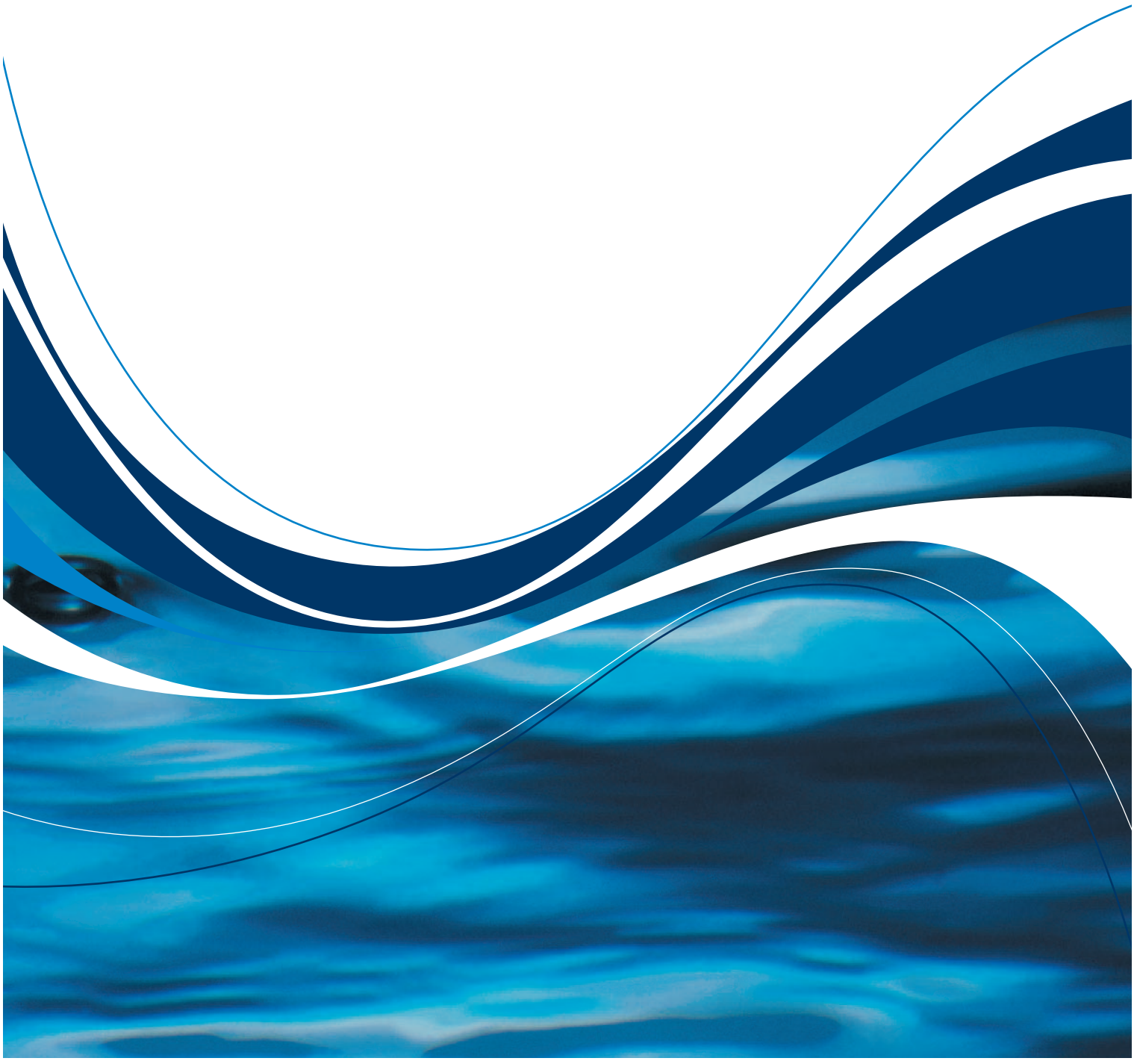
2005/06
WATER SUPPLY AND SEWERAGE

NSW BENCHMARKING REPORT



New South Wales Government
Department of Water and Energy

BEST PRACTICE MANAGEMENT

Local Government
Association of NSW

Shires Association
of NSW

2005/06

NSW WATER SUPPLY AND SEWERAGE

BENCHMARKING REPORT

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ISSN 1327-6425

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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*[1] 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 released the revised *Best-Practice Management of Water Supply and Sewerage Guidelines* in August 2007. The guidelines are the key driver for continuous improvement with the aim of improving the quality and efficiency of services to all NSW residents. The guidelines require Local Water Utilities (LWUs) to undertake annual performance monitoring in accordance with the *National Water Initiative*. Performance monitoring is also important for public accountability and has been strongly endorsed by the Independent Pricing and Regulatory Tribunal[2].

This *2005/06 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 last 5 years, enabling each utility to monitor trends in its performance indicators and to improve its performance through benchmarking against similar utilities.

The key performance indicators for all NSW water utilities, together with the statewide performance of the NSW non-metropolitan water utilities and interstate comparisons, are provided in the companion report *2005/06 NSW Water Supply and Sewerage Performance Monitoring Report*.

The *Benchmarking Report* has been prepared by the Department of Water and Energy (DWE) since 1986. To facilitate comparisons, the Minister for Water Utilities has made both the performance monitoring report and the benchmarking report available on the DWE website (*www.dwe.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 determining the present position and assessing future water supply and sewerage needs for non-metropolitan NSW. This ensures an appropriate focus and targeting of programs to assist the utilities.

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[1] *National Performance Framework – 2006 Urban Performance Reporting Indicators and Definitions*, National Water Commission/Water Services Association of Australia, June 2006

[2] *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 reporting 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 success of the NSW performance reporting system is contingent on full participation by all NSW Local Water Utilities (LWUs). The continuing participation of each LWU in the reporting system and each LWU's significant efforts in providing current, accurate and timely data on its performance for each of the last 5 years are therefore particularly acknowledged.

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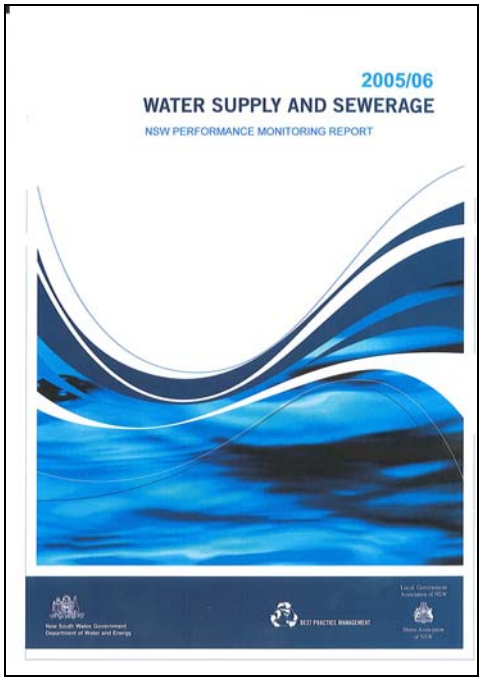
1. INTRODUCTION



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 water utilities over the last 5 years. The data is presented in the form of figures and 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 *2005/06 NSW Water Supply and Sewerage Performance Monitoring Report*, provides the key performance indicators for the NSW water utilities together with the statewide performance of the NSW non-metropolitan water utilities and interstate comparisons. To avoid duplication, the statewide performance, interstate comparisons and the NWI Performance Indicators for LWUs with over 10,000 connected properties are not repeated in this *Benchmarking Report*. To view the interstate comparisons refer to Appendix A of this report and also to page 9 of the *Performance Monitoring Report*.

2. NSW WATER UTILITIES

This report discloses performance indicators for all NSW water utilities, comprising the 107 non-metropolitan Local Water Utilities (LWUs) together with the 3 metropolitan utilities (Sydney Water, Hunter Water 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, namely 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 & Metropolitan) in Alphabetical Order

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

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 with DWE 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. DWE 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 1 or 2 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. DWE will be working with LWUs to facilitate appropriate syndicate benchmarking projects and will disseminate the results.

3.3. TBL PERFORMANCE REPORTS

DWE provides each utility and also IPART with an annual Triple Bottom Line (TBL) Performance Report for each utility's water supply and sewerage businesses. Each LWU should review its performance using the TBL Report as the basis for preparing its Action Plan as set out in section 5.3 on page 9.

The *2005/06 LWU TBL Performance Reports* indicate the status of each LWU's compliance with each of the criteria in the *Best-Practice Management of Water Supply and Sewerage Guidelines*. LWUs that comply with these guidelines will have demonstrated long-term financial sustainability of their 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% of LWUs for each indicator being ranked 1 and the bottom 20% being ranked 5 (LWUs in the range 40% to 60% 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 of the performance indicators 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 7. 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.

4. BEST-PRACTICE MANAGEMENT

4.1. REGULATORY FRAMEWORK

Through the *Local Government Act 1993* and the *Water Management Act 2000*, the Minister for Water Utilities is responsible for overseeing the performance of NSW country Local Water Utilities (LWUs) in the sustainable provision of water supply and sewerage services to the community. The aim of Government policy for NSW country LWUs is to achieve sustainable water supply and sewerage services through leadership, guidance and encouragement of the LWUs serving the urban areas of country NSW.

The State Government provides assistance to country towns in NSW through the *Country Towns Water Supply and Sewerage Program*, administered by the Department of Water and Energy (DWE). The program provides guidance and support to LWUs in the strategic areas of planning and management, operation & maintenance, 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 and sewerage schemes. 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 expects 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 Utilities published the "*Best-Practice Management of Water Supply and Sewerage Guidelines*" in 2004, linking compliance with the guidelines to the eligibility of LWUs for:

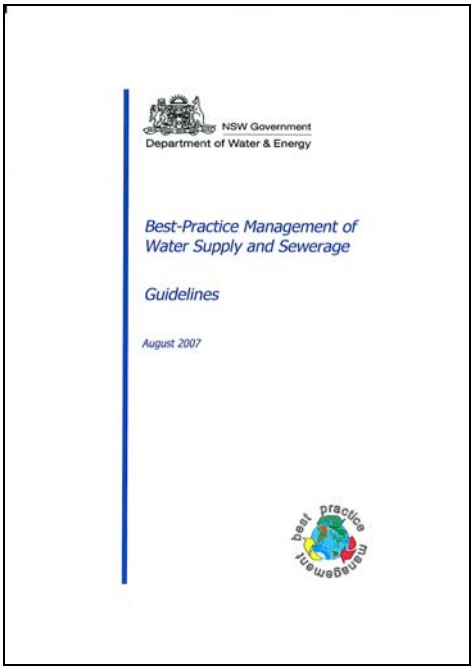
(a) the payment of a dividend from their water and sewerage businesses to the Council's general revenue and

(b) financial assistance towards the capital cost of backlog infrastructure.

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

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 for 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 DWE website (www.dwe.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 years and to establish an appropriate level of annual income from water supply, sewerage and trade waste charges. In addition to levying commercial water supply and sewerage developer charges, the LWU needs to consider the levels of service, meeting projected infrastructure recurrent costs and capital cost, externalities, dividend and tax-equivalent payments in order to achieve full cost-recovery and to provide appropriate signals to customers about the cost consequences of their water usage. Over 82% of LWUs have prepared sound strategic business plans and financial plans [Table 5 on page 118].

The *Best-Practice Management Guidelines* identify six criteria that each LWU must comply with. These are:

- strategic business planning,
- pricing (including developer charges, liquid trade waste policy and regulation),
- water conservation and demand management,
- drought management,
- performance reporting,
- integrated water cycle management.

The reported LWU compliance with the *Guidelines* is shown in Table 3 on page 110 of this report. A summary of LWU compliance is provided on page 13 of the *Performance Monitoring Report*. All LWUs should address these criteria. Particular attention is required for residential water supply revenue from usage charges [Table 6 on page 122], water conservation [Table 8C on page 166] and drought management, non-residential water supply and sewerage charges [Table 6B on page 129 and Table 7B on page 143], trade waste fees and charges [Table 7D on page 150] and trade waste approvals and policy [Table 7D on page 150].

4.3. ASSET MANAGEMENT

Renewals

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 develop 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 ie. 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 1 or 2%) of the current replacement cost of assets. Renewals expenditure will be required towards the end of the economic life of an asset (eg. 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 financial plan includes capital expenditure, including renewals, identified in a soundly based asset management plan. They should ensure their Typical Residential Bill is in accordance with the projection in their adopted Strategic Business Plan. They should also annually monitor income and expenditure and update the financial plan. Funding in the financial plan involves an appropriate mix of the utility's annual income, accumulated cash and investments and borrowings.

Further information on the development of a cost-effective asset renewal program can be obtained from DWE (Scott Chapman ph 8281 7335, fax 8281 7351, email scott.chapman@dwe.nsw.gov.au). Information on asset costing and economic life can be obtained from the *"NSW Reference Rates Manual for Valuation of Water Supply, Sewerage and Stormwater Assets" June 2003* and guidance on asset management is provided in the *"Asset Management Guidelines for Water Supply and Sewerage" Public Works NSW 1991.*

Leakage

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[3] (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 overflows.
- **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 customer meters), incorrect assumptions of unmeasured use or unauthorised consumption (illegal use).
- **Water losses** are the combination of Real Losses (leakage) plus 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, mains flushing and watering of parks and gardens.

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 these indicators identify the significance of these parameters in relation to the total water supplied, they are not helpful in monitoring the effectiveness of a utility's performance in reducing losses and are 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 when the system is pressurised is recommended by IWA as the best of the 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 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 now widely accepted and has been adopted in many countries as a more meaningful indication of leakage in a system. However, it is still relatively new to the water industry. The National Performance Framework[4] (NPF) and also DWE have adopted the ILI as a measure of leakage and will report the ILI for each LWU commencing in 2005/06. DWE will also continue to report leakage as L/d per connection and ML/100km of main [Figure 29 on page 52], which are good measures for tracking an LWU's leakage performance over time. These indicators have also been included in the NPF.

[3] *The Blue Pages, Losses from Water Supply Systems: Standard Terminology and Recommended Performance Measures,* International Water Association, October 2000

[4] *National Performance Framework – 2006 Urban Performance Reporting Indicators and Definitions*, National Water Commission/Water Services Association of Australia, June 2006

Previous leakage studies for over 40 NSW water utilities found an average leakage of 17% of annual consumption (range 6% to 35%). 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 either undertake a reservoir drop test or detailed waste metering and it is recommended that each LWU undertake such a program of testing. In the absence of such testing, DWE continues to recommend a minimum value of leakage of 6% of annual consumption be adopted. Similarly, statewide analysis also indicates a minimum value for non-revenue water of 10% of the annual consumption.

Greenhouse Gases

The National Water Initiative requires LWUs to report both direct and some indirect greenhouse gas (GHG) emission estimates. 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,
- Manufacturing processes,
- Transportation of materials, products, waste and people,
- Fugitive emissions (eg. Intentional or unintentional emissions from natural gas leaks, joints and seals), and
- 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 CO2/GJ). Emission factors are used to calculate GHG emissions by multiplying the factor (eg. Kg CO2/GJ energy in petrol) with activity data (eg. 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 Australian Greenhouse Office (www.green house.gov.au/challenge/tools/workbook/factorsmethod_section2-2html#5.2).

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 cost. After setting cost-reflective developer charges, non-residential charges and liquid trade waste fees and charges and making provision for any dividend payments, each utility should minimise its typical residential bill in current dollars on a sustainable basis.

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 [Figure 1 on page 21, Figure 10 on page 33, Figure 50 on page 70] and is the annual bill paid by a residential customer using the utility's average annual residential water consumption [Figure 28 on page 53]. 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) is efficient.

To assess performance, you should:

(1) ***Review your performance and produce an Action Plan*** to Council using your *2005/06 TBL Performance Report* for each of water supply and sewerage [see section 5.3].

(2) ***Compare selected performance indicators*** with those of similar sized utilities using the Figures showing performance trends for 4 utility size ranges over the last 5 years [eg. Figure 28 on page 53] .

(3) ***Undertake process benchmarking*** for selected indicators for areas of apparent under-performance, eg. where the LWU has a ranking of 3 to 5 relative to LWUs with similar characteristics [Table 13 on page 185].

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. Such factors can produce a fundamental difference in performance. For example, in the case of water supply, a utility which provides a full water supply system will perform differently to one which only provides components of the system (eg. reticulation or bulk supply). 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 8 to 10).

The most meaningful performance indicators are the trends over time for each utility. However, even with these, 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 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 operational costs.

(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.

(4) ***Development density***– Distribution networks are a major investment component of a water system. The density of urban development has a large effect on the infrastructure cost (eg. the number of properties served per km of main varies in non-metropolitan NSW from 2 to over 90 [Figure 6 on page 29]).

(5) ***Bulk storage and/or long transfer systems*** – 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 18].

(6) ***Size of LWU*** – there are significant economies of scale for large utilities, particularly the capital cost of infrastructure and operation of water treatment works [Figure 41 on page 65].

Social – Levels Of Service

(7) ***Service standards –*** Increasingly stringent standards for water quality and environmental health may result in additional capital and operational 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% of their water supply) [Note 18 on page 18].

Environmental

(9) ***High residential consumption per property*** [Figure 28 on page 53] - such utilities should examine opportunities for reducing consumption through water conservation and implementation of best-practice water pricing.

Economic

(10) ***High pumping cost*** [Figure 42 on page 66] - is influenced mainly by topography and geography. As noted on page 12, 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.

Median Economic Efficiency Indicators for 4 Sizes of LWUs – Water Supply 2005/06

Size of LWU / *Performance Indicator*	*Over 10,000 Connected Properties (22 LWUs)*	*3,001 to 10,000 Connected Properties (22 LWUs)*	*1,501 to 3,000 Connected Properties (14 LWUs)*	*200 to 1,500 Connected Properties (24 LWUs)*
Operating Cost/property ($)	260	357	322	343
Operating Cost (c/kL)	86	63	77	58
Operating Cost/ 100 km ($'000)	1073	832	867	599
Management Cost/property ($)	109	119	94	87
Treatment Cost[1]/property ($)	18	80	67	116
Pumping Cost/property ($)	22	27	28	54
Energy Cost[2]/property ($)	13	19	21	23
Water Main Cost/property ($)	45	56	55	61
No. of Employees/1000 properties	1.3	1.7	2.0	2.3

Notes: 1. Only LWUs with a treatment works with at least filtration & disinfection for over 50% of supply have been considered.
2. A component of pumping cost.

Median Economic Efficiency Indicators for 4 Sizes of LWUs – Sewerage 2005/06

Size of LWU / *Performance Indicator*	*Over 10,000 Connected Properties (20 LWUs)*	*3,001 to 10,000 Connected Properties (26 LWUs)*	*1,501 to 3,000 Connected Properties (21 LWUs)*	*200 to 1,500 Connected Properties (34 LWUs)*
Operating Cost/property ($)	291	308	243	244
Operating Cost (c/kL)	123	112	94	97
Operating Cost/ 100 km ($'000)	1198	1359	967	1021
Management Cost/property ($)	108	112	75	64
Treatment Cost/property ($)	84	125	78	117
Pumping Cost/property ($)	45	44	40	44
Energy Cost[1]/property ($)	20	19	14	18
Sewer Main Cost/property ($)	36	42	34	27
No. of Employees/1000 properties	1.5	1.5	1.6	2.4

Note: 1. A component of pumping and treatment costs.

5.3. ACTION PLAN

Each LWU should review its performance using its TBL Report, as well as items (2) and (3) in section 5.1. LWUs should then develop an Action Plan to Council to address any areas of under-performance identified. The TBL Report and the Action Plan should form the basis of a management report to Council. An example Action Plan is shown on page 13 and an example TBL Report is shown on pages 14 and 15. The Action Plan should also report on compliance with the *Best-Practice Management Guidelines* and should include the key actions in your LWU's Strategic Business Plan that are to be completed in the next financial year.

Compliance with Best Practice Management Guidelines

Compliance with each of the six criteria identified in the guidelines is shown on the TBL Report. LWUs should review these six criteria and address any areas of non-compliance. For each instance of non compliance, the Action Plan should briefly outline the reasons for non compliance and the strategy to ensure compliance. It should be noted that LWUs that achieve the outcomes required by the guidelines will have effective and sustainable 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 water supply or sewerage business and for financial assistance 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. For example, the rankings take no account of the impact of utility characteristics (eg. whether the water supply is fully filtered or whether it is a good quality groundwater, whether the LWU is a reticulator or dual supply 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 111 and 112], 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 (eg. reticulators).

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 performance improvement.

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

Utility Characteristics

- ***Renewals*** – LWUs should ensure that their Typical Residential Bill (TRB) in current dollars (ie. adjusted for inflation) is consistent with the projection in its 30 year financial plan in order to ensure it has sufficient funding for the required infrastructure. LWUs should also examine their asset management policy and ensure that the necessary funds are directed to maintenance and renewals.
- ***Employees*** – the number of employees per 1,000 properties is a good indicator of management costs. If your number of employees per 1,000 properties is significantly higher than the median shown in the tables above for your size of LWU, you should examine your management structure and identify the reasons for the difference and provide a brief explanation or your proposed remedial action in the Action Plan.
- ***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 35 properties per km (range 13 to 70), while for LWUs with 200 to 1,500 properties the median is 16 (range 2 to 38).

Social Factors

Affordability

- ***Typical Residential Bill (TRB)*** – as noted on page 7, 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 consumption). A critical element of the TRB is the operating cost (OMA – operation, maintenance and administration) as noted on the facing page under Economic Factors – Efficiency. The Action Plan should report on whether your TRB is consistent with the projection in your LWU's 30 year financial plan and on any warranted corrective action.

Health

- ***Microbiological water quality compliance (%)*** – This is the most important water supply health indicator and LWUs should aim for a value of 100%. LWUs with less than 98% do not comply with the *Australian Drinking Water Guidelines, 2004* and should identify the reasons for the lower value. Provide a brief explanation together with proposed remedial action in the Action Plan [Figure 37 on page 61].
- ***Public health incidents*** – where this indicator is significantly higher than the statewide median, the Action Plan should provide a brief explanation together with proposed remedial action if appropriate.
- ***Capital investment on improving public health*** – If your 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% 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 the Action Plan. Note that the result for this indicator may be influenced by the type of business (eg. Unfiltered supply, reticulator etc) [Figure 21 on page 44].
- ***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% 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 the Action Plan [Figure 54 on page 80].
- ***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 10 breaks/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 the Action Plan [Figure 23 on page 48].

Environmental Factors

- ***Average annual residential consumption*** – This indicator is heavily influenced by the location and type of LWU (eg. an inland LWU would expect to have a high residential consumption while an LWU with a dual supply would expect to have a low residential potable consumption) and also due to the presence of water restrictions. Inland LWUs have a significantly higher residential consumption due to their hotter and drier climate and the use of evaporative coolers. Note that the median residential consumption for inland LWUs in 2005/06 was 310 kL/property compared to 180 kL/property for coastal LWUs [Figure 28 on page 53].
- ***Water Losses (ILI) –*** 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 (eg. desalination) or where water is scarce. An ILI of less than 1.0 is meaningless and may indicate errors in the input data. WSAA makes reference to the following interpretations of ILI; 1.0 to 2.9 – substantial efforts are being made to manage and maintain infrastructure; greater than 2.9 – may have old or poor infrastructure or a relatively relaxed active leakage control policy [Table 10 on page 173 and Figure 29 on page 54].
- ***Reclaimed water*** – The volume of reclaimed water 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 2005/06 20% of LWUs reused over 50% of their effluent [Table 8 on page 158 and Figures 65 and 66 on pages 93 and 94].

- ***Compliance with BOD in licence*** – where compliance is low (eg. below 95%), provide a brief explanation together with proposed remedial action in the Action Plan [Figure 57 on page 85].
- ***Compliance with SS in licence*** – where compliance is low (eg. in the bottom 20% of LWUs), provide a brief explanation together with proposed remedial action in the Action Plan if appropriate [Figure 58 on page 86].
- ***Sewer main chokes and collapses*** – sections of sewer main with a high incidence of chokes and collapses (say treble the statewide median of 49 per 1,000 connected properties) warrant close attention. Provide a brief explanation together with proposed remedial action in the Action Plan [Figure 62 on page 90].
- ***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 [Figure 64 on page 92].
- ***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 *(%)*** – The revised *Best Practice Management Guidelines* require LWUs with greater than 4,000 properties to have at least 75% of residential revenue generated through usage charges by June 2008, while LWUs with less than 4,000 properties or LWUs with a dual supply must have at least 50% of residential revenue generated through usage charges. This is a key demand management measure to ensure customers receive a sufficiently high usage charge signal to encourage careful water use [Figure 33 on page 57].
- ***Economic real rate of return (ERRR)*** – this reflects the rate of return generated from operating activities (ie. 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. All LWUs should aim to achieve a positive ERRR [Figure 34 on page 58, Figure 71 on page 96]. The recent drought has had a significant effect on the rate of return for many LWUs, as reduced consumption has reduced their income from water usage charges and these LWUs have not set their tariff taking in to account this reduced consumption. **LWUs should set each year's tariff to raise the required income on the basis of the estimated water consumption in the next financial year.** This is particularly important during drought periods.
- ***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. As for ERRR, the return on assets should be positive [Figure 35 on page 59, Figure 72 on page 99].
- ***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 2005/06 the NSW median net debt to equity for water supply was only 4%. **LWUs facing significant capital investment are encouraged to make greater use of borrowings to reduce their TRB and avoid unfairly burdening their existing customers.**
- ***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 [Figure 36 on page 60, Figure 73 on page 100]. The median loan payment in 2005/06 for water supply was $23 per connected property.
- ***Interest cover*** – this ratio provides 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 [Figure 35 on page 59, Figure 72 on page 99]. As a general guide, an interest cover > 2 is a good interest cover position. For 2005/06, the median interest cover for water supply was >100.

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 [Figure 37 on page 61]. The components of operating cost are:

- ***Management cost*** – this includes administration, engineering and supervision and is typically almost 40% of the total operating cost [Figure 40 on page 64]. 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.

- ***Treatment cost (water)*** [Figure 41 on page 65] – 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 6, there are great economies of scale for the operation of water treatment works (ie. facilities involving at least filtration and disinfection).

  Treatment cost (sewage) [Figure 78 on page 105] – 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. There are significant economies of scale for operation of treatment works as shown in the Table on page 6.

- ***Pumping cost (water)*** [Figure 42 on page 66] – 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*** [Table 13 on page 185] – 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 (eg. 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 [Table 18 on page 205]. Significant cost savings may be available by optimising energy use in the treatment process (eg. 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*** [Figure 43 on page 67 and Figure 80 on page 107] – this is dependent on the age and condition of the mains, the ground conditions and the number of connected properties per km of mains.

5.4. EXAMPLE ACTION PLAN – SHOALHAVEN COUNCIL

An example Performance Report is shown on pages 48 and 49 for Shoalhaven City Council which has 2 conventional water treatment works, 1 microfiltration works and 1 direct filtration works. 70% of supply is fully treated (northern areas) while 30% is unfiltered (chlorinated – southern areas). An example analysis and Action Plan are shown below.

Summary

Council has achieved full compliance with the Best-Practice Management Guidelines*. The economic real rate of return is low. Council will examine increasing its Typical Residential Bill (TRB) by 9% to align it with the projected TRB in Council's Strategic Business Plan. Council will also increase usage charges and continue to phase in best-practice non-residential charges. Council will also review its management cost to identify options for improvement.*

INDICATOR		RESULT	ANALYSIS/ACTION PLAN
	Best-Practice Management Guidelines	Complied with all the required criteria.	Full compliance - excellent
	Non-residential charges compared to water consumption	Recovered 30% of charges, water consumption 41% of potable supply.	a) Reduce cross subsidy to non-residential customers by increasing non-residential charges.
CHARACTERISTICS			
9	Renewals expenditure	0.2% of CRC Ranking[#] of (2)	Council's 2005/06 Strategic Business Plan shows $50M will be spent on water supply renewals over the next 20 years – Satisfactory.
10	Employees/1,000 properties	1.0, High ranking of 1(1)	Good. Steady rate over the last 10 years.
SOCIAL - CHARGES			
12 13	Residential water usage charge Residential access charges	80c/kL. Low ranking of (3) $79 Low ranking of (5)	b) Increase usage charge for the first 450kL to 110c/kL, with higher usage at 165c/kL. Reduce access charge to about $40/a.
14	Typical residential bill (TRB)	$216, High ranking of 1(1)	Within the top 20%. However, the 2006/07 TRB is only 92% of the projected TRB in Council's business plan. c) Review whether TRB should be increased by 9% to achieve the projected TRB in Council's Strategic Business Plan, having regard to the wet year/dry year fluctuation in water consumption, and increased non-residential charges.
15	Typical Developer Charges	$4,100, High Ranking of 1(2)	Satisfactory. 69% increase over last 2 years.
SOCIAL - HEALTH			
19 19a 20	Physical quality compliance Chemical quality compliance Microbiological compliance	98%, Low ranking of (4) 100%, High ranking of (1) 100%, High ranking of (1)	Good, complies with ADWG, 2004. Excellent. Excellent.
21-23	Public health incidents	Ranking of 1 (1)	No incidents reported.
SOCIAL – LEVELS OF SERVICE			
25	Water Quality Complaints	3, Ranking of 3(3)	Satisfactory, well below the Statewide median. Significant improvement in this parameter over the last 5 years.
26	Service complaints/1,000 properties	4, Ranking of 3(2)	Near the Statewide median. d) Examine options for improvement.
27	Customer Interruption frequency	3, High ranking of (1)	Satisfactory.
30	Number of Main Breaks per 100 km of main	9, Low ranking of 4(2)	Near the Statewide median for last 10 years. e) Review asset management strategy & need for action.
32	Total Days Lost (%)	4, Low ranking of 4(4)	This has remained high over the last 10 years. f) Examine options for targeted improvement.
ENVIRONMENTAL			
33	Average Annual Residential Consumption	171 kL/a, High ranking of 1(1).	Good.
37-39	Environmental incidents	High ranking of 1	No incidents reported
ECONOMIC			
41	Residential Revenue from usage charges	55%, Ranking of (3).	BPMG require at least 75% by June 2008. g) Increase usage charges and reduce access charge as shown for Indicator 12.
43	Economic Real Rate of Return	0.8%, Low ranking of 5(4).	Rate of return is significantly lower than result for past 10 years. h) Consider increasing charges (refer to Indicator 14) and reducing the management cost to improve cost recovery.
49	Operating cost (OMA)/ property	$203, High ranking of 1(1).	Satisfactory. Steady over the last 10 years.
51	Management cost per property	$111, Low ranking of 4(4).	Increasing trend over the last 10 years. i) Review to identify options for improvement.
55	Water main cost per property	$36, Ranking of 3(2).	Satisfactory.

[#] The ranking relative to similar size LWUs is shown first, followed by the ranking relative to all LWUs within brackets)

Shoalhaven City Council Water Supply (TBL Performance Report Page 1)

Shoalhaven City Council | **TBL Water Supply Performance** | **2005/06**

WATER SUPPLY SYSTEM - Shoalhaven City Council serves a population of 75,500 (48,510 assessments). 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 13,600 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), 38 service reservoirs (201 ML) 29 pumping stations, 116 ML/d delivery capacity into the distribution system, 465 km of trunk mains and 1035 km of reticulation. 70% of the supply is fully treated (Northern areas) and 30% is unfiltered (chlorinated - Southern areas).

PERFORMANCE - Shoalhaven City Council complied with all of the 6 Best Practice Criteria. The typical residential bill was $216 which was less than the statewide median (Indicator 13). The economic real rate of return was 0.8% which was less than the statewide median (Indicator 41). The operating cost per property was less than the statewide median (Indicator 47). Water quality complaints were less than the statewide median (Indicator 23). Compliance with microbiological water quality was 100% with 4 of 5 zones compliant (Indicator 18), physical compliance was 100% (Indicator 16) and chemical compliance was 100% with 4 of 5 zones compliant (Indicator 17). Current replacement cost of system assets was $537M ($11,100 per assessment), cash and investments were $26.2M, debt was $4M and revenue was $17M (excluding capital works grants).

COMPLIANCE WITH BEST- PRACTICE MANAGEMENT GUIDELINES CRITERIA

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

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

				Ranking		
			LWU Result	>10,000 properties	All LWUs	Statewide Median
				Note 1	Note 2	Note 3
UTILITY CHARACTERISTICS	1	**Population served: 75500**	**Number of connected properties: 44630**			
	2	**Number of assessments: 48510**	**0.92 connected properties per assessment**			
	3	**Residential assessments** (% of total)		93			92
	4	**New residences connected to water supply** (%)		0.7	4	3	1.0
	5	**Properties served per kilometre of main**		30	4	2	33
	6	**Rainfall** (% of average annual rainfall)		61	5	5	86
	7	**Total water supplied at master meters** (ML)		16,000	1	1	7,400
	8	**Peak week to average consumption** (%)		184	4	4	155
	9	**Renewals expenditure** (% of current replacement cost of system assets)		0.2	2	2	0.0
	10	**Employees per 1000 properties**		1.0	1	1	1.3
SOCIAL / 2006/07 CHARGES & BILLS		**Residential tariff structure:**	inclining block; independent of land value				
	11	**Residential water usage charge (c / kL) for usage (Note 5)**		80	**5**	3	105
	12	**Residential access charge / assessment** ($)		79	1	1	110
	13	**Typical residential bill / assessment** ($)		216	1	1	345
	14	**Typical developer charge / equivalent tenement** ($)		4,100	3	2	4,100
SOCIAL / HEALTH	15	**Urban population without reticulated water supply** (%)		1.0	4	2	0.9
	16	**Physical water quality compliance** (%)		100	1	1	100
	17	**Chemical water quality compliance** (%)		100	1	1	100
	18	**Microbiological (E. coli) water quality compliance** (%)		100	1	1	100
	19	**Category 1 (minor) public health incidents per 1000 properties**		0.0		1	0.0
	20	**Category 2 (limited effects) public health incidents per 1000 properties**		0.0		1	0.0
	21	**Category 3 (major) public health incidents per 1000 properties**		0.00		1	0.00
	22	**Capital investment on improving public health performance per property** ($)		3		3	6
SOCIAL / SERVICE LEVELS	23	**Water quality complaints per 1000 properties**		3	3	3	6
	24	**Water service complaints per 1000 properties**		4	3	2	6
	25	**Customer interruption frequency per 1000 properties**		3		1	38
	26	**Average duration of interruption** (h)		3	**5**	4	3
	27	**Average customer outage time** (min)		1	1	1	6
	28	**Number of main breaks per 100 km**		9	4	2	10
	29	**Drought water restrictions** (% of time)		13	3	4	3
	30	**Total days lost** (%)		4.0	4	4	3.2
ENVIRONMENTAL / MANAGEMENT	31	**Average annual residential consumption per property** (kL)		171	1	1	190
	32	**Water losses** (including leakage) (%)		10		4	10
	33	**Energy consumption per Megalitre** (kiloWatt hours)		811		4	660
	34	**Renewable energy consumption per property** (kiloWattt hours)		0		1	216
ENVIRONMENTAL / PERFORMANCE	35	**Category 1 (minor) environmental incidents per 1000 properties**		0.0		1	0.0
	36	**Category 2 (limited effects) environmental incidents per 1000 properties**		0.0		1	0.0
	37	**Category 3 (major) environmental incidents per 1000 properties**		0.00		1	0.00
	38	**Capital investment on improving environmental performance per property** ($)		0.9		2	0.9
ECONOMIC / FINANCE	39	**Residential revenue from usage charges** (% of residential bills)		55	4	3	67
	40	**Non-residential revenue from usage charges** (% of non-residential bills)		84	1	1	71
	41	**Economic real rate of return** (%)		0.8	4	4	1.4
	42	**Return on assets** (%)		2.2	2	3	1.6
	43a	**Net Debt to equity** (%)		-12	4	3	-11
	44	**Interest cover**		>100	1	1	>100
	45	**Loan payment per property** ($)		15	3	4	23
ECONOMIC / EFFICIENCY	46	**Operating cost (OMA) per 100km of main** ($'000)		605	1	2	1040
	47	**Operating cost (OMA) per property** ($) (Note 6)		203	1	1	280
	48	**Operating cost (OMA) per kilolitre** (cents)		57	1	2	86
	49	**Management cost per property** ($)		110	3	4	110
	50	**Treatment cost per property** ($)		29	2	2	27
	51	**Pumping cost per property** ($)		14	2	1	24
	52	**Energy cost per property** ($)		11	3	2	17
	53	**Water main cost per property** ($)		36	2	2	49

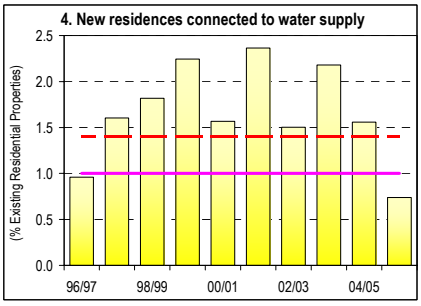
NOTES :

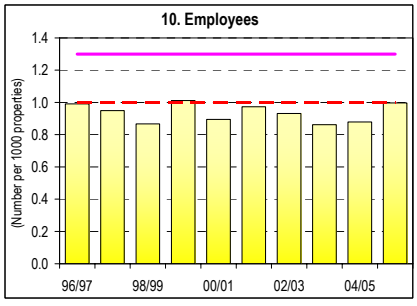
1. Ranking for LWUs with >10,000) connected properties is based on dividing the results for LWUs in this group into 5 equal divisions of 20%:
   ie. a ranking of 1 indicates the LWU is in the top 20% of LWUs; a ranking of 5 indicates the LWU is in the bottom 20% of LWUs. (Relevant for comparison with LWUs of similar size).
2. Ranking (1 to 5) for all LWUs is on a percentage of LWUs basis. (Relevant for comparing performance with all other LWUs).
3. The Statewide Median is on a percentage of connected properties basis (Table 1 of Monitoring Report) as this is the most appropriate for statewide comparisons.
4. Annual review of key projections and actions in LWU's 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:$244), TwoPart Tariff; All usage 80 c/kL.
   Water consumption by non-residential customers was 41% of potable water consumption excluding non-revenue water.
   2005/06 revenue from non-residential customers was 30% of annual rates and charges.
6. The operating cost (OMA)/property was $203. The components of operating cost were: management ($110), operation ($47), maintenance ($26), energy ($11) and chemical ($10).

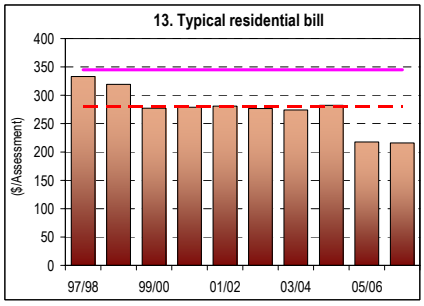
Shoalhaven Council Water Supply (TBL Performance Report Page 2)

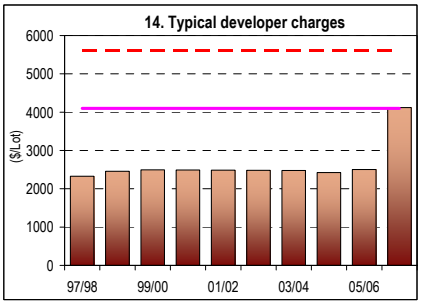
Shoalhaven City Council | **TBL Water Supply Performance (page 2)** | **2005/06**

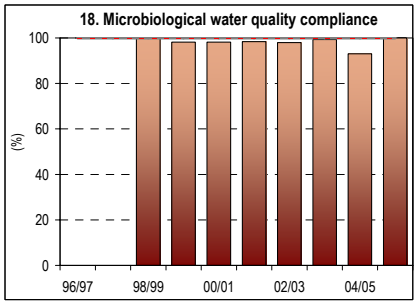
(Results shown for 10 years together with 2005/06 Statewide Median and Top 20%)

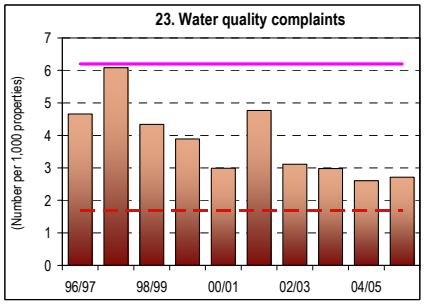


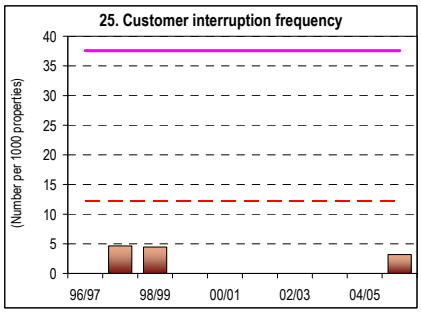


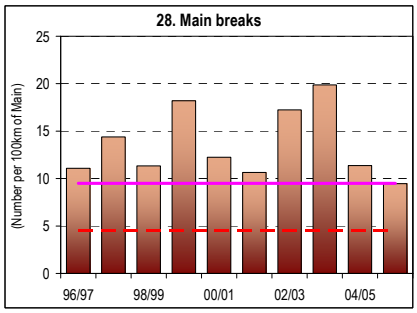


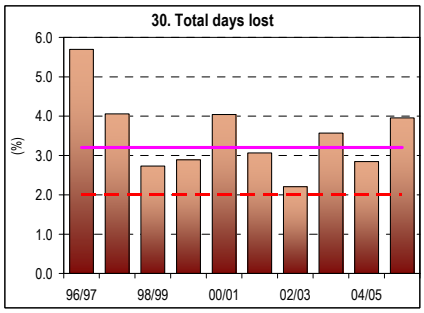


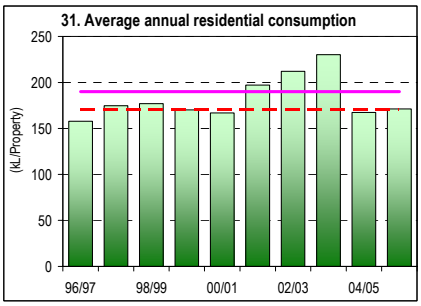


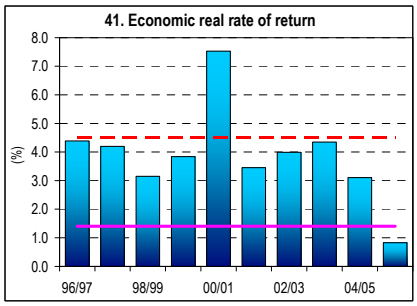


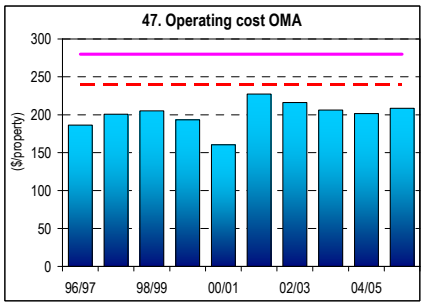


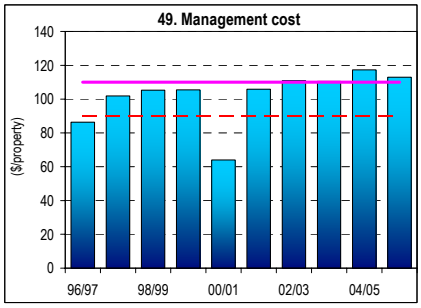


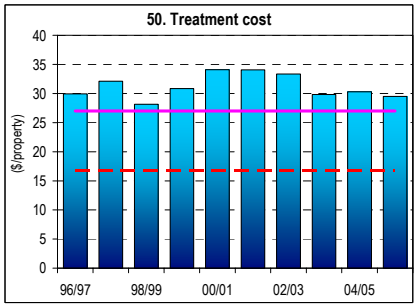


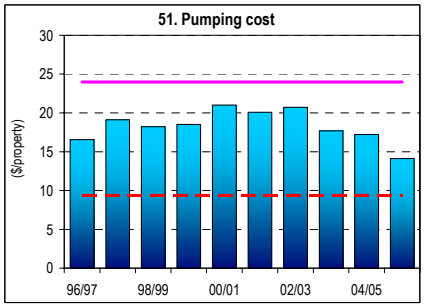












NOTES:

1. Costs are in Jan 2006$.
2. Microbiological water quality compliance from 1998/99 to 2003/04 was on the basis of E. coli in the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines; from 2004/05 compliance was on the basis of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines.

LEGEND

2005/06 State Median

2005/06 Top 20%

6. GENERAL NOTES

This 2005/06 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 DWE website (www.dwe.nsw.gov.au)

To provide a balanced view of the long-term sustainability of NSW LWUs, a Triple Bottom Line (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 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 5 years to enable review of trends and to facilitate benchmarking and 'yardstick' comparisons. The figures show ranked results for LWUs grouped into 4 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 and the 4 groups are:

- 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

Table 5 and Tables 6 to 18 show water supply and sewerage performance indicators for each of the 110 NSW water utilities (107 LWUs plus Sydney Water and Hunter Water Corporations and Hawkesbury Council).

As noted on page 1, 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 1 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 4 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 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 an item for 2005/06, the value previously reported has been used where appropriate, otherwise an estimate has been used based on results for similar utilities. Such values are shown in italics bold in Tables 5 to 18. These values are also shown in the relevant figures.

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 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 (eg. 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 any utility there is minimal change in this ratio of the number of connected properties per assessment from year to year. DWE 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 results in the median of all connected properties in the state which best reveals statewide performance by giving due weight to larger LWUs and reducing the effect of smaller LWUs. LWU rankings are also provided where appropriate (eg. for comparison of LWUs in the 'Ranking' columns of the 2 page TBL reports shown on pages 14 and 15 and in Appendix C).

6 **Aggregated Businesses** - To facilitate comparisons, the performance indicators in this report are for each LWU's aggregated water supply or sewerage businesses, rather than for individual water supply or sewerage schemes.

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 consumption and is the principal indicator of the overall cost of a water supply 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.

8 **Calculation of TRB** - The 2006/07 typical residential bill is based on a customer of the LWU's principal water supply or sewerage system using the LWU's 2005/06 average annual residential water consumption. These bills and tariff details are shown in Tables 6 and 7. The typical residential bill for 2005/06 and previous years is based on the reported average annual residential potable water consumption for that year.

9 **Average Residential Bill** - The average residential bill per connected property (Tables 6 and 7) comprises the LWU's revenue from residential rates and charges, including residential sales of water, divided by the number of connected residential properties. Except for utilities with an inclining block tariff or an annual water allowance, and those with access charges not independent of land value, the average residential bill is less than the typical residential bill due to pensioner rebates and vacant lots.

10 **Drinking Water Quality Guidelines** - Drinking water quality guidelines have become more stringent. This report reports compliance with the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines (National Health and Medical Research Council/National Resource Management Ministerial Council).

An LWU has complied with the guidelines for microbiological water quality (ie. it had 100% compliance) if the required number of samples was tested (Col 27 of Appendix D1) and at least 98% of the samples contained no E. coli. For LWUs which did not comply, the percentage of samples complying is reported.

11 **Average Annual Residential Potable Water Consumption** - The average annual residential potable water consumption per connected property is shown in Table 6. Where an LWU has not separately reported its residential water consumption, such consumption has been estimated using the statewide average of 58% of the LWU's total potable water consumption. Note that the equivalent NWI indicator (NWI 49) also includes non-potable water use.

12 **Dual Supplies** - 11 LWUs had a dual water supply to over 50% of their residential customers in June 2006 (ie. with a potable supply for indoor use and a non potable supply for outdoor use).

The total annual residential water consumption (ie. potable + non-potable) for those LWUs with a dual water supply is shown below, together with their potable residential water consumption in brackets. These consumptions were: Balranald 670 (150), Berrigan 450 (141), Bourke 1,790 (310), Central Darling 400 (106), Hay 830 (170), Jerilderie 460 (220), Murray 460 (180), Wakool 950 (530), Walgett 1,110 (450), Warren 440 (220) and Wentworth 560 (70).

Note that as the potable residential consumption shown above for Berrigan, Central Darling, Murray, Walgett and Wakool is calculated only for those towns with a dual supply (ie. excluding towns with only a potable water supply), it is lower than the value reported in column 14 of Table 6.

The typical residential bill has been calculated for those LWUs with a dual supply using the above consumptions.

13 **Water Losses** - For consistency with national performance reporting, water losses comprise real losses (leakage) plus apparent losses (unauthorised consumption and under-registration of customer meters). Unbilled consumption (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% of annual consumption (range 6% to 35%). Therefore, a minimum real loss (ie. leakage) of 6% of the potable water consumed has been adopted for this report. Reported real losses of less than 6% have therefore not been accepted, unless the utility has provided evidence of testingto support the adoption of a lower value.

Minimum Non Revenue Water – Similarly, statewide analysis of non revenue water (water losses plus unbilled consumption) for NSW water utilities other than bulk water suppliers, indicates a minimum of 10% of annual consumption. Reported non revenue water of less than 10% of total water consumption has therefore not been accepted, unless 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 consumed have been increased as a result of increasing the reported non revenue water component to 10%. These adjusted values are shown in italics bold in column 10 of Table 8.

15 **Total Water Supplied** - Total annual water supplied comprises the sum of the potable water supplied plus the non potable water supplied less the recycled water. Recycled water is a component of the non-potable supply which also includes raw water.

16 **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 $318/property comprises $210/property for the bulk supply from Goldenfields (bulk supplier) plus $108 for the reticulator (Cootamundra).

Note that this is different to the NWI definition for this indicator (NWI75) which overstates a reticulator's operating cost by also including the bulk suppliers capital and profit in the reported operated cost for the reticulators.

17 **Bulk Storage** - LWUs 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 section 5.2 (5)). The following LWUs provided such bulk storage: Armidale, Ballina, Bathurst, Bega Valley, Bourke, Brewarrina, Byron (Mullumbimby), Cabonne, Central Tablelands, Cobar, Coffs Harbour, Country Energy, Eurobodalla, Fish River, Glen Innes-Severn, Gosford, Goulburn Mulwaree, Guyra, Inverell, Kempsey, Kyogle, Lachlan, Lithgow, MidCoast, Mid Western Regional, Moree Plains, Orange, Palerang, Parkes, Port Macquarie-Hastings, Rous, Shoalhaven, Tamworth, Tenterfield, Tweed, Upper Hunter, Upper Lachlan, Uralla, Warrumbungle, Wingecarribee, Wyong, Yass Valley.

18 **Unfiltered** - a utility with over 50% 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% of its supply.

Groundwater - a utility with >50% of its supply comprising good quality unfiltered groundwater.

Reticulator - a utility which purchases >70% 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% of its residential customers (refer to Note 12 above).

19 **Sydney Water and Hunter Wate**r - The performance indicators shown for Sydney Water Corporation and Hunter Water Corporation were obtained from *National Performance Report 2005/06 – Major Urban Utilities*. The typical developer charges reported for Sydney Water Corporation and Hunter Water Corporation are for new release areas.

6.3. CONTENTS OF TABLES 5 TO 18

Table 5	**2005/06 NSW Water Utility Performance Summary** - *Overview of each water utility's key water supply and sewerage performance indicators.*
Table 5A	**Water Supply and Sewerage – Levels of Service, Financial** - *Combined water supply & sewerage indicators.*
Table 6	**Water Supply – Residential Charges, Bills, Cost Recovery** - *Type of tariff, residential charges, bills, cost recovery, average annual residential consumption and number of connected properties*
Tables 6A to 6C	**Water Supply – 2006/07 Residential Inclining Block or Multiple Tariffs, Non-Residential, Non-Rateable 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 7D	**Sewerage – 2006/07 Residential Multiple Tariffs, Non-Residential, Non-Rateable Tariffs, Liquid Trade Waste Fees and Charges**
Table 8	**2005/06 NSW Urban Water Consumptions** - *Water consumptions by customer category, water losses, leakage, total potable and non-potable water supplied, recycled water use and surface and groundwater use*
Table 8A	**2005/06 Water Losses and Non-Revenue Water**
Table 8B	**2005/06 Water Consumptions from Source Catchments in Non-metropolitan NSW** - *Shows details of water consumptions by customer category for each source catchment*
Table 8C	**2005/06 Water Conservation Initiatives**
Table 9	**Water Supply – Utility Characteristics** - *Population, No. of Assessments, Connected Properties, 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 Consumption, Recycled Water Use, Drought and Demand Management Policies*
Table 11	**Water Supply – Financial, Efficiency** - *Revenue, Residential Revenue and Consumption, Current Replacement Cost, Debt to Equity, Cross Subsidies, Operating Result, Externalities, 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, 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 Sewage Collected, Treated, Biosolids Reused, % Effluent Reclaimed*
Table 16	**Sewerage – Financial, Efficiency** - *Turnover, Current Replacement Cost, Debt to Equity, Cross Subsidies, Operating Result, Externalities, 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 and Customer Interruption Frequency*
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

This section contains the following Figures for water supply and sewerage:

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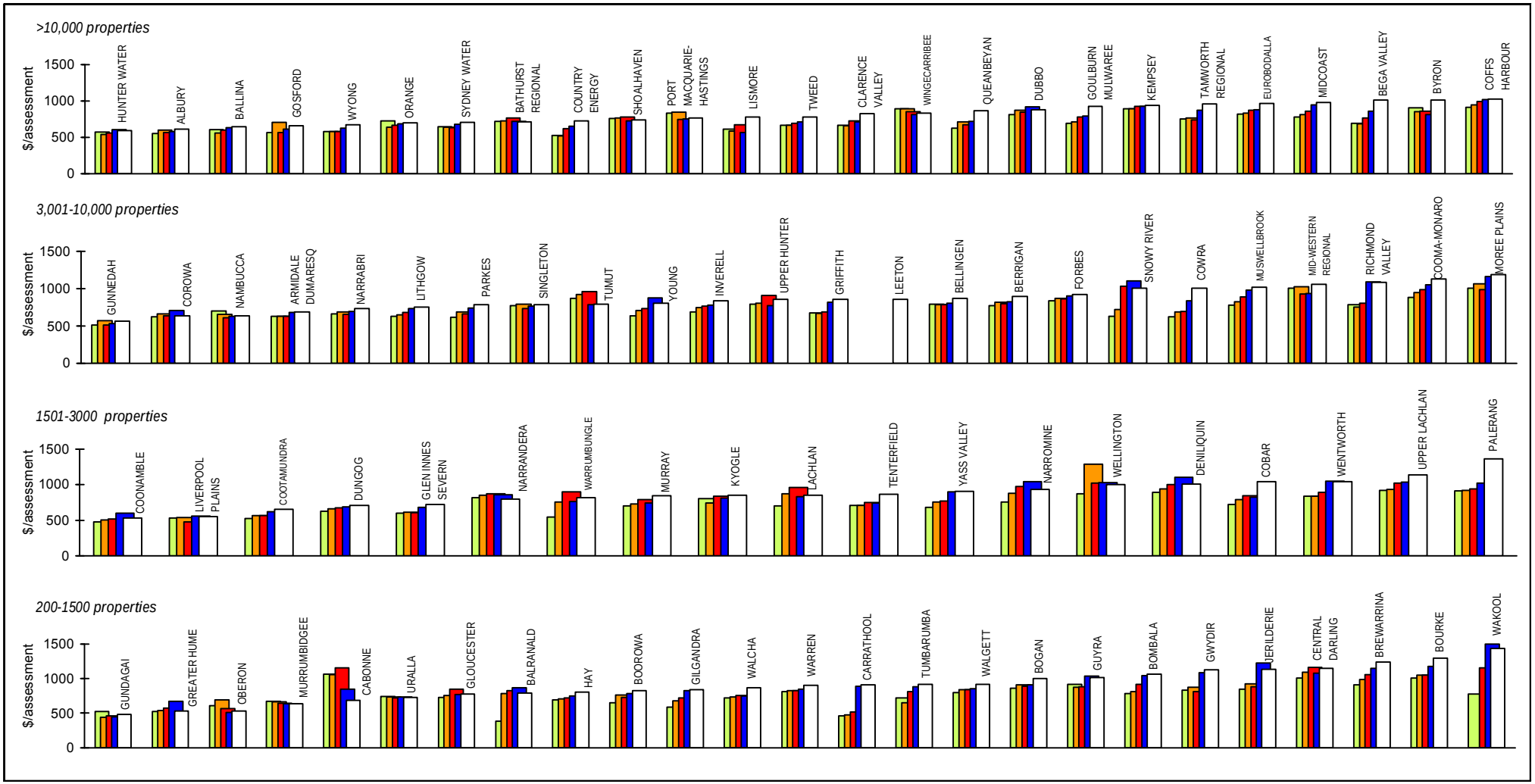
1 Typical Residential Bill – Water Supply and Sewerage



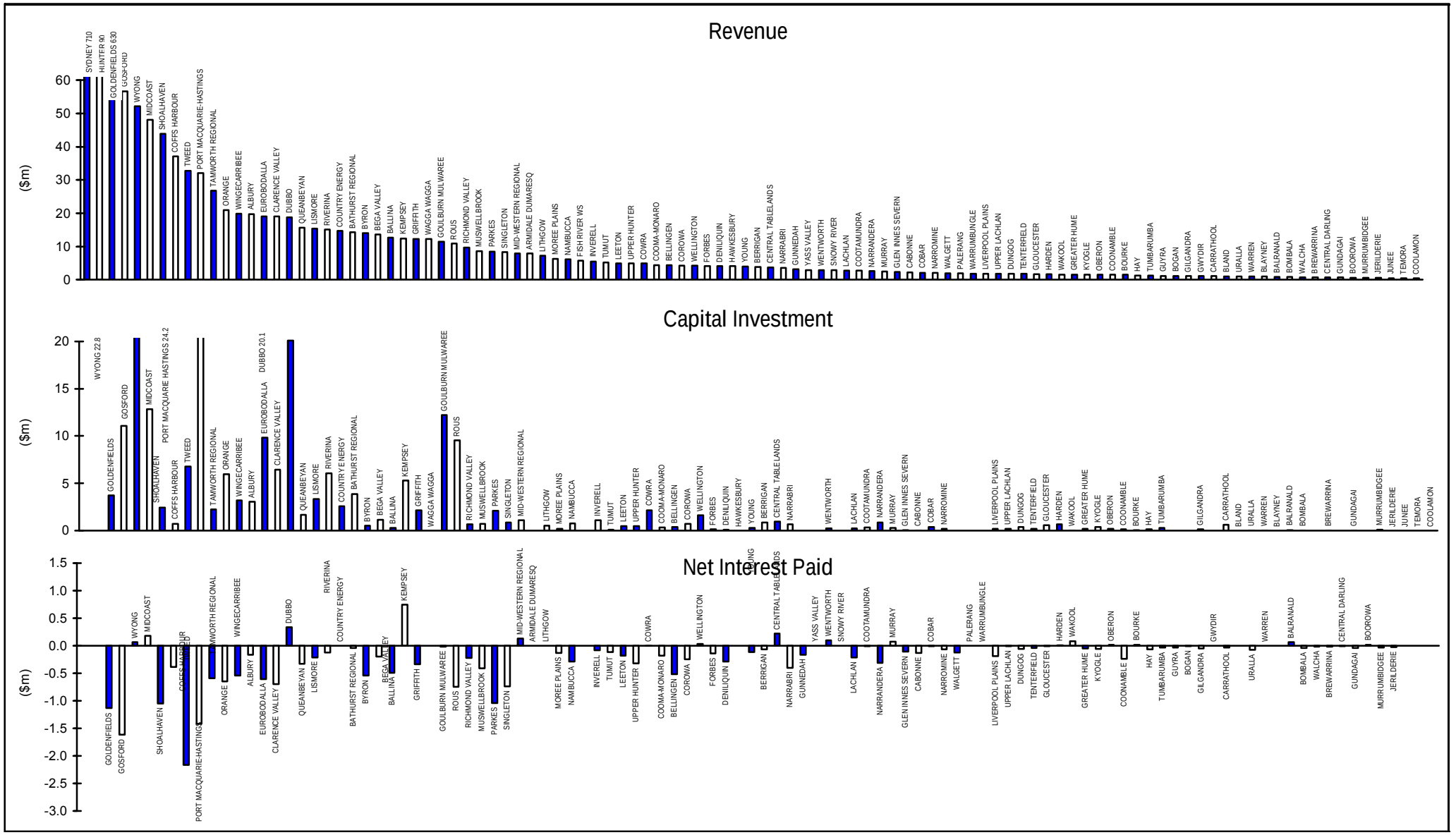
Parameter:

(2006/07 Average Residential Water Consumption x 2006/07 Water Usage Charge) + 2006/07 Water and Sewerage Access Charges

Notes:

1. This figure shows ranked values of the 2006/07 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 2006/07 typical residential water bill for water and sewerage supply for the 24 LWUs shown ranges from $569 to $1190. Results for the previous 4 years are also shown in Jan 2007$.
2. The·2006/07 Statewide median typical residential bill for water supply and sewerage is $745 per assessment.
3. For general notes see page 16.

2 Revenue, Capital Investment, Net Interest paid - Water Supply and Sewerage



Parameter: [Total Revenue (W13 +S14) - Grants for Acquisition of Assets (W11a + S12a)] ÷ 1,000,000

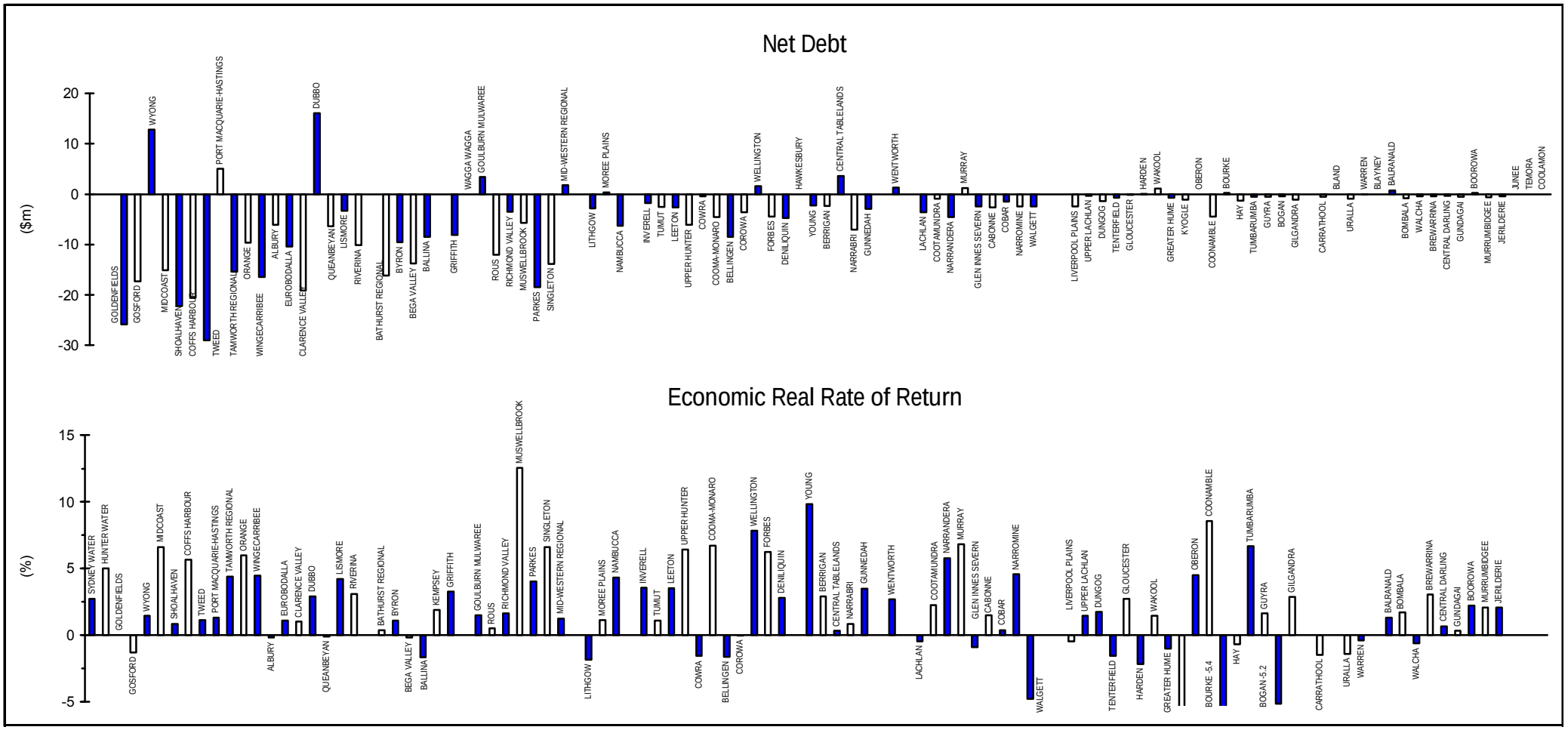
Parameter: Acquisition of Fixed Assets (W16 + S17)

Parameter: Interest Expense (W4a + S4a) - Interest Income (W9 + S10)

Notes:

1. Utilities are ranked on the basis of revenue (see the top graph).
2. For general notes see page 16.

2 Net Debt, Economic Real Rate of Return - Water Supply and Sewerage



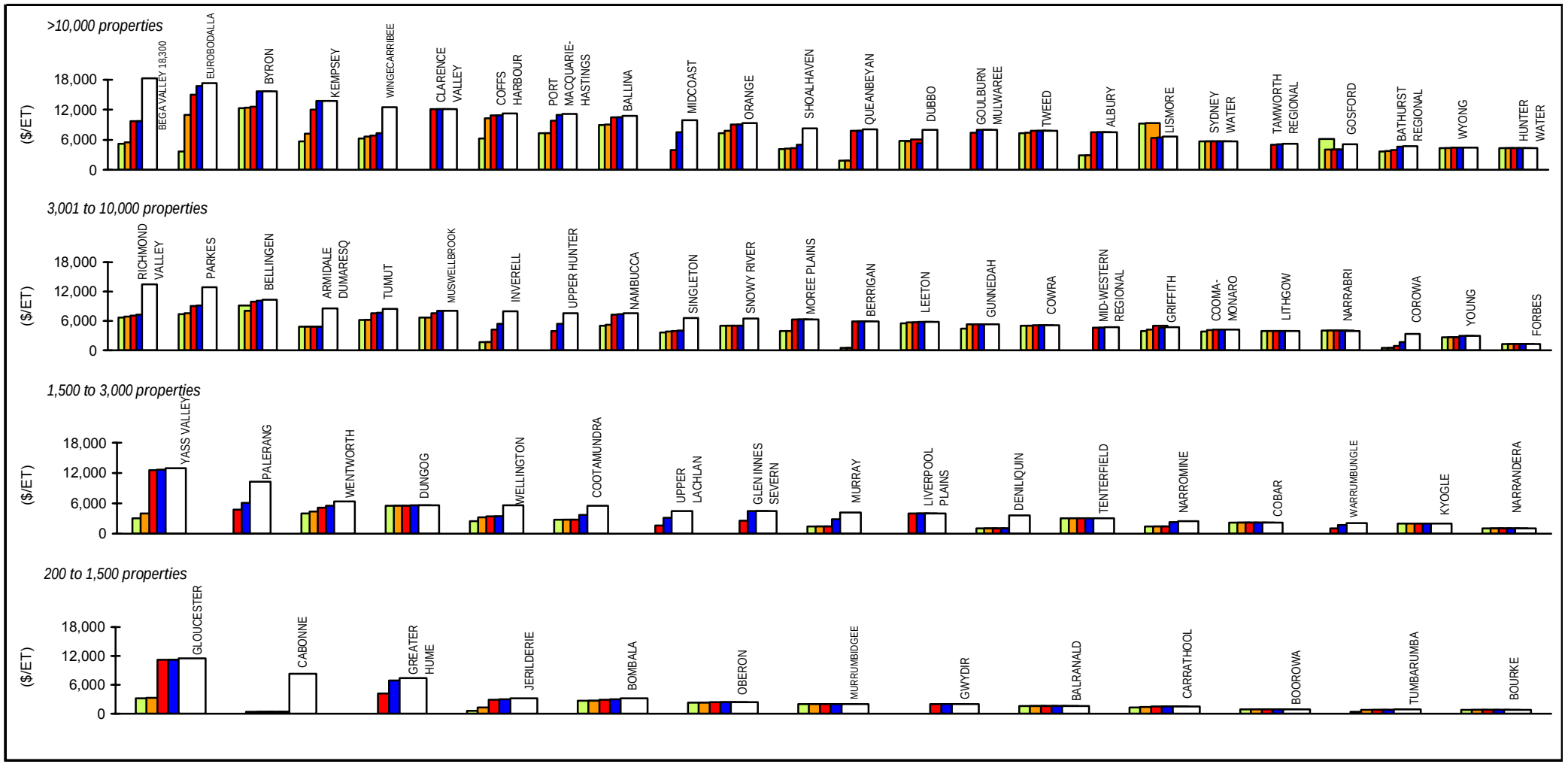
Parameter: [Borrowings (W39 + S40) + Bank Overdraft (W37 + S38)] - Cash and Investments (W30 + S31)

Parameter: $\frac{\text{[Operating Result (W15) + Interest Expense (W4a) - Interest Income (W9) - Grants for Acquisition of Assets (W11a)] x 100}}{\text{Written Down Replacement Cost of System Assets, Plant \& Equipment (W33)}}$

Notes:

1. Utilities are ranked on the basis of revenue (see the top graph).
2 For general notes see page 16.

3 Typical Developer Charge - Water Supply and Sewerage



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

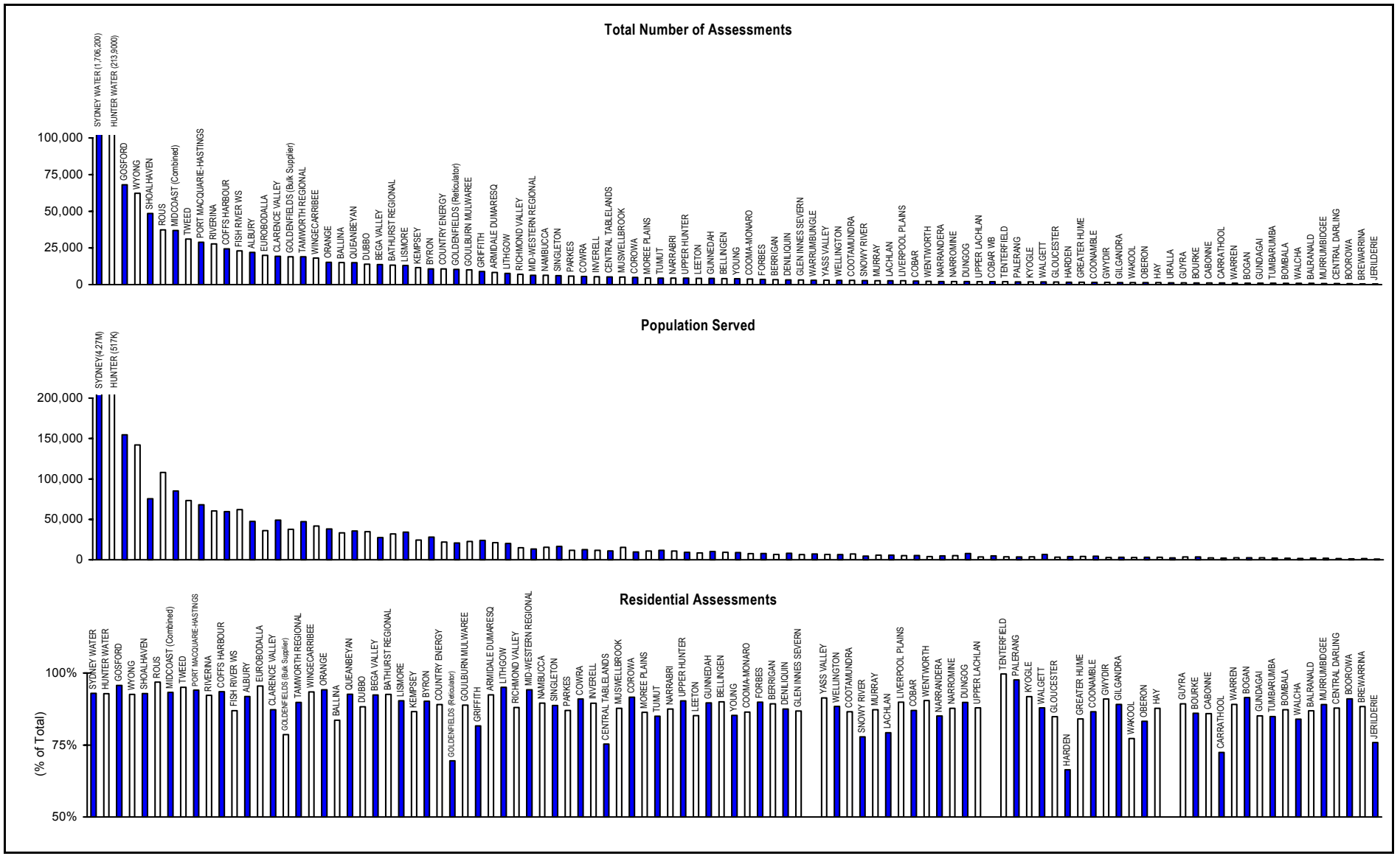
Notes:

1. This figure shows ranked values of the 2006/07 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 $13500 to $1300. Results for the previous 4 years are also shown in Jan 2007$.
2. The Statewide median typical developer charge for water supply and sewerage Is about $7600 per Equivalent Tenement (ET).
3. For general notes see page 16.

8. WATER SUPPLY FIGURES

This section contains the following Figures for water supply:

4 Population, Assessments Served - Water Supply



Parameter: No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)

Parameter: Population Served (Q1)

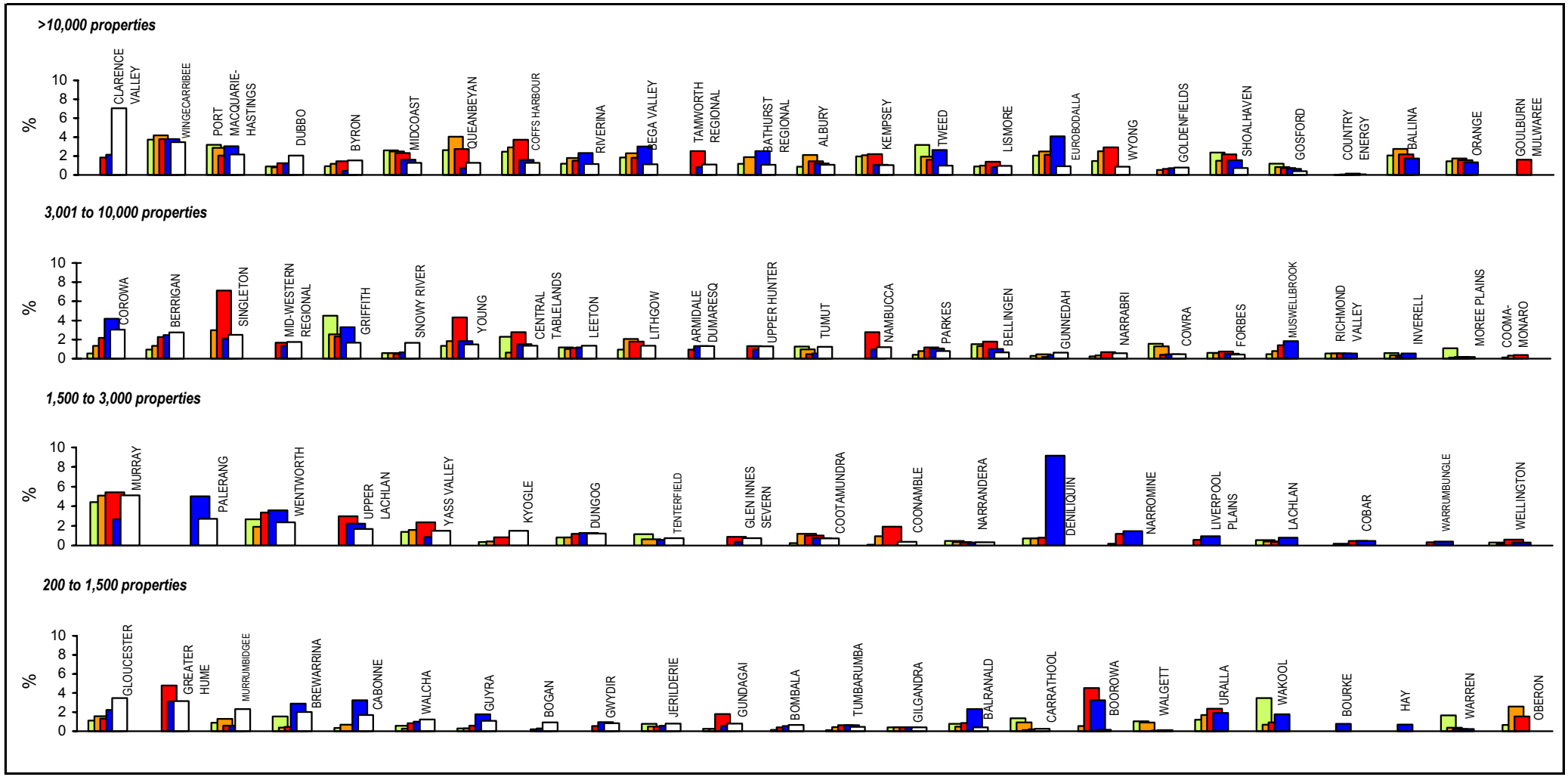
Parameter:

$$\frac{\text{No. of Residential Assessments (Q34)} \times 100}{\text{No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)}}$$

Note:

1. For general notes see page 16.

5 New Residential Dwellings Connected - Water Supply



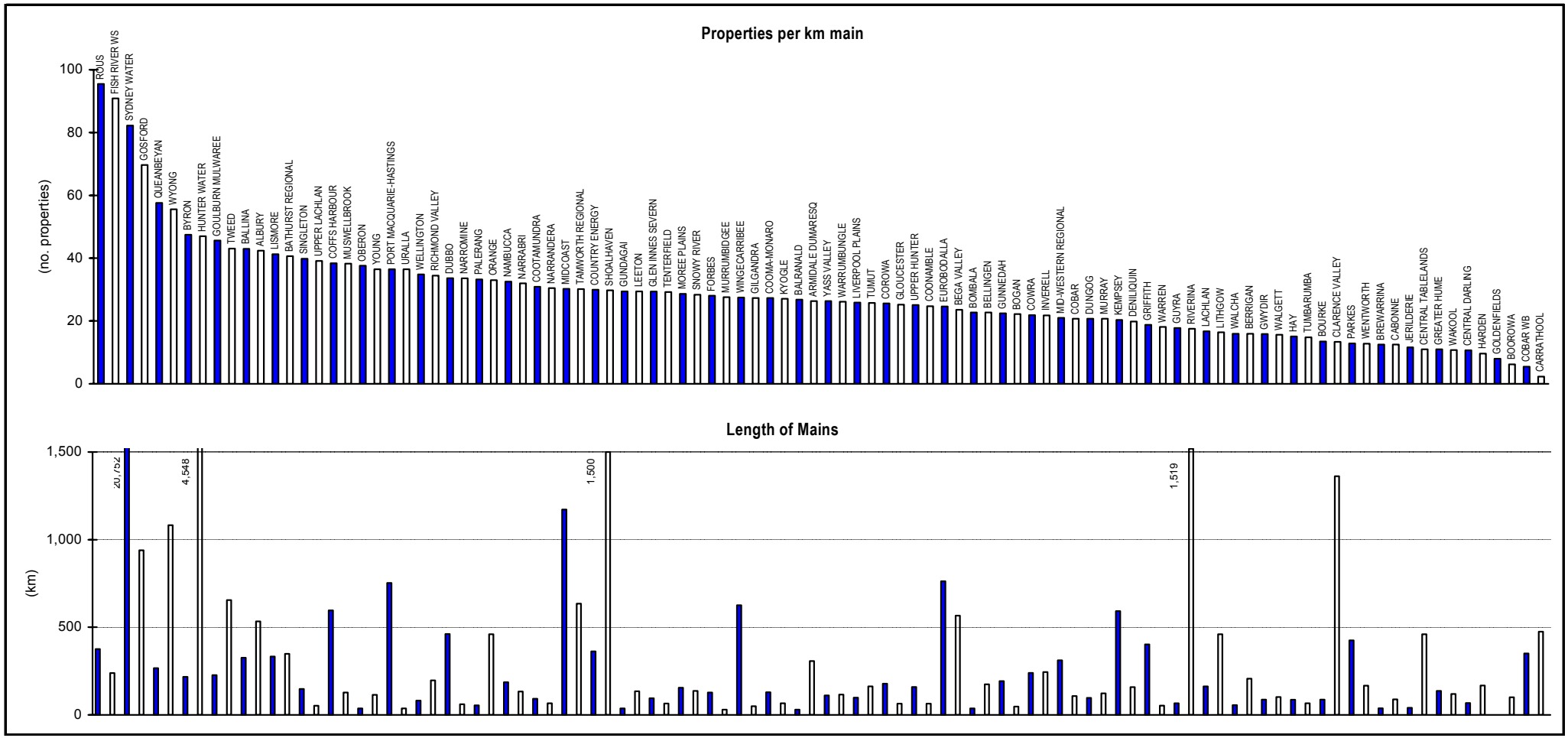
Parameter:

$$\frac{\text{No. of New Residential Dwellings Connected in Year (Q31)} \times 100}{\text{No. of Residential Assessments (Q34)} \times \text{No. of Connected Residential Properties per Residential Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 percentage of new residential dwellings connected to 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 percentage of new connections for the 25 LWUs shown ranges from 3% to 0%. Results for the previous 4 years are also shown.
2. The Statewide median percentage of new residential dwellings connected to water supply is 1.0% of the existing number of residential properties.
3. For general notes see page 16.

6 Properties Served per km of Main, Length of Mains - Water Supply



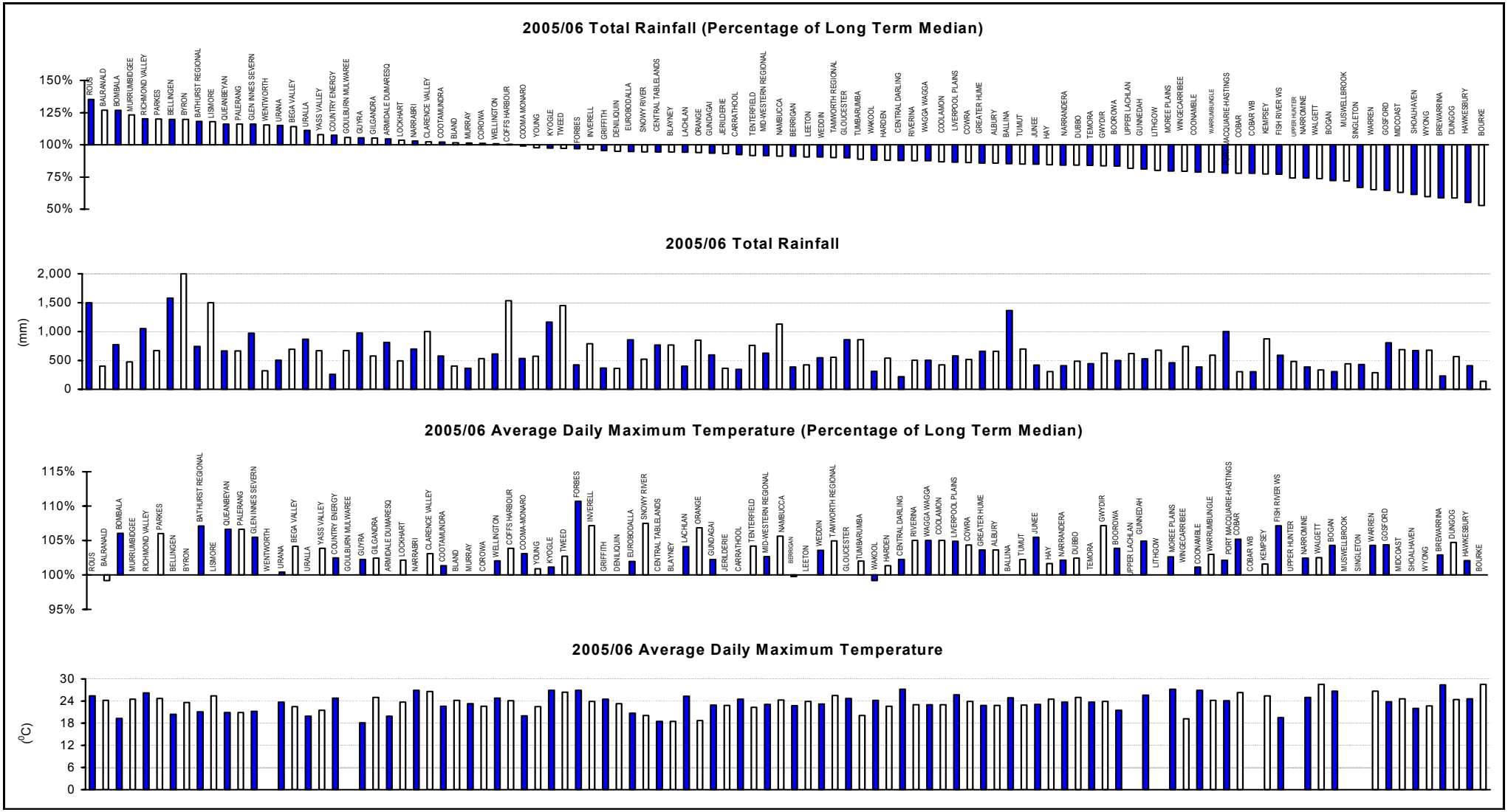
Parameter: $\frac{\text{No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}{\text{Length of Trunk Mains (Q20) + Length of Reticulation Mains (Q21)}}$

Parameter: 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 33.
3. For general notes see page 16.

7 Rainfall, Temperature - Water Supply



Parameter: 2005/06 Total Rainfall x 100 / Long Term Median Annual Rainfall

Parameter: 2005/06 Total Rainfall

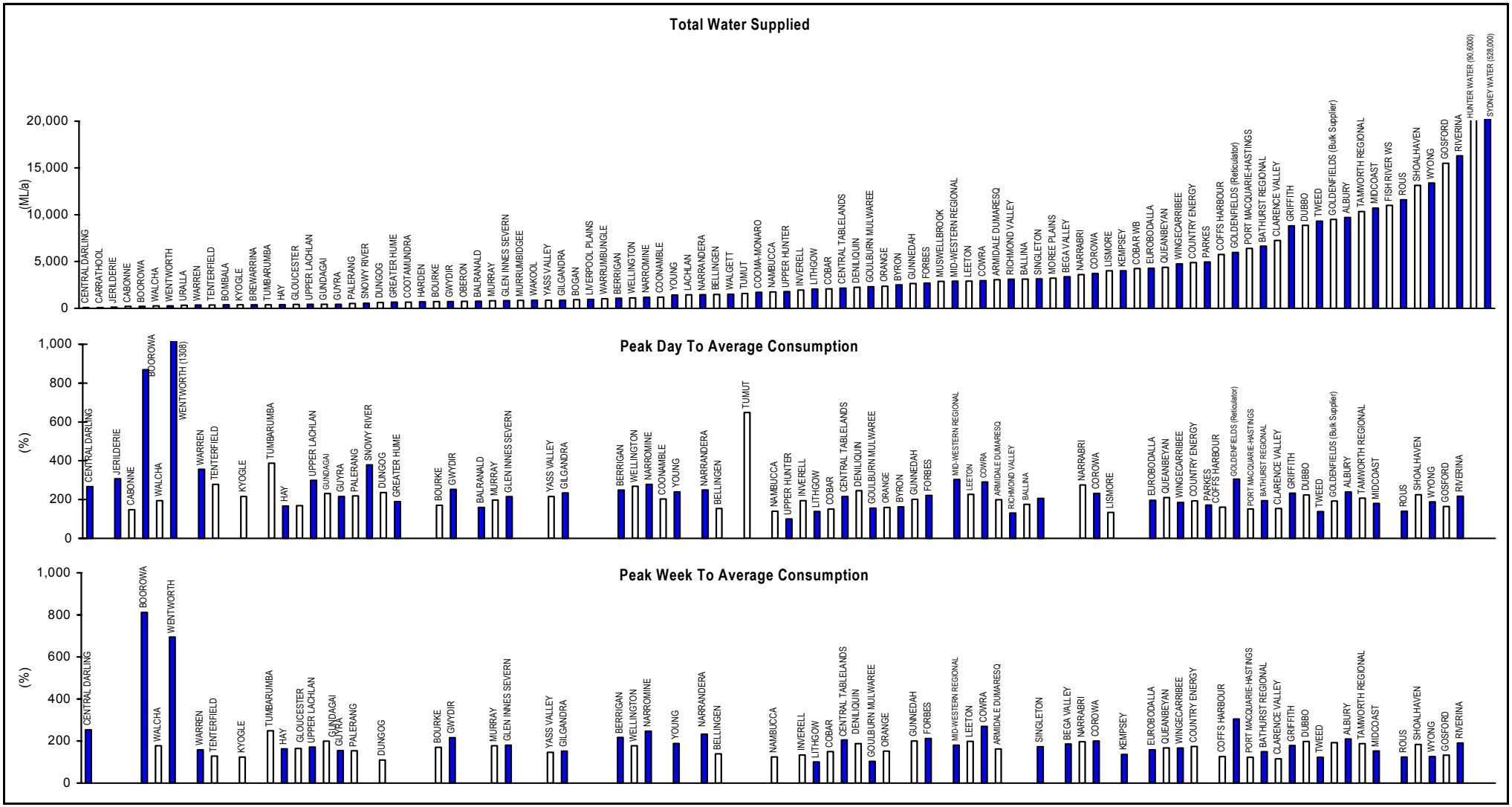
Parameter: 2005/06 Average Daily Maximum Temperature x 100 / Long Term Median Daily Maximum Temperature

Parameter: 2005/06 Average Daily Maximum Temperature

Notes:

1. Data provided by the Bureau of Meteorology.
2. For general notes see page 16.

8 Total Water Supplied - Water Supply



Parameter: Total Potable Water Consumed (Q71) + Non-Potable Water Consumed (Q72) - Recycled Water (STW Q25)

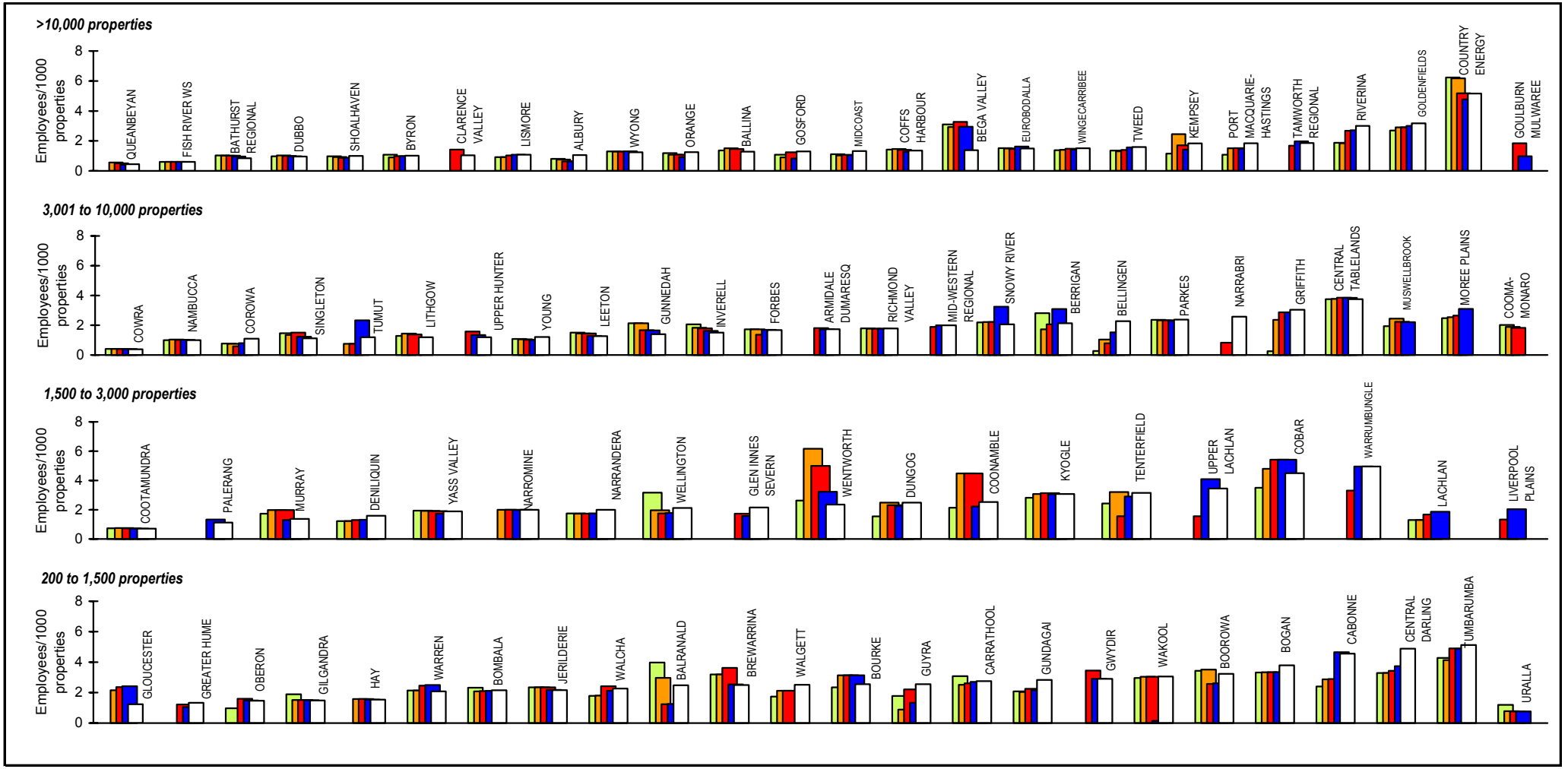
Parameter:
$$\frac{\text{Peak Day Consumption (Q82) x 365 x 10}}{\text{Total Potable Water Supplied (Q71)}}$$

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

Notes:

1. The top graph shows the total town water supplied (potable and non-potable). The second graph shows the percentage of peak to day average potable water consumption for each Local Water Utility (LWU). Each bar represents one LWU. The third graph shows the percentage peak week to average potable water consumption.
2. For general notes see page 16.

9 Employees per 1000 properties - Water Supply



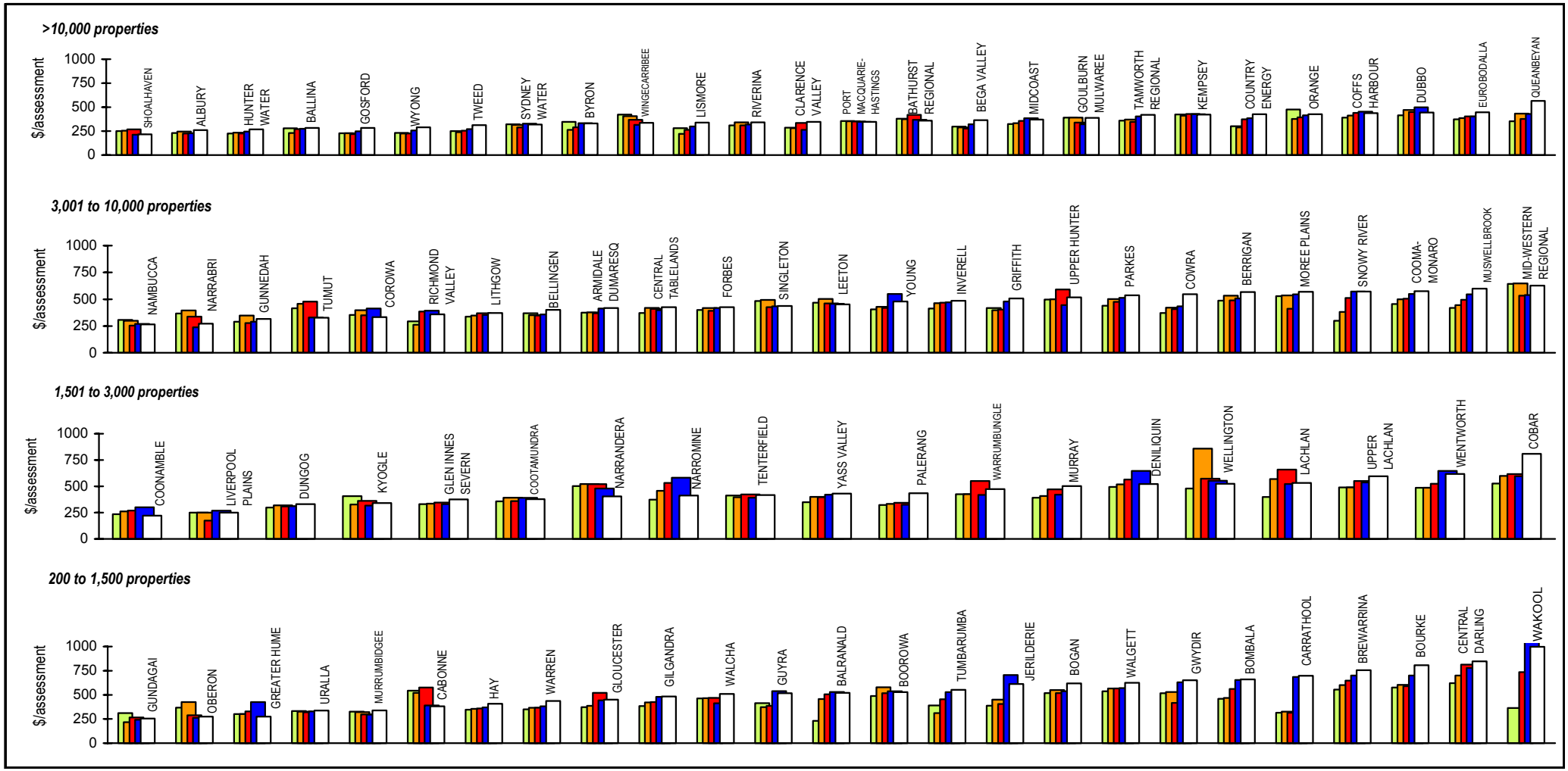
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 24 LWUs shown ranges from 0.4 to 3.8. The 3 utilities on the right did not report this indicator for 2005/06.
2. The Statewide median number of water supply employees is 1.3 per 1000 connected properties.
3. For general notes see page 16.

