,258	4,019
16 Wingecarribee Shire Council			95,713	163,821			120,544	184,798	236	256	292	297	331	334	324	323	567	592	549	620			3601	8,795			3,802	11,291
17 Queanbeyan City Council			104,499	105,159			109,954	110,579	468	540	349	497	267	234	274	249	736	774	623	746			1272	713			4,597	3,262
18 Dubbo City Council			167,887	166,725			134,779	136,517	409	457	437	419	359	333	335	370	768	790	754	789			2375	1,770			1,853	4,285
19 Orange City Council			116,029	130,716			91,990	105,388	345	309	317	333	270	269	318	296	615	577	612	629			1022	5,719			644	762
21 Bathurst Regional Council			121,231	125,567			67,705	70,374	382	415	373	390	309	333	317	342	692	748	682	732			4011	2,827			1,744	2,669
22 Lismore City Council			73,777	73,889			174,365	175,089	328	347	377	415	324	341	386	366	652	686	717	781			3259	1,127			4,758	1,907
23 Bega Valley Shire Council			96,355	100,141			109,710	115,872	357	358	336	371	510	526	574	596	867	883	819	967			2830	2,940			20,826	7,883
24 Ballina Shire Council			81,738	82,787			87,401	90,823	344	352	369	437	389	394	456	537	733	746	779	975			517	631			4,369	5,047
25 Kempsey Shire Council			219,915	224,105			104,086	112,662	280	285	305	334	426	356	365	381	706	641	571	716			1779	2,729			1,985	8,074
26 Country Energy									1003	894	800	800	260	241	268	337	1263	1135	1040	1,138			8321	18,793			1,515	924
27 Byron Shire Council			48,637	49,229			147,842	156,203	371	388	412	429	519	531	529	571	890	919	915	1,000			1452	410			6,007	7,907
28A Goldenfields Water (Reticulation)			104,572	108,710								390											2449	1,339				
28B Goldenfields Water (Bulk Supply)			100,607	104,445																				9937	3,876			
9 Wagga Wagga City Council								211,627					201	217	253	270											13,643	30,835
NMU Range Max	225,941	424,985	455,081	463,393	281,722	360,790	451,855	456,966	1,003	894	800	800	519	531	574	596	1,263	1,135	1,040	1,138	12,174	29,178	51,726	51,352	4,151	4,060	51,605	42,535
NMU Range Min	225,941	424,985	48,637	49,229	281,722	360,790	60,367	70,374	217	224	233	251	201	217	253	249	535	575	486	524	12,174	29,178	517	410	4,151	4,060	644	762
Median of NMU Indicators shown in Table	225,941	424,985	152,295	166,725	281,722	360,790	142,000	160,288	337	319	317	334	356	341	356	357	688	663	627	710	12,174	29,178	6,164	4,032	4,151	4,060	4,758	7,907

	WATER UTILITY	FINANCIAL																									
		WS + SGE				WS				SGE				WS + SGE													
		Capital Expenditure WS + Sge				ERRR WS				ERRR Sge				ERRR WS & Sge				Dividend Paid or Payable				Dividend Payout Ratio				Net Debt to Equity			
		F16				F17				F18				F19				F20				F21				F22			
		($'000)				(%)				(%)				(%)				($'000)				(%)				(%)			
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	499,214	635,486	1,353,670	1,847,870	2.7	1.9	-0.5	1.7	2.7	1.9	1.2	0.9	2.7	1.9	0.7	1.2	193,000	140,000	190,000	205,000	72.7	41.7	105.3	115.5	46	45	62	103