10 Typical Residential Bill – Water Supply

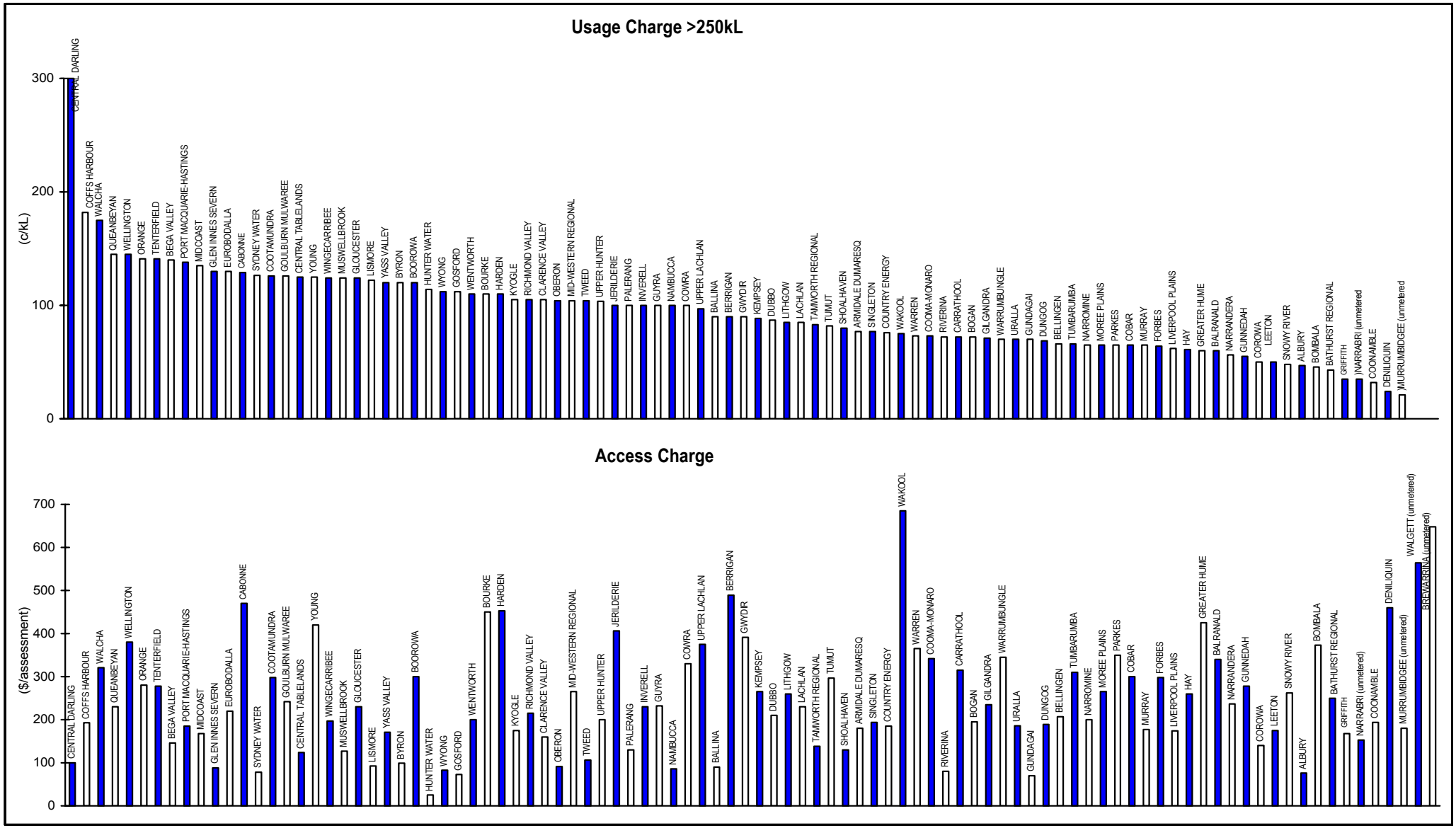


Parameter: (2005/06 Average Residential Water Consumption x 2006/07 Water Usage Charges) + 2006/07 Access Charge

Notes:

1. This figure shows ranked values of the 2006/07 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 2006/07 for the 25 LWUs shown ranges from $240 to $570 per assessment. Results for the previous 4 years are also shown in Jan 2007$.
2. The 2006/07 Statewide median typical residential bill for water supply is $345 per assessment.
3. For general notes see page 16.

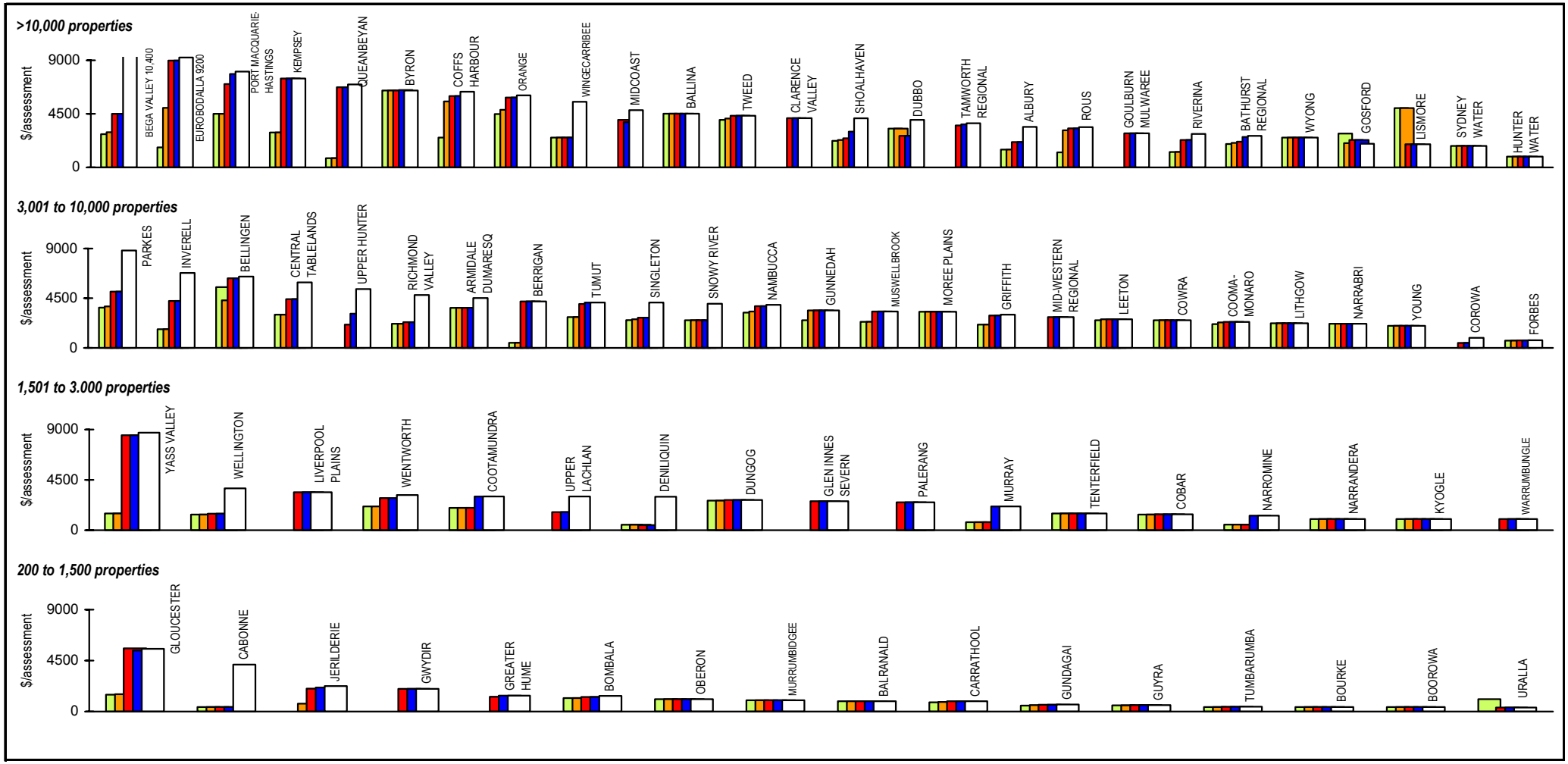
11 Residential Usage Charge and Access Charge - Water Supply



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 residential water usage charge shown is for usage in excess of 250 kL/a. Further information on water supply tariff structures is shown in Tables 6, 6A, 6B and 6C.
3. The Statewide median water usage charge was 105 c/kL. 20% of LWUs had a usage charge greater than 125 c/kL. 80 % of LWUs had a usage charge greater than 65 c/kL.
4. For general notes see page 16.

12 Typical Developer Charge – Water Supply

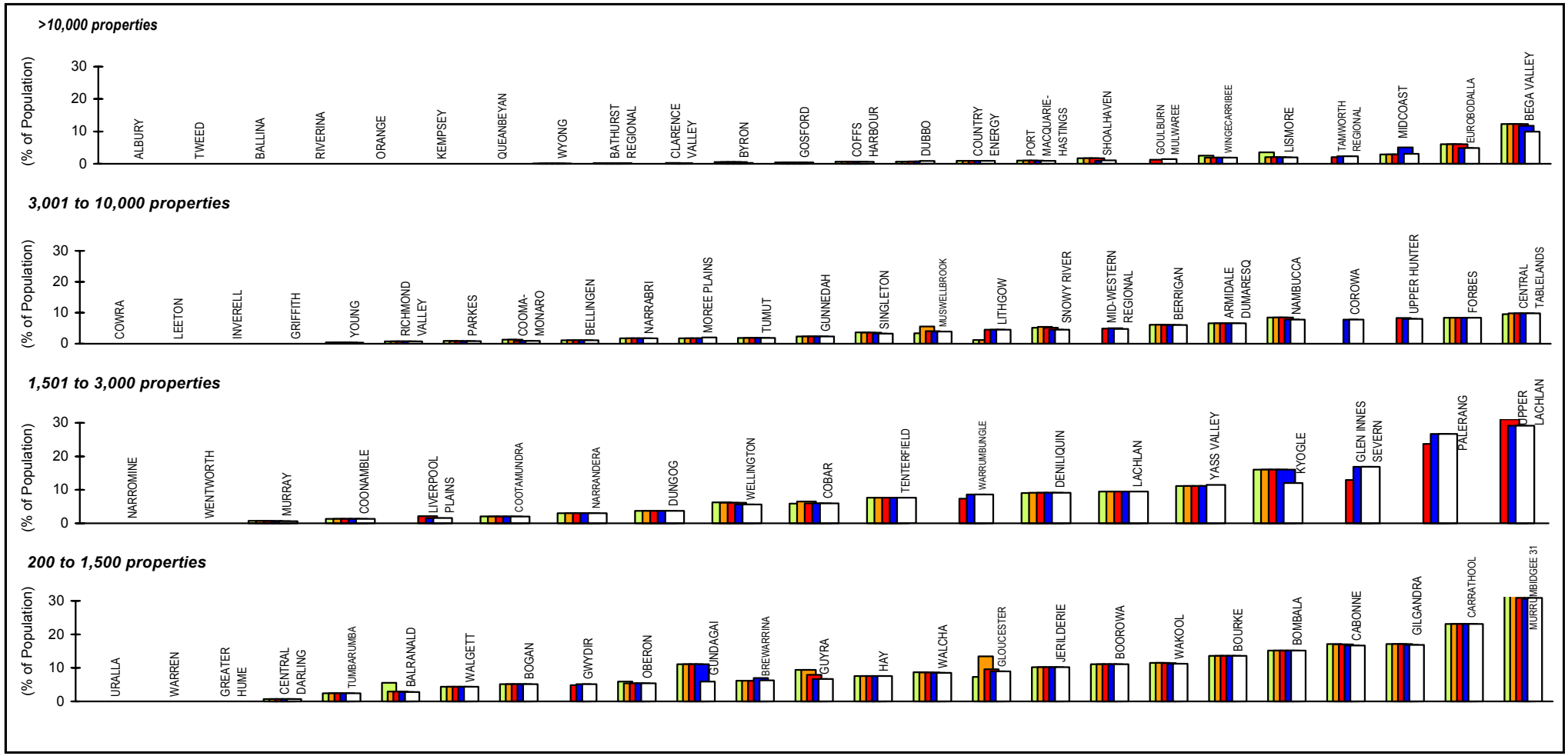


Parameter: Typical Water Supply Developer Charge (Q136)

Notes:

1. This figure shows ranked values of the 2006/07 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 25 LWUs shown ranges from $8800 to $700. Results for the previous 4 years are also shown in Jan 2007$.
2. The Statewide median typical developer charge for water supply is $4100 per equivalent tenement (ET).
3. 82 LWUs levied water supply developer charges.
4. For general notes see page 16.

13 Urban Population without Water Supply - Water Supply



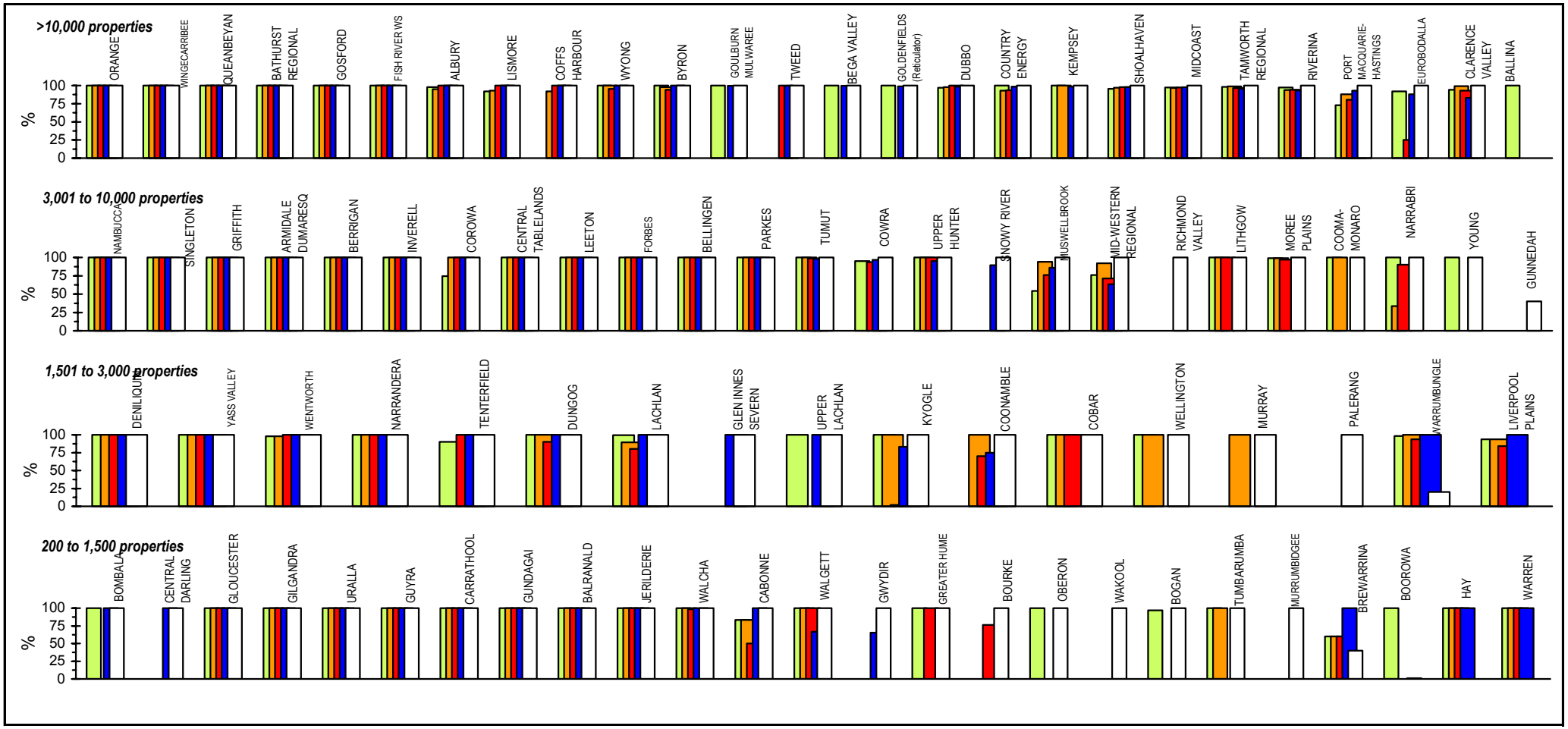
Parameter:

$$\frac{\text{Unserved Urban Population in LWU Area (Q40)} \times 100}{\text{Population Served (Q1)} + \text{Unserved Population (Q40)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 percentage of urban population without a reticulated public water supply 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 percentage of urban population without a reticulated public water supply for the 25 LWUs shown ranges from 0 to 10%. Results for the previous 4 years are also shown.
2. The statewide median urban population without a reticulated public water supply was 0.9%.
3. 28% of LWUs had an urban population of at least 500 without a reticulated water supply. 9% of LWUs had a population of at least 1000 without a reticulated water supply.
4. The percentage of urban population without a reticulated water supply for the median LWU was 5%.
5. 84% of LWUs had over 90% of their urban population served by a reticulated public water supply. Overall, 1.8 million people in non-metropolitan NSW (97.7% coverage) received a reticulated public water supply service.
6. For general notes see page 16.

14 Physical Water Quality Compliance - Water Supply

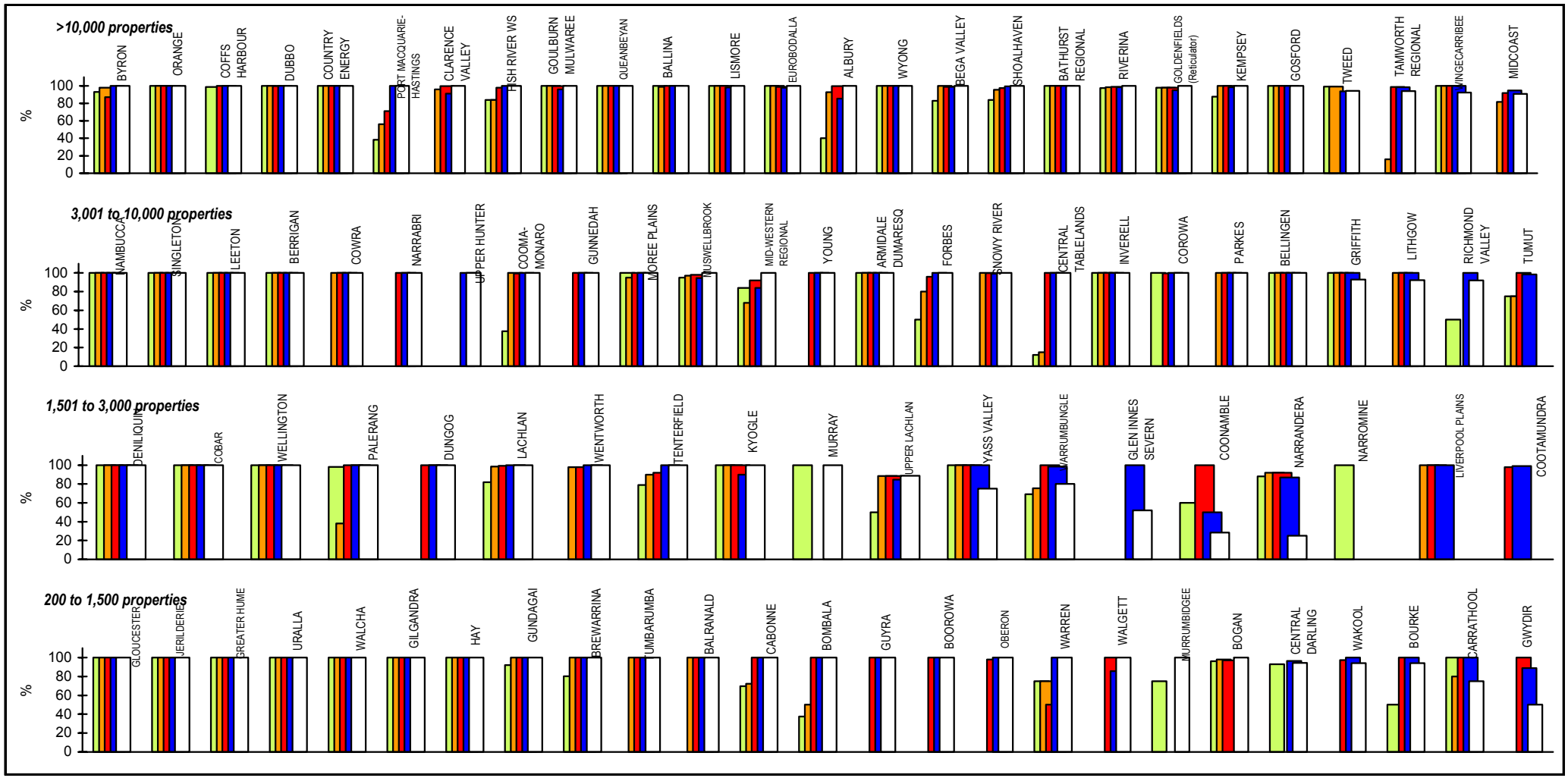


Parameter: Percentage of distribution system water samples complying with physical criteria of the NHMRC/NRMMC Australian Drinking Water Guidelines 2004.

Notes:

1. This figure shows ranked values of the 2005/06 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 25 LWUs shown ranges from 100% to 40%. Results for the previous 4 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. 95% of all physical samples tested in 2005/06 achieved 100% compliance with these guidelines. 91 % of LWUs complied with the guidelines in 2005/06.
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 physical water quality compliance is 100%.
5. For general notes see page 16.

15 Chemical Water Quality Compliance - Water Supply

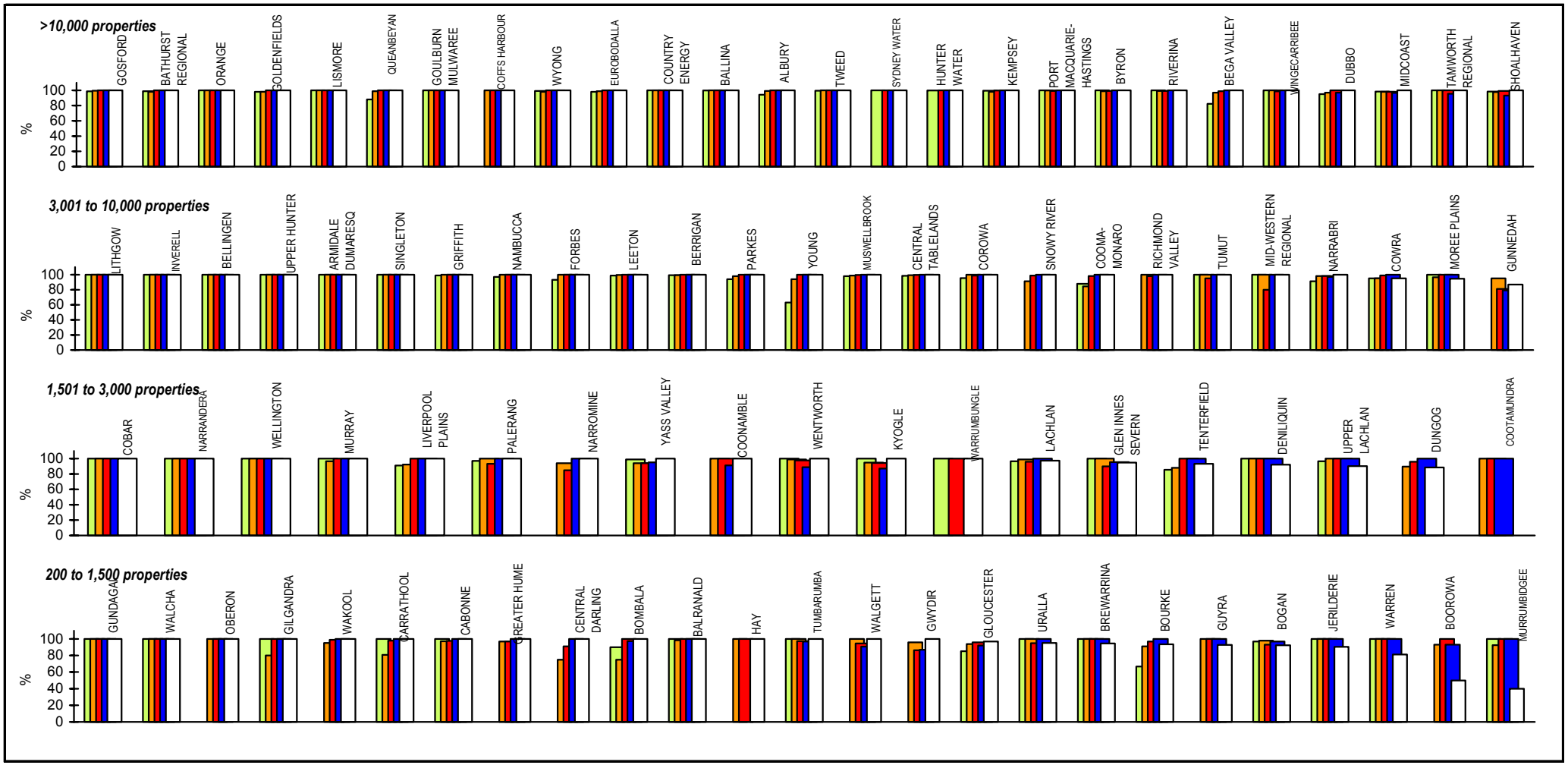


Parameter: Percentage of distribution system water samples complying with chemical criteria of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines.

Notes:

1. This figure shows ranked values of the 2005/06 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 25 LWUs shown ranges from 100% to 92%. Results for the previous 4 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. 96% of all chemical samples tested in 2005/06 achieved 100% compliance with 2004 Guidelines. 80% of the LWUs complied with the Guidelines in 2005/06.
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 chemical water quality compliance is 100%.
5. For general notes see page 16.

16 E.Coli Water Quality Compliance - Water Supply

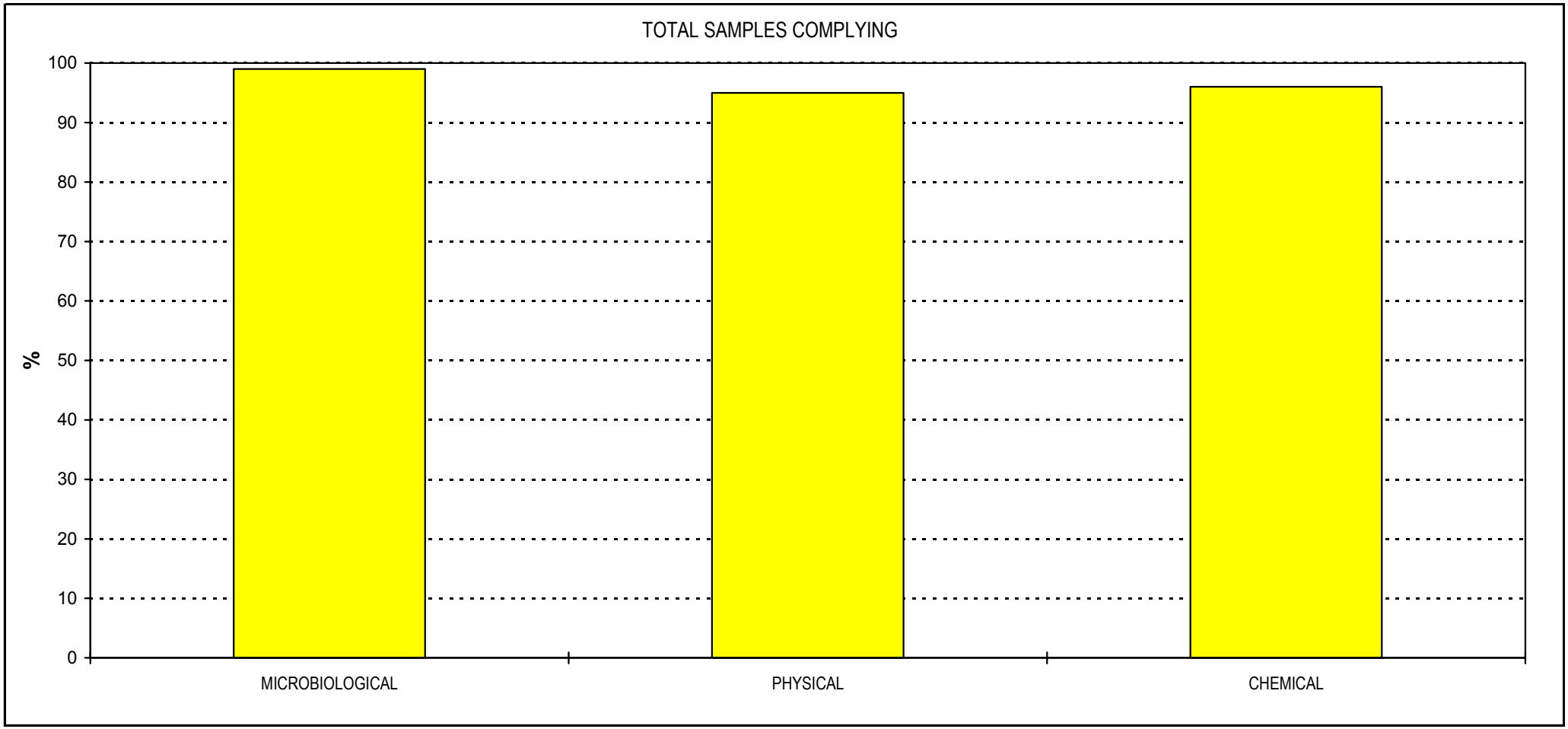


Parameter: Percentage of distribution system water samples complying with E. coli criteria of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines

Notes:

1. This figure shows ranked values of the 2005/06 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 E.coli water quality compliance for the 25 LWUs shown ranges from 100% to 87%. Results for the previous 4 years are also shown. The results for 2001/02 to 2003/04 are based on the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines.
2. Microbiological compliance is based on E. coli, which is health-related. 99% of all samples tested in 2005/06 contained no E. coli. 80% of the LWUs complied with the 2004 Guidelines for E. coli in 2005/06.
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 16.

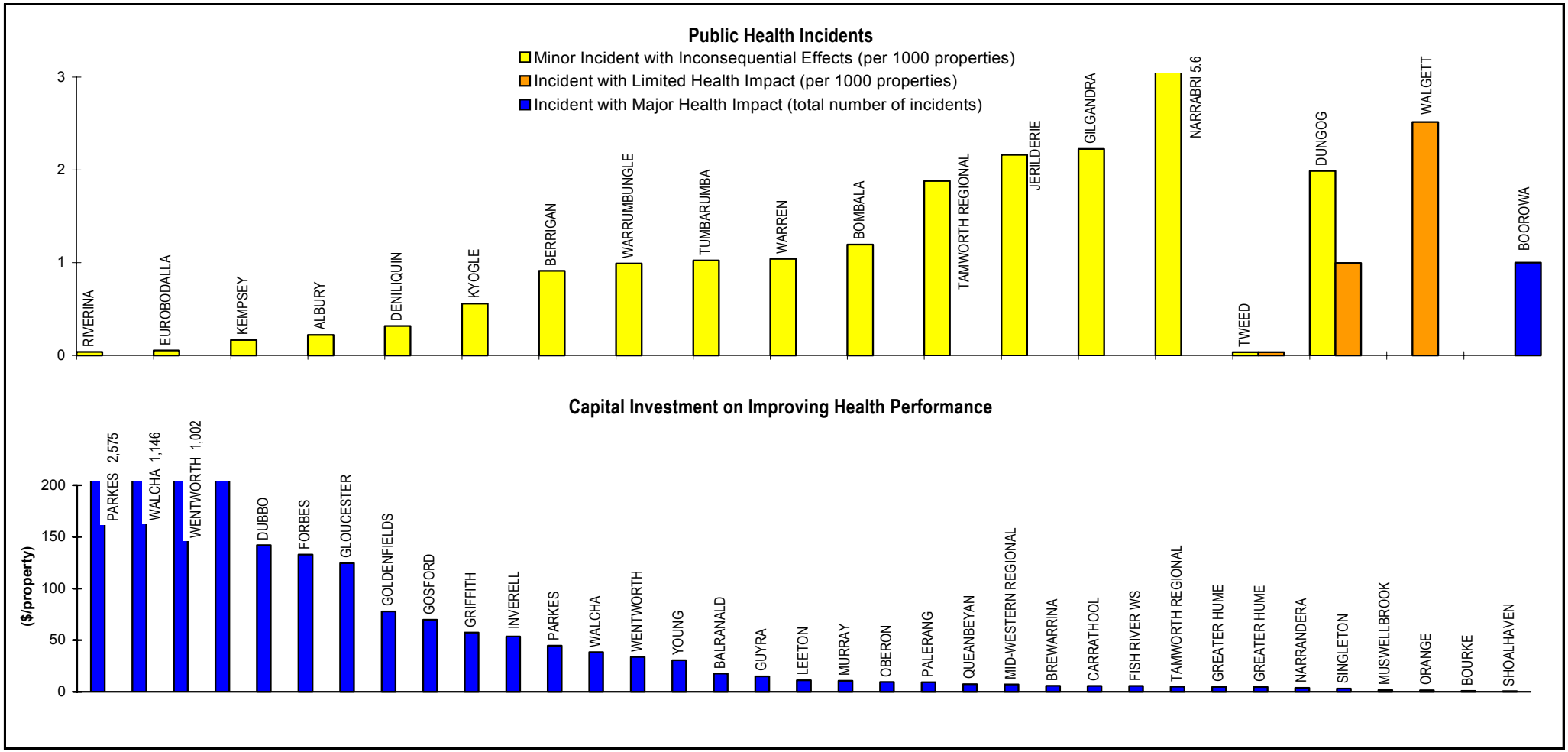
17 Compliance with 2004 Australian Drinking Water Guidelines - Water Supply



Notes:

1. E.coli Water Quality Guidelines (health related) - 99% of the 28100 samples tested for non-metropolitan NSW contained no E.coli. 80% of Local Water Utilities (LWUs) complied with the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines for E.coli.
2. Physical Water Quality Guidelines (health related) - 95% of the 27300 samples tested for non-metropolitan NSW achieved 100% physical compliance. 91% of Local Water Utilities (LWUs) complied with the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines for physical water quality.
3. Chemical Water Quality Guidelines (health related) - 96% of the 37200 samples tested for non-metropolitan NSW achieved 100% chemical compliance. 80% of Local Water Utilities (LWUs) complied with the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines for chemical water quality.
4. For general notes see page 16.

18 Public Health Incidents, Capital Investment - Water Supply



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

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

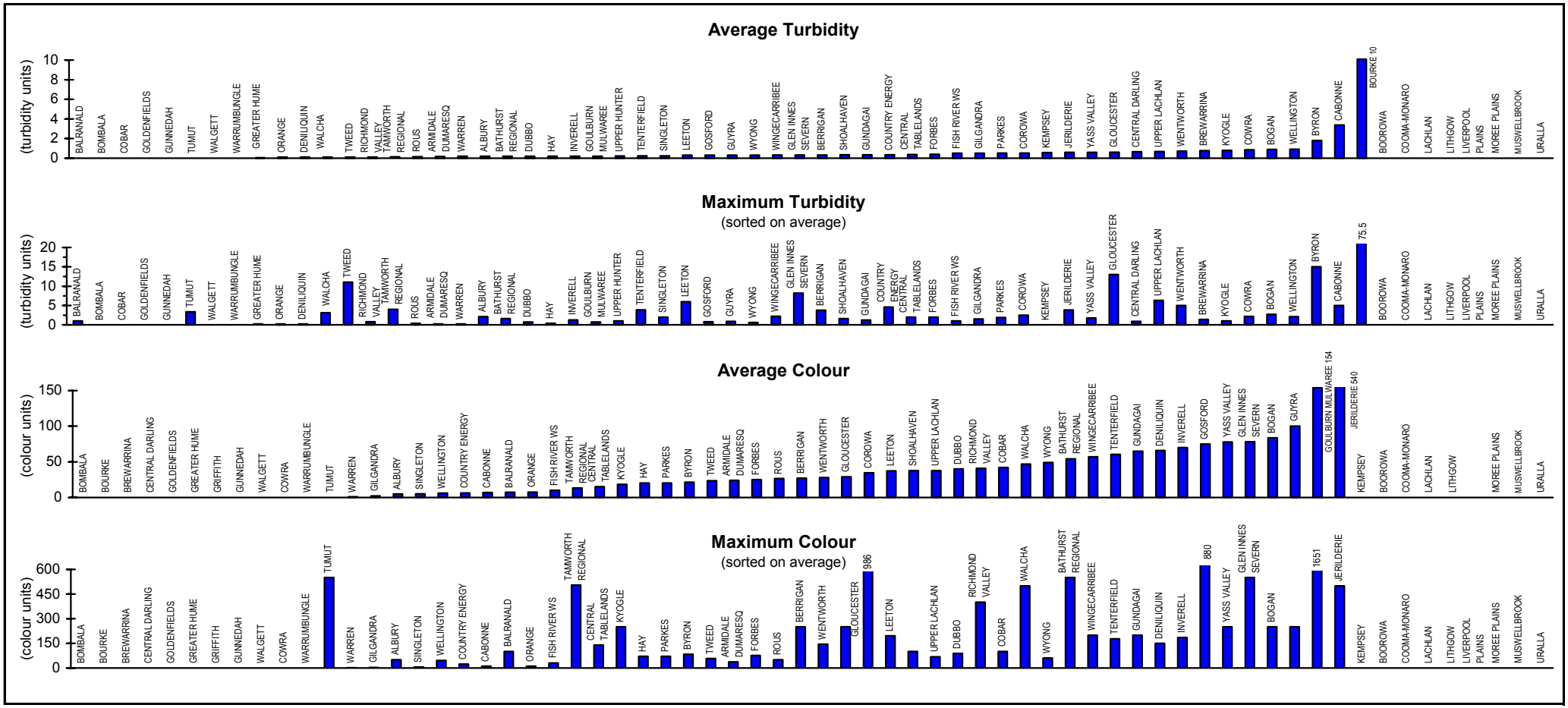
Parameter: Total No. of Major Incidents with Major Health Impacts (Q117) / [No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment

Parameter: Capital Expenditure on Improving Health Performance ($) x (Q119) / [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 16.

19 Turbidity and Colour for Filtered Supplies - Water Supply

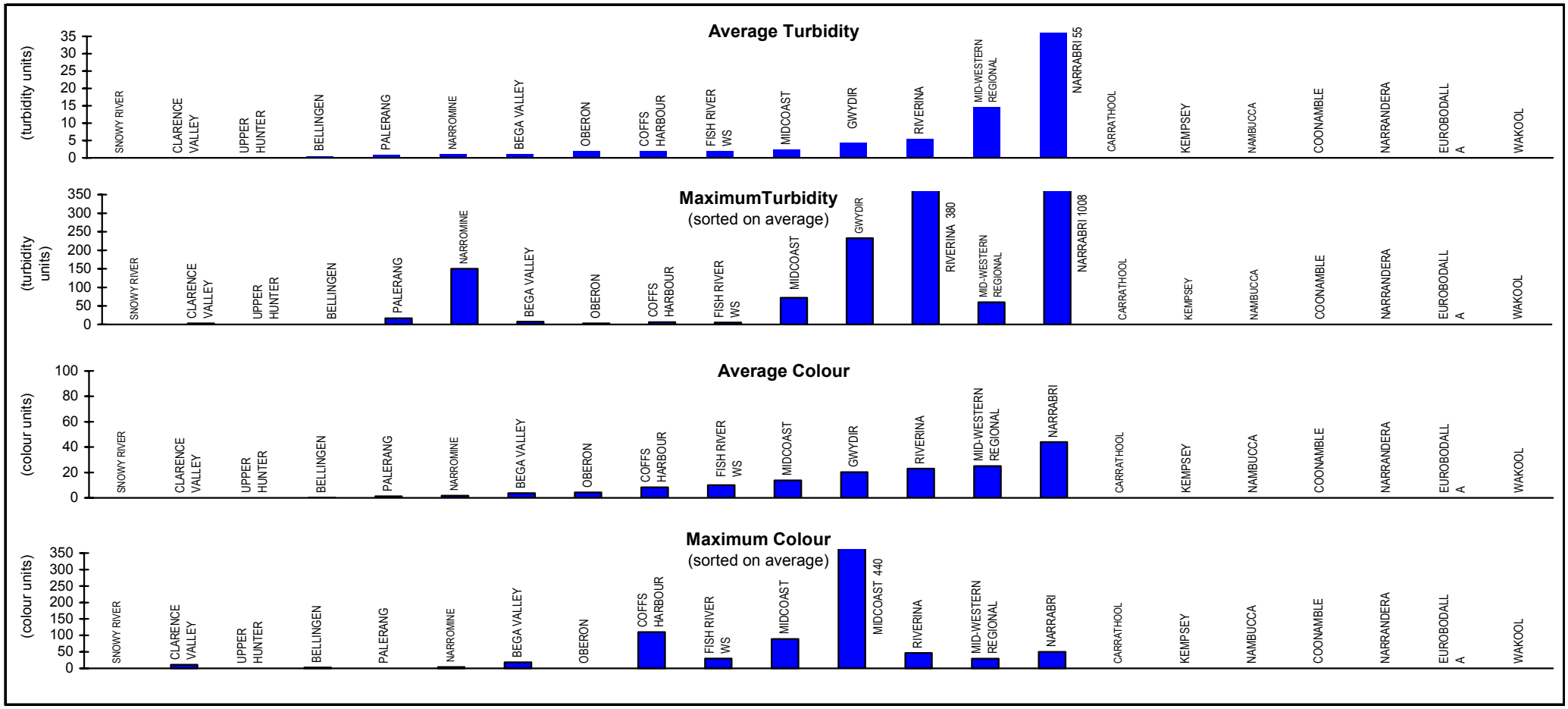


Parameter: Treated Water Average Turbidity (WTW Q15), Maximum Turbidity (WTW Q14), Treated Water Average Colour (WTW Q11), Maximum Colour (WTW Q10)

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 58 reporting LWUs had average turbidity not exceeding 2 turbidity units. 95% of these LWUs had average turbidity not exceeding 1 turbidity unit.
3. 37% of the 57 reporting LWUs had average colour not exceeding 8 colour units. 26% of these LWUs had average colour exceeding 5 colour units.
4. 21% 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 16.

20 Turbidity and Colour for Unfiltered Supplies - Water Supply

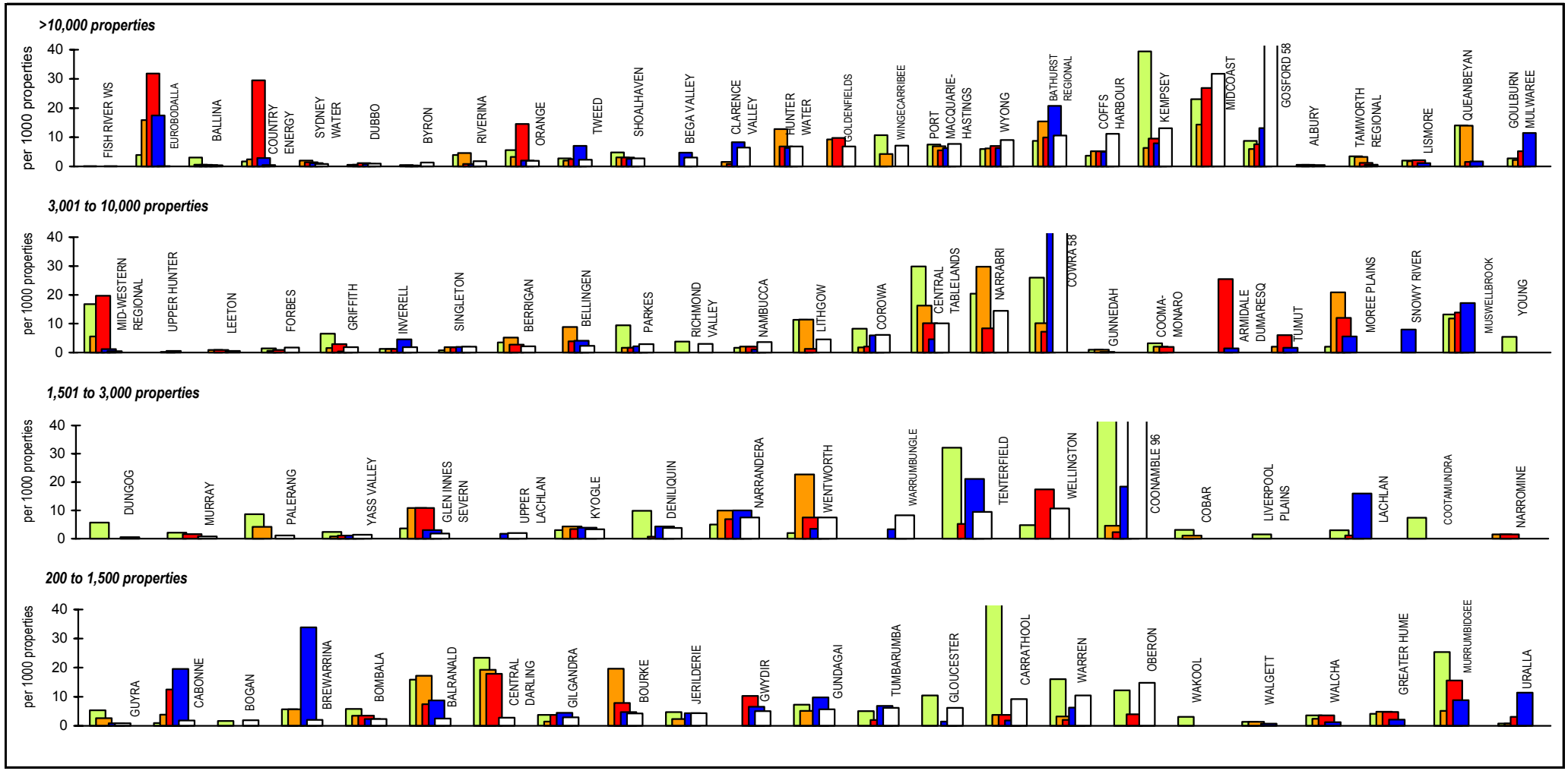


Parameter: Raw Water Average Turbidity (WTW Q13), Maximum Turbidity (WTW Q12), Raw Water Average Colour (WTW Q9), Maximum Colour (WTW Q8)

Notes:

1. Only unfiltered reporting supplies have been considered
2. 60% of the 15 reporting LWUs had average turbidity not exceeding 2 turbidity units. 67% of these LWUs had average turbidity not exceeding 1 turbidity unit.
3. 73 of reporting LWUs had average colour not exceeding 15 colour units. 73% of these LWUs had average colour not exceeding 5 colour units.
4. For general notes see page 16.

21 Water Quality Complaints - Water Supply



Parameter: No. of Water Quality Complaints (Q101) x 1000

[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 2005/06 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 15 LWUs shown ranges from nil to 58 per 1000 connected properties. The 8 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The Statewide median number of water quality complaints is 6 per 1000 properties.
3. For general notes see page 16.

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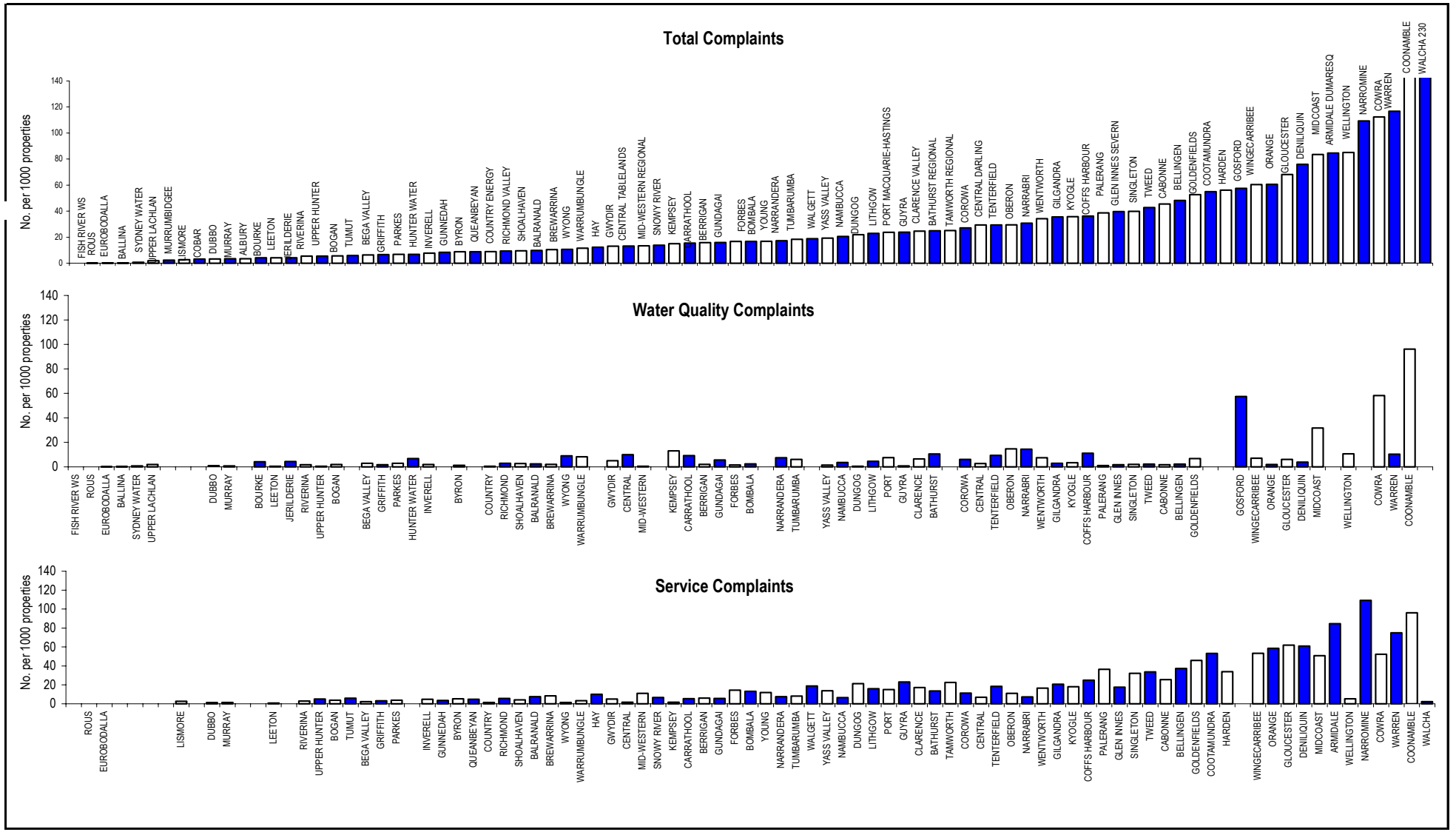
22 Complaints (per 1000 properties) - Water Supply



Parameter:

$$\frac{\text{Total No. of Complaints [(Q96)+(Q99)+(Q100)+(Q101)] x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

Parameter:

$$\frac{\text{No. of Water Quality Complaints (Q42a) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

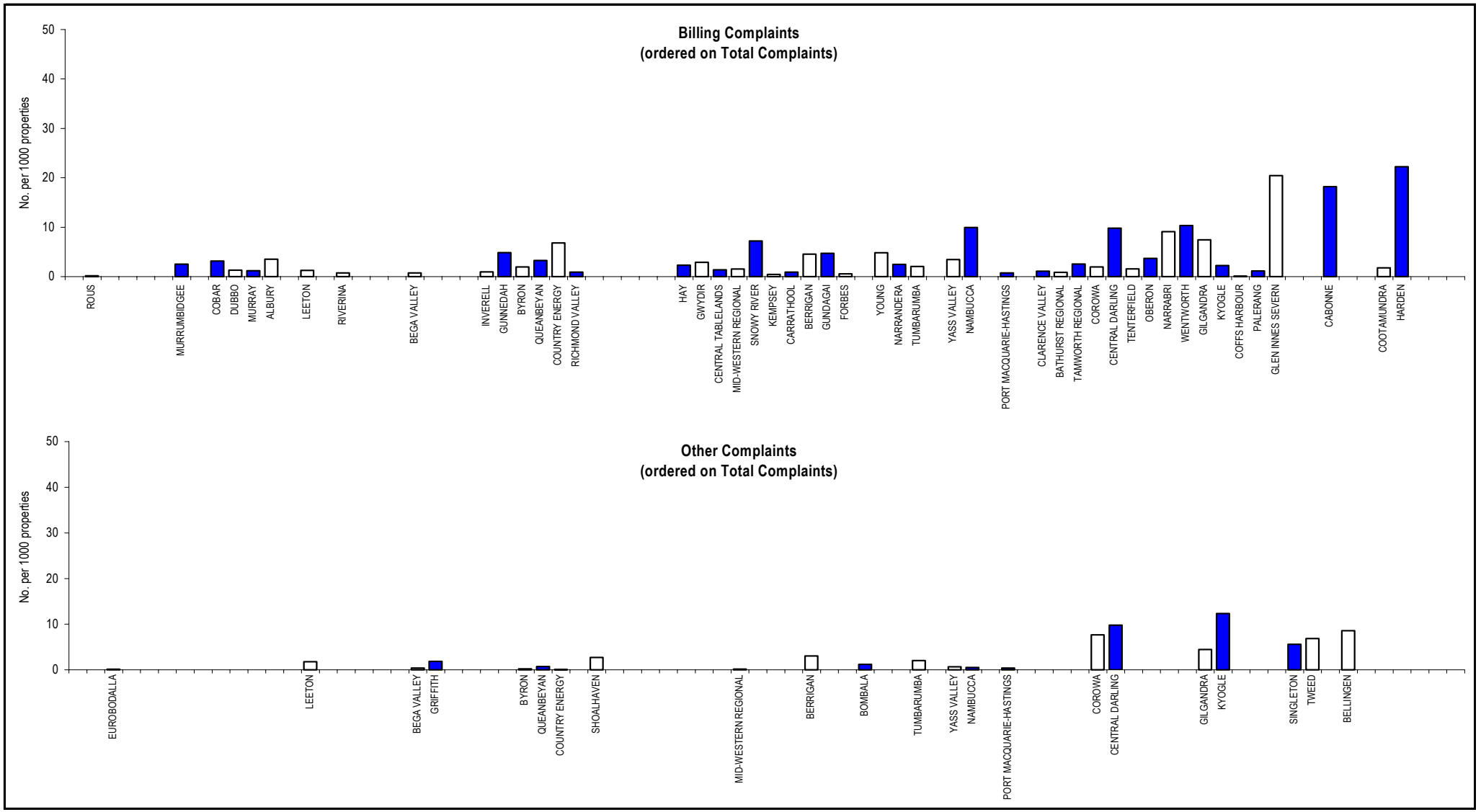
Parameter:

$$\frac{\text{No. of Water Service Complaints (Q19a) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

Note:

1. For general notes see page 16.

22 Complaints (per 1000 properties) - Water Supply



Parameter:

$$\frac{\text{No. of Billing Complaints (Q99)+ x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

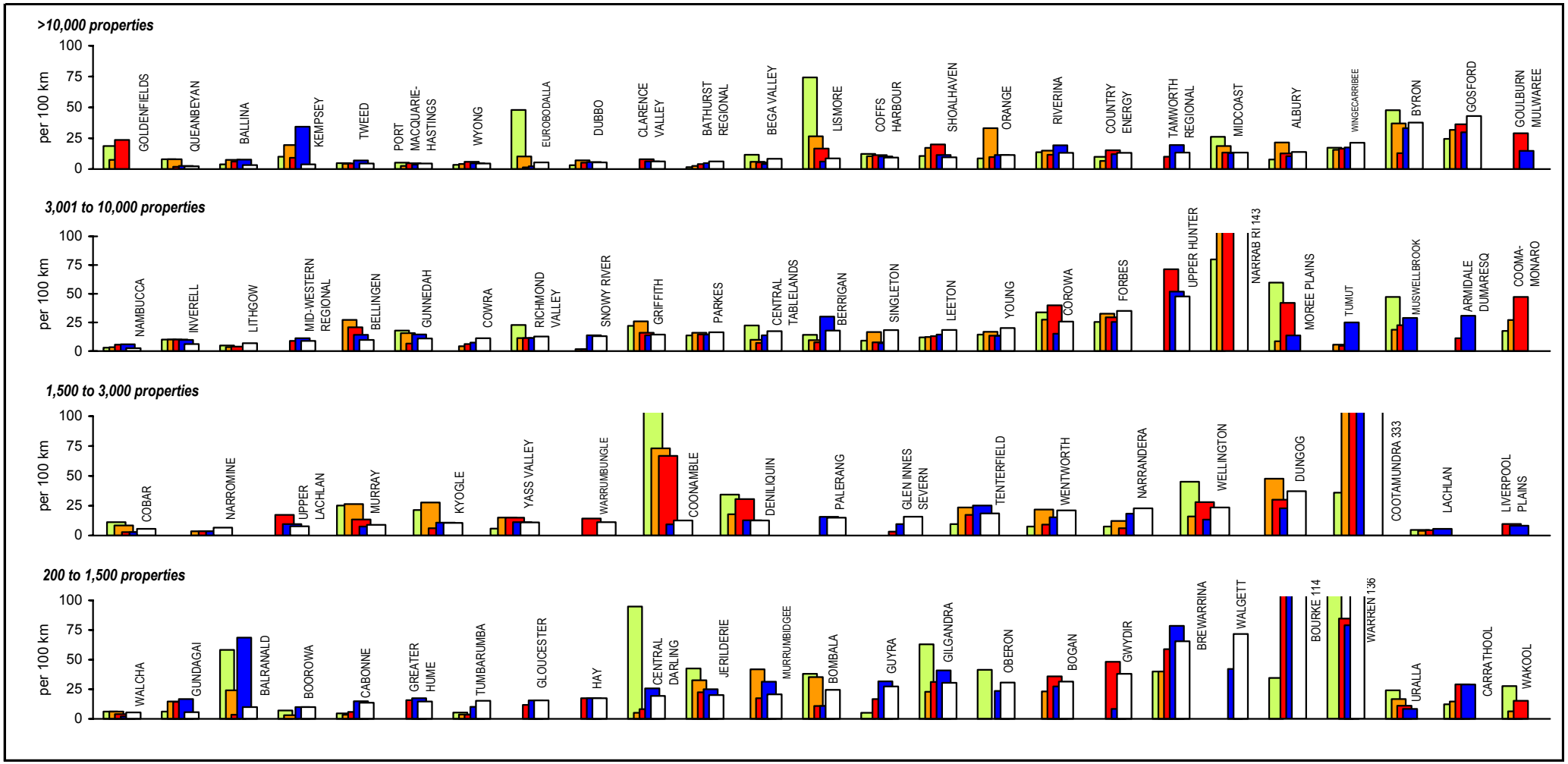
Parameter:

$$\frac{\text{No. of Other Complaints (Q100) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35)] x No. of Connected Properties per Assessment}}$$

Note:

1. For general notes see page 16.

23 Number of Water Main Breaks - Water Supply



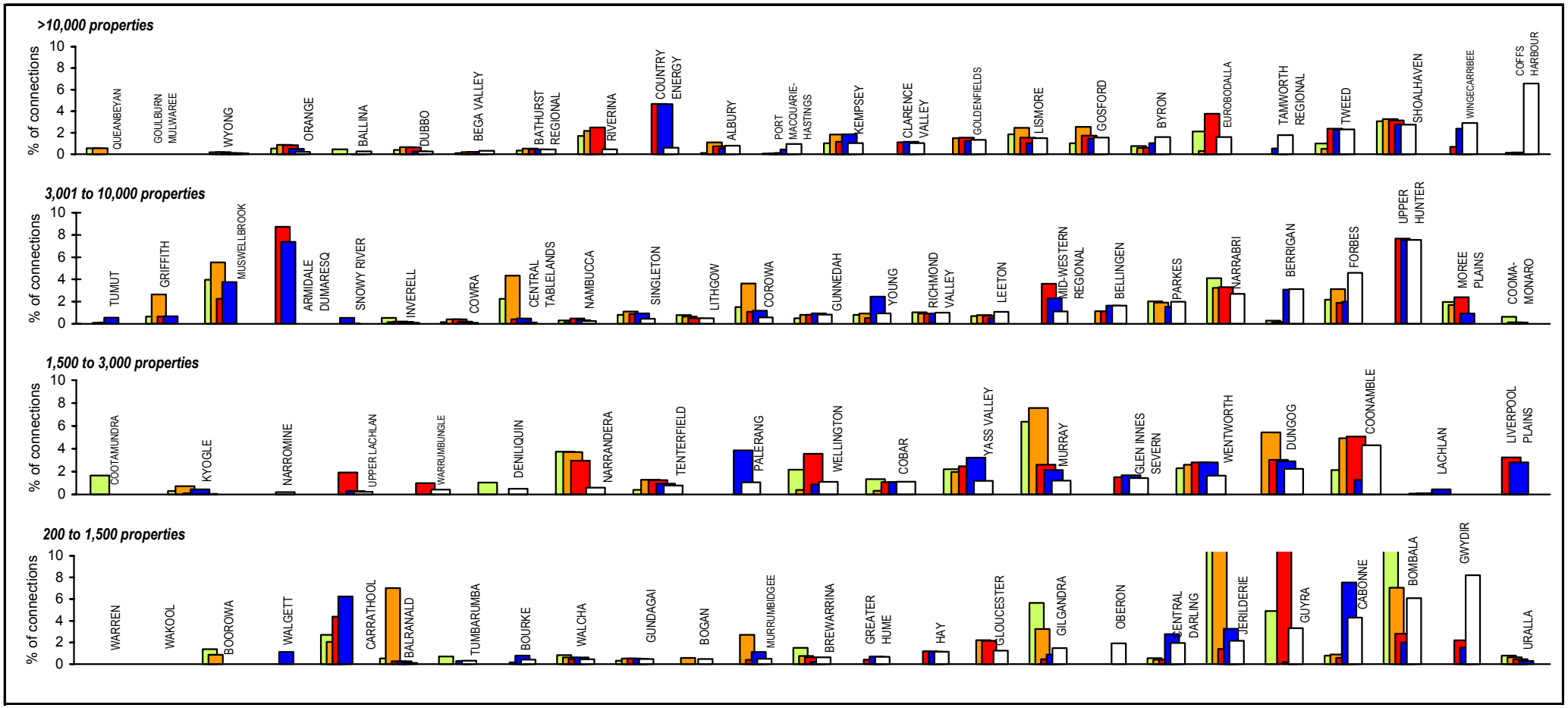
Parameter:

$$\frac{\text{No. of Pipeline Breaks (Q104) x 100}}{\text{Length of Distribution and Trunk Mains (Q22)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 20 LWUs shown ranges from 2.7 to 143 per 100km of water mains.The 5 LWUs on the right did not report this indicator for 2005/06 . Results for the previous 4 years are also shown.
2. The Statewide median number of water supply main breaks is 10 per 100km of water main.
3. For general notes see page 16.

24 Service Connection Failures - Water Supply



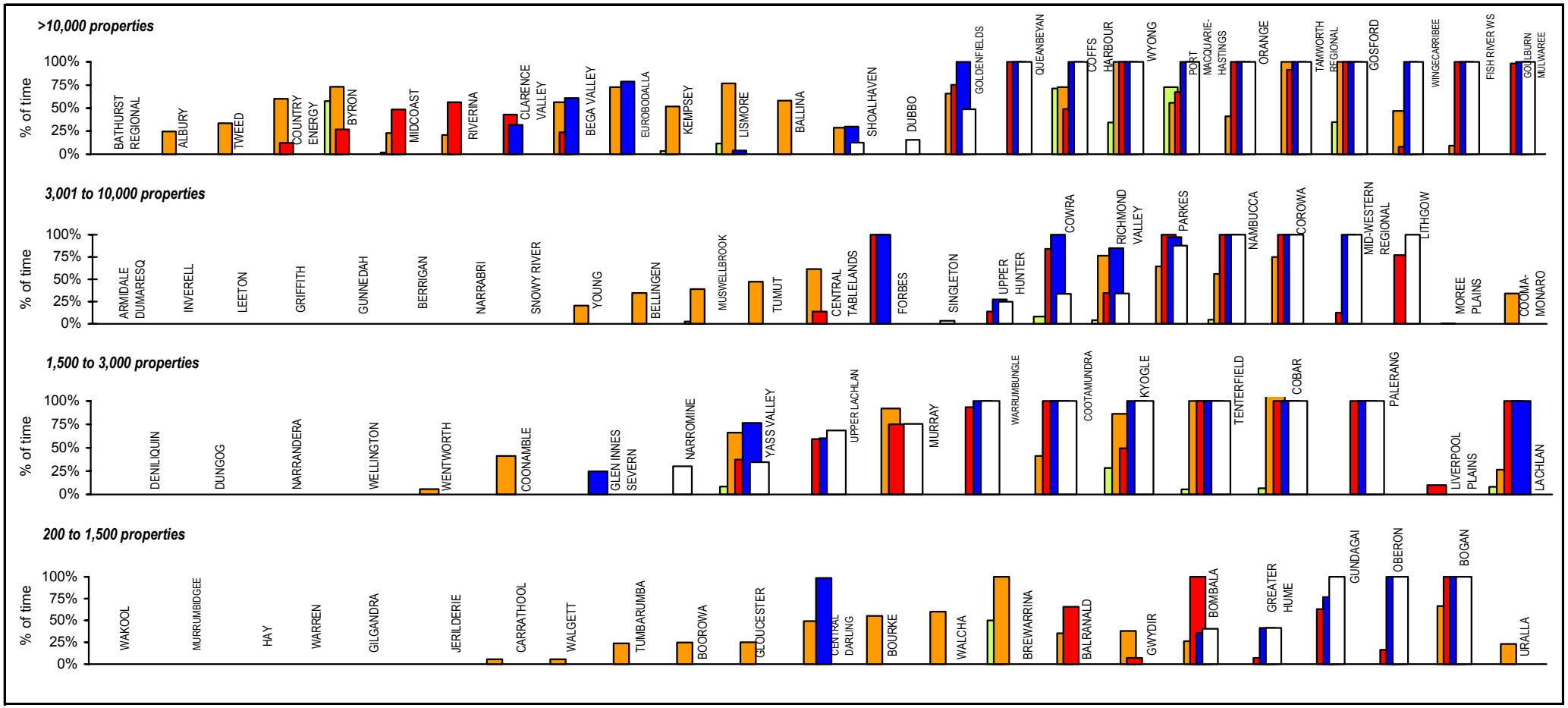
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 23 LWUs shown ranges from nil to 8 %. The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. For general notes see page 16.

25 Drought Water Restrictions - Water Supply

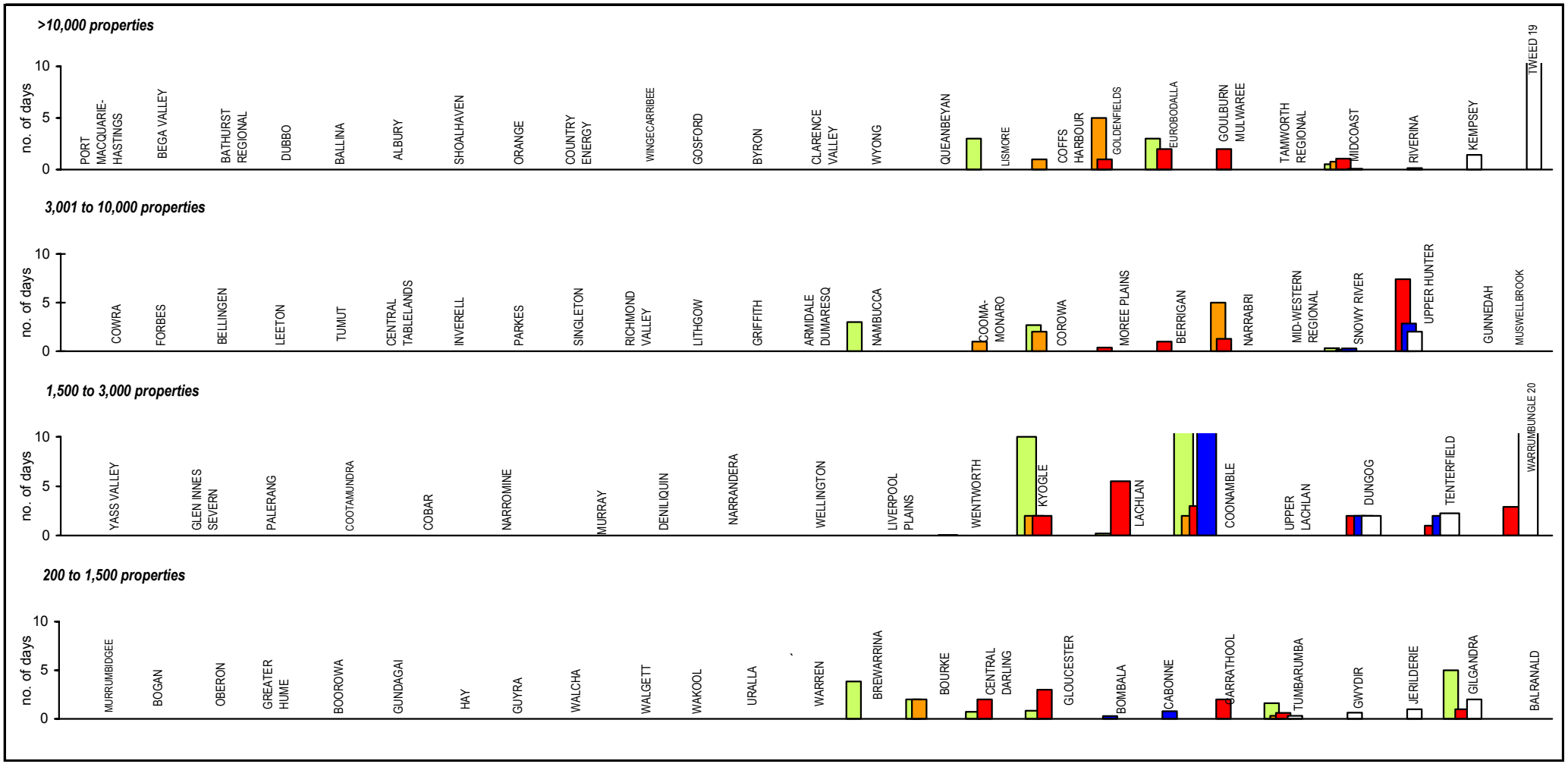


Parameter: $\frac{\text{No. of Days of Water Restrictions Due to Drought (Q95)} \times 100}{\text{365 Days}}$

Notes:

1. This figure shows ranked values of the 2005/06 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), 9 of the22 reporting LWUs reported restrictions ranging from 3% of the time to 100% of the time. 13 LWUs reported no restrictions. The 2 LWUs on the right did not report on this indicator for 2005/06. Results for the previous 4 years are also shown.
2. For general notes see page 16.

26 Chlorination System Malfunction - Water Supply

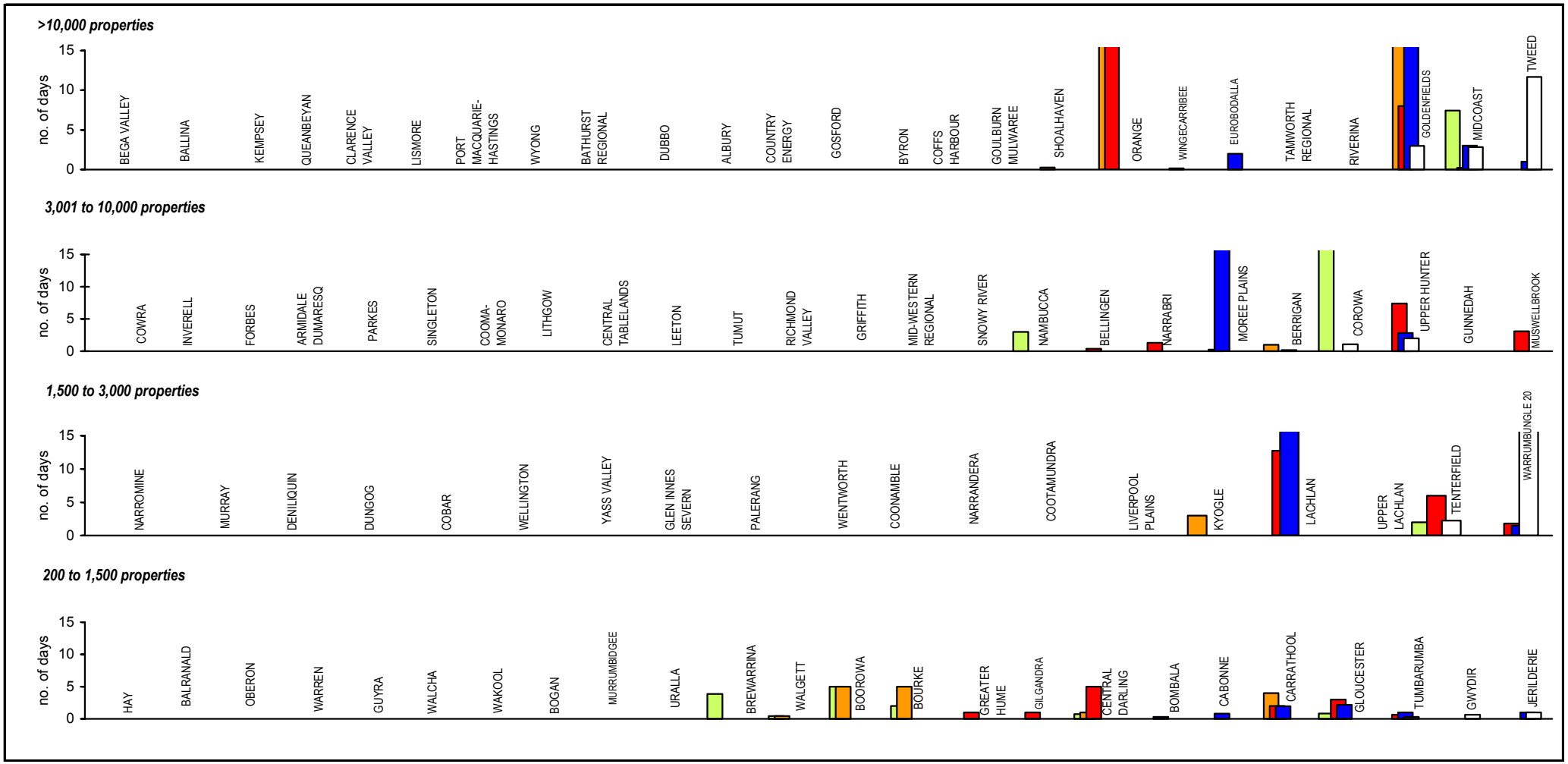


Parameter: Number of Days Chlorination System failed to Operate (Q44)

Notes:

1. The figure shows the 2005/06 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 22 LWUs shown ranges from nil to 2 days. The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 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 16.

27 Treatment Works Malfunction - Water Supply

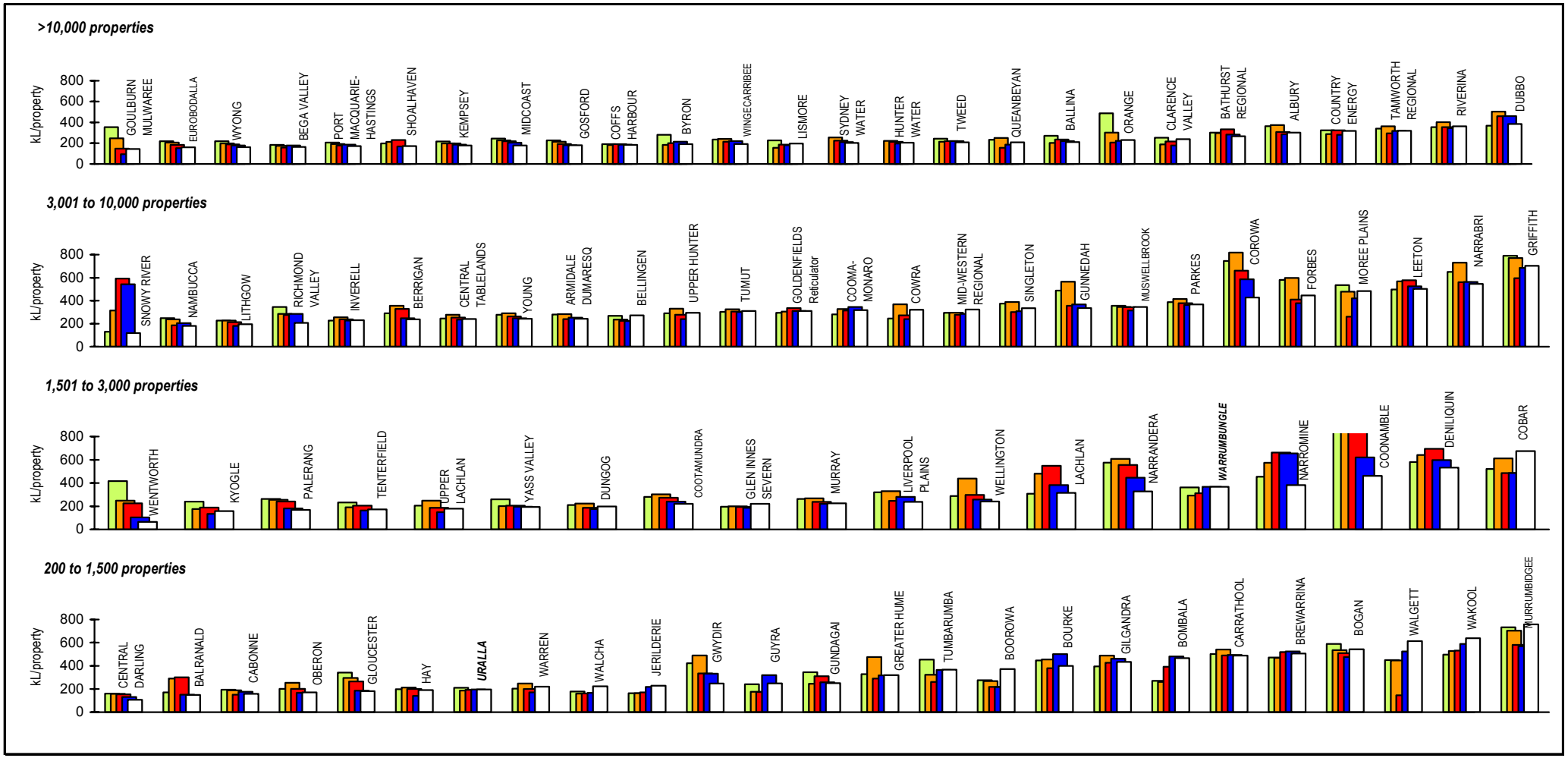


Parameter: Number of Days of major Malfunction of Treatment Processes (Q45)

Notes:

1. The figure shows the 2005/06 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 24 LWUs shown ranges from nil to 2 days.The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 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 16.

28 Average Annual Residential Consumption - Water Supply



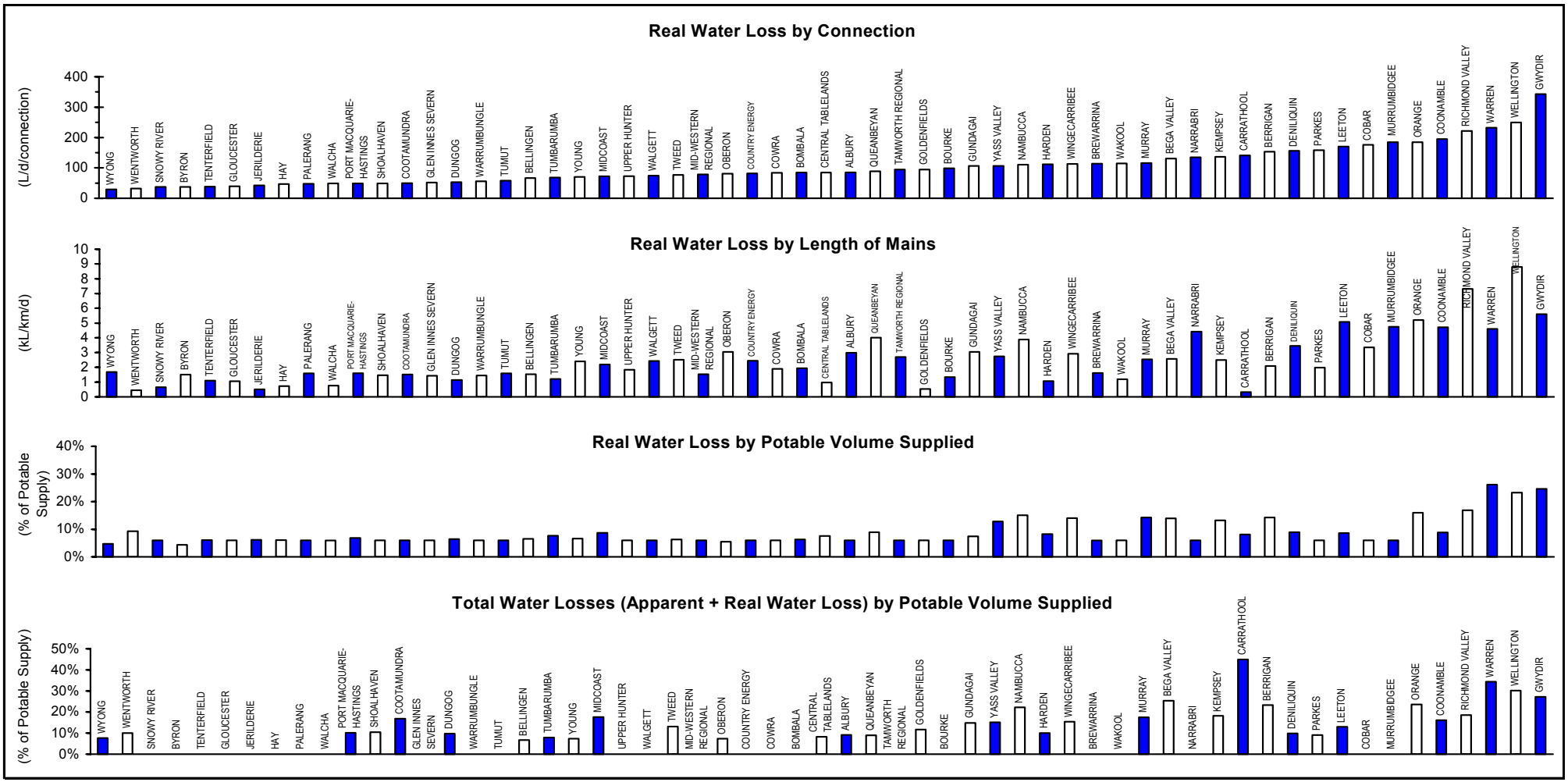
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 average annual residential potable water consumption 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 2005/06 annual residential water consumption for the 26 LWUs shown ranges from 120 to 700 kL/a per connected property. The 2004/05 result has been adopted for those LWUs that did not report in 2005/06. These LWUs are shown in italics bold. Results for the previous 4 years are also shown.
2. The 2004/05 result has been adopted for those LWUs that did not report in 2005/06. These LWUs are shown in italics bold.
3. The Statewide median annual residential water consumption is 190 kL/a per connected property. The median residential consumption for coastal and inland LWUs is 180 and 320kL/connected property repectively.
4. 11 LWUs had a dual water supply to over 50% of their residential customers in June 2006 (ie. with a potable supply for indoor use and a non-potable supply for outdoor use). Refer to Note 12 on page 17 for further information.
5. 36% of the LWUs needed to apply water restrictions in 2005/06.
6. For general notes see page 16.

29 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:

$$\frac{\text{Real Water Losses (Q68) x 100}}{\text{Total Potable Water Supplied (Q12i)}}$$

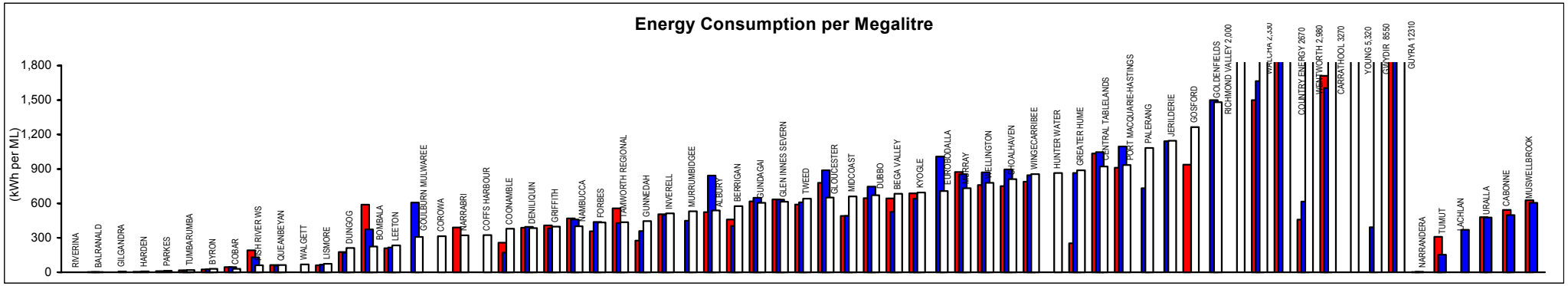
Parameter:

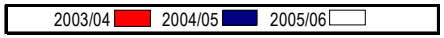
$$\frac{\text{Apparent \& Real Water Losses (Q69) x 100}}{\text{Total Potable Water Supplied (Q62)}}$$

Notes:

1. Refer to Note 13 of General Notes on page 17 for water losses.
2. For general notes see page 16.

30 Energy Consumption per ML - Water Supply





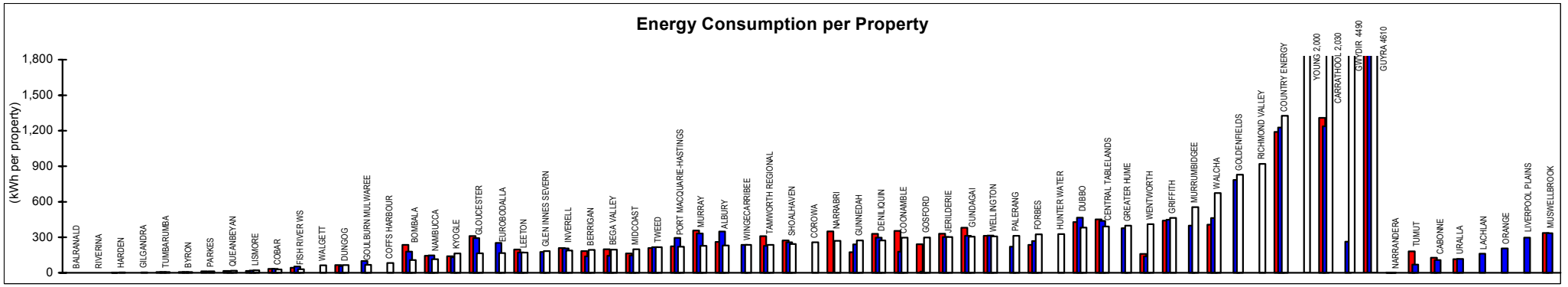
Parameter:

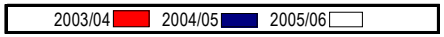
$$\frac{\text{Total Energy Usage (Q145) x 1000}}{\text{Total Potable Water Consumption ((Q62)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 total energy consumption per ML. The energy consumption per ML for the 55 Local Water Utilitites (LWUs) shown range from about 1 to 2990kWh per connected property. Results for the previous 2 years are also shown.
2. For general notes see page 16.

31 Energy Consumption per Property - Water Supply





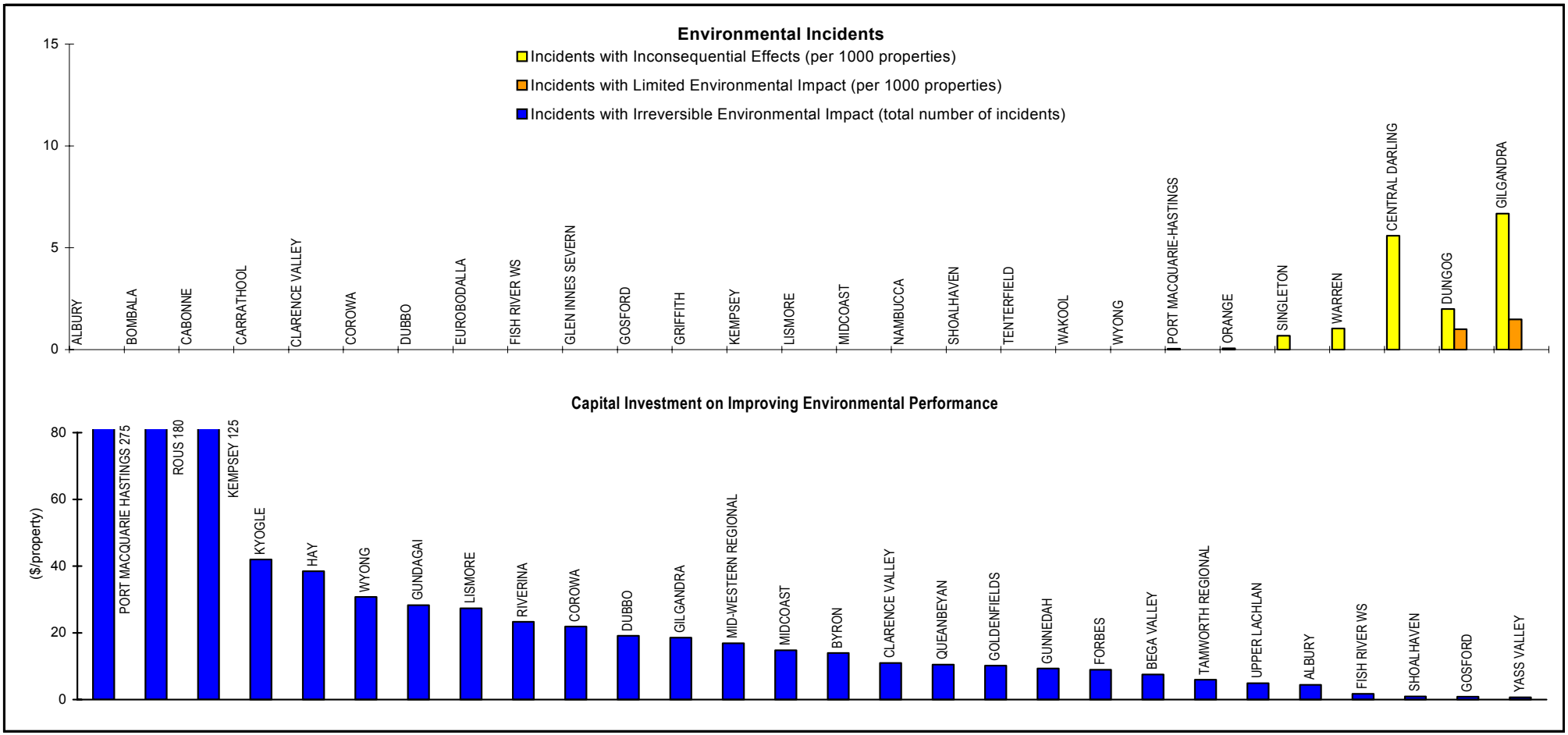
Parameter:

$$\frac{\text{Total Energy Usage (Q145) x 1000}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 total energy consumption per connected property. The energy usage per connected property for the 19 Local Water Utilitites (LWUs) shown range from about 306.7 to 4610kWh per connected property. Results for the previous 2 years are also shown.
2. For general notes see page 16.

32 Environmental Incidents, Management Systems, Capital Investment - Water Supply



Parameter:
$$\frac{\text{Total Number of Minor Incidents with Inconsequential Effects (Q137)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

Parameter:
$$\frac{\text{Total Number of Incidents with Limited Enviromental Impacts (Q138)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

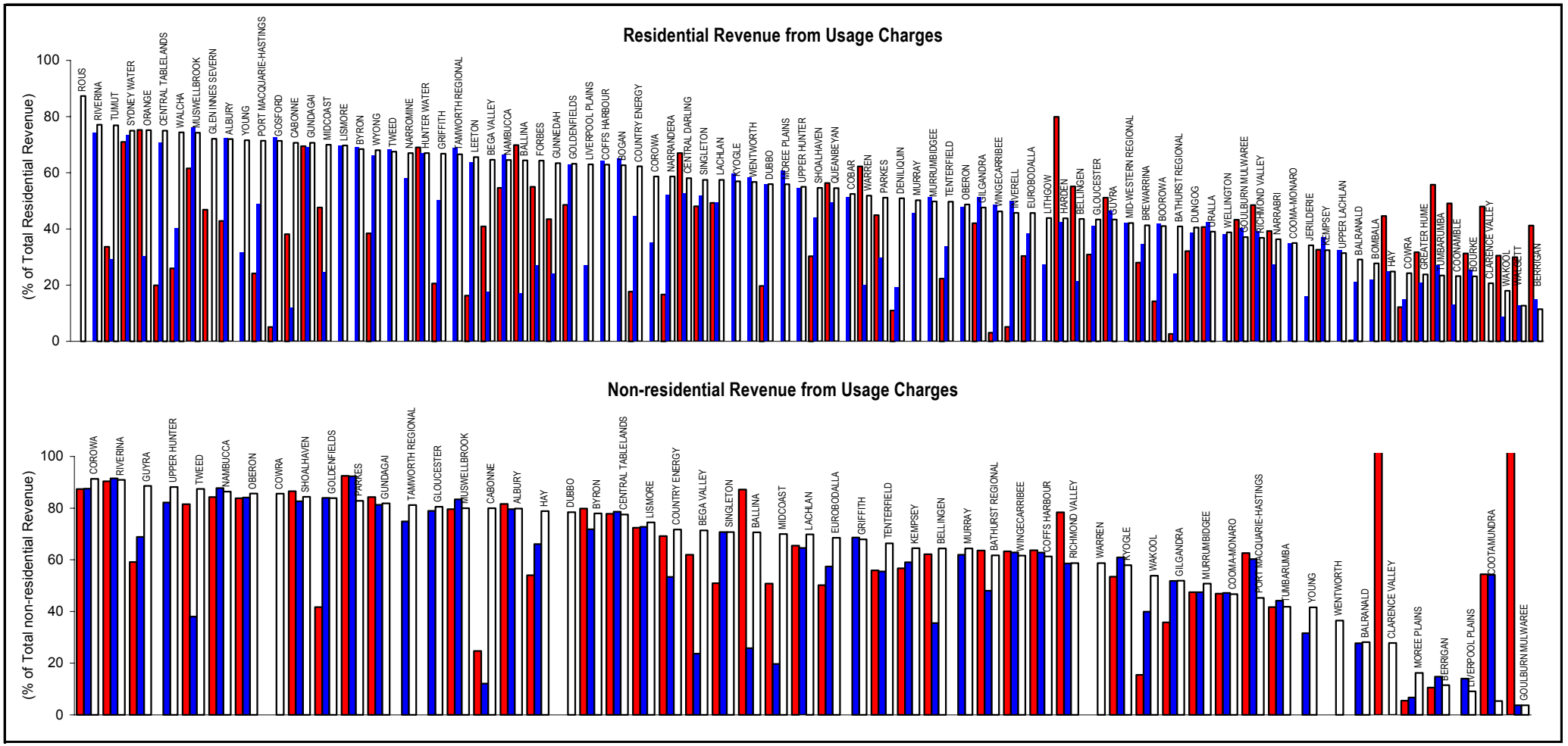
Parameter:
$$\frac{\text{Total Number of Incidents with Irreversible Enviromental Impacts (Q139)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

Parameter:
$$\frac{\text{Capital Expenditure on Improving Environmental Performance ($) (Q144)}}{\text{[No. of Residential Assessments (Q34) + No. of Non-Residential Assessments (Q35) x No. of Connected Properties per Assessment}}$$

Note:

1. The following 24 LWUs have prepared a water supply Environmental Management Plan:
   Albury, Bombala, Byron, Cabonne, Carrathool, Clarence Valley, Corowa, Dubbo, Eurobodalla, Fish River, Glen Innes, Gosford, Griffith, Kempsey, Lismore, MidCoast Water, Nambucca, Orange, Port Macquarie-Hastings, Riverina, Shoalhaven, Tenterfield, Wakool, Wyong,
2. For general notes see page 16.

33 Revenue from Usage - Water Supply



Parameter:

$$\frac{\text{Revenue from Residential User Charges (W6b)} \times 100}{\text{Revenue from Residential Access Charges (W6a)} + \text{Revenue from Residential User Charges (W6b)}}$$

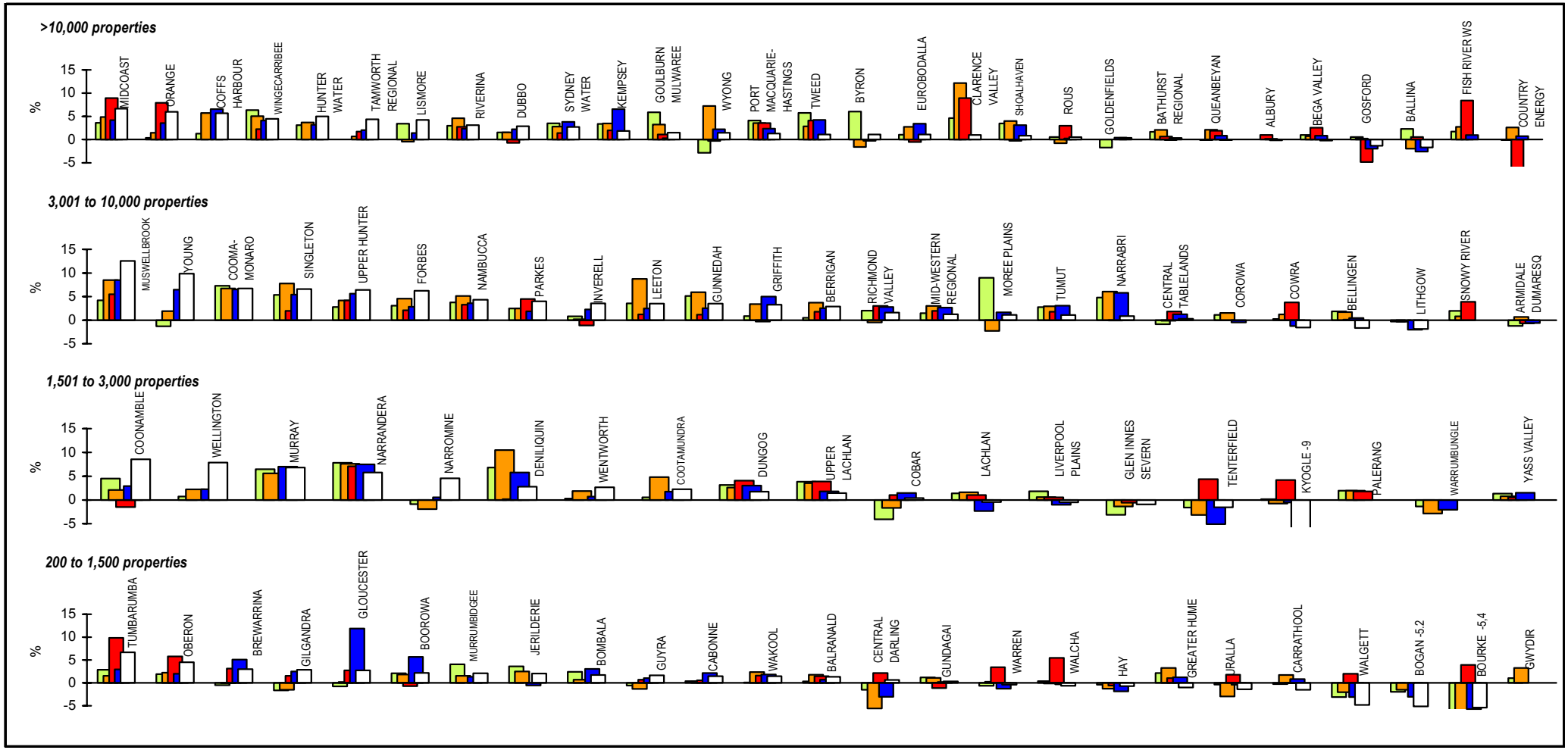
Parameter:

$$\frac{\text{Revenue from Non-residential User Charges (W7b)} \times 100}{\text{Revenue from Non-residential Access Charges (W7a)} + \text{Revenue from Non-residential User Charges (W7b)}}$$

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 67%.
3. For general notes see page 16.

34 Economic Real Rate of Return - Water Supply



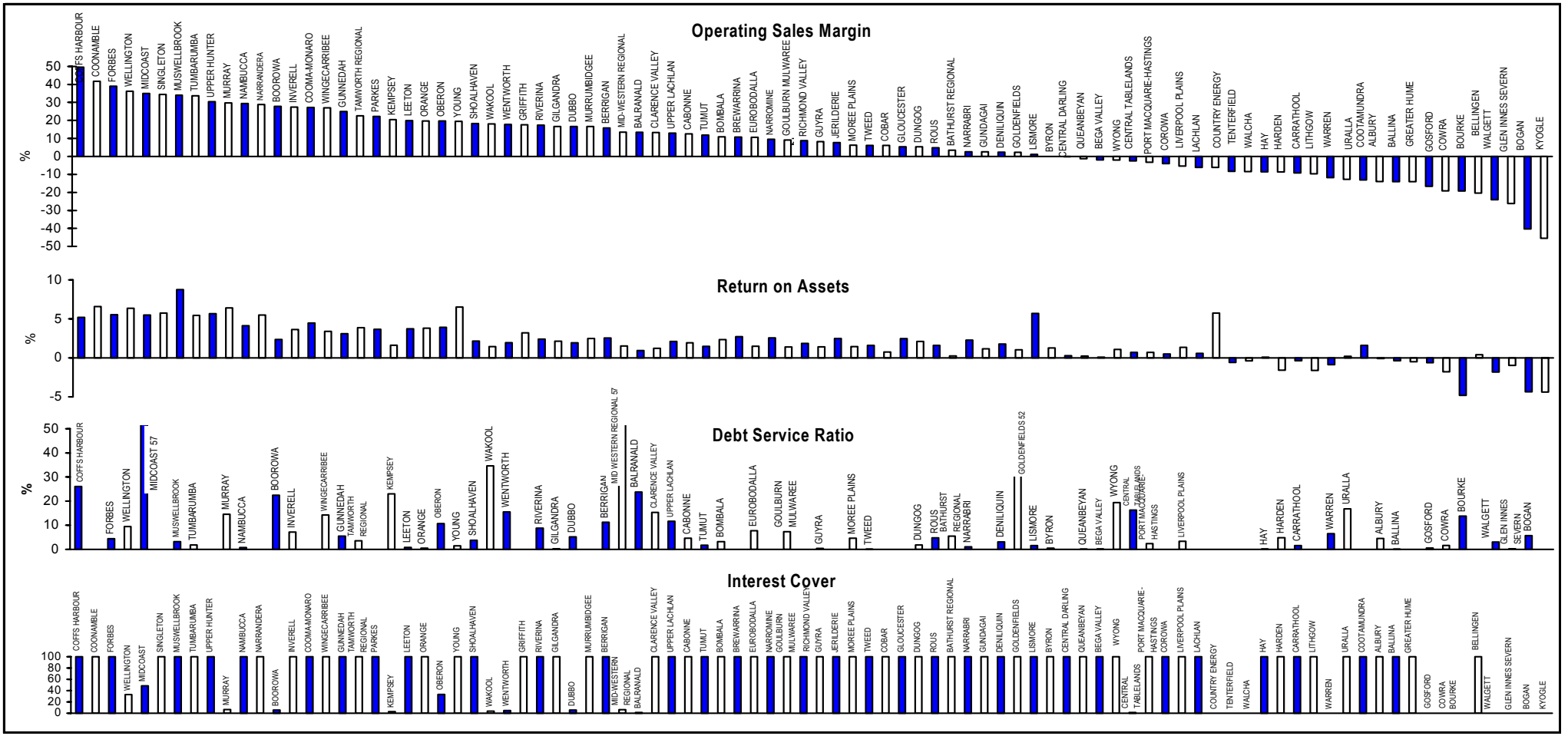
Parameter:

$$\frac{\text{[Operating Result (W15) + Interest Expense (W4a) - Interest Income (W9) - Grants for Acquisition of Assets (W11a)] x 100}}{\text{Written Down Replacement Cost of System Assets, Plant \& Equipment (W33)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 water supply real rate of return for the 23 LWUs shown ranges from 13% to -2%. The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The statewide median water supply ERRR is 1.4%.
3. The ERRR was not reported for Sydney and Hunter Water Corporations from 2001/02 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 16.

35 Operating Sales Margin, Return on Assets, Debt Service Ratio, Interest Cover - Water Supply



Parameter: [Operating Result (W15) + Interest Expenses (W4a) - Interest Income (W9) - Grants for Capital Works (W11a) - Developer Provided Assets (W12b)] x 100
Total Revenue (W13) - Grants for Capital Works (W11a) - Developer Provided Assets (W12b) - Interest Income (W9)

Parameter: [Operating Result (W15) + Interest Expenses (W4a) - Grants for Capital Works (W11a)] x 100
Written Down Replacement Cost of System Assets, Plant and Equipment (W33)

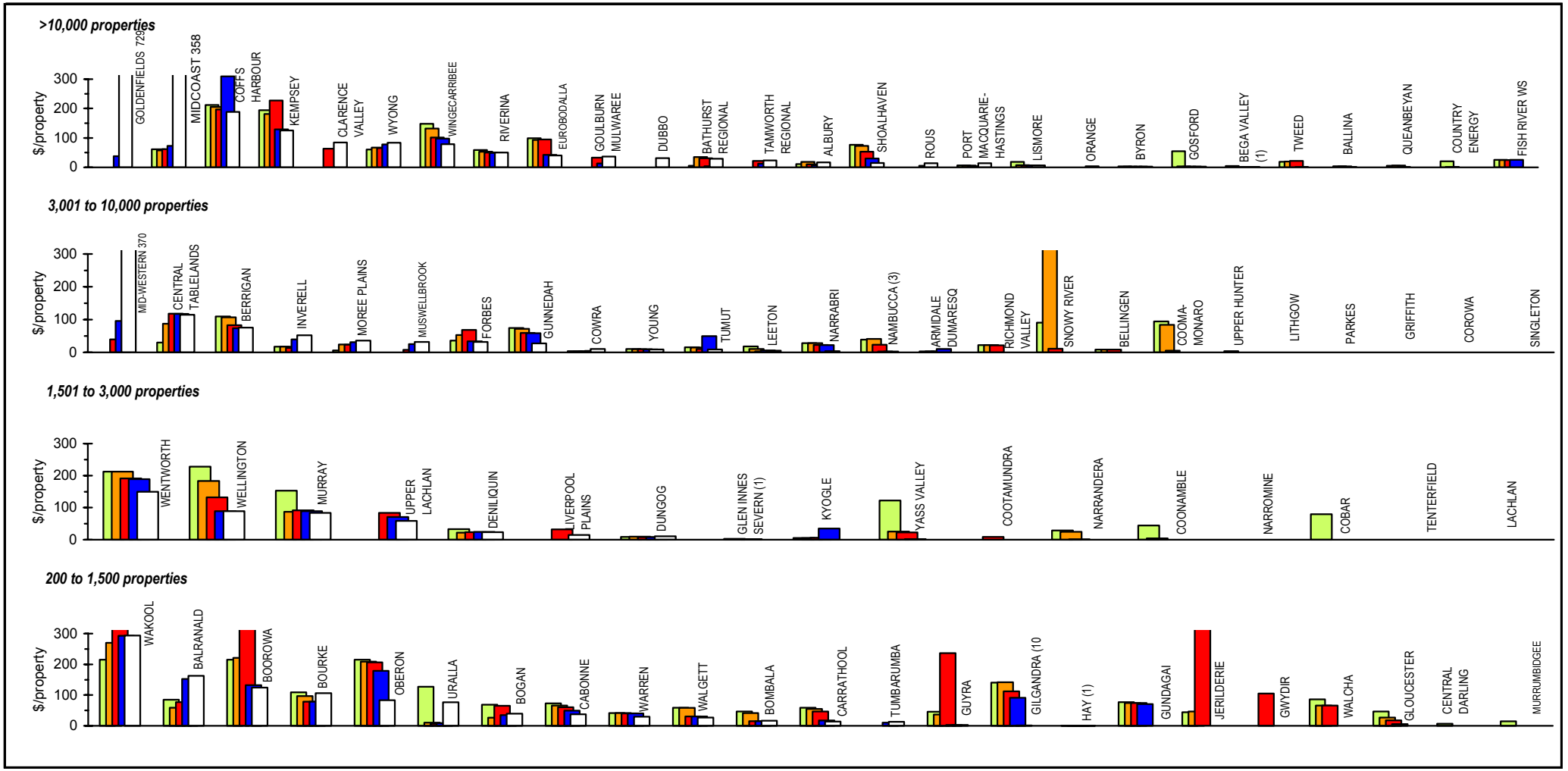
Parameter: [Internal Expenses (W4a) + Payment of Debt (W17)] x 100
Total Revenue (W13) - Grants for Capital Works (W11a) - Developer Provided Assets (W12b)

Parameter: [Operating Result (W15) + Interest Expenses (W4a) - Grants for Capital Works (W11a)]
Interest Expenses (W4a) - Interest Income (W9)

Notes:

1. Values of interest cover >100 are shown as 100 on the figure above.
2. For general notes see page 16.

36 Loan Payment - Water Supply



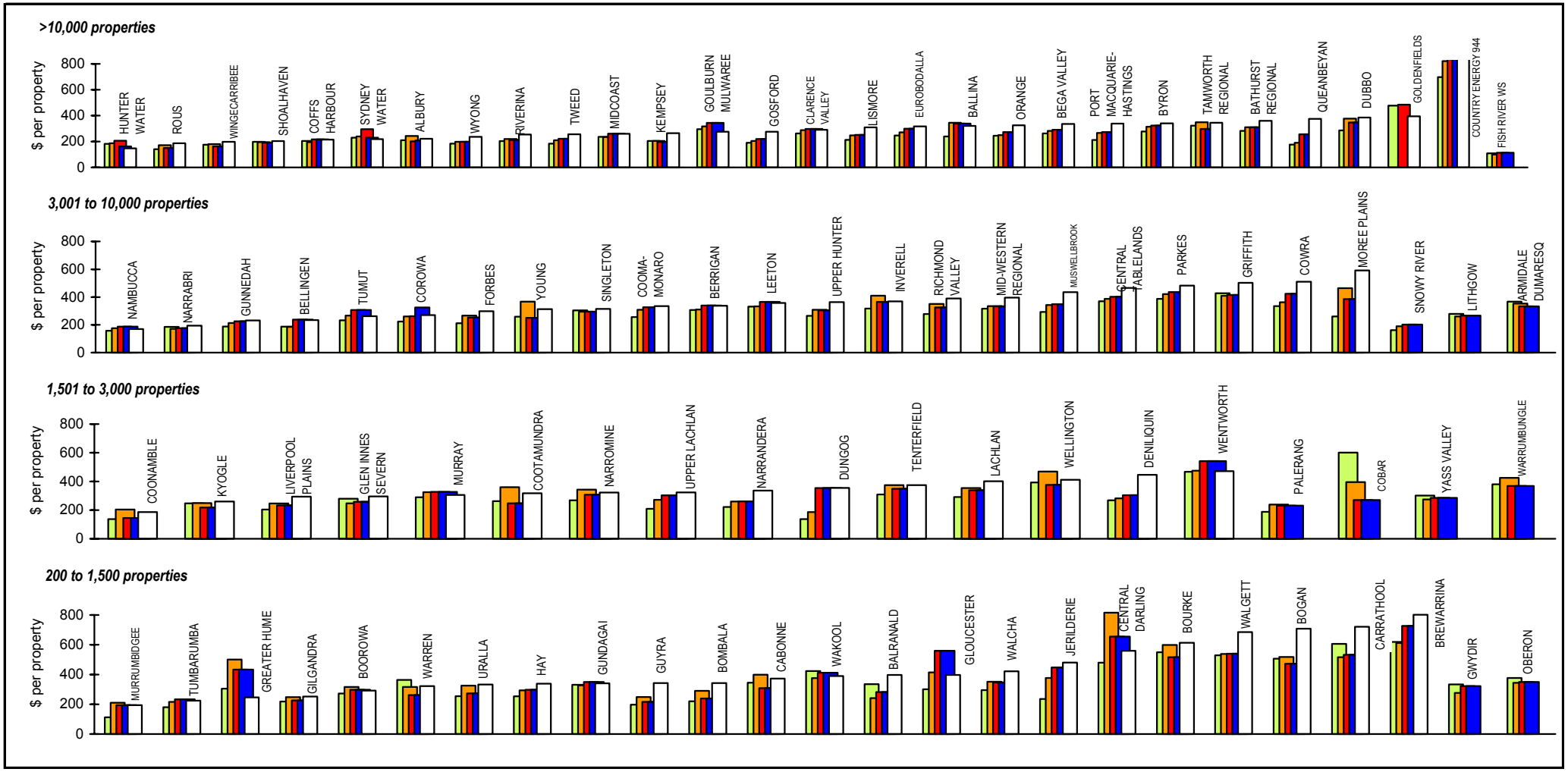
Parameter: Payment of Debt (W17) + Interest Expenses (W4a)

[No. of Residential Assessments (Q4a) + No. of Non-Residential Assessments (Q4b) x No. of Connected Properties per Assessment

Notes:

1. This figure shows ranked values of the 2005/06 water supply loan payment 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 2005/06 water supply loan payments for the 25 LWUs shown ranges from $371 to $0 per connected property. Results for the previous 4 years are also shown in Jan 2007$.
2. The Statewide median water supply loan payment is $27 per connected property.
3. For general notes see page 16.

37 Operating Cost (OMA) per property - Water Supply



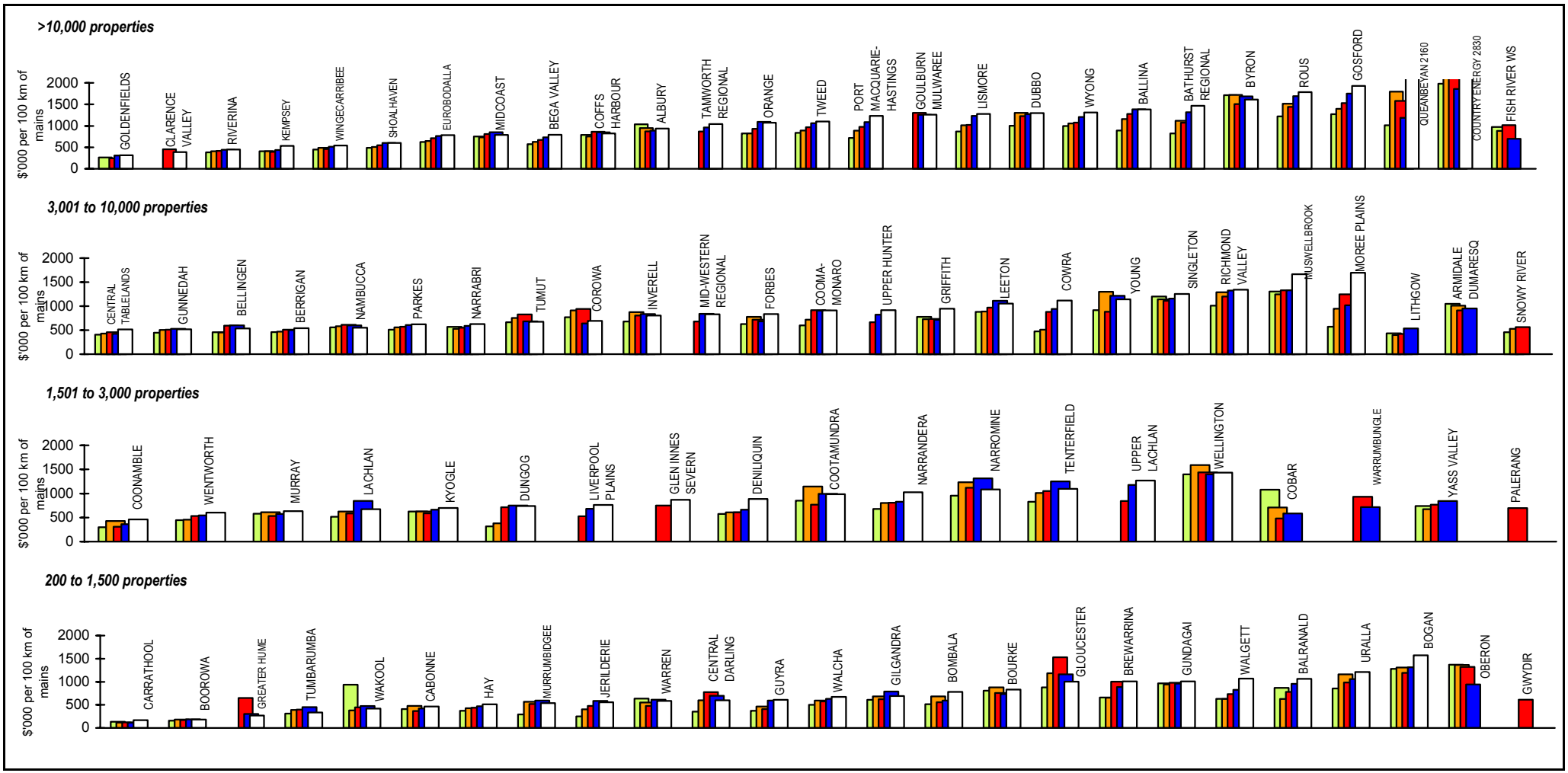
Parameter: Management Expenses (W1) + Total Operations Expenses (W2) - Purchase of Water + Bulk Supplier's OMA

[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 2005/06 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 2005/06 water supply operating costs for the 22 LWUs shown ranges from $170 to $595 per connected property.The 3 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median operating cost per connected property is $280.
3. For general notes see page 16.

38 Operating Cost (OMA) per 100km of Main - Water Supply



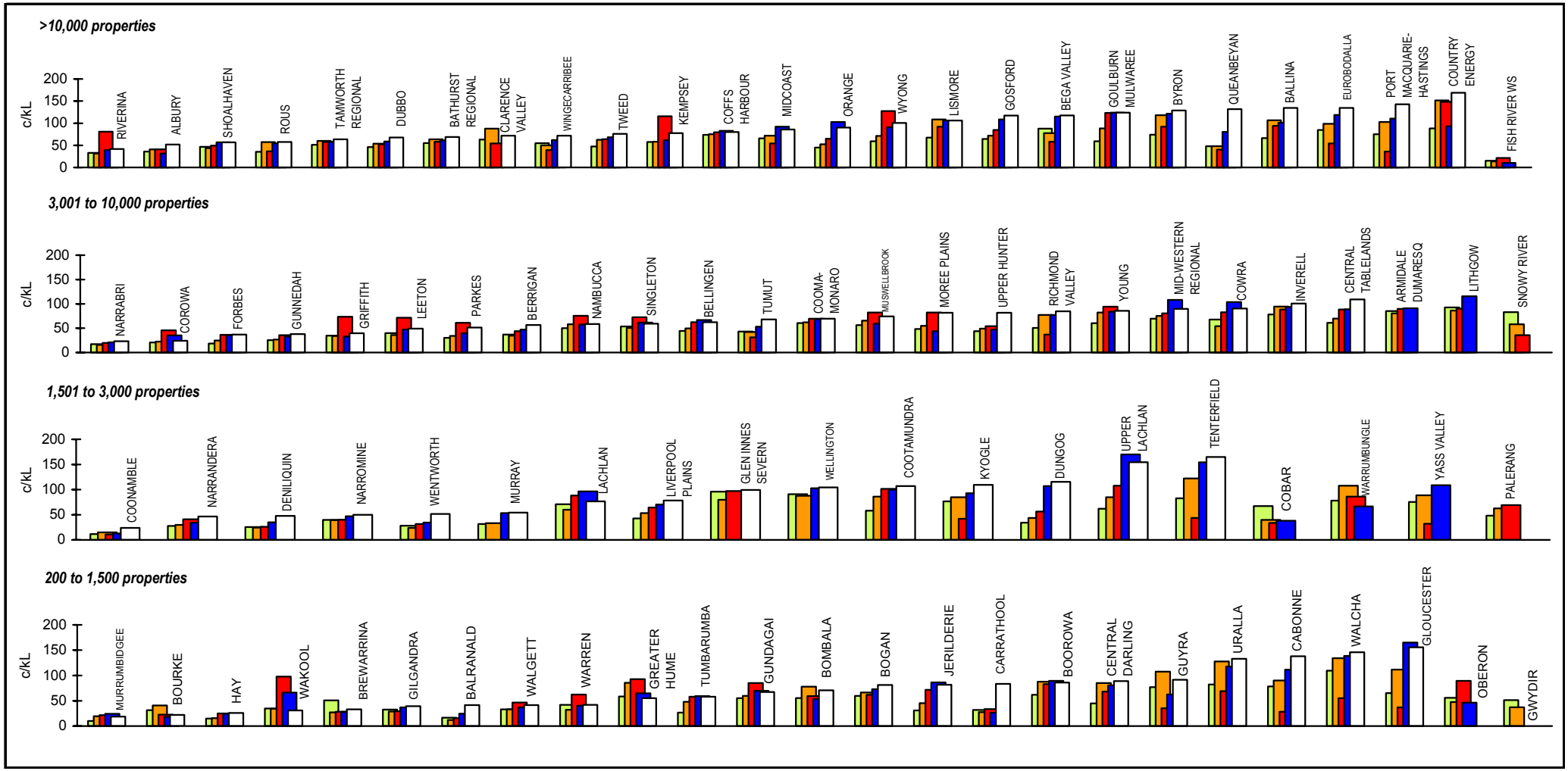
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 operating costs for the 22 LWUs shown ranges from $512,000 to $1,697,000 per 100km of main. Results for the previous 4 years are also shown. The 3 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median operating cost is $1,040,000 per 100 km of Water Main.
3. For general notes see page 16.

39 Operating Cost (OMA) per kL - Water Supply



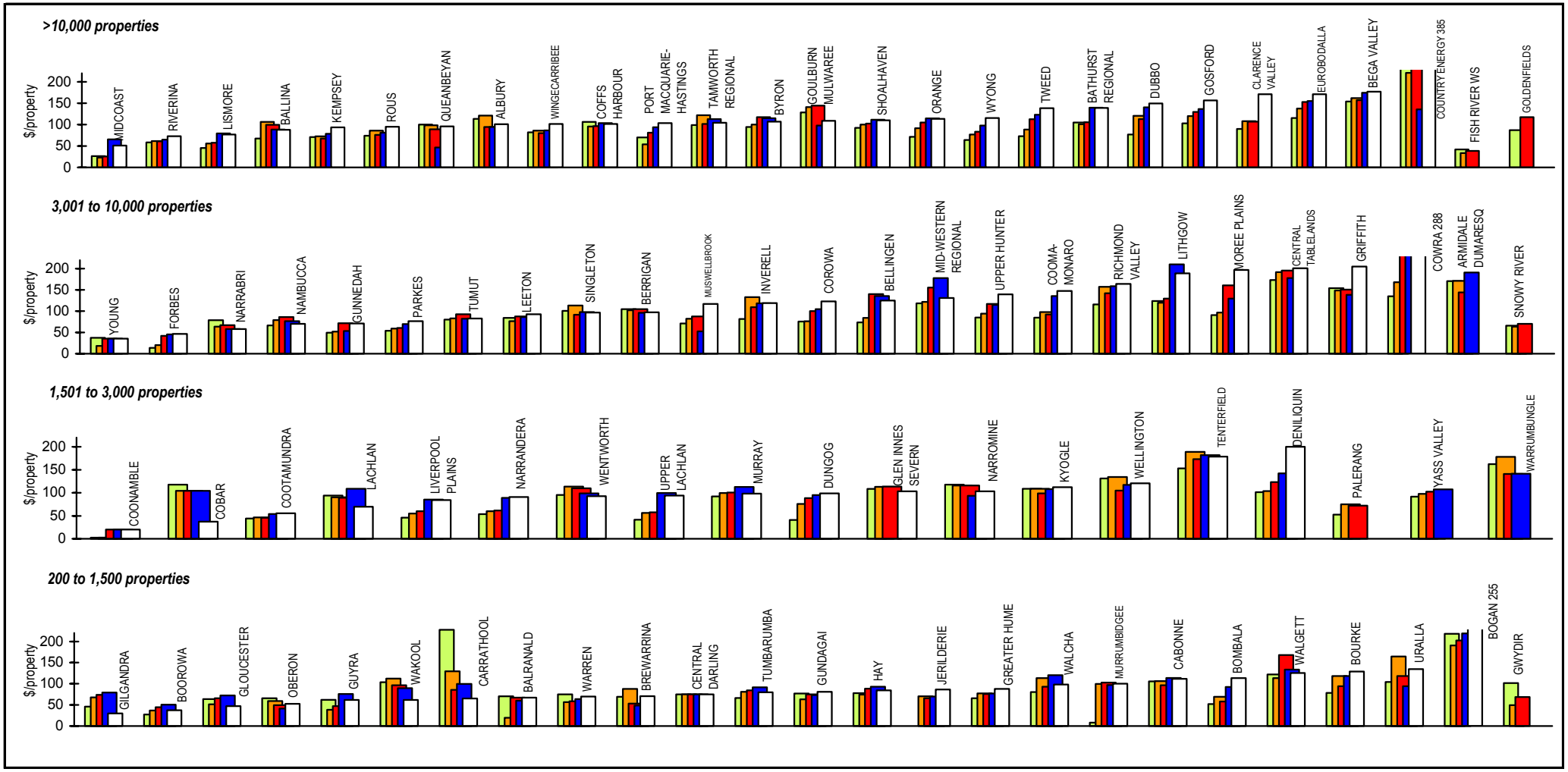
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 operating costs per kL for the 22 LWUs shown ranges from 23 to 109 c/kL. The 3 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median operating cost is 86c/kL.
3. For general notes see page 16.

40 Management Cost Per property ($/property) - Water Supply



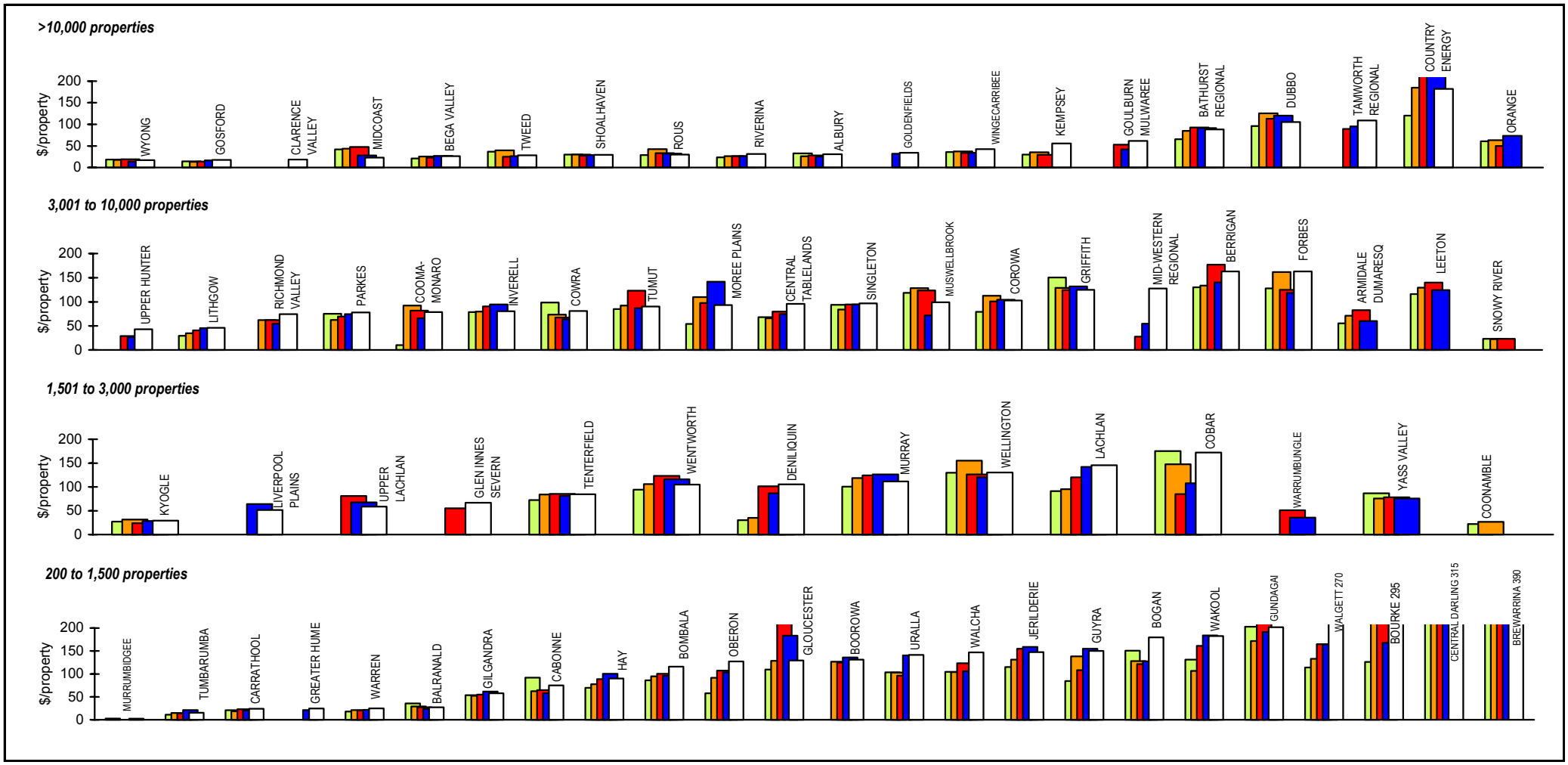
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 management costs per property for the 23 LWUs shown ranges from $35 to $288. The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median management cost is $110 per connected property.
3. For general notes see page 16.

41 Treatment Cost per property - Water Supply



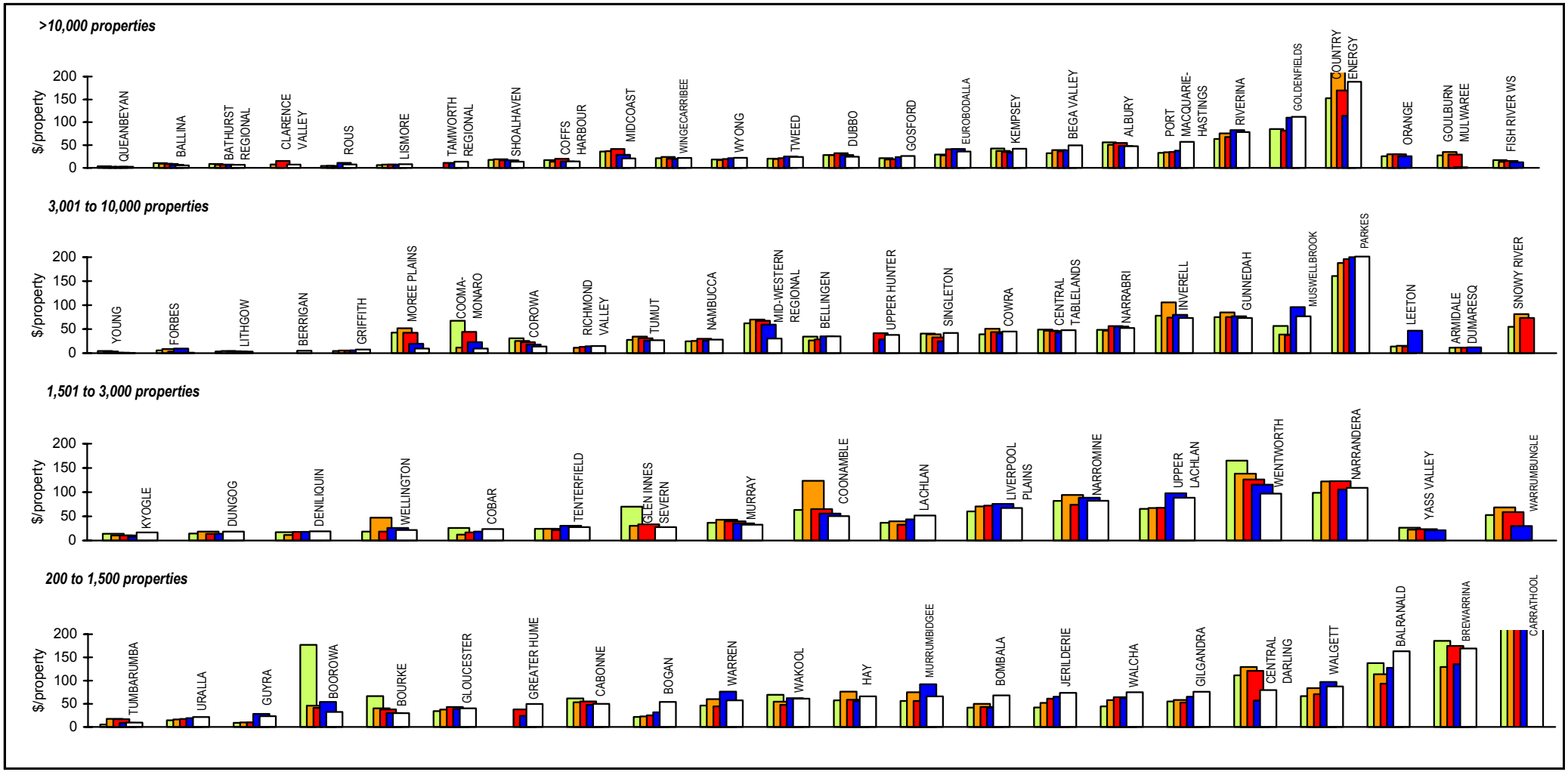
Parameter: Treatment Operation Expenses (W2j) + Treatment Chemical Cost (W2k) + Treatment Maintenance Expenses (W2l)

[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 2005/06 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 2005/06 treatment costs for the 17 LWUs shown ranges from $40 to $160 per connected property. The 3 LWUs on the right did not report the indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
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 $27 per connected property.
4. For general notes see page 16.

42 Pumping Cost per property - Water Supply



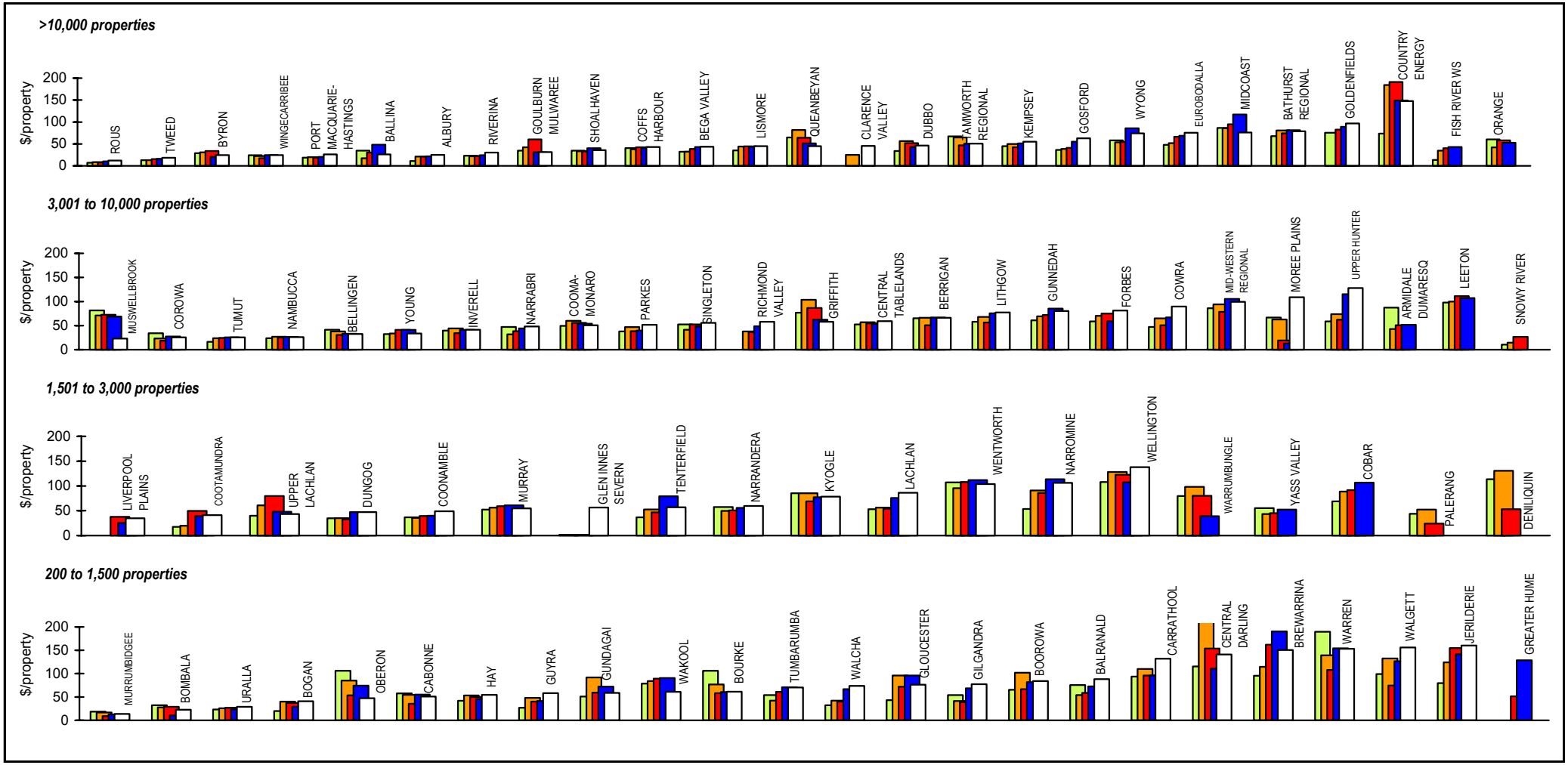
Parameter: Pumping Station Operation Expenses (W2g) + Pumping Station Energy Cost (W2h) + Pumping Station Maintenance Costs (W2i)

[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 2005/06 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 2005/06 water pumping costs for the 22 LWUs shown ranges from $0.5 to $201 per connected property. The 3 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median water pumping cost (including energy costs) is $24 per connected property.
3. For general notes see page 16.

43 Water Main Cost per property - Water Supply



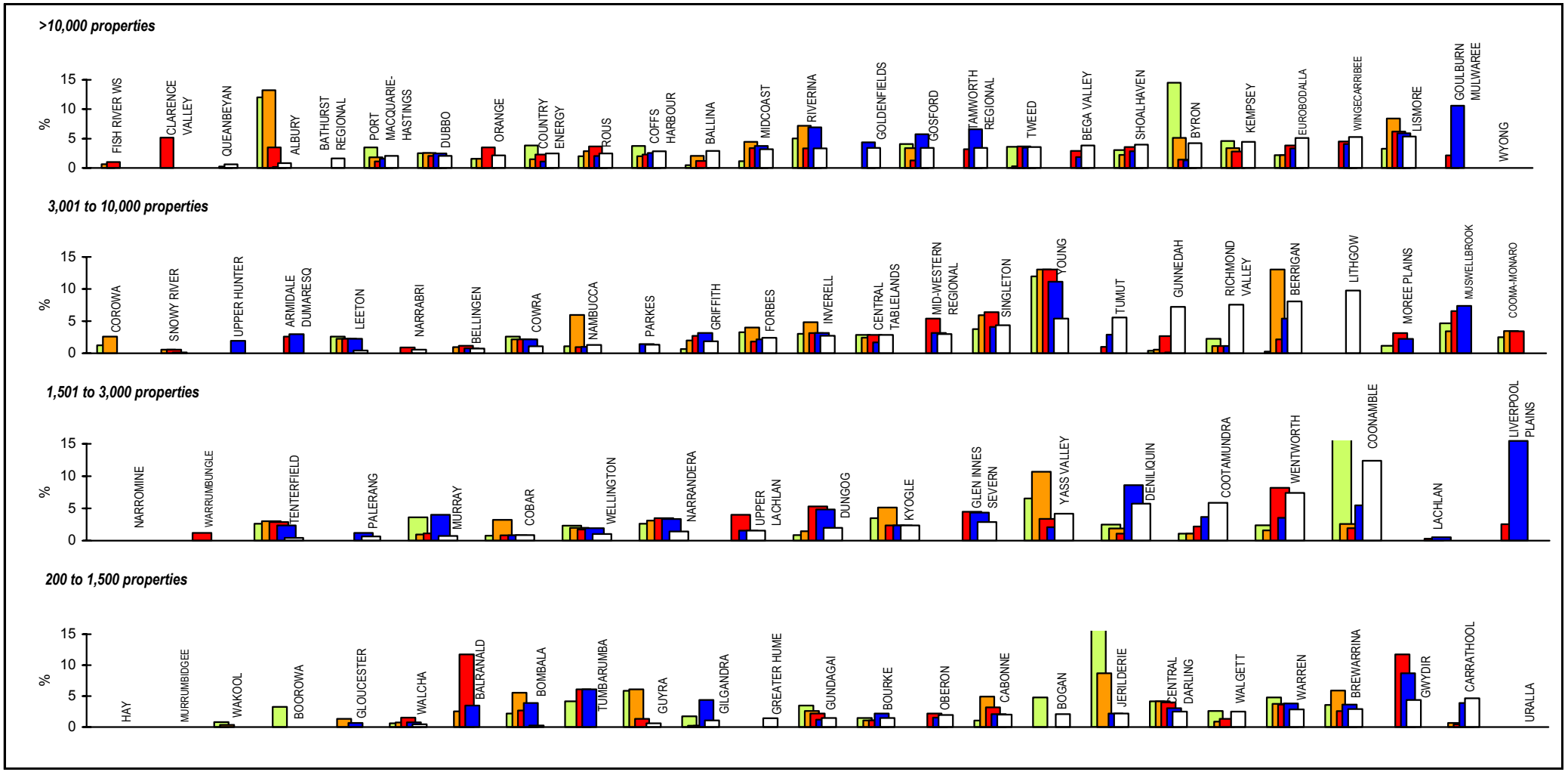
Parameter: Water Main Operation Expenses (W2c) + Water Main Maintenance Costs (W2d)

[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 2005/06 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 2005/06 water main costs for the 22 LWUs shown ranges from $23 to $128 per property. The 2 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median water main cost is $49 per property.
3. For general notes see page 16.

44 Total Days Lost - Water Supply



Parameter:

$$\frac{\text{Total Number of Days Lost for All Reasons in Year (Q31a) x 100}}{\text{Equivalent full time employees (Q120) x Available number of working days in year (ie. 230)}}$$

Notes:

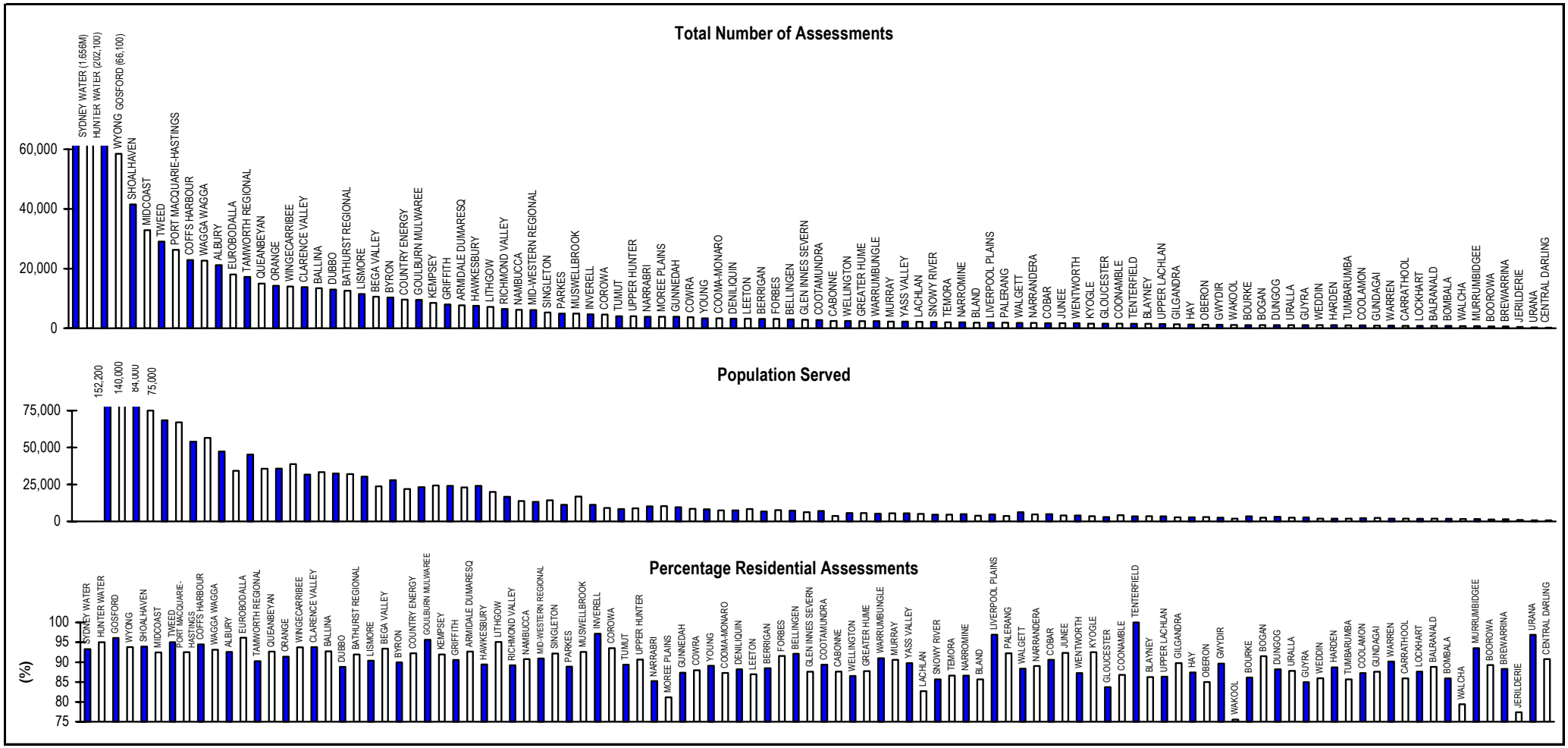
1. This figure shows ranked values of the 2005/06 total days lost for each Local Water Utility (LWU) in 4 groups based on the number of connected properties served – over 10,000, 3,001 to 10,000, 1,501 to 3,000 and 200 to 1,500. Each white bar represents one LWU. As an example, for the second graph (property range from 3,001 to 10,000), the 2005/06 total days lost for the 22 LWUs shown ranges from nil to 10%. Results for the previous 4 years are also shown. The 3 LWUs on the right did not report this indicator for 2005/06.
2. The Statewide median days lost is 3.2%.
3. For general notes see page 16.

9. SEWERAGE FIGURES

This section contains the following Figures for sewerage:

ECONOMIC – EFFICIENCY

45 Population, Assessment Served - Sewerage



Parameter: No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)

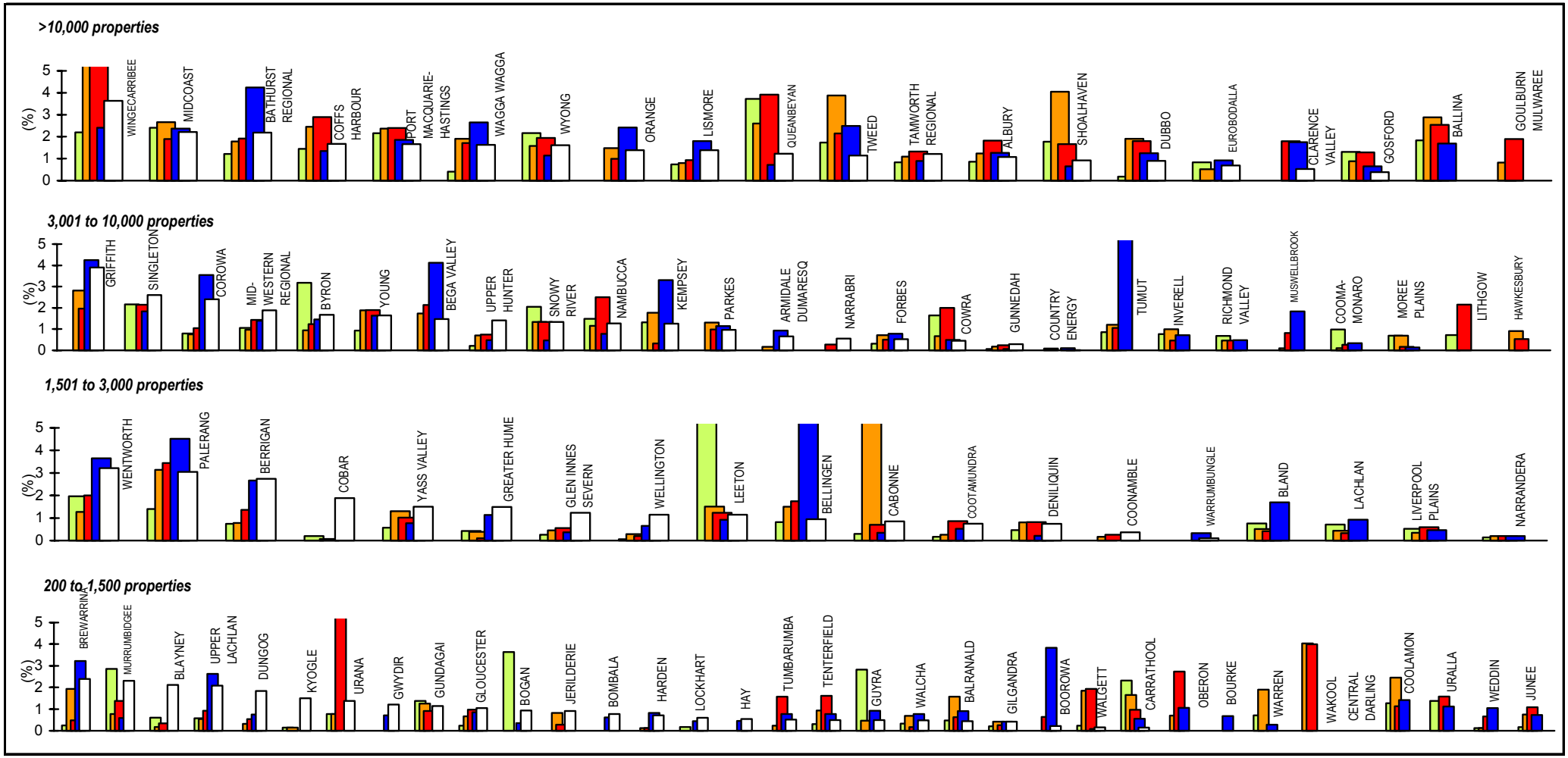
Parameter: Population Served (Q1)

Parameter: $\frac{\text{No. of Residential Assessments (Q15)} \times 100}{\text{No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)}}$

Note:

1. For general notes see page 16.

46 New Residential Dwellings Connected - Sewerage



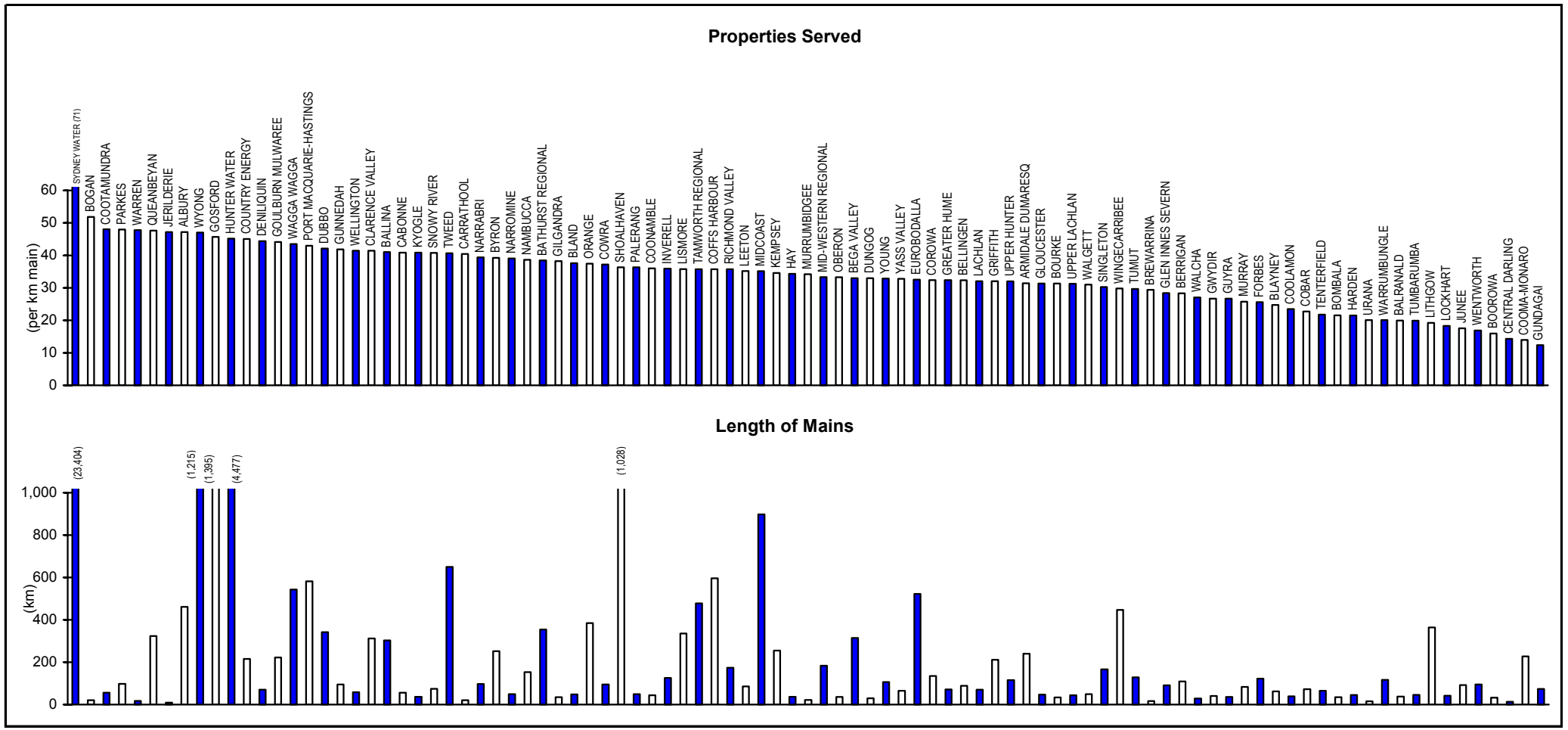
Parameter:

$$\frac{\text{No. of New Residential Dwellings Connected in Year (Q12)} \times 100}{\text{[No. of Residential Assessments (Q15)} + \text{No. of Non-Residential Assessments (Q16)} \times \text{No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 number of new residential dwellings connected to 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 2005/06 total number of new residential dwellings connected for the 18 LWUs shown ranges from about 12% to 0%. Results for the previous 4 years are also shown.
2. The 2005/06 Statewide median new residential dwellngs connected to sewerage is 1.3 % of the existing number of connected residential properties.
3. For general notes see page 16.

47 Properties Served per km of Main, Length of Mains - Sewerage

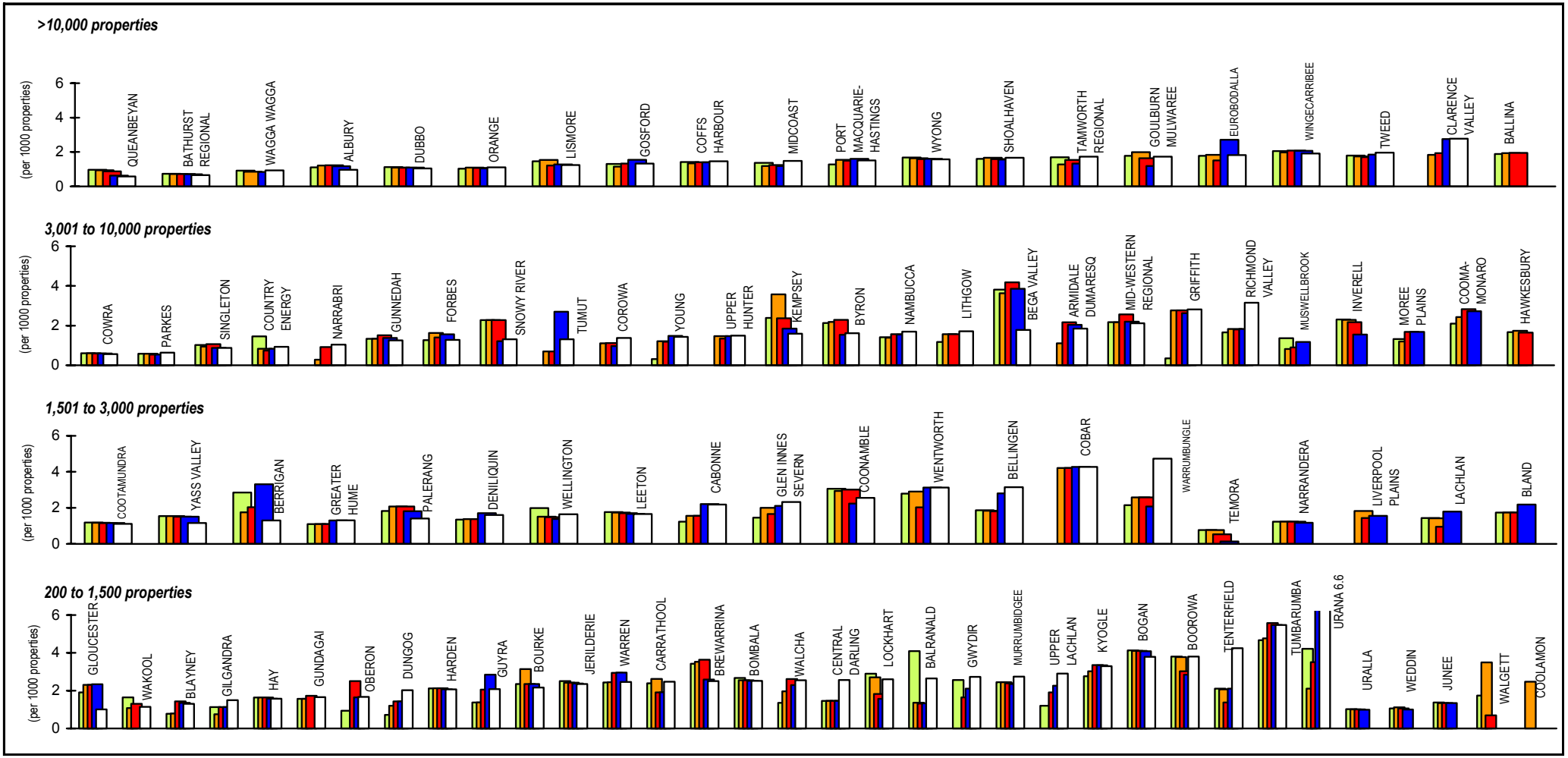


Parameter: $\frac{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}{\text{Length of Reticulation/Gravity Mains (Q7) + Length of Rising Mains (Q8)}}$

Note:

1. For general notes see page 16.

48 Employees - Sewerage



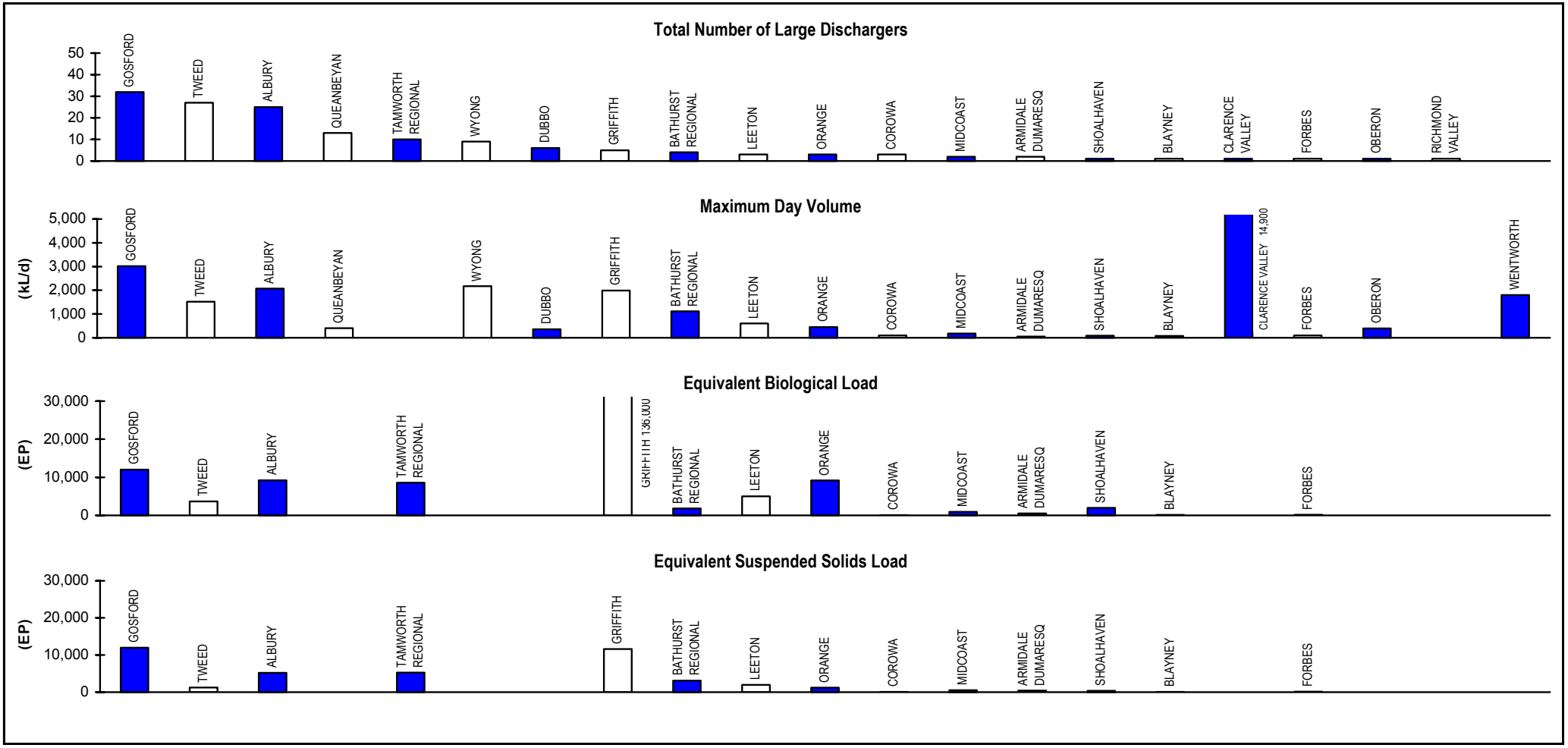
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 sewerage employees for the 21 LWUs shown ranges from about 1 to 4 per 1000 connected properties. The 5 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The 2005/06 Statewide median number of sewerage employees is 1.5 per 1000 connected properties.
3. For general notes see page 16.

49 Trade Waste - Sewerage

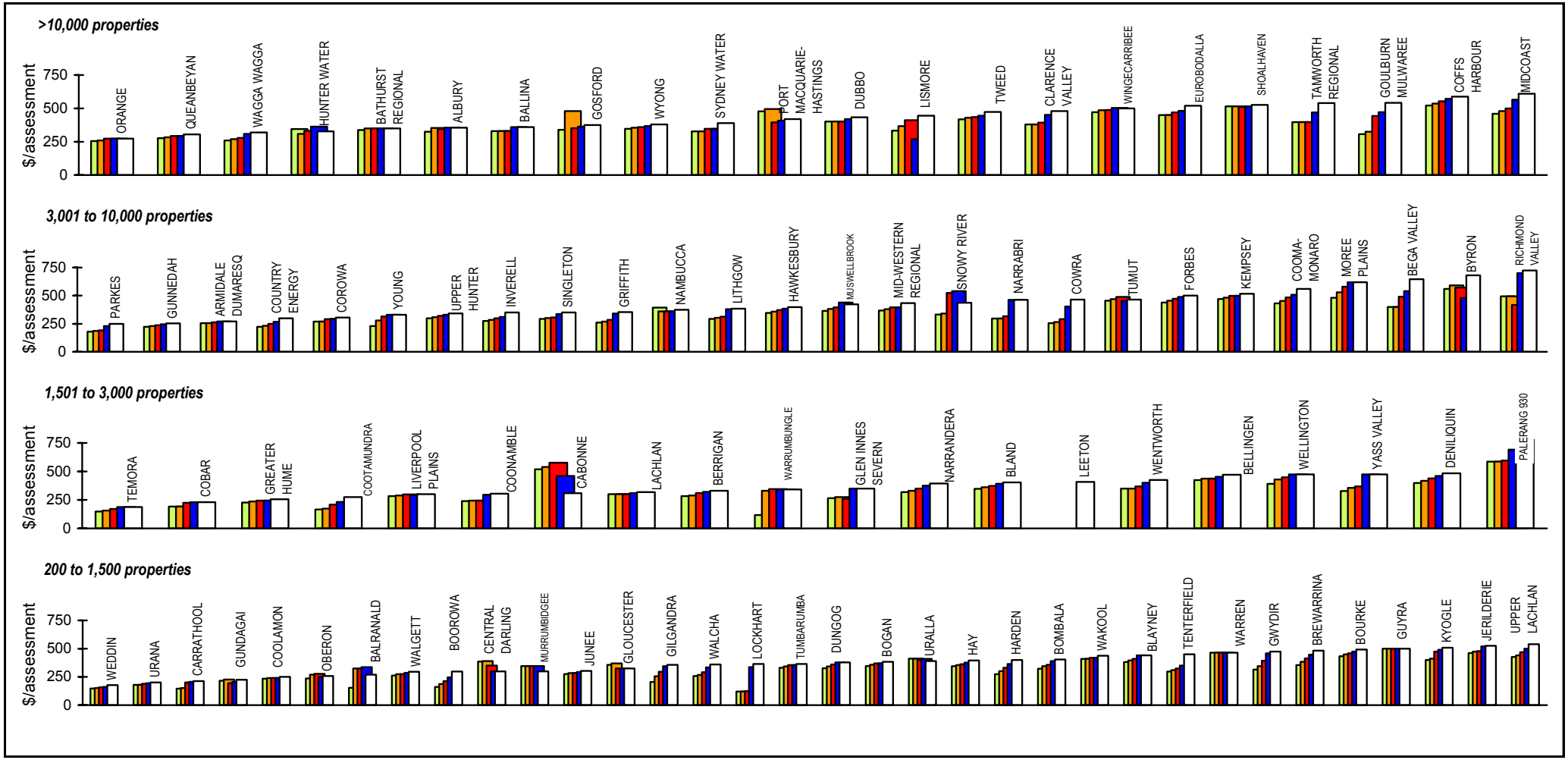


Parameter: Number of Large Dischargers (Q27)
Parameter: Maximum Day Volume (Q28)
Parameter: Equivalent Biological Load (Q29)
Parameter: Equivalent Suspended Solids Load (Q30)

Notes:

1. A total of 20 Local Water Utilities (LWUs) have 150 large trade waste dischargers (>20kL/d).
2. All LWUs should levy appropriate non-residential sewerage charges and trade waste fees and charges for all liquid trade waste dischargers into the LWU's sewerage system, in accordance with the Liquid Trade Waste Management Guidelines, 2005. Sewerage and trade waste pricing software to assist LWUs is available free of charge from DWE.
3. For general notes see page 16.

50 Typical Residential Bill – Sewerage

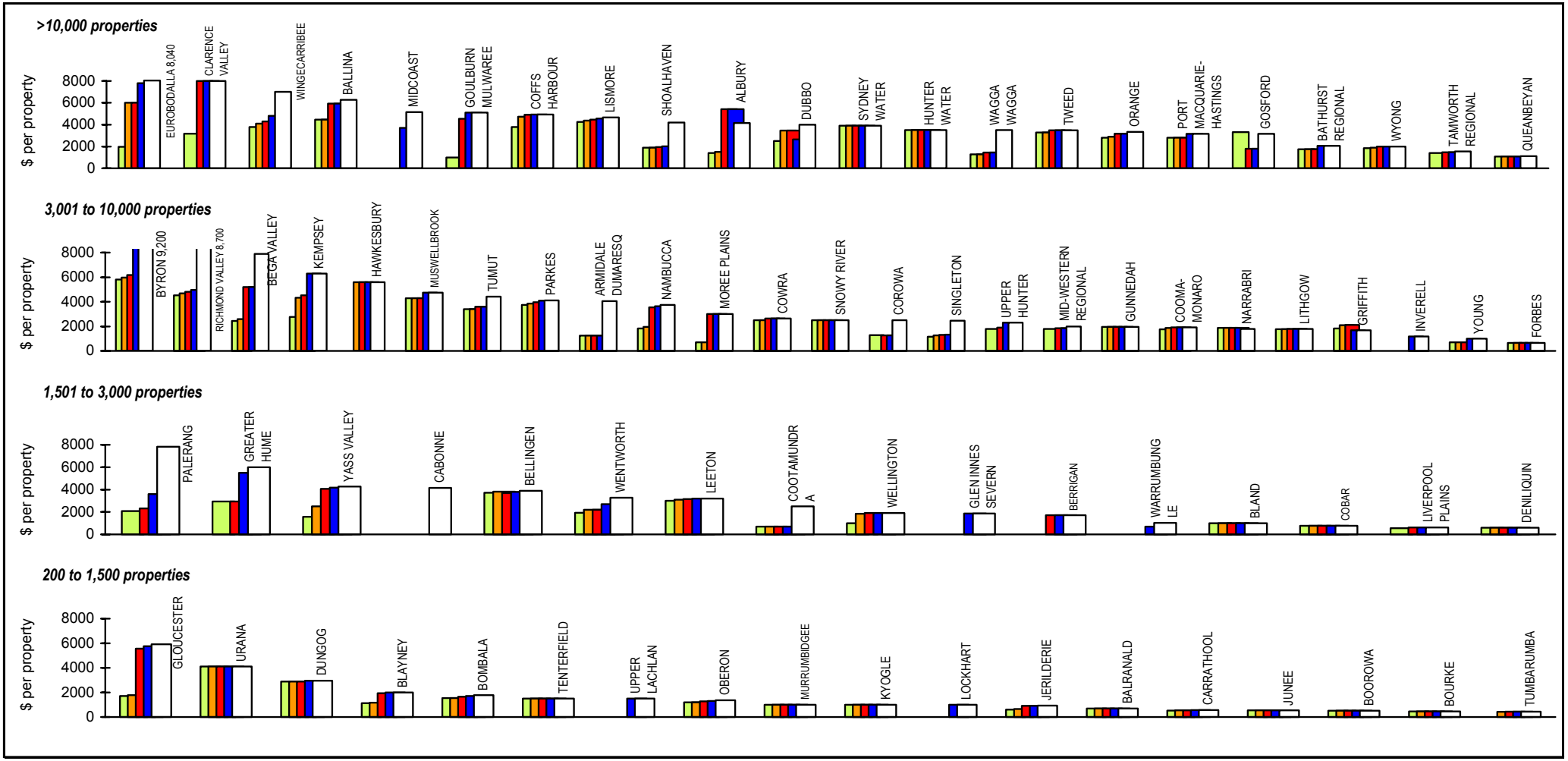


Parameter: Residential Access Charge

Notes:

1. This figure shows ranked values of the 2006/07 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 2006/07 typical residential bill for sewerage for the 26 LWUs shown ranges from about $250 to $725. Results for the previous 4 years are also shown in Jan 2007$.
2. The 2006/07 Statewide median typical residential bill for sewerage supply is $400 per assessment.
3. For general notes see page 16.

51 Typical Developer Charge - Sewerage

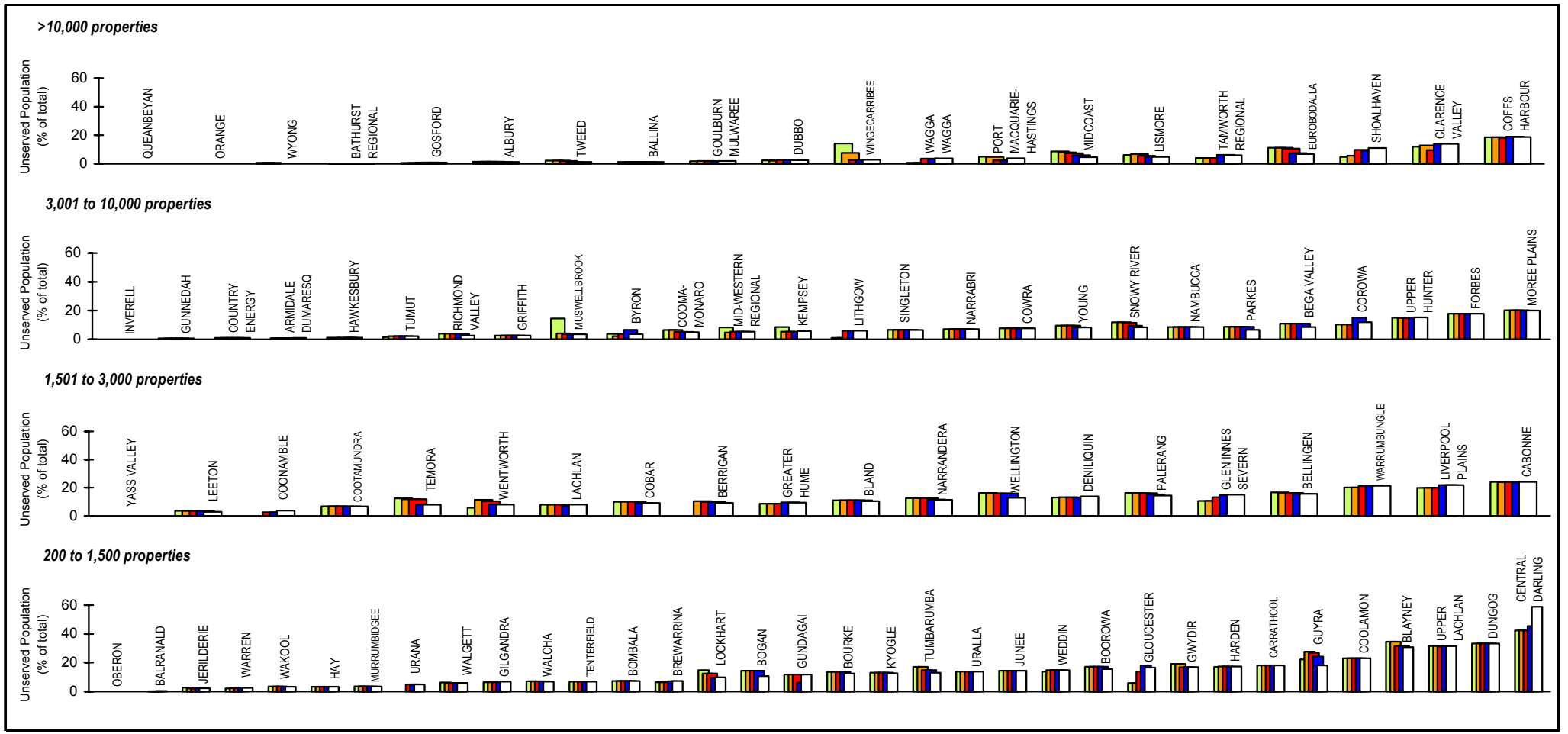


Parameter: Typical Sewerage Developer Charge (Q62)

Notes:

1. This figure shows ranked values of the 2006/07 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 25 LWUs shown ranges from from $9200 to $700 per equivalent tenement (ET). Results for the previous 4 years are also shown in Jan 2007$.
2. The 2006/07 Statewide median typical sewerage developer charge was about $3500 per ET.
3. 78 LWUs levied sewerage developer charges.
4. For general notes see page 16.

52 Urban Population without Sewerage - Sewerage



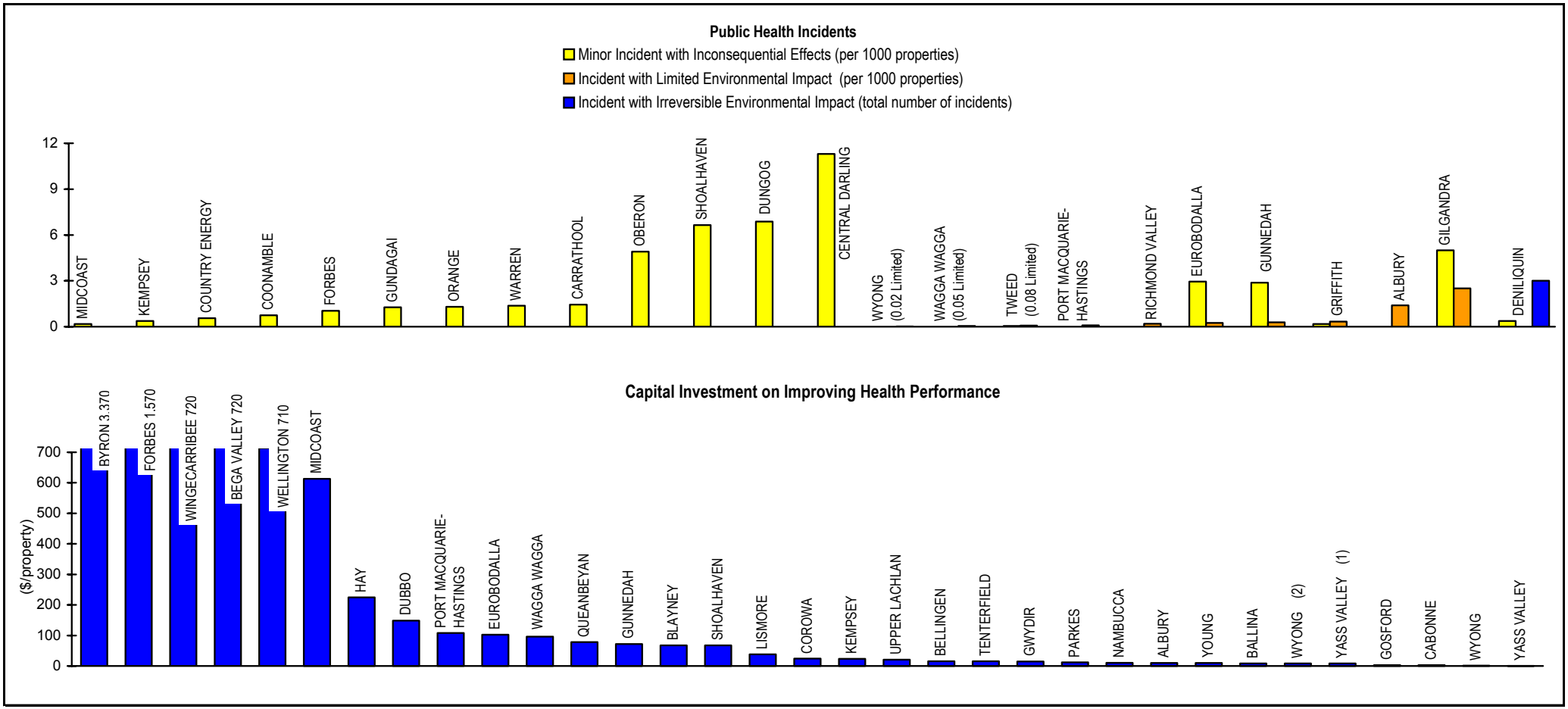
Parameter:

$$\frac{\text{Unserved Urban Population (Q21)}}{\text{Population Served (Q1) + Unserved Urban Population (Q21)}}$$

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 26 LWUs shown ranges from from nil to 20 %. Results for the previous 4 years are also shown.
2. The 2005/06 Statewide median urban population without a reticulated sewerage service was 3.3 .
3. 100% of LWUs had an urban population of at least 500 without a reticulated sewerage service and 85% of LWUs had a population of at least 1000 without a reticulated sewerage service.
4. The percentage of urban population without a reticulated sewerage service for the median LWU was 3.7%.
5. 93% of LWUs provided a reticulated sewerage service to over 80% of their urban population. Overall, 94.6% of the urban population in non-metropolitan NSW (ie. 1.69 million people) received a reticulated sewerage service.
6. For general notes see page 16.

53 Public Health Incidents, Capital Investment - Sewerage



Parameter: $\frac{\text{Total No. of Minor Incidents with Inconsequential Effects (Q44)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Total No. of Minor Incidents with Limited Health Impacts (Q45)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

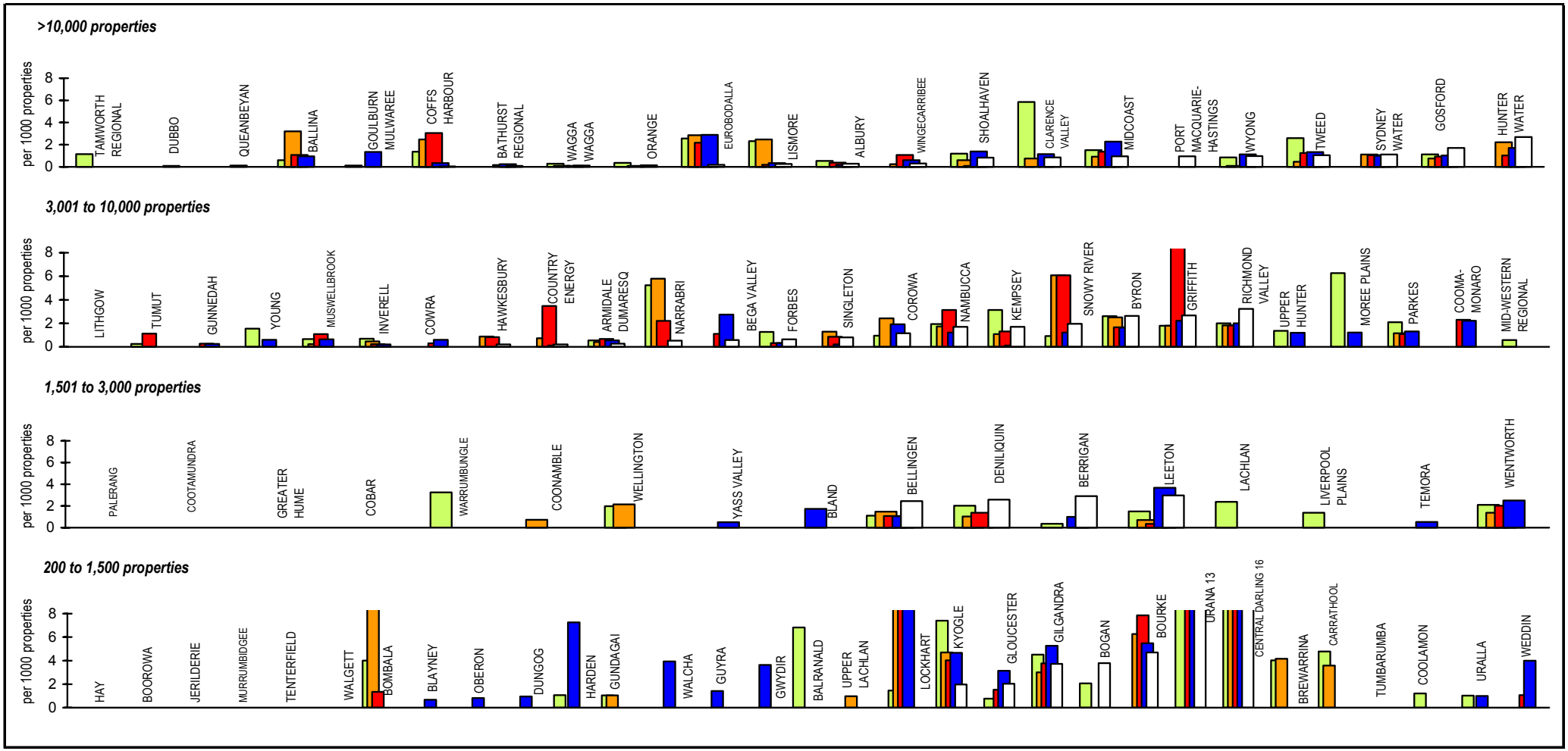
Parameter: $\frac{\text{Total No. of Major Incidents with Major Health Impacts (Q46)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Capital Expenditure on Improving Health Performance (S) x (Q48)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

Note:

1. For general notes see page 16.

54 Odour Complaints - Sewerage



Parameter:

$$\frac{\text{[No. of Odour Complaints from Treatment Works and Pumping Stations (Q39) x 1000}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 18 LWUs shown ranges from 0 to 3.2 complaints per thousand connected properties. The 5 LWUs on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The 2005/06 Statewide median number of odour complaints is 0.8 per 1000 properties.
3. For general notes see page 16.

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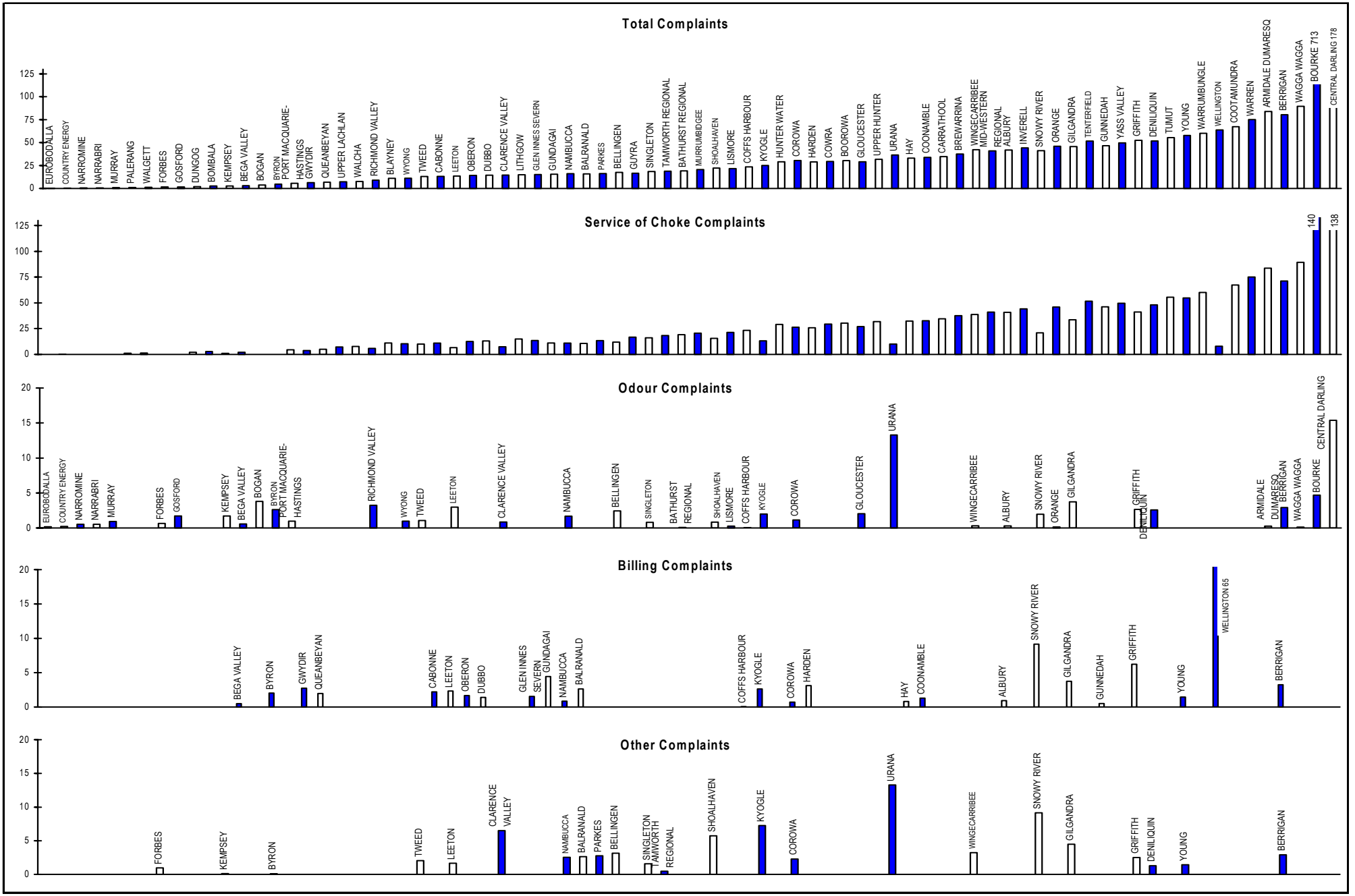
55 Complaints (per 1000 properties) - Sewerage



55 Complaints (per 1000 properties) - Sewerage

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: $\frac{\text{No. of Odour Complaints Reported (Q39)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

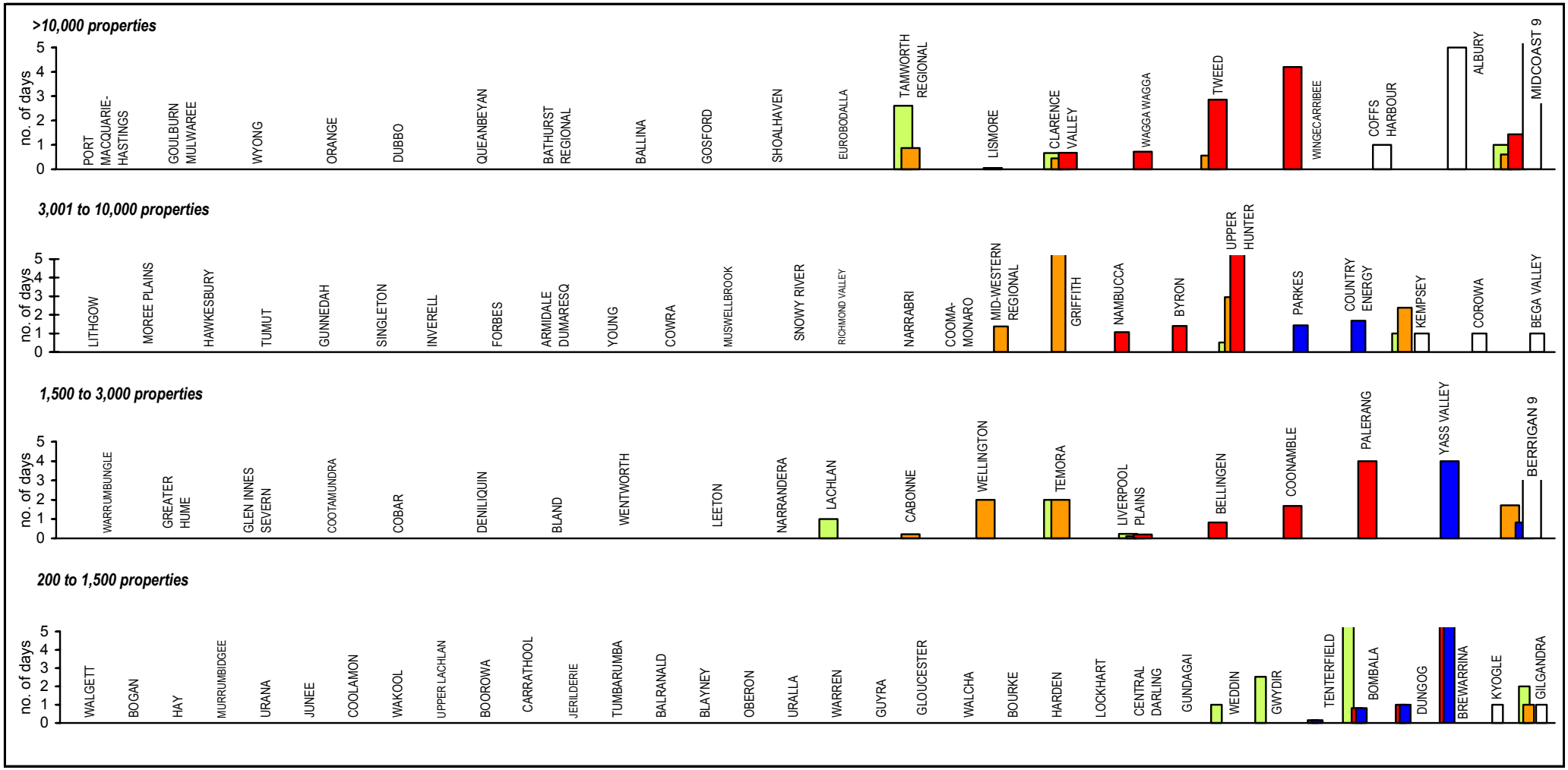
Parameter: $\frac{\text{No of Billings Complaints Reported (Q37)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$

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 16.