	Hunter Water Corporation	77,212	105,077	81,074	139,174	5.0	3.5	2.0	2.5	3.2	1.5	2.3	2.0	3.9	2.3	2.2	2.2	33,800	35,100	34,600	30,400	46	59	96	69	13	23	30	32
	Sydney Catchment Authority				79,757													15,387	16,581	6,164	26,816	97	90	75	75				
1	Gosford City Council	16,325	33,239	36,913	34,840	-1.3	-0.4	-0.3	0.3	2.4	1.4	1.3	1.1	0.7	0.4	0.4	0.6	1,394	974	1,746	1,694	28	24	437	115	-7	-2	-1	1
2	Wyong Shire Council	32,248	54,490	18,967	19,601	1.4	3.2	0.0	-0.6	0.3	1.4	-1.2	-1.6	1.0	2.3	-0.5	-1.0	0	0	0	0				0	2	6	8	10
3	Shoalhaven City Council	27,844	42,750	27,655	22,398	0.8	0.6	-0.3	-0.3	2.4	2.2	1.6	1.3	1.7	1.5	0.9	0.7	2,690	2,634	2,208	1,173	21	14	67	-409	-3	1	1	4
4	Rous County Council					0.5	0.3	-0.2	-0.4									0	0	0	0				0			10	11
5	MidCoast County Council	45,271	45,481	56,778	59,499	6.6	2.4	0.2	0.8	3.3	1.2	-0.1	-0.2	4.5	1.6	0.0	0.2	0	0	0	0				0	9	9	16	25
6	Tweed Shire Council	8,937	53,733	64,535	64,389	1.1	1.4	1.3	0.2	1.3	0.2	1.0	-0.2	1.2	0.7	1.1	0.0	0	0	0	0				0	-17	-6	-6	1
7	Port Macquarie-Hastings Council	37,882	29,913	13,066	30,222	1.3	1.1	0.7	1.7	1.6	0.1	0.3	2.1	1.4	0.8	0.6	1.9	806	775	0	0	22	31	0	0	-11	-5	-3	2
8	Riverina Water County Council					3.1	5.1	3.4	3.4									0	0	0	0				0			-7	0
10	Coffs Harbour City Council	9,915	21,780	69,199	65,817	5.6	2.9	3.9	1.7	4.1	3.0	3.1	2.1	4.8	3.0	3.4	1.9				0				0	-9	-4	13	26
11	Albury City Council	4,825	4,802	8,028	9,024	-0.2	-0.3	-1.6	-1.6	0.8	0.1	1.3	2.1	0.3	-0.1	-0.4	0.1	0	0	0	0				0	2	2	3	4
12	Fish River Water Supply																												
13	Tamworth Regional Council	6,472	7,545	15,312	26,832	4.4	2.7	3.0	2.1	7.7	6.4	6.9	7.8	5.7	4.2	4.6	4.7	1,076	1,081	1,048	1,051	11	15	9	6	-16	-18	-12	-9
14	Clarence Valley Council	11,422	49,219	58,838	51,337	0.5	9.8	9.9	1.7	2.3	5.4	3.6	1.2	0.8	8.7	8.4	1.5	0	0	0	0				0	-18	-8	-1	6
15	Eurobodalla Shire Council	31,204	7,969	21,505	18,336	1.1	1.5	2.4	2.3	0.3	1.2	1.0	1.6	0.7	1.4	2.0	1.9	734	339	0	0	76	12	0	0	-2	-2	2	0
16	Wingecarribee Shire Council	15,166	5,820	7,403	20,086	4.5	3.8	0.4	0.0	2.9	2.7	2.2	1.0	3.5	3.2	1.4	0.5	0	0	0	0				0	-5	-7	-6	-2
17	Queanbeyan City Council	3,210	2,092	5,869	3,975	-0.1	0.6	2.2	-0.7	-0.8	0.0	0.1	-1.0	-0.5	0.3	1.1	-0.9	0	0	0	0				0	-15	-14	-16	-16
18	Dubbo City Council	27,033	7,723	4,228	6,055	2.9	1.1	-0.3	0.2	3.3	1.4	1.7	1.4	3.1	1.3	0.6	0.7	0	0	0	0			0	0	7	4	3	3
19	Orange City Council	9,246	7,825	1,666	6,481	6.0	4.6	1.0	2.5	1.0	1.0	3.3	5.8	3.6	3.0	2.0	4.0	0	0	0	0				0	-15	-11	-12	-11
21	Bathurst Regional Council	6,060	21,942	5,755	5,496	0.3	0.5	1.1	1.9	1.1	1.2	1.3	2.2	0.6	0.8	1.1	2.0	0	0	0	0				0	-11	-9	-9	-10
22	Lismore City Council	6,006	4,637	8,017	3,034	4.2	0.6	-1.6	-1.7	2.6	0.9	-0.9	-1.3	3.1	0.8	-1.1	-1.5	223	212	0	0	5	9	0	0	-13	-6	-4	-4
23	Bega Valley Shire Council	21,547	22,080	23,656	10,823	-0.2	-0.3	1.6	1.5	-0.1	0.6	2.1	1.5	-0.2	0.3	1.8	1.5	0	0	0	0				0	-10	-3	0	0