56 Treatment Works Malfunction - Sewerage

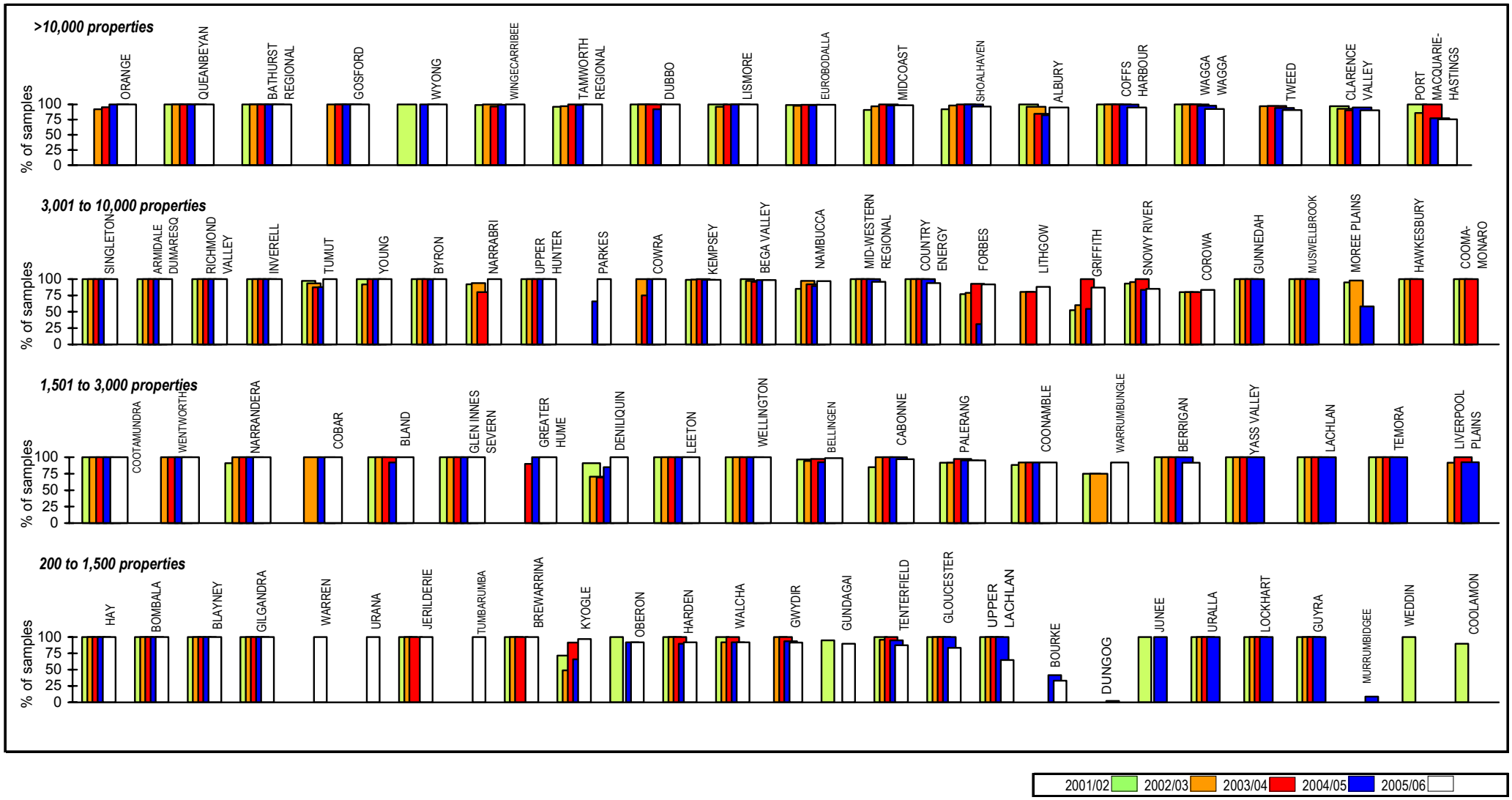


Parameter: Number of Days of major Malfunction of Treatment Processes (STW Q67)

Notes:

1. The figure shows the 2005/06 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 24 LWUs shown ranges from nil to 1.7 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 16.

57 Compliance with BOD in Licence - Sewerage

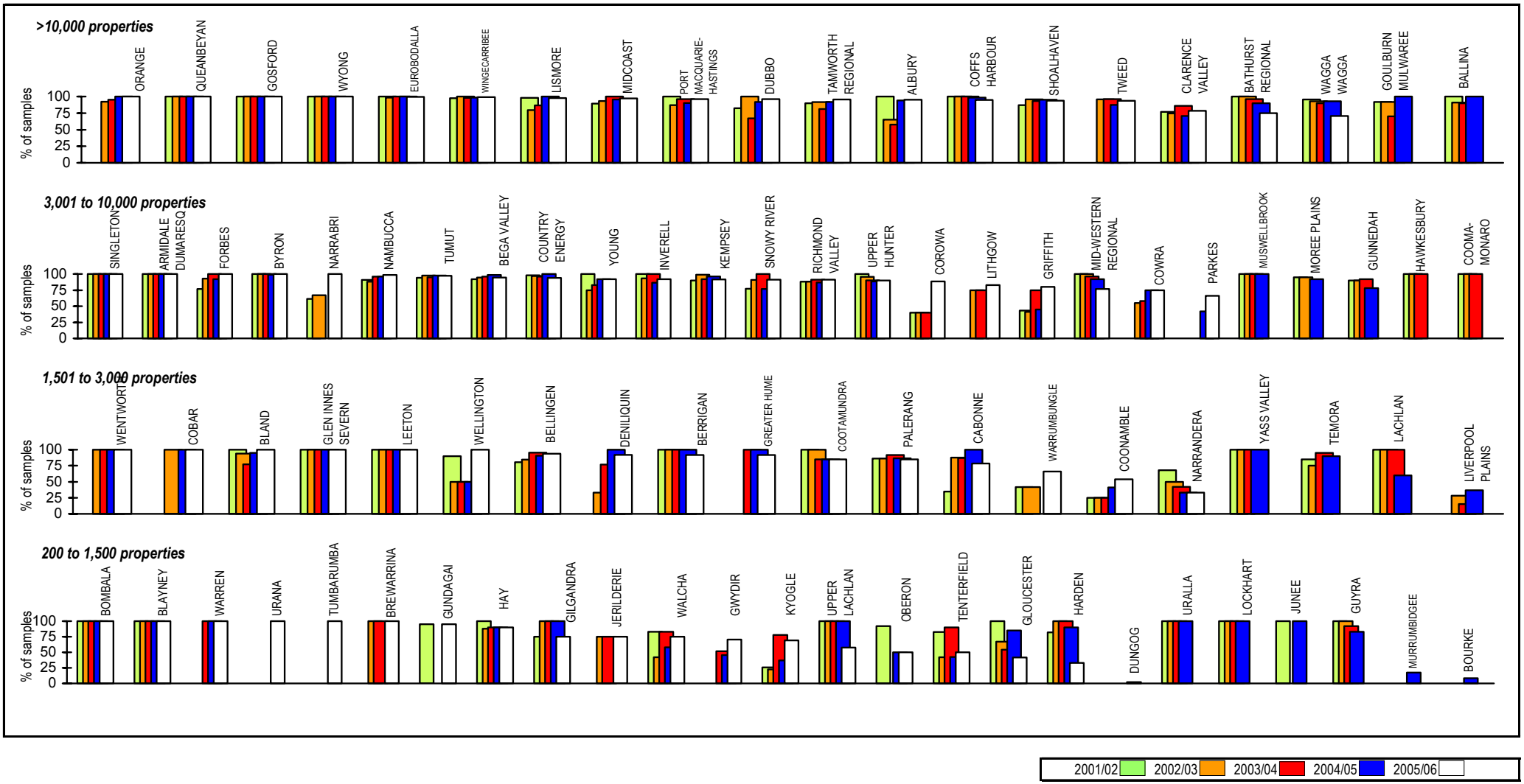


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Biochemical Oxygen Demand (BOD) (STW Q50)

Note:

1. For general notes see page 16.

58 Compliance with SS in Licence - Sewerage

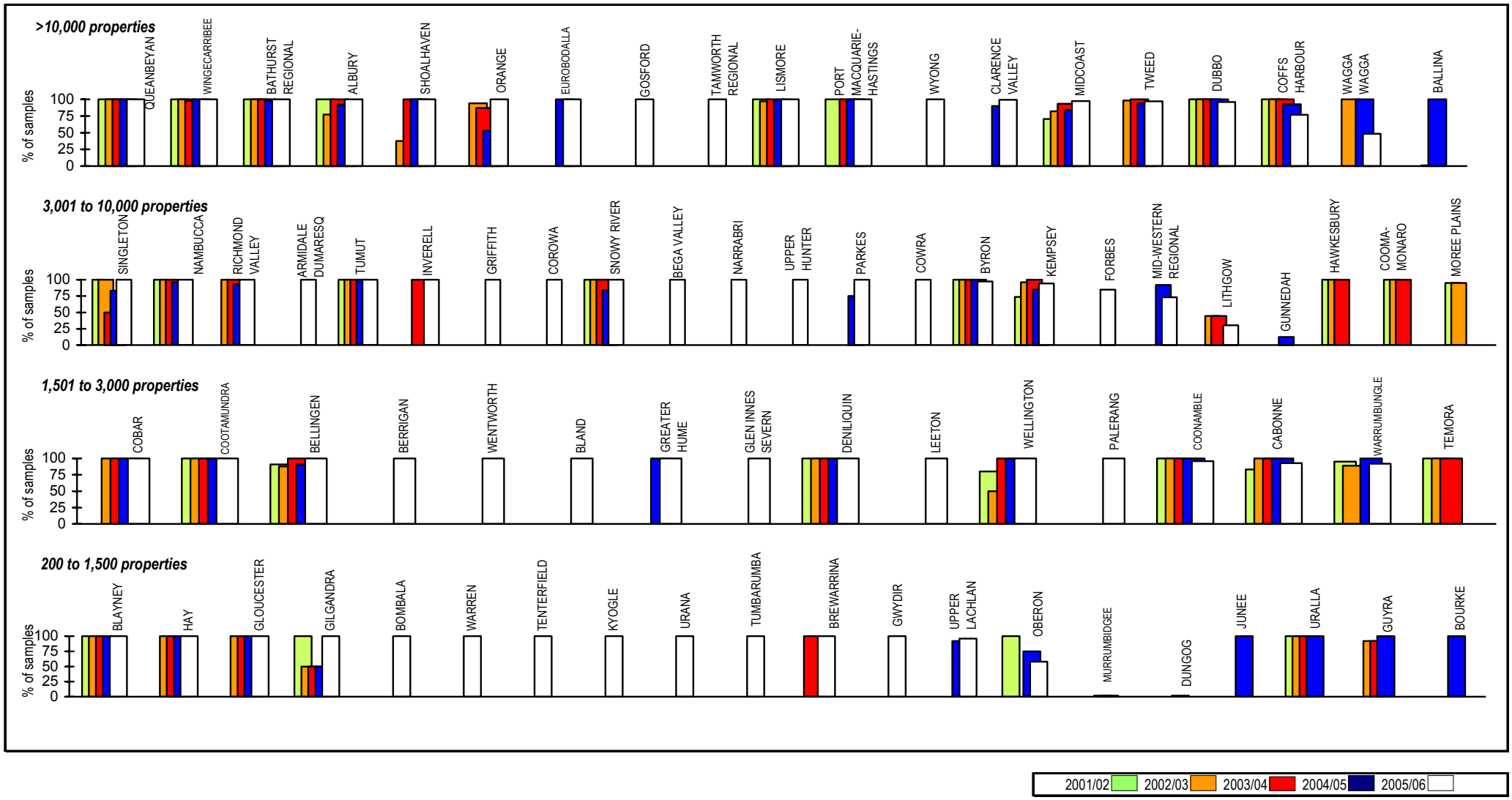


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Suspended Solids (SS) (STW Q52)

Note:

1. For general notes see page 16.

59 Compliance with N in Licence - Sewerage

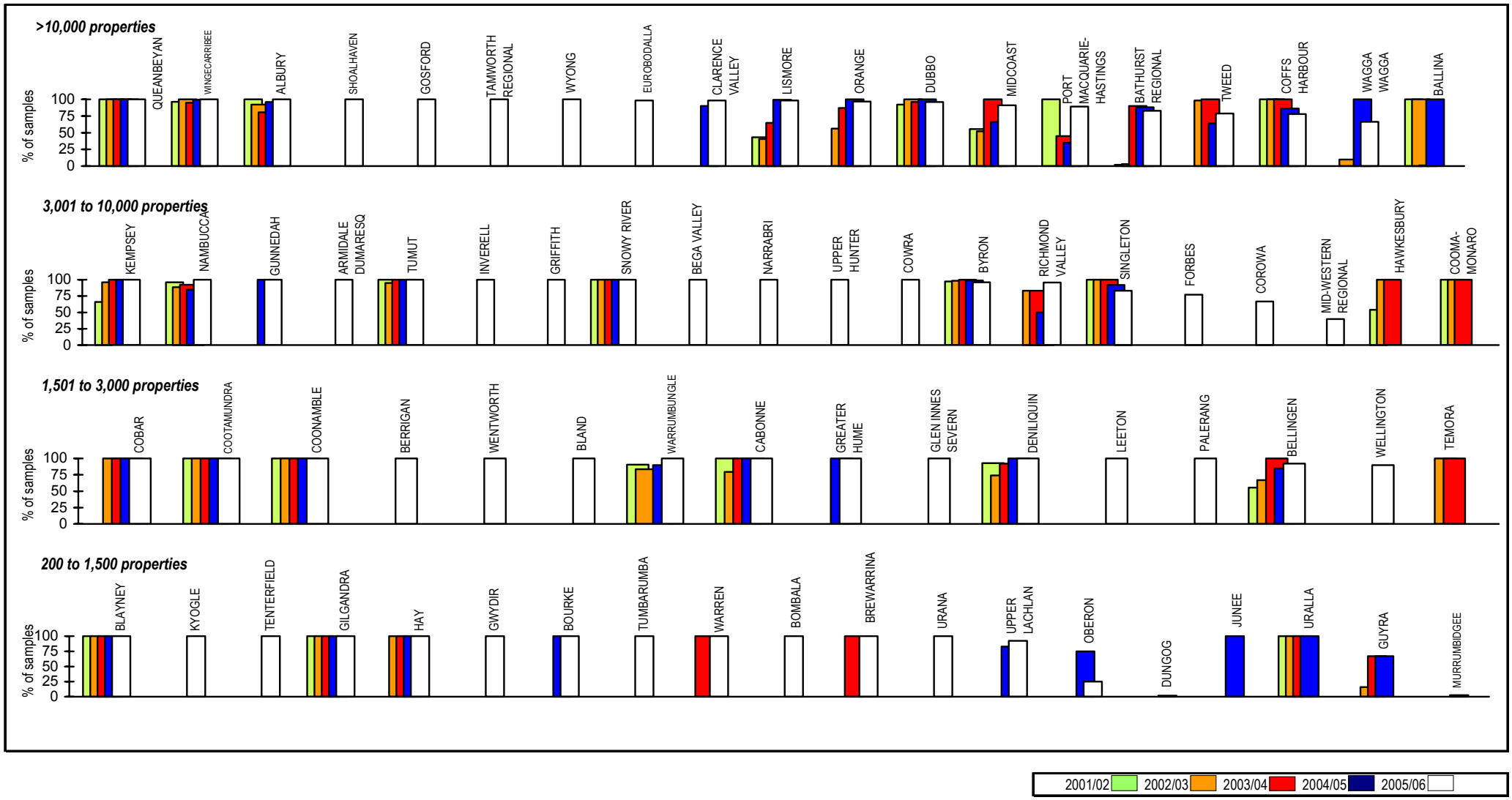


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Total Nitrogen (STW Q54)

Note:

1. For general notes see page 16.

60 Compliance with P in Licence - Sewerage

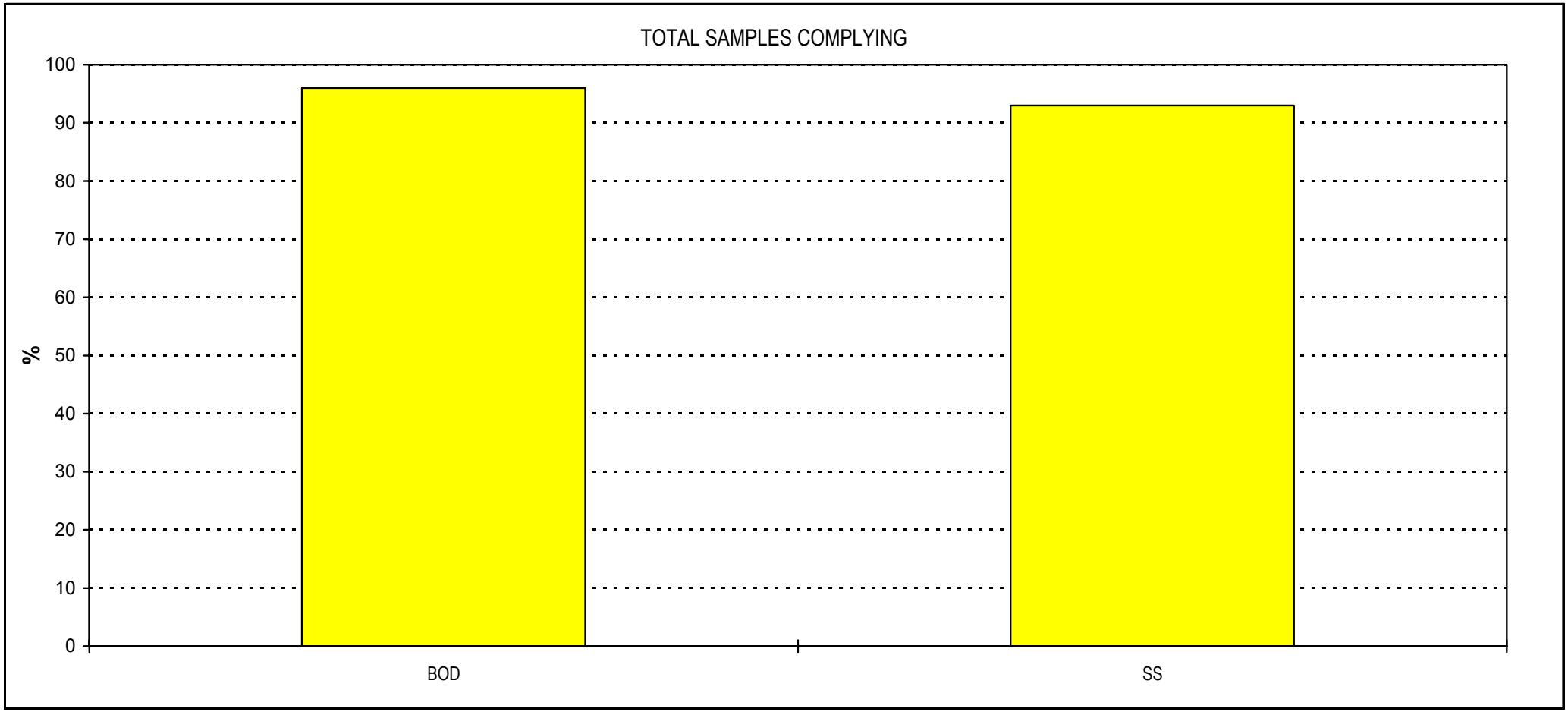


Parameter: Percentage of samples complying with 90 percentile Department of Environment and Conservation (DEC) licence limits for Total Phosphorus (STW Q60)

Note:

1. For general notes see page 16.

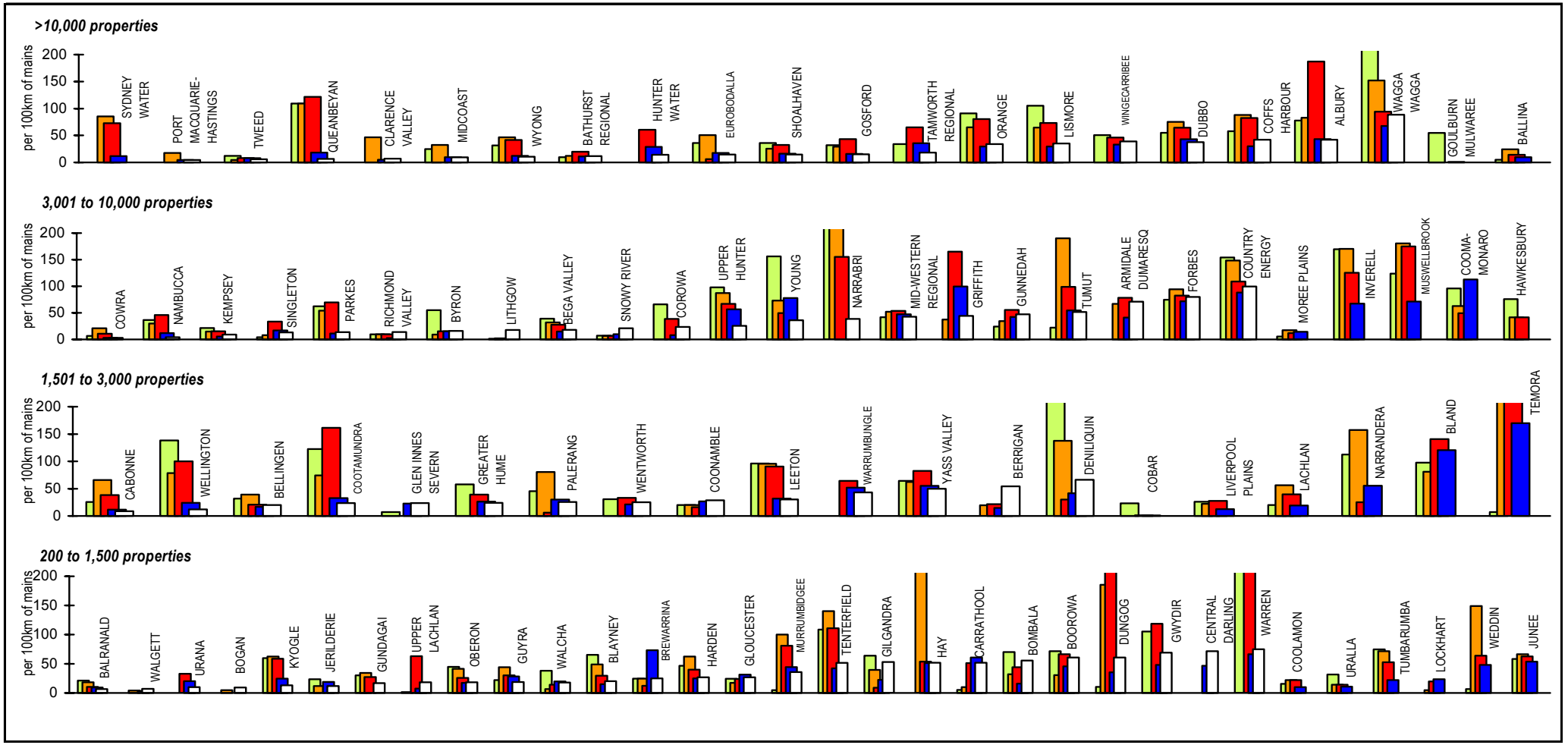
61 Compliance with DEC Licence - Sewerage



Notes:

1. BOD - 96% of the 4360 sampling days for NSW Local Water Utilities (LWUs) achieved 100% compliance with the 90 percentile limit of their DEC licence in regard to BOD. 55% of LWUs complied with the 90 percentile limit of their BOD licence.
2. SS - 93% of the 4360 sampling days for NSW LWUs achieved 100% compliance with the 90 percentile limit of their DEC licence in regard to SS. 36% of LWUs complied with the 90 percentile limit of their SS licence.
3. For LWUs with more than one treatment works, the reported compliance has been pro-rated on the basis of the number of sampling days at each treatment works.
4. The major cause of non-compliance is due to the growth of algae in maturation ponds, being measured as BOD and SS. Most treatment works in non-metropolitan NSW have maturation ponds due to previous DEC preference for ponding over chlorination. Negotiations with the DEC to develop an appropriate licensing method when maturation ponds are used for disinfection have favoured an option to test for SS prior to the maturation pond. For new installations and major augmentation, Ultra Violet (UV) disinfection is being used rather than maturation ponds to overcome this problem.
5. Median numbers of sampling days reported for treatment works are:
   - 12 days for < 4,000 EP
   - 15 days for about 15,000 EP
   - 30 days for >25,000 EP
6. For general notes see page 16.

62 Sewer Main Chokes and Collapses - Sewerage



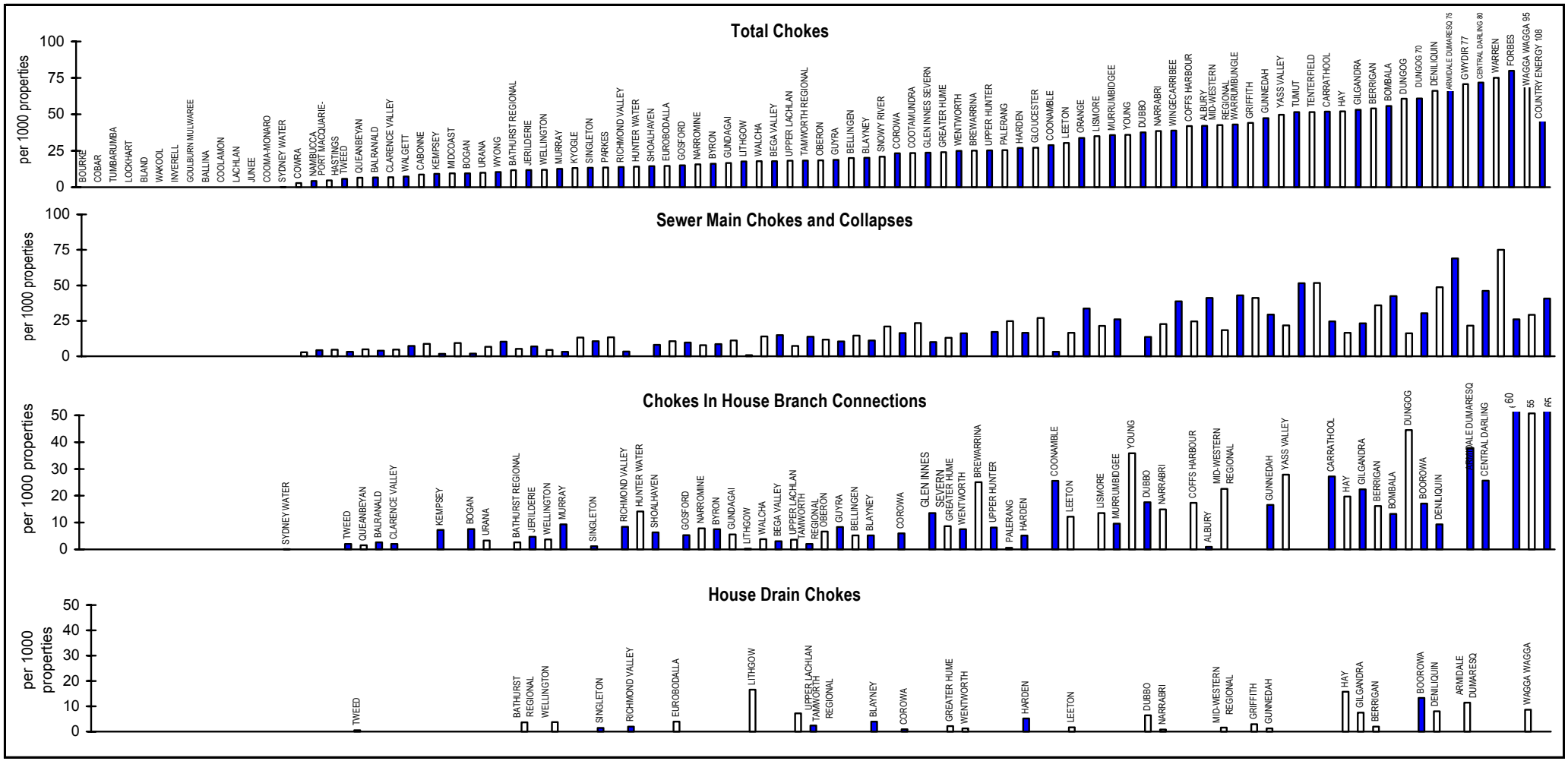
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 sewer main chokes and collapses for the 21 LWUs shown ranges from 3 to 113 chokes per 100 km of sewer mains. The 5 LWUs on the right did not report this indicator for 2005/06 Results for the previous 4 years are also shown.
2. The Statewide median sewer main chokes and collapses is 49 per 100 km of sewer mains.
3. 20% 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 16.

63 Total Chokes (per 1000 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

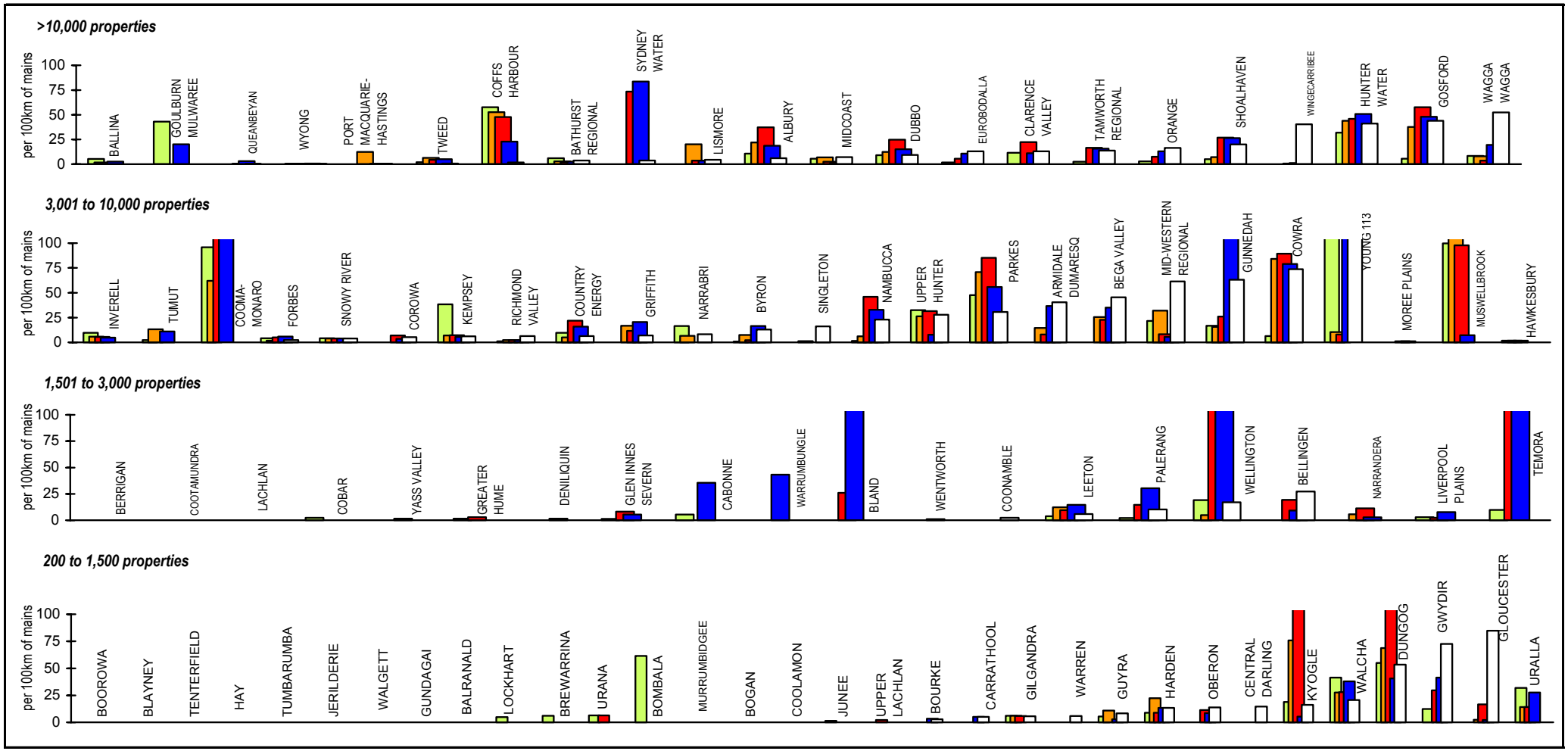
Parameter: No. of Chokes in House Branch Connections (Q67) x 1000
[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment

Parameter: 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

Note:

1. For general notes see page 16.

64 Sewer Overflows to the Environment - Sewerage



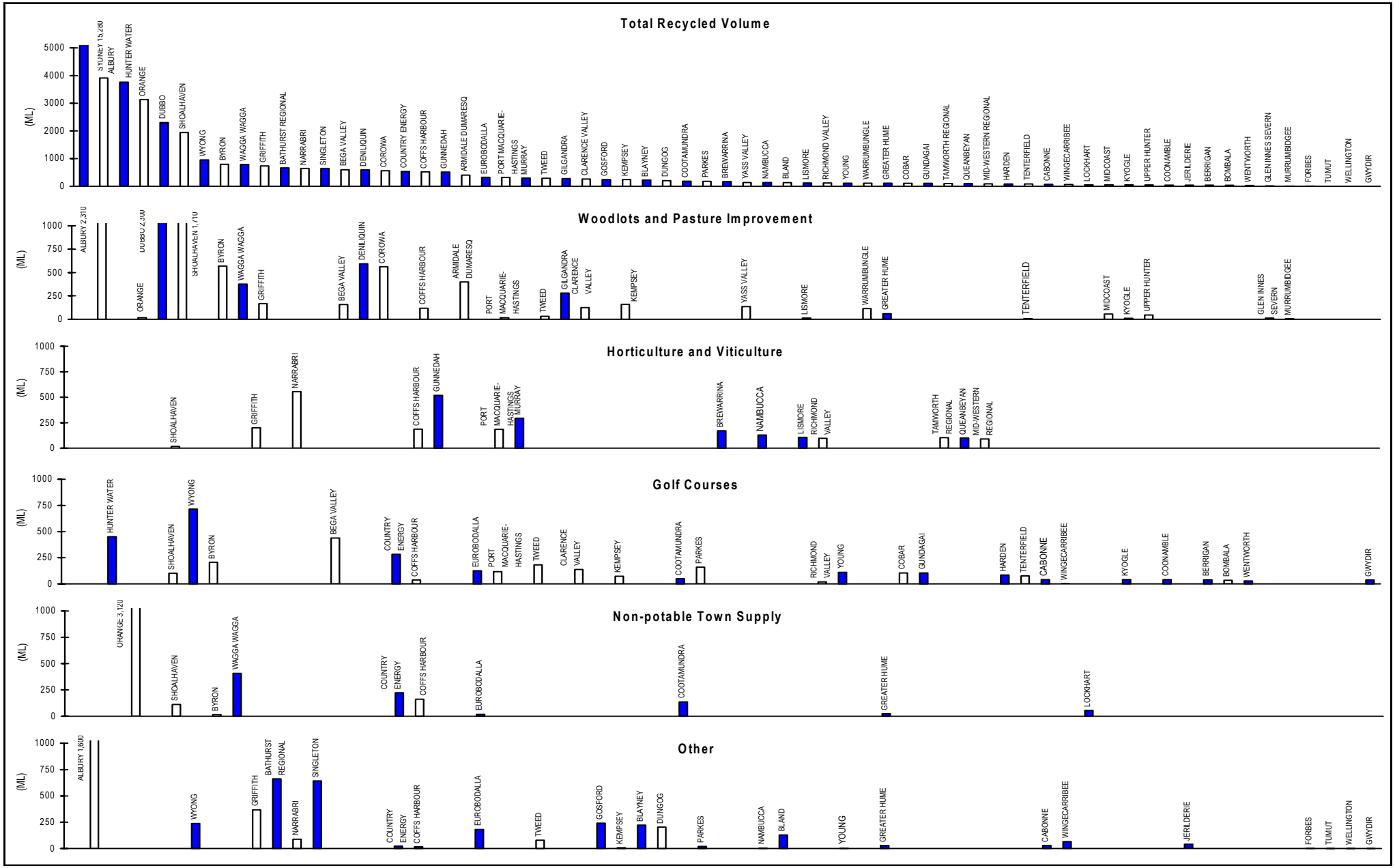
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 sewer overflows to the environment for the 19 LWUs shown ranges from nil to 113 overflows per 100 km of sewer mains. The 3 utililties on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The Statewide median sewer overflows to the environment is 7 per 100 km of sewer mains.
3. 36% of reporting LWUs reported no sewer overflows.
4. For general notes see page 16.

65 Recycled Water - Sewerage

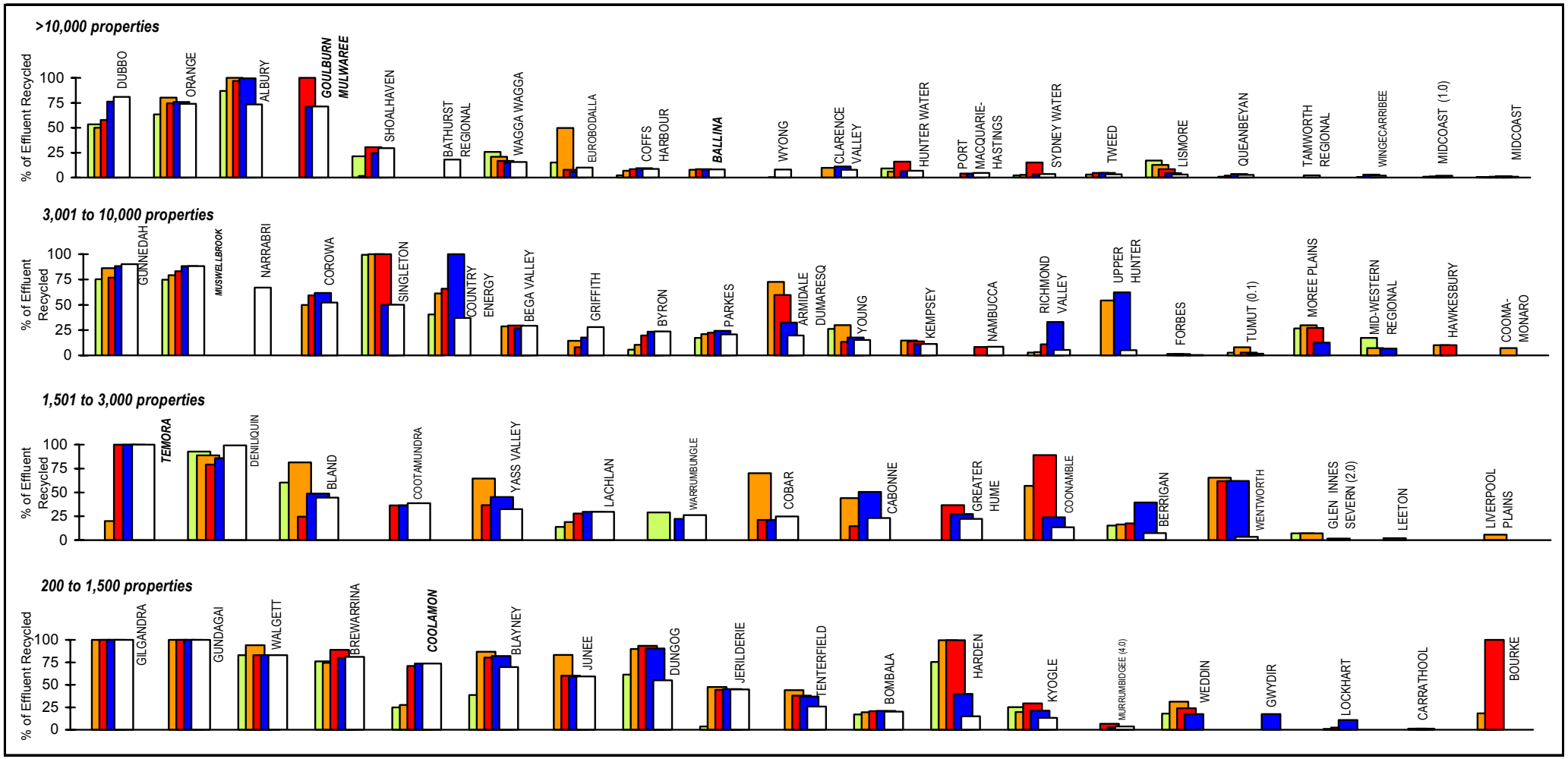


Notes:

1. The total volume of recycled water for non-metropolitan NSW was 30000 ML, which was 18 % of the total volume of sewage collected. Re-use was carried out by 66% of LWUs. 19% of LWUs recycled over 50% of their effluent.

2. For general notes see page 16.

66 Recycled Water (% of Effluent Recycled) - Sewerage



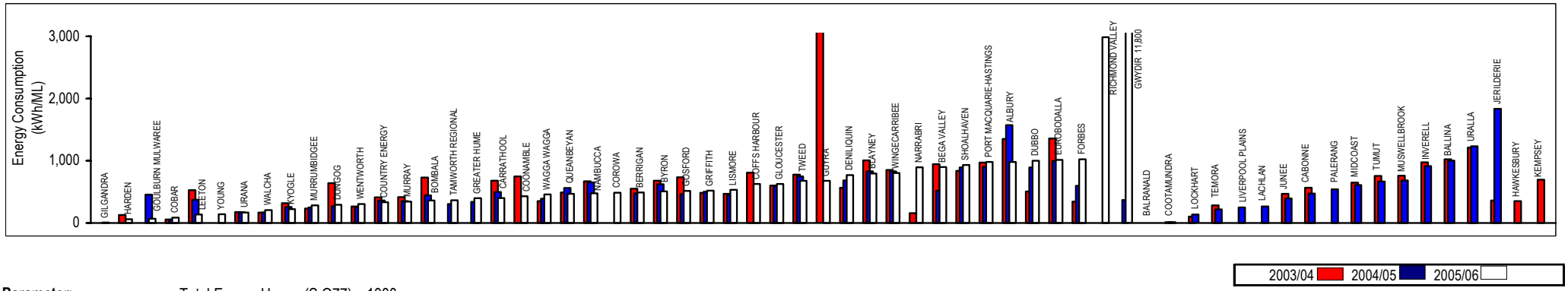
Parameter:

$$\frac{\text{Total Volume Recycled (STW Q25)} \times 100}{\text{Volume of Sewage Receiving Secondary Treatment (STW Q18)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 recycled water (% of sewage effluent recycled) for the 18 LWUs shown ranges from 90% to 0.1%. Results for the previous 4 years are also shown.
2. The 2004/05 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.
3. The Statewide median reuse of recycled water is 9% of effluent recycled.
4. Reuse of recycled water was carried out by 66% of LWUs. Statewide, 18% of the total volume of sewage collected was recycled. The total volume recycled in non-metropolitan NSW was 30,000 ML.
5. For general notes see page 16.

67 Energy Consumption per ML - Sewerage



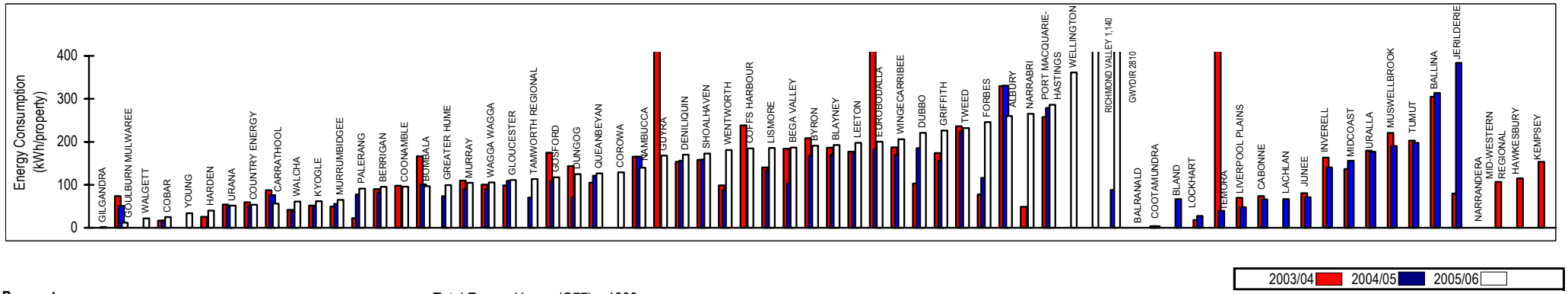
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 total energy consumption per ML. The energy consumption per ML for the 41 Local Water Utilitites (LWUs) shown range from about 7 to 11800kWh per connected property.
2. For general notes see page 16.

68 Energy Consumption per Property - Sewerage



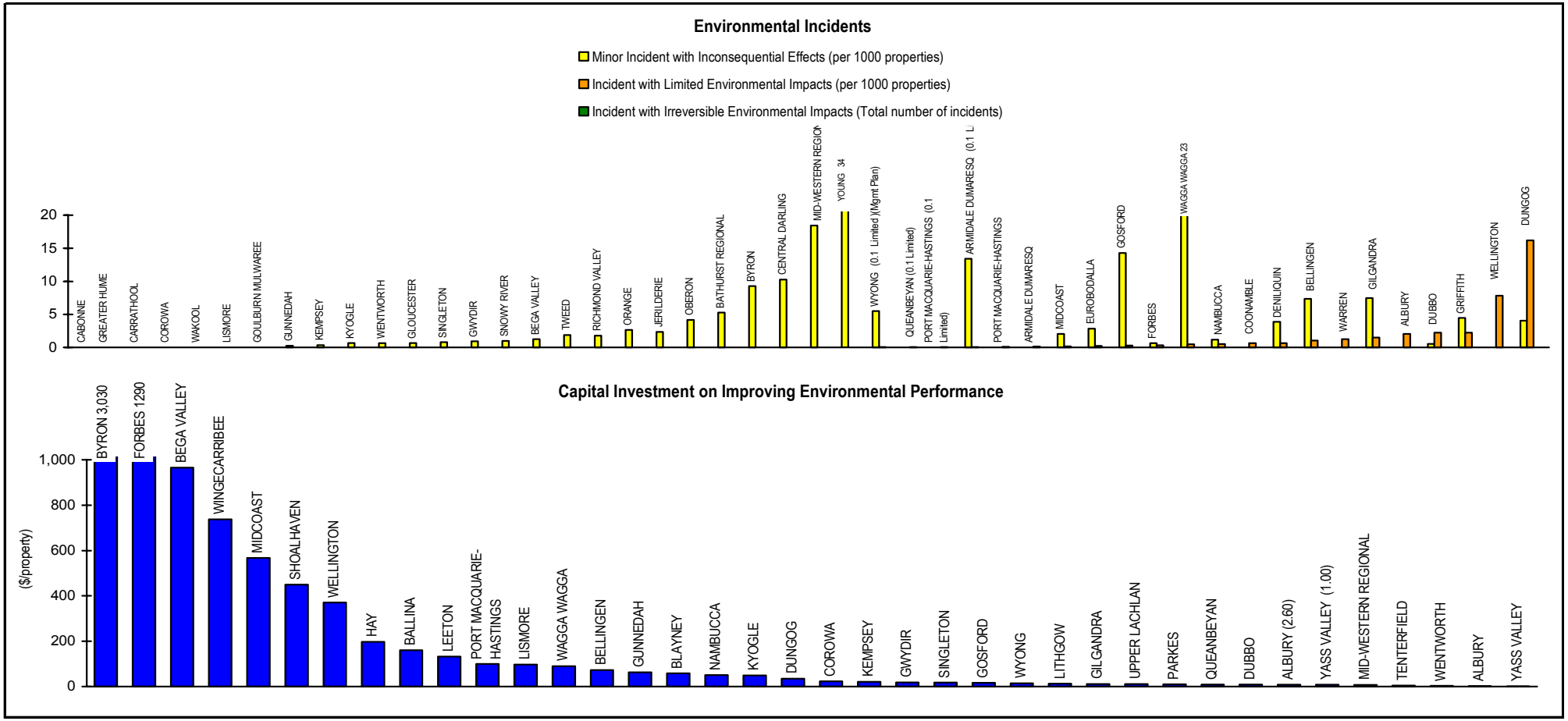
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 total energy consumption per connected property. The energy usage per connected property for the 52 Local Water Utilitites (LWUs) shown range from about 2 to 2810kWh per connected property.
2. For general notes see page 16.

69 Environmental Incidents, Management Systems, Capital Investment - Sewerage



Parameter: $\frac{\text{Total Number of Minor Incidents with Inconsequential Effects (Q69)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Total Number of Incidents with Limited Enviromental Impacts (Q70)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

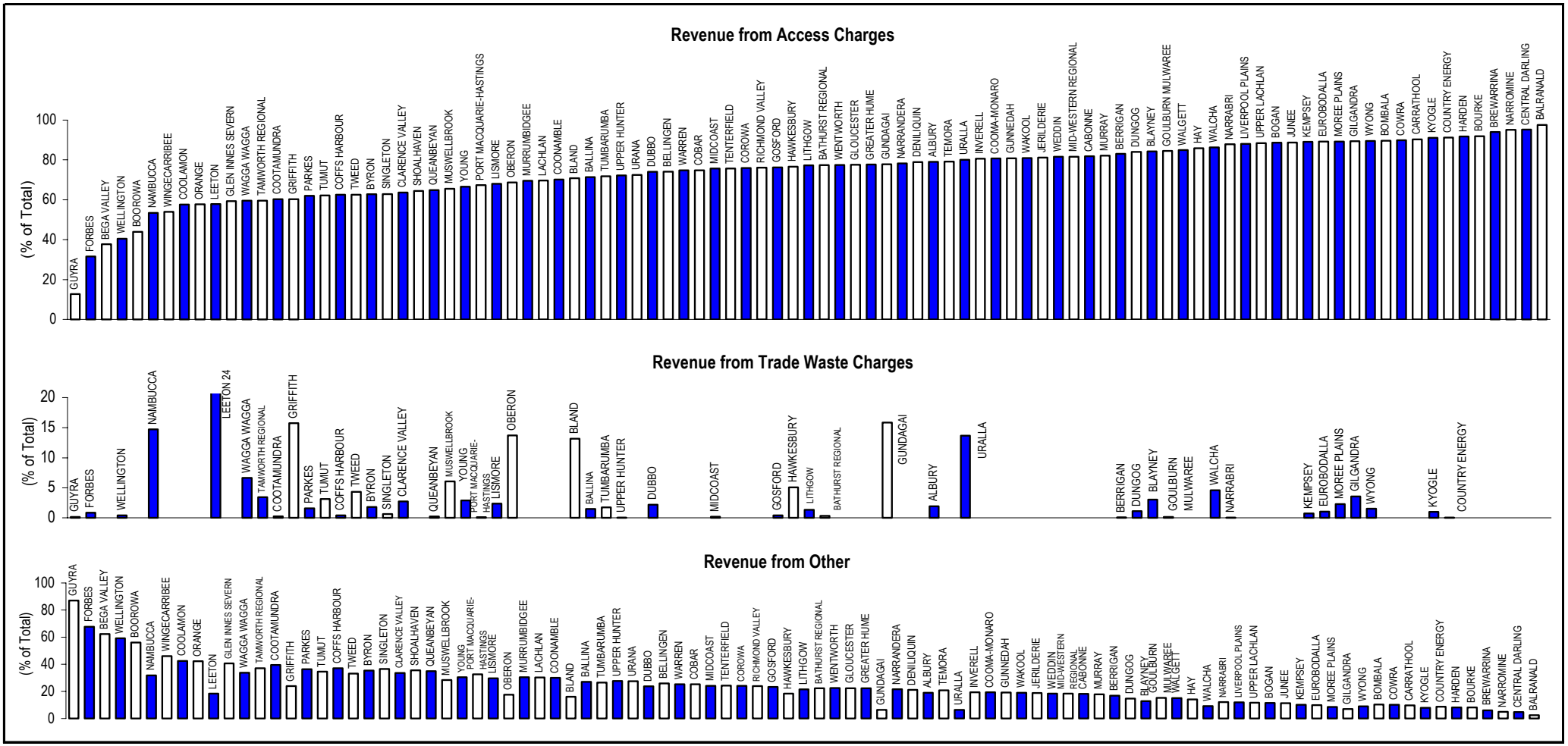
Parameter: $\frac{\text{Total Number of Incidents with Irreversible Enviromental Impacts (Q71)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

Parameter: $\frac{\text{Capital Expenditure on Improving Environmental Performance ($) (Q77)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16) x No. of Connected Properties per Assessment}}$

Note:

1. The following 21 LWUs have prepared a sewerage Environmental Management Plan:
   Albury, Bombala, Cabonne, Carrathool, Corowa, Dubbo, Eurobodalla, Gosford, Goulburn Mulwaree, Greater Hume, Griffith, Kempsey, Lismore, Lockhart, MidCoast Water, Nambucca, Shoalhaven, Wagga Wagga, Wakool, Wingecaribee, Wyong.
2. For general notes see page 16.

70 Revenue from Access Charges, Trade Waste Charges - Sewerage



Parameter: Rates and Services Availability Charges [(S6) + (S7a)] x 100 / Total Revenue (S14)

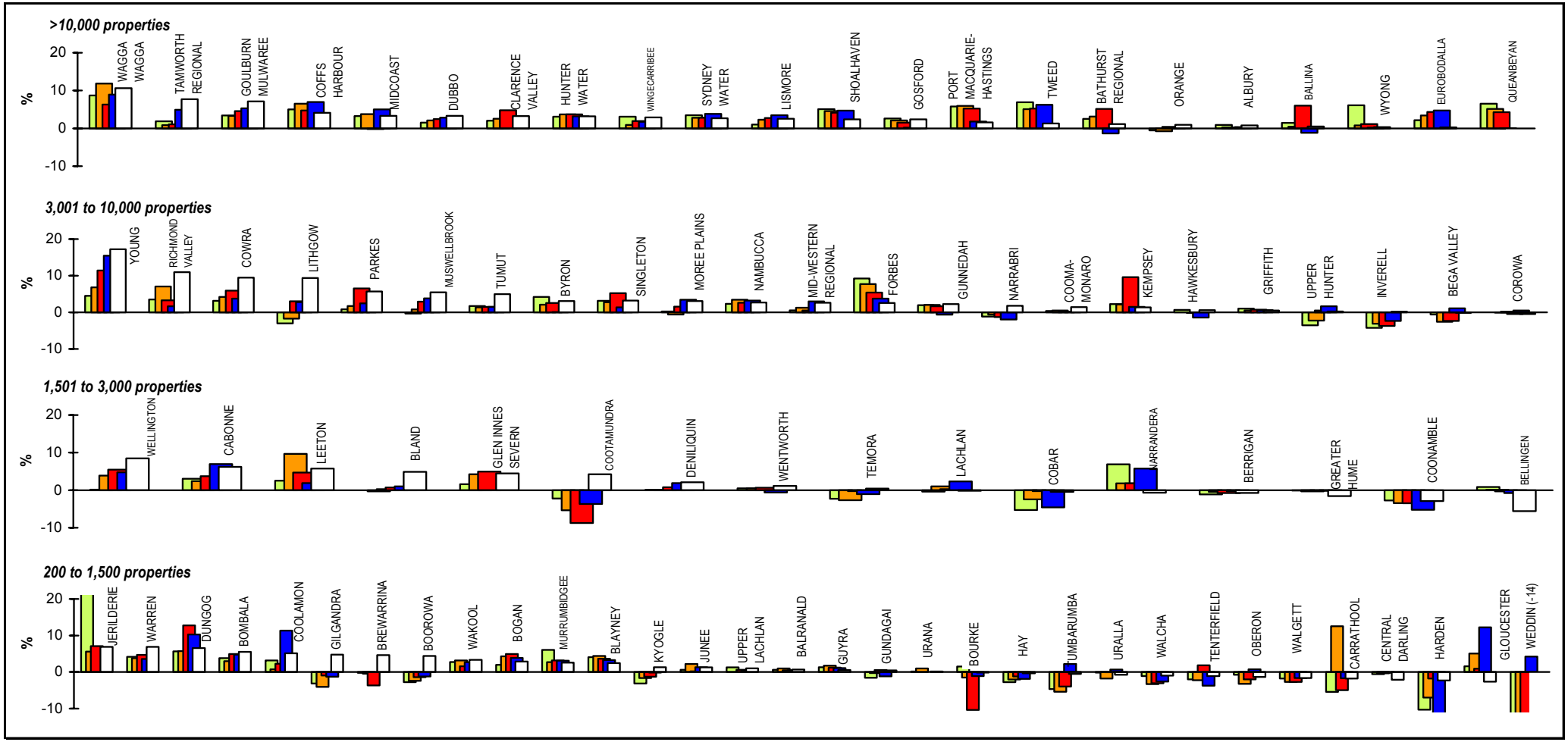
Parameter: Trade Waste Charges (S8) x 100 / Total Revenue (S14)

Parameter: [Other Sales and Charges (S11) + Extra Charges (S9) + Interest Income (S10) + Other Grants (S12C) + Contributions (S13)] x 100 / Total Revenue (S14)

Note:

1. For general notes see page 16.

71 Economic Real Rate of Return - Sewerage



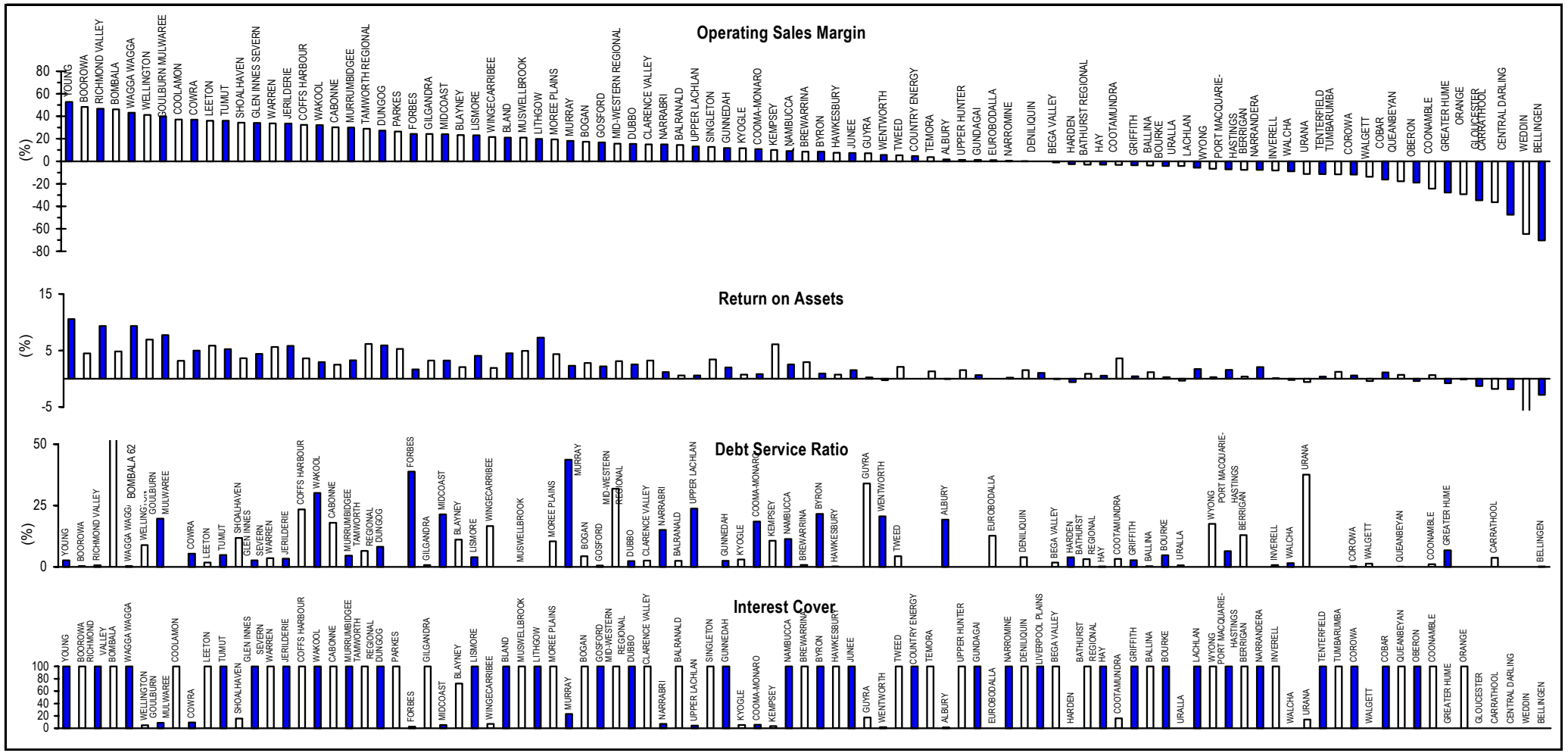
Parameter:

$$\frac{\text{[Operating Result (S16) + Interest Expense (S4a) - Interest Income (S10) - Grants for Acquisition of Assets (S12a)]} \times 100}{\text{Written Down Replacement Cost of System Assets, Plant \& Equipment (S34)}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 sewerage real rate of return for the 23 LWUs shown ranges from 17% to -0.5%. Results for the previous 4 years are also shown.
2. The Statewide median sewerage ERRR is 2.4%.
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 16.

72 Operating Sales Margin, Return on Assets, Debt Service Ratio, Interest Cover - Sewerage



Parameter: [Total Revenue (S14) - Grants for Acquisition of Assets (S12a) - Developer Provided Assets (S13b) - Total Expense (S5) + Interest Expenses (S4a) - Interest Income (S10)] x 100
Total Revenue (W14) - Grants for Acquistion of Assets (S12a) - Developer Provided Assets (S13b) - Interest Income (S10)

Parameter: [Total Revenue (S14) - Grants for Acquisition of Assets (S12a) - Total Expense (S5) + Interest Expenses (S4a)] x 100
Written Down Replacement Cost of System Assets, Plant and Equipment (S34)

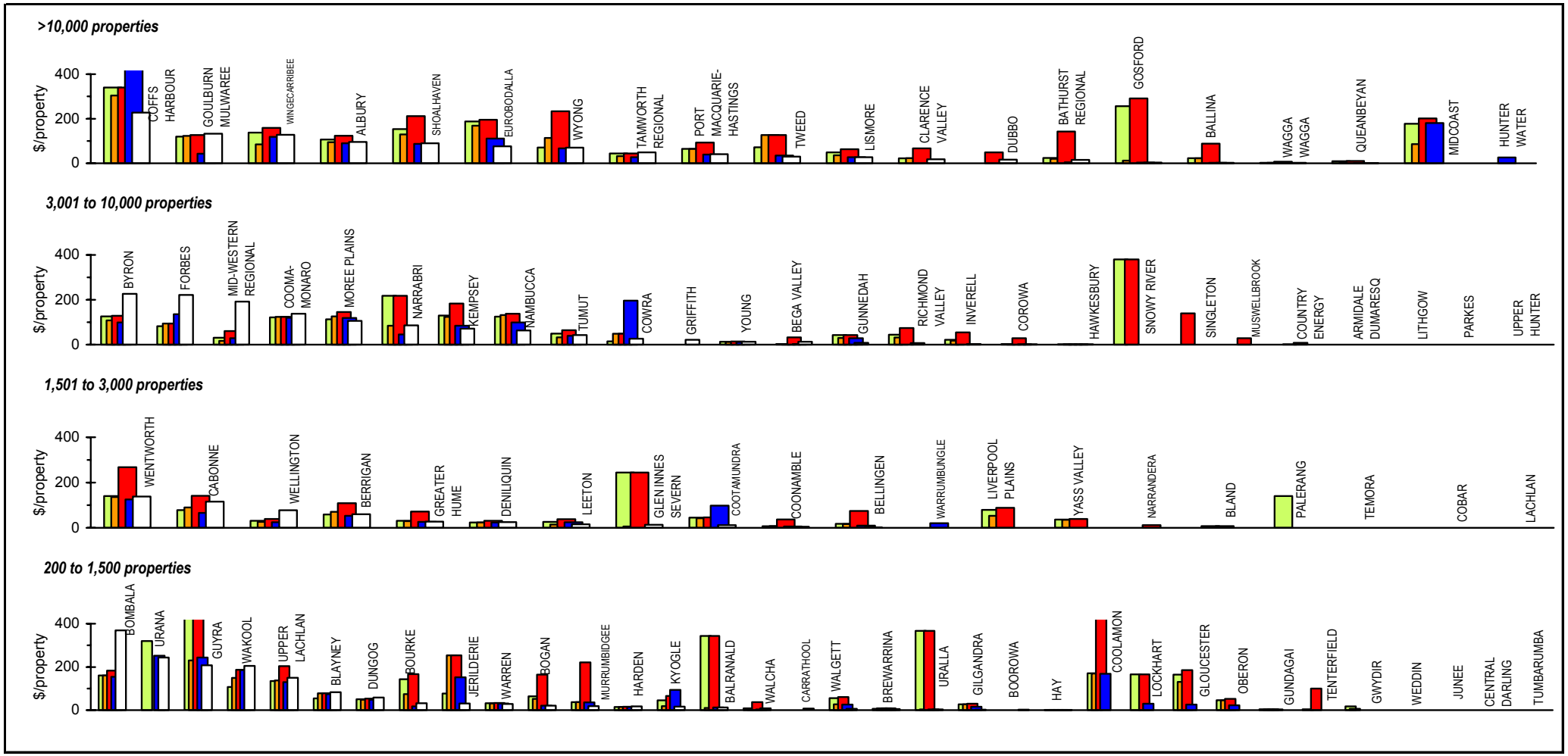
Parameter: [Payment of Debt (S18) + Interest Expense (S4a)] x 100
Total Revenue (S14) - Grants for Capital Works (S12a) - Developer Provided Assets (S13b)

Parameter: [Total Revenue (S14) - Grants for Capital Works (S12a) - Total Expenses (S5) + Interest Expense (S4a)]
Interest Expenses (S4a) -Interest Income (S10)

Note:

1. Values of interest cover >100 are shown as 100 in the figure above.
2. For general notes see page 16.

73 Loan Payment - Sewerage



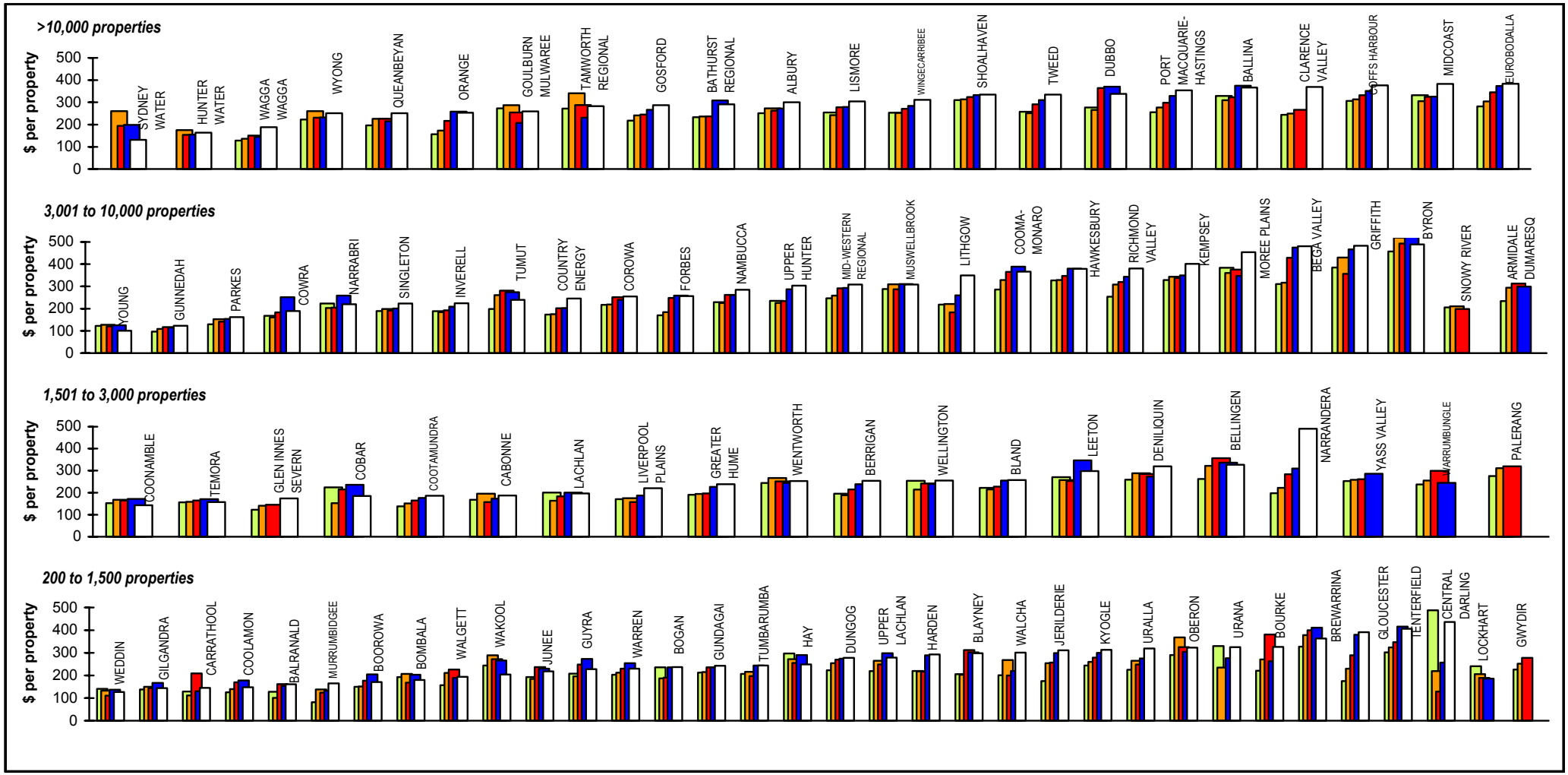
Parameter: Payment of Debt (S17) + Interest Expenses (S4a)

[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 2005/06 sewerage loan payment 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 2005/06 sewerage loan payments for the 26 LWUs shown ranges from $227 to $0 per connected property. Results for the previous 4 years are also shown in Jan 2006$. Results for the previous 4 years are also shown.
2. The Statewide median sewerage loan payment is $45 per connected property.
3. For general notes see page 16.

74 Operating Cost (OMA) per property - Sewerage



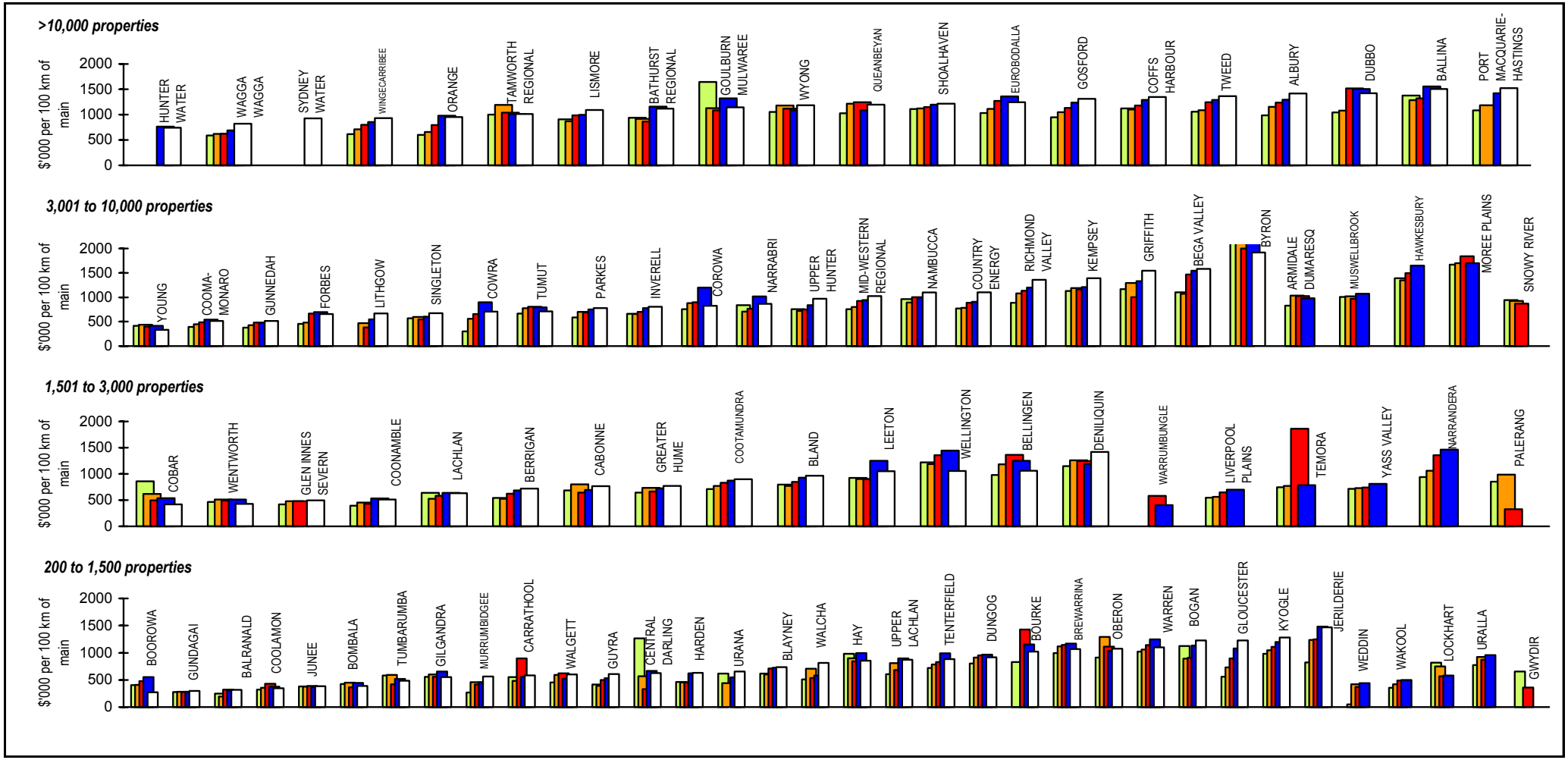
Parameter:

$$\frac{\text{Management Expenses (S1) + Total Operations Expenses (S2) - Purchase of Water + Bulk Supplier's OMA}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 24 LWUs shown ranges from $101 to $490 per connected property. Results for the previous 4 years are also shown in Jan 2006$. The 2 utilities on the right did not report this indicator for 2005/06.
2. The Statewide median operating cost per connected property is $290.
3. For general notes see page 16.

75 Operating Cost (OMA) per 100 km of Main - Sewerage



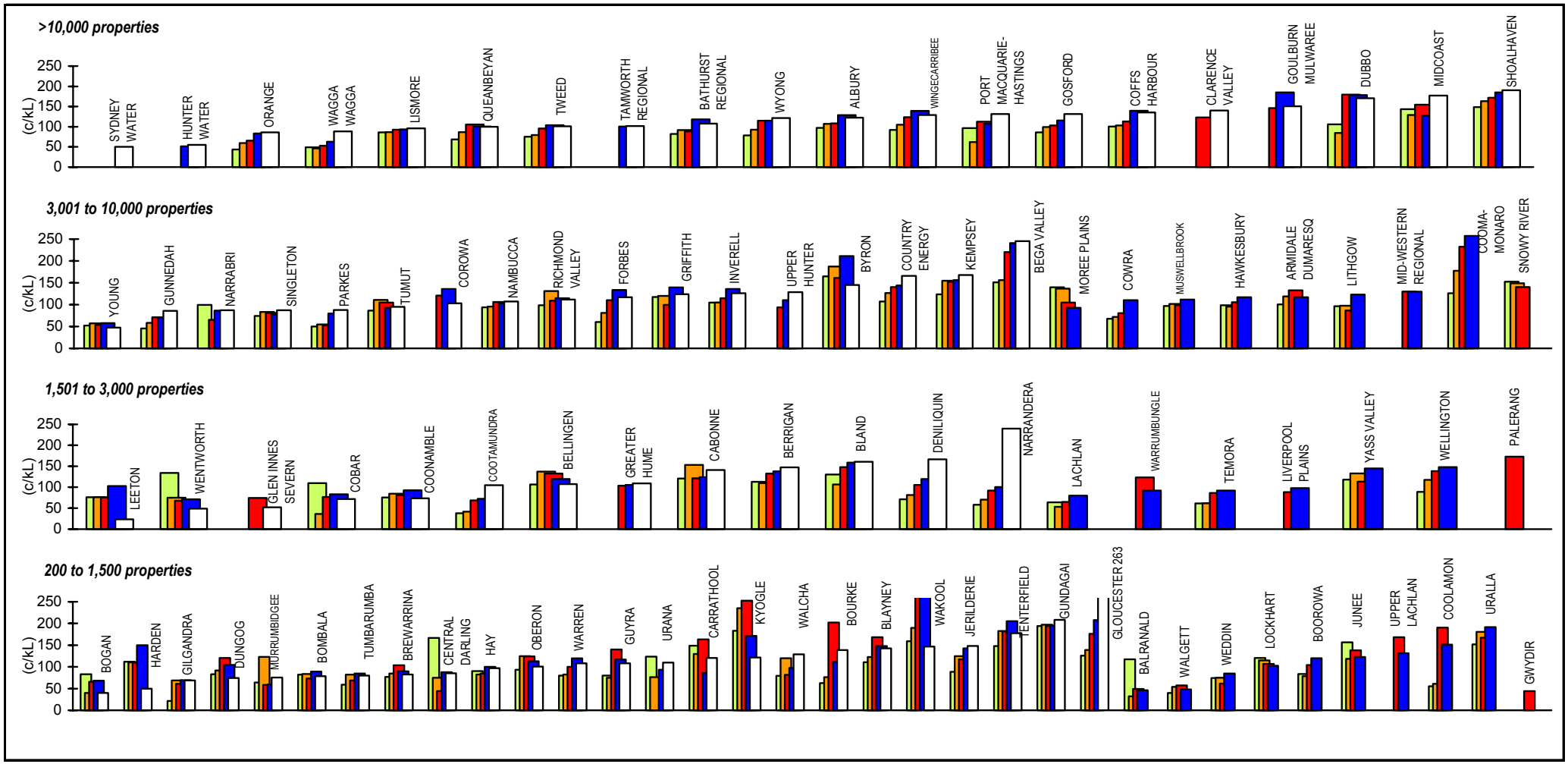
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 20 LWUs shown ranges from $0.33M to $1.92M per 100 km of sewer main. Results for the previous 4 years are also shown in Jan 2006$. The 6 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The Statewide median operating cost is $1.2M per 100 km of sewer main.
3. For general notes see page 16.

76 Operating Cost (OMA) per kL - Sewerage



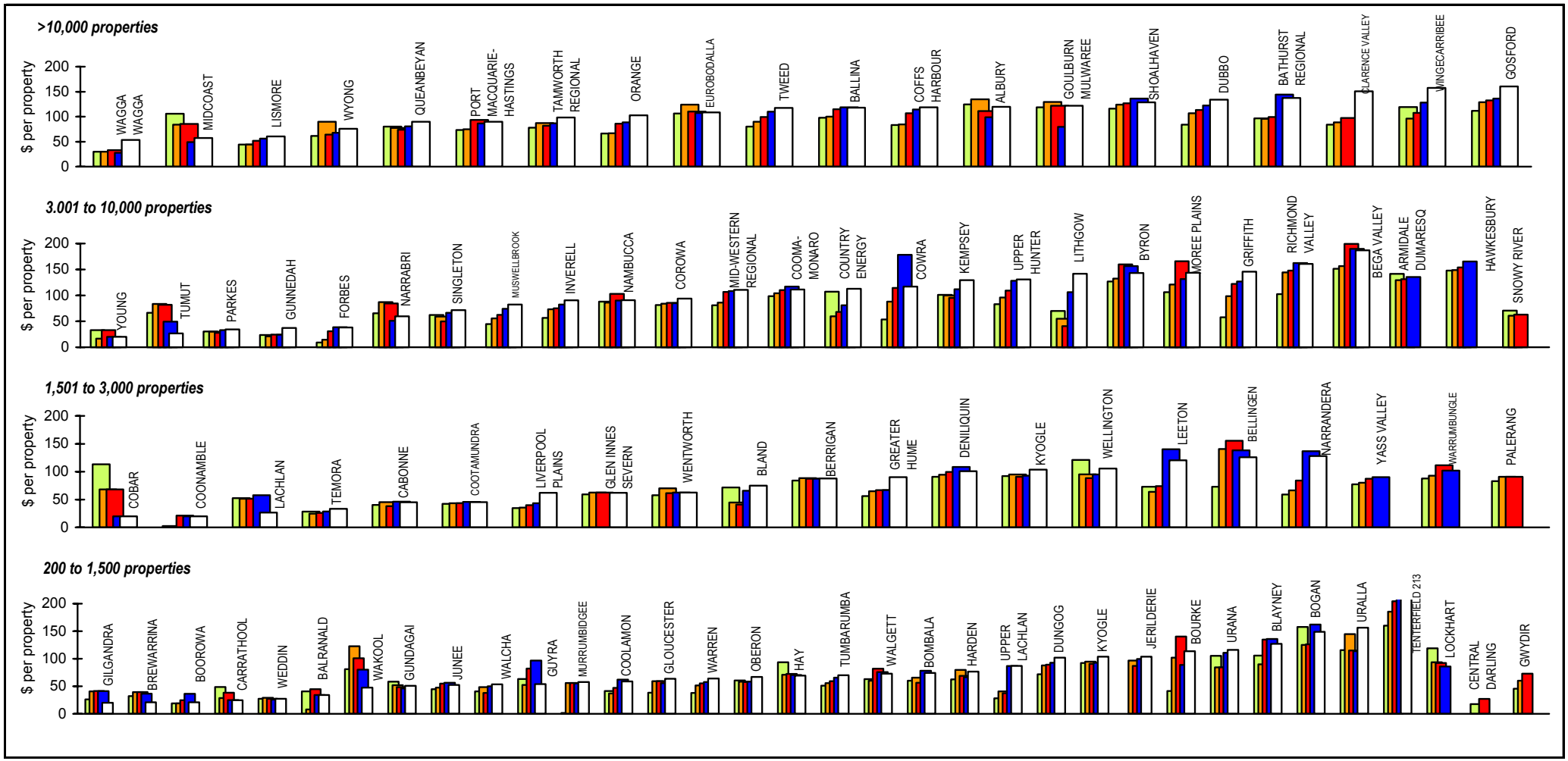
Parameter:

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

Notes:

1. This figure shows ranked values of the 2005/06 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 17 LWUs shown ranges from 47c/kL to 246c/kL. The 9 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median operating cost is 122c/kL.
3. For general notes see page 16.

77 Management Cost per Property - Sewerage



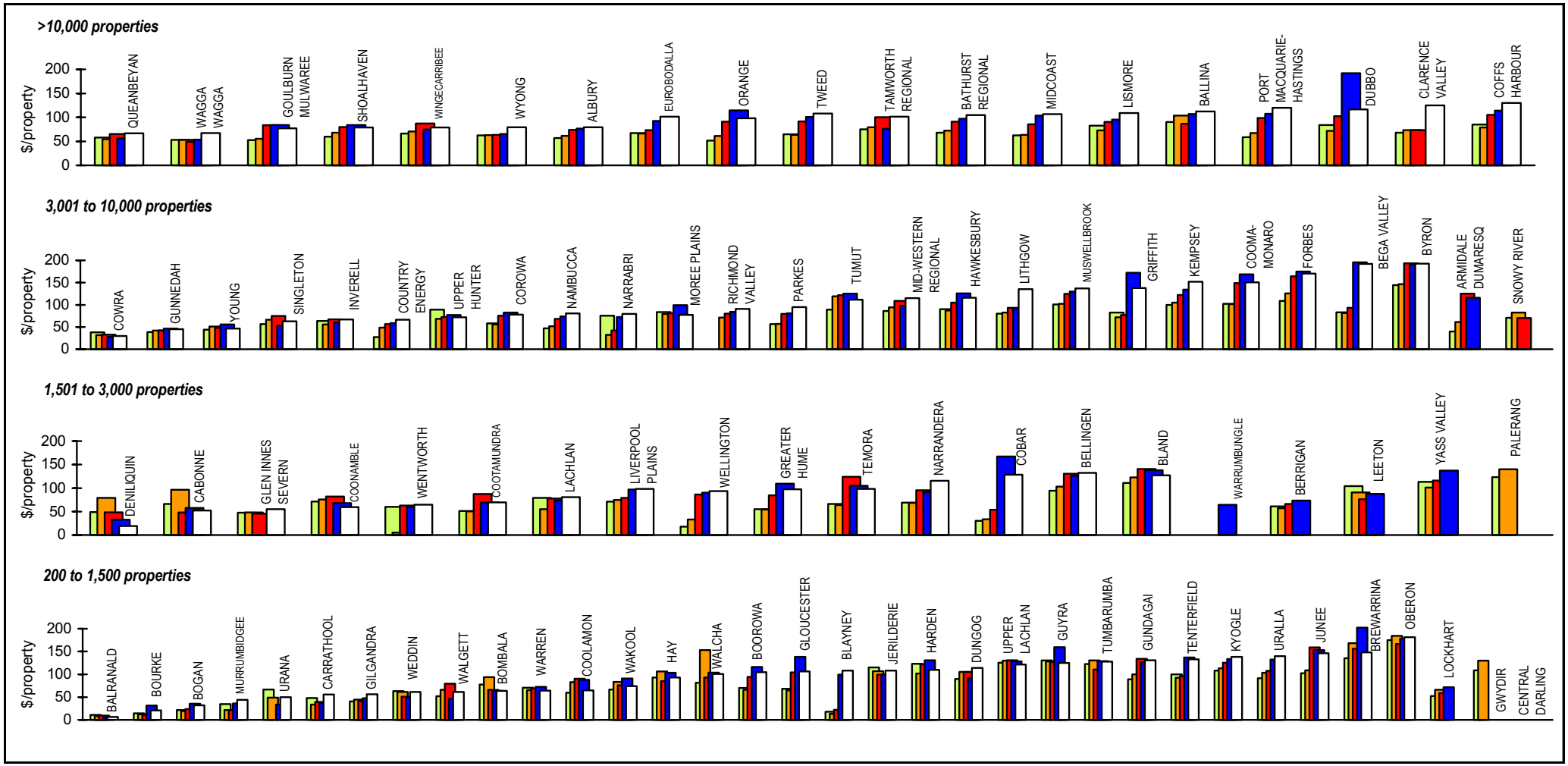
Parameter:

$$\frac{\text{Administration Cost (S1a) + Engineering Cost (S1b)}}{\text{[No. of Residential Assessments (Q15) + No. of Non-Residential Assessments (Q16)] x No. of Connected Properties per Assessment}}$$

Notes:

1. This figure shows ranked values of the 2005/06 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 2005/06 management costs for the 23 LWUs shown ranges from $20 to $187. The 3 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median management cost is $100 per connected property.
3. For general notes see page 16.

78 Treatment Cost - Sewerage



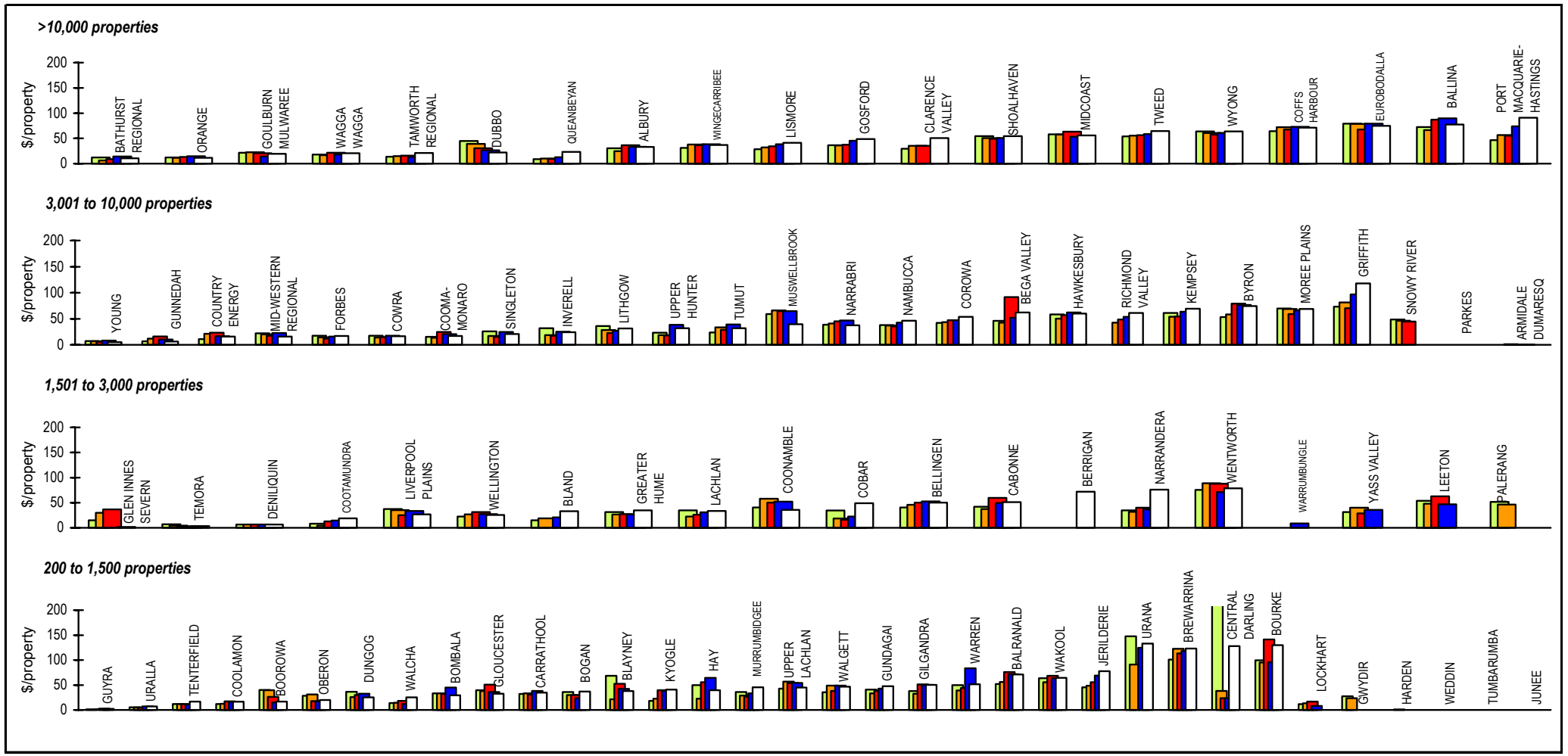
Parameter: Treatment Operation Expenses (S2f) + Treatment Chemical Cost (S2g) + Energy Cost (S2h)+ Treatment Maintenance Expenses (S2k)

[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 2005/06 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 2005/06 sewerage treatment cost for the 24 LWUs shown ranges from $30 to $192 per connected property. The 2 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median sewage treatment cost is $85 per connected property.
3. For general notes see page 16.

79 Pumping Cost - Sewerage



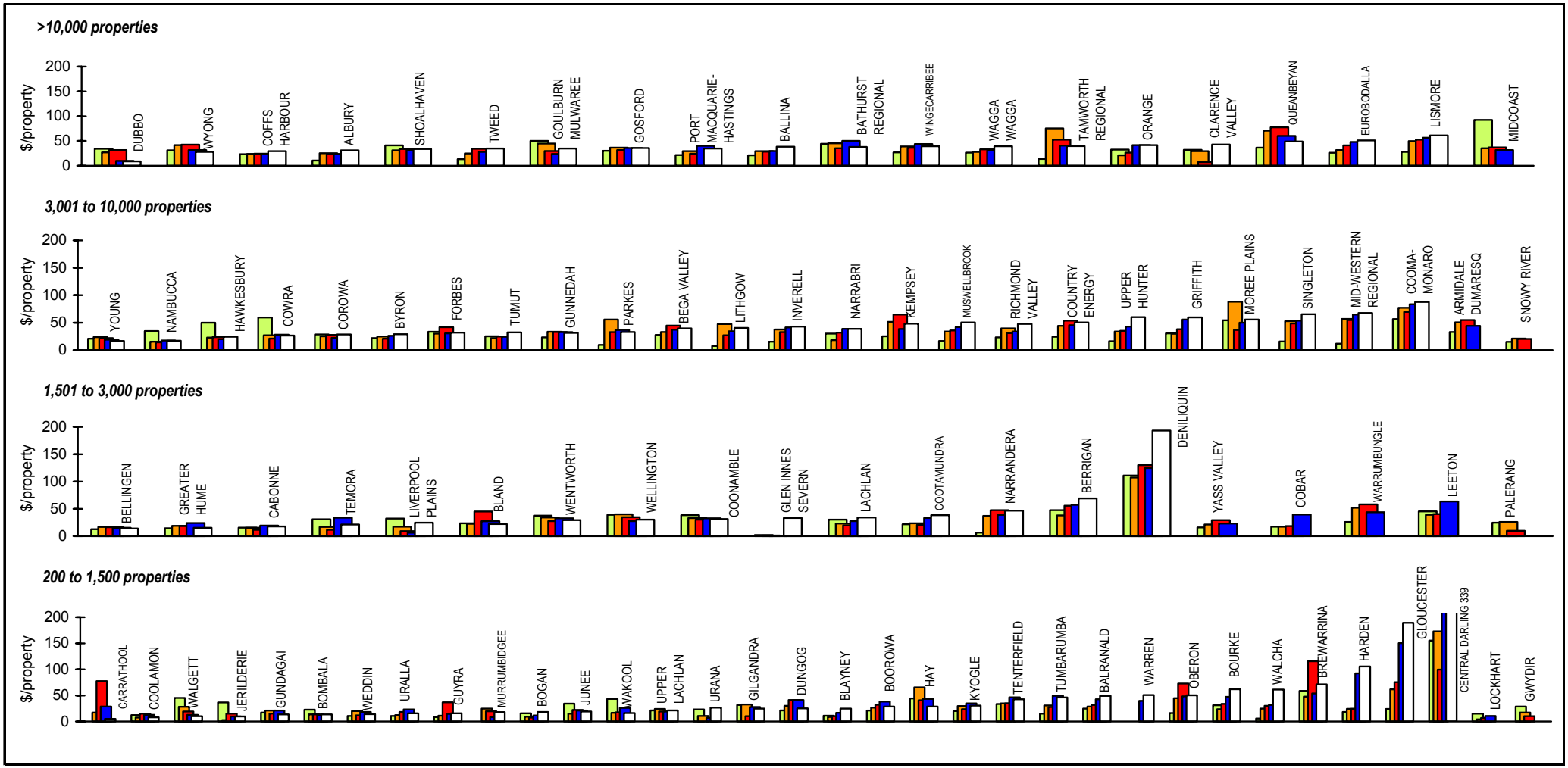
Parameter: Pumping Station Operation Expenses (S2c) + Energy Cost (S2d) + Treatment Cost (S2e)

[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 2005/06 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 2005/06 sewerage pumping cost for the 23 LWUs shown ranges from $5 to $118 per connected property. The 3 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median pumping cost is $48 per connected property.
3. For general notes see page 16.

80 Sewer Main Cost - Sewerage



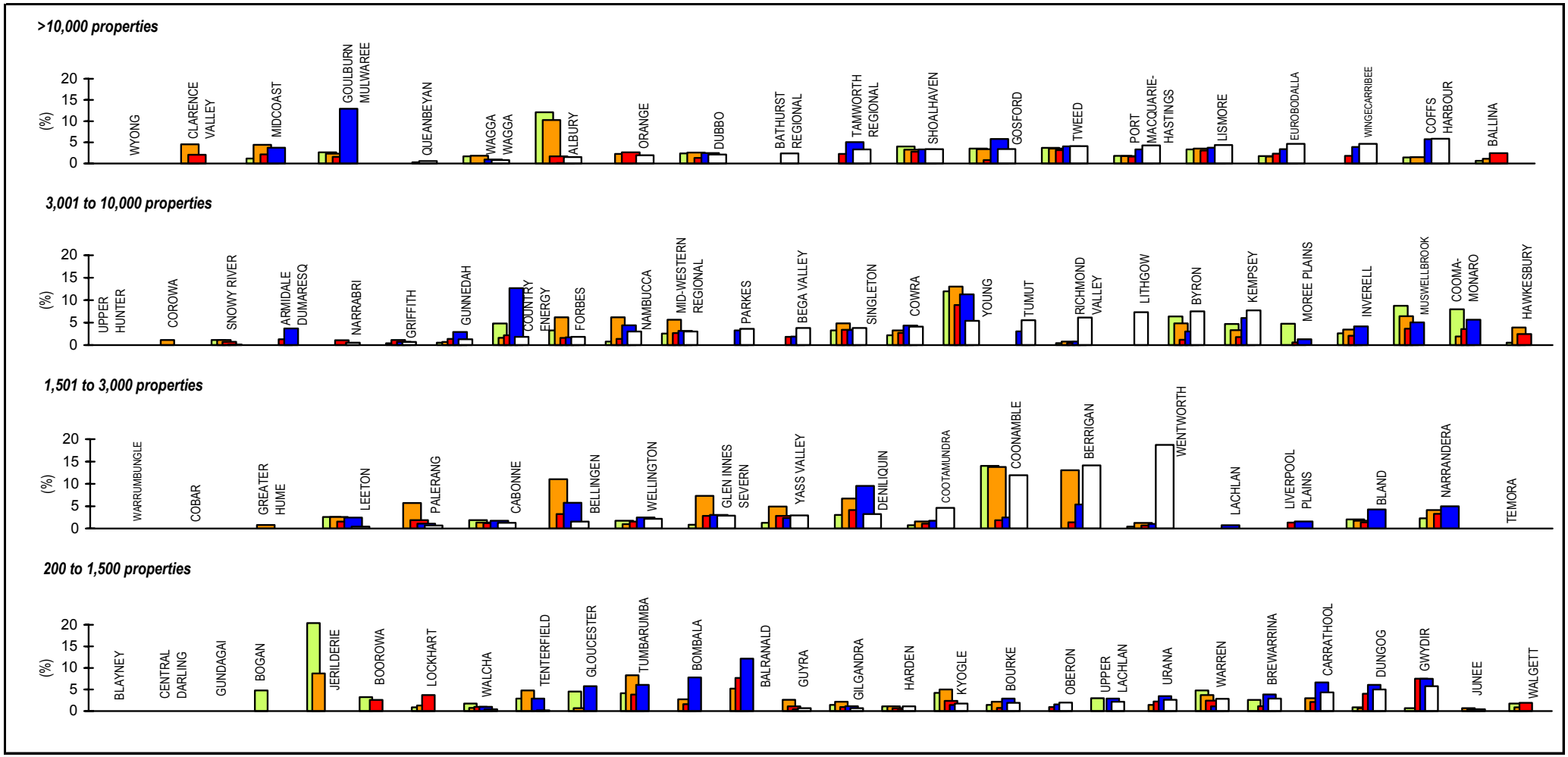
Parameter: Serwer Main Operation Cost (S2a) + Sewer Main Maintenance Cost (S2b)

[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 2005/06 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 2005/06 sewer main cost for the 24 LWUs shown ranges from $16 to $88 per connected property. The 2 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown in Jan 2006$.
2. The Statewide median sewer main cost is $31 per connected property.
3. For general notes see page 16.

81 Total Days Lost - Sewerage



Parameter: [Total Number of Days Lost in Year (Q52) x 100] / [Total Number of Employees / 230]

[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 2005/06 percentage of days lost 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 2005/06 percentage of days lost for the 18 LWUs shown ranges from nil to 8%. The 5 utilities on the right did not report this indicator for 2005/06. Results for the previous 4 years are also shown.
2. The Statewide median percentage days lost is 3%.
3. For general notes see page 16.

10 TABLES

SUMMARY TABLES
This section contains the following Summary Tables:

Table 1 2005/06 NSW Water Supply Performance Indicators

Provides the 20 percentile, median and 80 percentile values of the key water supply performance indicators on a percentage of connected properties basis

Table 2 2005/06 NSW Sewerage Performance Indicators

Provides the 20 percentile, median and 80 percentile values of the key sewerage performance indicators on a percentage of connected properties basis

Table 3 Best-Practice Management Compliance

Table 4 Trends in Statewide Performance Indicators – 1991 to 2005/06

Shows trends in water supply and sewerage key performance indicators over the last 15 years

Table 5 2005/06 NSW Water Utility Performance Summary

Provides an overview of each water utility's key water supply and sewerage performance indicators.

Table 5A Water Supply and Sewerage – Levels of Service, Financial

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Table 1 : 2005/06 NSW Water Supply Performance Indicators

UTILITY CHARACTERISTICS	20%	Median (50%)	80%
Residential Assessments (% of total)	88	92	94
New Residential Dwellings Connected to Water Supply (%)	1.4	1.0	0.4
Properties Served per km of Main	56	33	25
Rainfall (% of average annual rainfall)	100	86	70
Total Water Supplied (at Master Meters - ML)	15,500	7,400	2,900
Peak Week to Average Consumption (%)	130	155	190
Renewals Expenditure (% of current replacement cost of system assets)	0.7	0.0	0.0
Employees (employees per 1000 properties)	1	1.3	1.8
SOCIAL - Charges/Bills (2006/07)			
Residential Water Usage Charge (c/kL)	130	105	77
Residential Access Charge ($/assessment)	80	110	210
Typical Residential Bill ($/assessment)	280	345	440
Typical Developer Charge ($/equivalent tenement)	5,600	4,100	2,500
SOCIAL - Health			
Urban Population without Reticulated Public Water Supply (%)	0.3	0.9	4.6
Physical water quality compliance (%)	100	100	89
Chemical water quality compliance (%)	100	100	100
Microbiological Water Quality Compliance (E.coli) (%)	100	100	100
Category 1 Public Health Incidents - Minor (per 1000 properties)	0.0	0.0	0.0
Category 2 Public Health Incidents - Limited Effects	0.0	0.0	0.0
Category 3 Public Health Incidents - Major	0.0	0.0	0.0
Capital Expenditure on Improving Public Health ($/property)	133	6	2
SOCIAL - Levels of Service			
Water Quality Complaints (per 1000 properties)	2	6	11.2
Service Complaints (per 1000 properties)	2	6	32
Customer Interruption Frequency (per 1000 properties)	12	38	85
Average Duration of Interruption (hr)	2	3	3
Average Customer Outage Time (min)	3	6	20
Number of Main Breaks (per 100 km of main)	5	10	19
Drought Water Restrictions (% of time)	0	3	100
Total Days Lost (%)	2.0	3.2	3.8
ENVIRONMENTAL			
Average Annual Residential Consumption (kL/property)	170	190	310
Water Losses (including leakage %)	10	10	13
Energy Consumption (kWh/ML)	320	660	930
Energy Consumption (kWh/property)	68	216	297
Category 1 Environmental Incidents - Minor (per 1000 properties)	0.0	0.0	0.0
Category 2 Environmental Incidents - Limited Effects (per 1000 properties)	0.0	0.0	0.0
Category 3 Environmental Incidents - Major (per 1000 properties)	0.00	0.00	0.00
Capital Expenditure on Improving Environmental Performance ($/property)	22	0.9	0
ECONOMIC - Financial			
Residential Revenue from Usage Charges (% of total)	71	67	49
Non-residential Revenue from Usage Charges (% of total)	86	71	62
Economic Real Rate of Return (%)	4.5	1.4	-0.1
Return on Assets (%)	3.9	1.6	0.2
Debt to Equity (%)	15	4	0
Net Debt to Equity (%)	-4	-11	-15
Interest Cover	>100	>100	30
Loan Payment ($/property)	80	23	0
ECONOMIC - Efficiency			
Operating Cost (OMA) per 100 km of Main ($'000)	610	1,040	1,320
Operating Cost (OMA) per property ($/property)	240	280	340
Operating Cost (OMA) per kL (c/kL)	57	86	114
Management Cost ($/property)	90	110	150
Treatment Cost ($/property)	17	27	85
Pumping Cost ($/property)	9	24	45
Energy Cost ($/property)	9	17	24
Water Main Cost ($/property)	26	49	74

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 councils.
3. The performance indicators in this table and their grouping are consistent with the body of the present report and the reports for each council in Appendix C.

Table 2 : 2005/06 NSW Sewerage Performance Indicators

UTILITY CHARACTERISTICS	20%	Median (50%)	80%
Residential Assessments (% of total)	90%	90%	90%
New Residential Dwellings Connected to Sewerage (%)	1.7	1.3	0.7
Properties Served per km of Main	48	41	34
Volume of Sewage Collected (ML)	11,900	5,100	2,100
Renewals Expenditure (% of current replacement cost of system assets)	0.6	0.2	0.2
Employees (per 1000 properties)	1.0	1.5	1.7
Employees Undergoing 2 or more days of Training (%)	13	8.3	5.3
SOCIAL - Charges/Bills (2006/07)			
Residential Access Charge ($/assessment)	350	385	525
Typical Residential Bill ($/assessment)	350	400	525
Typical Developer Charge ($/equivalent tenement)	5,200	3,500	2,000
Non-residential sewer usage charge (c/kL)	130	80	70
SOCIAL - *Health*			
Urban Properties without Reticulated Sewerage Service (%)	0.8	3.7	9.3
Category 1 Public Health Incidents - Minor (per 1000 properties)	0.2	0.4	4.2
Category 2 Public Health Incidents - Limited Effects (per 1000 properties)	0.00	0.00	0.00
Category 3 Public Health Incidents - Major (per 1000 properties)	0.00	0.00	0.00
Capital Investment on Improving Public Health ($/property)	226	68	9
SOCIAL - *Levels of Service*			
Odour Complaints (per 1000 properties)	0.2	0.8	1.7
Service or Choke Complaints (per 1000 properties)	8	14	39
Customer Interruption Frequency (per 1000 properties)	4	15	29
Average Duration of Interruptions (hr)	1	2	2
Average Customer Outage Time (min)	0.3	1.5	3.0
Total Days Lost	1.7	3.3	4.3
ENVIRONMENTAL			
Volume of Sewage Treated per property (kL/a)	280	200	200
Reclaimed Water (% of effluent reclaimed)	32	9	2
Biosolids Reuse (%)	100	100	0
Energy Consumption (kWh/ML)	430	540	940
Energy Consumption (kWh/property)	93	148	203
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**			
Compliance with BOD in Licence (%)	100	100	95
Compliance with SS in Licence (%)	100	98	91
Sewer Main Chokes and Collapses (per 100 km of main)	22	49	86
Sewer Overflows to the Environment (per 100 km of main)	0	7	40
Category 1 Environmental Incidents - Minor (per 1000 properties)	1.3	5	8.3
Category 2 Environmental Incidents - Limited Effects (per 1000 properties)	0.1	0.1	0.3
Category 3 Environmental Incidents - Major (per 1000 properties)	0.00	0.00	0.00
Capital Investment on Improving Environmental Performance ($/property)	567	35	16
ECONOMIC - *Financial*			
Revenue from non-residential and trade waste charges (% of total revenue)	24	15	11
Revenue from Trade Waste Charges (% of total)	3	2	0
Revenue from Other (% of total)	36	24	16
Economic Real Rate of Return (%)	4.1	2.4	0.4
Return on Assets (%)	4.1	2.3	0.3
Debt to Equity (%)	14	7	1
Net Debt to Equity (%)	6	-7	-23
Interest Cover	100	100	10
Loan Payment ($/property)	90	45	5
ECONOMIC - *Efficiency*			
Operating Cost (OMA) per 100 km of Main ($'000)	920	1,200	1,370
Operating Cost (OMA) per property ($)	250	290	370
Operating Cost (OMA) per kL (c/kL)	101	122	166
Management Cost ($/property)	75	100	145
Treatment Cost ($/property)	67	85	101
Pumping Cost ($/property)	21	48	64
Energy Cost ($/property)	15	20	24
Sewer Main Cost ($/property)	29	31	39

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 performance indicators in this table and their grouping are consistent with the body of the present report and the reports for each LWU in Appendix C.

Table 3 - 2005/06 Best-Practice Management Compliance

WATER UTILITY (sorted on connected properties)		WATER SUPPLY REVENUE ($M)	WATER SUPPLY: OUTCOMES FOR 6 BPM CRITERIA												SEWERAGE: OUTCOMES FOR 4 BPM CRITERIA										
			(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Residential Charges >=50% in 2006/07, 60% in 2007/08, and 75% in 2008/09 *(Yes/No)*	(2c) Complying non-Residential Charges *(Yes/No)*	(2d) DSP with Commercial Developer Charges (Item 2(e) in Table 1) *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Sound Water Conservation implemented *(Yes/No)*	(5) Sound Drought Management implemented *(Yes/No)*	(6) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria5 *(Yes/No)*	Proposed Dividend from Surplus $'000	(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Complying non-Residential Charges *(Yes/No)*	(2c) Complying Trade Waste Fees & Charges *(Yes/No)*	(2d) DSP with commercial developer charges *(Yes/No)*	(2e) Liquid trade waste approvals & policy *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria[6] *(Yes/No)*	Proposed Dividend from Surplus $'000
LWUs with >10,000 Properties																								
1	Gosford	**56.7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1,314
2	Wyong	**52.1**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
3	Shoalhaven	**43.9**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1,418	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1,141
4	Rous (Bulk Supplier) (NO SGE)	**10.9**	Yes	Yes	Yes			Yes	Yes	Yes	Yes		Yes											
5	MidCoast (Unfiltered)	**48.1**	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
6	Tweed	**32.8**	Yes*	Yes	Yes	Yes	Yes	Yes	Yes		Yes				Yes*	Yes	Yes			Yes	Yes	Yes		
7	Port Macquarie-Hastings (Unfiltered)	**32.1**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	258	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	501
8	Riverina (Groundwater) (NO SGE)	**15.1**	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes													
9	Wagga Wagga (NO WS)	**12.2**													Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
10	Coffs Harbour (Unfiltered)	**37.1**	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
11	Albury City	**19.8**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
12	Fish River WS (Unfiltered, Bulk Supplier, N	**5.8**	Yes								Yes													
13	Tamworth Regional	**26.8**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	502	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	511
14	Clarence Valley	**19.0**	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes		Yes		Yes		
15	Eurobodalla (Unfiltered)	**19.1**	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	348	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	343
16	Wingecarribee	**19.9**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
17	Queanbeyan (Reticulator)	**15.7**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes		
18	Dubbo	**18.8**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
19	Orange	**21.0**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
20	Goulburn Mulwaree	**11.4**		Yes	Yes		Yes	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Yes	Yes	Yes	Yes		
21	Bathurst Regional	**14.3**		Yes			Yes		Yes							Yes	Yes	Yes	Yes	Yes		Yes		
22	Lismore (Reticulator)	**15.4**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	191	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	19
23	Bega Valley (Unfiltered)	**13.6**	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes				Yes	Yes	Yes	Yes		Yes		Yes		
24	Ballina (Reticulator)	**12.7**	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	350
25	Kempsey (Groundwater)	**12.5**	Yes	Yes	Yes			Yes	Yes			Yes			Yes		Yes	Yes	Yes	Yes	Yes			
26	Country Energy	**15.9**	Yes	Yes	Yes		Yes	Yes[e]	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes		Yes[e]		Yes	Yes	
27	Byron (Reticulator)	**14.0**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes			Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
28A	Goldenfields (Reticulator) (NO SGE)	**10.0**	Yes*		Yes	Yes		Yes	Yes															
28B	Goldenfields (Bulk) (NO SGE)	**7.7**						Yes	Yes															
% of LWUs 'Yes' (>10,000 connected properties)			93%	89%	93%	67%	84%	93%	96%	78%	85%	52%	**(Overall 83%[10])**		92%	88%	100%	79%	79%	100%	83%	96%	63%	**(Overall 87%[11])**	
LWUs with 3,001 - 10,000 Properties																								
29	Armidale Dumaresq	**7.9**	Yes*	Yes	Yes			Yes		Yes	Yes				Yes*							Yes		
30	Griffith	**12.4**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				Yes	Yes		Yes	Yes	Yes	Yes	Yes		
30A	Hawkesbury (NO WS)	**4.1**													Yes	Yes	Yes	Yes	Yes	Yes	Yes			
31	Lithgow	**7.2**	Yes		Yes		Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
32	Mid-Western Regional	**7.9**	Yes	Yes	Yes				Yes	Yes	Yes				Yes	Yes					Yes	Yes		
33	Richmond Valley	**9.7**	Yes	Yes	Yes		Yes	Yes	Yes		Yes				Yes	Yes	Yes	Yes		Yes	Yes	Yes		
34	Nambucca (Groundwater)	**6.1**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes		Yes		Yes	Yes	Yes	Yes	
35	Singleton	**8.3**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes		
36	Parkes	**8.5**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
37	Inverell	**5.6**	Yes	Yes	Yes			Yes							Yes	Yes			Yes	Yes		Yes		
38	Moree Plains (Groundwater)	**6.4**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
39	Cowra	**4.9**			Yes		Yes	Yes		Yes	Yes					Yes								
40	Central Tablelands (NO SGE)	**3.8**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes														
41	Muswellbrook	**8.6**	Yes	Yes	Yes	Yes	Yes	Yes							Yes	Yes	Yes	Yes		Yes	Yes		Yes	
42	Corowa	**4.3**	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		Yes		Yes		Yes			Yes	Yes	Yes	Yes	
43	Tumut	**5.2**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
44	Gunnedah (Groundwater)	**3.2**	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes				Yes		Yes		
45	Upper Hunter	**4.9**	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
46	Narrabri (Groundwater)	**3.6**		Yes	Yes				Yes							Yes				Yes	Yes			
47	Bellingen (Unfiltered)	**4.4**	Yes		Yes		Yes	Yes	Yes						Yes	Yes	Yes		Yes	Yes		Yes		
48	Leeton	**4.9**		Yes	Yes	Yes	Yes	Yes	Yes											Yes		Yes		
49	Young (Reticulator)	**4.0**	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes				Yes	Yes	Yes		Yes	Yes		Yes	Yes	

Table 3 - 2005/06 Best-Practice Management Compliance

	WATER UTILITY (sorted on connected properties)	WATER SUPPLY & SEWERAGE REVENUE ($M)	WATER SUPPLY: OUTCOMES FOR 6 BPM CRITERIA											
			(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Residential Charges >=50% in 2006/07, 60% in 2007/08, and 75% in 2008/09 *(Yes/No)*	(2c) Complying non-Residential Charges *(Yes/No)*	(2d) DSP with Commercial Developer Charges (Item 2(e) in Table 1) *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Sound Water Conservation implemented *(Yes/No)*	(5) Sound Drought Management implemented *(Yes/No)*	(6) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria5 *(Yes/No)*	Proposed Dividend from Surplus $'000
50	Cooma-Monaro	4.4	Yes	Yes	Yes			Yes	Yes		Yes			
51	Forbes	4.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
52	Snowy River (Unfiltered)	3.0	Yes*		Yes				Yes					
53	Berrigan (Dual Supply)	3.8	Yes		Yes			Yes	Yes	Yes	Yes			
54	Deniliquin	4.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
55	Warrumbungle	1.9	Yes*		Yes			Yes	Yes					
% of LWUs 'Yes' (3,001 - 10,000 connected properties)			89%	78%	100%	56%	62%	89%	85%	63%	70%	19%	(Overall 71%[10])	
LWUs with 1,501 - 3,000 Properties														
56	Yass Valley	3.0	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
57	Wellington	4.3	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	
58	Cootamundra (Reticulator)	2.8	Yes	Yes	Yes		Yes	Yes	Yes					
59	Lachlan	2.8	Yes		Yes	Yes	Yes		Yes		Yes			
60	Glen Innes Severn	2.3	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes			
61	Liverpool Plains	1.8			Yes	Yes	Yes	Yes			Yes			
62	Narromine (Groundwater)	2.1	Yes*	Yes	Yes	Yes	Yes		Yes					
63	Narrandera (Groundwater)	2.6	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes		
64	Dungog (Reticulator)	1.8	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes		
65	Murray (Dual Supply)	2.6	Yes*		Yes	Yes			Yes					
66	Cobar WB (Bulk Supplier, NO SGE)		Yes											
67	Cobar	2.2		Yes	Yes	Yes	Yes		Yes					
68	Tenterfield	1.8	Yes		Yes	Yes		Yes	Yes	Yes	Yes			
69	Temora (NO WS)	0.5												
70	Kyogle	1.6	Yes		Yes	Yes	Yes	Yes[e]	Yes	Yes	Yes	Yes		
71	Palerang	1.9	Yes*		Yes			Yes	Yes					
72	Bland (NO WS)	1.1												
73	Upper Lachlan	1.8	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes			
74	Wentworth (Dual Supply)	3.0	Yes		Yes	Yes	Yes	Yes	Yes					
75	Coonamble (Groundwater)	1.6	Yes	Yes	Yes		Yes	Yes[e]	Yes	Yes	Yes		Yes	
76	Harden (Reticulator)	1.7	Yes*		Yes		Yes	Yes	Yes					
% of LWUs 'Yes' (1,501 - 3,000 connected properties)			89%	47%	95%	58%	74%	79%	89%	47%	53%	26%	(Overall 66%[10])	
LWUs with 200 - 1,500 Properties														
77	Junee (NO WS)	0.5												
78	Blayney (NO WS)	1.0												
79	Walgett (Dual Supply)	2.0							Yes		Yes			
80	Greater Hume	1.6	Yes		Yes		Yes	Yes	Yes					
81	Gwydir	1.1	Yes		Yes		Yes		Yes		Yes			
82	Gloucester	1.7	Yes	Yes	Yes		Yes	Yes	Yes	Yes				
83	Oberon (Reticulator)	1.6		Yes	Yes		Yes	Yes	Yes					
84	Gilgandra (Groundwater)	1.1	Yes	Yes	Yes		Yes		Yes					
85	Uralla	1.1			Yes			Yes						
86	Hay (Dual Supply)	1.3	Yes		Yes		Yes	Yes[e]	Yes	Yes	Yes			
87	Bourke (Dual Supply)	1.5	Yes		Yes				Yes	Yes	Yes			
88	Wakool (Dual Supply)	1.6	Yes	Yes	Yes		Yes	Yes	Yes		Yes			
89	Bogan	1.2			Yes	Yes	Yes		Yes	Yes	Yes			
90	Guyra	1.2	Yes	Yes	Yes				Yes	Yes	Yes	Yes		
91	Cabonne	2.2	Yes	Yes	Yes	Yes			Yes					
92	Carrathool (Groundwater)	1.1			Yes		Yes		Yes					
93	Tumbarumba	1.2	Yes	Yes	Yes		Yes	Yes[e]	Yes	Yes				
94	Gundagai	0.7		Yes	Yes	Yes	Yes		Yes					
95	Weddin (NO WS)	0.2												
96	Warren (Dual Supply)	1.0	Yes	Yes	Yes	Yes		Yes[e]	Yes	Yes				
97	Bombala	0.8		Yes	Yes				Yes	Yes	Yes		Yes	
98	Walcha	0.8	Yes*	Yes	Yes	Yes	Yes		Yes		Yes			

	SEWERAGE: OUTCOMES FOR 4 BPM CRITERIA										
	(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Complying non-Residential Charges *(Yes/No)*	(2c) Complying Trade Waste Fees & Charges *(Yes/No)*	(2d) DSP with commercial developer charges *(Yes/No)*	(2e) Liquid trade waste approvals & policy *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria[6] *(Yes/No)*	Proposed Dividend from Surplus $'000
50		Yes	Yes		Yes	Yes		Yes			
51		Yes		Yes				Yes			
52	Yes*							Yes			
53	Yes		Yes			Yes		Yes			
54	Yes	Yes				Yes	Yes	Yes	Yes		
55						Yes		Yes			
% of LWUs 'Yes' (3,001 - 10,000 connected properties)	77%	77%	50%	38%	42%	77%	54%	92%	35%	(Overall 60%[11])	
LWUs with 1,501 - 3,000 Properties											
56	Yes		Yes		Yes	Yes	Yes	Yes	Yes		
57	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
58	Yes	Yes						Yes			
59	Yes	Yes	Yes				Yes	Yes			
60	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
61				Yes					Yes		
62	Yes*	Yes						Yes			
63	Yes							Yes	Yes		
64	Yes	Yes	Yes			Yes	Yes	Yes			
65	Yes*	Yes		Yes	Yes	Yes		Yes			
66											
67							Yes	Yes			
68	Yes		Yes		Yes	Yes	Yes	Yes			
69	Yes	Yes									
70	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	
71	Yes*	Yes				Yes					
72	Yes*	Yes	Yes			Yes		Yes			
73	Yes	Yes	Yes					Yes			
74	Yes	Yes				Yes		Yes			
75	Yes			Yes							
76	Yes*					Yes		Yes			
% of LWUs 'Yes' (1,501 - 3,000 connected properties)	90%	65%	45%	30%	30%	50%	40%	80%	25%	(Overall 51%[11])	
LWUs with 200 - 1,500 Properties											
77	Yes	Yes			Yes						
78	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			
79								Yes			
80	Yes*			Yes				Yes			
81	Yes			Yes					Yes		
82	Yes		Yes	Yes		Yes	Yes	Yes			
83			Yes	Yes	Yes	Yes					
84	Yes	Yes	Yes	Yes	Yes	Yes[e]	Yes	Yes		Yes	
85			Yes		Yes	Yes	Yes				
86	Yes					Yes[e]	Yes	Yes			
87	Yes	Yes						Yes			
88	Yes	Yes	Yes			Yes		Yes			
89		Yes						Yes			
90	Yes	Yes			Yes	Yes	Yes	Yes	Yes		
91	Yes			Yes	Yes	Yes	Yes	Yes			
92								Yes			
93	Yes		Yes		Yes	Yes[e]	Yes	Yes			
94		Yes		Yes				Yes			
95	Yes							Yes			
96	Yes	Yes	Yes					Yes			
97		Yes	Yes		Yes	Yes		Yes			
98	Yes*		Yes	Yes	Yes			Yes			

Table 3 - 2005/06 Best-Practice Management Compliance

	WATER UTILITY (sorted on connected properties)	WATER SUPPLY & SEWERAGE REVENUE ($M)	WATER SUPPLY: OUTCOMES FOR 6 BPM CRITERIA												SEWERAGE: OUTCOMES FOR 4 BPM CRITERIA											
			(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Residential Charges >=50% in 2006/07, 60% in 2007/08, and 75% in 2008/09 *(Yes/No)*	(2c) Complying non-Residential Charges *(Yes/No)*	(2d) DSP with Commercial Developer Charges (Item 2(e) in Table 1) *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Sound Water Conservation implemented *(Yes/No)*	(5) Sound Drought Management implemented *(Yes/No)*	(6) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria5 *(Yes/No)*	Proposed Dividend from Surplus $'000	(1) Complete Current SBP & FP *(Yes/No)*	(2) Pricing with full cost-recovery, without significant cross subsidies *(Yes/No)*	(2a) Complying Residential Charges *(Yes/No)*	(2b) Complying non-Residential Charges *(Yes/No)*	(2c) Complying Trade Waste Fees & Charges *(Yes/No)*	(2d) DSP with commercial developer charges *(Yes/No)*	(2e) Liquid trade waste approvals & policy *(Yes/No)*	(3) Complete performance Reporting Form by 15 September each year *(Yes/No)*	(4) Integrated Water Cycle Management Strategy Commenced *(Yes/No)*	Compliance with required Criteria[6] *(Yes/No)*	Proposed Dividend from Surplus $'000
99	Coolamon (NO WS)	**0.5**													Yes	Yes						Yes	Yes		
100	Balranald (Dual Supply)	**0.9**	Yes*	Yes	Yes		Yes		Yes						Yes*	Yes	Yes	Yes				Yes			
101	Murrumbidgee (Groundwater)	**0.6**	Yes*	Yes	Yes	Yes	Yes		Yes						Yes*	Yes						Yes			
102	Lockhart (NO WS)	**0.3**													Yes										
103	Central Darling (Dual Supply)	**0.8**		Yes	Yes	Yes		Yes[e]	Yes	Yes	Yes	Yes										Yes	Yes		
104	Boorowa	**0.7**		Yes	Yes		Yes	Yes[e]								Yes	Yes		Yes	Yes[e]					
105	Brewarrina	**0.8**		Yes					Yes		Yes					Yes						Yes			
106	Jerilderie (Dual Supply)	**0.6**	Yes	Yes	Yes				Yes						Yes	Yes		Yes				Yes			
107	Urana (NO WS)	**0.2**													Yes	Yes				Yes		Yes			
% of LWUs 'Yes' (200 - 1,500 connected properties)			60%	68%	92%	28%	60%	44%	92%	36%	44%	8%	**(Overall 53%[10])**		68%	55%	39%	38%	35%	39%	26%	81%	13%	**(Overall 44%[11])**	
	WS LWUs with >$5M revenue 23 WS LWUs with <$5M revenue 75 SGE LWUs with >$5M revenue 26 SGE LWUs with <$5M revenue 75																								
TOTAL 'YES' for large LWUs (>$10M revenue)[2]			21	22	22	16	20	22	23	18	20	13	14	5	24	23	25	20	20	26	22	25	15	14	7
% of Large LWUs (23 WS LWUs and 26 SGE LWUs)			91%	96%	96%	70%	87%	96%	100%	78%	87%	57%	61%	22%	92%	88%	96%	77%	77%	100%	85%	96%	58%	54%	27%
TOTAL 'YES' for remainder of LWUs (<$10M revenue)[2]			60	49	71	35	47	50	66	38	43	13	16	0	57	48	33	26	27	40	28	63	18	8	0
% of Small LWUs (75 WS LWUs and 75 SGE LWUs)			80%	65%	95%	47%	63%	67%	88%	51%	57%	17%	21%	0%	76%	64%	44%	34%	36%	53%	37%	84%	24%	11%	0%
TOTAL 'YES' for all LWUs			81	71	93	51	67	72	89	56	63	26	30	5	81	71	58	46	47	68	50	88	33	22	7
% all LWUs			83%	72%	98%	54%	71%	73%	91%	57%	64%	27%	31%	5%	80%	70%	57%	46%	47%	67%	50%	87%	33%	22%	7%
													(Overall 69%[10])												**(Overall 60%[11])**

Notes:

1 The reported compliances for each LWU are on the basis of Notes 2 or 3 of the Special Purpose Financial Reports of its 2005/06 Annual Financial Statements, supplemented by other data provided to DEUS by the LWU.

2 For LWUs with water supply only or sewerage only, the relevant revenue is $5M.

3 The revenue for LWUs responsible for water supply or sewerage only is shown left justified above.

4 Where an LWU has not yet reported its revenue for 2005/06, the revenue reported for 2004/05 is shown in italics bold above.

5 The required criteria for water supply in 2005/06 are (1), (2), (2a), (2b), (2c), (3), (4) and (5).

6 The required criteria for sewerage in 2005/06 are (1), (2), (2a), (2b), (2c), (2d), (2e) and (3).

7 Yes* in column (1) indicates that the LWU's strategic business plan and financial plan need to be updated.

8 Yes* in column 2c for water supply or column 2d 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] in these columns indicates the LWU is exempt from the requirement to prepare a DSP due to low growth (under 5 lots/a).

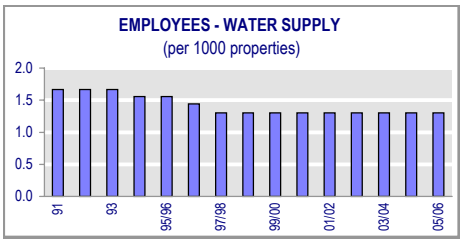
9 Bulk water suppliers are not required to meet criteria 2(a), 2(b) and 2(c), which refer to residential water tariffs.

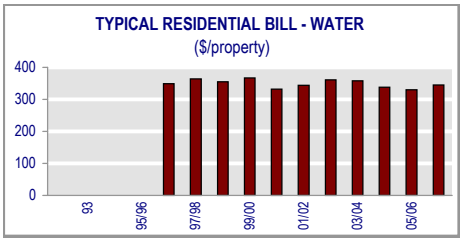
10 As shown above, the overall levels of compliance with the outcomes of the Best-Practice Management Critieria for water supply (Criteria 1,2,2a,2b,2c,2d,3,4,5 and 6) were: 83% for LWUs with >10,000 properties; 71% for LWUs with 3,001 - 10,000 properties; 66% for LWUs with 1,501 - 3,000 properties and 53% for LWUs with 200 - 1,500 properties respectively. The overall level of compliance for all LWUs was 69%.

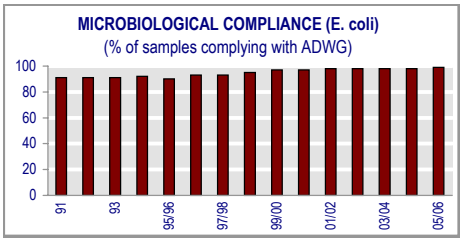
11 As shown above, the overall levels of compliance with the outcomes of the Best-Practice Management Critieria for sewerage (Criteria 1,2,2a,2b,2c,2d,2e,3 and 4) were: 87% for LWUs with >10,000 properties; 60% for LWUs with 3,001 - 10,000 properties; 51% for LWUs with 1,501 - 3,000 properties and 44% for LWUs with 200 - 1,500 properties respectively. The overall level of compliance for all LWUs was 60%.

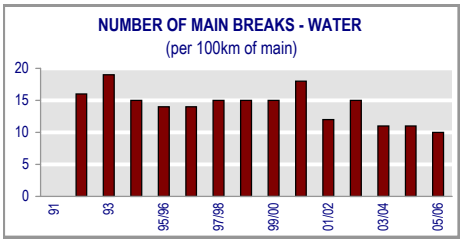
Table 4 - Trends in Statewide Performance Indicators - 1991 to 2005/06

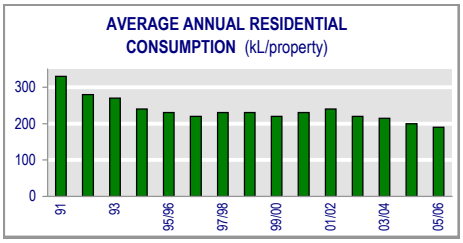
WATER SUPPLY	91	92	93	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07
UTILITY CHARACTERISTICS																
Employees (Employees/1000 properties)	1.7	1.7	1.7	1.6	1.6	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	
SOCIAL - Bills/Charges																
Typical Residential Bill ($/ property) (January 2006$)	January 2006$					349	364	355	367	332	344	361	358	338	330	345
SOCIAL - Health																
Compliance with Microbiological[3] Drinking Water Guidelines (% of samples complying)	91	91	91	92	90	93	93	95	97	97	98	98	98	98	99	
SOCIAL - Levels of Service																
Number of Main Breaks (per 100km of Main)		16	19	15	14	14	15	15	15	18	12	15	11	11	10	
ENVIRONMENTAL																
Annual Residential Consumption (kL/property)	330	280	270	240	230	220	230	230	220	230	240	220	215	200	190	
ECONOMIC - Financial																
Economic Real Rate of Return (%)					2.2	2.4	2.8	2.4	2.5	2.6	1.7	2.9	2.7	2.3	1.4	
ECONOMIC - Efficiency																
Operating (OMA) Cost ($/property) (January 2006$)	227	220	224	204	199	170	194	217	213	229	233	259	268	267	280	
Management Cost ($/property) (January 2006$)	69	69	80	75	69	72	80	96	89	92	98	102	105	103	110	

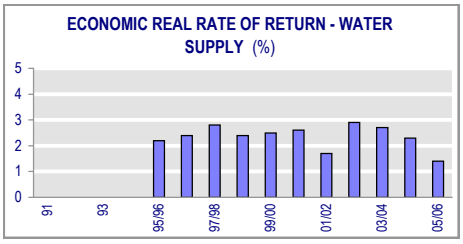


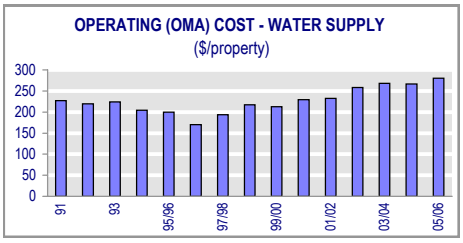












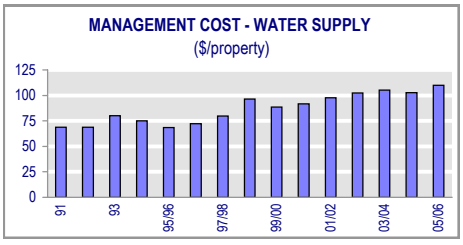
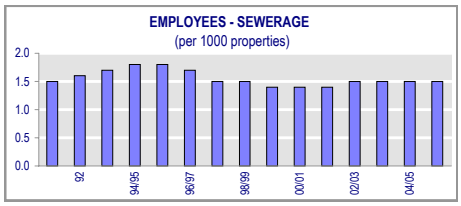
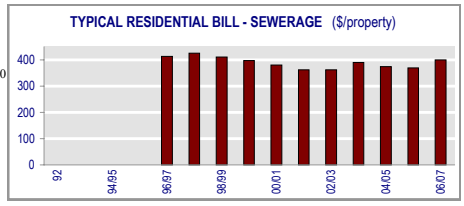


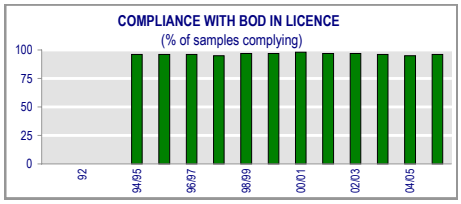
Table 4 - Trends in Statewide Performance Indicators - 1991 to 2005/06 cont'd

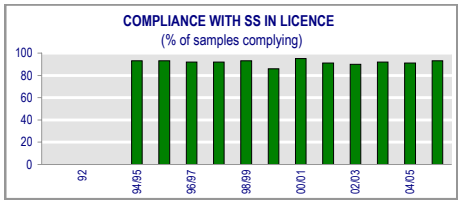
SEWERAGE

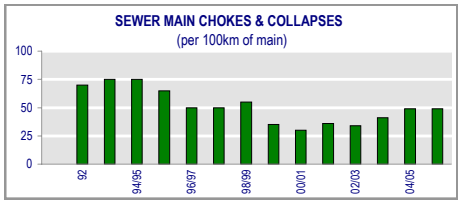
	91	92	93	94/95	95/96	96/97	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07
UTILITY CHARACTERISTICS																
Employees (Employees/1000 properties)	1.5	1.6	1.7	1.8	1.8	1.7	1.5	1.5	1.4	1.4	1.4	1.5	1.5	1.5	1.5	
SOCIAL - Bills/Charges																
Typical Residential Bill ($/property) (January 2006$)						413	425	411	398	380	362	362	390	375	370	400
ENVIRONMENTAL																
Compliance with BOD in Licence (% of samples complying)				96	96	96	95	97	97	98	97	97	96	95	96	
Compliance with SS in Licence (% of samples complying)				93	93	92	92	93	86	95	91	90	92	91	93	
Sewer Main Chokes and Collapses (per 100 km of Main)		70	75	75	65	50	50	55	35	30	36	34	41	49	49	
Sewer Overflows to the Environment (per 100 km of Main)					8	6	3	3	4	4	5	7	7	11	7	
ECONOMIC - Financial																
Economic Real Rate of Return (%)					3.0	2.5	3.5	3.3	2.8	2.6	2.8	2.1	1.9	1.8	2.4	
ECONOMIC - Efficiency																
Operating (OMA) Cost ($/property) (January 2006$)	208	208	218	212	209	228	248	246	254	251	259	273	272	270	290	
Management Cost ($/property) (January 2006$)	67	64	69	67	66	86	86	87	81	84	91	95	98	100	100	

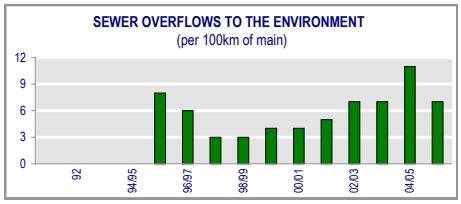


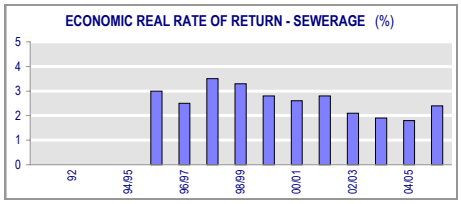


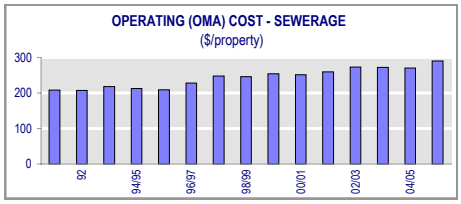


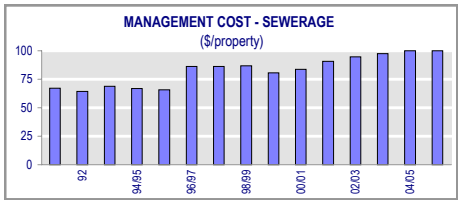












Notes:

1. The values shown are Statewide medians on a percentage of connected properties basis from 1991 to 2005/06, except for microbiological, BOD and SS compliance which are the percentage of samples complying.
2. 2004/05 and 2005/06 results are on the basis of E. coli in the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines (ADWG).
   1998/99 to 2003/04 results are on the basis of the 1996 NHMRC/ARMCANZ 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 - 2005/06 NSW Water Utility Performance Summary

	WATER UTILITY	Water Supply									Sewerage				Water Supply and Sewerage - 2005/06 unless noted							
		Water Supply Connected Properties (No.)[5]	Total Water Consumed Potable + Non-potable - Recycled (ML)[2]	Average Annual Residential Water Consumption (Potable) (kL/connected property)	Revenue ($M)[8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines) CHEMICAL Chemical[11] (%)	No. of Zones Complying	MICROBIOLOGICAL Microbiological: E. coli[12] (%)	No. of Zones Complying	% Pop'n with Microbiological Compliance	Revenue ($M)[2,8]	% Sge Treated that was Compliant (%)	Sewage Odour Complaints (per 1000 properties)	Recycled Water (% of effluent recycled)	Total Revenue ($M)	Net Profit After Tax ($M)	2006/07 Typical Residential Bill ($/assessment)	2006/07 Typical Developer Charge ($/ET)	OMA Cost ($/connected property)	Total Cost (OMA + depreciation) ($/connected property)	Management Cost ($/connected property)	Strategic Business Plans Prepared ?[15] (Yes/No)
		(1) NWI 1	(2) NWI 17	(3) NWI 49	(4) NWI 62	(7)	(7a) NWI 34	(8)	(8a) NWI 32	(8b) NWI 33	(9) NWI 64	(10) NWI 53	(11) NWI 41	(12) NWI 59	(13) NWI 62+64	(13a) NWI 71	(13b) NWI 21+25[17]	(14)	(17) NWI 75+77[18]	(17a) NWI 76+78[18]	(18)	(21)
	Sydney Water	1,706,200	528,000	203	**711**	100	13/13	100	13/13	100	**804**	100	1.1	4	**1,515**	266	709	5,700	349	552		
	Hunter Water	213,900	72,800	204	**90**	100	8/8	100	8/8	100	**100**	96	2.7	7	**190**	73	597	4,400	311	459		
	LWUs with > 10,000 Properties																					
1	Gosford	65,500	15,500	180	**23.4**	100	1/1	100	1/1	100	**33.3**	100	1.7	2	**56.7**	4.8	660	5,130	565	754	317	Yes
2	Wyong	60,130	14,100	163	**28.7**	100	1/1	100	1/1	100	**23.4**	100	1.0	8	**52.1**	2.6	671	4,500	488	739	191	Yes
3	Shoalhaven	44,630	16,100	171	**17.0**	100	4/5	100	4/5	100	**26.9**	85	0.8	30	**43.9**	12.1	742	8,320	538	749	238	Yes
4	Rous (Bulk Supplier) (NO SGE)	35,810	11,600		**10.9**	100	2/2	100	2/2	100	**NO SGE**				**10.9**	1.6		3,380	187	249	95	Yes
5	MidCoast (Unfiltered)	35,450	10,700	178	**21.7**	91	2/4	100	4/4	100	**26.4**	86	1.0	1	**48.1**	10.9	981	9,950	643	958	108	Yes
6	Tweed	28,200	9,500	208	**14.2**	94	1/3	100	3/3		**18.6**	95	1.1	3	**32.8**	6.9	784	7,820	592	912	256	Yes
7	Port Macquarie-Hastings (Unfiltered)	27,450	6,500	171	**16.3**	100	4/4	100	4/4	100	**15.8**	40	1.0	5	**32.1**	3.5	767	11,190	692	913	194	Yes
8	Riverina (Groundwater) (NO SGE)	26,610	16,300	362	**15.1**	100	13/14	100	13/14		**NO SGE**				**15.1**	2.6	341	2,800	255	401	73	Yes
10	Coffs Harbour (Unfiltered)	22,860	6,170	184	**16.9**	100	3/3	100	3/3	100	**20.2**	94	0.0	9	**37.1**	14.0	1027	11,290	592	832	221	Yes
11	Albury	22,610	9,700	302	**9.2**	100	2/2	100	1/2	100	**10.6**	88	0.3	73	**19.8**	-0.3	642	7,560	533	855	225	Yes
12	Fish River WS (Unfiltered, Bulk Supplier)	21,620	11,000		**5.8**	100	1/1	100	1/1		**NO SGE**				**5.8**							Yes
13	Tamworth Regional	19,130	10,400	319	**13.8**	94	6/7	100	5/7	95	**13.0**	64	0.0	2	**26.8**	9.7	960	5,240	629	916	203	Yes
14	Clarence Valley	18,180	7,390	238	**10.2**	100	5/7	100	4/7	100	**8.8**	76	0.9	8	**19.0**	4.3	826	12,140	677	915	339	Yes
15	Eurobodalla (Unfiltered)	18,780	4,420	159	**9.9**	100	1/1	100	1/1		**9.2**	99	0.2	10	**19.1**	0.9	967	17,270	701	985	279	Yes
16	Wingecarribee	17,150	4,740	192	**9.5**	92	1/3	100	3/3	100	**10.4**	98	0.3	2	**19.9**	5.1	836	12,500	511	808	258	Yes
17	Queanbeyan (Reticulator)	15,390	4,370	209	**8.6**	100	1/1	100	1/1		**7.1**	100	0.0	3	**15.7**	1.1	871	8,180	626	870	186	Yes
18	Dubbo	15,540	8,850	385	**9.7**	100	1/1	100	1/1	100	**9.1**	64	0.0	81	**18.8**	3.5	878	8,000	723	983	283	Yes
19	Orange	15,210	5,490	230	**12.3**	100	2/2	100	2/2	100	**8.7**	94	0.1	74	**21.0**	3.4	700	9,390	579	944	216	Yes
20	Goulburn Mulwaree	10,360	2,310	143	**5.1**	100	2/2	100	2/2	100	**6.3**		0.0	71	**11.4**	2.5	929	7,960	535	766	231	Yes*
21	Bathurst Regional	14,130	7,390	267	**7.6**	100	1/1	100	1/1	100	**6.7**	75	0.1	18	**14.3**	1.1	710	4,700	652	917	276	Yes*
22	Lismore (Reticulator)	13,750	4,010	196	**7.4**	100	1/1	100	1/1		**8.0**	98	0.2	3	**15.4**	4.7	784	6,610	614	828	138	Yes
23	Bega Valley (Unfiltered)	13,370	3,810	163	**6.6**	100	6/6	100	6/6	100	**7.0**	92	0.6	29	**13.6**	0.0	1011	18,300	816	1159	364	Yes
24	Ballina (Reticulator)	14,020	3,350	209	**5.1**	100	1/1	100	1/1	100	**7.6**		0.0	8	**12.7**	0.8	643	10,770	687	861	206	Yes
25	Kempsey (Groundwater)	12,030	4,090	178	**7.0**	100	8/8	100	8/8	100	**5.5**	104	1.7	11	**12.5**	1.4	939	13,770	665	903	223	Yes
26	Country Energy	10,850	6,060	317	**12.3**	100	2/2	100	2/2	100	**2.4**	82	0.2	37	**14.7**	1.0	724		1189	1469	498	Yes
27	Byron (Reticulator)	10,310	2,720	190	**4.7**	100	1/1	100	1/1	100	**9.3**	86	2.6	24	**14.0**	1.1	1013	15,680	829	1066	250	Yes
28A	Goldenfields (Reticulator) (NO SGE)	9,770	5,970	311	**10.0**	100	1/1	100	1/1	100	**NO SGE**				**10.0**		546	3,100	748	1034	96	Yes
28B	Goldenfields (Bulk Supplier) (NO SGE)	17,810	9,630		**7.7**	100	2/4	100	2/4		**NO SGE**				**7.7**				220	315	43	Yes
	Totals or Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties	*561,000*	*190,000*	*194*	*326.5*	*23 / 27 complied*		*27 / 27 complied with ADWG*			*294.3*		*0.3*	*9*	*621*	*1.4*	*805*	*8,200*	*628*	*908*	*225*	
	LWUs with 3,001 - 10,000 Properties																					
29	Armidale Dumaresq	8,090	3,110	243	**4.4**	100	1/1	100	1/1	100	**3.5**	100	0.3	20	**7.9**		690	8,580				Yes
30	Griffith	7,550	9,550	703	**7.5**	93	1/2	100	2/2	100	**4.9**	78	2.7	28	**12.4**	2.0	861	4,700	985	1357	350	Yes
31	Lithgow	7,550	2,140	170	**3.5**	92		100			**3.7**				**7.2**	0.4	734	1,790	349	426	331	Yes
32	Mid-Western Regional	6,520	2,420	286	**4.5**	100		100			**3.4**				**7.9**	1.2	1022	4,790	705	988	241	Yes
33	Richmond Valley	6,780	3,120	207	**3.6**	92	0/1	100	1/1	100	**6.1**	98	3.2	6	**9.7**	3.5	1085	13,470	771	946	325	Yes
34	Nambucca (Groundwater)	6,040	1,750	180	**2.6**	100	1/1	100	1/1	100	**3.5**	97	1.7	8	**6.1**	2.0	640	7,630	454	649	161	Yes
35	Singleton	5,900	3,140	335	**5.2**	100	1/1	100	1/1	100	**3.1**	83	0.8	50	**8.3**	3.5	788	6,580	537	828	168	Yes
36	Parkes	5,460	5,120	368	**6.6**	100	1/1	100	1/1		1.9			21	**8.5**	3.0	787	12,920	645	916	111	Yes
37	Inverell	5,320	1,950	231	**3.9**	100	2/3	100	3/3	100	1.7	95	0.0		**5.6**	1.1	836	7,960	593	832	209	Yes
38	Moree Plains (Groundwater)	4,440	3,220	484	**3.5**	100		94			**2.9**				**6.4**	0.9	1190	3,000	1047	1315	340	Yes
39	Cowra	5,240	2,130	255	**3.3**	100		95			1.6				**4.9**	-0.2	945	5,150	700	952	405	Yes*
40	Central Tablelands (NO SGE)	5,070	2,160	241	**3.8**	100	2/2	100	2/2	100	**NO SGE**				**3.8**	-0.1	425	5,940	465	679	201	Yes
41	Muswellbrook	4,900	2,640	344	**5.3**	100		100			**3.3**		0.0	88	**8.6**	3.5	1022	8,050	744	1058	199	Yes
42	Corowa	4,570	5,140	427	**2.3**	100	3/4	100	3/4	100	**2.0**	16	1.1	52	**4.3**	0.3	638	3,406	524	827	217	Yes
43	Tumut	4,200	1,610	310	**2.2**		0/5	100	5/5		**3.0**	99	0.0	0	**5.2**	1.6	792	8,520	501	873	109	Yes
44	Gunnedah (Groundwater)	4,310	2,650	336	**2.1**	100	4/4	87	1/4		1.1	75	0.0	90	**3.2**	0.9	569	5,340	355	519	108	Yes
45	Upper Hunter	4,010	1,780	294	**3.0**	100	3/4	100	4/4		1.9			5	**4.9**	1.4	859	7,640	668	875	270	Yes
46	Narrabri (Groundwater)	4,290	3,600	547	1.7	100	6/6	100	5/6	100	1.9		0.5	67	**3.6**	0.6	734	4,000	415	653	118	Yes*
47	Bellingen (Unfiltered)	3,970	1,490	272	**2.5**	100	2/2	100	2/2	100	1.9	82	2.4		**4.4**	-0.6	872	10,350	562	1454	251	Yes
48	Leeton	3,970	2,890	502	**2.6**	100	3/4	100	3/4		**2.3**		3.0		**4.9**	1.7	850	5,800	656	885	213	
49	Young (Reticulator)	4,160	1,520	242	**2.5**	100	1/1	100	1/1		1.5	92	0.0	15	**4.0**	1.5	808	3,000	414	498	55	Yes

Table 5 - 2005/06 NSW Water Utility Performance Summary

	WATER UTILITY	Water Supply									Sewerage				Water Supply and Sewerage - 2005/06 unless noted							
		Water Supply Connected Properties (No.)[5]	Total Water Consumed Potable + Non-potable - Recycled (ML)[2]	Average Annual Residential Water Consumption (Potable) (kL/connected property)	Revenue ($M)[8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines) CHEMICAL Chemical[11] (%)	No. of Zones Complying	MICROBIOLOGICAL Microbiological: E. coli[12] (%)	No. of Zones Complying	% Pop'n with Microbiological Compliance	Revenue ($M)[2,8]	% Sge Treated that was Compliant (%)	Sewage Odour Complaints (per 1000 properties)	Recycled Water (% of effluent recycled)	Total Revenue ($M)	Net Profit After Tax ($M)	2006/07 Typical Residential Bill ($/assessment)	2006/07 Typical Developer Charge ($/ET)	OMA Cost ($/connected property)	Total Cost (OMA + depreciation) ($/connected property)	Management Cost ($/connected property)	Strategic Business Plans Prepared ?[15] (Yes/No)
		(1) NWI 1	(2) NWI 17	(3) NWI 49	(4) NWI 62	(7)	(7a) NWI 34	(8)	(8a) NWI 32	(8b) NWI 33	(9) NWI 64	(10) NWI 53	(11) NWI 41	(12) NWI 59	(13) NWI 62+64	(13a) NWI 71	(13b) NWI 21+25[17]	(14)	(17) NWI 75+77[18]	(17a) NWI 76+78[18]	(18)	(21)
50	Cooma-Monaro	3,530	1,700	318	**2.3**	100		100			**2.1**				**4.4**	0.9	1134	1,910	701	981	259	Yes
51	Forbes	3,590	2,900	446	**2.6**	100	1/1	100	1/1	100	1.6	77	0.6	1	**4.2**	1.3	927	1,340	554	768	85	Yes
52	Snowy River (Unfiltered)	3,880	540	118	1.4	100	5/5	100	3/5	100	1.6	80	2.0		**3.0**		1008	6,500				Yes
53	Berrigan (Dual Supply)	3,290	1,960	237	**2.2**	100	4/4	100	4/4	100	1.6	23	2.9	7	**3.8**	0.7	896	5,900	592	876	185	Yes
	Totals or Medians (% of LWUs basis) for 3,001 - 10,000 Properties	*127,000*	*70,230*	*294*	*84.9*	*21 / 24 complied*		*22 / 25 complied with ADWG*			*62.1*		*0.8*	*20*	*147.0*	*1.2*	*850*	*5,420*	*592*	*875*	*209*	
	LWUs with 1,501 - 3,000 Properties																					
54	Deniliquin	3,150	2,950	533	**2.3**	100	1/1	92	0/1		1.8	92	2.6	99	**4.1**	0.5	936	3,580	766	1042	301	Yes
55	Warrumbungle	3,030	1,020	368	1.1	80	2/8	100	7/8	93	0.8		0.0	26	1.9		816	2,030				Yes
56	Yass Valley	2,900	860	193	1.6	75	0/1	100	1/1	100	1.4	100	0.0	32	**3.0**		907	12,970				Yes
57	Wellington	2,820	1,020	233	**2.7**	100		100			1.6				**4.3**	1.3	988	5,650	666	931	226	Yes
58	Cootamundra (Reticulator)	2,840	850	221	1.6						1.2	85	0.0	39	**2.8**	0.5	653	5,500	505	698	101	Yes
59	Lachlan	2,720	1,190	314	1.9	100		97			0.9			30	**2.8**	0.3	852		599	912	97	Yes
60	Glen Innes Severn	2,790	830	222	1.1	52	1/2	95	0/2		1.2			2	**2.3**	0.3	726	4,450	470	672	166	Yes
61	Liverpool Plains	2,530	950	238	1.1			100			0.7				1.8	0.2	550	610	513	735	146	
62	Narromine (Groundwater)	2,010	1,300	381	1.1		0/2	100	1/2	100	1.0		0.5		**2.1**	0.2	932	2,520	601	904	250	Yes
63	Narrandera (Groundwater)	2,010	1,390	463	1.5	25		100			1.1				**2.6**	0.8	876	1,000	827	955	219	Yes*
64	Dungog (Reticulator)	2,010	620	198	1.2	100	1/1	88	0/1		0.6	2	0.0	55	1.8	0.3	709	5,650	278	405	201	Yes
65	Murray (Dual Supply)	2,550	1,450	224	1.5	100	2/2	100	2/2	100	1.1		0.9	50	**2.6**	0.5	843	4,180	549	784	208	Yes
67	Cobar	2,220	2,240	675	1.6	100	1/1	100	1/1		0.6	100	0.0	25	**2.2**	0.2	1040	2,180	185	305	57	
66	Cobar WB (Bulk Supplier)	1,920									**NO SGE**											Yes
68	Tenterfield	1,900	430	171	1.0	100	2/3	93	2/3		0.8	28	0.0	26	1.8	0.0	866	3,000	780	1063	392	Yes
70	Kyogle	1,790	420	158	0.8	100	2/3	100	2/3	100	0.8	84	2.0	13	1.6	-0.2	849	2,000	573	994	216	Yes
71	Palerang	1,790	540	180	1.0	100		100			0.9				1.9		1376	10,310				Yes
73	Upper Lachlan	2,030	330	105	1.0	89		90			0.8				1.8	0.2	1063	4,500	603	835	181	Yes
74	Wentworth (Dual Supply)	2,130	1,960	66	**2.1**	100	3/3	100	3/3	100	0.9	90		3	**3.0**	0.2	1044	6,430	725	1216	155	Yes
76	Harden (Reticulator)	1,620	790	424	1.3						0.4	33	0.0	15	1.7	-0.1	1176	2,000	882	1163	151	Yes
75	Coonamble (Groundwater)	1,580	1,240	462	1.0	29	0/3	100	3/3	100	0.6	51	0.0	14	1.6	0.6	526		329	616	40	Yes
	Totals or Medians (% of LWUs basis excl bulk suppliers) for 1,501 - 3,000 Properties	*46,000*	*22,000*	*229*	*28.4*	*10 / 16 complied*		*12 / 18 complied with ADWG*			*19.1*		*0.0*	*26*	*47.5*		*871*	*3,700*	*599*	*904*	*181*	
	LWUs with 200 - 1,500 Properties																					
79	Walgett (Dual Supply)	1,590	2,620	614	1.4	100	2/2	100	2/2		0.6		0.0	83	**2.0**	-0.2	741		878	1402	198	
80	Greater Hume	1,500	680	319	0.8	100	1/1	100	1/1	100	0.8	72	0.0	22	1.6	-0.2	530	7,400	485	774	178	Yes
81	Gwydir	1,380	720	247	0.8	50	2/4	100	3/4		0.4				1.1		1204	2,000				Yes
82	Gloucester	1,610	410	181	1.0	100	2/2	97	1/2	73	0.7	42	2.0		1.7	0.1	774	11,460	788	1058	111	Yes
83	Oberon (Reticulator)	1,350	730	170	1.1	100	1/1	100	1/1	10	0.5	25	0.0		1.6	0.2	532	2,450	323	421	119	Yes*
84	Gilgandra (Groundwater)	1,350	860	433	0.7	100	1/1	100	1/1	100	0.5	75	3.7	100	1.1	0.3	841		397	586	50	Yes
85	Uralla	1,320	330	196	0.6	100		95			0.5				1.1	0.0	727	340	652	926	291	
86	Hay (Dual Supply)	1,300	1,700	191	0.7	100	1/1	100	1/1		0.6	90	0.0		1.3	0.0	804		587	967	154	Yes
87	Bourke (Dual Supply)	1,180	3,320	399	0.9	94	0/1	94	0/1		0.6		4.7		1.5	-0.2	1299	860	939	1426	243	Yes
88	Wakool (Dual Supply)	1,280	1,620	638	1.1	94	5/8	100	5/8		0.5				1.6	0.3	1435		594	915	109	Yes
89	Bogan	1,060	920	543	0.7	100	1/1	92	0/1		0.5		3.8		1.2	-0.2	1002		945	1285	404	
90	Guyra	1,170	440	248	0.7	100	1/1	93	0/1		0.5				1.2	0.1	1081	560	571	863	116	Yes
91	Cabonne	1,100	300	159	0.9	100	2/2	100	2/2	100	1.3			23	**2.2**	0.6	688	8,300	560	891	157	Yes
92	Carrathool (Groundwater)	1,090	940	488	1.0	75	2/5	100	4/5	100	0.1				1.1	-0.1	638	1,480	866	1090	90	Yes*
93	Tumbarumba	980	380	367	0.7	100	2/2	100	2/2	100	0.5				1.2	0.3	917	870	468	879	150	Yes
94	Gundagai	1,060	540	250	0.5	100	1/1	100	1/1	100	0.3		0.0	100	0.7	0.1	480	630	584	669	132	
96	Warren (Dual Supply)	960	740	219	0.5	100	2/3	81	0/3		0.6				1.0	0.2	903		553	860	134	Yes
97	Bombala	840	410	467	0.4	100	2/2	100	1/2	67	0.4	80	0.0	20	0.8	0.3	1064	3,150	523	675	188	Yes*
98	Walcha	880	260	223	0.5	100	1/1	100	1/1		0.3	75	0.0		0.8	0.0	871		722	986	152	Yes
100	Balranald (Dual Supply)	800	200	163	0.6	100		97			0.3		0.0		0.9	0.1	791	1,590	558	948	102	Yes
101	Murrumbidgee (Groundwater)	800	840	759	0.3	100	2/2	40	1/2	100	0.3		0.0	4	0.6	0.2	639	2,000	360	531	158	Yes
103	Central Darling (Dual Supply)	720	450	107	0.7	94	1/2	100	2/2	100	0.1				0.8	0.0	1148	400	996	1433		Yes*

Table 5 - 2005/06 NSW Water Utility Performance Summary

	WATER UTILITY		Water Supply								Sewerage				Water Supply and Sewerage - 2005/06 unless noted							
			Water Supply Connected Properties (No.)[5]	Total Water Consumed Potable + Non-potable - Recycled (ML)[2]	Average Annual Residential Water Consumption (Potable) (kL/connected property)	Revenue ($M)[8]	Water Quality Compliance (2004 NHMRC/NRMMC Guidelines) CHEMICAL: Chemical[11] (%)	CHEMICAL: No. of Zones Complying	MICROBIOLOGICAL: Microbiological: E. coli[12] (%)	MICROBIOLOGICAL: No. of Zones Complying	MICROBIOLOGICAL: % Pop'n with Microbiological Compliance	Revenue ($M)[2,8]	% Sge Treated that was Compliant (%)	Sewage Odour Complaints (per 1000 properties)	Recycled Water (% of effluent recycled)	Total Revenue ($M)	Net Profit After Tax ($M)	2006/07 Typical Residential Bill ($/assessment)	2006/07 Typical Developer Charge ($/ET)	OMA Cost ($/connected property)	Total Cost (OMA + depreciation) ($/connected property)	Management Cost ($/connected property)	Strategic Business Plans Prepared ?[15] (Yes/No)
			(1) NWI 1	(2) NWI 17	(3) NWI 49	(4) NWI 62	(7)	(7a) NWI 34	(8)	(8a) NWI 32	(8b) NWI 33	(9) NWI 64	(10) NWI 53	(11) NWI 41	(12) NWI 59	(13) NWI 62+64	(13a) NWI 71	(13b) NWI 21+25[17]	(14)	(17) NWI 75+77[18]	(17a) NWI 76+78[18]	(18)	(21)
104	Boorowa		620	210	372	0.3	100		100			0.3				0.7	0.2	824	900	462	679	58	
105	Brewarrina		480	1,170	506	0.5	100	2/2	95	0/2		0.3			81	0.8	0.1	1239		1165	1411	92	
106	Jerilderie (Dual Supply)		460	270	228	0.3	100	1/1	91	0/1		0.3	75		45	0.6	0.2	1136	3,180	791	937	190	Yes
	Totals or Medians (% of LWUs basis) for 200 - 1,500 Properties		*76,000*	*21,060*	*250*	*48.3*	*20 / 25 complied*		*15 / 25 complied with ADWG*			*31.8*		*0.0*	*45*	*80.1*		*841*	*2,000*	*586*	*921*	*150*	
LWUs without Water Supply																							
17	Wagga Wagga (NO WS)	**NO WS**	23,610									**12.2**	32	0.1	16	**12.2**	6.3	320	3,500	189	242	53	Yes
30A	Hawkesbury	**NO WS**	7,390									**4.1**				**4.1**	0.4	398	5,590	379	498		
69	Temora	**NO WS**	2,040									0.5			100	0.5	0.1	187	150	157	201	33	Yes
72	Bland	**NO WS**	1,810									1.1	83	0.0	45	1.1	0.3	405	1,000	257	402	75	Yes
77	Junee	**NO WS**	1,620									0.5			59	0.5	0.1	350	550	218	299	53	Yes
78	Blayney	**NO WS**	1,530									1.0	100	0.0	70	1.0	0.2	440	2,000	298	456	127	Yes
95	Weddin	**NO WS**	950									0.2				0.2	-0.1	178		127	274	27	Yes
99	Coolamon	**NO WS**	910									0.5		0.0	74	0.5	0.2	250		148	284	59	
102	Lockhart	**NO WS**	770									0.3				0.3		365	1,000				Yes
107	Urana	**NO WS**	300									0.2				0.2	0.0	200	4,100	325	488	116	Yes
	Totals or Medians (% of LWUs basis) for LWUs without WS		*41,000*									*20.5*		*0.0*	*64*	*20.5*		*335*	*1,885*	*218*	*299*	*56*	
	Statewide Totals[6]		761,000	304,000 ML (note 6)	Median 190kL/connected property (note 7)	$460M (note 6)	74 / 92 complied with ADWG		76 / 95 complied with ADWG (note 11)		(note 12)	$410M (note 6)				$870M (note 6)		Median $745 per assessment (note 7)	Median $7,600 per ET (note 7)	Median $570/ connected property (note 7)		Median $210/ connected property (note 7)	88 Yes 9 Yes* (note 15)

Notes

1. This table shows the key 2005/06 performance indicators/characteristics for NSW water utilities.
   A more detailed breakdown is provided in Tables 6 to 18 and Figures 1 to 83 of the *2005/06 NSW Water Supply and Sewerage Benchmarking Report* (www.deus.nsw.gov.au/water). This table enables LWUs to carry out an overall comparison of their performance with that of other NSW LWUs. However, ***it is important to ensure that any such comparisons are made with LWUs with similar businesses*** (refer to pages 7 to 12).
2. **No WS** means not responsible for water supply; **No SGE** means not responsible for sewerage.
3. In NSW in 2005/06, there were 110 water utilities comprising:
   - 3 metropolitan water utilities (Sydney and Hunter Water Corporations and Hawkesbury Council), and
   - 107 non-metropolitan Local Water Utilities (LWUs).

   The 107 LWUs comprised:
   - 102 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 107 LWUs,
   - 98 were responsible for water supply (including 3 for bulk supply - Cobar WB, Fish River WS & Rous Water)
   - 101 were responsible for sewerage.
   - 92 were responsible for both water supply and sewerage, 6 for water supply only and 9 for sewerage only.
4. Where an LWU has not reported an item for 2005/06, the value previously reported has been used where available. Such values are shown in this table in italics bold.
5. The number of connected properties for LWUs responsible for sewerage only (column (1)) is sewerage properties.
6. The totals shown above are for non-metropolitan NSW & therefore exclude Sydney & Hunter Water Corporations and Hawkesbury Council. The totals for the Water Supply Connected Properties (col (1)), Total Water Consumed (col (2)) and Revenue (column (4)) exclude double-counting where bulk water suppliers are involved.
   - **Total number of water supply connected properties** in non-metropolitan NSW was 760,000 (col (1)).
   - **Total annual water consumption** was 304,000 ML (column (2)).
   - **Total revenue** for water supply and sewerage was $870M (column (13)) and the current replacement cost of assets was $11,500M (column (19)).
7. Columns (3), (13), (14), (15), (26), (27) and (18) show that the Statewide medians (non-metropolitan) were:
   - **Average annual residential water consumption** - 190kL/connected property (column (3)).
   - **Typical residential bill** for water and sewerage - $745/assessment (column(13b). The 2006/07 typical residential bill for water supply has been calculated on the basis of each LWU's 2006/07 tariff using the 2005/06 average annual residential water consumption (column (3)). The typical residential bill for sewerage is based on the LWU's access charge (col (1)) of Table 7 except for 5 LWUs where account was also taken of the LWU's usage charges.
   - **Typical developer charge** for water and sewerage - $7,600/ET for 2006/07 (col (14)). For LWUs with water supply only or sewerage only, this is shown left justified in column (14) while the result for amalgamated LWUs are shown in brackets. Refer also to Tables 6 and 7.
   - **Economic real rate of return (ERRR)** for water and sewerage - 1.7% (column (25) of Table 5A). 71 of the 97 non-metropolitan LWUs reporting had a positive real rate of return. Refer also to Tables 6 and 7.
   - **Net Debt/equity** for water and sewerage - 4% (column (26) of Table 5A).
   - **Operation, maintenance and administration (OMA)** cost for water and sewerage - $570/connected property (column (17)). For water supply only or sewerage only utilities, the OMA cost is shown left justified in column (17). Refer also to Tables 6 and 7.
   - **Management cost** for water supply and sewerage - $210/connected property (column (18)). For water supply only or sewerage only LWUs, the management cost is shown left justified in column (18).
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*). 60 LWUs are Category 1 businesses (shown in bold in Cols (4) & (9)).
   Column (4) shows there were 58 LWUs responsible for water supply with a revenue of over $2M; and 41 such utilities responsible for sewerage (column (9).
9. **Pay-for-use water supply tariff** - 93 of the 95 water supply LWUs have a pay-for-use water supply tariff in 2006/07 (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** - 62 of the 95 LWUs have pay-for-use water supply pricing in 2005/06, residential tariffs independent of land value together with a positive ERRR (Tables 6 and 7) for each of water supply and sewerage. Such LWUs comply with the COAG Strategic Framework for Water Reform and the National Water Initiative.
11. **Physical and chemical water quality** - 95% of the 23,900 physical samples and 96% of the 33,800 chemical samples tested for NSW LWUs achieved 100% compliance with the 2004 NHMRC/NRMMC Guidelines. Col (7) shows that 74 out of 92 LWUs reporting complied with chemical water quality (health related).
12. **Microbiological water quality** - E.coli contamination is the primary health-related indicator.
    E.coli - 99% of the 18,000 samples tested for NSW LWUs achieved 100% compliance with the 2004 NHMRC/NRMMC Guidelines.
    76 out of 95 LWUs reporting complied with these guidelines (column 8).
13. **BOD** - 96% of the 4,360 sampling days for NSW LWUs achieved 100% compliance with the 90-percentile limit of their DEC licence for BOD (Biochemical Oxygen Demand).
    38 out of 69 LWUs licenced by the DEC achieved 100% BOD compliance.
    (6 LWUs had no DEC discharge licence (NL), 26 did not report)
14. **SS** - 93% of the 4,360 sampling days for NSW LWUs achieved 100% compliance with the 90-percentile limit of their DEC licence for SS (Suspended Solids).
    22 out of 68 LWUs licenced by the DEC achieved 100% SS compliance.
    (6 LWUs had no DEC discharge licence (NL), 27 did not report)
15. **Strategic Business Plans** - 88 LWUs have completed a sound water supply and/or sewerage Strategic Business Plan (col 21) and have demonstrated long term financial sustainability of their water supply and sewerage businesses to comply with National Competition Policy. A number of these plans now need updating.
    9 LWUs have prepared draft Strategic Business Plans for their businesses but further development of these draft business plans is required; these are shown as "Yes*" in column 21.
16. **Total Water Consumed** (col (2)) includes non-potable but excludes recycled water (see Table 8).
    However, NWI 17 includes nonpotable & recycled water. Similarly, NWI 49 includes recycled water whereas the Annual Residential Water Consumption reported in column (3) in the table is for potable water.
17. **The Typical Residential Bill (TRB)** shown in column (13b) is for 2006/07. However, NWI 21 & NWI 25 are defined as the TRB for 2005/06 and will therefore differ from those shown in column (13b).
18. **The OMA Cost and Total Cost** (cols(17) & (17a)) exclude the purchase cost of water. However, NWI indicators NWI 75, 76, 77 & 78 include the purchase cost of water and therefore may differ from the figures in cols (17) & (17a).
19. The performance indicators for Sydney and Hunter Water Corporations are from the *National Performance Report 2005-06 for Major Urban Water Utiilities* .

Table 5A - Water Supply and Sewerage - Levels of Service, Financial

	WATER UTILITY	LEVELS OF SERVICE									FINANCIAL															
		Billing Complaints (per 1000 properties) (22) NWI 26			Average Telephone Connect Time (seconds) (23) NWI 48			Net Greenhouse Emissions (tonnes CO2)) (24) NWI 51			Economic Real Rate of Return (%) (25) NWI 68			Net Debt to Equity (%) (26) NWI 69			Interest Cover (27) NWI 70			Dividend Paid ($'000) (29) NWI 72			CSOs ($'000) (30) NWI 73			% Revenue from CSOs (%) (31) NWI 74		
		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
	Sydney Water		3			20			355624			3.8	2.7		46			3			120,000			86,075			
	Hunter Water		6			90			63973			3.2	3.9		13			8			33,800			9,103			
LWUs with > 10,000 Properties																											
1	Gosford		0						28511		0.4	-0.7	0.7		-7			>100			1,313			987			2
2	Wyong										2.5	1.1	1.0		2			>100						2,313			4
3	Shoalhaven					1					4.2	4.0	1.7		-3			>100			2,559			1,642			4
5	MidCoast					5			9027		1.4	4.7	4.5		9			10						952			2
6	Tweed					30					1.9	5.3	1.2		-17			>100						1,356			4
9	Wagga Wagga										4.4	9.0	10.7					>100						282			2
7	Port Macquarie-Hastings		1			21			11556		4.6	2.1	1.4		-11			>100			759			1,189			4
11	Albury City		4						11028		3.9	0.2	0.3		2			2						604			3
10	Coffs Harbour		0								5.0	6.8	4.8		-9			>100						851			2
13	Tamworth Regional		3								0.6	3.3	5.7		-16			>100			1,013			645			2
15	Eurobodalla								6742		0.6	4.1	0.7		-2			>100			691			682			4
17	Queanbeyan		5			5			2		1.6	0.4	-0.5		-15			>100						302			2
19	Orange										4.6	1.9	3.6		-15			>100						487			2
20	Goulburn Mulwaree								810		3.4	2.7	3.8		13			12						318			3
18	Dubbo		3			30			8617		3.4	2.5	3.1		7			>100						333			2
16	Wingecarribee										2.6	2.7	3.5		-5			>100						485			2
14	Clarence Valley		1								2.2		1.5		-17			>100						733			4
21	Bathurst Regional		1								1.6	-0.6	0.6		-11			>100						338			2
24	Ballina					60					2.9	-1.7	-0.3		-20			>100			350			509			4
22	Lismore										3.6	2.8	3.1		-13			>100			210			449			3
	Totals or Medians (% of LWUs basis) for >10,000 Properties		*1*										*1.6*		*-9*												
LWUs with 3,001 - 10,000 Properties																											
23	Bega Valley		1			10			3547		-0.9	0.9	-0.2		-10			>100						524			4
27	Byron		4			20					4.1	0.0	2.6		1			>100						289			2
26	Country Energy		7						12172		6.2	-0.3	0.5											556			3
25	Kempsey		0			3					-0.1	4.4	1.7		-96			3						433			3
31	Lithgow		3			5					2.5	-0.5	1.8		-18									313			4
29	Armidale Dumaresq										1.5	-0.4															
30A	Hawkesbury										-0.3	-1.4	0.6					>100						-184			-4
30	Griffith		6									3.1	2.0		-11			>100						211			2
33	Richmond Valley		1									2.2	6.5		-15			>100						311			3
32	Mid-Western Regional		2			30					-0.8	2.8	1.6		-5			>100						233			3
34	Nambucca		11						1		0.7	3.4	3.4		-15			>100						249			4
35	Singleton										1.4	3.5	5.0		-27			>100						136			2
37	Inverell		1			5					1.5	1.3	2.9		-11			>100						231			4

Table 5A - Water Supply and Sewerage - Levels of Service, Financial

	WATER UTILITY	LEVELS OF SERVICE									FINANCIAL															
		Billing Complaints (per 1000 properties) (22) NWI 26			Average Telephone Connect Time (seconds) (23) NWI 48			Net Greenhouse Emissions (tonnes CO2)) (24) NWI 51			Economic Real Rate of Return (%) (25) NWI 68			Net Debt to Equity (%) (26) NWI 69			Interest Cover (27) NWI 70			Dividend Paid ($'000) (29) NWI 72			CSOs ($'000) (30) NWI 73			% Revenue from CSOs (%) (31) NWI 74		
		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
41	Muswellbrook										2.6	6.0	8.9			-22			>100								1
36	Parkes										3.4	2.0	4.3			-33			>100					202			2
42	Corowa			3			10				7.6	-0.1	-0.2			-15			>100					180			4
38	Moree Plains										3.6	2.5	2.1			6			>100								
44	Gunnedah			5							-0.1	1.4	3.1			-20			>100					93			3
46	Narrabri			9			35			1992	2.8	1.1	1.4			-18			>100					125			4
43	Tumut										0.6	2.4	2.9			-16			>100					140			3
49	Young			6							0.0	10.2	13.0			-34			>100					145			4
39	Cowra			2							4.9	-0.3	0.4			-8			5					191			4
45	Upper Hunter										0.2	3.6	3.4			-27			>100					144			3
52	Snowy River			14			30				1.8																
51	Forbes			1							2.9	3.2	4.4			-8			>100					115			3
50	Cooma-Monaro										2.3	2.2	3.2			-13			>100					116			3
53	Berrigan			8							1.1	1.4	1.5			-17			>100					144			4
	Totals or Medians (% of LWUs basis) for 3,001 - 10,000			*3*									*2.8*			*-15*											
	LWUs with 1,501 - 3,000 Properties																										
48	Leeton			3			20				4.1	2.2	4.6			-21			>100					120			2
54	Deniliquin			5						1	5.5	3.5	2.4			-24			>100					129			3
47	Bellingen										3.0	-0.1	-3.4			-26								180			4
60	Glen Innes Severn			22							3.6		1.2			-11			>100					105			5
58	Cootamundra			2							2.4	-1.6	3.2			-4			66					142			5
57	Wellington			117			40			701	0.7	3.0	8.1			11			11					118			3
91	Cabonne			23								4.9	3.8			-22			>100					80			4
80	Greater Hume						30					0.3	-1.3			-9			>100					75			5
59	Lachlan										4.1	-0.9	-0.4			-21			>100					82			3
65	Murray			1			10				-0.4	4.7	4.4			10			9					93			4
62	Narromine										4.7	-0.3	1.7			-28			>100					69			3
56	Yass Valley			3			10				2.1	3.6															
61	Liverpool Plains										-4.6	-1.1	-18.7			-24			>100					93			5
55	Warrumbungle										-0.4	-2.1															
69	Temora										1.2	-1.1	0.5						>100					45			10
71	Palerang			1							0.6																
72	Bland										0.0	1.0	4.9						>100					38			4
63	Narrandera										2.9	6.9	3.4			-39			>100					87			3
67	Cobar			3			3			48	5.1	0.1	0.1			-17			>100					44			2
74	Wentworth			10			5				4.6	0.1	2.0			7			3					64			2
75	Coonamble			1							1.3	-1.5	2.8			-50			>100					53			3
	Totals or Medians (% of LWUs basis) for 1,501 - 3,000			*3*									*2.2*			*-21*											

Table 5A - Water Supply and Sewerage - Levels of Service, Financial

WATER UTILITY		LEVELS OF SERVICE									FINANCIAL																	
		Billing Complaints			Average Telephone Connect Time			Net Greenhouse Emissions			Economic Real Rate of Return			Net Debt to Equity			Interest Cover			Dividend Paid			CSOs			% Revenue from CSOs		
		(per 1000 properties)			(seconds)			(tonnes CO2))			(%)			(%)						($'000)			($'000)			(%)		
		(22) NWI 26			(23) NWI 48			(24) NWI 51			(25) NWI 68			(26) NWI 69			(27) NWI 70			(29) NWI 72			(30) NWI 73			(31) NWI 74		
		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
LWUs with 200 - 1,500 Properties																												
70	Kyogle		4			1			401		1.7	-0.3	-1.6		-8									96			6	
77	Junee										-1.4	1.3	1.3					>100						35			6	
78	Blayney										0.1	3.3	2.5					72						27			3	
79	Walgett								911		2.1	-2.5	-3.5		-23									40			2	
68	Tenterfield		2								0.7	-4.3	-1.3		-18			>100						78			4	
84	Gilgandra		11			30			15		-2.5	1.0	3.6		-15			>100						47			4	
73	Upper Lachlan					60					-0.2	1.0	1.2		-2			13						55			3	
82	Gloucester								428			12.0	0.2		-18			>100						65			4	
87	Bourke											-4.0	-3.4		-14									20			1	
86	Hay		3								-2.2	-1.9	-0.6		-13			>100						44			3	
83	Oberon		5								0.1	1.5	2.1		-9			>100						33			2	
81	Gwydir		5								-0.7																	
64	Dungog					15					-2.1	5.3	3.3		-20			>100						78			4	
85	Uralla										0.9	0.0	-1.2		-18			>100						49			5	
95	Weddin										1.3	4.2	-13.8											25			15	
89	Bogan					10					-0.3	-0.9	-2.7		-15													
76	Harden		24								-1.2	-4.5	-2.2		-3									65			4	
88	Wakool										-9.7	2.0	1.9		4			7						47			3	
93	Tumbarumba		2								2.1	2.7	4.3		-24			>100						36			3	
94	Gundagai		8								1.0	0.0	0.3		-12			>100						35			5	
92	Carrathool		1								0.4	0.2	-1.6		-5									27			2	
96	Warren		31								2.9	-1.3	-0.4		-16			>100						27			3	
99	Coolamon										-0.3		5.1					>100						24			5	
102	Lockhart										2.2																	
98	Walcha		226								-0.4	-1.0	-0.8		-5									25			3	
100	Balranald		2								2.2	0.6	0.9		1			2										
97	Bombala					20					4.4	4.0	3.7		-17			>100						35			4	
101	Murrumbidgee		2								-1.2	2.2	2.3		-21			>100						25			4	
90	Guyra										0.9	1.1	0.9		-2			>100						45			4	
104	Boorowa										2.8	2.7	3.2		2			19						25			4	
105	Brewarrina										-3.5	3.7	3.4		-23			>100						7			1	
106	Jerilderie										1.2	3.0	4.4		-33			>100						18			3	
103	Central Darling		10			20					-0.5	-2.8	0.2		-5			>100										
107	Urana										4.1	0.3	0.1					14						7			4	
Totals or Medians (% of LWUs basis) for 200 - 1,500 Properties			*5*										*0.6*			*-14*											

CHARGES/BILLS TABLES

This section contains the following Charges/Bills Tables:

Table 6 - Water Supply - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA																RESIDENTIAL BILLS						COST RECOVERY									
		Type of Tariff	Access Charge (or Minimum)			Usage Charge								Operating Cost (OMA)			Typical Developer Charge			Typical Residential Bill			Average Residential Bill			ERRR			Residential Revenue from Usage Charges		Annual Residential Cnsmptn (Potable)**		Connected Properties
						Step 1				Step 2																						
			($)			Step (kL)		Charges (c/kL)		Step (kL)		Charges (c/kL)		(c/kL)			($/ET)			($/assessment)			($/property)			(%)			(% of residential		kL/property		
		(1) NWI 20	(2) NWI 20			(5a)		(5b)		(5c)		(5d)		(6)			(7)			(8) NWI 21						(12) NWI 66			(13) NWI 22		(14) NWI 49		(15) NWI 1
		2005/06	2004/05	2005/06	2006/07	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2003/04	2004/05	2005/06	04/05	05/06	06/07	03/04	04/05	05/06	03/04	04/05	05/06	04/05	05/06	04/05	05/06	05/06
	Sydney Water	Inclining Block	78	76	64	<400	<400	101	120	126	>400	>400	148	163	87	74	70	1,800	1,800	1,800	289	319	321				4.1	3.8	2.7	74	75	211	203	1,706,000
	Hunter Water	Declining Block	25	32	35	<1000	<1000	101	109	114	>1000	>1000	103	110	56	44	39	900	900	900	225	255	268				4.2	3.2	5.0	67	67	197	204	214,000
	LWUs with > 10,000 Properties																																
1	Gosford	Two Part	72	81	83	All	All	76	93	112					85	108	117	2,300	2,300	1,980	218	247	284	184	212	235	-1.1	-1.9	-1.3	73	71	180	180	65,500
2	Wyong	Two Part	83	92	108	All	All	76	93	112					75	91	101	2,500	2,500	2,500	225	244	290	206	213	237	4.1	2.2	1.4	66	68	178	163	60,130
3	Shoalhaven	Inclining Block	130	95	79	<450	<450	60	70	80	>450	>450	105	120	43	57	57	2,440	3,000	4,120	268	215	216	267	213	202	4.3	3.1	0.8	44	55	167	171	44,630
4	Rous (Bulk Supplier) (No Sge)		94	104	108	All	All	87	96	96						54	58	3,280	3,280	3,380							1.4	0.2	0.5					35,810
5	MidCoast (Unfiltered)	Two Part	168	140	130	All	All	71	120	135					79	92	86	4,000	3,800	4,800	358	354	371	325	178	360	5.3	4.2	6.6	58	70	204	178	35,450
6	Tweed	Two Part	106	90	95	All	All	68	82	104					62	68	76	4,330	4,330	4,330	255	261	311	212	241	248	3.4	4.2	1.1	68	68	221	208	28,200
7	Port Macquarie-Hastings (U	Inclining Block	185	113	110	<270	<270	93	125	138	>270	>270	250	276	111	111	143	7,010	7,850	8,040	351	327	346	326	353	368	4.2	2.3	1.3	49	71	186	171	27,450
8	Riverina (Groundwater) (No	Two Part	80	80	80	All	All	65	70	72						39	42	2,300	2,300	2,800	310	334	341	349	344	381	3.9	2.3	3.1	74	77	343	362	26,610
10	Coffs Harbour (Unfiltered)	Inclining Block	193	200	104	All	<365	131	136	182		>365		200	79	83	80	5,990	5,990	6,360	441	450	438	355	385	394	5.3	6.5	5.6	64	63	186	184	22,860
11	Albury City	Inclining Block	76	84	84	<250	<225	44	45	47	>275	>250	>225	88	90	94	42	32	52	2,125	2,125	3,400	225	243	262	221	221	240	1.0	0.1	-0.2	72	72	284	302	22,610
12	Fish River WS (Bulk Supplier) (No Sge)		MAQ	MAQ	MAQ											10											0.6	1.0						21,620
13	Tamworth Regional	Inclining Block	138	150	155	<450	<450	70	80	83	>450	>450	>450	75*	85	88	58	58	63	3,520	3,610	3,700	348	405	420	330	338	386	1.7	2.0	4.4	69	67	317	319	19,130
14	Clarence Valley	Two Part	160	90	96	All	All	77	98	105					54		72	4,140	4,140	4,140	321	323	346			371	8.9		1.0		21	178	238	18,180
15	Eurobodalla (Unfiltered)	Two Part	220	220	240	All	All	100	120	130					95	118	135	8,980	8,980	9,230	403	411	447	363	349	401	2.5	3.4	1.1	38	46	151	159	18,780
16	Wingecarribee	Inclining Block	197	197	99	<150	<300	53	53	124	>150	>150	>300	143*	143	185	55	62	72	2,510	2,510	5,500	368	336	336	401	385	389	5.6	4.1	4.5	49	46	220	192	17,150
17	Queanbeyan (Reticulator)	Inclining Block	230	238	247	<176	<176	95	100	145	>176	>176	>176	135	150	195	101	80	132	6,730	6,730	6,960	377	463	566	354	385	464	0.4	0.8	-0.1	49	55	185	209	15,390
18	Dubbo	Inclining Block	210	175	110	<550	<550	52	70	87		>550	>550		105	131	52	59	68	2,640	2,640	4,000	448	444	445	436	438	342	2.1	2.2	2.9	56	56	462	385	15,540
19	Orange	Inclining Block	280	102	102	<450	<450	55	141	141		>450	>450		212	212	81	103	90	5,870	5,870	6,050	393	427	427	375	417	420	2.7	3.6	6.0	30	75	221	230	15,210
20	Goulburn Mulwaree	Inclining Block	242	256	208	<292	<292	66	70	126	>400	>292	>292	148	157	181	124	124	124	2,860	2,860	2,860	339	356	388	408	297	397	1.1	0.3	1.5	40	37	93	143	10,360
21	Bathurst Regional	Inclining Block	250	250	259	>45	<300	50	50	43	>300	>255	>300	80	80	85	58	61	69	2,160	2,560	2,650	420	365	360	384	290	371	2.6	-0.1	0.3	24	41	283	267	14,130
22	Lismore (Reticulator)	Two Part	92	100	100	All	All	92	111	122					92	106	106	1,940	1,940	1,940	264	317	339	240	259	291	1.5	1.4	4.2	70	70	179	196	13,750
23	Bega Valley (Unfiltered)	Two Part	146	125	135	All	All	88	110	140					94	115	118	4,500	4,500	10,400	276	304	363	302	166	297	0.1	0.8	-0.2	18	65	178	163	13,370
24	Ballina (Reticulator)	Inclining Block	90	95	95	<350	<350	77	82	90	>350	>350	>350	100	105	120	94	101	134	4,510	4,510	4,510	270	267	283	239	248	260	0.6	-2.6	-1.7	17	64	220	209	14,020
25	Kempsey (Groundwater)	Two Part	265	265	265	All	All	83	86	89					53	62	78	7,470	7,470	7,470	429	418	422	387	380	356	3.6	6.6	1.9	37	32	187	178	12,030
26	Country Energy	Inclining Block	185	185	185	<400	<400	48	71	76	>200	>400	>400	75*	220	236	148	178	169				373	410	426	408	448	542	-0.1	0.7	-0.1	45	62	281	317	10,850
27	Byron (Reticulator)	Two Part	99	101	103	All	All	96	108	120					92	121	129	6,460	6,490	6,460	291	307	331	286	304	305	2.1	-0.3	1.1	69	68	214	190	10,310
28A	Goldenfields (Reticulator) (I	Two part	204	204	204	All	All	104	106	110					55	85	122	2,000	2,000	3,100	553	533	546	513	522	656	-0.4	-1.9	-2.3	63	65	311	311	9,770
28B	Goldenfields (Bulk Supplier) (No Sge)														41		41										-0.4	2.8	2.8	67	67			17,810
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties				*106*				*112*							*88*			*4,330*			*353*			*364*			*1.3*		*64*		*194*		
	LWUs with 3,001 - 10,000 Properties																																
29	Armidale Dumaresq	Inclining Block	180	219	219	<400	<200	75	77	77	>200	>400	>200	100*	103	103	90	91		3,620	3,620	4,520	369	407	418	339	375		-0.7	-0.6		8		253	243	8,090
30	Griffith	Inclining Block	168	153	135	<200	<200	25	30	35	>200	>200	>200	47	55	60	35	33	40	2,930	2,930	3,010	404	490	507	518	449	603	0.7	5.0	3.3	50	67	685	703	7,550
31	Lithgow	Inclining Block	260	200	206	<500	<500	51	85	85	>500	>500	>500	132*	160	160	90	116	124	2,230	2,230	2,230	369	344	372	371	374	386	0.7	-2.0	-1.9	27	44	181	195	7,550
32	Mid Western Regional	Two Part	265	265	292	All	All	96	96	104					81	108	90	2,800	2,800	2,800	531	575	627	501	575	519	2.0	2.7	1.2	42	42	286	322	6,520
33	Richmond Valley	Inclining Block	215	215	140	<200	<200	55	55	105	>200	>200	>200	80	80	150	73	77	85	2,330	2,330	4,800	385	330	360	265	326	338	2.0	2.8	1.6	39	37	286	207	6,780
34	Nambucca (Groundwater)	Two Part	86	85	85	All	All	90	90	100					61	58	58	3,780	3,780	3,890	254	247	265	233	230	219	4.5	3.6	4.3	66	65	205	180	6,040
35	Singleton	Two Part	194	194	180	All	All	77	77	77					58	61	59	2,730	2,730	4,110	425	452	438	417	366	370	9.8	5.4	6.6	52	57	309	335	5,900
36	Parkes	Inclining Block	350	295	295	<365	<365	30	60	65	>365	>365	>365	114	160	170	36	39	52	5,110	5,110	8,820	474	519	537	457	494	629	3.0	1.9	4.0	30	51	362	368	5,460
37	Inverell	Two Part	230	245	255	All	All	100	100	100					88	94	101	4,240	4,240	6,780	468	476	486	424	463	449	1.0	2.3	3.5	50	46	227	231	5,320
38	Moree Plains (Groundwater	Two Part	265	255	255	All	All	56	62	65					82	44	82	3,270	3,270	3,270	411	555	570	564	592	599	5.5	1.7	1.1	61	56	467	484	4,440
39	Cowra	Inclining Block	330	347	225	<500	<600	28	36	100	>500	>500	>600	57*	71	200	83	104	90	2,500	2,500	2,500	407	439	546	465	458	464	-0.7	-1.3	-1.6	15	24	240	321	5,240
40	Central Tablelands (No Sge)	Inclining Block	124	124	124	<450	<450	112	116	125		>450	>450		174	188		89	109	4,430	4,430	5,940	408	404	425	407	416	531	0.0	1.2	0.3	71	75	236	241	5,070

Table 6 - Water Supply - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA																		RESIDENTIAL BILLS						COST RECOVERY									
		Type of Tariff	Access Charge (or Minimum)			Usage Charge									Operating Cost (OMA)			Typical Developer Charge			Typical Residential Bill			Average Residential Bill			ERRR			Residential Revenue from Usage Charges		Annual Residential Cnsmptn (Potable)**		Connected Properties
						Step 1				Step 2																								
			($)			Step (kL)		Charges (c/kL)			Step (kL)			Charges (c/kL)			(c/kL)			($/ET)			($/assessment)			($/property)			(%)			(% of residential		kL/property		
		(1)	(2)			(5a)		(5b)			(5c)			(5d)			(6)			(7)			(8)			(9)			(12)			(13)		(14)		(15)
		NWI 20	NWI 20																				NWI 21						NWI 66			NWI 22		NWI 49		NWI 1
		2005/06	2004/05	2005/06	2006/07	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2003/04	2004/05	2005/06	04/05	05/06	06/07	04/05	05/06	06/07	03/04	04/05	05/06	03/04	04/05	05/06	04/05	05/06	04/05	05/06	05/06
41	Muswellbrook	Inclining Block	127	167	172	<350	<350	107	120	124		>350	>350		180	185	65	59	74	3,300	3,300	3,300	494	580	599	442	503	651	7.9	8.5	12.6	76	74	314	344	4,900
42	Corowa	Two Part	140	120	120	<999	All	10	50	50	>300	>1000		50	110		26	35	24	440	440	910	441	333	333	355	319	309	5.3	-0.5	0.0	35	59	587	427	4,570
43	Tumut	Inclining Block	296	89	72	<400	<400	59	80	82	>400	>400	>400	83	100	103	31	53	68	3,970	4,110	4,110	477	204	326	434	451	379	2.0	3.1	1.1	29	77	301	310	4,200
44	Gunnedah (Groundwater)	Inclining Block	278	125	130	<450	<450	63	45	55		>450	>450		90	95	36	33	38	3,390	3,390	3,390	278	276	315	388	389	397	3.6	2.5	3.5	24	63	367	336	4,310
45	Upper Hunter	Two Part	200	205	212	All	All	97	100	104							54	47	82	2,110	3,110	5,340	459	499	517	456	426	522	4.2	5.6	6.4	55	55	239	294	4,010
46	Narrabri (Groundwater)	Two Part	153	40	80	All	All	33	35	35							20	21	23	2,200	2,200	2,200	338	231	271	324	335	233	5.1	5.8	0.8	27	36	562	547	4,290
47	Bellingen (Unfiltered)	Two Part	207	214	222	All	All	62	64	66							62	67	63	6,300	6,300	6,450	346	388	402	348	239	389	1.8	0.5	-1.6	21	44	223	272	3,970
48	Leeton	Inclining Block	175	175	175	<350	<350	46	49	50	>400	>350	>350	55	64	67	39	47	49	2,600	2,600	2,600	461	444	452	497	461	477	3.4	2.5	3.5	64	66	524	502	3,970
49	Young (Reticulator)	Inclining Block	420	175	175	<100	<300	125	125	125		>100	>300		170	170	94	84	86	2,000	2,000	2,000	420	540	478	530	551	498	1.6	6.4	9.8	32	72	247	242	4,160
50	Cooma-Monaro	Two Part	342	342	342	All	All	52	60	73							69	69	69	2,340	2,340	2,340	505	533	574	524	561	522	7.7	6.5	6.7	35	35	344	318	3,530
51	Forbes	Inclining Block	298	186	140	<400	<450	30	61	64	>600	>400	>400	60	92	96	37	36	37	670	670	690	391	473	426	399	410	499	2.7	2.9	6.2	27	64	377	446	3,590
52	Snowy River (Unfiltered)	Two Part	262	455	299	All	All	42	44	48							31			2,500	2,500	4,000	511	570	570	387			1.8					542	118	3,880
53	Berrigan (Dual Supply)	Two Part	489	506	300	>250	All	55	57	90							44	47	57	4,200	4,200	4,200	489	673	566	525	480	534	1.6	2.5	2.9	15	11	247	237	3,290
53	Berrigan (Non Potable)	Two Part				>500	All	27	28	45																								450	***450***	
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties				*180*					*77*								*68*			*3,390*			*452*			*477*			*3.3*		*56*		*318*	
	LWUs with 1,501 - 3,000 Properties																																			
54	Deniliquin	Inclining Block	460	274	395	<400	<800	15	53	24	>800	>400	>800	31*	81	55	28	35	48	450	450	2,980	564	593	523	633	675	634	8.4	5.8	2.8	19	51	597	533	3,150
55	Warrumbungle	Two Part	345	419	217	>418	All	78	90	70							86	66		1,000	1,000	1,000	345	419	475	454	304			-2.1				368	***368***	3,030
56	Yass Valley	Two Part	171	196	200	All	All	110	115	120							96	109		8,490	8,490	8,700	396	418	432	410	386		2.8	1.5		58		195	193	2,900
57	Wellington	Inclining Block	380	310	175	<300	<300	65	95	145	>500	<500	<500	85	105	175	91	103	104	1,480	1,480	3,740	574	531	525	538	616	492	0.9	2.3	7.8	38	39	256	241	2,820
58	Cootamundra (Reticulator)	Inclining Block	298	96	100	<450	<450	113	123	126		>450	>450	99	246	250	101	100	107	2,000	3,000	3,000	359	367	378	446	415	406	2.4	1.8	2.3	20		239	221	2,840
59	Lachlan	Inclining Block	230	230	265	<300	<450	60	70	85	>300	>300	>450	100	100	128	46	96	77				658	454	532	411	415	488	-0.7	-2.3	-0.5	49	57	382	314	2,720
60	Glen Innes Severn	Inclining Block	88	88	88	<450	<450	130	130	130	>450	>450	>450	195	195	195	97		99	2,590	2,590	2,590	339	376	376	357		346	-0.6		-0.9		72	187	222	2,790
61	Liverpool Plains	Inclining Block	174	100	103	<300	<300	60	60	62		>300	>300		100	103	64	70	78	3,390	3,390	3,390	174	243	250	331	374	327	0.6	-1.0	-0.5	27	63	280	238	2,530
62	Narromine (Groundwater)	Two Part	200	175	165	All	All	50	62	65							40	47	50	500	1,300	1,300	532	437	413	415	432	469	1.9	0.6	4.6	58	67	656	381	2,010
63	Narrandera (Groundwater)	Two Part	236	225	220	All	All	51	58	56							32	34	46	1,000	1,000	1,000	520	491	404	475	541	560	4.3	7.5	5.8	52	59	445	327	2,010
64	Dungog (Reticulator)	Inclining Block	189	194	195	<220	<220	65	66	69	>220	>220	>220	129	133	138	56	107	115	2,700	2,700	2,700	310	325	331	353	363	416	1.5	3.0	1.7	39	41	175	198	2,010
65	Murray (Dual Supply)	Two Part	177	177	190	All	All	56	56	65							41	53	54	700	2,130	2,130	472	420	503	511	487	446	7.1	7.0	6.8	46	50	222	224	2,550
65	Murray (Non Potable)	Two Part	63	63	70	All	All	38	38	45																								390	460	
67	Cobar	Inclining Block	300	290	270	<450	<450	65	60	65	>500	>450	>450	130	100	110	31	38		1,410	1,410	1,410	616	1127	810	589	711	606	1.7	1.5	0.4	51	52	485	675	2,220
66	Cobar WB (Bulk Supplier) (No Sge)																																			1,920
68	Tenterfield	Two Part	278	210	175	All	All	71	112	141							98	154	165	1,500	1,500	1,500	423	402	416	322	379	331	1.6	-5.1	-1.6	34	50	163	171	1,900
70	Kyogle	Inclining Block	175	175	175	All	<200	100	105	105			>200			175	83	93	110	1,000	1,000	1,000	362	343	341	248	284	268	-1.6	-0.5	-8.6	60	57	135	158	1,790
71	Palerang	Inclining Block	130	160	266	<200	<200	85	92	100	>200	>200	>200	90	125	135	69			2,490	2,490	2,490	336	326	435				1.8					180	169	1,790
73	Upper Lachlan	Inclining Block	375	401	421	<300	<250	90	92	97	>300	>300	>250	100	110	116	108	170	154	1,600	1,600	3,000	543	498	595	471	482	440	3.9	1.8	1.4	32	31	148	179	2,030
74	Wentworth (Dual Supply)	Inclining Block	200	220	240	<250	<250	100	110	110	>250	>250	>250	250	260	260	32	35	51	2,880	2,880	3,150	524	646	619	653	752	625	0.8	0.7	2.7	58	57	104	66	2,130
74	Wentworth (Non Potable)	Inclining Block	100	110	130	<700	<700	30	35	35	>700	>700	>700	50	60	60																		680	560	
75	Coonamble (Groundwater)	Inclining Block	194	175	60	>360	<370	24	48	32			>370			48	11	13	24				270	348	222	361	291	470	3.8	2.9	8.6	13	23	621	462	1,580
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties				*195*					*85*								*78*			*2,590*			*432*			*458*			*2.0*		*52*		*224*	

Table 6 - Water Supply - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA																RESIDENTIAL BILLS						COST RECOVERY								
		Type of Tariff	Access Charge (or Minimum)			Usage Charge									Operating Cost (OMA)			Typical Developer Charge			Typical Residential Bill			Average Residential Bill			ERRR			Residential Revenue from Usage Charges		Annual Residential Cnsmptn (Potable)**		Connected Properties
						Step 1				Step 2																							
			($)			Step (kL)		Charges (c/kL)			Step (kL)			Charges (c/kL)			(c/kL)			($/ET)			($/assessment)			($/property)			(%)			(% of residential		kL/property		
		(1)	(2)			(5a)		(5b)			(5c)			(5d)			(6)			(7)			(8)			(9)			(12)			(13)		(14)		(15)
		NWI 20	NWI 20																				NWI 21						NWI 66			NWI 22		NWI 49		NWI 1
		2005/06	2004/05	2005/06	2006/07	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	2003/04	2004/05	2005/06	04/05	05/06	06/07	04/05	05/06	06/07	03/04	04/05	05/06	03/04	04/05	05/06	04/05	05/06	04/05	05/06	05/06
	LWUs with 200 - 1,500 Properties																																			
76	Harden (Reticulator)	Inclining Block	453	470	280	>300	<350	100	104	110		>350			150		88	108	121	2,000	2,000	2,000	619	782	776	909	894	1019	-2.6	-3.8	-2.2	42	44	418	424	1,620
79	Walgett (Dual Supply)	Unmetered	565	570	626	All	All										46	37	41				565	570	626	715	745	699	-1.9	-3.1	-4.8	13	13	523	614	1,590
79	Walgett (Non Potable)	Unmetered				All	All	Nil	Nil	Nil																								1100	1110	
80	Greater Hume	Inclining Block	425	425	60	>400	<200	90	90	60	>1000	>1000	>200	110	110	80	92	65	55	1,300	1,400	1,400	425	712	275	377	382	451	1.0	1.2	-1.0	21	24	318	319	1,500
81	Gwydir	Inclining Block	391	364	430	<450	<450	175	80	90		>450	>450		220	195				2,000	2,000	2,000	416	630	652									333	247	1,380
82	Gloucester	Two Part	230	225	225	All	All	110	118	124							140	165	156	5,580	5,380	5,540	521	438	449	453	478	491	-4.8	11.9	2.7	41	43	185	181	1,610
83	Oberon (Reticulator)	Two Part	91	94	98	All	All	97	100	104							37	46	44	1,100	1,100	1,060	287	264	275	338	345	362	3.0	2.0	4.5	48	49	167	170	1,350
84	Gilgandra (Groundwater)	Two Part	235	250	176	All	All	45	50	71							29	37	40				427	467	484	359	418	436	2.8	2.5	2.9	51	48	460	433	1,350
85	Uralla	Two Part	186	190	200	All	All	70	70	70							113	118	133	360	360	360	320	327	337	364	374		-0.4	-0.4	-1.4	42	39	196	***196***	1,320
86	Hay (Dual Supply)	Inclining Block	260	70	75	<300	<300	50	58	61	>300	>300	>300	80	87	92	25	24	26				360	371	409	352	342	335	-1.1	-1.9	-0.7	25	25	140	191	1,300
86	Hay (Non Potable)	Unmetered		220	230	All	All	Nil	Nil																									670	830	
87	Bourke (Dual Supply)	Two Part	450	170	176	All	All	37	50	110							22	18	22	400	400	400	590	549	807	621	726	739	-9.3	-5.7	-5.4	25	23	500	399	1,180
87	Bourke (Non Potable)	Unmetered		280	290	All	All																											1780	1790	
88	Wakool (Dual Supply)	Inclining Block	685	150	200	<400	<600	65	80	75		>400	>600		160	120	39	66	31				736	1078	998	559	772	549	2.2	1.8	1.5	9	18	589	638	1,280
88	Wakool (Non-Potable)	Unmetered		400	400																													1000	950	
89	Bogan	Inclining Block	195	195	195	<450	<450	60	70	72	>450	>450	>450	92	105	108	62	73	81				520	610	619	652	604	613	-0.7	-3.1	-5.2	65	63	476	543	1,060
90	Guyra	Inclining Block	232	245	270	<750	<450	88	92	100	>750	>750	>450	160	165	120	78	63	91	560	560	560	386	531	518	376	394	393	-0.6	1.0	1.6	46	43	319	248	1,170
91	Cabonne	Inclining Block	470	170	176	<300	<300	71	125	129	>300	>300	>300	115	275	284	88	111	138	400	400	4,150	577	390	380	602	528	488	1.8	2.1	1.5	12	71	176	159	1,100
92	Carrathool (Groundwater)	Inclining Block*	315	325	333	<350	<350	33	70	72	>1000	>350	>350	47	80	82	34	26	84	900	900	920	315	416	698	514	743	710	1.0	0.8	-1.5	50		493	488	1,090
93	Tumbarumba	Inclining Block	310	310	310	<400	<400	55	60	66	>500	>400	>400	87	90	98	55	59	58	410	410	440	453	530	552	473	489	494	5.5	3.0	6.7	27	23	364	367	980
94	Gundagai	Inclining Block	70	75	80	<300	<300	63	65	70	>300	>300	>300	83	85	90	57	70	67	600	600	630	266	238	255	300	216	231	-0.6	0.2	0.3	69	71	257	250	1,060
96	Warren (Dual Supply)	Inclining Block	365	210	220	<450	<450	60	70	73		>450	>450		105	110	32	40	42				365	382	438	444	449	442	0.6	-1.3	-0.4	20	52	170	219	960
96	Warren (Non Potable)	Inclining Block				<450	<450	Nil	25	26		>450	>450		45	47																		380	440	
97	Bombala	Inclining Block	373	373	385	<350	<350	43	44	46	>350	>350	>350	93	96	99	59	53	71	1,280	1,280	1,380	561	639	661	452	411	434	3.9	3.1	1.7	22	28	481	467	840
98	Walcha	Inclining Block	321	120	120	<300	<300	91	175	175		>300	>300		260	260	128	139	146				468	412	511	497	522	533	-0.3	-0.3	-0.6	40	74	167	223	880
100	Balranald (Dual Supply)	Two Part	340	171	180	All	All	55	57	60							16	25	41	910	910	910	505	530	522	539	457	516	1.4	0.7	1.3	21	29	150	149	800
100	Balranald (Non Potable))	200kL Allowance		181	181	>200	>200	20	21	22																								790	670	
101	Murrumbidgee (Groundwate	Two Part	180	180	180	All	All	20	20	21							21	24	19	1,000	1,000	1,000	296	332	339	347	328	323	2.4	1.3	2.1	52	50	570	759	800
103	Central Darling (Dual Supply)	Two Part	100	105	105	All	All	290	300	300							68	80	89				813	779	848	776	440	520	-4.2	-3.1	0.7	53	58	131	107	720
103	(Non Potable-Wilcannia	Unmetered	400	425	425	All	All																											550	400	
104	Boorowa	Two Part	300	310	80	All	All	100	105	120							83	89	86	400	400	400	517	513	527	502	493	507	3.1	5.7	2.2	42	41	215	372	620
105	Brewarrina	Unmetered	648	700	756	All	All										28	28	33				648	700	756	744	811	954	0.5	5.1	3.0	35	41	525	506	480
106	Jerilderie (Dual Supply)	Inclining Block	406	160	161	<200	<250	100	140	100	>600	>200	>250	90*	200	140	72	86	82	2,030	2,110	2,250	406	705	611	549	643	723	1.2	-0.5	2.1	16	34	217	228	460
106	Jerilderie (Non Potable)	300kL Allowance		225	230	>300	>300	37	37	45																								450	460	
	Medians (% of LWUs basis) for 200 to 1,500 Properties				*188*				*74*									*67*			*1,000*			*524*			*500*			*1.3*		*42*		*285*	

NOTES: 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).