24	Ballina Shire Council	3,654	4,505	4,886	5,678	-1.7	0.1	-1.2	-2.4	0.5	1.1	-0.7	-2.3	-0.3	0.6	-1.0	-2.3	372	360	240	0	44	15	130	0	-20	-13	-13	-11
25	Kempsey Shire Council	7,085	3,864	3,764	10,803	1.9	1.1	-0.4	-0.5	1.4	1.6	0.5	0.4	1.7	1.2	-0.1	-0.2	0	0	0	0				0		3	2	4
26	Country Energy	3,384	6,955	9,836	19,717													0	0	0	0				0			0	0
27	Byron Shire Council	9,847	6,073	7,458	8,317	1.1	0.2	-1.3	0.2	3.1	1.9	1.3	1.4	2.6	1.1	0.7	1.1	0	0	0	0				0	1	2	4	6
28A	Goldenfields Water (Reticulation)					-2.3	-0.3	-1.3	-0.9									0	0	0	0				0			-9	0
28B	Goldenfields Water (Bulk Supply)					2.8	0.4	-0.5	-0.8									0	0	0	0				0			-9	0
9	Wagga Wagga City Council												1.0					0	0	0	0				0			-9	4
	NMU Range Max	45,271	54,490	69,199	65,817	7	10	10	3	7.7	6.4	6.9	7.8	5.7	8.7	8.4	4.7	2,690	2,634	2,208	1,694	76	31	437	115	9	9	16	26
	NMU Range Min	3,210	2,092	1,666	3,034	-2	0	-2	-2	-0.8	0.0	-1.2	-2.3	-0.5	-0.1	-1.1	-2.3	0	0	0	0	5	9	0	-409	-20	-18	-16	-16
	Median of NMU Indicators shown in Table	9,881	7,897	11,451	18,969	1	1	0	0	1.6	1.2	1.3	1.2	1.4	1.2	0.9	0.7	0	0	0	0	22	15	4	0	-10	-4	-1	1

	WATER UTILITY	FINANCIAL																											
		WS + SGE												WS				SGE				WS		SGE		WS & Sge			
		Interest Cover				Net Profit after Tax				CSO				Capital Works Grants WS				Capital Works Grants SGE				Water Supply Capital Expenditure		Sewerage Capital Expenditure		NPAT Ratio			
		F23				F24				F25				F26				F27				F28		F29		F30			
						($'000)				($'000)				($'000)				($'000)				($/property)		($/property)					
		2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09	2005/06	2006/07	2007/08	2008/09
	Sydney Water Corporation	3.4	2.4	0.9	1.5	265,585	335,978	180,500	177,501	86,075	89,676	91,295	112,736	0	0	0	0	0	0	0	0	828		231		9			
	Hunter Water Corporation	7.8	5.9	3.2	3.0	73,017	59,212	36,035	44,253	9,103	8,993	8,958	9,278				0	615		2,627	0	306		337		22			
	Sydney Catchment Authority					17,093	21,812	4,681	39,172																				
1	Gosford City Council	>100	>100	2	>100	4,964	4,118	400	1,477	1103	1068	1115	1,162	0	209	814	1,471	0	0	2032	1,811	278		224		2.5			
2	Wyong Shire Council	81	22	0	0	2,769	-5,938	-25,221	-17,532	1351	1332	1306	1,270	82	2641	702	321	0	0	40	0	261		69		-31.0			
3	Shoalhaven City Council	>100	>100	3	1	12,833	18,485	3,546	-287	959	854	876	925	0	0	0	4	7386	10932	8738	4,516	36		526		-0.6			
4	Rous County Council	>100	>100	0	0	1,709	1,041	-11,150	-5,240	12	11	10	7	0	0	0	0					80				-39.1			
5	MidCoast County Council	7	>100	0	0	11,555	11,009	-18,959	-15,011	556	980	952	825	0	2521	2048	3,124	145	0	0	1,426	1,007		706		-33.2			
6	Tweed Shire Council	>100	>100	>100	0	7,318	7,950	6,541	-3,963	792	741	713	718	0	0	0	0	578	136	0	107	1,622		439		-8.9			
7	Port Macquarie-Hastings Council	>100	>100	0	1	3,755	2,494	-2,978	-7,166	695	708	656	679	4268	144	0	0	79	2	6	5	132		966		-17.8			