** For LWUs with a dual water supply, the first row in column 14 is the potable supply while the second row labelled non-potable supply shows the Total Annual Residential consumption (ie. sum of the potable and non-potable consumption (see Note 12 on page 17).

As the potable residential consumption for Berrigan, Central Darling, Murray, Walgett and Wakool is calculated only for those towns with a dual supply (ie. excluding towns with only potable supply), it is lower than the value reported in column 14 above (see Note 12 on page 17).

For LWUs with a dual water supply, the TRB in column 8 is calculated using the potable consumptions shown in Note 12 on page 17.

Table 6A - Water Supply - 2006/07 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	219	P	Nil	up to 400 kL	77
							401 kL to 1000 kL	103
							>1000 kL	118
		Armidale, untreated	Inclining Block	219	P	Nil	up to 400 kL	38
							401 kL to 1000 kL	67
							>1000 kL	82
100	Balranald (Dual Supply)	Balranald	Two Part	180	P	Nil	All	60
		Balranald & Euston, Raw	200 kL Allowance	191	P	200	>200 kL	22
21	Bathurst Regional	Filtered	Inclining Block	259	P	Nil	0 to 300 kL	43
							>300 kL	85
		Raw	Inclining Block		P	Nil	0 to 45 kL	35
							46 kL to 300 kL	40
							>300 kL	70
53	Berrigan (Dual Supply)	Berrigan,Barooga,Finley(Potable)	Two Part	300	P	Nil	All	90
		Berrigan,Barooga,Finley(Non-Potable)	Two Part	300	P	Nil	All	45
		Tocumwal (Filtered)	Two Part	300	P	Nil	All	60
89	Bogan	Nyngan	Inclining Block	195	P	Nil	up to 450 kL	72
							>450 kL	108
		Nyngan, Raw Water (private)	Inclining Block	200			up to 450 kL	44
							>450 kL	65
		Hermidale	Annual Charge	452	P			
		Girilambone & Coolabah	Annual Charge	300	P			
97	Bombala	Bombala	Inclining Block	385	P	Nil	up to 350 kL	46
							>350 kL	99
		Delegate	Unmetered	294	P			
87	Bourke (Dual Supply)	Bourke, Filtered	Two Part	176	P	Nil	All	110
		Bourke, Raw	Unmetered	290	P			
105	Brewarrina	Brewarrina	Unmetered	756	O			
		Goodooga	Unmetered	621	O			
91	Cabonne	Molong	Inclining Block	176	P	Nil	up to 300 kL	129
							301 kL to 500 kL	284
							>500 kL	388
		Cumnock	Inclining Block	155	P	Nil	up to 300 kL	305
							301 kL to 500 kL	393
							>500 kL	414
		Yeoval	Inclining Block	130	P	Nil	up to 300 kL	165
							301 kL to 500 kL	227
							>500 kL	372
		North Yeoval Wellington	Inclining Block	130	P	Nil	up to 300 kL	165
							301 kL to 500 kL	227
							>500 kL	372
92	Carrathool	Carrathool	Inclining Block	333	P	Nil	up to 350 kL	72
							>350 kL	82
		Hillston	Inclining Block	150	P	Nil	up to 350 kL	47
							>350 kL	58
		Melbergen	Inclining Block	205	P	Nil	up to 400 kL	36
							>400 kL	67
		Goolgowi Rural Water	Inclining Block	500	P	Nil	<450 kL	47
							>450 kL	70
		Rankins Springs	500 kL Allowance	578	P	500	>500 kL	46
103	Central Darling	Wilcannia (Filtered)	Two Part	105	P	Nil	All	300
		Wilcannia (Raw)	Unmetered	425	P			
		White Cliffs, Raw	Two Part	400	P	Nil	All	330
		Ivanhoe (Raw)	Two Part	175	P	Nil	All	135
		Ivanhoe (Filtered)	Two Part	110	P	Nil	All	310
40	Central Tablelands	Central Tablelands	Inclining Block	124	P	Nil	up to 450 kL	125
							>450 kL	188
		Quandialla	Inclining Block	464	P	Nil	up to 200 kL/quarter	120
							after 200 kL/quarter	200

Table 6A - Water Supply - 2006/07 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)
67	Cobar	Cobar	Inclining Block	300	P	Nil	up to 450 kL	65
							451 to 550 kL	110
							>551 kL	160
75	Coonamble Shire	Coonamble	Inclining Block	60	P	Nil	<370 kL	32
							>370 kL	48
		Gulargambone, Quambone	Inclining Block	100	P	Nil	<430 kL	45
							>430 kL	67
42	Corowa	Corowa, Mulwala, Howlong	Two Part	120	P	Nil	All	50
		Balldale	Two Part	240	P	Nil	All	50
26	Country Energy	Broken Hill, Sunset Strp, Menindi (filtered)	Inclining Block	185	P	Nil	up to 400 kL	76
							> 400 kL	236
							extra 0.549kL/day for smmuer	76
		Pipeline Customers or Unfiltered Water	Inclining Block	185	P	Nil	up to 400 kL	47
							> 400 kL	109
39	Cowra	Cowra	Inclining Block	225	P	Nil	up to 600 kL	100
							>200 kL	200
		Raw Water	Inclining Block	225	P	Nil	up to 400 kL	92
							>400 kL	130
54	Deniliquin	Deniliquin, Filtered	Inclining Block	395	P	Nil	< 800 kL	24
							>800 kL	55
		Deniliquin, Raw	Flat rate	200	P	Nil	Unrestricted	
64	Dungog (Unfiltered)	Dungog	Inclining Block	195	P	Nil	up to 220 kL	69
							> 220 kL	137
		Clarence Town	Inclining Block	200	P	Nil	up to 220 kL	71
							> 220 kL	138
		Patterson District	Inclining Block	312	P	Nil	up to 220 kL	85
							> 220 kL	183
		Gresford	Inclining Block	426	P	Nil	up to 220 kL	77
							> 220 kL	188
84	Gilgandra (Groundwater)	Gilgandra	Two Part	250	P	Nil	All	50
		Tooraweenah	Two Part	67	P	Nil	All	105
60	Glen Innes Severn	Glen Innes	Inclining Block	88	P	Nil	up to 450 kL	130
							>450 kL	195
		Deep water	Inclining Block	88	P	Nil	up to 450 kL	60
							>450 kL	125
82	Gloucester	Gloucester	Two Part	225	P	Nil	All	118
		Barrington	Two Part	225	P	Nil	All	118
20	Goulburn Mulwaree Council	Goulburn	Inclining Block	208	P	Nil	up to 292 kL	126
							>292 kL	181
		Marulan	Inclining Block	300	P	Nil	<292 kL	118
							>292 kL	203
80	Greater Hume	Culcairn	Inclining Block	60	P	Nil	<200kL	60
							>200kL	80
		Villages	Inclining Block	109	P	Nil	<200kL	100
							>200kL	130
30	Griffith	Griffith (Filtered)	Inclining Block	135	P	Nil	up to 200 kL	35
							>200 kL	60
		Yenda (Dual), Filtered	Inclining Block	243	P	Nil	up to 200 kL	35
							>200 kL	60
		Yenda (Dual), Raw	Two Part		P	Nil	All	21
94	Gundagai		Inclining Block	80	P	Nil	up to 300 kL	70
							301 to 500 kL	90
							> 500 kL	140
44	Gunnedah (Groundwater)	Gunnedah	Inclining Block	130	P	Nil	up to 450 kL	55
							>450 kL	95
		Curlewis	440 kL Allowance	314	P	450	All	70
		Mullaley	440 kL Allowance	572	P	450	All	70
		Tambar Springs	440 kL Allowance	652	P	450	All	70

Table 6A - Water Supply - 2006/07 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)
90	Guyra	Guyra	Inclining Block	270		Nil	up to 450 kL	100
							>450 kL	120
		Tingha	Inclining Block	235		Nil	up to 450 kL	154
		Tingha Rural	Inclining Block	215		Nil	>450 kL	184
86	Hay (Dual Supply)	Hay (Filtered)	Inclining Block	75	P	Nil	up to 300 kL	61
							>300 kL	92
		Hay (Unfiltered)	unmetered	230				27
106	Jerilderie (Dual Supply)	Jerilderie, Filtered	Inclining Block	161	P	Nil	up to 250 kL	100
							>250 kL	140
		Jerilderie, Raw	unmetered	230	P			
61	Liverpool Plains Shire Council	Quirindi, Blackville,Caroona, Premer, Spring Ridge,Wallabadah, Willow Tree	Inclining Block	103	P	Nil	up to 300 kL	62
							>300 kL	103
		Werris Creek	Inclining Block	200	P	300	up to 300 kL	95
							>300 kL	155
38	Moree Plains Shire	Moree, Mungindi, Boggabilla, Pallamallawa	Potable,Two Part	255	P	Nil	All	65
		Garah, Boomi, Boggabilla, Gurley, Weemalah	Non-Potable, Two Part	255	P	Nil	All	46
65	Murray	Murray, Filt	Two Part	190	P	Nil	All	65
		Murray, Raw	Two Part	70	P	Nil	All	45
101	Murrumbidgee	Darlington Point	Two Part	180	P	Nil	All	21
		Coleambally	Two Part	200	P	Nil	All	20
46	Narrabri (Groundwater)	Narrabri	Two Part	80	P	Nil	All	35
		Narrabri, non - metered		170				
		Gwabegar	Two Part	175	P	Nil	All	51
		Wee Wa	Two Part	80	P	Nil	All	51
		Boggabri	Two Part	225	P	Nil	All	51
		Bellata	Two Part	316	P	Nil	All	51
		Pilliga	Two Part	200	P	Nil	All	51
71	Palerang	Bungendore	Inclining Block	266	P	Nil	up to 200 kL	100
							200-280 kL	135
							>280kL	155
		Braidwood	Inclining Block	266	P	Nil	up to 200 kL	100
							200-280 kL	135
							>280kL	155
		Captains Flat	Inclining Block	244	P	Nil	up to 200 kL	190
							>200 kL	220
8	Riverina (Groundwater) (No Sge)	WaggaWagga	Two Part	80	P	Nil	All	72
		Rural Towns & Villages	Two Part	100	P	Nil	All	72
35	Singleton	Singleton	Two Part	180	P	Nil	All	77
		Mt Thorley	Two Part	496	P	Nil	All	150
		Jerry's Plains /Broke Water	Two Part	180	P	Nil	All	120
13	Tamworth	Tamworth	Inclining Block	104	P	Nil	up to 450 kL	83
							451 to 900 kL	88
							> 900 kL	93
		Calala Backwash Water	Inclining Block		P	Nil	All	19
		Raw Water			P		up to 450 kL	57
							451 to 900 kL	62
							> 900 kL	67
		Dungowan Dam (if main crosses property)	Inclining Block	78	P	Nil	up to 450 kL	28
		Raw Water					451 to 900 kL	62
							> 900 kL	67
		Dungowan Dam (if main does not cross property)	Inclining Block	155	P	Nil	up to 450 kL	57
		& Conners Creek Dam (Raw Water)					451 to 900 kL	62
							> 900 kL	67
68	Tenterfield	Tenterfield	Two Part	175	P	Nil	All	141
		Jennings	Two Part	210	P	Nil	All	141
		Urbenville	Two Part	320	P	Nil	All	63
93	Tumbarumba (Unfiltered)	Tumbarumba	Inclining Block	310	P	Nil	up to 400 kL	66
							>400 kL	98
		Khancoban, metered	IncliningBlock	350	P	Nil	up to 400 kL	67
							>400 kL	101

Table 6A - Water Supply - 2006/07 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)
43	Tumut		Tumut	72		Nil	up to 400 kL	82
							> 400 kL	103
							up to 400 kL	34
			Tumit Raw Water	included in the above				
							> 400 kL	45
45	Upper Hunter Shire Council	Murrurundi	Two Part	280	P	Nil	All	127
		Merriwa/Cassilis	Two Part	212	P	Nil	All	85
		Aberdeen/Scone	Two Part	212	P	Nil	All	104
73	Upper Lachlan Council	Crookwell	Inclining Block	421	P	Nil	up to 250 kL	97
							> 250 kL	116
		Taralga	Inclining Block	348	P	Nil	up to 250 kL	90
							> 250 kL	117
		Dalton Water	Inclining Block	416	P	Nil	up to 250 kL	119
							> 250 kL	150
		Gunning	Inclining Block	189	P	Nil	up to 250 kL	60
							> 250 kL	90
85	Uralla	Uralla	Two Part	200	P	Nil	All	70
		Bundarra	Two Part	500	P	Nil	All	70
88	Wakool (Dual Supply)	Barham, Tooleybuc, Moulamein(Filtered + Raw Water)	Inclining Block, Raw Water is unmetered	200+400	O	Nil	up to 600 kL	75
							>600 kL	120
		Wakool , Murray Downs, Koraleigh (Filtered)	Inclining Block	200	O	Nil	up to 600 kL	75
							>600 kL	120
98	Walcha	Treated	Inclining Block	124	P	Nil	up to 300 kL	181
							> 300 kL	270
		Untreated	Two part	62	P	Nil		91
79	Walgett	Walgett Shire Water Charge	Unmetered	626	P			
		Lightening Ridge	Unmetered	570				
		Collarenebri	Unmetered	650				
		Carinda Water Charge	Unmetered	280	P			
		Carinda Bore Water Charge	Unmetered	266	P			
		Rowena Water Charge	Unmetered	320	P			
96	Warren (Dual Supply)	Warren Bore Water	Inclining Block	220	P	Nil	up to 450 kL	73
							>450 kL	110
		Warren River Water	Inclining Block			Nil	up to 450 kL	25
							>450 kL	45
		Nevertire	Inclining Block	84	P	Nil	up to 450 kL	42
							>450 kL	63
		Collie	Inclining Block	84	P	Nil	up to 400 kL	89
							>400 kL	132
55	Warrumbungle, Northern	Coonabarabran	Two part	217	P	Nil	All	70
		Timore Dam (Raw)	Two part	217	P	Nil	All	70
		Baradine	Two part	217	P	Nil	All	110
		Binnaway	Two part	217	P	Nil	All	110
		Villages: Bugaldie, Kenebri	Two part	427	P	Nil	All	90
	Warrumbungle, Southern	Southern, Coolah, Dunedoo & Mendooran	Inclining Block	267	P	Nil	<300 kL	74
							301 to 500 kL	92
							501 to 800 kL	106
							> 800 kL	121
		Village	Two part	589			All	90
57	Wellington	Wellington, Geurie	Inclining Block	175	P	Nil	up to 300 kL	145
							301 to 500 kL	175
							500 to 10000kL	175
							>10000 kL	180
74	Wentworth (Dual Supply)	Filtered	Inclining Block	240	P	Nil	up to 250 kL	110
							>250 kL	260
		Raw	Inclining Block	130	P	Nil	up to 700 kL	35
							>700 kL	60
56	Yass Valley	Yass, Bowning, Binalong & Rural Areas	Two Part	200	P	Nil	All	120
		Murrumbateman	Two Part	149	P	Nil	All	120
49	Young (Reticulator)	Young	Inclining Block	175	P	Nil	up to 50 kL (1st & 4th quarter)	125
							>50 kL	170
							up to 100 kL (2nd & 4th quarter)	125
							>100 kL	170

Table 6B - Water Supply - 2006/07 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(c) of BPMG (8)
11	Albury City	Albury	Inclining Block	84	Meter Size* (eg 40mm:$336)	P	Nil	up to 225 kL	47	P
								226 kL to 19999kL	94	
								>19999	67	
29	Armidale Dumaresq	Armidale	Inclining Block	219	Uniform Access Charge	P	Nil	Up to 400 kL	77	O
								401 kL to 1000 kL	103	
								>1000 kL	118	
		Armidale, Untreated Water	Inclining Block	219	Uniform Access Charge	P	Nil	Up to 400 kL	38	
								401 kL to 1000 kL	67	
								>1000 kL	82	
24	Ballina (Reticulator)	Ballina	Inclining Block	95	Service Connection Size* (eg. 40mm $380)	P	Nil	<350 kL	90	P
								>350 kL	120	
100	Balranald (Dual Supply)	Balranald & Euston, Raw	200 kL Allowance	191	Service Connection Size* (eg. 40mm $764)	P	200	>200 kL	22	P
		Balranald	Two Part	180	Service Connection Size* (eg. 40mm $721)	P	Nil	All	60	
21	Bathurst Regional	Bathurst (Filtered)	Inclining Block	259	Service Connection Size* (eg. 25mm $404; 40mm $1036)	P	Nil	<300kL	55	P
								>300 kL	85	
		Bathurst (Raw)	Inclining Block	259	Service Connection Size* (eg. 25mm $404; 40mm $1036)	P	Nil	<300kL	40	
								>300 kL	70	
23	Bega Valley (Unfiltered)	Bega Valley	Two Part	135	Service Connection Size* (eg. 40mm $540)	P	Nil	all	140	P
47	Bellingen (Unfiltered)		Two Part	222	Meter Size*: eg 40mm $888	P	Nil	All	66	P
53	Berrigan (Dual Supply)	Berrigan,Barooga,Finley(Potable)	Two Part	300	Uniform Access Charge	P	Nil	All	90	O
		Berrigan,Barooga,Finley(Non-Potab	Two Part	300	Uniform Access Charge	P	Nil	All	45	
		Tocumwal (Filtered)	Two Part	300	Uniform Access Charge	P	Nil	All	60	
89	Bogan	Nyngan	Inclining Block	195	Service Connection Size* (eg. 25mm $305; 40mm $780)	P	Nil	<450 kL	72	P
								>450 kL	108	
		Nyngan, Raw Water (private)	Inclining Block	200			Nil	up to 450 kL	44	
								>450 kL	65	
		Hermidale	Annual Charge	452						
		Girilambone & Coolabah	Annual Charge	300						
97	Bombala	Bombala	Inclining Block	386	Uniform Access Charge	P	Nil	up to 350 kL	46	O
								>350 kL	99	
		Delegate	Unmetered	294	Uniform Access Charge	P				
104	Boorowa	Boorowa	Two Part	80	Uniform Access Charge	P	Nil	All	120	O
87	Bourke (Dual Supply)	Bourke, Filtered	Two Part	176	Uniform Access Charge	P	Nil	All	110	O
		Bourke, Raw	Unmetered	290	Uniform Access Charge					
105	Brewarrina	Brewarrina	Unmetered	756	Land Value	O				O
		Goodooga	Unmetered	621	Land Value	O				O
27	Byron (Reticulator)	Byron	Two Part	103	Service Connection* (40mm: $412)	P	Nil	All	120	P
91	Cabonne	Molong	Inclining Block	176	Uniform Access Charge	P	Nil	<300 kL	129	O
								301 kL to 500 kL	284	
								>500 kL	388	
		Cumnock	Inclining Block	155	Uniform Access Charge	P	Nil	<300 kL	305	
								301 kL to 500 kL	393	
								>500 kL	414	
		Yeoval	Inclining Block	130	Uniform Access Charge	P	Nil	<300 kL	165	
								301 kL to 500 kL	227	
								>500 kL	372	
		North Yeoval Wellington	Inclining Block	130	Uniform Access Charge	P	Nil	<300 kL	165	
								301 kL to 500 kL	227	
								>500 kL	372	
92	Carrathool	Carrathool	Inclining Block	333	Meter Size (40mm $500)	P	Nil	<350kL	72	P
								>350kL	82	
		Hillston	Inclining Block	150	Meter Size (40mm $225)	P	Nil	<350kL	47	
								>350kL	58	
		Melbergen	Inclining Block	205	Uniform Access Charge	P	Nil	<400 kL	38	
								>400 kL	67	
		Goolgowi Rural Water	Inclining block	500	Uniform Access Charge	P	500	<450 kL	47	
								>450 kL	70	
		Rankins Springs	500 kL Allowance	578	Uniform Access Charge	P	500	>500 kL	46	

Table 6B - Water Supply - 2006/07 Non-Residential Tariffs

	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(c) 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)
103	Central Darling	Wilcannia (Filtered)	Two Part	105	Uniform Access Charge	P	Nil	All	300	O
		Wilcannia (Raw)	Unmetered	425	Uniform Access Charge	P	Nil			
		White Cliffs, Raw	Two Part	400	Uniform Access Charge	P	Nil	All	330	
		Ivanhoe (Raw)	Two Part	175	Uniform Access Charge	P	Nil	All	135	
		Ivanhoe (Filtered)	Two Part	110	Uniform Access Charge	P	Nil	All	310	
40	Central Tablelands	Central Tablelands	Inclining Block	124	Meter Size*(40mm:$496)	P	Nil	All	125	P
		Quandialla	Inclining Block	464		P	Nil	up to 200 kL/quarter	120	
								after 200 kL/quarter	200	
14	Clarence Valley		Two Part	96	Service Connection Size (40mm:$385)	P		All	77	P
67	Cobar (Dual Supply)	Cobar	Inclining Block	300	Service Connection Size (40mm:$600)	P	Nil	<450 kL	65	P
								451 - 550 kL	110	
								>551 kL	160	
10	Coffs Harbour (Unfiltered)	Coffs Harbour, Nana Glen, Coramba	Two Part	104	Uniform Access Charge	P	Nil	All	182	O
50	Cooma-Monaro	Cooma, Bredbo, Nimmitabel	Two Part	342	Uniform Access Charge	P	Nil	All	73	O
75	Coonamble Shire	Coonamble	Inclining Block	60	Meter Size 40mm :240	P	Nil	<370 kL	32	P
								>370 kL	48	
		Gulargambone, Quambone	Inclining Block	100	Meter Size 40mm :400	P	Nil	<430 kL	45	
								>430 kL	67	
58	Cootamundra (Reticulator)	Cootamundra	Inclining Block	182	Meter Size: 40 mm $728	P	Nil	<450	126	P
								>450	252	
42	Corowa	Corowa, Mulwala, Howlong	Two Part	120	Uniform Access Charge	P	Nil	all	50	O
		Balldale	Two Part	240	Uniform Access Charge	P	Nil	all	50	
26	Country Energy	Broken Hill, Sunset Strp, Menindi, F	Inclining Block	185	Service Connection* (eg.40mm $794)	P	Nil	0 kL to 400 kL	76	P
								> 400 kL	236	
								extra 0.549kL/day for	76	
		Chlorinated	Inclining Block	185	Service Connection* (eg.40mm $794)	P	Nil	0 kL to 200 kL	64	
								> 400 kL	224	
								extra 0.549kL/day for	64	
		Untreated	Two Part	185	Service Connection* (eg.40mm $794)				112	
		Effluent Water	Two Part	185	Service Connection* (eg.40mm $794)	P	Nil	all	32	
39	Cowra	Cowra, Rural, Commercial, Governm	Two Part	115	Meter Size: 40 mm $460	P	Nil	All	90	P
		Cowra, Industrial	Two Part	116	Meter Size: 40 mm $460	P	Nil	All	51	
54	Deniliquin	Deniliquin, Filtered	Two Part	395	Service connection*(40mm:790)	P	Nil	All	55	P
		Deniliquin,Raw	Unlimited	200		P	Nil	Unlimited		
18	Dubbo	Dubbo	Inclining Block	110	Meter Size* (eg.40mm $700)	P	Nil	<550 kL	87	P
								>550 kL	131	
64	Dungog (Unfiltered)	Dungog	Inclining Block	195	Meter Size (eg.40mm $307)	P	Nil	upto 220 kL	69	O
								> 220 kL	137	
		Clarence Town	Inclining Block	200	Meter Size (eg.40mm $317)	P	Nil	upto 220 kL	71	
								> 220 kL	138	
		Patterson District	Inclining Block	312	Meter Size (eg.40mm $482)	P	Nil	upto 220 kL	85	
								> 220 kL	183	
		Gresford	Inclining Block	426	Meter Size (eg.40mm $751)	P	Nil	upto 220 kL	77	
								> 220 kL	188	
15	Eurobodalla (Unfiltered)	Eurobodalla	Two Part	240	Meter Size*: 40mm:$960	P	Nil	All	130	P
51	Forbes	Forbes	Two Part	140		P	Nil	All	64	P
84	Gilgandra (Groundwater)	Gilgandra	Two Part	176	Service Connection Size* (40mm:704)	P	Nil	All	71	P
		Tooraweenah	Two Part	70	Uniform Access Charge	P	Nil	All	105	
60	Glen Innes Severn	Glen Innes	Inclining Block	88	Service Connection Size* (40mm:350)	P	Nil	upto 450 kL	130	P
								>450 kL	195	
		Deepwater	Inclining Block	88	Service Connection Size* (40mm:350)	P	Nil	upto 450 kL	60	
								>450 kL	125	
82	Gloucester	Gloucester	Two Part	225	Service Connection Size (40mm:$900)	P	Nil	all	124	P
		Barrington	Two Part	225	Uniform Access Charge	P	Nil	all	124	
0	Goldenfields (Reticulator)	Retail	Two Part	204	Uniform Access Charge	P	Nil	All	110	O
1	Gosford	Gosford	Two Part	83	Service Connection Size* (40mm:$332.96)	P	Nil	All	112	P

Table 6B - Water Supply - 2006/07 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(c) of BPMG (8)
20	Goulburn	Goulburn	Inclining Block	208	Meter Size*(40mm:$833)	P	Nil	up to 292 kL (for 20mm	126	P
								>292 kL (for 20mm meter)	181	
		Marilan	Inclining Block	300	Uniform Access Charge	P	Nil	up to 292 kL (for 20mm	118	
								>292 kL (for 20mm meter)	203	
80	Greater Hume	Culcairn	Inclining Block	60	Service Connection Size (40mm:$120)	P	Nil	<200kL	60	P
								>200kL	80	
		Villages	Inclining Block	109	Service Connection Size (40mm:$900)	P	Nil	<200kL	100	
								>200kL	130	
30	Griffith	Griffith (Filtered)	Inclining Block	135	Meter Size*(40mm:$540)	P	Nil	up to 200 kL	35	P
								>200 kL	60	
		Yenda (Dual), Filtered	Inclining Block	243	Uniform Access Charge	P	Nil	up to 200 kL	35	
								>200 kL	60	
		Yenda (Dual), Raw	Two Part				Nil	All	21	
94	Gundagai	Gundagai	Inclining Block	80	Service Connection Size*: 40mm:$320	P	Nil	all	90	P
44	Gunnedah (Groundwater)	Gunnedah	Inclining Block	130	Service Connection Size: 20 to 40 mm:$125, 50mm: $290	O	Nil	<450 kL	55	P
								>450 kL	95	
		Curlewis	440 kL Allowance	314	Uniform Access Charge	O	450	All	70	
		Mullaley	440 kL Allowance	572	Uniform Access Charge	O	450	All	70	
		Tambar Springs	440 kL Allowance	652	Uniform Access Charge	O	450	All	70	
90	Guyra	Guyra	Inclining Block	245	Uniform Access Charge	P	Nil	up to 450 kL	100	O
								>450 kL	120	
		Tingha	Inclining Block	235	Uniform Access Charge	P	Nil	up to 450 kL	154	
		Tingha Rural	Inclining Block	215	Uniform Access Charge			>450 kL	184	
81	Gwydir			430	Meter Size*(40mm:$1720)	P	Nil	<450 kL	90	P
								>450 kL	195	
76	Harden (Reticulator)	Harden	Inclining Block	280	Service Connection Size*:40 mm:$1120	P	Nil	<350 kL	110	P
								>350 kL	150	
7	Port Macquarie-Hastings (Unfiltered)	Hastings	Inclining Block	110	Meter Size* (eg. 40mm $440)	P	Nil	<270 kL	138	P
								>270 kL	276	
86	Hay (Dual Supply)	Hay (Filtered)	Inclining Block	75	Service Connection Size*:40 mm:$300	P	Nil	up to 300 kL	61	P
								>300 kL	92	
		Hay (Unfiltered) - commercial users	Inclining Block	75	Service Connection Size*:40 mm:$300	P	Nil	<450 kL	27	
								>450 kL	40	
0	Hunter Water		Declining Block	26	Meter Size* (eg. 50mm: $162, 100mm: $645, 300mm:	P	Nil	up to 1,000 kL	93	
								>1000 kL	86	
37	Inverell	Inverell/Ashford/Yetman, Filtered	Two Part	255	Uniform Access Charge	P	Nil	All		O
106	Jerilderie (Dual Supply)	Jerilderie, Filtered	Inclining Block	161	Service Connection Size*(40mm:$644)	P	Nil	up to 250 kL	100	P
								>250 kL	140	
		Jerilderie, Raw	unmetered							
25	Kempsey (Groundwater)	Kempsey	Two Part	265	Uniform Access Charge	P	Nil	All	86	O
70	Kyogle	Kyogle, Bonalbo, Muli-Muli, Woode	Inclining Block	175	Service Connection Size*:40 mm:$700	P	Nil	< 200 kL	105	P
								> 200 kL	175	
59	Lachlan	Condoblin	Two Part	215	Service Connection Size*:40 mm:$860	P	Nil	all	85	P
48	Leeton	Leeton, Whitton, Murrami	Inclining Block	175	Meter Size*(40mm:$700)	P	Nil	up to 350 kL	50	P
								>350 kL	67	
22	Lismore (Reticulator)	Lismore, Nimbin	Two Part	100	Service Connection Size*(40mm:$400)	P	Nil	All	122	P
31	Lithgow	Lithgow	Inclining Block	510	Meter Size (50mm:$680)	P	Nil	<500 kL	85	P
								>500 kL	160	
61	Liverpool Plains Shire Council	Premer, Spring Ridge,Wallabadah,	Inclining Block	103	Service Connection Size* (eg. 40mm $412)	P	Nil	up to 300 kL	62	P
								>300 kL	103	
		Werris Creek	Inclining Block	200	Service Connection Size(eg. 40mm $1318)			up to 300 kL	95	
								>300 kL	155	
5	MidCoast		Two Part	130	Meter Size* (eg. 40mm $520)	P	Nil	All	135	P
32	Mid Western Regional Council	Mudgee, Gulgong & Rylstone	Two Part	489	Uniform Access Charge	P	Nil	All	104	O
38	Moree Plains Shire	Pallamallawa	Two Part	255	Service Connection Size (eg. 40mm $1000)	P	Nil	All	65	P
		Weemalah	Two Part	255	Service Connection Size (eg. 40mm $1000)	P	Nil	All	46	
65	Murray	Murray, Filt	Two Part	190	Uniform Access Charge	P	Nil	All	65	O
		Murray, Raw	Two Part	70	Uniform Access Charge	P	Nil	All	45	
101	Murrumbidgee	Darlington Point	Two Part	180	Service Connection Size (eg. 40mm $340)	P	Nil	All	21	P
		Coleambally	Two Part	200	Service Connection Size (eg. 40mm $360)	P	Nil	All	20	

Table 6B - Water Supply - 2006/07 Non-Residential Tariffs

	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(c) 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)
41	Muswellbrook	Muswellbrook,Denman, Sandy Hollo	Two Part	172	Service Connection Size* (eg. 40mm $688)	P	Nil	All	155	P
34	Nambucca	Nambucca	Two Part	85	Service Connection Size* (eg. 40mm $245)	P	Nil	All	100	P
46	Narrabri (Groundwater)	Narrabri	Two Part	80	Service Connection Size (eg. 40mm $205)	P	Nil	All	35	P
		Narrabri, non - metered	Unmetered	170	Service Connection Size (eg. 40mm $410)					
		Gwabegar	Two Part	175	Service Connection Size* (eg. 40mm $448)	P	Nil	All	51	
		Wee Wa	Two Part	80	Service Connection Size* (eg. 40mm $205)	P	Nil	All	40	
		Boggabri	Two Part	225	Service Connection Size* (eg. 40mm $576)	P	Nil	All	51	
		Bellata	Two Part	316	Service Connection Size* (eg. 40mm $809)	P	Nil	All	51	
		Pilliga	Two Part	200	Service Connection Size* (eg. 40mm $512)	P	Nil	All	51	
63	Narrandera (Groundwater)	Narrandera	Two Part	220	Meter Size (eg. 40mm $600)	P	Nil	All	56	P
62	Narromine (Groundwater)	Narromine, Trangie, Tomingley	Two Part	165	Service Connection Size* (eg. 40mm $660)	P	Nil	All	65	P
83	Oberon (Unfiltered, Reticulator)	Oberon	Two Part	100	Service Connection Size* (eg. 38mm $361)	P	Nil	All	104	P
19	Orange	Orange	Two Part	102	Service Connection Size* (eg. 40mm $408)	P	Nil	All	141	P
71	Palerang	Bungendore	Inclining Block	266	Uniform Access Charge	P	Nil	up to 200 kL	100	O
								200-280 kL	135	
								>280kL	155	
		Braidwood	Inclining Block	266	Uniform Access Charge	P	Nil	up to 200 kL	100	
								200-280 kL	135	
								>280kL	155	
		Captains Flat	Inclining Block	244	Uniform Access Charge	P	Nil	up to 200 kL	190	
								>200kL	220	
36	Parkes	Parkes	Inclining Block	295	Meter Size, eg : 40mm $614	P	Nil	up to 365kL	65	P
								>365 kL	170	
17	Queanbeyan (Reticulator)	Queanbeyan	Inclining Block	247	Meter Size, eg : 40mm $1075	P	Nil	up to 176 kL	145	P
								>176kL	195	
33	Richmond Valley	all	Inclining Block	140	Service Connection Size* (eg. 40mm $560)	P	Nil	up to 200 kL	105	P
								>200 kL	150	
8	Riverina	WaggaWagga	Two Part	120	Uniform Access Charge	P	Nil	up to 36,000 kL	72	O
		Rural Towns & Villages	Two Part	125	Uniform Access Charge			>36,000 kL	62	
4	Rous County Council	Rous Retail	Two Part	108	Uniform Access Charge	P	Nil	All	96	O
3	Shoalhaven	Shoalhaven, treated	TwoPart	79	Service Connection Size(40mm:$244)	P	Nil	All	80	P
35	Singleton	Singleton	Two Part	180	Meter Size* (eg. 40mm $720)	P	Nil	All	77	P
		Mt Thorley	Two Part	496	Meter Size* (eg. 40mm $1036)	P	Nil	All	150	
		Jerry's/Broke Plains	Two Part	180	Uniform Access Charge	P	Nil	All	120	
52	Snowy River (Unfiltered)	Snowy River	Two Part	299	Uniform Access Charge	P	Nil	All	48	O
0	Sydney Water		Two Part	75	Meter Size* (eg. 40mm $300, 100mm $1,875, 300mm $16,875)	P	Nil	All	94	
13	Tamworth	Tamworth	Inclining Block	155	Service Connection Size* (eg. 40mm $622)	P	Nil	up to 450 kL	83	P
								451 to 900 kL	88	
								> 900 kL	93	
		Calala Backwash Water						All	19	
		Raw Water						up to 450 kL	57	
								451 to 900 kL	62	
								> 900 kL	67	
		Dungowan Dam (if main crosses proj	Inclining Block	78	Uniform Access Charge	P	Nil	up to 450 kL	28	
		Raw Water						451 to 900 kL	62	
								> 900 kL	67	
		Dungowan Dam (if main does not cr	Inclining Block	155	Uniform Access Charge	P	Nil	up to 450 kL	57	
		& Conners Creek Dam (Raw Water)						451 to 900 kL	62	
								> 900 kL	67	
68	Tenterfield	Tenterfield	Two Part	175	Uniform Access Charge	P	Nil	All	141	O
		Jennings	Two Part	210	Uniform Access Charge	P	Nil	All	141	
		Urbenville	Two Part	320	Uniform Access Charge	P	Nil	All	63	
93	Tumbarumba (Unfiltered)	Tumbarumba	Inclining Block	310	Meter Size* (eg. 40mm $1240)	P	Nil	<400 kL	66	P
								>400 kL	98	
		Khancoban	Inclining Block	350	Meter Size* (eg. 40mm $1400)	P	Nil	<400 kL	67	
								>400 kL	101	
43	Tumut	Tumut	Inclining Block	72	Meter Size (eg. 40mm $183)	P	Nil	up to 400 kL	82	P
								> 400 kL	103	
		Tumit Raw Water	Inclining Block	included in the above				up to 400 kL	34	
								> 400 kL	45	

Table 6B - Water Supply - 2006/07 Non-Residential Tariffs

	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(c) 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)
6	Tweed	Tweed	Two Part	95	Meter Size*(40mm:$380)	P	Nil	All	104	P
45	Upper Hunter Shire Council	Murrurundi	Two Part	280	Uniform Access Charge	P	Nil	All	127	O
		Merriwa/Cassilis	Two Part	212	Uniform Access Charge	P	Nil	All	85	
		Aberdeen/Scone	Two Part	212	Uniform Access Charge	P	Nil	All	104	
73	Upper Lachlan Council	Crookwell	Inclining Block	421	Service Connection Size 38mm:$842)	P	Nil	up to 250 kL	97	P
								> 250 kL	116	
		Taralga	Inclining Block	348	Service Connection Size 38mm:$656)	P	Nil	up to 250 kL	90	
								> 250 kL	117	
		Dalton	Inclining Block	416	Service Connection Size 38mm:$832)	P	Nil	up to 250 kL	119	
								> 250 kL	150	
		Gunning	Inclining Block	189	Service Connection Size 38mm:$378)	P	Nil	up to 250 kL	60	
								> 250 kL	90	
85	Uralla	Uralla	Two Part	200	Uniform Access Charge	P	Nil	All	70	O
		Bundarra	Two Part	500	Uniform Access Charge	P	Nil	All	70	
88	Wakool (Dual Supply)	Moulamein(Filtered + Raw Water)	Two Part, Raw Water is unmetered	200+400	Service Connection Size*(40mm:$1600, $800)	P	Nil	all	75	P
		Filtered	Two Part	200	Service Connection Size*(40mm:$800)	P	Nil	all	75	
98	Walcha	Wakool , Murray Downs, Koraleigh	Two Part	124	Service Connection Size 38mm:$496)	P	Nil	All	181	P
		Raw	Two Part	62	Service Connection Size 38mm:$248)	P	Nil	All	91	
79	Walgett (Dual Supply)	Walgett Shire Water Charge	Unmetered	626	Uniform Access Charge	P	Unmetered			O
		Lightening Ridge	Unmetered	570	Uniform Access Charge	P	Unmetered			
		Collarenebri	Unmetered	650	Uniform Access Charge	P	Unmetered			
		Carinda Water Charge	Unmetered	280	Uniform Access Charge	P	Unmetered			
		Carinda Bore Water Charge	Unmetered	266	Uniform Access Charge	P	Unmetered			
		Rowena Water Charge	Unmetered	320	Uniform Access Charge	P	Unmetered			
96	Warren (Dual Supply)	Warren Bore Water	Inclining Block	220	Uniform Access Charge	P	Nil	up to 450 kL	73	O
								>450 kL	110	
		Warren River Water	Inclining Block				Nil	up to 450 kL	25	
								>450 kL	45	
		Nevertire	Inclining Block	330	Uniform Access Charge	P	Nil	up to 450 kL	42	
								>450 kL	63	
		Collie	Inclining Block	225	Uniform Access Charge	P	Nil	up to 400 kL	89	
								>400 kL	132	
55	Warrumbungle	Coonabarabran	Two part	217	Uniform Access Charge	P	Nil	All	70	O
		Timore Dam (Raw)	Two part	217	Uniform Access Charge	P	Nil	All	70	
		Baradine	Two part	217	Uniform Access Charge	P	Nil	All	110	
		Binnaway	Two part	217	Uniform Access Charge	P	Nil	All	110	
		Villages: Bugaldie, Kenebri	Two part	427	Uniform Access Charge	P	Nil	All	90	
		Southern, Coolah, Dunedoo & Mend	Inclining Block	267	Uniform Access Charge	P	Nil	<300 kL	74	
						P		301 to 500 kL	92	
								501 to 800 kL	106	
								> 800 kL	121	
		Village	Two part	589				All	90	
57	Wellington	Wellington, Geurie	Inclining Block	260	Service Connection Size 40mm:$1040)	P	Nil	up to 300 kL	95	P
								301 to 500 kL	105	
								500 to 10000kL	115	
								>10000 kL	115	
74	Wentworth (Dual Supply)	Filtered	Inclining Block	240	Service Connection Size*(40mm:$960)	P	Nil	up to 250 kL	110	P
								>250 kL	260	
		Raw	Inclining Block	130	Service Connection Size*(40mm:$480)	P	Nil	up to 700 kL	35	
								>700 kL	60	
16	Wingecarribee	Wingecarribee	Inclining Block	99	Meter Size*(40mm:$396)		Nil	up to 300 kL	124	P
								>300 kL	185	
						P		>5,000 kL	169	
2	Wyong	Wyong	Two Part	107	Service Connection Size (eg. 40mm: $381.94)	P	Nil	All	112	P
56	Yass Valley	Areas	Two Part	200	Meter Size 40mm:$309)	P	Nil	All	120	P
		Murrumbateman	Two Part	149	Uniform Access Charge	P	Nil	All	120	
49	Young (Reticulator)	Young	Two Part	175	Meter Size* (40mm:$700)	P	Nil	All	125	P

Table 6C - Water Supply - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	Tariff Type	Access Charge for 20 mm Service Connection (or Minimum)	Basis for Access Charge	Allowance	Usage Range	Usage Charge	Reduction* for Non-rateable properties
				(1)	($) (2)	*Proportional to square of size of service connection or water meter (3)	(kL) (5)	(kL) (6)	(c/kL) (7)	
11	Albury City	Albury		Inclining Block	84	Uniform Access Charge	Nil	up to 225 kL	47	N
								226 kL to 19999kL	94	
								>19999	67	
29	Armidale Dumaresq	Armidale	Non Rateable	Two Part	219	Uniform Access Charge	Nil	all	107	N
			Non-Profit Sporting	Two Part	219	Uniform Access Charge	Nil	all	81	
			Dialysis Users	Allowance, Inclining Block	219	Uniform Access Charge	100	101 to 400 kL	72	
								401 kL to 1000 kL	96	
								>1000 kL	118	
24	Ballina (Reticulator)	Ballina		Inclining Block	95	Uniform Access Charge	Nil	<350 kL	90	N
								>350 kL	120	
100	Balranald (Dual Supply)	Balranald & Euston, Raw	All	200 kL Allowance	191	Service Connection Size* (eg. 40mm $764)	200	>200 kL	22	N
		Balranald	All	Two Part	180	Service Connection Size* (eg. 40mm $721)	Nil	All	60	
21	Bathurst Regional	Bathurst (Filtered)		Inclining Block	250	Service Connection Size* (eg. 25mm $390; 40mm $1000)	Nil	<300kL	55	N
								>300 kL	85	
		Bathurst (Raw)		Inclining Block	250	Service Connection Size* (eg. 25mm $390; 40mm $1000)	Nil	<300kL	40	
								>300 kL	70	
23	Bega Valley (Unfiltered)	Bega Valley	Public Hospitals and Nursing Homes		Nil	No Access Charge	300	>300kL	140	L
			Home Dialysis, Home Care Patients		Nil	No Access Charge	> 4 monthly of 70 kL	>Allowance	140	
			Non-Profit Community Org.		Nil	No Access Charge	Nil	all	140	
			Churches		Nil	No Access Charge	Nil	all	140	
			Church Halls, Residences, Church Schools		135	Uniform Access Charge	Nil	all	140	
47	Bellingen (Unfiltered)				222	Meter Size 40mm $888	Nil	all	66	N
53	Berrigan (Dual Supply)	Berrigan,Barooga,Finley(Potable)		Two Part	300	Uniform Access Charge	Nil	all	90	N
		Berrigan,Barooga,Finley(Non-Potable)		Two Part	300	Uniform Access Charge	Nil	all	45	
		Tocumwal (Filtered)		Two Part	300	Uniform Access Charge	Nil	all	60	
89	Bogan	Nyngan	all	Inclining Block	98	Service Connection Size* (eg.40mm $390)	Nil	<450 kL	72	L
								>450 kL	108	
97	Bombala	Bombala		Incining Block	386	Uniform Access Charge	Nil	up to 350 kL	46	N
								>350 kL	99	
		North Yeoval Wellington		Unmetered	294	Uniform Access Charge				
104	Boorowa	Boorowa		Usage Charge only	Nil	No Access Charge	Nil	All	131	N
87	Bourke (Dual Supply)	Bourke		Bourke, Filtered	176	Uniform Access Charge	Nil	All	110	N
				Bourke, Raw	290	Uniform Access Charge				
105	Brewarrina	Brewarrina		Unmetered	756	Uniform Access Charge	Nil	Unmetered		N
		Goodooga		Unmetered	621	Uniform Access Charge	Nil	Unmetered		
27	Byron (Reticulator)	Byron		Two Part	103	Service Connection Size* (eg. 40mm: $412)	Nil	All	120	N
91	Cabonne	Molong		Inclining Block	176	Uniform Access Charge	Nil	<300 kL	129	N
								301 kL to 500 kL	284	
								>500 kL	388	
		Cumnock		Inclining Block	155	Uniform Access Charge	Nil	<300 kL	305	
								301 kL to 500 kL	393	
								>500 kL	414	
		Yeoval		Inclining Block	130	Uniform Access Charge	Nil	<300 kL	165	
								301 kL to 500 kL	227	
								>500 kL	372	
		Delgany		Inclining Block	130	Uniform Access Charge	Nil	<300 kL	165	
								301 kL to 500 kL	227	
								>500 kL	372	
92	Carrathool	Carrathool	Churches, 1/2 charge	Inclining Block	167	Meter Size (40mm $225)	Nil	<350kL	72	L
								>350kL	82	
		Hillston	Churches, 1/2 charge	Inclining Block	75	Meter Size (40mm $225)	Nil	<350kL	47	
								>350kL	58	
		Melbergen			205	Uniform Access Charge	Nil	<400 kL	37	
								>400 kL	65	
		Goolgowi/Merriwagga	Churches, 1/2 charge	Inclining Block	500	Uniform Access Charge	500	500 kL to 1,000 kL	30	
								>1,000 kL	47	
		Rankins Springs	Non-Rateable	500 kL Allowance	578	Uniform Access Charge	500	>500 kL	45	
103	Central Darling	Wilcannia (Filtered)						All	360	S
		Wilcannia (Raw)								
		White Cliffs, Raw		Two Part	400	Uniform Access Charge		All	330	
		Ivanhoe (Raw)						All	300	
		Ivanhoe (Filtered)						All	360	
40	Central Tablelands	Central Tablelands		Inclining Block	124	Meter Size* (eg. 20mm $124; 40mm $496)	Nil	All	125	N
		Quandialla		Inclining Block	464		Nil	up to 200 kL/quarter	120	
								after 200 kL/quarter	200	

*L: Large Reduction in comparison with non-residential tariff
S: Significant Reduction in comparison with non-residential tariff
N: No Reduction

Table 6C - Water Supply - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	Tariff Type	Access Charge for 20 mm Service Connection (or Minimum)	Basis for Access Charge	Allowance	Usage Range	Usage Charge	Reduction* for Non-rateable properties
				(1)	($) (2)	*Proportional to square of size of service connection or water meter (3)	(kL) (5)	(kL) (6)	(c/kL) (7)	
14	Clarence Valley			Two Part	96	Service Connection Size (40mm:$385)	Nil	All	77	N
67	Cobar	Cobar		Inclining Block	300	Service Connection Size (40mm:$600)	Nil	<450 kL	65	N
								451 - 550 kL	110	
								>551 kL	160	
10	Coffs Harbour (Unfiltered)	Coffs Harbour, Nana Glen, Coramba		Two Part	104	Uniform Access Charge (with a testable backflow)	Nil	All	182	N
50	Cooma-Monaro	Cooma, Bredbo, Nimmitabel		Two Part	342	Uniform Access Charge	Nil	All	73	N
75	Coonamble (Groundwater)	Coonamble		Inclining Block	0	No Access Charge	Nil	<370 kL	32	L
								>370 kL	48	
		Gulargambone, Quambone		Inclining Block	0	No Access Charge	Nil	<430 kL	45	
								>430 kL	67	
58	Cootamundra (Reticulator)	Cootamundra	community	Two Part	91	Meter Size* (eg 40mm $364)	Nil	All	88	L
42	Corowa	Corowa, Mulwala, Howlong		Two Part	120	Uniform Access Charge	Nil	all	50	N
		Balldale		Two Part	240	Uniform Access Charge	Nil	all	50	
26	Country Energy	Broken Hill & other towns	Exempt Properties	Usage Charge only	Nil	No Access Charge	Nil	All Filtered	154	L
39	Cowra	Cowra	All	Two Part	115	Meter Size 40 mm:460	Nil	all	90	N
54	Deniliquin	Deniliquin, Filtered		Two Part	395	Service connection*(40mm:790)	Nil	All	55	N
		Deniliquin, Raw		Unlimited	200	Meter Size	Nil	Unlimited		
18	Dubbo	Dubbo		Inclining Block	110	Meter Size* (eg.40mm $700)	Nil	<550 kL	87	N
								>550 kL	131	
64	Dungog (Unfiltered)	Dungog			195	Meter Size (eg.40mm $307)	Nil	all	138	N
		Clarence Town			200	Meter Size (eg.40mm $317)	Nil	all	138	
		Patterson District			312	Meter Size (eg.40mm $482)	Nil	all	183	
		Gresford			426	Meter Size (eg.40mm $751)	Nil	all	188	
15	Eurobodalla (Unfiltered)	Eurobodalla		Two Part	240	Meter Size*: 40mm $960	Nil	All	130	N
51	Forbes	Forbes		Two part	140		Nil	All	64	N
84	Gilgandra (Groundwater)	Gilgandra		Two Part	176	Service Connection Size* (40mm:704)	Nil	All	71	N
		Tooraweenah		Two Part	70	Uniform Access Charge	Nil	All	105	
60	Glen Innes Severn	Glen Innes		Inclining Block	88	Service Connection Size* (40mm:350)	Nil	upto 450 kL	130	N
								>450 kL	195	
		Deepwater		Inclining Block	88	Service Connection Size* (40mm:350)	Nil	upto 450 kL	60	
								>450 kL	125	
82	Gloucester	Gloucester		Two Part	225	Service Connection Size (40mm:$900)	Nil	all	124	N
		Barrington		Two Part	225	Uniform Access Charge	Nil	All	124	
0	Goldenfields (Reticulator)	Retail		Two Part	204	Uniform Access Charge	Nil	All	110	N
1	Gosford	Gosford			83	Service Connection Size* (40mm:$332.96)	Nil	All	112	N
20	Goulburn Mulwaree Council	Goulburn		Inclining Block	208	Meter Size*(40mm:$833)	Nil	up to 292 kL (for 20mm meter)	126	N
								>292 kL (for 20mm meter)	181	
						Uniform Access Charge		up to 292 kL (for 20mm meter)	118	
		Marulan		Inclining Block	300		Nil	>292 kL (for 20mm meter)	203	
80	Greater Hume	Culcairn		Inclining Block	60	Service Connection Size (40mm:$120)	Nil	<200kL	60	N
								>200kL	80	
		Villages		Inclining Block	109	Service Connection Size (40mm:$900)	Nil	<200kL	100	
								>200kL	130	
30	Griffith	Griffith	Griffith (Filtered)	Inclining Block	135	Meter Size*(40mm:$540)	Nil	up to 200 kL	35	N
								>200 kL	60	
			Yenda (Dual), Filtered	Inclining Block	243	Uniform Access Charge	Nil	up to 200 kL	35	
							Nil	>200 kL	60	
			Yenda (Dual), Raw	Two Part			Nil	All	21	
94	Gundagai	Gundagai			80	Service Connection Size*: 40mm:$320	Nil	all	90	N
44	Gunnedah (Groundwater)	Gunnedah		Inclining Block	130	Service Connection Size: 20 to 40 mm:$125, 50mm: $290	Nil	<450 kL	55	N
								>450 kL	95	N
		Curlewis, Mullaley, Tambar Springs			Nil	No Access Charge	Nil	All	70	L
90	Guyra	Guyra		Inclining Block	245	Uniform Access Charge	Nil	up to 450 kL	100	N
								>450 kL	120	
		Tingha		Inclining Block	235	Uniform Access Charge	Nil	up to 450 kL	154	
		Tingha Rural		Inclining Block	215	Uniform Access Charge		>450 kL	184	
81	Gwydir			Inclining Block	430	Meter Size*(40mm:$1720)	Nil	<450kL	90	N
								>450kL	195	
76	Harden (Reticulator)	Harden		Inclining Block	280	Service Connection Size*:40 mm:$1120	Nil	<350 kL	110	N
								>350 kL	150	
7	Port Macquarie-Hastings (Unfiltered)	Hastings			Nil		Nil	<270 kL	138	L
								>270 kL	276	

*L: Large Reduction in comparison with non-residential tariff
S: Significant Reduction in comparison with non-residential tariff
N: No Reduction

Table 6C - Water Supply - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	Tariff Type	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)	Allowance (kL) (5)	Usage Range (kL) (6)	Usage Charge (c/kL) (7)	Reduction* for Non-rateable properties
				(1)						
86	Hay (Dual Supply)	Hay (Filtered)		Inclining Block	75	Uniform Access Charge	Nil	up to 300 kL	61	N
								>300 kL	92	
		Hay (Unfiltered)		Inclining Block	75	Uniform Access Charge	Nil	<450 kL	27	
								>450 kL	40	
0	Hunter Water			Declining Block	26	Meter Size* (eg. 50mm: $162, 100mm: $645, 300mm: $5,805,	Nil	up to 1,000 kL	93	
								>1000 kL	86	
37	Inverell	Inverell, Filtered		Two Part	255	Uniform Access Charge	Nil	All	100	N
106	Jerilderie (Dual Supply)	Jerilderie, Filtered		Inclining Block	161	Service Connection Size*(40mm:$644)	Nil	up to 250 kL	100	N
								>250 kL	140	
		Jerilderie, Raw		300 kL Allowance	220	Uniform Access Charge	300 kL	>300 kL	45	
25	Kempsey (Groundwater)	Kempsey	All	Two Part	265	Uniform Access Charge	Nil	All	86	L
70	Kyogle	Kyogle		Inclining Block	175	Service Connection Size*:40 mm:$700	Nil	< 200 kL	105	N
								> 200 kL	175	
59	Lachlan	Condoblin		Two Part	215	Service Connection Size*:40 mm:$860	Nil	All	85	N
48	Leeton	Leeton, Whitton, Murrami		Inclining Block	175	Meter Size*(40mm:$700)	Nil	up to 350 kL	50	N
								>350 kL	67	
22	Lismore (Reticulator)	Lismore		Two Part	100	Service Connection Size*(40mm:$400)	Nil	All	122	N
31	Lithgow	Lithgow		Inclining Block	206	Uniform Access Charge	Nil	<500 kL	85	N
								>500 kL	160	
61	Liverpool Plains Shire Council	Spring Ridge,Wallabadah, Willow Tree		Inclining Block	103	Service Connection Size* (eg. 40mm $412)	Nil	up to 300 kL	62	N
								>300 kL	103	
		Werris Creek		Inclining Block	200	Service Connection Size(eg. 40mm $1318)	Nil	up to 300 kL	95	
								>300 kL	155	
5	MidCoast			Two part	130	Meter Size* (eg. 40mm $520)	Nil	All	135	N
32	Mid Western Regional Council	Mudgee, Gulgong & Rylstone		Two part	292	Uniform Access Charge	Nil	All	104	N
38	Moree Plains Shire	Moree, Mungindi, Boggabilla,		Two Part	255	Service Connection Size (eg. 40mm $1000)	Nil	All	65	N
		Garah, Boomi, Boggabilla, Gurley,		Two Part	255	Service Connection Size (eg. 40mm $1000)	Nil	All	46	
65	Murray	Murray, Filt		Two Part	190	Uniform Access Charge	Nil	All	65	N
		Murray, Raw		Two Part	70	Uniform Access Charge	Nil	All	45	
101	Murrumbidgee	Darlington Point	Churches	Two Part	Nil	No Access Charge	Nil	All	21	S
		Coleambally	Churches	Two Part	Nil	No Access Charge	Nil	All	20	
41	Muswellbrook	Muswellbrook,Denman, Sandy Hollow		Two Part	172	Service Connection Size (eg. 40mm $688)	Nil	All	155	N
34	Nambucca	Nambucca		Two Part	85	Service Connection Size (eg. 40mm $245)	Nil	All	100	N
46	Narrabri (Groundwater)	Narrabri		Two Part	80	Service Connection Size (eg. 40mm $205)	Nil	All	35	N
					170	Service Connection Size (eg. 40mm $410)				
		Gwabegar		Two Part	175	Service Connection Size* (eg. 40mm $448)	Nil	All	51	
		Wee Wa		Two Part	80	Service Connection Size* (eg. 40mm $205)	Nil	All	40	
		Boggabri		Two Part	225	Service Connection Size* (eg. 40mm $576)	Nil	All	40	
		Bellata		Two Part	316	Service Connection Size* (eg. 40mm $809)	Nil	All	51	
		Pilliga		Two Part	200	Service Connection Size* (eg. 40mm $512)	Nil	All	51	
63	Narrandera (Groundwater)	Narrandera	Schools	Declining Block	110	Meter Size (eg. 40mm $300)	Nil	<12.5 kL/day	56	N
								>12.5 kL/day	28	L
			Hospitals	12.9 kL Allowance	110	Meter Size (eg. 40mm $300)	12.9 kL/day	>12.9 kL	56	N
62	Narromine (Groundwater)	Narromine, Trangie, Tomingley		Two Part	165	Service Connection Size* (eg. 40mm $660)	Nil	All	65	N
83	Oberon (Unfiltered, Reticulator)	Oberon		Two Part	100	Service Connection Size* (eg. 38mm $361)	Nil	All	104	N
19	Orange	Orange		Two Part	102	Service Connection Size* (eg. 40mm $408)	Nil	All	141	N
71	Palerang	Bungendore		Inclining Block	266	Uniform Access Charge	Nil	up to 200 kL	100	N
								200-280 kL	135	
								>280kL	155	
		Braidwood		Inclining Block	266	Uniform Access Charge	Nil	up to 200 kL	100	
								200-280 kL	135	
								>280kL	155	
		Captains Flat		Inclining Block	244	Uniform Access Charge	Nil	up to 200 kL	190	
								>200kL	220	
36	Parkes	Parkes		Inclining Block	295	Meter Size, eg : 40mm $614	Nil	up to 365kL	65	N
								>365 kL	170	
17	Queanbeyan	Queanbeyan		Inclining Block	247	Meter Size, eg : 40mm $1075	Nil	up to 176 kL	145	N
								>176kL	195	
33	Richmond Valley	Casino		Inclining Block	140	Service Connection Size* (eg. 40mm $560)	Nil	up to200 kL	105	N
								>200 kL	150	
			Govt Depts, Police Stations, Courts, Schools, Staff Housing, Public Offices		Wagga: $80, Rural, Town & Village: $100	Uniform Access Charge		up to 36,000 kL	72	S
8	Riverina (Groundwater)	Wagga Wagga					Nil			
			Churches or similar	Usage charge only	No Access Charge	No Access Charge		>36,000 kL	62	
4	Rous County Council	Rous Retail	Community org	Two Part	54	50% of Normal	Nil	All	96	S
3	Shoalhaven	Shoalhaven, treated	All	Two Part	79	Service Connection Size(40mm:$244)	Nil	All	80	N
35	Singleton	Singleton		Two Part	180	Meter Size* (eg. 40mm $720)	Nil	All	77	N
		Mt Thorley		Two Part	496	Meter Size (eg. 40mm $1,036)	Nil	All	150	
		Jerry's/Broke Plains		Two Part	180	Uniform Access Charge	Nil	All	120	

*L: Large Reduction in comparison with non-residential tariff
S: Significant Reduction in comparison with non-residential tariff
N: No Reduction

Table 6C - Water Supply - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	Tariff Type	Access Charge for 20 mm Service Connection (or Minimum)	Basis for Access Charge	Allowance	Usage Range	Usage Charge	Reduction* for Non-rateable properties
					($)	*Proportional to square of size of service connection or water meter	(kL)	(kL)	(c/kL)	
				(1)	(2)	(3)	(5)	(6)	(7)	
52	Snowy River (Unfiltered)	Snowy River		Two Part	299	Uniform Access Charge	Nil	All	48	N
0	Sydney Water			Two Part	75	Meter Size* (eg. 40mm $300, 100mm $1,875, 300mm $16,875)	Nil	All	94	
13	Tamworth	Tamworth		Inclining Block	155	Service Connection Size* (eg. 40mm $622)	Nil	up to 450 kL	83	N
								451 to 900 kL	88	
								> 900 kL	93	
		Calala Backwash Water						All	19	
		Raw Water						up to 450 kL	57	
								451 to 900 kL	62	
								> 900 kL	67	
		Dungowan Dam (if main crosses property)		Inclining Block	78	Uniform Access Charge	Nil	up to 450 kL	28	
		Raw Water						451 to 900 kL	62	
								> 900 kL	67	
		Dungowan Dam (if main does not cross property)		Inclining Block	155	Uniform Access Charge	Nil	up to 450 kL	57	
		& Conners Creek Dam (Raw Water)						451 to 900 kL	62	
								> 900 kL	67	
68	Tenterfield	Tenterfield		Two Part	175	Uniform Access Charge, Council will consider on application, the making of a contribution equivalent to that of the water availability charge		All	141	N
		Jennings		Two Part	210			All	141	
		Urbenville		Two Part	320			All	63	
93	Tumbarumba (Unfiltered)	Tumbarumba		Inclining Block	310	Meter Size* (eg. 40mm $1240)	Nil	<400 kL	66	N
								>400 kL	98	
		Khancoban		Inclining Block	350	Meter Size* (eg. 40mm $1400)		<400 kL	67	
								>400 kL	101	
43	Tumut	Tumut		Inclining Block	72	Meter Size (eg. 40mm $183)	Nil	up to 400 kL	82	N
								> 400 kL	103	
		Tumut Raw Water		Inclining Block	included in the above			up to 400 kL	34	
								> 400 kL	45	
6	Tweed	Tweed		Two Part	95	Meter Size*(40mm:$380)	Nil	All	104	N
45	Upper Hunter Shire Council	Murrurundi		Two Part	280	Meter Size	Nil	All	127	N
		Merriwa/Cassilis		Two Part	212		Nil	All	85	
		Aberdeen/Scone		Two Part	212		Nil	All	104	
73	Upper Lachlan Council	Crookwell		Inclining Block	421	Service Connection Size 38mm:$842)	Nil	up to 250 kL	97	N
								> 250 kL	116	
		Taralga		Inclining Block	348	Service Connection Size 38mm:$656)	Nil	up to 250 kL	90	
								> 250 kL	117	
		Dalton		Inclining Block	416	Service Connection Size 38mm:$832)	Nil	up to 250 kL	119	
								> 250 kL	150	
		Gunning		Inclining Block	189	Service Connection Size 38mm:$378)	Nil	up to 250 kL	60	
								> 250 kL	90	
85	Uralla	Uralla		Two Part	200	Uniform Access Charge	Nil	All	70	N
		Bundarra		Two Part	500	Uniform Access Charge	Nil	All	70	
88	Wakool (Dual Supply)	Filtered + Raw Water		Two Part, Raw Water is unmetered	200+400	Uniform Access Charge	Nil	All	75	N
		Filtered		Two Part	200	Uniform Access Charge	Nil	All	75	
98	Walcha	Walcha,Treated		Two Part	124	Service Connection Size 38mm:$496)	Nil	All	181	N
		Walcha, Untreated		Two Part	62	Service Connection Size 38mm:$248)	Nil	All	91	
79	Walgett (Dual Supply)	Walgett Shire Water Charge		unmetered	626	Uniform Access Charge				N
		Lightening Ridge		unmetered	570	Uniform Access Charge				
		Collarenebri		unmetered	650	Uniform Access Charge				
		Carinda Water Charge		unmetered	280	Uniform Access Charge				
		Carinda Bore Water Charge		unmetered	266	Uniform Access Charge				
		Rowena Water Charge		unmetered	320	Uniform Access Charge				
96	Warren (Dual Supply)	Warren Bore Water		Inclining Block	220	Uniform Access Charge	Nil	up to 450 kL	73	N
								>450 kL	110	
		Warren River Water					Nil	up to 450 kL	25	
								>450 kL	45	
		Nevertire		Inclining Block	330	Uniform Access Charge	Nil	up to 450 kL	42	
								>450 kL	63	
		Collie		Inclining Block	225	Uniform Access Charge	Nil	up to 400 kL	89	
								>400 kL	132	

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S: Significant Reduction in comparison with non-residential tariff
N: No Reduction

Table 6C - Water Supply - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	Tariff Type	Access Charge for 20 mm Service Connection (or Minimum)	Basis for Access Charge	Allowance	Usage Range	Usage Charge	Reduction* for Non-rateable properties
					($)	*Proportional to square of size of service connection or water meter	(kL)	(kL)	(c/kL)	
				(1)	(2)	(3)	(5)	(6)	(7)	
55	Warrumbungle	Coonabarabran		Two part	217	Uniform Access Charge	Nil	All	70	N
		Timore Dam (Raw)		Two part	217	Uniform Access Charge	Nil	All	70	
		Baradine		Two part	217	Uniform Access Charge	Nil	All	110	
		Binnaway		Two part	217	Uniform Access Charge	Nil	All	110	
		Villages: Bugaldie, Kenebri		Two part	427	Uniform Access Charge	Nil	All	90	
		Southern, Coolah, Dunedoo & Mendooran		Inclining Block	267	Uniform Access Charge	Nil	<300 kL	74	
						Uniform Access Charge		301 to 500 kL	92	
								501 to 800 kL	106	
								> 800 kL	121	
		Village		Two part	589			All	90	
57	Wellington	Village		Inclining Block	No Access Charge	No Access Charge	Nil	up to 300 kL	95	L
								301 to 500 kL	105	
								500 to 10000kL	115	
								>10000 kL	115	
74	Wentworth (Dual Supply)	Filtered		Inclining Block	240	Service Connection Size*(40mm:$960)	Nil	up to 250 kL	110	N
								>250 kL	260	
		Raw		Inclining Block	130	Service Connection Size*(40mm:$480)	Nil	up to 700 kL	35	
								>700 kL	60	
16	Wingecarribee	Wingecarribee		Inclining Block	99	Meter Size*(40mm:$396)	Nil	up to 300 kL	124	N
								>300 kL	185	
#N/A	Wyong	Wyong		Two Part	107	Service Connection Size (eg. 40mm $381.94)		All	112	N
56	Yass Valley		Churches,etc	Two Part	200	Meter Size (40mm:$309)	Nil	All	30	L
			Playgrounds & Yass Pool	Two Part	200	Uniform Access Charge	Nil	All	54	
			Binalong Pool	Two Part	200	Uniform Access Charge	Nil	All	108	
49	Young (Reticulator)	Young		Two Part	175	Meter Size* (40mm:$700)	Nil	All	125	N

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S: Significant Reduction in comparison with non-residential tariff
N: No Reduction

Table 7 - Sewerage - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA															RESIDENTIAL BILLS						COST RECOVERY			
		Access Charge (or Minimum) ($) (1) NWI 24			Operating Cost (OMA) (c/kL) (2)			Access Charge Independent of Land Value ? Yes/No (3)		Non-residential Sewer Usage Charge (Not incl SDF) c/kL (3a)		Does Council Have Liquid Trade Waste Fees and Charges* ? (4)		Non-Res & Trade Waste Charges (% of Annual rates & Charges) (5)	Non-Res & Trade Waste Volume (% of Sewage Collected) (6)	Typical Developer Charge ($/Equivalent Tenement [ET]) (7)			Typical Residential Bill ($/assessment) (8) NWI 25			Average Residential Bill ($/assessment) (9)			Economic Real Rate of Return (%) (11) NWI 67			Connected Properties (No.) (12) NWI 12
		2004/05	2005/06	2006/07	03/04	04/05	05/06	05/06	06/07	05/06	06/07	05/06	06/07	2005/06	2005/06	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	03/04	04/05	05/06	03/04	04/05	05/06	05/06
	Sydney Water	347	374	389	88	72	50	✓	✓	119	123	✓	✓			3900	3900	3900	347	374	389				4.1	3.8	2.7	1,656,000
	Hunter Water	⊦288+usage	⊦268+usage	284+usage	55	48	55	✓	✓	43	44	✓	✓			3500	3500	3500	332	311	329				4.2	3.2	3.2	202,100
	LWUs with > 10,000 Properties																											
1	Gosford	352	364	376	103	115	132	✓	✓	78	80	✓	✓		17	1650	1680	3150	352	364	376	324	332	366	1.5	0.2	2.4	63,500
2	Wyong	359	368	381	115	115	122	✓	✓	66	68	✓	✓	15		2000	2000	2000	359	368	381	335	335	338	1.1	0.2	0.3	57,200
3	Shoalhaven	510	515	526	172	187	190	✓	✓	80	80	✓	✓	11		1950	3000	4200	510	515	526	502	508	546	4.1	4.7	2.4	37,400
5	MidCoast (Combined)	500	565	610	154	127	177	✓	✓	145	157	✓	✓	18	17	3700	3850	5150	500	565	610	479	507	572	-0.2	5.0	3.3	31,600
6	Tweed	435	445	473	96	104	101	✓	✓	69	71	✓	✓	11	25	3490	3490	3490	435	445	473	435	423	454	5.3	6.2	1.3	26,400
17	Wagga Wagga	279	309	320	53	63	88	✓	✓	62	65	✓	✓	24		1450	1450	3500	279	309	320	248	254	279	6.3	9.0	10.7	23,600
7	Port Macquarie-Hastings	395	409	421	112	107	131	✓	✓	62	65	✓	✓	13		2800	3150	3150	395	409	421	450	392	404	5.3	1.8	1.6	25,000
11	Albury City	345	355	355	108	129	123	✓	✓	185	149	✓	✓	23		2900	2900	4160	345	355	355	307	319	329	0.2	0.3	0.8	21,700
10	Coffs Harbour	553	572	589	115	140	135	✓	✓			✓	✓	7		4930	4930	4930	553	572	589	589	605	571	4.8	7.0	4.1	21,300
13	Tamworth Regional	396	470	540	104	101	101	✓	✓			✓	✓	17		1470	1500	1540	396	470	540	379	350	454	1.1	4.9	7.7	17,100
15	Eurobodalla	470	482	520	203	204	202	✓	✓			✓	✓	8		6000	7800	8040	470	482	520	421	447	489	4.3	4.7	0.3	17,000
17	Queanbeyan	294	294	305	106	100	100	✓	✓	50	55			13	13	1080	1080	1120	294	294	305	334	260	277	4.3	0.1	-0.8	15,400
19	Orange	273	273	273	65	83	86	✓	✓	128	128	✓	✓		25	3170	3240	3340	273	273	273	272	260	338	0.4	0.2	1.0	14,400
20	Goulburn Mulwaree	444	471	542	146	185	151	✓	✓	176	202	✓	✓	24		4540	5100	5100	444	471	542	382	284	420	4.6	5.3	7.1	9,800
18	Dubbo	403	421	434	179	178	171	✓	✓	120	124	✓	✓	31		2509	2640	4000	403	421	434	394	407	373	2.4	2.8	3.3	14,400
16	Wingecarribee	⊦402+usage	⊦416+usage	500	124	139	129	✓	✓	40	87	✓	✓	12		4300	4400	7000	488	504	500	601	495	515	1.9	1.7	2.9	13,300
14	Clarence Valley	393	452	480	123		140	✓	✓	28	28	✓	✓	11		8000	8000	8000	393	452	480	382	234	436	4.8		3.2	12,900
21	Bathurst Regional	351	351	351	88	118	107	✓	✓	78	78	✓	✓	28	25	1750	2050	2050	351	351	351	334	308	300	5.2	-1.4	1.1	13,600
24	Ballina	330	360	360	109	120		✓	✓	105	105	✓	✓	20		5930	5930	6260	330	360	360	355	352	389	6.0	-1.1	0.5	12,400
22	Lismore	412	432	445	93	93	96	✓	✓	110	110	✓	✓	25		4460	4560	4670	412	432	445	341	383	399	2.7	3.5	2.6	12,000
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties			*439*			*129*											*4,080*			*439*			*402*			*2.4*	
	LWUs with 3,001 - 10,000 Properties																											
23	Bega Valley	490	540	648	221	241	246	✓	✓	138	138	✓	✓	16		5200	5200	7900	490	540	648	356	460	504	-2.4	1.1	-0.1	10,400
27	Byron	⊦464+usage	⊦478+usage	510+usage	161	211	145	✓	✓	101	120	✓	✓	24		6170	6170	9220	572	651	681	670	591	629	2.6	0.1	3.1	9,900
26	Country Energy	250	268	298	140	144	166	✓	✓	86	86	✓	✓	13					250	268	298	211	241	320	-0.3	-3.9	2.5	9,700
25	Kempsey	499	499	517	153	156	168	✓	✓	126	130	✓	✓	23		4530	6300	6300	499	499	517	459	470	475	9.6	1.5	1.4	8,800
31	Lithgow	313	380	384	87			✓	✓	98	98	✓	✓	11		1790	1790	1790	313	380	384	267	291	395	3.0	2.8	9.3	7,000
29	Armidale Dumaresq	264	272	272	133	117		✓	✓							1240	1240	4060	264	272	272	239	252		-1.1	0.0		7,500
30A	Hawkesbury	371	384	398	106			✓	✓	155	165	✓	✓	23		5590	5590	5590	371	384	398	363	371	386	-0.2	-1.4	0.6	7,400
30	Griffith	284	340	354	100	149	124	✓	✓		73	✓	✓	39		1650	1690	1690	284	340	354	421	317	379	0.7	0.6	0.5	6,800
33	Richmond Valley	418	700	725	109	115	112	✓	✓	60	142			15		4820	4960	8670	418	700	725	431	399	714	3.2	1.6	11.0	6,200
32	Mid Western Regional	396	396	433	130	130		✓	✓			✓	✓	5		1850	1850	1990	396	396	433	372	408	372	0.5	2.9	2.6	6,100
34	Nambucca	360	360	375	106	103	107	✓	✓		141			30		3550	3640	3740	360	360	375	309	317	316	2.6	3.2	2.7	5,900
35	Singleton	307	336	350	81	77	87	✓	✓			✓	✓	16		1300	1330	2470	307	336	350	307	316	351	5.2	1.3	3.2	5,000
37	Inverell	298	310	350	115	136	126	✓	✓			×	×	7			1180	1180	298	310	350	259	269	274	-3.8	-2.3	0.2	4,500
41	Muswellbrook	395	440	423	99	112		✓	✓	150	155	✓	✓	21		4290	4750	4750	395	440	423	422	438	429	2.9	3.8	5.5	4,700

Table 7 - Sewerage - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA																RESIDENTIAL BILLS						COST RECOVERY			
		Access Charge (or Minimum) ($) (1) NWI 24			Operating Cost (OMA) (c/kL) (2)			Access Charge Independent of Land Value ? Yes/No (3)		Non-residential Sewer Usage Charge (Not incl SDF) c/kL (3a)		Does Council Have Liquid Trade Waste Fees and Charges* ? (4)		Non-Res & Trade Waste Charges (% of Annual rates & Charges) (5)	Non-Res & Trade Waste Volume (% of Sewage Collected) (6)	Typical Developer Charge ($/Equivalent Tenement [ET]) (7)			Typical Residential Bill ($/assessment) (8) NWI 25			Average Residential Bill ($/assessment) (9)			Economic Real Rate of Return (%) (11) NWI 67			Connected Properties (No.) (12) NWI 12
		2004/05	2005/06	2006/07	03/04	04/05	05/06	05/06	06/07	05/06	06/07	05/06	06/07	2005/06	2005/06	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	03/04	04/05	05/06	03/04	04/05	05/06	05/06
36	Parkes	191	230	250	53	93	88	✓	✓	95	97	✓	✓	18		3970	4100	4100	191	230	250	210	226	238	6.5	2.4	5.7	4,700
42	Corowa	290	295	305	121	142	103	✓	✓			✓	✓	14	18	1270	1270	2500	290	295	305	298	318	313	-0.5	0.5	-0.5	4,400
38	Moree Plains	580	620	620	104	96		✓	✓	100	100	✓	✓			3000	3000	3000	580	620	620	501	548	826	1.6	3.5	3.1	3,800
44	Gunnedah	237	245	254	71	82	86	✓	✓			✓	✓	5		1950	1950	1950	237	245	254	217	223	236	1.7	-0.6	2.2	4,000
46	Narrabri	316	463	463	65		87	✓	✓			✓	✓	5		1880	1800	1800	316	463	463	264	294	405	-1.3	-1.9	1.8	3,800
43	Tumut	488	455	466	105	92	95	✓	✓	116	116	✓	✓			3610	4410	4410	488	455	466	437	460		1.5	1.5	5.0	3,800
49	Young	315	330	330	54	58	47	✓	✓			✓	✓	21	6	700	1000	1060	315	330	330	273	275	289	11.4	15.4	17.2	3,500
39	Cowra	290	403	465	81	110		✓	✓			✓	✓	28		2650	2650	2650	290	403	465	279	313	328	5.9	3.8	9.4	3,500
45	Upper Hunter	320	330	342	94	110	129	✓	✓	62	64	✓	✓	9		1900	2300	2300	320	330	342	310	373	324	0.5	1.7	0.3	3,700
52	Snowy River	316+usage	422+usage	360+usage	140			✓	✓	107	118					2500	2500	2500	525	540	438	383			3.1			3,100
51	Forbes	472	488	501	110	133	117	×	✓		120	✓	✓		21	650	650	670	472	488	501	378	402	457	5.4	3.7	2.6	3,100
50	Cooma-Monaro	485	509	560	233	257		✓	✓			✓	✓	19		1910	1910	1910	485	509	560	445	482	503	0.2	0.0	1.4	3,200
53	Berrigan	310	320	330	132	138	147	✓	✓					15		1700	1700	1700	310	320	330	313	319	326	-0.8	-0.3	-0.7	3,100
	Medians (% of LWUs basis excl bulk suppliers) for 3,000 to 10,000 Properties			*384*			*114*											*2,500*			*398*			*376*			*2.6*	
	LWUs with 1,501 - 3,000 Properties																											
48	Leeton	125	170	163	75	74	24	×	×			✓	✓		12	3150	3200	3200			409	492	503	511	4.7	1.9	5.8	3,000
54	Deniliquin	439	461	484	105	120	166	✓	✓							600	600	600	439	461	484	404	427	409	0.8	1.9	2.1	3,100
47	Bellingen	438	453	470	133	120	107	✓	✓	105	109	✓	✓	15		3700	3800	3900	438	453	470	422	419	446	-0.3	-0.7	-5.6	2,900
60	Glen Innes Severn	260	350	350	74		52	✓	✓		88						1860	1860	260	350	350	302		400	5.0		4.5	2,600
58	Cootamundra	208	233	275	68	72	105	×	✓		141	×	×			700	700	2500	208	233	275	206	257	226	-8.8	-3.6	4.3	2,700
57	Wellington	450	475	475	138	148		✓	✓	90	70			25		1910	1910	1910	450	475	475	469	463	524	5.4	4.8	8.5	2,400
91	Cabonne	577	460	177+usage	121	124	141	✓	✓	118	118	✓	✓	24		3760	3890	4150	577	460	308	455	485	531	3.8	7.0	6.2	2,300
80	Greater Hume	245	245	255	104	105	109	×	✓		80	×	×			2930	3000	6000	245	245	255	263	290	260	-0.1	-0.1	-1.6	2,300
59	Lachlan	300	310	319	65	80		✓	✓			×	×	18					300	310	319	270	268	281	0.3	2.4	-0.1	2,200
65	Murray	318	318	340	75	84	88	✓	✓		48	✓	✓	24		700	2050	2050	318	318	340	399	361	367	2.9	2.8	2.5	2,100
62	Narromine	440	460	165+usage			94	✓	✓		155	✓	✓	8		940	1220	1220	440	460	519	408	433	457	-0.8	-0.7	0.5	1,900
56	Yass Valley	370	475	475	113	144		✓	✓		148	✓	✓		20	4060	4160	4260	370	475	475	433	462		11.5	10.2		2,200
61	Liverpool Plains	299	292	300	88	98		✓	✓		129	✓	✓	19		610	610	610	299	292	300	321	291	284	0.8	-1.4		1,900
55	Warrumbungle	345	342	342	124	92		✓	✓			×	×			685	1030	1030	345	342	342	344	321		-1.0	-2.4		2,300
69	Temora	170	187	187	86	93		✓	✓			×	×	5			150	150	170	187	187	131	142	186	-0.2	-1.1	0.5	2,000
71	Palerang	595	692	930	173			✓	✓			×	×			2320	3600	7820	595	692	930	450			2.1			1,800
72	Bland	373	392	405	148	158	161	×	×			×	×	36	2	1000	1000	1000	373	392	405	414	370	367	0.7	1.0	4.9	1,800
63	Narrandera	350	375	395	92	102	240	×	×			×	×						350	375	395	454	450	453	1.8	5.7	-0.6	1,600
67	Cobar	225	230	230	77	83	72	✓	✓			×	×			770	770	770	225	230	230	184	221	251	-0.2	-4.6	-0.4	1,600
74	Wentworth	370	400	425	68	71	49	✓	✓					10		2200	2700	3280	370	400	425	396	394	466	0.7	-0.6	1.1	1,600
75	Coonamble	244	295	304	81	92	74	✓	✓	70	72			6					244	295	304	292	235	233	-3.5	-5.2	-2.9	1,600
	Medians (% of LWUs basis excl bulk suppliers) for 1,500 to 3,000 Properties			*342*			*99*											*1,980*			*350*			*384*			*1.1*	

Table 7 - Sewerage - Residential Charges, Bills, Cost Recovery

	WATER UTILITY	RESIDENTIAL CHARGES/OMA																RESIDENTIAL BILLS						COST RECOVERY			
		Access Charge (or Minimum) ($) (1) NWI 24			Operating Cost (OMA) (c/kL) (2)			Access Charge Independent of Land Value ? Yes/No (3)		Non-residential Sewer Usage Charge (Not incl SDF) c/kL (3a)		Does Council Have Liquid Trade Waste Fees and Charges* ? (4)		Non-Res & Trade Waste Charges (% of Annual rates & Charges) (5)	Non-Res & Trade Waste Volume (% of Sewage Collected) (6)	Typical Developer Charge ($/Equivalent Tenement [ET]) (7)			Typical Residential Bill ($/assessment) (8) NWI 25			Average Residential Bill ($/assessment) (9)			Economic Real Rate of Return (%) (11) NWI 67			Connected Properties (No.) (12) NWI 12
		2004/05	2005/06	2006/07	03/04	04/05	05/06	05/06	06/07	05/06	06/07	05/06	06/07	2005/06	2005/06	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07	03/04	04/05	05/06	03/04	04/05	05/06	05/06
	LWUs with 200 - 1,500 Properties																											
70	Kyogle	474	490	508	253	153	122	✓	✓	85	88	✓	✓	9		1000	1000	1000	474	490	508	368	434	449	-1.3	-0.2	1.3	1,500
77	Junee	283	293	304	138	127		✓	✓			✓	✓	14		550	550	550	283	293	304	289	294	279	0.2	1.3	1.3	1,600
78	Blayney	410	440	440	169	148	143	✓	✓	50	80	✓	✓		10	1930	2000	1980	410	440	440	467	495	536	3.6	3.3	2.5	1,500
79	Walgett	274	285	295	58			✓	✓			×	×	8					274	285	295	361	364		-2.7	-1.7	-1.7	1,500
68	Tenterfield	325	350	450	182	205	178	✓	✓			✓	✓	20		1500	1500	1500	325	350	450	346	365	361	1.9	-3.7	-1.1	1,400
84	Gilgandra	295	345	357	61	75	69	✓	✓	35	90	✓	✓	19	25				295	345	357	230	243	283	-0.9	-1.3	4.8	1,300
73	Upper Lachlan	469	500	540	169	132		✓	✓	92	97	✓	✓	18		900	1500	1500	469	500	540	433	431	459	0.6	0.3	1.0	1,400
82	Gloucester	325	325	325	176	208	263	✓	✓	100	100	✓	✓	31		5550	5750	5920	325	325	325	371	337	319	0.9	12.2	-2.6	1,500
87	Bourke	459	475	492	203	112	139	✓	✓			✓	✓	7		460	460	460	459	475	492	501	533	471	-10.4	-1.1	-0.2	1,300
86	Hay	363	376	395	85	120	97	✓	✓	50	65	×	×	16					363	376	395	366	366	372	-1.2	-1.8	-0.3	1,300
83	Oberon	278	249	257	124	113	101	✓	✓	37	74	✓	✓	47		1270	1310	1350	278	249	257	271	281	223	-2.0	0.7	-1.3	1,200
81	Gwydir	393	458	475	44			✓	✓	240	245	✓	✓						393	458	475	275			-5.3			1,100
64	Dungog	360	378	378	121	105	74	✓	✓			✓	✓	16		2870	2950	2950	360	378	378	421	443	510	12.8	10.3	6.5	990
85	Uralla	400	410	390	167	192		✓	✓	100	100	✓	✓				340	340	400	410	390	394	403	422	0.0	0.7	-0.7	1,000
95	Weddin	157	162	178	61	84		✓	✓			×	×	8					157	162	178	117	126		-12.5	4.2	-13.8	950
89	Bogan	370	370	383	66	68	40	✓	✓			×	×	4	2				370	370	383	432	450	361	4.9	3.9	2.9	1,100
76	Harden	331	363	400	110	150	50	✓	✓			×	×	6					331	363	400	287	312	346	-1.8	-12.0	-2.3	970
88	Wakool	420	420	437	342		147	✓	✓			×	×	24					420	420	437	448	454	440	1.6	2.7	3.3	1,100
93	Tumbarumba	354	354	365	69	84	80	✓	✓	75	77	×	×	27		430	430	430	354	354	365	312	349	355	-4.0	2.2	-0.5	910
94	Gundagai	195	205	225	194		209	✓	✓	95	114	✓	✓	45					195	205	225	270	166	164	0.5	-1.2	0.4	900
92	Carrathool	200	207	212	163	86	121	✓	✓			×	×			550	570	580	200	207	212	143	143	150	-5.0	-1.7	-1.8	810
96	Warren	465	465	465	100	120	108	✓	✓			✓	✓	21					465	465	465	480	482	481	4.7	3.6	6.9	810
99	Coolamon	240	240	250	190	152		✓	✓			×	×	19					240	240	250	300	300	266	2.3	11.3	5.1	910
102	Lockhart	125	337	365	107	91		✓	✓	147	262	×	×				1000	1000	125	337	365	370	356		0.2	-0.2		770
98	Walcha	292	335	360	81	98	129	✓	✓	80	80	✓	✓	31					292	335	360	253	267	331	-3.1	-2.6	-1.0	780
100	Balranald	325	336	269	49	46		✓	✓	14	15	×	×	15		680	680	680	325	336	269	409	396	401	0.5	0.5	0.7	760
97	Bombala	357	390	403	74	89	79	✓	✓	14	15	✓	✓	31		1640	1710	1770	357	390	403	424	426	366	4.9	4.7	5.5	750
101	Murrumbidgee	346	346	300	58	59	75	×	×			×	×	6		1000	1000	1000	346	346	300	260	257	244	3.2	3.1	2.6	730
90	Guyra	500	500	500	140	117	108	✓	✓			×	×	19					500	500	500	517	524	415	1.2	1.1	0.6	960
104	Boorowa	212	247	297	104	120		✓	✓			×	×	3		500	500	500	212	247	297	178	203	228	-1.4	-1.2	4.4	530
105	Brewarrina	414	447	483	104	90	83	×	×			×	×						414	447	483	361	448	506	-3.7	-1.2	4.7	480
106	Jerilderie	520	520	525	118	143	148	✓	✓	55	70	×	×	5		900	900	930	478	520	525	269	314	652	7.1	6.6	6.9	420
103	Central Darling	350	300	300	44	88	85	✓	✓						1	400	400	400	350	300	300	289	372	367	-0.2	-1.5	-2.1	190
107	Urana	189	195	200		93	110	✓	✓							4100	4100	4100	189	195	200	460	455		0.0	0.3	0.1	300
	Medians (% of LWUs basis excl bulk suppliers) for 200 to 1,500 Properties			*372*			*108*											*1,000*			*372*			*366*			*0.6*	

Table 7A - Sewerage - 2006/07 Residential Multiple Tariffs

WATER UTILITY		Town	Access Charge (or Minimum) ($) (1)	Access Charge Independent of Land Value ? (2)
53	Berrigan	Berrigan, Finley & Tocumwal	320	P
		Barooga	214	O
78	Blayney	Blayney	440	P
		Millthorpe	680	P
87	Bombala	Bombala	403	O
		Delegate	327	O
105	Brewarrina	Brewarrina	483	O
		Goodooga	210	O
91	Cabonne	Molong	177	P
		Canowindra	363	P
		Eugora	308	P
		Manildra	500	O
		Cudal, Cumnock, Yeoval	500	O
92	Carrathool	Hilston	212	P
		Rankins Springs	180	P
42	Corowa	Corowa	305	P
		Mulwala	365	P
		Howlong	290	P
20	Goulburn Mulwaree Council	Goulburn	542	P
		Marulan	665	P
80	Greater Hume	Burrumbuttock	460	O
		Jindera	220	O
		Holbrook	320	O
		Culcairn	255	P
		Henty	190	P
		Walla Walla	280	P
44	Gunnedah	Gunnedah	254	P
		Curlewis	444	P
102	Lockhart	Lockhart	365	P
		The Rock	423	P
		The Rock west	342	P
38	Moree Plains Shire	Moree, Mungindi	620	P
		Balone	605	P
		Bogabilla and Gurly	400	P
101	Murrumbidgee	Darlington Point	300	O
		Coleambally	183	O
46	Narrabri	Narrabri	413	P
		Wee Waa	456	P
		Boggabri	337	P
71	Palerang	Bungendore	930	P
		Braidwood	739	P
		Captaind Flat	639	P
68	Tenterfield	Tenterfield	450	P
		Urbenville	578	P
93	Tumbarumba	Tumbarumba	365	P
		Khancoban	385	P
73	Upper Lachlan Council	Crookwell	540	P
		Gunning	589	P
		Taralga	589	P
79	Walgett	Walgett	295	
		Lightening Ridge	286	
		Lightening Ridge Pump Assisted	220	
		Collarenebri	327	
96	Warren	Warren	465	P
		Nevertire	490	P
55	Warrumbungle Shire Council	Coolah & Dunedo	314	P
		Coonabarabran	120	O
		Baradine	623	P
57	Wellington	Wellington	475	P
		Mumbli	455	P
		Guerie	445	P

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 - 2006/07 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)	Compliance with 2(b) of BPMG Yes/No (5)
11	Albury	Albury	120	P	Meter Size (eg 25mm:$197, 40mm:$505)+usage	149 c/kL	P
29	Armidale Dumaresq	Armidale	272	O	Multiple Units: $243/WC; Hotels, Motels: $88/WC, $32/Urinals		O
24	Ballina	Ballina	280+usage	P	Service connection size* (40mm $1120)	105 c/kL	P
100	Balranald	Balranald	228+usage	P	Access charge per equivalent 20 mm water connection	15 c/kL	P
21	Bathurst Regional	Bathurst	307	P	Service Connection Size*(25mm:$480, 40mm:$1229)	78 c/kL	P
23	Bega Valley	Bega Valley	648	P	Meter size* (eg. 40mm $2592)	145 c/kL	P
47	Bellingen	Bellingen, Urunga, Dorrigo	470	P	Uniform Access Charge	109 c/kL	O
53	Berrigan	Berrigan, Finley, Tocumwal, Barooga	330	P	Uniform Access Charge, after two WCs $72/WC		
72	Bland	Bland	405	O	Land Value	$30/Cistern, $75/WC	O
78	Blayney	Blayney	392	P	Service connection size* (40mm $1568)	80 c/kL	P
		Millthorpe	636	P	Service connection size* (40mm $2544)	80 c/kL	
89	Bogan	Nyngan	383	P	Uniform Access Charge		O
97	Bombala	Bombala	387	P	Uniform Access Charge	15 c/kL	O
		Delegate	328	P	Uniform Access Charge	65 c/kL	
104	Boorowa	Boorowa	297	P	Uniform Access Charge		O
87	Bourke	Bourke	492	P	Uniform Access Charge		O
105	Brewarrina	Brewarrina	483	O	$41/Urinals, Additional WCs (2-5) $122, additional WC $41/WC		O
		Goodooga	210	O			
27	Byron	Byron	510+usage	P	$510 for up to 1 kL/d of usage, $510 for each additional kL/d of usage	120 c/kL	P
91	Cabonne	Molong	177	P	Service connection size* (40mm $497)	118 c/kL	P
		Canowindra	363	P	Service connection size* (40mm $503)	118 c/kL	
		Eugora	308	P	Service connection size* (40mm $488)	119 c/kL	
		Manildra	500	O	Land Value		
		Cudal, Cumnock, Yeoval	500	O	Land Value		
92	Carrathool	Hilston	212	P	Base Charge — Motels:Base+10% Base charge/unit; Service Station:1.5 Base Charge;laundromat, Clubs & Hotels:2xBase Charge		O
		Rankine Springs	354		Uniform Access Charge		
103	Central Darling	Wilcannia	300	P	Uniform Access Charge for two fittings, $100/additional fitting		O
14	Clarence Valley		276	P	Service connection size* (40mm: $1102)	59 c/kL	P
67	Cobar		250	P	Uniform Access Charge for 3 WCs, additional $60/WC		O
10	Coffs Harbour	Coffs Harbour	589	P	Uniform Access Charge		O
99	Coolamon	Coolamon	250	P	Uniform Access Charge	for >2 Pedestals, $70/Pedestal	O
		Ganmain	250	P	Uniform Access Charge	for >2 Pedestals, $70/Pedestal	
50	Cooma-Monaro	Cooma,Nimmitabel	542	P	$596 for consumption < 100 kL, increasing to $14,162 for consumption > 8,000 kL		O
75	Coonamble	Coonamble	196	P	Uniform Access Charge	72 c/kL	O
		Gulargambone	256	P	Uniform Access Charge	76 c/kL	
58	Cootamundra	Cootamundra	192	O	Meter Size 40mm:$768		O
42	Corowa	Corowa	305	P	Uniform Access Charge	3 to 8 WC: $81/WC, 9 to 20 $54/WC,	O
		Mulwala	365	P	Uniform Access Charge	>20 WCs: $40/WC	
		Howlong	290	P	Uniform Access Charge		
26	Country Energy	Broken Hill	537	P	Service connection size* (40mm:$2146)	86 c/kL	P
39	Cowra	Cowra	465	P	Uniform Access Charge	$55/cistern	O
54	Deniliquin	Deniliquin	484	P	Uniform Access Charge+$56/3 WC+ $28/additional WC & $27/Urinal		O
18	Dubbo	Dubbo	230	P	Service connection size* (40mm:$921)	124 c/kL	P
64	Dungog	Dungog	378	P	Uniform Access Charge	Hotels-Licensed Area & Clubs: $179/WC, $149/Urinal, Hotels- Guest Areas & Motels: $89/WC, $75/Urinal	O
15	Eurobodalla	Eurobodalla	520	P	Meter Size(Availability Factor based)* (eg. 40mm 4x$520)		O
51	Forbes	Forbes	337	O	Service Connection Size 40mm:1346.68	120 c/kL	O
84	Gilgandra	Gilgandra	158	P	Service Connection Size*(40mm:$632)	90 c/kL	P
60	Glen Innes Severn	Glen Innes	148	P	Service Connection Size*(40mm:$594)	88 c/kL	P
82	Gloucester	Gloucester	295	P	Service connection size* (40mm:$1180)	100 c/kL	P
1	Gosford	Gosford	376	P	Meter Size*(40mm $1123.60)	80 c/kL	P
76	Goulburn Mulwaree	Goulburn	301	P	Meter Size* (40mm:1201)	202 c/kL	P
		Marulan	821	P	Meter Size* (40mm:3284)	164 c/kL	

Table 7B - Sewerage - 2006/07 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)	Compliance with 2(b) of BPMG Yes/No (5)
80	Greater Hume	Burrumbuttock	88	P	Service Connection Size*(40mm:$352)	80 c/kL	P
		Jindera	85	P	Service Connection Size(40mm:$169)	80 c/kL	P
		Holbrook	96	P	Service Connection Size(40mm:$192)	80 c/kL	P
		Culcairn	96	P	Service Connection Size(40mm:$192)	80 c/kL	P
		Henty	100	P	Service Connection Size(40mm:$200)	80 c/kL	P
		Walla Walla	103	P	Service Connection Size(40mm:$206)	80 c/kL	P
30	Griffith	Griffith	159	P	Service Connection Size(40mm:$636)	73 c/kL	P
94	Gundagai	Gundagai	80+usage> 225	P	Service Connection*(eg 40mm:300)	114 c/kL	P
44	Gunnedah	Gunnedah	254	P	Uniform Access Charge		O
		Curlewis	444	P	Uniform Access Charge		
90	Guyra	Guyra	500	P	Uniform Access Charge	Ist WC/Urinal covered by rate, 2 to 6: $212/WC or Urinal, All additional: $106/WC or Urinal	O
81	Gwydir	Bingara, Warialda	400	P	Meter Size*(eg 40mm:1600)	245 c/kL	P
76	Harden	Harden	400	P	Uniform Access Charge		O
7	Port Macquarie-Hastings	Hastings	421	P	Uniform Access Charge	65 c/kL	O
30A	Hawkesbury	Category 1, Vol < 1kL/d	465	P	Uniform Access Charge		O
		Category 2, Vol : 1kL to 5 kL/d	2330	P	Uniform Access Charge		
		Category 3, Vol < 5kL to 10 kL/d	4640	P	Uniform Access Charge		
		Category 4, Vol : 10kL to 20 kL/d	9250	P	Uniform Access Charge		
		Category 5, Vol > 20 kL/d	9250	P	Uniform Access Charge	for waste > 20 kL/d, 165c/kL	
86	Hay	Hay	324	P	Uniform Access Charge		O
0	Hunter Water		432	P	Meter Size* (Appropriate sewer discharge factor is applied to obtain the access charge. eg. 40 mm with 0.8 discharge factor results in access charge of $1,382)	41 c/kL	
37	Inverell	Inverell, Ashford, Delungra, Gilgai	355	P	Uniform Access Charge		O
106	Jerilderie	Jerilderie	525	P	Service Connection(eg 32mm:1155)	70 c/kL	P
77	Junee	Junee	304	P	$76.20/WC, $29.30/Urinal		O
25	Kempsey	Kempsey	483	P	Meter Size*(eg 40mm:$1851)	130 c/kL	P
70	Kyogle	Kyogle	175	P	Service Connection Size*(40mm:$700)+Usage, (minimum $508 including Trade waste Charges)	88 c/kL	P
59	Lachlan	Lachlan	319	P	Uniform Access Charge		O
48	Leeton	Leeton	237	O	Land Value		O
22	Lismore	Lismore, Nimbin & Perradenya	456	P	Uniform Access Charge		O
31	Lithgow	Lithgow,Wallerawang, Portland	510	P	Meter Size(50mm:$680)	98 c/kL	P
61	Liverpool Plains	Quirindi, Werris Creek	182	P	Service Connection Size*(40mm:$729))	129 c/kL	P
102	Lockhart	Lockhart	154	P	Meter Size*(40mm:$617)	262 c/kL	P
		The Rock	216	P	Meter Size*(40mm:$866)	72 c/kL	
		The Rock west	342	P	Uniform Access Charge		
5	MidCoast		460	P	Meter Size*(eg 40mm: $1840)	157 c/kL	P
32	Mid Western Regional	Mudgee, Gulgong & Rylstone	433	P	Uniform Access Charge		O
38	Moree Plains Shire	Moree, Mungindi	620	P	Service Connection Size (40mm:$698)	100 c/kL	P
		Balone	605	P	Uniform Access Charge		
		Bogabilla and Gurly	400	P	Uniform Access Charge		
65	Murray	Moama, Mathoura	245	P	Service Connection Size*(40mm:$980)	48 c/kL	P
101	Murrumbidgee	Darlington Point	300	P	Land Value		P
		Coleambally	183	O	Land Value		
41	Muswellbrook	Muswellbrook, Denman	185	P	Service Connection Size*(40mm:$740))	155 c/kL	P
34	Nambucca	Nambucca	375	P	Service Connection Size (40mm:$435))	141c/kL	O
46	Narrabri	Narrabri	413	P	Uniform Access Charge	$62/Pedestal, $62/Cistern	O
		Wee Waa	456	P	Uniform Access Charge	$68/Pedestal, $68/Cistern	
		Bogabri	337	P	Uniform Access Charge	$51/Pedestal, $51/Cistern	
63	Narrandera	Narrandera	395	O	Land Value		O
62	Narromine	Narromine, Trangie	165	P	Uniform Access Charge	155 c/kL	O
83	Oberon	Oberon	97	P	Service Connection Size*(38mm:$350))	74 c/kL	P
19	Orange	Orange	97	P	Service connection Size 40mm:$388.36	128 c/kL	P
71	Palerang	Bungendore	930	P	Uniform Access Charge		O
		Braidwood	739	P	Uniform Access Charge		
		Captaind Flat	639	P	Uniform Access Charge		

Table 7B - Sewerage - 2006/07 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)	Compliance with 2(b) of BPMG Yes/No (5)
36	Parkes	Parkes	105	P	Meter Size* (40mm:$421))	97 c/kL	P
17	Queanbeyan	Queanbeyan	238	P	Service Connection Size (40mm:$1036)	55 c/kL	P
33	Richmond Valley	all	(140+(1.42xC))xSDF	P	Service Connection Size(40mm:$560), C=Water Cons in kL, SDF=0.95	142 c/kL	P
3	Shoalhaven	Shoalhaven	526	P	Meter Size (40mm:$1342))	80 c/kL	P
35	Singleton	Singleton	350	P	Uniform Access Charge	for more than 2 WCs: $156.25/WC, $85.4/Urinal	0
52	Snowy River	Snowy River	360	P	Uniform Access Charge+usage	117.8 c/kL	0
0	Sydney Water		347	P	Meter Size* (eg. 40mm: $1,280, 100mm: $7,980, 300mm: $71,800)	for waste > 500kL/a, 119 c/kL	
13	Tamworth	Tamworth	540	P	Uniform Access Charge	$71/Additional unit (motels/hotels/Club),	0
69	Temora	Temora	187	P	Uniform Access Charge	up to 3 WCs, 4 to 9 WCs $93.50/WC, >10 WCs $46.75	0
68	Tenterfield	Tenterfield	450	P	Uniform Access Charge	$150/WC for Motels, $225/WC for Parks/Guest Houses/Clubs/Hotels	0
		Urbenville	578	P	Uniform Access Charge		
93	Tumbarumba	Tumbarumba	210	P	Meter Size (40mm:$840))	77 c/kL	P
		Khancoban	210	P	Meter Size (40mm:$840))	77 c/kL	
43	Tumut	Tumut	442	P	Meter Size* (40mm:$1761))	116 c/kL	P
6	Tweed	Tweed	473	P	Uniform Access Charge	71 c/kL	0
45	Upper Hunter	Murrurundi	414	P	Meter Size (40mm $829)	64 c/kL	P
		Merriwa	414	P	Meter Size (40mm $829)	64 c/kL	
		Aberdeen/Scone	414	P	Meter Size (40mm $829)	64 c/kL	
73	Upper Lachlan	Crookwell	540	P	Uniform Access Charge	97 c/kL	0
		Gunning	589	P	Uniform Access Charge	60 c/kL	
		Taralga	589	P	Uniform Access Charge		
85	Uralla	Uralla	275	P	Uniform Access Charge	100 c/kL	0
107	Urana		200	P	Uniform Access Charge		0
17	Wagga Wagga	Wagga Wagga	640	P	Access charge includes first 4 pan equivalent fixtures. Additional $80/equivalent fixture		0
88	Wakool	Wakool, Barham, Moulamein, Tooleybuc, Mu	437	P	Hotels: SC+20%SC/Cistern+10%SC/Room, Clubs: SC+20%SC/Cistern, Shops/Motels/Units: SC+10%SC		0
98	Walcha	Walcha	360	P	Meter Size* (40mm $360x4)	80 c/kL	P
79	Walgett	Walgett	295	P	Uniform Access Charge Additional $295/Pedestal, $46.20/Cistern		0
		Lightening Ridge	286	P	Uniform Access Charge Additional $295/Pedestal, $46.20/Cistern		
		Lightening Ridge Pump Assisted	220	P	Uniform Access Charge		
		Collarenebri	327	P	Uniform Access Charge Additional $295/Pedestal, $46.20/Cistern		
96	Warren	Warren	465	P	Uniform Access Charge for multiple users:$233/WC/Urinal	$233/WC	0
		Nevertire	490	P	Uniform Access Charge		
55	Warrumbungle	Coolah & Dunedo	314	P	Uniform Access Charge		0
		Coonabarabran	120	0	Base $120+ Land Value		
		Baradine	623	P	Uniform Access Charge		
95	Weddin	Grenfell	178	P	Uniform Access Charge		0
57	Wellington	Wellington, Mumbli, Guerie	270	P	Meter Size* (40mm $1080) minimum charge:$475	70 c/kL	P
74	Wentworth	Wentworth, Nimatjira	425	P	Uniform Access Charge		0
16	Wingecarribee	Wingecarribee	428	P	Meter Size* (40mm:$1712)	86.52 c/kL	P
2	Wyong	Wyong	137	P	Meter Size* (40mm:$548.68)	68 c/kL	P
56	Yass Valley	Yass	475	P	Uniform Access Charge	148 c/kL	0
49	Young	Young	345	P	Uniform Access Charge	after 2 WCs, $172.50/WC	0

Table 7C - Sewerage - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	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	Usage/Additional Charges (for estimated volume discharged to sewer = water usage x sewer discharge factor)	Reduction+ for Non-rateable properties
				(1)	(2)	(3)	(4)	
11	Albury	Albury		120	✓	Meter Size (eg 25mm:$197, 40mm:$505)	149 c/kL	N
29	Armidale Dumaresq	Armidale	Churches & Hospitals	Nil		$40/WC, $32/Urinal		L
			Others	Nil		$88/WC, $32/Urinal		
24	Ballina	Ballina	Hospitals, Schools and Churches	280	✓	Service Connection Size* (40mm:$1120)	105 c/kL	N
100	Balranald	Balranald		228	✓	Access charge per equivalent 20 mm water connection	15c/kL	N
21	Bathurst Regional	Bathurst	Schools and Churches excluding church residen	307	✓	Service Connection Size*(25mm:$480, 40mm:$1229)	78 c/kL	N
23	Bega Valley	Bega Valley	Nursing Homes & Public Hospitals	Nil	✓	Meter size (eg. 40mm $1960), 300kL water usage allowance per day per resident, Standard Charge above the Allowance, Standard Availability Charge if the above is below the Availability Charge	145 c/kL, Discharge Factor 76%, Sporting Complex 26%	L
			Non-Profit Community Organisations	Nil			145 c/kL	
			Religious Bodies	Nil			145 c/kL	
47	Bellingen	Bellingen, Urunga, Dorrigo		470	✓	Uniform Access Charge	109c/kL, 400kL allowance if charge is levied, else 0 kL	N
53	Berrigan	Berrigan, Finley, Tocumwal, Barooga		Nil	✓	$72 per cistern/toilet		L
72	Bland	Bland			×	$73.50/WC, $21/Cistern		L
78	Blayney	Blayney	all	392	✓	Service connection size* (40mm $1568)	80 c/kL	N
		Millthorpe	all	636	✓	Service connection size* (40mm $2544)	80 c/kL	
89	Bogan	Nyngan	all	383	✓	Uniform Access Charge		S
97	Bombala	Bombala		387	✓	Uniform Access Charge	15 c/kL	N
		Delegate		328	✓	Uniform Access Charge	65 c/kL	
104	Boorowa	Boorowa		297	✓	Uniform Access Charge		N
87	Bourke	Bourke		492	✓	Uniform Access Charge		N
105	Brewarrina	Brewarrina		483	×	$41/Urinals, Additional WCs (2-5) $122, additional WC $41/WC		N
		Goodooga		210	×			
27	Byron	Byron		510+usage	✓	<1kL/d usage $510, $510 each additional kL/d	120 c/kL	N
91	Cabonne	Molong		177	✓	Service connection size* (40mm $497)	118 c/kL	N
		Canowindra		363	✓	Service connection size* (40mm $503)	118 c/kL	
		Eugora		308	✓	Service connection size* (40mm $488)	119 c/kL	
		Manildra		500	×	Land Value		
		Cudal, Cumnock, Yeoval		500	×	Land Value		
92	Carrathool	Hilston, Goolgowi	Police Stations, Hospitals, Schools, etc	Nil	✓	$70/WC, $35/Urinal		L
			Churches	Nil	✓	$35/WC, $17.50/Urinals		
103	Central Darling	Wilcannia		390	✓	Uniform Access Charge for two fittings, $90/additional fitting		N
14	Clarence Valley			Nil	✓		147 c/kL	L
67	Cobar			250	✓	Uniform Access Charge For > 3 WCs, additional $60/WC		N
10	Coffs Harbour	Coffs Harbour	Schools/Church	Nil		$41.20/WC or Cistern		L
			Other Non-Rateables	Nil		$66/WC or Cistern		
75	Coolamon	Coolamon		250	✓	for greater than 2 toilets, $70/WC		N
		Ganmain		250	✓	for greater than 2 toilets, $70/WC		
50	Cooma-Monaro	Cooma		560	✓			S
75	Coonamble	Coonamble			✓	Uniform Access Charge	72 c/kL	L
		Gulargambone			✓	Uniform Access Charge	76 c/kL	
58	Cootamundra	Cootamundra	community	77		Meter Size 50 mm: $480		L

+L: Large Reduction in comparison with non-residential tarrif
S: Significant Reduction in comparison with non-residential tarrif
N: No Reduction

Table 7C - Sewerage - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	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)	Usage/Additional Charges (for estimated volume discharged to sewer = water usage x sewer discharge factor) (4)	Reduction+ for Non-rateable properties
42	Corowa	Corowa				$81/WC, $40/Urinal		N
		Mulwala						
		Howlong						
26	Country Energy	Broken Hill	State Schools, Religious bodies				86 c/kL	L
39	Cowra	Cowra		355+110	✓	Uniform Access Charge	$55/cistern	N
54	Deniliquin	Deniliquin	Schools & Churches	484	✓	Uniform Access Charge+$56/3 WC+ $28/additional WC & $27/Urinal		N
18	Dubbo	Dubbo	All Non-Rateable	230	✓			N
64	Dungog	Dungog	Schools & Churches	Nil		$179/WC, $149/Urinal		S
			Nursing Homes			$89/WC		
			Others			$356/WC, $149/Urinal		
15	Eurobodalla	Eurobodalla		520	✓	Meter Size(Availability Factor based)* (eg. 40mm 4x$520)		N
51	Forbes	Forbes		337		Service Connection Size 40mm:1346.68	120 c/kl	N
84	Gilgandra	Gilgandra		158	✓	Service Connection Size*(40mm:$632)	90 c/kL	N
60	Glen Innes Severn	Glen Innes		148	✓	Service Connection Size*(40mm:$594)	88 c/kL	N
82	Gloucester	Gloucester	Schools,Churches	325		Service connection size* (40mm:$1180)	100 c/kL	N
1	Gosford	Gosford		376	✓	Meter Size*(40mm $1123.60)	80 c/kL	N
20	Goulburn Mulwaree Council	Goulburn		301		Meter Size* (40mm:1201)	202 c/kL	N
		Marulan		821		Meter Size* (40mm:3284)	164 c/kL	
80	Greater Hume	Henty, Culcairn, Walla Walla	Burrumbuttock	88		Service Connection Size*(40mm:$352)	80 c/kL	N
			Jindera	85		Service Connection Size(40mm:$169)	80 c/kL	
			Holbrook	96		Service Connection Size(40mm:$192)	80 c/kL	
			Culcairn	96		Service Connection Size(40mm:$192)	80 c/kL	
		Holbrook	Henty	100		Service Connection Size(40mm:$200)	80 c/kL	
		Burrumbuttock, Jindera	Walla Walla	103		Service Connection Size(40mm:$206)	80 c/kL	
30	Griffith	Griffith		159		Service Connection Size(40mm:$636)	73 c/kL	N
94	Gundagai	Gundagai	All Non-Rateable	80+usage>=225		Service Connection*(eg 40mm:$320)	114 c/kL	N
44	Gunnedah	Gunnedah, Curlewis	Schools and Churches	Nil		$50/WC & $45/Urinal		S
			Others	Nil		$90/WC & $45/Urinal		
90	Guyra	Guyra	All Non-Rateable			$106/WC or Urinal		L
81	Gwydir	Bingara, Warialda		400	✓	Meter Size*(eg 40mm:$1600)	245 c/kL	N
76	Harden	Harden	Schools and Residences, Religious bodies			$82.50/WC, $66/Cistern		S
			Others			$165/WC, $66/Cistern		
7	Port Macquarie-Hastings	Hastings	Churches and halls	271	✓	Uniform Access Charge	65 c/kL	L
			Others	336	✓			
30A	Hawkesbury	Category 1, Vol < 1kL/d		465	✓	Uniform Access Charge		N
		Category 2, Vol : 1kL to 5 kL/d		2330		Uniform Access Charge		
		Category 3, Vol < 5kL to 10 kL/d		4640		Uniform Access Charge		
		Category 4, Vol : 10kL to 20 kL/d		9250		Uniform Access Charge		
		Category 5, Vol > 20 kL/d		9250		Uniform Access Charge	if waste generated > 20 kL/d, 165 c/kL	
86	Hay	Hay		324	✓	Uniform Access Charge	65 c/kL	N
22	Hunter Water			432	✓	Meter Size* (Appropriate sewer discharge factor is applied to obtain the access charge. eg. 40 mm with 0.8 discharge factor results in access charge of $1,382)	41 c/kL	
31	Inverell	Inverell, Ashford, Delungra, Gilgai		350		Uniform Access Charge		N

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S: Significant Reduction in comparison with non-residential tarrif
N: No Reduction

Table 7C - Sewerage - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	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)	Usage/Additional Charges (for estimated volume discharged to sewer = water usage x sewer discharge factor) (4)	Reduction+ for Non-rateable properties
106	Jerilderie	Jerilderie	Schools, etc	Nil		$45/WC, $40/Urinal		L
			Others	Nil		$80/WC, $45/Urinal		
77	Junee	Junee	School, Churches and Hospitals	Nil	✓	$34.20/WC, $25.90/Urinal		S
			Aged Care Hostel/Unit	Nil	✓	$51.90/Unit		
			Others	Nil	✓	$76.20/WC, $29.30/Urinal		
25	Kempsey	Kempsey	All	483	✓	Meter Size*(eg 40mm:$1851)	130 c/kL	S
70	Kyogle	Kyogle,Wooden Bong, Bonalbo		175	✓	Service Connection Size*(40mm:$700)+Usage, (minimum $508 including Trade waste Charges)	88 c/kL	N
59	Lachlan	Lachlan	Schools			$44/WC, $35/Urinal		L
			Others			$87/WC, $35/Urinal		
48	Leeton	Leeton	Churches &Schools	Nil		$87/WC, $35/Cistern		L
			Others	Nil		$44/WC, $35/Cistern		
22	Lismore	Lismore, Nimbin & Perradenya		456	✓	Uniform Access Charge		N
31	Lithgow	Lithgow,Wallerawang, Portland		510	✓	Meter Size(eg: 50mm:$680)		N
61	Liverpool Plains Shire Council	Quirindi, Werris Creek	All	182	✓	Service Connection Size*(40mm:$729))	129 c/kL	N
102	Lockhart	Lockhart		154	✓	Meter Size*(40mm:$617)	262 c/kL	N
		The Rock		216	✓	Meter Size*(40mm:$866)	72 c/kL	
		The Rock west		342	✓	Uniform Access Charge		
5	MidCoast			460	✓	Meter Size*(eg 40mm: $1840)	157 c/kL	N
32	Mid Western Regional Council	Mudgee, Gulgong & Rylstone		433	✓	Uniform Access Charge		N
38	Moree Plains Shire	Moree, Mungindi		620	✓	Service Connection Size (40mm:$698)	100 c/kL	N
		Balone		605	✓	Uniform Access Charge		
		Bogabilla and Gurly		400	✓	Uniform Access Charge		
65	Murray	Moama, Mathoura		245	✓	Service Connection Size*(40mm:$980)	48 c/kL	N
101	Murrumbidgee	Darlington Point		300		Land Value		N
		Coleambally		183		Land Value		N
		Churches	Churches	25				L
41	Muswellbrook	Muswellbrook, Denman	All	185	✓	Service Connection Size*(40mm:$740))	155 c/kL	N
34	Nambucca	Nambucca	All	375	✓	Service Connection Size (40mm:$435))	141c/kL	N
46	Narrabri	Narrabri		413	✓	$62/Pedestal, $62/Cistern		N
		Wee Waa		456	✓	$68/Pedestal, $68/Cistern		
		Bogabri		337	✓	$51/Pedestal, $51/Cistern		
63	Narrandera	Narrandera	Schools	Nil		$62/Pedestal, $62/Cistern		N
			Religious bodies			$68/Pedestal, $68/Cistern		
			All others			$51/Pedestal, $51/Cistern		
62	Narromine	Narromine, Trangie	All			Nil	155 c/kL	L
83	Oberon	Oberon	Non-Rateable	97	✓	Service Connection Size*(38mm:$350))	74 c/kL	N
19	Orange	Orange	All	97	✓	Service connection Size 40mm*:$388.36+Usage	128 c/kL	N
71	Palerang	Bungendore		930	✓	Uniform Access Charge		N
		Braidwood		739	✓	Uniform Access Charge		
		Captaind Flat		639	✓	Uniform Access Charge		
36	Parkes	Parkes	Chrches	125				L
17	Queanbeyan	Queanbeyan	Schools and Churches			$60/WC		L
33	Richmond Valley	Richmond		(140+(1.42xC))xSDF	✓	142c/kL		N
3	Shoalhaven	Shoalhaven		526	✓	Meter Size (40mm:$1342))	80 c/kL	N
35	Singleton	Singleton	Non-Rateable Properties	Nil		$43.30/WC and $31.25/Urinals		L
16	Snowy River	Snowy River		360	✓	Uniform Access Charge	117.8 c/kL	N

+L: Large Reduction in comparison with non-residential tarrif
S: Significant Reduction in comparison with non-residential tarrif
N: No Reduction

Table 7C - Sewerage - 2006/07 Non-Rateable Tariffs

	WATER UTILITY	Town	Property	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)	Usage/Additional Charges (for estimated volume discharged to sewer = water usage x sewer discharge factor) (4)	Reduction+ for Non-rateable properties
2	Sydney Water			328	P	Meter Size* (eg. 40mm: $1,280, 100mm: $7,980, 300mm:	106 c/kL for discharges over 500kL/a	
13	Tamworth	Tamworth		Nil	P	$71/WC or Urinal		S
69	Temora	Temora		187	P	up to 3 WCs, 4 to 9 WCs $93.50/WC, >10 WCs $46.75/WC		N
68	Tenterfield	Tenterfield	Schools, Churches & Community Managed serv	Nil		$58/WC, $47/Cistern		L
			Others			$107/WC, $47/Cistern		
93	Tumbarumba	Tumbarumba		210	P	Meter Size (40mm:$840))	77 c/kL	N
		Khancoban		210	P	Meter Size (40mm:$840))	77 c/kL	
43	Tumut	Tumut	All	442	P	Meter Size* (40mm:$1761))	116 c/kL	N
6	Tweed	Tweed	All	473	P	Uniform Access Charge	71 c/kL	N
45	Upper Hunter Shire Council	Murrurundi		414	P	Meter Size (40mm $829)	64 c/kL	N
		Merriwa		414	P	Meter Size (40mm $829)	64 c/kL	
		Aberdeen/Scone		414	P	Meter Size (40mm $829)	64c/kL	
73	Upper Lachlan Council	Crookwell		540	P	Uniform Access Charge	97 c/kL	N
		Gunning		589	P	Uniform Access Charge	60 c/kL	
		Taralga		589	P	Uniform Access Charge		
85	Uralla	Uralla		275	P	Uniform Access Charge	100 c/kL	N
107	Urana			200		Uniform Access Charge		N
17	Wagga Wagga	Wagga Wagga		640	P	Includes up to 4 pan equivalent fixtures. Additional $80/equivalent fixture		N
88	Wakool	Barham, Moulamein, Murray Downs, Tooleybuc	Churches	Nil		15% of SC per cistern		L
			Hospitals/Nursing homes			1xSC+15% of SC per cistern		
			Others			1xSC		
98	Walcha	Walcha		360		Meter Size* (40mm $360x4)	80 c/kL	N
79	Walgett			220	P			N
96	Warren	Warren		465	P	for multiple users:$233/WC/Urinal		N
		Nevertire		490	P			
55	Warrumbungle Shire Council		Schools & Hospitals	Nil		$80.45/WC, $40.75/Urinal		L
			Others	354				L
95	Weddin	Grenfell	Schools, Religious Bodies	Nil	P	$43/WC, $36/Cistern		N
			Others	Nil	P	$77/WC, $36/Cistern		
57	Wellington	Villages	Church	Nil	P		70c / kL	L
		Wellington	Church	216		minimum charge $380	70c / kL	L
74	Wentworth	Wentworth, Nimatjira	Church	Nil	P	$45/WC, $40Urinal		L
			Others	Nil	P	$80/WC, $40Urinal		
16	Wingecarribee	Wingecarribee		428	P	Meter Size* (40mm:$1712)	86.52 c/kL	N
2	Wyong	Wyong		137	P	Meter Size* (40mm:$548.68)	68 c/kL	N
56	Yass Valley	Yass	All	475			148c/kL	N
49	Young	Young	Schools and associated residences/churches	Nil	P	$86.25/WC, $66/Urinal		S
			Church residences and Others	Nil		$172.50/WC, $66/Urinal		

+L: Large Reduction in comparison with non-residential tarrif
S: Significant Reduction in comparison with non-residential tarrif
N: No Reduction

Table 7D - Sewerage - Liquid Trade Waste Fees and Charges (2006/07)

	WATER UTILITY	Does LWU have complying Liquid Trade Waste Policy* ? (1) 2005/06	Does LWU have complying Liquid Trade Waste Policy* ? (2) 2006/07	Complying Trade Waste Fees & Charges (Yes/No) (3)	Approval issued to all liquid trade waste dischargers (Yes/No) (4)	ANNUAL TRADE WASTE FEE ($) Category 1 (5)	Category 1A [Prescribed pretreatment with low impact] (6)	Category 2 (7)	Category 3 (8)	Reinspection Fee $/inspection Cat/1/2/3 (9)	Category 2 Trade Waste Usage Charge (c/kL) (10)	Excess Mass Charge (c/kg) BOD_5 (Up to 600mg/L) (11)	Suspended Solids (12)	Oil & Grease (13)	Non-compliance Excess Mass Charge for BOD_5 (Yes/No) (14)
11	Albury City		✓	✓	Yes	Yes						127	26	16	41	
29	Armidale Dumaresq			No	Yes	50	100	222	554				50	63	70	
24	Ballina		✓	✓	Yes	Yes	64	64	128	430	90	105	54	69	200	Yes
100	Balranald	×		×	No											
21	Bathurst Regional		✓	✓	No		471					55				
23	Bega Valley		✓	✓	No											
47	Bellingen		✓	✓	Yes		80				90					
53	Berrigan		✓	✓	No											
72	Bland	×		×	No											
78	Blayney		✓	✓	Yes	Yes	160		160	265			44	43	85	
89	Bogan	×		×	No											
97	Bombala		✓	✓	No											
104	Boorowa	×		×	No											
87	Bourke		✓	✓	No											
105	Brewarrina	×		×	No											
27	Byron		✓	✓	Yes	Yes	210					120				
91	Cabonne		✓	✓	No											
92	Carrathool	×		×	No											
103	Central Darling				No											
40	Central Tablelands (No Sge)	**NO SGE**														
14	Clarence Valley		✓	✓												
67	Cobar	×		×	No	Yes										
66	Cobar WB															
10	Coffs Harbour		✓	✓	Yes		150									
99	Coolamon				No											
50	Cooma-Monaro		✓	✓	Yes											
75	Coonamble				No											
58	Cootamundra	×		×	No											
42	Corowa		✓	✓	No											
26	Country Energy		✓	✓	No		139		440		139					
39	Cowra		✓	✓	Yes											
54	Deniliquin				No											
18	Dubbo		✓	✓	Yes	Yes	120	120	600	600	110		110	90	200	
64	Dungog		✓	✓	No								110	110	110	
15	Eurobodalla		✓	✓	No	Yes	64			400						
12	Fish River WS (No Sge)	**NO SGE**														
51	Forbes		✓	✓	Yes		250	250								
84	Gilgandra		✓	✓	Yes	Yes										
60	Glen Innes Severn				Yes											
82	Gloucester		✓	✓		Yes					82					
28A	Goldenfields (Reticulator) (No Sge)	**NO SGE**														
1	Gosford		✓	✓	Yes	Yes	179				112		130	130	668	
20	Goulburn Mulwaree		✓	✓	Yes	Yes	70	70	266	266	55	182				
80	Greater Hume	×		×	Yes											
30	Griffith		✓	✓	Yes	Yes	60		64	430	60			103		
94	Gundagai		✓	✓	No											
44	Gunnedah		✓	✓												
90	Guyra	×		×		Yes										

Table 7D - Sewerage - Liquid Trade Waste Fees and Charges (2006/07)

	WATER UTILITY	Does LWU have complying Liquid Trade Waste Policy* ? (1) 2005/06	Does LWU have complying Liquid Trade Waste Policy* ? (2) 2006/07	Complying Trade Waste Fees & Charges (Yes/No) (3)	Approval issued to all liquid trade waste dischargers (Yes/No) (4)	ANNUAL TRADE WASTE FEE ($) Category 1 (5)	Category 1A [Prescribed pretreatment with low impact] (6)	Category 2 (7)	Category 3 (8)	Reinspection Fee $/inspection Cat/1/2/3 (9)	Category 2 Trade Waste Usage Charge (c/kL) (10)	Excess Mass Charge (c/kg) BOD_5 (Up to 600mg/L) (11)	Suspended Solids (12)	Oil & Grease (13)	Non-compliance Excess Mass Charge for BOD_5 (Yes/No) (14)
81	Gwydir		✓	No											
76	Harden	×	×	Yes											
7	Port Macquarie-Hastings		✓	Yes	Yes	108		108	464	65		58	74	105	
30A	Hawkesbury		✓	No											
86	Hay	×	×		Yes										
	Hunter Water		✓	Yes											
37	Inverell	×	×	No											
106	Jerilderie	×	×	Yes											
77	Junee		✓	No											
25	Kempsey		✓	Yes	Yes			71	477	71	132	60		110	
70	Kyogle		✓	No	Yes	132		132	443	64	100				
59	Lachlan	×	×	Yes	Yes										
48	Leeton		✓	Yes											
22	Lismore		✓	Yes	Yes	170		170		95		132	82	230	
31	Lithgow		✓	No	Yes	128		190	348						
61	Liverpool Plains		✓	No		66		440		62		55	75	100	
102	Lockhart	×	×	Yes											
5	MidCoast		✓		Yes	70		105	410			126	105	152	
32	Mid Western Regional		✓	Yes	Yes										
38	Moree Plains		✓	Yes						65					
65	Murray		✓	No		86	86	175	600	50		70	56	140	
101	Murrumbidgee	×	×	Yes											
41	Muswellbrook		✓	No	Yes										
34	Nambucca			Yes	Yes										
46	Narrabri		✓	No	Yes	175		220	330			175			
63	Narrandera	×	×	No											
62	Narromine		✓	Yes											
83	Oberon		✓	Yes											
19	Orange		✓		Yes	124		124	124			41	45	80	
71	Palerang	×	×	Yes											
36	Parkes		✓	No	Yes	67		67	430	63					
17	Queanbeyan		✓	No	Yes	64		64	430	60					
33	Richmond Valley														
8	Riverina (No Sge)	**NO SGE**													
4	Rous (No Sge)	**NO SGE**		Yes											
3	Shoalhaven		✓	Yes	Yes										
35	Singleton		✓	No	Yes	265				80		55	123	98	
52	Snowy River					50									
	Sydney Water		✓	Yes											
13	Tamworth Regional		✓	No	Yes	108						65	63		
69	Temora	×	×	No											
68	Tenterfield		✓	No	Yes										
93	Tumbarumba	×	×	Yes	Yes	64				60		54	69	97	
43	Tumut		✓	Yes	Yes	137	240	547	950	99		110	100	190	
6	Tweed		✓		Yes										
45	Upper Hunter		✓			265				80					
73	Upper Lachlan		✓	Yes											

Table 7D - Sewerage - Liquid Trade Waste Fees and Charges (2006/07)

	WATER UTILITY	Does LWU have complying Liquid Trade Waste Policy* ? (1) 2005/06	Does LWU have complying Liquid Trade Waste Policy* ? (2) 2006/07	Complying Trade Waste Fees & Charges (Yes/No) (3)	Approval issued to all liquid trade waste dischargers (Yes/No) (4)	ANNUAL TRADE WASTE FEE ($) Category 1 (5)	Category 1A [Prescribed pretreatment with low impact] (6)	Category 2 (7)	Category 3 (8)	Reinspection Fee $/inspection Cat/1/2/3 (9)	Category 2 Trade Waste Usage Charge (c/kL) (10)	Excess Mass Charge (c/kg) BOD_5 (Up to 600mg/L) (11)	Suspended Solids (12)	Oil & Grease (13)	Non-compliance Excess Mass Charge for BOD_5 (Yes/No) (14)
85	Uralla	✓	✓	No	Yes										
107	Urana			Yes											
9	Wagga Wagga	✓	✓	No	Yes										
88	Wakool	×	×	No											
98	Walcha	✓	✓	No		64			430	60					
79	Walgett	×	×	Yes											
96	Warren	✓	✓												
55	Warrumbungle	×	×	No		68									
95	Weddin	×	×	No											
57	Wellington			No	Yes										
74	Wentworth			Yes											
16	Wingecarribee	✓	✓	Yes	Yes										
2	Wyong	✓	✓	Yes	Yes					42		66	54	133	
56	Yass Valley	×	×	Yes	Yes										
49	Young	✓	✓			66				66		44	44	88	

*with 2005 Liquid Trade Waste Management Guidelines

PERFORMANCE INDICATOR TABLES

This section contains the following Performance Indicator Tables:

Table 8 - 2005/06 NSW Urban Water Supplied

	WATER UTILITY	SOURCE CATCHMENT	POTABLE WATER SUPPLIED - Town Water Supply (ML)												NON-POTABLE SUPPLIED Town Water (includes raw & recycled) (for outdoor uses or industry) (11)	TOTAL Town Water Supplied[7] (Potable + Non-potable - Recycled) =(10)+(11)-(13) (12) NWI 17[11]	RECYCLED WATER (ML)				WATER SOURCES (ML)				TOTAL Sourced Water + Recycled =(13)+(15)+(16)+(17) (17b) NWI 9
			Revenue Water							Non Revenue Water				TOTAL Potable Town Water Supplied Revenue+Non Revenue =(1)+(2)+(3)+(4)+(5)+(6)+(7)+(9) or total reported (10)			For Town Water Supply[9] (Non-potable) (13) NWI 19	For Agricultural or Other Uses[10] (14) NWI 8	% Recycled Total =(13)+(14)/(12) (14a)	% Recycled for Town Water Supply =(13)/(12) (14b) NWI 18	Surface Water (15) NWI 4,5	Ground Water (16) NWI 7	Bulk Purchases (17) NWI 10	Total Sourced Water =(15)+(16)+(17) (17a)	
			Residential (1)	Commercial (2)	Industrial (3)	Rural (4)	Institutional (5)	Bulk Sales (6)	Public Parks & Gardens (7)	Unbilled Authorised (Fire Fighting, Flushing) ML (8)	Water Losses[3,6] ML (8a)	Real Losses (Leakage)[6] Included in (8a) ML (8b)	Total Non Revenue Water (8) + (8a) ML (9)												
	Sydney Water Corporation	Metropolitan	320,509	146,937			60,814							528,260		528,000		15,282	3		6,150		522,000	528,200	528,150
	Hunter Water Corporation	Metropolitan	40,553	20,784			8,537	2,955						80,920		80,000	451	3,311	5	1	90,000	11,380		101,400	101,380
LWUs with > 10,000 Properties																									
1	Gosford	Hawkesbury	11,280	1,597	501	13	201		75	279				***15,500***		***15,500***		241	2		14,110	180	60	14,350	14,350
2	Wyong	Tuggerah Lake	9,065	3,948							1,073	662	1,073	14,090	716	14,090	716	238	7	5.1	9,210		4,880	14,090	14,810
3	Shoalhaven	Shoalhaven	7,099	1,676	1,928	541	135		132	480	1,400	800	1,880	13,390	2,869	16,050	214	1,725	12	1	16,180		80	16,260	16,470
4	Rous (Bulk Supplier) (NO SGE)	Tweed/Richmond	478	15	7	236		10,736		70	131	61	201	11,600		11,600					11,600	3		11,600	11,600
5	MidCoast (Unfiltered)	Manning	5,894	1,620	855		139		118	224	1,890	936	2,114	10,740		10,740		56	1		10,010	726		10,740	10,740
6	Tweed	Tweed/Richmond	5,703	1,563	241	166	170	57	241	115	1,245	600	1,360	9,500	181	9,500	181	111	3	2	10,150			10,150	10,330
7	Port Macquarie-Hastings (Unfiltered	Hastings	4,414	952	22	52	345		57		656	441	656	6,500	117	6,500	117	201	5	2	6,500			6,500	6,620
8	Riverina (Groundwater) (NO SGE)	Murrumbidgee	8,898	1,842	849	970	810	424	416	100	2,026		2,126	16,340		16,340					3,560	12,600	80	16,240	16,240
10	Coffs Harbour (Unfiltered)	Clarence	3,924	1,063	95		135		135	39				***5,950***	423	***6,170***	200	320	8	3	5,740			5,740	5,940
11	Albury	Murray	6,287	854	478	18	396	404	374	10	885	582	895	9,700		9,700		3,911	40		9,700			9,700	9,700
12	Fish River WS (Unfiltered, Bulk Sup	Castlereagh/Macquarie	228					10,149			584	584	584	10,960		10,960					11,030			11,030	11,030
13	Tamworth Regional	Namoi	5,478	948	1,670	179	343	30	696					***10,380***	53	***10,440***		103	1		9,880	341		10,220	10,220
14	Clarence Valley	Clarence	3,933	1,042	537	838		5	343	60	634	444	694	7,390	138	7,390	138	125	4	2	7,290			7,290	7,430
15	Eurobodalla (Unfiltered)	Clyde	2,856	926		19	87	45	44	22				***4,420***	143	***4,420***	143	181	7	3	4,220			4,220	4,360
16	Wingecarribee	Hawkesbury	3,100	580		179	116		33		729	665	729	4,740	2	4,740	2	65	1	0	1,560		3,910	5,470	5,470
17	Queanbeyan (Reticulator)	Murrumbidgee	3,001	514		1			225	235	392	391	627	4,370		4,370		100	2				4,370	4,370	4,370
18	Dubbo	Castlereagh/Macquarie	5,231	1,005	190	439	583		520	20				***8,850***		***8,850***		2,304	26		6,930	1,780		8,710	8,710
19	Orange	Castlereagh/Macquarie	3,297	732					168		1,294	874	1,294	5,490	3,121	5,490	3,121	15	57	57	5,420	68		5,490	8,610
20	Goulburn Mulwaree	Hawkesbury												***2,310***		***2,310***		***1,132***	49		2,060	244		2,300	2,300
21	Bathurst Regional	Castlereagh/Macquarie	3,521	912	983	21	166			560	481		1,041	6,640	741	7,390		662	9		11,670			11,670	11,670
22	Lismore (Reticulator)	Tweed/Richmond	2,457	927		224								***4,010***		***4,010***		119	3		144		3,780	3,920	3,920
23	Bega Valley (Unfiltered)	Bega	2,022	328	79	202	135	5	68	5	967	531	972	3,810	438	3,810	438	158	16	11	1,680	2,130		3,810	4,250
24	Ballina (Reticulator)	Tweed/Richmond	2,455	673										***3,130***	220	***3,350***		***324***	10		116	6	3,870	3,990	3,990
25	Kempsey (Groundwater)	Macleay	1,835	512	215	369	79	12	120	205	745	540	950	4,090	74	4,090	74	166	6	2		4,090		4,090	4,160
26	Country Energy	Darling	3,066	472	1,104		166		39					***5,390***	1,176	***6,060***	506	24	9	8			6,090	6,090	6,600
27	Byron (Reticulator)	Tweed/Richmond	1,771	684		91				59		119		***2,720***	222	***2,720***	222	569	29	8	428		2,480	2,910	3,130
28A	Goldenfields (Reticulator) (NO SGE)	Murrumbidgee	2,109	531	102	2,067	159		258	50	698		748	5,970		5,970							5,970	5,970	5,970
28B	Goldenfields (Bulk Supplier) (NO SG	Murrumbidgee						8,385			1,109		1,109	9,490	134	9,630					4,180	5,020	420	9,620	9,620
	Totals (excluding bulk suppliers) for LWUs with >10,000 Properties													*185,420*	*10,634*	*190,000*	*6,071*	*12,850*			*136,558*	*22,165*	*35,570*	*194,290*	*200,360*
LWUs with 3,001 - 10,000 Properties																									
29	Armidale Dumaresq	Macleay	1,819	330			566		36	50				***3,060***	54	***3,110***		400	13		3,030			3,030	3,030
30	Griffith	Murrumbidgee	4,284	1,983		715			952		880		880	8,810	737	9,550		734	8				8,740	8,740	8,740
31	Lithgow	Hawkesbury	1,400	436		6	5							***2,050***		***2,050***					1,370		960	2,330	2,330
32	Mid-Western Regional	Castlereagh/Macquarie	2,000	280			20		300	20				***2,890***		***2,890***		90	3		485			485	485
33	Richmond Valley	Tweed/Richmond	1,235	482	740	39			26	16	580	526	596	3,120	19	3,120	19	97	4	1	2,540		580	3,120	3,140
34	Nambucca (Groundwater)	Nambucca	976	221	26	98	26		15		389	264	389	1,750		1,750		133	8			1,750		1,750	1,750
35	Singleton	Hunter	1,754	595	246	47	156				337		337	3,140		3,140		643	20		3,140			3,140	3,140
36	Parkes	Lachlan	1,188	180	2,618	20	130	14	500		465	307	465	5,120	160	5,120	160	20	4	3	2,950	2,160		5,110	5,270
37	Inverell	Gwydir									200		200	1,950		1,950							1,950	1,950	1,950
38	Moree Plains (Groundwater)	Gwydir												***3,220***		***3,220***									
39	Cowra	Lachlan	1,531	233	285	360	76	4		46				***2,770***	191	***2,960***					2,540			2,540	2,540

Table 8 - 2005/06 NSW Urban Water Supplied

	WATER UTILITY	SOURCE CATCHMENT	POTABLE WATER SUPPLIED - Town Water Supply (ML)											NON-POTABLE SUPPLIED Town Water (includes raw & recycled) (for outdoor uses or industry) (11)	TOTAL Town Water Supplied[7] (Potable + Non-potable - Recycled) =(10)+(11)-(13) (12) NWI 17[11]	RECYCLED WATER (ML)				WATER SOURCES (ML)				TOTAL Sourced Water + Recycled =(13)+(15)+(16)+(17) (17b) NWI 9
			Revenue Water							Non Revenue Water				TOTAL Potable Town Water Supplied Revenue+Non Revenue =(1)+(2)+(3)+(4)+(5)+(6)+(7)+(9) or total reported (10)			For Town Water Supply[9] (Non-potable) (13) NWI 19	For Agricultural or Other Uses[10] (14) NWI 8	% Recycled Total =(13)+(14)/(12) (14a)	% Recycled for Town Water Supply =(13)/(12) (14b) NWI 18	Surface Water (15) NWI 4,5	Ground Water (16) NWI 7	Bulk Purchases (17) NWI 10	Total Sourced Water =(15)+(16)+(17) (17a)	
			Residential (1)	Commercial (2)	Industrial (3)	Rural (4)	Institutional (5)	Bulk Sales (6)	Public Parks & Gardens (7)	Unbilled Authorised (Fire Fighting, Flushing) ML (8)	Water Losses[3,6] ML (8a)	Real Losses (Leakage)[6] Included in (8a) ML (8b)	Total Non Revenue Water (8) + (8a) ML (9)											
40	Central Tablelands (NO SGE)	Lachlan	920	239	159	303	53	247	29	30	178	163	208	2,160		2,160					1,980	176		2,160	2,160
41	Muswellbrook	Hunter												***2,640***		***2,640***		***1,145***	43						
42	Corowa	Murray	1,769	367	879	3	11		330					***3,730***	1,411	***5,140***		562	11		3,400			3,400	3,400
43	Tumut	Murrumbidgee	1,108		265	40			7					***1,580***	36	***1,610***		1	0		1,700			1,700	1,700
44	Gunnedah (Groundwater)	Namoi	1,300	245	490	25		122	245	27	200		227	2,650		2,650		517	20			2,450		2,450	2,450
45	Upper Hunter	Hunter	1,078	209	197	12	13		96					***1,780***		***1,780***		45	3		1,890	5		1,890	1,890
46	Narrabri (Groundwater)	Namoi												***3,600***		***3,600***		643	18			3,240		3,240	3,240
47	Bellingen (Unfiltered)	Bellinger	972	365				1		53	100	97	153	1,490		1,490					177	1,310		1,490	1,490
48	Leeton	Murrumbidgee	1,700	250	370	35	40	25	75	20	375	250	395	2,890		2,890					2,890			2,890	2,890
49	Young (Reticulator)	Murrumbidgee	860	26	300		24	6	60	134	112	100	246	1,520	111	1,520	111	3	8	7			1,410	1,410	1,520
50	Cooma-Monaro	Murrumbidgee												***1,700***		***1,700***									
51	Forbes	Lachlan	1,441	392	45	7	132	351	65	10				***2,700***	199	***2,900***		4	0		2,180	488		2,670	2,670
52	Snowy River (Unfiltered)	Snowy	357	74	38	17								***540***		***540***					2,020			2,020	2,020
53	Berrigan (Dual Supply)	Murray	695	109					50		258	158	258	1,110	892	1,960	39		2	2	2,580			2,580	2,620
	Totals (excluding bulk suppliers) for 3,000 - 10,000 Properties													*67,970*	*3,810*	*71,440*	*330*	*5,037*			*34,872*	*11,579*	*13,640*	*60,095*	*60,425*
LWUs with 1,501 - 3,000 Properties																									
54	Deniliquin	Murray	1,452	290	45	120	16	1	1	100	222	200	322	2,250	700	2,950		593	20		2,250			2,250	2,250
55	Warrumbungle	Castlereagh/Macquarie	780	138										***1,020***		***1,020***		113	11		707	552		1,260	1,260
56	Yass Valley	Murrumbidgee	512	114				4	30	70	130	110	200	860		860		135	16		813	47		860	860
57	Wellington	Castlereagh/Macquarie	602	101			36		31	7	338	260	345	1,120		1,120		1	0		1,120			1,120	1,120
58	Cootamundra (Reticulator)	Murrumbidgee	542	74	10	3	68		7		143	51	143	850	185	850	185		22	22			850	850	1,040
59	Lachlan	Lachlan												***1,190***		***1,190***		***166***	14						
60	Glen Innes Severn	Moonie/Macintyre	543	183	3		14		4					***830***		***830***		13	2						
61	Liverpool Plains	Namoi												***950***		***950***									
62	Narromine (Groundwater)	Castlereagh/Macquarie	775						105	300	2		302	1,180	121	1,300					121	1,180		1,300	1,300
63	Narrandera (Groundwater)	Murrumbidgee	560	200	100	15	20		340	180	45		225	1,460		1,460						1,460		1,460	1,460
64	Dungog (Reticulator)	Hunter	357	50		45	45	16	26	20	60	40	80	620		620		203	33		50		650	700	700
65	Murray (Dual Supply)	Murray	499	146	1		8		2		140	114	140	800	650	1,450		295	20		1,450			1,450	1,450
66	Cobar WB (Bulk Supplier)	Darling																							
67	Cobar	Darling	1,306	291	13	342			17					***2,190***	158	***2,240***	105		5	5	80		1,260	1,340	1,450
68	Tenterfield	Moonie/Macintyre	325	45	2	2	2	10	4					***430***	76	***430***	76	8	19	18	475			475	551
70	Kyogle	Clarence	260	60	12	40	7	4			41		41	420	41	420	41	11	12	10	362		60	422	463
71	Palerang	Murrumbidgee	464						1					***520***		***520***					208	256		464	464
73	Upper Lachlan	Lachlan	320	20	3	1	20		20	10				***430***		***430***					340	80		420	420
74	Wentworth (Dual Supply)	Darling	127	62		5	35			35	29	27	64	290	1,690	1,960	28		1	1	1,950			1,950	1,980
75	Coonamble (Groundwater)	Castlereagh/Macquarie	632	80	3	46	120	30	120	10	200	110	210	1,240	41	1,240	41		3	3		1,250		1,250	1,290
	Totals (excluding bulk suppliers) for 1,500 - 3,000 Properties													*18,650*	*3,662*	*21,840*	*476*	*1,537*			*9,926*	*4,825*	*2,820*	*17,571*	*18,058*
LWUs with 200 - 1,500 Properties																									
76	Harden (Reticulator)	Murrumbidgee	704							8	79	65	87	790	85	790	85		11	11			790	790	875
79	Walgett (Dual Supply)	Namoi	1,354											***1,500***	1,120	***2,620***		***517***	20		1,130	517		1,650	1,650
80	Greater Hume	Murray	403	13	2	150	10	5	25	5				***680***	23	***680***	23	89	16	3		212	400	612	635
81	Gwydir	Gwydir	309	85		11	26		46	50	196	177	246	720	38	720	38	-38		5	306	417		723	761
82	Gloucester	Manning	247	54	37		23		9					***410***		***410***					379			379	379

Table 8 - 2005/06 NSW Urban Water Supplied

	WATER UTILITY	SOURCE CATCHMENT	POTABLE WATER SUPPLIED - Town Water Supply (ML)												NON-POTABLE SUPPLIED Town Water (includes raw & recycled)	TOTAL Town Water Supplied[7] (Potable + Non-potable - Recycled)	RECYCLED WATER (ML)				WATER SOURCES (ML)				TOTAL Sourced Water + Recycled
			Revenue Water							Non Revenue Water				TOTAL Potable Town Water Supplied Revenue+Non Revenue			For Town Water Supply[9] (Non-potable)	For Agricultural or Other Uses[10]	% Recycled Total	% Recycled for Town Water Supply	Surface Water	Ground Water	Bulk Purchases	Total Sourced Water	
			Residential	Commercial	Industrial	Rural	Institutional	Bulk Sales	Public Parks & Gardens	Unbilled Authorised (Fire Fighting, Flushing)	Water Losses[3,6]	Real Losses (Leakage)[6] Included in (8a)	Total Non Revenue Water												
			ML							ML	ML	ML	(8) + (8a) ML	=(1)+(2)+(3)+(4)+(5)+(6)+(7)+(9) or total reported	(for outdoor uses or industry)	=(10)+(11)-(13)	=(13)+(14)/(12)	=(13)/(12)							
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8a)	(8b)	(9)	(10)	(11)	(12) NWI 17[11]	(13) NWI 19	(14) NWI 8	(14a)	(14b) NWI 18	(15) NWI 4,5	(16) NWI 7	(17) NWI 10	(17a)	(17b) NWI 9
83	Oberon (Reticulator)	Castlereagh/Macquarie	193	34	410				30	11	54	40	65	730		730					732			732	732
84	Gilgandra (Groundwater)	Castlereagh/Macquarie	520	155	66	25	15	10	50	15				***860***		***860***		280	33			856		856	856
85	Uralla	Gwydir												***330***		***330***									
86	Hay (Dual Supply)	Murrumbidgee	345											***380***	1,318	***1,700***					1,660			1,660	1,660
87	Bourke (Dual Supply)	Darling	638											***710***	2,607	***3,320***									
88	Wakool (Dual Supply)	Murray	629	136		1			8					***860***	760	***1,620***					1,500		120	1,620	1,620
89	Bogan	Castlereagh/Macquarie	780						48	4				***920***		***920***					833			833	833
90	Guyra	Gwydir	259	120				11	5	1				***440***		***440***					408		170	578	578
91	Cabonne	Lachlan	150	45						10	34		44	240	99	300	41	30	24	14	332	6		338	379
92	Carrathool (Groundwater)	Murrumbidgee	162			***200***			***10***		***305***	***55***	***305***	***680***	266	940						700	760	1,460	1,460
93	Tumbarumba	Murray	304	10	3				20	10	30	29	40	380		380					481			481	481
94	Gundagai	Murrumbidgee	226	65	59	25	39		33	10	80	40	90	540	105	540	105		19	19	602			602	707
96	Warren (Dual Supply)	Castlereagh/Macquarie	185	24			5		3	5	117	89	122	340	400	740						338	400	738	738
97	Bombala	Snowy	341	9	7		7		1			26		***410***	35	***410***	35		9	9	400			400	435
98	Walcha	Namoi	166	41	1	2	10		10					***260***		***260***					232			232	232
100	Balranald (Dual Supply)	Murrumbidgee	167							4	12		16	180	587	770					755			755	755
101	Murrumbidgee (Groundwater)	Murrumbidgee	541		100				112					***840***		***840***		6	1			753		753	753
103	Central Darling (Dual Supply)	Darling	67	7						2				***80***	369	***450***					880	72		952	952
104	Boorowa	Lachlan												***210***		***210***									
105	Brewarrina	Castlereagh/Macquarie	338											***380***	790	***1,170***		170	15		1,070	100		1,170	1,170
106	Jerilderie (Dual Supply)	Murray	80	27	3									***120***	150	***270***		40	15						
	Totals (excluding bulk suppliers) for 200 - 1,500 Properties													*13,990*	*8,752*	*22,420*	*327*	*1,094*			*11,699*	*3,972*	*2,640*	*18,313*	*18,640*
LWUs without Water Supply																									
9	Wagga Wagga (NO WS)																408	377							
30A	Hawkesbury																								
69	Temora																	345							
72	Bland																	129							
77	Junee																	160							
78	Blayney																	223							
95	Weddin																								
99	Coolamon																	70							
102	Lockhart																56								
107	Urana																								
or the 74 LWUs reporting column (1) together with (2) and/or (3)			**151,000**	**35,600**	**17,400**	**8,900**	**5,900**	**1,800**	**7,800**	**3,400**	**30,000**	**18,600**	**33,400**	**261,000**	**20,000**	**274,000**	**7,120**	**16,700**			**185,000**	**36,300**	**51,200**	**272,700**	**279,800**
	Percentage of Total Potable Supply (ie. % of col(10))		**58%**	**14%**	**7%**	**3%**	**2%**	**1%**	**3%**	**1%**	**11%**	**7%**	**13%**												
	TOTAL (all LWUs excluding metropolitan LWUs)[4]													**286,000**	**27,000**	**304,000**	**8,000**	**22,000**			**193,000**	**43,000**	**55,000**	**290,000**	**297,000**

Table 8 - 2005/06 NSW Urban Water Supplied

WATER UTILITY	SOURCE CATCHMENT	POTABLE WATER SUPPLIED - Town Water Supply (ML)											NON-POTABLE SUPPLIED Town Water (includes raw & recycled)	TOTAL Town Water Supplied[7] (Potable + Non-potable - Recycled)	RECYCLED WATER (ML)				WATER SOURCES (ML)				TOTAL Sourced Water + Recycled
		Revenue Water							Non Revenue Water														
		Residential	Commercial	Industrial	Rural	Institutional	Bulk Sales	Public Parks & Gardens	Unbilled Authorised (Fire Fighting, Flushing)	Water Losses[3,6]	Real Losses (Leakage)[6] Included in (8a)	Total Non Revenue Water	TOTAL Potable Town Water Supplied Revenue+Non Revenue			For Town Water Supply[9] (Non-potable)	For Agricultural or Other Uses[10]	% Recycled Total	% Recycled for Town Water Supply	Surface Water	Ground Water	Bulk Purchases	Total Sourced Water	
									ML	ML	ML	(8) + (8a) ML	=(1)+(2)+(3)+(4)+(5)+(6)+(7)+(9) or total reported	(for outdoor uses or industry)	=(10)+(11)-(13)			=(13)+(14)/(12)	=(13)/(12)				=(15)+(16)+(17)	=(13)+(15)+(16)+(17)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8a)	(8b)	(9)	(10)	(11)	(12) NWI 17[11]	(13) NWI 19	(14) NWI 8	(14a)	(14b) NWI 18	(15) NWI 4,5	(16) NWI 7	(17) NWI 10	(17a)	(17b) NWI 9

Notes:

1. Source: Data provided by the 107 non-metropolitan NSW water utilities for the 2005/06 NSW Water Supply and Sewerage Benchmarking Report. 98 of these utilities are responsible for water supply. Columns (13) and (14) report the volume of recycled water use and include a further 9 utilities which are responsible for sewerage only.
2. The water consumption for Sydney and Hunter Water Corporations was obtained from the National Performance Report 2005-06 and has not been included in the totals shown above.
3. For consistency with national performance reporting, water losses (column (8)) now include leakage (column (9)).
4. Where a water utility has not reported its total potable town water supplied in 2005/06 (column (10)), the previously reported supply has been used and is shown in ***italics bold.***
5. The total consumptions for all non-metropolitan water utilities shown in the bottom line of the above table exclude double counting where water is supplied by a bulk supplier.
6. A review of non revenue water for NSW water utilities responsible for reticulating water supply to residential customers has indicated a minimum of 10% of annual town water supplied. The values for any such utilities reporting less than 10% non revenue water (column (9)) have therefore been increased to 10% (but are shown as blank), and the reported values for total town water consumed (column (10)) have been increased accordingly (shown in ***italics bold***). Similarly, minimum leakage levels for such utilities have been found to be at least 6% of the total potable town water supplied. Unless corroborated by a reservoir drop test or detailed waste metering, reported values of leakage of less than 6% (column (8b)) have been increased to 6% (but are shown as blank).
7. The total town water supplied (column (12)) comprises the sum of the potable water supplied (column (10)) and the non-potable water supplied (column (11)), less the recycled town water (column (13)).
8. The above analysis shows that the total 2005/06 town water supplied for non-metropolitan NSW was 304,000 ML (column (12)), of which 286,000 ML (column (10)) was potable water. The total non-potable water supplied was 27,000 ML (column (11)) which included 8,000 ML recycled water (column (13)). The non-potable supply was mainly for outdoor uses in dual water supplies (approximately 7,300 ML), but also includes supplies to industry and other outdoor uses. The average uses as a percentage of the total potable water supply were:
   - Residential - 58 % (column (1))
   - Commercial - 14 % (column (2))
   - Industrial - 7 % (column (3))
   - Non Revenue Water - 13 % (column (9))
9. Recycled water used for non-potable town water supply is shown in column (13). This is a component of the non-potable town water supply (column (11)) which also includes raw water.
10. The recycled water used for agricultural uses is shown in column (14). The total volume of recycled water for non-metropolitan NSW water utilities was 30,000 ML (column (13) + column (14)), which is about 18% of the total volume of sewage collected.
11. **Total Town Water Supplied** (col (12)) includes non-potable but excludes recycled water. However, NWI 17 includes nonpotable & recycled water. Similarly, NWI 49 includes recycled water whereas the Annual Residential Water Consumption reported in column (56) in table 10 is for potable water.

Table 8A - 2005/06 Water Losses & Non-Revenue Water

	WATER UTILITY	NON-REVENUE WATER - Potable													REVENUE WATER - Potable	TOTAL CONSUMPTION - Potable	
		WATER LOSSES [3]										UNBILLED WATER[2] (Potable) (ML)	TOTAL NON REVENUE WATER (Water Losses + Unbilled)		BILLED REVENUE WATER[1] (Potable) (ML)	REVENUE WATER + NON REVENUE WATER (ie.BILLED + UNBILLED + WATER LOSSES)	
		Apparent Losses (ML)					Real Losses[4] (Leakage) (ML)			Water Losses[5] (Apparent + Real Losses) (ML)							
		Unauthorised Consumption	Under-registration of meters	Apparent Losses Reported (1)+(2)	Apparent Losses Adopted	Adopted % of Total Potable (4)/(17)	Real Losses Reported	Real Losses Adopted (see Table 8)	Real Losses % of Total Potable (7)/(17)	Water Losses Reported (3) + (6)	Water Losses Adopted (see Table 8)	Water Losses % of Total Potable (10)/(17)	Fire Fighting, Mains Flushing	Non Revenue Water	Non Revenue % of Total Potable (10)/(15)	Metered and Unmetered	Total Reported (9) + (12) + (15)	Total Adopted (Table 8 Col (10)) (10)+(12)+(15)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
	Sydney Water Corporation										52,830	10%				528,260	528,260	528,260
	Hunter Water Corporation				3,240	4%		4,855	6%		8,090	10%				72,829	72,830	80,920
LWUs with > 10,000 Properties																		
1	Gosford City Council		303	303			113			416			279			13,667	14,360	***15,500***
2	Wyong Shire Council	411		411	411	3%	662	662	5%	1,073	1,073	8%		1,073	8%	13,013	14,090	14,090
3	Shoalhaven City Council	385	215	600	600	4%	800	800	6%	1,400	1,400	10%	480	1,880	14%	11,511	13,390	13,390
4	Rous County Council						61	61		61			70	201	2%	11,472	11,600	11,600
5	MidCoast County Council	524	430	954	954	9%	936	936	9%	1,890	1,890	18%	224	2,114	20%	8,626	10,740	10,740
6	Tweed Shire Council	550	95	645	645	7%	600	600	6%	1,245	1,245	13%	115	1,360	14%	8,141	9,500	9,500
7	Port Macquarie-Hastings (Unfiltered)	40	175	215	215	3%	441	441	7%	656	656	10%		656	10%	5,842	6,500	6,500
8	Riverina Water County Council		1,400	1,400	1,050	6%	626			2,026	2,026	12%	100	2,126	13%	14,209	16,340	16,340
10	Coffs Harbour City Council						344			344			39			5,352	5,740	***5,950***
11	Albury City Council		303	303	303	3%	582	582	6%	885	885	9%	10	895	9%	8,810	9,700	9,700
12	Fish River Water Supply						584	584	5%	584	584	5%		584	5%	10,377	10,960	10,960
13	Tamworth Regional Council							623	6%							9,344	9,340	***10,380***
14	Clarence Valley Council	1	290	291	190	3%	343			634	634	9%	60	694	9%	6,698	7,390	7,390
15	Eurobodalla Shire Council	4	65	69			152			221			22			3,977	4,220	***4,420***
16	Wingecarribee Shire Council	4	60	64	64	1%	665	665	14%	729	729	15%		729	15%	4,008	4,740	4,740
17	Queanbeyan City Council	1		1	1		391	***391***	***9%***	***392***	***392***	***9%***	235	627	14%	3,741	4,370	4,370
18	Dubbo City Council	82	40	122			428			550			20			7,968	8,540	***8,850***
19	Orange City Council		420	420	420	8%	874	874	16%	1,294	1,294	24%		1,294	24%	4,197	5,490	5,490
20	Goulburn Mulwaree Council																	***2,310***
21	Bathurst Regional Council		112	112	83	1%	370			481	481	7%	560	1,041	16%	5,603	6,640	6,640
22	Lismore City Council	77		77			235			312						3,608	3,920	***4,010***
23	Bega Valley Shire Council	50	386	436	436	11%	531	531	14%	967	967	25%	5	972	26%	2,838	3,810	3,810
24	Ballina Shire Council															3,128	3,130	3,130
25	Kempsey Shire Council	1	204	205	205	5%	540	540	13%	745	745	18%	205	950	23%	3,142	4,090	4,090
26	Country Energy							323	6%							4,847	4,850	***5,390***
27	Byron Shire Council						119	119	4%	119			59			2,546	2,720	2,720
28A	Goldenfields Water Reticulator	10	330	340	340	6%	358	358	6%	698	698	12%	50	748	13%	5,226	5,970	5,970
28B	Goldenfields Water County Council	10	101	111	111	1%	998	998	11%	1,109	1,109	12%		1,109	12%	8,385	9,490	9,490
	Medians (% of LWUs basis) for LWUs with >10,000 Properties					*4%*			*6%*			*12%*			*14%*			
LWUs with 3,001 - 10,000 Properties																		
29	Armidale Dumaresq Council		4	4			10			14			50			2,751	2,820	***3,060***
30	Griffith City Council		352	352	351	4%	528			880	880	10%		880	10%	7,934	8,810	8,810
31	Lithgow City Council							123	6%							1,847	1,850	***2,050***
32	Mid-Western Regional Council							173	6%				20			2,600	2,620	***2,890***
33	Richmond Valley Council	3	51	54	54	2%	526	526	17%	580	580	19%	16	596	19%	2,520	3,120	3,120
34	Nambucca Shire Council	60	65	125	125	7%	264	264	15%	389	389	22%		389	22%	1,361	1,750	1,750
35	Singleton Shire Council	157		157	149	5%	180			337	337	11%		337	11%	2,798	3,140	3,140
36	Parkes Shire Council						465	307	6%	465	465	9%		465	9%	4,650	5,120	5,120
37	Inverell Shire Council		100	100	83	4%	100			200	200	10%		200	10%	1,750	1,950	1,950
38	Moree Plains Shire Council																	***3,220***
39	Cowra Shire Council							166	6%				46			2,489	2,540	***2,770***
40	Central Tablelands Water	15		15	15		163	163	8%	178	178	8%	30	208	10%	1,950	2,160	2,160
41	Muswellbrook Shire Council																	***2,640***
42	Corowa Shire Council		100	100			109			209						3,357	3,570	***3,730***
43	Tumut Council							95	6%							1,420	1,420	***1,580***
44	Gunnedah Shire Council	25	25	50	41	2%	150			200	200	8%	27	227	9%	2,427	2,650	2,650

Table 8A - 2005/06 Water Losses & Non-Revenue Water

	WATER UTILITY	NON-REVENUE WATER - Potable														REVENUE WATER - Potable	TOTAL CONSUMPTION - Potable	
		WATER LOSSES [3]										UNBILLED WATER[2] (Potable) (ML)	TOTAL NON REVENUE WATER (Water Losses + Unbilled)		BILLED REVENUE WATER[1] (Potable) (ML)	REVENUE WATER + NON REVENUE WATER (ie.BILLED + UNBILLED + WATER LOSSES)	
		Apparent Losses (ML)					Real Losses[4] (Leakage) (ML)			Water Losses[5] (Apparent + Real Losses) (ML)							
		Unauthorised Consumption	Under-registration of meters	Apparent Losses Reported (1)+(2)	Apparent Losses Adopted	Adopted % of Total Potable (4)/(17)	Real Losses Reported	Real Losses Adopted (see Table 8)	Real Losses % of Total Potable (7)/(17)	Water Losses Reported (3) + (6)	Water Losses Adopted (see Table 8)	Water Losses % of Total Potable (10)/(17)	Fire Fighting, Mains Flushing	Non Revenue Water	Non Revenue % of Total Potable (10)/(15)	Metered and Unmetered	Total Reported (9) + (12) + (15)	Total Adopted (Table 8 Col (10)) (10)+(12)+(15)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
45	Upper Hunter Shire Council							107	6%							1,605	1,610	***1,780***
46	Narrabri Shire Council							216	6%							3,237	3,240	***3,600***
47	Bellingen Shire Council	2	1	3	3		97	97	7%	100	100	7%	53	153	10%	1,337	1,490	1,490
48	Leeton Shire Council	15	110	125	125	4%	250	250	9%	375	375	13%	20	395	14%	2,495	2,890	2,890
49	Young Shire Council	3	9	12	12		100	100	7%	112	112	7%	134	246	16%	1,276	1,520	1,520
50	Cooma-Monaro Council																	***1,700***
51	Forbes Shire Council	2	10	12			17			29			10			2,433	2,470	***2,700***
52	Snowy River Shire Council							32	6%							486	490	***540***
53	Berrigan Shire Council		100	100	100	9%	158	158	14%	258	258	23%		258	23%	854	1,110	1,110
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties					*4%*			*6%*			*10%*			*11%*			
	LWUs with 1,501 - 3,000 Properties																	
54	Deniliquin Council	2	20	22	22		200	200	9%	222	222	10%	100	322	14%	1,925	2,250	2,250
55	Warrumbungle Shire Council							61	6%							918	920	***1,020***
56	Yass Valley Council	5	15	20	20	2%	110	110	13%	130	130	15%	70	200	23%	660	860	860
57	Wellington Council		78	78	78	7%	260	260	23%	338	338	30%	7	345	31%	770	1,120	1,120
58	Cootamundra Shire Council						143	51	6%	143	143	17%		143	17%	704	850	850
59	Lachlan Shire Council																	***1,190***
60	Glen Innes Severn Shire Council							50	6%							747	750	***830***
61	Liverpool Plains Shire Council																	***950***
62	Narromine Shire Council	2		2	-69			71	6%	2	2		300	302	26%	880	1,180	1,180
63	Narrandera Shire Council	10	30	40	-43		5			45	45		180	225	15%	1,235	1,460	1,460
64	Dungog Shire Council	10	10	20	20	3%	40	40	6%	60	60	10%	20	80	13%	539	620	620
65	Murray Shire Council	14	12	26	26	3%	114	114	14%	140	140	17%		140	17%	657	800	800
66	Cobar Water Board																	
67	Cobar Shire Council							131	6%							1,969	1,970	***2,190***
68	Tenterfield Shire Council							26	6%							389	390	***430***
70	Kyogle Council	7	19	26	16	4%	15			41	41	10%		41	10%	381	420	420
71	Palerang Council		1	1				***31***	***6%***	***1***						465	470	***520***
73	Upper Lachlan Council	2	2	4			10			14			10			384	410	***430***
74	Wentworth Shire Council	2		2	2		27	27	9%	29	29	10%	35	64	22%	229	290	290
75	Coonamble Shire Council	10	80	90	90	7%	110	110	9%	200	200	16%	10	210	17%	1,031	1,240	1,240
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties					*4%*			*6%*			*15%*			*17%*			
	LWUs with 200 - 1,500 Properties																	
76	Harden Shire Council		14	14	14	2%	65	65	8%	79	79	10%	8	87	11%	704	790	790
79	Walgett Shire Council							90	6%							1,354	1,350	***1,500***
80	Greater Hume Shire Council	5	5	10			5			15			5			608	630	***680***
81	Gwydir Shire Council	8	11	19	19	3%	177	177	25%	196	196	27%	50	246	34%	477	720	720
82	Gloucester Shire Council							25	6%							370	370	***410***
83	Oberon Council		14	14	14	2%	40	40	5%	54	54	7%	11	65	9%	667	730	730
84	Gilgandra Shire Council	2	2	4						4			15			841	860	860
85	Uralla Shire Council																	***330***
86	Hay Shire Council							23	6%							345	350	***380***
87	Bourke Shire Council							43	6%							638	640	***710***

Table 8A - 2005/06 Water Losses & Non-Revenue Water

	WATER UTILITY	NON-REVENUE WATER - Potable													REVENUE WATER - Potable	TOTAL CONSUMPTION - Potable	
		WATER LOSSES [3]										UNBILLED WATER[2] (Potable) (ML)	TOTAL NON REVENUE WATER (Water Losses + Unbilled)		BILLED REVENUE WATER[1] (Potable) (ML)	REVENUE WATER + NON REVENUE WATER (ie.BILLED + UNBILLED + WATER LOSSES)	
		Apparent Losses (ML)					Real Losses[4] (Leakage) (ML)			Water Losses[5] (Apparent + Real Losses) (ML)							
		Unauthorised Consumption	Under-registration of meters	Apparent Losses Reported (1)+(2)	Apparent Losses Adopted	Adopted % of Total Potable (4)/(17)	Real Losses Reported	Real Losses Adopted (see Table 8)	Real Losses % of Total Potable (7)/(17)	Water Losses Reported (3) + (6)	Water Losses Adopted (see Table 8)	Water Losses % of Total Potable (10)/(17)	Fire Fighting, Mains Flushing	Non Revenue Water	Non Revenue % of Total Potable (10)/(15)	Metered and Unmetered	Total Reported (9) + (12) + (15)	Total Adopted (Table 8 Col (10)) (10)+(12)+(15)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
88	Wakool Shire Council							52	6%							774	770	***860***
89	Bogan Shire Council						1			1			4			828	830	***920***
90	Guyra Shire Council			8			5			13			1			395	410	***440***
91	Cabonne Council	19	4	23	20	8%	11			34	34	14%	10	44	18%	195	240	240
92	Carrathool Shire Council	150	100	250	250	37%	55	55	8%	305	305	45%		305	45%	372	680	680
93	Tumbarumba Shire Council	1		1	1		29	***29***	***8%***	***30***	***30***	***8%***	10	40	11%	337	380	380
94	Gundagai Shire Council	20	20	40	40	7%	40	40	7%	80	80	15%	10	90	17%	447	540	540
96	Warren Shire Council	5	23	28	28	8%	89	89	26%	117	117	34%	5	122	36%	217	340	340
97	Bombala Council		5	5			26	26	6%	31						365	400	***410***
98	Walcha Council							15	6%							230	230	***260***
100	Balranald Shire Council	1	1	2	1		10			12	12	7%	4	16	9%	167	180	180
101	Murrumbidgee Shire Council							50	6%							753	750	***840***
103	Central Darling Shire Council	1	1	2			2			4			2			74	80	80
104	Boorowa Council																	***210***
105	Brewarrina Shire Council							23	6%							338	340	***380***
106	Jerilderie Shire Council							7	6%							110	110	***120***
	Medians (% of LWUs basis) for 200 to 1,500 Properties					*7%*			*6%*			*14%*			*17%*			

Notes:

1. Revenue water (potable) comprises billed, authorised consumption (metered and unmetered).
2. Non-revenue water (potable) comprises unbilled, authorised consumption (includes firefighting and mains flushing) plus water losses.
3. Water losses comprise apparent losses (unauthorised consumption, under-registration of customer meters) plus real losses (leakage).
4. Real losses in column (7) above are the same as those shown in column (8b) in Table 8.
5. Total water losses shown in column (10) above are the same as those shown in column (8a) in Table 8.
6. A minimum real loss (ie. leakage) of 6% of the potable water supplied and a minimum non-revenue water of 10% of total potable water consumption have been adopted for this report.
   Utilities reporting real losses of less than 6% have not been included unless the utility has carried out a recent reservoir drop test or detailed waste metering which justifies the adoption of a lower value.
   Similarly, reported non-revenue water (water losses + unbilled consumption) of less than 10% have not been included unless the utility has evidence which supports the adoption of a value less than 10%.
7. Total adopted revenue plus non-revenue water (potable) in column (15) above is generally the same as those shown in column (10) in Table 8.

Table 8B - 2004/05 Water Consumptions from Source Catchments in Non-metropolitan NSW

SOURCE CATCHMENT	WATER CONSUMPTION - Town Water Supply (ML)									WATER SUPPLIED - Town Water (ML)			RECYCLED WATER		CONSUMPTION (ML)	
	Residential	Commercial	Industrial	Rural	Institutional	Bulk Sales	Public Parks & Gardens	Water Losses	Leakage	Potable Town Water Supplied =(1)+(2)+(3)+(4)+(5)+(6)+(7)+(8)	Non-Potable Town Water Supplied (for outdoor uses or industry)	Total Town Water Supplied (Potable + Non-potable) =(10)+(11)-(13)	For Non-Potable Town Water Supply	For Agricultural use	Surface Water	Ground Water
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Bega	2,020	328	79	202	135	5	68	967	531	3,810	438	3,810	438	158	1,680	2,130
Bellinger	972	365				1		100	97	1,490		1,490			177	1,310
Castlereagh/Macquarie	18,400	3,800	1,820	616	1,000	57	1,300	4,560	3,270	31,700	5,214	33,700	3,160	3,640	29,100	6,120
Clarence	8,120	2,160	644	878	142	9	478	1,270	826	13,800	602	14,000	379	456	13,400	
Clyde	2,860	926		19	87	45	44	442	265	4,420	143	4,420	143	181	4,220	
Darling	4,980	929	1,160	371	217	5	77	865	529	8,660	6,000	14,000	639	24	2,910	72
Gwydir	3,750	955	367	199	150	49	215	440	320	6,660	38	6,660	38	-038	714	417
Hastings	4,410	952	22	52	345		57	656	441	6,500	117	6,500	117	201	6,500	
Hawkesbury (Country Towns only)	17,120	2,930	655	277	374	16	177	2,480	1,720	24,600	2	24,600	2	1,440	19,100	424
Hunter (Country Towns only)	4,720	1,210	619	194	274	34	201	575	335	8,180		8,180		2,040	5,080	5
Lachlan	6,360	1,300	3,200	739	443	626	656	1,270	838	14,800	649	15,300	201	219	10,300	2,910
Macleay	3,650	842	215	369	645	12	156	1,050	723	7,150	128	7,200	74	566	3,030	4,090
Manning	6,140	1,670	892		162		127	1,930	961	11,200		11,200		056	10,400	726
Moonie/Macintyre	868	228	5	2	16	10	8	126	76	1,260	76	1,260	76	21	475	
Murray	12,120	1,950	1,410	291	441	410	809	2,070	1,410	19,600	4,586	24,200	62	5,490	21,400	212
Murrumbidgee	24,690	5,650	2,340	1,950	1,100	488	2,380	4,910	2,870	44,300	3,430	47,300	486	979	12,200	15,820
Nambucca	976	221	26	98	26		15	389	264	1,750		1,750		133		1,750
Namoi	10,440	2,060	2,560	412	490	194	1,130	1,770	1,100	19,300	1,173	20,500		1,780	11,200	6,550
Shoalhaven	7,099	1,676	1,928	541	135		132	1,400	800	13,400	2,869	16,100	214	1,730	16,200	
Snowy	698	83	45	17	7		1	95	58	950	35	950	35		2,420	
Tuggerah Lake	9,070	3,950						1,070	662	14,100	716	14,100	716	238	9,210	
Tweed/Richmond	13,620	4,330	981	520	170	57	267	2,940	1,550	22,500	642	22,700	423	1,220	13,400	6
No Water Supply														1,420		
	163,100	**38,500**	**19,000**	**7,700**	**6,400**	**2,000**	**8,300**	**31,000**	**20,000**	**286,000**	**27,000**	**304,000**	**8,000**	**22,000**	**193,000**	**43,000**

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 water consumption (column 10) and the consumptions for each category summed for each catchment to obtain the above values.