8	Riverina Water County Council	>100	6	>100	>100	2,735	3,300	4,561	3,940	205	207	187	190	187	0	0	0					306				22.2			
10	Coffs Harbour City Council	>100	>100	1	1	14,827	13,350	4,394	-5,432	497	465	471	451	0	0	0	574	2302	1530	5266	4,134	1,334		1,515		-14.8			
11	Albury City Council	1	31	0	0	-333	-4,335	-2,210	-1,021	353	341	286	294	0	0	0	0	0	0	0	0	185		238		-5.1			
12	Fish River Water Supply																												
13	Tamworth Regional Council				>100	10,282	7,187	12,019	16,380	377	369	371	380	55	437	941	223	302	46	0	0	316		1,110		48.9			
14	Clarence Valley Council	>100	>100	17	2	3,539	27,945	22,102	2,069	428	399	414	423	6252	6310	5713	353	0	0	1266	9,279	423		2,969		8.1			
15	Eurobodalla Shire Council	>100	>100	>100	12	962	2,915	2,918	4,033	398	369	364	373	86	862	4531	7,650	0	0	0	3,320	746		228		16.3			
16	Wingecarribee Shire Council	>100	>100	>100	>100	5,436	4,800	741	422	284	277	265	369	0	0	0	0	3653	363	734	3,335	489		791		2.3			
17	Queanbeyan City Council	>100	>100	>100	0	1,194	2,461	3,919	-1,947	176	165	155	156	0	0	0	0	0	0	0	0	45		204		-12.8			
18	Dubbo City Council	>100	31	2	2	3,722	2,986	489	97	194	191	181	180	1	134	12	5	69	6	3	1	110		287		0.5			
19	Orange City Council	>100	>100	42	>100	3,659	6,038	1,044	7,441	285	239	240	244	319	724	200	2,782	0	0	0	0	360		50		28.4			
21	Bathurst Regional Council	>100	>100	>100	>100	1,171	1,476	3,063	4,926	198	193	191	199	1258	225	15	30	0	0	0	0	189		184		26.7			
22	Lismore City Council	>100	>100	0	0	4,992	2,445	-3,911	-4,822	262	224	232	285	0	0	0	0	218	51	0	0	81		155		-33.1			
23	Bega Valley Shire Council	0	>100	>100	8	6	9,179	3,928	2,768	306	235	244	252	53	16	18	428	9034	9630	7798	3,792	209		665		13.3			
24	Ballina Shire Council	>100	>100	0	0	841	2,374	185	-3,019	297	313	276	284	0	0	0	0	53	11	46	0	45		397		-20.8			
25	Kempsey Shire Council	2	7	0	0	1,487	1,417	-1,872	-3,250	253	121	241	241	249	0	0	43	51	0	6	0	222		900		-24.6			
26	Country Energy	>100	>100	>100	>100				1,313	325	294	284	273	0	0	0	0	0	0	0	0	1,798		95		7.7			
27	Byron Shire Council	>100	>100	0	1	1,134	1,619	-519	-1,142	169	156	149	149	132	46	0	0	2164	40	315	767	39		803		-6.9			
28A	Goldenfields Water (Reticulation)	>100	>100	0	0		1,359	-22	-184	98	100	96	96	0	34	8	0					134				-3.0			
28B	Goldenfields Water (Bulk Supply)	4	>100	0	0		385	-539	-561	0	0	0	0	0	0	0	0									-9.9			
9	Wagga Wagga City Council	>100	>100	>100	9	6,719	5,080	2,039	1,742	165	156	154	153					0	0	0	0			1,306		12.9			
	NMU Range Max	81	>100	>100		14,827	27,945	22,102	16,380	1,351	1,332	1,306	1,270	6,252	6,310	5,713	7,650	9,034	10,932	8,738	9,279	1,798		2,969		49			
	NMU Range Min	0	6	0	0	-333	-5,938	-25,221	-17,532	0	0	0	0	0	0	0	0	0	0	0	0	36		50		-39			
	Median of NMU Indicators shown in Table	3	>100	>100	0	3,599	2,951	615	-287	297	277	265	284	0	8	0	2	53	0	3	1	222		439		-3