Table 8C - 2005/06 Water Conservation Initiatives

WATER UTILITY		CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED MEASURES			OTHER MEASURES						CONSUMPTION/LOSSES				
		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	Customer Billing Period	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge/kL		Residential Revenue from Usage Charges	Average Annual Residential Consumption	Total Town Water Consumed	Total Water Losses	Real Losses (Leakage)	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No	months		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14) 2005/06	(15) 2005/06	(16) 2005/06	(17) 2005/06	(18) 2005/06	(19) 2005/06
11	Albury City	Yes	Yes	No	No		Yes	Yes	4	Full pay-for-use pricing, public education program, customer billing 3 times/a, annual Waterwise program, water conservation and loss management strategy, leak reduction program, reservoir drop test, effluent reuse, separate metering for new and existing multi-unit developments, monitoring programs & customer surveys, free water audits (non-residential), review of water conservation initiatives.	Yes	Yes	47	94	72	302	9,700	885	582	85
29	Armidale Dumaresq	Yes	No	No	No		No	No	6	Full pay-for-use pricing, demand management plan, member of waterwise, public education program.		Yes	77	103		243	3,110			
24	Ballina (Reticulator)	Yes	Yes	Yes	Yes	670	Yes	Yes	3		Yes	Yes	90	120	64	209	3,350			
100	Balranald (Dual Supply)	No	Yes	No	No		No	No	3	Full pay-for-use pricing, member of waterwise, restrictions.	Yes		60		29	149	770	12		
21	Bathurst Regional	Yes	No	No	No		No	No	3	Member of waterwise, public education program.	Yes		43	85	41	267	7,390	481		
23	Bega Valley (Unfiltered)	Yes	No	No	No		Yes	No	4	Full pay-for-use pricing, customer billing 3-times/a, member of waterwise, public education, water restrictions, effluent reuse, water demand management officer.	Yes		140		65	163	3,810	967	531	131
47	Bellingen (Unfiltered)	No	No	No	No		Yes	Yes	3	Full pay-for-use pricing, member of waterwise, retrofit program, public education program.	Yes		66		44	272	1,490	100	97	66
53	Berrigan (Dual Supply)								12	Public education.	Yes	Yes	90		11	237	1,960	258	158	153
72	Bland (No WS)																			
78	Blayney (No WS)																			
89	Bogan	Yes	No	No	No		Yes	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	72	108	63	543	920			
97	Bombala								3	Full pay-for-use pricing, member of waterwise, public education program.	Yes	Yes	46	99	28	467	410		26	84
104	Boorowa	No	No	No	No	N	No	No	3	Full pay-for-use pricing, public education program.			120		41	372	210			
87	Bourke (Dual Supply)	No	No	No	No		No	No	6	Full pay-for-use pricing, member of waterwise, public education program, waterwise program with local schools.	Yes	Yes	110		23	399	3,320		43	99
105	Brewarrina	No	No	No	No		Yes	No	12		Yes				41	506	1,170		23	114
27	Byron (Reticulator)	Yes	Yes	Yes	Yes	1800	Yes	Yes	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, retrofit program, public education program, pressure reduction.	Yes	Yes	120		68	190	2,720		119	38
91	Cabonne	Yes	No	No	No		Yes	Yes	6	Member of waterwise, public education program.	Yes		129	284	71	159	300	34		
92	Carrathool (Groundwater)				Yes	500				Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, other.	Yes		72	82		488	940	305	55	141
103	Central Darling (Dual Supply)	No	No	No	No		No	No	3	Full Pay-for-use pricing, customer billing 3 times/a, water restrictions.	Yes	Yes	300		58	107	450			
40	Central Tablelands (No Sge)	Yes	No	No	No		No	Yes	3	Full pay-for-use pricing, member of waterwise, public education program, free showerhead exchange program.	Yes	Yes	125	188	75	241	2,160	178	163	84
14	Clarence Valley	Yes			Yes		Yes	Yes	3	Full pay-for-use pricing, restrictions, retrofit program, public education program.	Yes	Yes	105		21	238	7,390	634		
67	Cobar	Yes	No	No	No		Yes	No	3	Full Pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes		65	110	52	675	2,240		131	176
66	Cobar WB (Bulk Supplier) (N																			
10	Coffs Harbour (Unfiltered)	Yes	Yes	Yes	No		Yes	Yes	3	Full pay-for-use pricing, customer billing 3 times/a, member of waterwise, building code program, water 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 water conservation measures.	Yes	Yes	182	200	63	184	6,170			
99	Coolamon (No WS)																			
50	Cooma-Monaro									Full pay-for-use pricing, member of waterwise, public education program, water 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 water conservation measures.	Yes		73		35	318	1,700			
75	Coonamble (Groundwater)	No	Yes		No		Yes	No	3	Public education program.	Yes	Yes	32	48	23	462	1,240	200	110	195
58	Cootamundra (Reticulator)	No		No	No		Yes	No	3	Member of waterwise, public education program.	Yes		126	250		221	850	143	51	50
42	Corowa	Yes	No		Yes		Yes	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	50		59	427	5,140			
26	Country Energy	Yes	No	No	No		Yes	Yes	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, public education program.	Yes	Yes	76	236	62	317	6,060		323	82
39	Cowra	No	No	No	No	N	No	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.		Yes	100	200	24	321	2,960		166	84
54	Deniliquin	Yes	No	No	No		Yes	No	3	Member of waterwise, public education program, integrated water cycle management study.	Yes	Yes	24	55	51	533	2,950	222	200	156
18	Dubbo	Yes	No	No	No		Yes	Yes	3	Full pay-for-use pricing, member of waterwise, public education program, customer billing 4 times/a, effluent reuse schemes, stormwater reuse schemes, leakage reduction program, park irrigation controls, separate metering for new multi-unit developments, water restriction, reservoir drop test, draft drought management plan, demand management strategy, demonstration waterwise garden.	Yes	Yes	87	131	56	385	8,850			
64	Dungog (Reticulator)	No	No	No	No		No	No	3	Member of waterwise, retrofit program, public education program.	Yes	Yes	69	138	41	198	620	60	40	53
15	Eurobodalla (Unfiltered)	Yes	Yes	Yes	Yes	1200	Yes	No	4	Member of waterwise, public education program, restrictions, integrated water cycle management study.	Yes	Yes	130		46	159	4,420			
12	Fish River WS (Bulk Supplier)	No	No	No	No			Yes	12								10,960	584	584	
51	Forbes	Yes	Yes	No	No		No	No	3	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	64	96	64	446	2,900			
84	Gilgandra (Groundwater)	Yes	No	No	No		No	Yes	6	Full pay-for-use pricing, member of waterwise, public education program.	Yes		71		48	433	860			
60	Glen Innes Severn	Yes	No	No		Yes	No	Yes	3	Full pay-for-use pricing, rainwater tank subsidy, restrictions, ad hoc public education.	Yes	Yes	130	195	72	222	830		50	52
82	Gloucester								4	Full pay-for-use pricing, restrictions, retrofit program, public education program.	Yes	Yes	124		43	181	410		25	39

Table 8C - 2005/06 Water Conservation Initiatives

WATER UTILITY		CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED MEASURES			OTHER MEASURES					CONSUMPTION/LOSSES				
		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	Customer Billing Period	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge/kL		Residential Revenue from Usage Charges	Average Annual Residential Consumption	Total Town Water Consumed	Total Water Losses	Real Losses (Leakage)	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No	months		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
															2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
28B	Goldenfields (Bulk Supplier)	Yes	No	No	No		No	No	3		Yes				67		9,630	1,109	998	
28A	Goldenfields (Reticulator) (N	Yes	No	No	No		No	No	3	Full pay-for-use pricing, customer billing 3 times/a, member of waterwise, public education program, water restriction, separate metering of new multi-unit developments, monitoring program, review water conservation measures.	Yes		110		65	311	5,970	698	358	94
1	Gosford	Yes	Yes	Yes	Yes	1000	No	Yes	6	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	112		71	180	15,500			
20	Goulburn Mulwaree	Yes	Yes	Yes	Yes	650	Yes	Yes	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, AAA washing machine rebates.	Yes	Yes	126	181	37	143	2,310			
80	Greater Hume	No	Yes	No	No		Yes	Yes	12	Full pay-for-use pricing, restrictions, public education program.	Yes		60	80	24	319	680			
30	Griffith	Yes	Yes	Yes	No		No	No	4	Full pay-for-use pricing, restriction policy in place, public education program.	Yes	Yes	35	60	67	703	9,550	880		
94	Gundagai	No	No	No	No		Yes	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes		70	90	71	250	540	80	40	106
44	Gunnedah (Groundwater)	No	No	No	No		No	No	3	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	55	95	63	336	2,650	200		
90	Guyra		No	No	No		No	No	6	Full pay-for-use pricing, restrictions, public education program.	Yes	Yes	100	120	43	248	440			
81	Gwydir		No	No	No		Yes	No	4		Yes		90	195		247	720	196	177	343
76	Harden (Reticulator)	No	No	No	No		Yes	Yes	12	Full pay-for-use pricing.	Yes		110	150	44	424	790	79	65	112
7	Port Macquarie-Hastings (U	Yes	Yes	Yes	No		Yes	Yes	3	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	138	276	71	171	6,500	656	441	49
30A	Hawkesbury (No WS)																			
86	Hay (Dual Supply)	No		No	No				4	Full pay-for-use pricing, public education program, other.	Yes	Yes	61	92	25	191	1,700		23	47
	Hunter Water									Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, leakage reduction, effluent reuse.			114	110	67	204	80,000	8,090	4,855	62
37	Inverell	No	No		No		No	No	3	Full pay-for-use pricing, member of waterwise, public education program.			100		46	231	1,950	200		
106	Jerilderie (Dual Supply)								6	Full pay-for-use pricing, customer billing 3 times/a, member of waterwise, building code program, water restrictions, public education, retrofit program, effluent reuse, reservoir drop test, review water conservation measures.	Yes		100	140	34	228	270		7	42
77	Junee (No WS)																			
25	Kempsey (Groundwater)	Yes	No	No	No		Yes	Yes	1 or 6	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 restriction policy.	Yes		89		32	178	4,090	745	540	136
70	Kyogle	No	No	No	No		Yes	Yes	6	Full pay-for-use pricing, member of waterwise, IWCM investigating rainwater tank subsidies, restrictions, non-potable water supplies, customer billing 4 times/a for commercial premises, 90% effluent reuse at Bonalbo and Woodenbong.	Yes	Yes	105	175	57	158	420	41		
59	Lachlan									Full pay-for-use pricing, restrictions, retrofit program under investigation, public education program .	Yes		85	128	57	314	1,190			
48	Leeton	No	No	No	No		Yes	No	4	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		50	67	66	502	2,890	375	250	170
22	Lismore (Reticulator)	Yes	Yes	Yes	Yes	670	Yes	Yes	3	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	122		70	196	4,010			
31	Lithgow	Yes	No	No	No		No	No	6	Full pay-for-use pricing, member of waterwise, public education program, water restrictions implemented from Drought Management Plan.	Yes	Yes	85	160	44	195	2,050		123	48
61	Liverpool Plains												62	103	63	238	950			
102	Lockhart (No WS)																			
5	MidCoast (Unfiltered)	Yes	No	No	No		Yes	Yes	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, other.	Yes	Yes	135		70	178	10,740	1,890	936	72
32	Mid Western Regional	Yes	No	No		Yes	100	No	No	4		Yes	Yes	104		42	322	2,890		173	78
38	Moree Plains (Groundwater)									Full pay-for-use pricing, member of waterwise, restrictions, public education program (media).	Yes	Yes	65		56	484	3,220			
65	Murray (Dual Supply)	Yes	No		Yes	No		No	No	4	Full pay-for-use pricing, restrictions, public education.	Yes		65		50	224	1,450	140	114	116
101	Murrumbidgee (Groundwater	No	No	No	No			Yes	No	N	Full pay-for-use pricing, rainwater tank guidelines, encouraging retrofit program.	Yes		21		50	759	840		50	185
41	Muswellbrook									Full pay-for-use pricing, member of waterwise, restrictions, public education program.			124	185	74	344	2,640			
34	Nambucca (Groundwater)	Yes	No		Yes	No		No		Yes	6	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes	Yes	100		65	180	1,750	389	264	111
46	Narrabri (Groundwater)	No	No	No		No		No	No	3	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program.	Yes		35		36	547	3,600		216	135
63	Narrandera (Groundwater)	No	Yes	No	No			No	No		Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	56		59	327	1,460	45		
62	Narromine (Groundwater)	No	No	No	No			Yes	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes		65		67	381	1,300	2	71	
83	Oberon (Reticulator)	Yes	No	No	No		No	Yes		Full pay-for-use pricing, restrictions.	Yes		104		49	170	730	54	40	81
19	Orange	Yes	No	No	Yes	650	No	No	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, public education program.	Yes	Yes	141	212	75	230	5,490	1,294	874	185

Table 8C - 2005/06 Water Conservation Initiatives

	WATER UTILITY	CUSTOMER FOCUSSED MEASURES					BUSINESS FOCUSSED MEASURES			OTHER MEASURES					CONSUMPTION/LOSSES				
		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	Customer Billing Period	Other Demand Management Measures	Sound Water Conservation Implemented?	Sound Drought Management Implemented?	Water Usage Charge/kL		Residential Revenue from Usage Charges	Average Annual Residential Consumption	Total Town Water Consumed	Total Water Losses	Real Losses (Leakage)	
		Yes/No	Yes/No	Yes/No	Yes/No	$	Yes/No	Yes/No	months		(Yes/No)	(Yes/No)	Step 1 (c/kL)	Step 2 (c/kL)	(%)	(kL/property)	(ML)	(ML)	(ML)	(L/d/ connection)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14) 2005/06	(15) 2005/06	(16) 2005/06	(17) 2005/06	(18) 2005/06	(19) 2005/06
71	Palerang	No	No	Yes	Yes	250	No	No	3		Yes		100	135		169	520		31	48
36	Parkes			No	No		Yes	Yes	4	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	65	170	51	368	5,120	465	307	158
17	Queanbeyan (Reticulator)	Yes	Yes	Yes	Yes	500	Yes	No	3	Full pay-for-use pricing, customer billing 4 times/a, member of waterwise, public education program, water restrictions, rainwater tank rebate, rebate for water efficient appliances, subsidised garden mulch, free water audits, effluent reuse, retrofit program, review water conservation measures, reservoir drop test.	Yes	Yes	145	195	55	209	4,370	392	391	89
33	Richmond Valley	Yes	Yes	Yes	Yes	500	Yes	No	3	Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program.	Yes		105	150	37	207	3,120	580	526	222
8	Riverina (Groundwater) (No				No				3	Full pay-for-use pricing, customer billing 3 times/a, member of waterwise, building code program, water restrictions, public education program, separate metering of new and existing multi-unit developments, reservoir drop test, leakage reduction program, monitoring program, review of water conservation measures, meter replacement program.	Yes	Yes	72		77	362	16,340	2,026		
4	Rous (Bulk Supplier) (No Sg	Yes	Yes	Yes	Yes	670	Yes	Yes	3	Full pay-for-use pricing, member of waterwise, restrictions, retrofit program, public education program, appliance rebates, residential tune up program, school grants.	Yes	Yes	96				11,600		61	5
3	Shoalhaven	Yes	No	No	Yes	1000	Yes	Yes	3	Full pay-for-use pricing, quarterly billing, member of waterwise and AWA, rainwater tank subsidy, rainwater tank connection to toilet or washing machine subsidy, restrictions, public education program, Water conservation Tapstar Show, promote retrofitting of showerhead, leak reduction program, monitoring demand, effluent reuse for agriculture.	Yes	Yes	80	120	55	171	16,050	1,400	800	49
35	Singleton									Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	77		57	335	3,140	337		
52	Snowy River (Unfiltered)	No	No	No	No		No	No	4	Full pay-for-use pricing, member of waterwise, subsidy, restrictions, DCP rainwater tanks required in new developments.	Yes		48			118	540		32	37
	Sydney Water									Full pay-for-use pricing, member of waterwise, rainwater tank subsidy, restrictions, retrofit program, public education program, leakage reduction, effluent reuse.			126	163	75	203	528,000	52,830		
13	Tamworth Regional								3	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	83	88	67	319	10,440		623	94
69	Temora No WS)									Effluent reuse.										
68	Tenterfield	Yes	No	No	No		No	No	6	Full pay-for-use pricing, member of waterwise, water restrictions, public education program, effluent reuse, leakage reduction program, retrofit program.	Yes	Yes	141		50	171	430		26	38
93	Tumbarumba	No	No	No	No		No	No	6	Full pay-for-use pricing, restrictions, public education program.	Yes	Yes	66	98	23	367	380	30	29	68
43	Tumut	No	No	No	No		Yes	No	6	Full pay-for-use pricing, restrictions, public education program, metering.	Yes	Yes	82	103	77	310	1,610		95	58
6	Tweed	Yes	No	No	No		No	No	6	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes		104		68	208	9,500	1,245	600	77
45	Upper Hunter								3		Yes	Yes	104		55	294	1,780		107	73
73	Upper Lachlan	No	No	No	No		No	No	6		Yes	Yes	97	116	31	179	430			
85	Uralla									Full pay-for-use pricing, restrictions, considering retrofit program.			70		39	196	330			
107	Urana (No WS)																			
9	Wagga Wagga (No WS)																			
88	Wakool (Dual Supply)	No			No			No		Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes		75	120	18	638	1,620		52	114
98	Walcha	No	No	No	No		No	No	3	Full pay-for-use pricing, member of waterwise, restrictions.	Yes		175	260	74	223	260		15	49
79	Walgett (Dual Supply)	No	No	Yes	No		Yes	No	4	Full pay-for-use pricing, member of waterwise, considering rainwater tank subsidy, restrictions, public education program, proposing introduction of water meters.	Yes				13	614	2,620		90	74
96	Warren (Dual Supply)	Yes	No	No	No		No	No	3	Full pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	73	110	52	219	740	117	89	233
55	Warrumbungle	Yes	No	No	No		No	No	12		Yes		70			368	1,020		61	56
95	Weddin (No WS)																			
57	Wellington	Yes	Yes	No	No		No	Yes	3	Full Pay-for-use pricing, member of waterwise, restrictions, public education program.	Yes	Yes	145	175	39	241	1,120	338	260	249
74	Wentworth (Dual Supply)	No	No	No	No		No	No	6	Full pay-for-use pricing, restrictions.	Yes		110	260	57	66	1,960	29	27	32
16	Wingecarribee	Yes	Yes	No	No		Yes	No	3	Full pay-for-use pricing, customer billing 4 times/a, member of waterwise, restrictions, showerhead retrofit program, public education program.	Yes	Yes	124	185	46	192	4,740	729	665	113
2	Wyong	Yes	Yes	Yes	Yes	1000	Yes	Yes	6	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	112		68	163	14,090	1,073	662	29
56	Yass Valley	Yes	No	No	Yes	200	No	No	4	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	120			193	860	130	110	107
49	Young (Reticulator)	Yes	No	No	No		Yes	No	3	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		125	170	72	242	1,520	112	100	70

Table 9 - Water Supply - Utility Characteristics

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION											ASSETS									WORKFORCE									
		Total No of Assessments			No. of Connections	Connected Properties - Total		Connected Properties - Residential			Population		Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	Outsourcing			Injuries	Days Lost		
					(Single Dwellings + Mult Dwellings + Non-res Dwellings + Fire)	(Ratio of Connected Properties to Assessments)	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)	(20) / (25)	(No.)	(No.)	(No.)	(No.)	(28) / [(25) x 100]	($'M)	($'M)	No./1000 properties	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No.	(%)	
		(18)			(18a)	(19)	(20) NWI 1	(21)	(22)	(22a)	(23)	(24)	(25) NWI 2	(26) NWI 3	(27) NWI 11	(28)	(29)	(30)	(30a)	(31)	(31a) NWI 63	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
	Sydney Water	1,661,000	1,685,000	1,706,200	1706000	1.00	1,706,200	0.93	1.00	1585700	4,267,200		20,750	82	9			148	1												
	Hunter Water	209,000	211,200	213,900	214000	1.00	213,910	0.93	1.00	198510	517,400		4,550	47	6			84	2												
	LWUs with > 10,000 Properties																														
1	Gosford	67,300	67,700	68,130	59310	0.96	65,500	0.96	0.96	62810	154,700		940	70	1	2	5	20	2	11.0		1.3	9	24			5	15	3	47	0
2	Wyong	57,900	59,200	62,300	62060	0.97	60,130	0.93	0.97	55760	142,000	180	1,080	56	1	1	13	19	2	22.8	0.1	1.2		100							
3	Shoalhaven	46,800	47,600	48,510	44610	0.92	44,630	0.93	0.92	41470	75,500	420	1,500	30	4	4		29	2	2.4		1.0	8	76	2	5	9	3	4	10	0
4	Rous (Bulk Supplier) (NO SGE)	37,300	37,300	37,300	36130	0.96	35,810	0.97	0.96	34680	108,000		375	95	2	2	3	11	3	9.5		1.7	29	65				6	2	51	0
5	MidCoast (Unfiltered)	35,400	36,400	36,930	35420	0.96	35,450	0.93	0.96	33060	85,000	110	1,170	30	2	2	15	25	2	12.8		1.3	17	100				5	3	37	0
6	Tweed	29,500	30,900	30,990	21370	0.91	28,200	0.95	0.93	27400	73,100	130	655	43	3	1		22	3	6.8		1.6	2	100	16	17	7		4	84	1
7	Port Macquarie-Hastings (Unfiltered)	27,700	28,500	28,900	24680	0.95	27,450	0.94	0.95	25820	68,000	130	753	36	3	1	1	18	2	24.2	4.0	1.8	6	100	25	10	10	7	2	2	0
8	Riverina (Groundwater) (NO SGE)	28,300	27,700	27,720	26140	0.96	26,610	0.92	0.96	24550	60,500	100	1,520	18	8		30	71	5	6.1	0.2	3.0	9	100				8	3	57	0
10	Coffs Harbour (Unfiltered)	23,400	24,000	24,320	22350	0.94	22,860	0.94	0.94	21370	59,500	120	596	38	1	2		7	1	0.7		1.4	3	97				2	3	8	0
11	Albury City	20,800	21,300	21,960	18750	1.03	22,610	0.92	1.03	20850	47,400	110	533	42	1			18	3	3.1		1.1	17	33	60	1	62	2	1	26	0
12	Fish River WS (Unfiltered, Bulk Supp	23,000	23,000	23,000		0.94	21,620	0.87	0.94	18800	62,000		238	91	1	2		3	1			0.6	8	100			10				
13	Tamworth Regional	18,300	19,530	18,940	18080	1.01	19,130	0.90	1.01	17180	47,100	170	635	30	5	2	8	16	3	2.2	0.1	1.9		48	4			4	3	31	0
14	Clarence Valley	20,400	20,400	19,340	18270	0.94	18,180	0.87	0.98	16540	49,100	140	1,360	13	1			8	1	6.4	5.5	1.0	11	100							
15	Eurobodalla (Unfiltered)	18,890	19,730	19,980		0.94	18,780	0.96	0.94	17940	36,100	300	762	25		1	7	15	2	9.8	0.1	1.5	4	100			3	3	5	19	0
16	Wingecarribee	18,420	19,210	18,030	16070	0.95	17,150	0.93	0.96	16180	41,800	100	625	27	3	2		14	2	3.2		1.5	8	23				3	5	123	2
17	Queanbeyan (Reticulator)	15,390	16,430	14,940	12100	1.03	15,390	0.93	1.04	14390	35,600	100	267	58				4	1	1.7		0.5	14	100		10		2	1	5	0
18	Dubbo	13,440	13,800	14,000	14830	1.11	15,540	0.88	1.10	13600	34,600	110	462	34	1		7	7	2	20.1	0.0	1.0	7	100					2		
19	Orange	14,640	15,010	15,210	12970	1.00	15,210	0.94	1.00	14320	38,000	100	461	33	2	2	4	5	1	6.0	0.3	1.2		100	10	5	5	2	2	46	1
20	Goulburn Mulwaree	9,480	13,950	10,060	9960	1.03	10,360	0.89	1.03	9200	22,500		227	46	2	2	4	7	3	12.2	4.3										
21	Bathurst Regional	12,070	12,870	13,330	11530	1.06	14,130	0.93	1.07	13210	32,000	190	348	41	1	2		7	2	3.9	1.2	0.8		100	1	1	4	8	2	4	0
22	Lismore (Reticulator)	12,740	12,910	13,110	12620	1.05	13,750	0.90	1.06	12550	34,200		333	41		1		5	2	3.4		1.1	7	0		5	5		5		
23	Bega Valley (Unfiltered)	13,180	13,230	13,720	11110	0.97	13,370	0.92	0.98	12420	27,400	150	567	24		3	11	19	3	1.1	0.1	1.4	3	100	5			3	4	5	0
24	Ballina (Reticulator)	13,180	13,180	15,080		0.93	14,020	0.84	0.93	11720	33,300		326	43	1	1	2	3	1	0.3		1.3	11	0	30		10		3		
25	Kempsey (Groundwater)	11,230	11,470	11,570	10860	1.04	12,030	0.87	1.03	10320	24,300	140	592	20	1	2	38	20	3	5.3	0.2	1.8	11	100	5	5	5		4		
26	Country Energy	10,130	10,390	10,740	10820	1.01	10,850	0.89	1.01	9660	22,000	100	362	30	2	3		7	2	2.6		5.2	13	100				2	2	8	0
27	Byron (Reticulator)	10,500	10,610	10,740	8670	0.96	10,310	0.90	0.96	9300	28,000	180	217	47	1			6	3	0.5	0.1	1.0	10	95					4		
28A	Goldenfields (Reticulator) (NO SGE)	10,200	10,200	10,390	10390	0.94	9,770	0.70	0.94	6790	20,800	110	1,820	5	1			22	1	3.0		2.5	13	44	14	5	5	5	8	27	0
28B	Goldenfields (Bulk Supplier) (NO SGI	18,800	18,800	18,950		0.94	17,810	0.79	0.94	14010	37,600	100	315	57	1		6	14	4	0.7		1.7	13	45	14	5	5	5	6	27	0
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties					*0.96*		*0.92*	*0.97*					*35*						*4.6*		1.3	*9*					*3*	*3*		
	LWUs with 3,001 - 10,000 Properties																														
29	Armidale Dumaresq	8,010	8,160	8,250	7650	0.98	8,090	0.92	0.98	7470	21,100	110	307	26	2	3		11	4			1.7	4	0							
30	Griffith	9,000	8,650	8,890	8620	0.85	7,550	0.82	0.84	6090	24,000	110	402	19				2	0	2.1		3.0	7	0	5	5	10	2	2	50	1
31	Lithgow	7,380	7,380	7,710	6990	0.98	7,550	0.95	0.98	7180	20,000	100	460	16	1	1		6	1	0.5		1.2		78			20	2	10	64	3
32	Mid-Western Regional	6,210	6,390	6,390	6060	1.02	6,520	0.94	1.03	6200	13,200	150	311	21	3	2	37	11	4	1.1	0.2	2.0	8	100					3		
33	Richmond Valley	6,720	6,720	6,990	6500	0.97	6,780	0.88	0.97	5970	14,900	120	197	34	1			5	3	0.7	0.0	1.8	4	50				4	8	66	2

Table 9 - Water Supply - Utility Characteristics

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION											ASSETS									WORKFORCE									
		Total No of Assessments			No. of Connections	Connected Properties - Total		Connected Properties - Residential			Population		Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	Outsourcing			Injuries	Days Lost	
					(Single Dwellings + Mult Dwellings + Non-res Dwellings + Fire)	(Ratio of Connected Properties to Assessments)	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)	(20) / (25)	(No.)	(No.)	(No.)	(No.)	(28) / [(25) x 100]	($'M)	($'M)	No./1000 properties	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No. (%)	
		(18)			(18a)	(19)	(20) NWI 1	(21)	(22)	(22a)	(23)	(24)	(25) NWI 2	(26) NWI 3	(27) NWI 11	(28)	(29)	(30)	(30a)	(31)	(31a) NWI 63	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
34	Nambucca (Groundwater)	6,240	6,290	6,360	6540	0.95	6,040	0.90	0.95	5410	15,600	130	186	32	1		9	2	1	0.8	0.1	1.0	17	50	20	15	20		1		
35	Singleton	5,800	6,060	6,210	5820	0.95	5,900	0.89	0.95	5240	16,500	100	148	40	1			5	3	0.9		1.1	2	30					4		
36	Parkes	5,860	5,940	5,750	5310	0.95	5,460	0.87	0.95	4750	11,600		425	13	1	2	5	8	2	2.1	0.1	2.4		100				3	1	20	1
37	Inverell	5,120	5,170	5,430		0.98	5,320	0.90	0.99	4810	11,700	110	244	22	2		1	7	3	1.1		1.5	13	50			10		3		
38	Moree Plains (Groundwater)	5,160	5,160	4,580		0.97	4,440	0.86	0.96	3790	10,800		155	29	2					0.2											
39	Cowra	5,250	5,250	5,520	5440	0.95	5,240	0.91	0.95	4770	12,600	110	240	22	1			4	2	2.2		0.4		100					1		
40	Central Tablelands (NO SGE)	5,190	5,220	5,330	5290	0.95	5,070	0.75	0.95	3820	11,000	110	460	11	3	2	5	28	6	1.0	0.0	3.8	16	63					3		
41	Muswellbrook	5,190	5,070	5,190		0.94	4,900	0.88	0.96	4370	15,300		128	38					0	0.7	0.1										
42	Corowa	4,670	4,740	4,920	4880	0.93	4,570	0.92	0.92	4140	9,500	180	178	26	3			4	2	0.7		1.1		60							
43	Tumut	4,200	4,530	4,420	4470	0.95	4,200	0.85	0.95	3570	11,700	100	163	26	5	1		10	6	0.1		1.2		100				7	6	64	6
44	Gunnedah (Groundwater)	4,140	4,170	4,230	4200	1.02	4,310	0.90	1.02	3860	10,200		192	22			17	17	9			1.4		100	5		5	1	7	10	1
45	Upper Hunter	3,730	4,560	4,360	4040	0.92	4,010	0.90	0.93	3660	9,100	100	160	25	4	1	1	6	4	0.5		1.2		0							
46	Narrabri (Groundwater)	4,250	4,250	4,380	4380	0.98	4,290	0.87	0.98	3750	10,700	100	134	32			11	2	1	0.7		2.6		36				3	1	3	0
47	Bellingen (Unfiltered)	4,060	4,150	4,170	4000	0.95	3,970	0.90	0.95	3570	9,100	100	175	23	2	1	4	6	3	0.4		2.3	22	56		5	5		1		
48	Leeton	3,740	4,260	4,320	4030	0.92	3,970	0.85	0.92	3390	8,400	110	135	29	3	3		6	4	0.5		1.3	20	20				5	0	5	0
49	Young (Reticulator)	3,760	3,770	4,000	3890	1.04	4,160	0.85	1.04	3550	8,900	120	114	36				3	3	0.3	0.0	1.2	20	100	5	30	30	3	5	37	3
50	Cooma-Monaro	3,650	3,690	3,710		0.95	3,530	0.86	0.95	3050	7,600		129	27	1					0.3											
51	Forbes	3,450	3,530	3,560	3710	1.01	3,590	0.90	1.01	3230	7,600	100	128	28	1		1	3	2	0.2		1.7		67		2	4		2		
52	Snowy River (Unfiltered)	2,370	2,370	2,720	2380	1.43	3,880	0.78	1.43	3020	4,600	540	137	28	6			9	7			2.1	13	0			20				
53	Berrigan (Dual Supply)	2,980	3,310	3,360	2830	0.98	3,290	0.89	0.98	2940	6,700	120	207	16	4	3		11	5	0.9		2.1		100			7		8		
	Medians (% of LWUs basis) 3,001 to 10,000 Properties					*0.95*		*0.89*	*0.96*					*26*						*0.7*		1.6	*13*					*3*	*3*		
	LWUs with 1,501 - 3,000 Properties																														
54	Deniliquin	3,200	3,160	3,280	3520	0.96	3,150	0.87	0.95	2730	8,000	150	159	20	1			4	3	0.1		1.6		80			38	1	6	4	0
55	Warrumbungle	3,060	3,060	3,060	3010	0.99	3,030		0.97		7,000	100	116	26	3	1	7	8	7			5.0		67				1		20	1
56	Yass Valley	2,940	2,950	2,960	2830	0.98	2,900	0.91	0.98	2650	6,700	110	110	26	1	1	1	8	7			1.9	9	55			10	1	4	2	0
57	Wellington	2,930	2,880	2,880	2860	0.98	2,820	0.88	0.98	2500	6,300	100	81	35	1			4	5	1.6		2.1		33			5		1		
58	Cootamundra (Reticulator)	2,820	2,830	2,870	2790	0.99	2,840	0.87	0.99	2460	7,000	110	92	31					0	0.3		0.7		50					6		
59	Lachlan	2,630	2,640	2,670		1.02	2,720	0.79	1.02	2160	5,600		163	17	3					0.2	0.1										
60	Glen Innes Severn	2,990	2,970	3,100	2650	0.90	2,790	0.87	0.91	2450	6,400	110	95	29	2			2	2	0.0		2.2		100				1	3		
61	Liverpool Plains	2,250	2,260	2,580		0.98	2,530	0.90	0.98	2280	5,000		98	26						0.2											
62	Narromine (Groundwater)	2,110	2,130	2,120		0.95	2,010	0.88	0.95	1770	5,000		60	34	2	2	15	3	5	0.2	0.0	2.0		25							
63	Narrandera (Groundwater)	2,200	2,180	2,190	2110	0.92	2,010	0.85	0.92	1710	4,800	110	66	30			3	4	6	0.9		2.0		100	5	5	10		1		
64	Dungog (Reticulator)	2,050	2,100	2,120	2080	0.95	2,010	0.90	0.95	1810	7,700	100	97	21	1			3	3	0.4		2.5		80			15	1	2	14	1
65	Murray (Dual Supply)	2,030	2,030	2,690	2690	0.95	2,550	0.87	0.95	2230	5,600	210	123	21	2			7	6	0.3		1.4	4	86					1		
67	Cobar	2,020	2,020	2,340	2040	0.95	2,220	0.87	0.95	1940	5,200	100	107	21	1	2	1	6	6	0.4		4.5	10	40					1		
66	Cobar WB (Bulk Supplier)	2,020	2,020	2,020		0.95	1,920		0.95		4,800		350	5																	
68	Tenterfield	2,030	2,000	2,000	1850	0.95	1,900	1.00	0.95	1900	3,600		65	29	1	1	1	2	3	0.2	0.0	3.2	17	83			3		0		
70	Kyogle	1,850	1,890	1,880	1870	0.95	1,790	0.92	0.95	1640	3,700	120	66	27	1	1	1	4	6	0.4		3.1		100	5	5			2		
71	Palerang	1,620	1,880	1,880	1770	0.95	1,790	0.98	0.95	1740	3,500		54	33	3	2	6	2	4			1.1		50					1		
73	Upper Lachlan	1,450	1,720	2,030	1970	1.00	2,030	0.88	1.00	1790	3,500	110	52	39	1	2	4	4	8	0.2		3.4		100					2		
74	Wentworth (Dual Supply)	1,690	1,800	2,240	2300	0.95	2,130	0.90	0.95	1920	4,000	130	167	13	3			8	5	0.3		2.3	10	80		5	2	1	7		
75	Coonamble (Groundwater)	1,520	1,550	1,550	1550	1.02	1,580	0.87	1.02	1370	4,400	100	64	25			7	7	11	0.1		2.5		100		2	2	2	12	84	9
	Medians (% of LWUs basis) 1,501 to 3,000 Properties					*0.95*		*0.88*	*0.95*					*26*						*0.2*		2.2	*10*					*1*	*2*		

Table 9 - Water Supply - Utility Characteristics

	WATER UTILITY	ASSESSMENTS - CONNECTIONS - POPULATION											ASSETS								WORKFORCE									
		Total No of Assessments			No. of Connections	Connected Properties - Total		Connected Properties - Residential			Population		Mains	Properties Served per km of Main	Water Treatment Works	Dams	Bores	Pumping Stations	Pumping Stations / 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	Outsourcing			Injuries	Days Lost	
					(Single Dwellings + Mult Dwellings + Non-res Dwellings + Fire)	(Ratio of Connected Properties to Assessments)	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)	(20) / (25)	(No.)	(No.)	(No.)	(No.)	(28) / [(25) x 100]	($'M)	($'M)	No./1000 properties	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	No.	Total (%)	Due to Injuries No.	(%)
		(18)			(18a)	(19)	(20) NWI 1	(21)	(22)	(22a)	(23)	(24)	(25) NWI 2	(26) NWI 3	(27) NWI 11	(28)	(29)	(30)	(30a)	(31)	(31a) NWI 63	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
LWUs with 200 - 1,500 Properties																														
76	Harden (Reticulator)	1,530	1,570	1,690	1600	0.96	1,620	0.66	0.95	1060	3,900		168	10				3	2	0.7		2.5	25	50			1		1		
79	Walgett (Dual Supply)	1,660	1,680	1,870	3320	0.85	1,590	0.88	0.85	1400	6,600	190	102	16	2		6	7	7		0.1	2.5		0				1	3	23	3
80	Greater Hume	1,480	1,500	1,580	1610	0.95	1,500	0.84	0.95	1260	4,000	110	137	11	1		2	2	1	0.2		1.3		100				1	1	2	0
81	Gwydir	1,450	1,450	1,450	1420	0.95	1,380	0.91	0.95	1250	2,700	130	87	16			9	1	1			2.9	3	100			10		4		
82	Gloucester	1,470	1,440	1,700	1730	0.95	1,610	0.85	0.95	1370	3,100	150	64	25	2			8	13	0.6	0.0	1.2		50			75				
83	Oberon (Reticulator)	1,240	1,340	1,340	1350	1.01	1,350	0.83	1.02	1140	3,000	130	36	38	1				0	0.2		1.5		100			10		2		
84	Gilgandra (Groundwater)	1,350	1,370	1,380	1340	0.98	1,350	0.89	0.98	1200	3,000	100	49	27	1		4	1	2	0.2	0.0	1.5		50			5	1	1	2	0
85	Uralla	1,290	1,300	1,300		1.01	1,320		1.02		2,300		36	36	1					0.0											
86	Hay (Dual Supply)	1,290	1,320	1,330	1340	0.98	1,300	0.88	0.98	1140	2,900		86	15	1			3	3	0.1		1.5		100			30				
87	Bourke (Dual Supply)	1,700	1,700	1,180	1180	1.00	1,180	0.86	1.00	1010	3,500		87	14	1			2	2	0.1		2.5		100					1		
88	Wakool (Dual Supply)	1,350	1,330	1,340	1240	0.95	1,280	0.77	0.95	990	2,800		119	11				8	7	0.0		3.1		0							
89	Bogan	1,190	1,190	1,050	1060	1.01	1,060	0.91	1.01	970	2,500		48	22	1			1	2			3.8	25	50	10		3		2		
90	Guyra	1,190	1,190	1,230	1520	0.95	1,170	0.89	0.95	1050	3,500		66	18	1	2		1	2			2.6		67			5		1		
91	Cabonne	1,090	1,130	1,160	1110	0.95	1,100	0.86	0.95	950	2,200	100	88	12	1	3	3	3	3	0.0		4.6	10	60					2		
92	Carrathool (Groundwater)	1,130	1,130	1,150	1070	0.95	1,090	0.72	0.95	790	2,000	110	474	2		3	7	14	3	0.6		2.7		100					5		
93	Tumbarumba	1,070	1,080	1,030	1170	0.95	980	0.85	0.95	830	2,000	170	66	15		1		3	5	0.3		5.1	20	60							
94	Gundagai	960	1,000	1,040	1030	1.02	1,060	0.85	1.02	900	2,400	170	36	29	1			1	3	0.0		2.8	33	100		15	10		1		
96	Warren (Dual Supply)	1,070	1,060	1,060	1050	0.91	960	0.89	0.90	850	2,400	100	53	18			5	2	4	0.0		2.1		100				1	3	4	1
97	Bombala	900	900	880	840	0.95	840	0.87	0.95	730	1,900	110	37	23	2			3	8	0.0		2.2		100					0		
98	Walcha	820	810	880	860	1.01	880	0.84	1.01	740	1,600	120	56	16	1			3	5			2.3		50					0		
100	Balranald (Dual Supply)	850	840	850	870	0.95	800	0.87	0.95	700	2,000	100	30	27	1			3	10	0.1		2.5		100							
101	Murrumbidgee (Groundwater)	750	770	780	750	1.03	800	0.89	1.03	710	1,700		29	28	1		4	3	10	0.1		2.5		0							
103	Central Darling (Dual Supply)	730	720	720	680	1.00	720	0.88	1.00	630	1,400	110	67	11	2	4	3	7	10		0.1	4.9		100					2		
104	Boorowa	620	610	660	660	0.94	620	0.91	0.94	560	1,200	110	100	6	1			1	1			3.2		50							
105	Brewarrina	550	550	560	540	0.86	480	0.88	0.86	420	1,500	120	38	13	2	1	1	4	10	0.0		2.5		100	50				3		
106	Jerilderie (Dual Supply)	460	490	500	480	0.93	460	0.76	0.93	350	970		40	12	1			1	3	0.0		2.2		100					2		
	Medians (% of LWUs basis) 200 to 1,500 Properties					*0.95*		*0.87*	*0.95*					*16*						*0.1*		2.5	*23*					*1*	*2*		
	Totals (excluding bulk suppliers)			*792,000*			*760,000*				*1,800,000*		*28,000*																	

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Table 10 - Water Supply - Asset Management, Water Resource Management

WATER UTILITY		ASSET MANAGEMENT																			WATER RESOURCE MANAGEMENT																				
		Leakage (from Table 8)								Main Breaks			Unplanned Interruptions to Supply			Rehabilitations			Mains Renewals		Mains Maintenance Cost	Total Town Water Supplied				Non-potable Town Water Supplied			% Water Recycled (from Table 8)			Peak Week to Average Consumption		Management Policy in Place?		Average Annual Residential Consumption+ (Potable)					
		(L/d per connection)			(kL/km/d)	(ILI)	Reservoir Drop Test Type Year		Result %	(per 100kmofMain)			(per '000 properties)			Mains (kmper 100 km)	Service Connections (%)	Water Meters (%)	($'000 per 100kmof Main)	(% of CRC)	($'000 per 100kmofMain)	Potable + Non-potable - Recycled (ML) (fromTable 8)				For outdoor uses or industry (ML) (fromTable 8)			(Town Water Supply + Agricultural Use)/Total Town Water Consumption (%)			(%)		Drought (Y/N)	Demand (Y/N)	From Tables 8 & 9 (1) ÷ [(22a)] (kL/property)					
		(41) NWI 50A			(41a) NWI 50B	(41b) NWI 50	(41c)	(41d)	(41e)	(42) NWI 40			(43) NWI 37			(44)	(45)	(45a)	(46)	(47)	(48)	(49) NWI 17*				(50)			(51)			(53)		(54)	(55)	(56) NWI 49*					
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06		2005/06	2002/03	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06			
	Sydney Water	62	86	96	5.9	1.6			8.5	38	38	35	260	234	196	0.7			273		39	634,700	563,000	525,000	528,300				3	3	4					224	211	202			
	Hunter Water	68	95	87	4.1	1.3				45	42	53	368	386	234	0.4						77,600	77,000	69,900	80,500				8	6	7					208	197	204			
LWUs with > 10,000 Properties																																									
1	Gosford	51	36	43	2.7	<1.0				36	30	43	278	265	295	1.1		22.1			372	18,300	16,900	15,200	15,500				1	1	2	196	133	P	P	193	180	180			
2	Wyong	46	32	29	1.7	<1.0	RDT	2004	4.7	6	5	5	24	34	31	0.9	0.5	3.3			238	15,300	15,000	14,200	14,100		30	716		0	7	130	126	P	P	188	178	163			
3	Shoalhaven	80	70	49	1.5	<1.0	WM	2005		20	11	9		4	3	0.7	0.0	2.1	62	0.2	57	19,000	18,900	15,900	16,000	3,270	3,370	2,869	11	10	12	173	184	P	P	230	167	171			
4	Rous (Bulk Supplier) (NO SGE)	23	1	5	0.4					13	13	11	4	4	3	0.5	0.1	0.4			112	9,950	11,500	11,700	11,600							124	123	P	P						
5	MidCoast (Unfiltered)	139	79	72	2.2	<1.0	RDT	2006		13	13	13				0.3					189	11,100	11,300	10,400	10,700					1	1	110	152	P	P	219	204	178			
6	Tweed	72	78	77	2.5	1.3				5	7	4	46	74	59	1.5	1.8	5.9			79	8,740	9,540	9,980	9,500			181	4	4	3	132	123	O	O	219	221	208			
7	Port Macquarie-Hastings (Unfiltered	52	95	49	1.6	<1.0				5	4	5	13	15	21	0.2	0.0	5.3	114	0.3	86	6,190	6,500	7,320	6,500			117	4	4	5		123	P	P	178	186	171			
8	Riverina (Groundwater) (NO SGE)	127	101	103	1.8	<1.0				12	19	13	90	1	92	0.6	0.3		170	1.2	48	17,800	16,100	16,000	16,300							149	190	P	P	354	343	362			
10	Coffs Harbour (Unfiltered)	44	46	44	1.6					11	10	9	32	33	40	1.7	0.1	3.9	2	0.0	131	5,490	6,030	6,010	6,170		150	423	8	8	8	125	126	P	P	189	186	184			
11	Albury City	102	86	85	3.0	2.2	RDT	2006	2.0	13	10	14				0.8	0.1		186	0.4	107	11,403	10,668	14,400	9,700		5,290		46	31	40	151	210	P	P	307	284	302			
12	Fish River WS (Unfiltered, Bulk Sup				6.7					6	5	4			0	4.2	0.0					15,500	11,700	16,300	11,000	6,730	7,520													
13	Tamworth Regional	141	98	94	2.7					10	19	13				0.3	0.1	10.6	354	1.3	6	10,748	9,765	10,700	10,400		160	53	4		1	136	188	O	P	294	317	319			
14	Clarence Valley	111	126	67	0.9	<1.0	RDT	2005		8	6	6		52	55	0.1	0.3		6	0.0	59	7,100	7,610	16,500	7,390		4,180	138	2	2	4		116			216	178	238			
15	Eurobodalla (Unfiltered)	45	43		1.0					1	2	5	20	20		0.4	0.6				94	4,760	5,590	4,820	4,420	220	180	143	4	4	7	157	158	P	P	183	151	159			
16	Wingecarribee	63	52	113	2.9	1.5				17	18	21	80	85	78	0.2	0.9		129	0.7	68	6,040	5,170	5,110	4,740			2		2	1	424	166	P	P	214	220	192			
17	Queanbeyan (Reticulator)	132	83	89	4.0	1.6		2000		2	3	2				0.2		5.8				5,700	4,030	4,010	4,370				2	3	2	133	168	P	P	155	185	209			
18	Dubbo	232	176	98	3.2	1.4				5	6	5	79	26	38	0.0	0.0		38	0.2	146	10,200	9,890	9,580	8,850				16	23	26	187	198	P	P	459	462	385			
19	Orange	87	95	185	5.2	2.3				10	11	12		73	70	0.2	0.6				148	6,600	4,930	4,760	5,490	3,360	3,390	3,121	69	71	57	119	152	P	P	206	221	230			
20	Goulburn Mulwaree	56	41							29	15					4.4			518		143	3,500	2,710	2,340	2,310				66	48	49	106	103	P	P	147	93	143			
21	Bathurst Regional	101	115	95	3.1	1.1				4	5	6			14	2.0	0.6	0.9			237	6,260	6,810	7,960	7,390		30	741			9	138	149			333	283	267			
22	Lismore (Reticulator)	42	60	52	2.0					17	6	9	84	32	35	3.0	1.0		938	5.1	186	3,010	3,660	3,850	4,010				8	4	3			P	P	186	179	196			
23	Bega Valley (Unfiltered)	68	53	131	2.6	1.9				5	4	8				1.8	0.2		163	0.8	41	4,460	3,970	3,540	3,810			438	14	15	16	144	186			158	178	163			
24	Ballina (Reticulator)						DT+W	2005	11.0	6	8	3	4		4	3.1			79	0.5	60	3,450	4,430	4,470	3,350	320	330	220		7	10			P	P	234	220	209			
25	Kempsey (Groundwater)	65	126	136	2.5	2.5				9	34	4				1.7		8.1	130	0.5	113	3,970	4,300	4,170	4,090	260	220	74	6	5	6	150	137			197	187	178			
26	Country Energy	78	85	82	2.4		RDT	2006		15	12	13				2.8	0.2		576		417	5,620	6,050	7,230	6,060	560	1,870	1,176	15	24	9		174			323	281	317			
27	Byron (Reticulator)	55	99	38	1.5	<1.0	WM	2006	7.0	13	33	38	2	5	1	4.6	5.4				69	2,640	3,560	3,020	2,720	580		222	16	20	29			O	O	200	214	190			
28A	Goldenfields (Reticulator) (NO SGE	112	202	94	0.5		WM	2006	7.0	24	18	19	129	151	147	1.2	0.7				53	6,860	5,660	3,890	5,970								305			335	311	311			
28B	Goldenfields (Bulk Supplier) (NO SGE)				8.7		WM	2006	7.0							0.0					88	10,700	9,560	9,420	9,630	170	180	134					192								
Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties				*83*	*2.4*							*9*			*39*	*0.9*			*130*		*101*										*7*								196
LWUs with 3,001 - 10,000 Properties																																									
29	Armidale Dumaresq	82	67	66	1.6	<1.0				11	31					1.0						3,320	2,910	3,160	3,110	60	60	54	36	20	13	175	162			239	253	243			
30	Griffith	169	162	168	3.6	1.4				16	14	14	39	37	40	1.2			87	0.7	40	9,200	9,010	9,420	9,550	750	820	737	2	4	8	163	178	P	P	596	685	703			
31	Lithgow	47		48	0.7					4		7	15		13	0.4	0.2				127	2,110	2,140	2,140	2,050								101	P	P	214	181	195			
32	Mid-Western Regional		64	78	1.5	<1.0				9	11	9	79	77		0.3	0.3		149	0.6	175	2,800	2,620	2,420	2,890				3	4	3	253	180	P	P	277	286	322			
33	Richmond Valley	71	73	222	7.3	6.6				11	11	13				5.1	2.2		318	1.8	171	2,940	2,930	3,040	3,120			19	7	20	4			O	P	275	286	207			
34	Nambucca (Groundwater)	55	48	111	3.9	1.7	RDT	2006		6	6	3	17	13	10	1.1	0.2	0.5			85	1,740	1,810	1,910	1,750				7		8	105	125	P	P	186	205	180			
35	Singleton	97	81	89	3.5					8	7	18	363	347	339	0.5	3.9		92	0.3	108	3,130	2,800	2,750	3,140				40	23	20	151	173	P	P	301	309	335			
36	Parkes	215	240	158	2.0			2004		15	14	16				0.2					13	6,850	6,720	6,520	5,120		210	160	4	3	4			P	P	378	362	368			
37	Inverell	70	68		1.3					10	10	6	5	5	4	4.1	0.1		369	1.8	91	2,140	2,080	2,100	1,950							131	134	O	O	238	227	231			

Table 10 - Water Supply - Asset Management, Water Resource Management

	WATER UTILITY	ASSET MANAGEMENT																				WATER RESOURCE MANAGEMENT																							
		Leakage (from Table 8)								Main Breaks			Unplanned Interruptions to Supply			Rehabilitations			Mains Renewals		Mains Maintenance Cost	Total Town Water Supplied				Non-potable Town Water Supplied			% Water Recycled (from Table 8)			Peak Week to Average Consumption		Management Policy in Place?		Average Annual Residential Consumption+ (Potable)												
		(L/d per connection)			(kL/km/d)	(ILI)	Reservoir Drop Test Type Year	Result %		(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 (ML) (from Table 8)				For outdoor uses or industry (ML) (from Table 8)			(Town Water Supply + Agricultural Use)/Total Town Water Consumption (%)			(%)		Drought (Y/N)	Demand (Y/N)	From Tables 8 & 9 (1) ÷ [(22a)] (kL/property)												
		(41) NWI 50A			(41a) NWI 50B	(41b) NWI 50	(41c)	(41d)	(41e)							(44)	(45)	(45a)	(46)	(47)	(48)	(49) NWI 17*				(50)			(51)			(53)		(54)	(55)	(56) NWI 49*												
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2002/03	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06										
38	Moree Plains (Groundwater)	135	108							42	14		284								312	3,980	2,350	3,220	***3,220***				17					P	P	261	420	484								
39	Cowra	102	66	84	1.9					6	8	11				4.2	0.2				196	3,300	2,560	2,180	2,960		40	191				217	270			273	240	321								
40	Central Tablelands (NO SGE)	129	66	84	1.0	<1.0				7	14	17	6	87	79	2.2	0.6	3.2	200	1.3	65	2,650	2,160	2,090	2,160							245	205	P	P	254	236	241								
41	Muswellbrook	78	114							23	29		29	89							88	2,430	2,630	2,870	***2,870***	870	1,150		42	40	43	155				343	314	344								
42	Corowa	262	158	126	3.4					34	15	26		41	44	5.6	1.2				66	4,406	3,892	3,260	5,140			1,411	13	13	11		200	P	P	583	587	427								
43	Tumut	80	59	58	1.6					5	25			139		6.1	6.5				66	2,520	4,010	2,050	1,610	1,650	90	36		1	0			O	P	306	301	310								
44	Gunnedah (Groundwater)	133	112	104	2.3	1.0				6	15	11	5	4	3	0.5	0.2					3,390	2,660	2,850	2,650				19	17	20	173	201	O	P	357	367	336								
45	Upper Hunter	174	96	73	1.8					71	52	48	442	3	22	6.3			245	1.6	321	2,678	2,206	2,790	1,780		510		25	20	3			P	P	277	239	294								
46	Narrabri (Groundwater)			135	4.4	<1.0				115		143			117	7.5	1.1		488	2.9	143	4,430	3,740	3,740	3,600						18		197	O	P	561	562	547								
47	Bellingen (Unfiltered)	59	70	66	1.5	<1.0				21	14	10				5.7					43	1,440	1,470	1,390	1,490							129	139	O	P	225	223	272								
48	Leeton	240	253	170	5.1	4.8				13	14	19	49	38	38	7.4	1.3				345	3,200	3,250	3,130	2,890							163	198	O	O	578	524	502								
49	Young (Reticulator)	79	67	70	2.4	1.2				14	13	20	58	77	23	1.3	0.9	5.4				1,690	1,590	1,630	1,520		130	111	6	8	8	170	188	O	P	264	247	242								
50	Cooma-Monaro	78								47									179	1.4	129	1,730	1,700	1,700	***1,700***									O	P	314	344	318								
51	Forbes	168	127	120	3.5	<1.0				29	25	35	205	195	210	7.8	0.1				219	3,750	2,410	2,350	2,900	90	150	199			0	141	213	P	P	410	377	446								
52	Snowy River (Unfiltered)	64	120	37	0.6					2	14	13		1	13	7.3	0.7					1,110	2,210	2,260	540											591	542	118								
53	Berrigan (Dual Supply)	81	81	153	2.1					8	30	18	3	6	12	0.2	0.4	3.6				2,580	2,260	2,210	1,960	1,100	1,090	892	4	9	2	135	217	P	P	329	247	237								
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties			*89*	*2.0*							*15*			*23*	*3.1*			*200*		*117*										*8*						318								
	LWUs with 1,501 - 3,000 Properties																																													
54	Deniliquin	146	107	156	3.5	3.8				31	13	13			24	6.3	0.2		38	0.5		3,800	3,330	2,960	2,950	720	690	700	19	19	20	174	188	O	O	696	597	533								
55	Warrumbungle	54	52	56	1.4					14		11	10		21	8.6	0.3					1,190	1,340	1,250	1,020				19	6	11					311	368	***368***								
56	Yass Valley	49	98	106	2.7	3.3				15	11	11	10	4	3	2.0	1.2	4.0				810	850	840	860				20	21	16	196	147			204	195	193								
57	Wellington	145	179	249	8.8	3.8	2004	23		28	13	23	139	64	73	12.3	3.5		764	2.6	467	1,360	1,190	1,020	1,120						0	200	178	P	P	298	256	241								
58	Cootamundra (Reticulator)	71	53	50	1.5					222	333	132				0.0					127	1,120	1,000	900	850			185	23	26	22				P	273	239	221								
59	Lachlan	113	78							5	6		6	12					12	0.1	144	1,590	1,980	1,430	***1,430***	230	250		8	12	14	235		O	P	548	382	314								
60	Glen Innes Severn	51	41	51	1.4					3	10	16	7	7		10.5	4.4				164	860	729	740	830				2		2	139	180	P	P	193	187	222								
61	Liverpool Plains	82	71							10	8			27					124	0.5	90	1,075	832	950	***950***				8			162		O	O	247	280	238								
62	Narromine (Groundwater)				3.2					4	4	7			30	16.7	2.0				352	1,760	1,540	1,540	1,300	100	100	121					247	O	O	663	656	381								
63	Narrandera (Groundwater)	260	109	114	3.6					6	18	23	74	70	75	15.2	0.2				118	1,770	1,630	1,440	1,460	50	50					191	232	P	P	556	445	327								
64	Dungog (Reticulator)	69	56	53	1.1	1.0				30	23	37	1,011	259	320	2.1	0.8		94	0.9	29	830	720	680	620				30	36	33	150	110	P	P	186	175	198								
65	Murray (Dual Supply)	76	54	116	2.5	<1.0				13	8	9	370	60	38	0.2	0.6		141	1.7	114	1,880	1,550	1,280	1,450	760	530	650	13	6	20	138	177	O	P	237	222	224								
67	Cobar	146	120	176	3.4					3	3	6	2	2	4	9.3	2.3					1,910	1,660	1,660	2,240	200	200	158	6	6	5		150			485	485	675								
66	Cobar WB (Bulk Supplier)																					4,000	4,250	4,250	***4,250***																				
68	Tenterfield	47	47	38	1.1					17	25	18	49	37	37	1.7	2.1		102	0.4		530	690	520	430	120		76	15	21	19	267	128	P	P	204	163	171								
70	Kyogle	34	34	37	1.1	<1.0				6	11	11	10	21	14	3.5	3.1	1.4	45	0.4	212	480	460	470	420	100	100	41	15	13	12	160	123	P	P	187	135	158								
71	Palerang	58	52	48	1.6	<1.0					16	15		3	6	18.6	0.2					580	390	540	520								153			240	180	169								
73	Upper Lachlan	79	32	36	1.3					17	10	8		6	4	1.0	1.0		335	1.4		460	406	330	430							431	171	O	P	187	148	179								
74	Wentworth (Dual Supply)	46	72	32	0.4	<1.0				9	15	21	14	11	12	6.0	0.2				133	3,080	2,760	2,580	1,960	2,190	2,190	1,690	12	13	1	796	694			224	104	66								
75	Coonamble (Groundwater)	199	179	194	4.7	57.1				67	9	13	41	6	63	1.3	2.8				120	1,820	1,810	1,630	1,240			41	9	4	3	192				1,128	621	462								
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties			*54*	*1.6*							*13*			*24*	*6.0*			*102*		*130*										*13*						224								

Table 10 - Water Supply - Asset Management, Water Resource Management

ASSET MANAGEMENT

	WATER UTILITY	Leakage (from Table 8) (L/d per connection) (41) NWI 50A			(kL/km/d) (41a) NWI 50B	(ILI) (41b) NWI 50	Reservoir Drop Test Type (41c)	Year (41d)	Result % (41e)	Main Breaks (per 100km of Main) (42) NWI 40			Unplanned Interruptions to Supply (per '000 properties) (43) NWI 37			Rehabilitations: Mains (km per 100 km) (44)	Service Connections (%) (45)	Water Meters (%) (45a)	Mains Renewals ($'000 per 100km of Main) (46)	(% of CRC) (47)	Mains Maintenance Cost ($'000 per 100km of Main) (48)
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06		2005/06
	LWUs with 200 - 1,500 Properties																				
76	Harden (Reticulator)	140	87	111	1.1	<1.0				13	11	10	27	27	26	6.0	0.3		302	3.9	67
79	Walgett (Dual Supply)	178	114	74	2.4	<1.0					42	72				9.8					188
80	Greater Hume	27	68	69	0.8	<1.0				16	17	15	7	7	20	0.0	0.2				
81	Gwydir	143	155	342	5.6	5.4	RDT	2006	10.0	48	8	38	164	30	15	0.6	3.6	14.0			
82	Gloucester	78	53	39	1.1					12	16	16	4	110		0.0			734	4.7	192
83	Oberon (Reticulator)	173	88	81	3.0				8.9		24	31	9	7	7	2.8	1.8		358	2.1	178
84	Gilgandra (Groundwater)	145	133			<1.0		2000	10.0	31	41	30	38	34	15	1.0	0.4				211
85	Uralla	65	65							11	8		32	11							
86	Hay (Dual Supply)	49	43	47	0.7					17	17	17				0.0	0.8				82
87	Bourke (Dual Supply)	112	137	99	1.3	<1.0				155	115	114		764	828	0.0		2.5	59		83
88	Wakool (Dual Supply)	110	118	114	1.2					15						0.0			3	0.02	54
89	Bogan	149	141	143	3.2	<1.0	RDT	2005		36	27	32			118	21.0	6.7				90
90	Guyra	32	67	47	1.1	<1.0				17	32	27	31	65	85	15.2	2.6				103
91	Cabonne	45	35	35	0.4					6	15	14		28	27	11.4	4.3				64
92	Carrathool (Groundwater)	136	124	141	0.3					29	29			52		0.6	4.5				18
93	Tumbarumba	79	75	68	1.2					3	10	15	2	2	12	15.2	1.2		84	0.6	18
94	Gundagai	93	110	106	3.0	1.2				14	17	6	20	49	28	0.0	0.7				86
96	Warren (Dual Supply)	55	57	232	4.6	7.6				85	79	136				18.9					277
97	Bombala	63	85	85	1.9					11	11	24	15	82	78	2.7	6.1		76	0.5	
98	Walcha	51	47	49	0.8					4	2	5	12	6	11	18.0					117
100	Balranald (Dual Supply)	43	41	35	1.0	<1.0				3	68	10	782	651	647	33.3	0.6				230
101	Murrumbidgee (Groundwater)	189	166	183	4.7					17	31	21				34.5	0.2				31
103	Central Darling (Dual Supply)	71	23	20	0.2					8	26	19		73	106	14.9	1.0	1.7			151
104	Boorowa	76									10	10				10.0					14
105	Brewarrina	133	137	114	1.6	<1.0				59	78	65	43			26.2	0.8				188
106	Jerilderie (Dual Supply)	38	40	42	0.5					23	25	20		22	22	0.0					185
	Medians (% of LWUs basis) for 200 to 1,500 Properties			*81*	*1.2*							*20*			*27*	*6.0*			*84*		*97*

WATER RESOURCE MANAGEMENT

	WATER UTILITY	Total Town Water Supplied: Potable + Non-potable - Recycled (ML) (from Table 8) (49) NWI 17*				Non-potable Town Water Supplied: For outdoor uses or industry (ML) (from Table 8) (50)			% Water Recycled (from Table 8) (Town Water Supply + Agricultural Use)/Total Town Water Consumption (%) (51)			Peak Week to Average Consumption (%) (53)		Management Policy in Place? Drought (Y/N) (54)	Demand (Y/N) (55)	Average Annual Residential Consumption[+] (Potable) From Tables 8 & 9 (1) ÷ [(22a)] (kL/property) (56) NWI 49*		
		2002/03	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06
	LWUs with 200 - 1,500 Properties																	
76	Harden (Reticulator)	820	1,060	790	***790***	230		85	17	9	11			**O**	**P**	466	418	424
79	Walgett (Dual Supply)	2,310	1,640	2,300	2,620	1,300	1,120	1,120	28		20			**O**	**O**	230	523	614
80	Greater Hume	761	671	620	680			23	22	21	16	103		**O**	**P**	290	318	319
81	Gwydir	1,080	920	930	720			38	5	5			216			334	333	247
82	Gloucester	520	560	450	410							146	165	**P**	**P**	265	185	181
83	Oberon (Reticulator)	890	760	690	730											202	167	170
84	Gilgandra (Groundwater)	1,140	1,030	1,050	860				30	30	33	134	152	**O**	**P**	426	460	433
85	Uralla	330	320	330	***330***							236		**O**	**O**	192	196	***196***
86	Hay (Dual Supply)	2,370	1,510	1,660	1,700	1,130	1,310	1,318				147	163			200	140	191
87	Bourke (Dual Supply)	1,880	2,930	3,530	3,320	2,250	2,530	2,607				120	170	**O**	**P**	378	500	399
88	Wakool (Dual Supply)	1,410	1,350	860	1,620	470		760						**O**	**P**	532	589	638
89	Bogan	940	920	860	920							198				510	476	543
90	Guyra	260	310	570	440							122	155	**P**	**P**	175	319	248
91	Cabonne	460	360	330	300	120	100	99	12	48	24	120				151	176	159
92	Carrathool (Groundwater)	2,020	1,700	2,060	940	880	1,240	266		0		810				489	493	488
93	Tumbarumba	460	430	460	380							240	249	**O**	**P**	261	364	367
94	Gundagai	540	600	490	540			105	18		19	197	199			311	257	250
96	Warren (Dual Supply)	920	800	810	740	430	460	400				126	159	**O**	**P**	199	170	219
97	Bombala	320	350	410	***410***			35	10	9	9			**P**	**P**	392	481	467
98	Walcha	220	230	230	260							185	178	**O**	**O**	162	167	223
100	Balranald (Dual Supply)	1,550	1,440	1,130	770	1,200	930	587				102		**O**	**P**	179	150	149
101	Murrumbidgee (Groundwater)	840	690	710	840				1	1	1			**O**	**O**	581	570	759
103	Central Darling (Dual Supply)	700	700	580	450	530	480	369					254	**P**	**P**	153	131	107
104	Boorowa	210	210	210	***210***							811	812	**O**	**O**	217	215	372
105	Brewarrina	1,210	1,210	1,200	1,170	800	780	790	13	14	15	483		**O**	**O**	519	525	506
106	Jerilderie (Dual Supply)	360	270	270	***270***	150	150	150	15	15	15			**O**	**P**	171	217	228
	Medians (% of LWUs basis) for 200 to 1,500 Properties										*16*							285

\+ There are 11 LWUs with a dual water supply in 2005/06; Balranald, Berrigan, Bourke, Central Darling, Hay, Jerilderie, Murray, Wakool, Walgett, Warren, Wentworth.
For these 11 LWUs, note 10 on page 15 reports the approximate total potable annual residential consumption per property. This is lower than the value reported in Column 56 as it is calculated only for those towns with a dual supply.

* **Total Water Supplied** (col (49) in the table) includes non-potable but <u>excludes</u> recycled water (see Table 8 col(12)). However, NWI 17 includes nonpotable & recycled water. Similarly, NWI 49 includes recycled water whereas the Annual Residential Water Supplied reported in column (56) in the table is for potable water.

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Table 11 - Water Supply - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Cross Subsidies		Operating Result		Externalities (Fees to State Water)	Operating Cost (OMA)				Total Cost (Operating Cost (OMA) + Depreciation)				Management Cost			
		($'000)		Res Revenue (% annual rates & charges)*	Res Consumption (% of potable excluding water losses)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			(%)			Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)		($/property)	($/property)				($/property)				($/property)			
		(57) NWI 62		(58)	(59)	(60)	(61)	(62)	(63) NWI 69			(63a) see also Table 6 Col (12) NWI 66			(64a)	(64b)	(65)		(66)	(67) NWI 75**				(68) NWI 76**				(68a)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	03/04	04/05	05/06	03/04	04/05	05/06	2005/06	2005/06	04/05	05/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
	Sydney Water	587,000		75	67	7,769						4.1	3.8	2.7						250	221	230	218	325	296	305	303				
	Hunter Water	60,400		67	56	950						4.2	3.2	5.0			24			195	158	162	147	242	206	210	200				
	LWUs with > 10,000 Properties																														
1	Gosford	20,200	21,700	***100***	75	226	350	5,100		-6.9		-1.1	-1.9	-1.3			-32	-26	0.0	204	219	248	277	276	298	321	359	120	130	137	156
2	Wyong	29,000	27,000	***100***	70	318	499	8,000		4.0		4.1	2.2	1.4			83	38	0.0	199	199	227	236	315	313	350	357	77	83	98	116
3	Shoalhaven	18,900	15,700	69	59	347	537	11,100		-12.0		4.3	3.1	0.8			133	86	0.0	195	191	207	203	281	275	291	289	100	103	111	110
4	Rous (Bulk Supplier) (NO SGE)	10,000	9,800	***100***	4	91	137	3,700		-11.2		1.4	0.2	0.5			51	45	0.1	172	151	177	187	232	208	235	249	86	76	81	95
5	MidCoast (Unfiltered)	19,500	19,700	73	67	106	201	5,500		-11.9		5.3	4.2	6.6			110	182	0.3	235	262	274	260	351	377	388	368	23	25	65	51
6	Tweed	18,900	12,000	76	69	162	221	7,100		-14.9		3.4	4.2	1.1			273	110	0.0	210	222	243	257	324	336	357	379	88	112	123	138
7	Port Macquarie-Hastings (Unfilter	19,100	14,700	88	75	205	271	9,400		2.5		4.2	2.3	1.3	9367	9367	243	47	0.0	267	273	299	339	401	394	418	443	54	81	94	104
8	Riverina (Groundwater) (NO SGE	14,600	14,200	74	62	116	209	7,500		-7.8		3.9	2.3	3.1			104	97		220	211	237	255	349	342	385	401	61	61	65	73
10	Coffs Harbour (Unfiltered)	18,200	14,700	72	73	139	175	7,200		-12.8		5.3	6.5	5.6			401	342	0.0	195	217	215	215	265	299	297	297	96	97	103	102
11	Albury City	8,980	9,020	72	71	156	260	11,800		-3.7		1.0	0.1	-0.2			14	-8	3.8	252	208	207	222	375	373	378	406	120	94	94	101
12	Fish River WS (Unfiltered, Bulk S	5,770	***5,770***		2		100	4,300				0.6	1.0				22			99	114	77		193	216	160		33	38		
13	Tamworth Regional	11,600	13,200	66	59	90	171	9,000		-14.1		1.7	2.0	4.4			127	230	13.2	350	298	313	346	491	439	447	485	122	101	113	105
14	Clarence Valley	20,200	9,100	23	58	156	***206***	***10,600***		-10.1		8.9		1.0				111	0.0	288	297		291	452	463		411	108	107		171
15	Eurobodalla (Unfiltered)	11,900	9,180	87	72	97	147	7,300		-9.1		2.5	3.4	1.1			204	87	0.0	271	300	308	317	395	426	428	433	137	153	155	171
16	Wingecarribee	9,550	8,850	82	75	70	116	6,400		-18.7		5.6	4.1	4.5			170	170		181	163	174	199	286	263	279	312	86	80	87	101
17	Queanbeyan (Reticulator)	8,190	8,270	***100***	75	92	129	8,600		-6.4		0.4	0.8	-0.1			61	14	0.0	318	256	191	375	449	318		477	98	89	47	96
18	Dubbo	9,290	9,650	56	66	63	109	7,800		20.4		2.1	2.2	2.9			104	95	5.6	376	348	367	385	522	495	505	505	120	113	140	149
19	Orange	11,800	11,600	***99***	75	75	106	7,000		-11.0		2.7	3.6	6.0			196	233	0.1	250	273	325	325	383	412	464	464	91	105	114	113
20	Goulburn Mulwaree	5,180	4,930	83			44	4,400		8.3		1.1	0.3	1.5			26	47	0.1	318	343	202	276	431	455	278	409	141	144	98	109
21	Bathurst Regional	7,500	7,460	68	57	128	145	10,900		-10.8		2.6	-0.1	0.3			-6	22	0.1	311	308	357	360	462	459	503	496	101	106	139	139
22	Lismore (Reticulator)	5,370	7,170	74	68	44	61	4,700		-9.3		1.5	1.4	4.2	2	2	46	149	0.0	248	252	302	309	346	353	357	386	56	57	79	77
23	Bega Valley (Unfiltered)	6,840	6,380	78	71	59	113	8,200		-19.0		0.1	0.8	-0.2	115	115	60	5	1.4	282	291	317	336	438	447	469	487	162	157	175	177
24	Ballina (Reticulator)	4,790	4,600	75	75	33	47	3,100		-19.7		0.6	-2.6	-1.7			-31	-11	0.1	346	339	368	321	463	445	419	366	106	99	88	88
25	Kempsey (Groundwater)	9,420	6,960	62	55	106	145	12,500		-90.1		3.6	6.6	1.9			353	85	1.6	205	196	216	264	290	283	348	396	73	67	79	94
26	Country Energy	12,200	12,300	52	63	66	60	5,600				-0.1	0.7	-0.1			41	65		822	875	910	944	1014	1089	1115	1143	221	251	279	385
27	Byron (Reticulator)	4,610	4,140	75	72	16	28	2,600		-26.9		2.1	-0.3	1.1			42	43	0.0	314	325	360	340	415	413	405	386	100	117	115	107
28A	Goldenfields (Reticulator) (NO SC	8,710	8,260	100	40	75	157	15,100				-0.4	-1.9	-2.3			-102	-34		484		589	748	564	620	841	1034		118	90	96
28B	Goldenfields (Bulk Supplier) (NO	8,720	7,650	***100***	65	83	134	7,100				-0.4	2.8	2.8			144	96			220	204	220		323	306	315		51	40	43
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties									*-10.8*				*1.3*				*86*				*300*				*403*				108
	LWUs with 3,001 - 10,000 Properties																														
29	Armidale Dumaresq	4,350	***4,350***		66		107	12,900				-0.7	-0.6				-17		0.1	353	333	360		547	513	547		171	144	191	
30	Griffith	7,350	7,110	67	54	45	49	5,500		-14.5		0.7	5.0	3.3			767	238		408	415	423	503	548	568	596	687	148	151	139	205
31	Lithgow	3,790	3,500	83	75	17	38	4,900		-14.8		0.7	-2.0	-1.9			-13	-45		261	266	342		356	366	417		120	129	210	189
32	Mid-Western Regional	4,570	4,270	88	75	46	72	11,300		3.9		2.0	2.7	1.2			167	69		335	333	401	397	453	450	474	562	122	155	178	131
33	Richmond Valley	3,580	3,390	63	49	23	34	4,900		-13.0		2.0	2.8	1.6			108	74	0.1	350	325	359	390	437	409	426	456	157	142	158	164
34	Nambucca (Groundwater)	2,480	2,330	69	72	21	31	4,900		-21.8		4.5	3.6	4.3			163	196	0.7	175	187	184	169	241	251	249	235	79	86	76	70
35	Singleton	4,500	***4,500***	60	63	28	42	6,700		-32.9		9.8	5.4	6.6			335	412	15.4	295	294	293	315	425	424	421	446	114	92	97	97
36	Parkes	5,880	5,600	63	38	43	82	14,300		-30.4		3.0	1.9	4.0			304	417	9.0	421	436	456	483	611	627	649	685	59	61	69	77
37	Inverell	3,410	3,660	79	64	28	50	9,200		-5.7		1.0	2.3	3.5			125	204	0.6	410	365	388	369	544	496	518	499	133	109	118	119

Table 11 - Water Supply - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Cross Subsidies		Operating Result		Externalities (Fees to State Water)	Operating Cost (OMA)				Total Cost (Operating Cost (OMA) + Depreciation)				Management Cost			
		($'000)		Res Revenue (% annual rates & charges)*	Res Consumption (% of potable excluding water losses)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			(%)			Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)		($/property)	($/property)				($/property)				($/property)			
		(57) NWI 62		(58)	(59)	(60)	(61)	(62)	(63) NWI 69			(63a) see also Table 6 Col (12) NWI 66			(64a)	(64b)	(65)		(66)	(67) NWI 75**				(68) NWI 76**				(68a)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	03/04	04/05	05/06	03/04	04/05	05/06	2005/06	2005/06	04/05	05/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
38	Moree Plains (Groundwater)	3,050	3,320	78		19	***31***	***6,800***			1.6	5.5	1.7	1.1			73	73	1.3	464	386	315	593	516	438	404	704	97	161	129	197
39	Cowra	2,870	3,240	72	62	29	***37***	***6,700***			-1.3	-0.7	-1.3	-1.6			-72	-119	9.2	363	423	453	510	499	560	610	679	168	260	272	288
40	Central Tablelands (NO SGE)	3,600	3,590	73	46	32	73	13,700			12.7	0.0	1.2	0.3			52	-26		387	402	374	465	596	611	585	679	192	195	178	201
41	Muswellbrook	4,300	4,900	67		15	30	5,800			-25.2	7.9	8.5	12.6			378	477		342	348	356	435	450	455	464	595	82	88	52	117
42	Corowa	1,820	2,020	69	53	29	45	9,100			-10.9	5.3	-0.5	0.0			63	36	13.5	361	326	259	269	481	441	360	433	78	96	105	123
43	Tumut	2,520	2,050	100	75	22	37	8,500			-9.9	2.0	3.1	1.1			191	86	2.7	266	307	254	262	413	452	392	430	83	93	82	83
44	Gunnedah (Groundwater)	2,130	1,960	85	53	17	27	6,400			-13.6	3.6	2.5	3.5			131	152	0.2	213	225	221	232	284	296	347	314	52	72	53	71
45	Upper Hunter	2,710	2,680	81	67	13	24	5,500			-30.1	4.2	5.6	6.4			223	287	0.1	308	304	314	364	417	400	395	448	94	117	115	139
46	Narrabri (Groundwater)	2,110	1,250	***100***	63	11	22	5,100			-37.1	5.1	5.8	0.8			240	100	1.5	170	176	189	195	242	248	261	267	63	67	58	58
47	Bellingen (Unfiltered)	2,100	1,940	80	70	22	36	8,600			-27.2	1.8	0.5	-1.6			105	31	0.5	186	238	236	235	360	413	411	580	84	140	135	125
48	Leeton	2,540	2,440	***100***	68	14	30	6,800			-15.0	3.4	2.5	3.5			129	168		333	366	374	357	442	481	483	463	76	88	86	93
49	Young (Reticulator)	2,440	2,370	84	61	6	8	1,900			-25.3	1.6	6.4	9.8			121	139		367	250	350	313	568	381	405	363	35	35	35	35
50	Cooma-Monaro	2,310	2,160	84		9	17	4,500			-26.5	7.7	6.5	6.7			211	217		308	326	322	334	412	421	419	437	98	92	135	147
51	Forbes	2,050	2,350	72	59	15	21	5,900			-22.3	2.7	2.9	6.2			159	303	12.9	267	253	234	298	366	341	319	383	20	42	45	46
52	Snowy River (Unfiltered)	1,370	***1,370***		73		***21***	***7,600***				1.8							0.2	189	202			295	313			64	70		
53	Berrigan (Dual Supply)	2,090	2,110	85	75	14	26	7,800			-13.7	1.6	2.5	2.9	216	14	129	120	4.9	309	340	310	338	480	511	466	492	102	105	96	97
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties										*-14.8*			*3.3*				*139*				*347*				*459*				119
	LWUs with 1,501 - 3,000 Properties																													
54	Deniliquin	2,290	2,030	***100***	72	6	12	3,800			-23.6	8.4	5.8	2.8			193	108	11.7	282	304	342	446	429	461	493	592	104	123	142	200
55	Warrumbungle	1,090	***1,090***		75		29	9,400					-2.1				-55			425	369	275		598	535	414		178	141	142	
56	Yass Valley	1,610	***1,610***		70		33	11,200				2.8	1.5				103		0.3	275	285	315		426	421	453		98	102	108	
57	Wellington	1,830	2,620	69	75	14	24	8,300			11.9	0.9	2.3	7.8			88	322	1.4	468	376	371	412	587	483	486	528	135	104	117	120
58	Cootamundra (Reticulator)	1,320	1,550	24	75	10	***17***	***6,000***			-7.6	2.4	1.8	2.3			22	64		360	247	319	318	524	345	350	387	46	45	54	55
59	Lachlan	1,720	1,670	68		18	34	12,900			-16.3	-0.7	-2.3	-0.5			-86	46	11.2	354	338	512	402	497	505	677	593	90	89	109	70
60	Glen Innes Severn	1,150	1,010	100	73	14	***27***	***8,600***			-14.3	-0.6		-0.9				-58		247	258		295	359	371		407	113	114		103
61	Liverpool Plains	980	910	***99***		10	22	8,600			-18.7	0.6	-1.0	-0.5			25	54		246	232	301	293	356	342	420	378	55	60	85	84
62	Narromine (Groundwater)	1,020	1,010	***96***	57	3	10	4,600			-39.4	1.9	0.6	4.6			38	78	2.4	343	307	357	322	438	391	440	406	116	116	93	103
63	Narrandera (Groundwater)	1,430	1,210	***100***	40	7	11	4,800			-37.5	4.3	7.5	5.8			348	328	5.3	260	262	271	336	315	324	334	400	60	61	89	91
64	Dungog (Reticulator)	1,190	1,070	77	64	5	10	4,800			-20.8	1.5	3.0	1.7			110	66	0.5	187	353	363	355	255	410	425	417	76	89	95	98
65	Murray (Dual Supply)	1,360	1,430	75	75	7	***10***	***3,900***			22.0	7.1	7.0	6.8			186	137	5.9	325	327	354	306	430	421	447	378	100	101	113	98
67	Cobar	1,620	1,610	***100***	66	30	21	8,900			-10.6	1.7	1.5	0.4			114	51	0.3	395	270	327		555	416	487		104	104	104	37
66	Cobar WB (Bulk Supplier)											1.7																			
68	Tenterfield	920	930	76	75	5	17	8,700			-11.6	1.6	-5.1	-1.6			-114	-19	0.3	375	349	419	374	554	513	588	523	189	173	182	179
70	Kyogle	850	760	61	68	3	8	4,300			-16.5	-1.6	-0.5	-8.6			20	-162	0.2	249	218	240	259	406	364	386	548	109	98	108	112
71	Palerang	1,040	***1,040***		63		***10***	***5,100***				1.8							0.1	238	232			375	367			75	72		
73	Upper Lachlan	1,020	950	***100***	75	9	12	6,100			-3.3	3.9	1.8	1.4			82	65		272	303	359	324	384	417	457	405	56	58	100	94
74	Wentworth (Dual Supply)	1,680	2,060	94	48	18	20	8,900			7.4	0.8	0.7	2.7			4	123	17.7	474	542	521	472	726	832	838	726	114	110	98	93
75	Coonamble (Groundwater)	670	740	***100***	61	4	8	5,400			-54.0	3.8	2.9	8.6			188	343	0.4	204	145	146	186	302	243	227	272	20	20	20	***20***
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties										*-15.3*			*2.0*				*66*				*324*				*407*				96

Table 11 - Water Supply - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 6)																EFFICIENCY (SEE ALSO COST RECOVERY TABLE 6)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity			ERRR			Cross Subsidies		Operating Result		Externalities (Fees to State Water)	Operating Cost (OMA)				Total Cost (Operating Cost (OMA) + Depreciation)				Management Cost			
		($'000)		Res Revenue (% annual rates & charges)*	Res Consumption (% of potable excluding water losses)	Written Down Cost ($M)	Current Replacement Cost ($M)	Current Replacement Cost per Assessmnt ($)	(%)			(%)			Annual Fees & Charges ($/assessment)	Developer Charge ($/assessment)	($/property)		($/property)	($/property)					($/property)				($/property)			
		(57) NWI 62		(58)	(59)	(60)	(61)	(62)	(63) NWI 69			(63a) see also Table 6 Col (12) NWI 66			(64a)	(64b)	(65)		(66)	(67) NWI 75**				(68) NWI 76**				(68a)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	03/04	04/05	05/06	03/04	04/05	05/06	2005/06	2005/06	04/05	05/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
LWUs with 200 - 1,500 Properties																														
76	Harden (Reticulator)	1,220	1,290	86	63	5	13	7,700	0.5			-2.6	-3.8	-2.2			-108	-73	0.1	658	443	573	589	1083	744	766	760	61	52	52	74
79	Walgett (Dual Supply)	1,250	1,270	***100***	63	6	16	8,500	-26.0			-1.9	-3.1	-4.8			-60	-115	21.6	539	539	591	684	862	861	923	983	113	168	133	125
80	Greater Hume	680	730	100	66	10	15	9,500	-6.6			1.0	1.2	-1.0			37	-35	1.0	501	433	282	246	656	575	353	376	77	76	77	88
81	Gwydir	750	***750***		59		***12***	***8,300***											1.9	277	322			370	430			49	69		
82	Gloucester	1,540	1,000	76	67	5	10	5,900	-2.4			-4.8	11.9	2.7			423	89	0.3	415	560	545	397	553	702	699	533	52	66	73	47
83	Oberon (Reticulator)	990	1,020	40	28	5	6	4,600	0.1			3.0	2.0	4.5	17	17	58	135		344	350	238		588	593	360		59	50	41	52
84	Gilgandra (Groundwater)	740	640	83	67	5	12	9,000	-16.8			2.8	2.5	2.9			139	102	2.4	247	226	289	252	521	358	423	381	68	74	79	30
85	Uralla	570	520	***100***		5	9	6,900	-14.2			-0.4	-0.4	-1.4			33	5	0.2	326	273	290	333	441	391	394	449	164	118	94	134
86	Hay (Dual Supply)	590	660	63	63	8	9	7,100	-11.9			-1.1	-1.9	-0.7			-70	7	10.2	293	297	311	338	481	485	513	542	75	89	93	85
87	Bourke (Dual Supply)	870	890	***100***	63		13	11,400	6.8			-9.3	-5.7	-5.4			-155	-165	0.7	598	517	501	613	904	823	805	888	118	94	118	129
88	Wakool (Dual Supply)	1,140	1,070	56	75	16	20	14,700	8.6			2.2	1.8	1.5			115	89	11.5	375	412	448	390	533	582	620	600	112	97	90	62
89	Bogan	870	730	***100***	63	6	16	15,000	-6.0			-0.7	-3.1	-5.2			-146	-271	0.2	518	473	520	708	724	684	733	950	191	202	219	256
90	Guyra	680	***680***	63	66	6	11	8,800	-9.0			-0.6	1.0	1.6			75	77	0.1	249	216	314	342	402	360	456	471	38	47	76	61
91	Cabonne	920	760	73	73	7	16	14,300	-22.7			1.8	2.1	1.5			272	203	1.9	398	308	343	372	632	545	571	595	106	96	114	112
92	Carrathool (Groundwater)	880	920	100	75		13	10,900	-5.2			1.0	0.8	-1.5			106	-49	7.8	516	532	500	721	673	660	653	878	129	86	100	65
93	Tumbarumba	610	670	66	75	4	9	9,000	-10.0			5.5	3.0	6.7			129	266	0.7	216	233	262	224	371	394	430	405	81	84	92	80
94	Gundagai	450	430	50	49	3	4	4,000	-13.1			-0.6	0.2	0.3			42	48	6.0	327	350	337	342	384	411	395	396	63	75	73	81
96	Warren (Dual Supply)	450	440	89	75	5	9	8,200	-1.0			0.6	-1.3	-0.4			-61	-53	9.1	317	262	340	323	454	408	494	470	57	59	64	70
97	Bombala	400	***400***	85	75	3	6	7,000	-22.7			3.9	3.1	1.7			127	98	0.6	290	239	256	343	366	315	332	421	69	58	92	114
98	Walcha	440	460	***100***	72	6	10	11,500	-5.8			-0.3	-0.3	-0.6			-9	-29	0.1	351	347	385	422	493	502	542	564	113	93	121	98
100	Balranald (Dual Supply)	490	550	78	61	6	9	10,400	11.5			1.4	0.7	1.3			-35	15	13.2	242	282	349	397	398	439	527	581	41	67	60	67
101	Murrumbidgee (Groundwater)	330	300	78	72	3	5	6,100	-17.6			2.4	1.3	2.1			77	105		210	194	215	195	321	307	325	307	99	103	97	100
103	Central Darling (Dual Supply)	580	660	100	75	8	15	20,700	-3.6			-4.2	-3.1	0.7			-292	32		816	655	639	560	1174	1014	949	844	75	75	75	75
104	Boorowa	490	330	***100***		4	5	7,300	5.1			3.1	5.7	2.2			360	117	0.3	316	298	326	292	409	390	420	381	37	44	50	37
105	Brewarrina	520	510	***100***	63	2	9	15,300	-18.4			0.5	5.1	3.0	314		226	140	0.7	611	726	715	802	731	850	867	950	88	53	49	71
106	Jerilderie (Dual Supply)	280	290	***100***	73	1	3	5,600	-24.2			1.2	-0.5	2.1			9	100	6.8	377	447	509	480	445	513	570	560	70	66	70	87
	Medians (% of LWUs basis) for 200 to 1,500 Properties								*-6.6*				*1.3*					*48*				*381*				*551*				80

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

** The Operating Cost and Total Cost shown in the table exclude the purchase cost of water. NWI defines operating cost as including the purchase cost of water, so where an LWU purchases water, NWI 75 and 76 will be different to the figures shown in the table.

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Table 12 - Water Supply - Health, Levels of Service

	WATER UTILITY	HEALTH																LEVELS OF SERVICE																				
		Management Plan		Water Quality Compliance (%)														Water Quality Complaints			Water Service Complaints			Total Water Complaints	Customer with Restrictions	Average Customer Outage Time			Customer Interruption Frequency			Average Duration of Interruptions			Drought Water Restrictions		
		Risk Based?	External Assessmnt	Physical			Chemical			No. zones compliant	Microbiological (E. coli)			No. zones compliant	% Pop'n with complian																							
		(69a) NWI 29 Y/N	(69b) NWI 30 Basis	(69) 1996 NHMRC/ARMCANZ Guidelines			(70) 1996 NHMRC/ARMCANZ Guidelines			(70a) NWI 34	(71) 1996 NHMRC/ARMCANZ Guidelines			(71a) NWI 32	(71b) NWI 33									(per 1000 properties) (73) NWI 35			(per 1000 properties) (74)			(per 1000 properties) (75) NWI 36	(per 1000 properties) (75a) NWI 23	(mins/property-unplanned) (76)			(No./1000 properties) (77) NWI 37			(Hours) (78) NWI 38			(% of time) (78A)		
				2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
	Sydney Water	Y		100	100		100	100		13/13	100	100	100	13/13	100	1	1	1					1			31	31	260	234	270	2	2	2			
	Hunter Water	Y		100	100		100	100		8/8	100	100	100	8/8	100	7	6	7		13	10	10	10			56	18	368	386	376	2	2	1			
LWUs with > 10,000 Properties																																					
1	Gosford	N		100	100	100	100	100	100	1/1	100	100	100	1/1	100	8	13	58	17	15		58		48	45	18	220	265	295	2	3	1	100	100	100
2	Wyong	N		95	100	100	100	100	100	1/1	100	100	100	1/1	100	7	6	9	2	1	2	11		4	6	5	69	34	31	3	3	3	100	100	100
3	Shoalhaven	N		98	98	100	99	99	100	4/5	93	100	100	4/5	100	3	3	3	5	5	4	10	1		1	1		4	3	3	3	3	29	30	13
4	Rous (Bulk Supplier) (NO SGE)	Y	N	100	100	100	100	100	100	2/2	100	100	100	2/2	100			0			0	0		1	1	1	5	4	3	3	3	3	76	0	0
5	MidCoast (Unfiltered)	N		97	98	100	92	95	91	2/4	97	100	100	4/4	100	27		32	41	49	51	84	1									23	0	0
6	Tweed	N		100	100	100	99	94	94	1/3	100	100	100	3/3		2	7	2	36	38	34	43		5	9	7	60	74	59	2	2	2	34	0	0
7	Port Macquarie-Hastings (Unfiltered)	Y		81	93	100	99	100	100	4/4	100	100	100	4/4	100	6	6	8	8	16	15	24	0	2	3	4	12	15	21	3	4	3	56	100	100
8	Riverina (Groundwater) (NO SGE)	Y	N	94	93	100	96	98	100	13/14	100	100	100	13/14		1	1	2	5	3	3	5		18		6	110	1	92	3	3	1	21	0	0
10	Coffs Harbour (Unfiltered)			100	100	100	100	100	100	3/3	100	100	100	3/3	100	5	5	11	11	21	25	36	10		4	5		33	40		2	2	73	100	100
11	Albury City	N		100	100	100	99	85	100	2/2	100	100	100	1/2	100				14	12		4								3		4	25	0	0
12	Fish River WS (Unfiltered, Bulk Supplier)	N		100	100	100	98	100	100	1/1	100	100	100	1/1				0				0				0			0	8	8	8	9	100	100
13	Tamworth Regional	N		97	96	100	98	98	94	6/7	96	97	100	5/7	95	1	1		31	40	23	25								9			100	100	100
14	Clarence Valley	N		93	83	100	99	91	100	5/7	95	100	100	4/7	100	1	8	6	18	18	17	25			8	8		52	55		3	3	60	32	0
15	Eurobodalla (Unfiltered)	N		25	88	100	99	98	100	1/1	100	100	100	1/1		32	17	0.1	9	49	0	0		6	6			20		2	5		73	79	0
16	Wingecarribee	N		100	100	100	99	100	92	1/3	100	100	100	3/3	100			7	29	46	53	60	7	19	20	19		85	78		4	4	47	100	100
17	Queanbeyan (Reticulator)	Y	Y	100	100	100	100	100	100	1/1	100	100	100	1/1		2	2		9	4	5	9								2	4	2		100	100
18	Dubbo	N		100	99	100	99	100	100	1/1	97	100	100	1/1	100	1	1	1	1	1	1	3		9	3	5	58	26	38	2	2	2	0	0	16
19	Orange	N		100	100	100	100	100	100	2/2	100	100	100	2/2	100	15	2	2	40	34	59	60			17	15		73	70	3	4	4	41	100	100
20	Goulburn Mulwaree			100	100	100	99	96	100	2/2	100	100	100	2/2	100	5	11			5											4		80	100	100
21	Bathurst Regional	N		100	100	100	99	100	100	1/1	100	100	100	1/1	100	10	21	11	4	21	14	25				2			14	2	2	2	0	0	0
22	Lismore (Reticulator)			100	100	100	99	98	100	1/1	100	100	100	1/1		2	1		6	3	3	3		5	4	5	75	32	35	3	2	3	77	4	0
23	Bega Valley (Unfiltered)	N	N		100	100	100	99	100	6/6	100	100	100	6/6	100		5	3	3	6	2	6	2							2	2	3	56	61	0
24	Ballina (Reticulator)	N					95	100	100	1/1	100	100	100	1/1	100			0.4	3	3		0	2			0	5		4	2	2	2	58		0
25	Kempsey (Groundwater)	N			98	100	100	98	100	8/8	100	100	100	8/8	100	10	8	13	3	1	2	15	1				32			3		3	52	0	0
26	Country Energy	N		94	99	100	98	100	100	2/2	100	100	100	2/2	100	30	3	0.5	11	9	2	9								1	1		60	0	0
27	Byron (Reticulator)	N		94	100	100	98	100	100	1/1	100	100	100	1/1	100			1	5	5	5	9	0			0	3	5	1	2	1	3	73	0	0
28A	Goldenfields (Reticulator) (NO SGE)	N		100	99	100	98	95	100	1/1	100	100	100	1/1	100	10	2	8	43	73	80	88	4	16	18	26	129	151	147	2	2	3	75	100	49
28B	Goldenfields (Bulk Supplier) (NO SGE)	N		100	99	100	98	95	100	2/4	100	100	100	2/4				2				2												49
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties					*100*			*100*				*100*					*3*			*5*	*11*				*5*			*38*			*3*			*0*
LWUs with 3,001 - 10,000 Properties																																					
29	Armidale Dumaresq	N		100	100	100	100	100	100	1/1	100	100	100	1/1	100	25	1		91		85	85	1								2			0	0
30	Griffith			100	100	100	100	100	93	1/2	100	100	100	2/2	100	3		2	2	6	3	7		9	9	10	26	37	40		4	4	0	0	0
31	Lithgow	N		100		100	97	100	92	0/1	100	100	100	1/1	100	1		5	16		16	23		1		2	43		13	2		2	0		100
32	Mid-Western Regional	N		71	63	100		84	100	3/4	100	100	100	3/4	100	20	1	0	35	23	11	13			9			77		5	2	2	7	100	100
33	Richmond Valley	N				100	96	100	92	0/1	100	100	100	1/1	100			3	6	6	6	9	5							3		2	76	85	34
34	Nambucca (Groundwater)	N		100	100	100	100	100	100	1/1	100	100	100	1/1	100	2	1	4	5	4	6	21	5	2	2	1	6	13	10	1	2	2	56	100	100
35	Singleton			100	100	100	100	100	100	1/1	100	100	100	1/1	100	2	2	2	23	39	32	40		44	42	41	374	347	339	2	2	2	0	0	3
36	Parkes			100	100	100	100	100	100	1/1	100	100	100	1/1		2	2	3	2	3	4	7								2	2	2	64	97	88
37	Inverell	N		100	100	100	100	100	100	2/3	100	100	100	3/3	100	1	5	2	5	5	5	8	4			0	5	5	4	1		1	0	0	0
38	Moree Plains (Groundwater)			97		100	99	100	100		100	84	94			12	6		58	89				26						2	2			0	
39	Cowra	N		94	97	100	97	100	100	1/1	100	95	95	0/1		7	96	58	40	40	52	112								2	2	2	0	100	34
40	Central Tablelands (NO SGE)	Y		100	100	100	100	100	100	2/2	100	100	100	2/2	100	10	5	10	8	11	2	13	8	1	21	19	2	87	79	4	4	4	62	0	0
41	Muswellbrook			76	86	100	97	95	100		100	100	100			14	17		3	28				3	14		67	89		2	3		39	0	0

Table 12 - Water Supply - Health, Levels of Service

	WATER UTILITY	HEALTH														LEVELS OF SERVICE																				
		Management Plan		Water Quality Compliance (%)												Water Quality Complaints			Water Service Complaints			Total Water Complaints	Customer with Restrictions	Average Customer Outage Time			Customer Interruption Frequency			Average Duration of Interruptions			Drought Water Restrictions		
				Physical			Chemical				Microbiological (E. coli)					(per 1000 properties)			(per 1000 properties)			(per 1000 properties)	(per 1000 properties)	(mins/property-unplanned)			(No./1000 properties)			(Hours)			(% of time)		
		Risk Based? (69a) NWI 29 Y/N	External Assessmnt (69b) NWI 30 Basis	(69) 1996 NHMRC/ARMCANZ Guidelines			(70) 1996 NHMRC/ARMCANZ Guidelines			No. zones compliant (70a) NWI 34	(71) 1996 NHMRC/ARMCANZ Guidelines			No. zones compliant (71a) NWI 32	% Pop'n with compliant (71b) NWI 33	(73) NWI 35			(74)			(75) NWI 36	(75a) NWI 23	(76)			(77) NWI 37			(78) NWI 38			(78A)		
				2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
42	Corowa	Y		100	100	100	98	100	100	3/4	100	100	100	3/4	100	2	6	6	19	19	11	27				5		41	44	3		2	71	100	100
43	Tumut	N		99	98	100	97	98		0/5	100	100	100	5/5		6	2		6	48	6	47			42			139		3	5		47	0	0
44	Gunnedah (Groundwater)	N				40	99	100	100	4/4	79	77	87	1/4					2	2	3	8				0	4	4	3	2		2	0	0	0
45	Upper Hunter			100	95	100	94	100	100	3/4	100	100	100	4/4		6		0	32	3	5	5				2		3	22	7		1	23	27	25
46	Narrabri (Groundwater)	N		90		100	100	100	100	6/6	97	100	100	5/6	100	8		14	84		7	31				17			117	3		3	0		0
47	Bellingen (Unfiltered)	N		100	100	100	100	100	100	2/2	100	100	100	2/2	100	4	4	2	31	46	37	48	1						3	2	2	35	0	0
48	Leeton	N		100	100	100	100	100	100	3/4	100	100	100	3/4		1		1	2	0	1	4		6	5	5	47	38	38	2	2	2	0	0	0
49	Young (Reticulator)	N	N			100	97	100	100	1/1	100	100	100	1/1					10	13	12	17	7	7	14	3	21	77	23	2	3	3	21	0	0
50	Cooma-Monaro					100	100	100	100		100	100	100			2			37										3			34		
51	Forbes	N		100	100	100	98	100	100	1/1	100	91	100	1/1	100	1		2	28	24	14	17	13	32	29	26	42	195	210	2	3	2	0	100	0
52	Snowy River (Unfiltered)				90	100	100	99	100	5/5	100	100	100	3/5	100		8		6	15	7	14				2		1	13	2		2	0		0
53	Berrigan (Dual Supply)	Y		100	100	100	99	100	100	4/4	100	100	100	4/4	100	3		2	5	3	6	16	15		1	1	3	6	12		2	2	0	0	0
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties					*100*			*100*				*100*					*2*			*7*	*16*			*3*			*23*			*2*			*0*
	LWUs with 1,501 - 3,000 Properties																																			
54	Deniliquin	N		100	100	100	98	100	100	1/1	100	100	92	0/1		1	4	4	38	41	61	76	3			3			24			2	0	0	0
55	Warrumbungle	N		94	100	20	94	99	80	2/8		91	100	7/8	93	4	3	8	1	3	3	12				3			21	4		2	79	100	100
56	Yass Valley	N		100	100	100	98	100	75	0/1	95	96	100	1/1	100	1	1	1	15	16	14	19	7	2	1	0	3	4	3	3	3	3	66	76	35
57	Wellington	N				100	100	100	100	2/2	100	100	100	2/2	100	17		11	17	7	5	85	4	17	8	9	65	64	73	2	2	2	0	0	0
58	Cootamundra (Reticulator)						99	99			100	100							61	89	53	55								2	2	2	41	100	100
59	Lachlan			80	100	100	97	100	100		100	100	97			1	16		3	7				1	1		3	12		1	2		27	100	
60	Glen Innes Severn				100	100	86	100	52	1/2	95	100	95	0/2		11	3	2	42	17	18	40						7					32	25	0
61	Liverpool Plains			84	100		98	100			100	100	100						4	8							27		1			54	0	
62	Narromine (Groundwater)						96			0/2	100	100	100	1/2	100	1			84	66	109	109				5			30			3		0	30
63	Narrandera (Groundwater)	N		100	100	100	95	87	25	0/1	100	100	100	1/1	100	7	10	7	8	7	7	17	30	7	6	7	99	70	75	2	2	2	0	0	0
64	Dungog (Reticulator)	N		90	100	100	99	100	100	1/1	100	100	88	0/1				0	73	29	21	22		364		77	47	259	320	5		4	0	0	0
65	Murray (Dual Supply)	N				100	100		100	2/2	100	100	100	2/2	100	2		1		3	2	4		49		6	185	60	38	3		3	92	0	76
67	Cobar			100		100	100	100	100	1/1	100	100	100	1/1					3	3		3				1	4	2	4	2		2	100	100	100
66	Cobar WB (Bulk Supplier)											100																				0		
68	Tenterfield	N		100	100	100	100	100	100	2/3	100	94	93	2/3		5	21	9	26	24	18	29	4	7		6	41	37	37	3		3	100	100	100
70	Kyogle	N		2	83	100	80	90	100	2/3	87	92	100	2/3	100	3	4	3	30	16	18	36		1		2	23	21	14	2		2	86	100	100
71	Palerang	Y				100	99	100	100	3/3	100	100	100	2/3	88			1		53	36	39				1		3	6	4		4	44	100	100
73	Upper Lachlan	N			100	100	100	85	89	3/4	100	95	90	0/4			2	2	18	2		2			1	0		6	4	5	2	2	65	60	68
74	Wentworth (Dual Supply)	N		100	100	100	97	100	100	3/3	89	95	100	3/3	100	7	4	8	20	2	16	34		1	1	1	12	11	12	1	1	1	6	0	0
75	Coonamble (Groundwater)			70	75	100	97	50	29	0/3	91	100	100	3/3	100	2	18	96	97	48	96	192		2		4	79	6	63	1		1	41	0	0
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties					*100*			*100*				*100*					*4*			*18*	*34*			*3*			*24*			*2*			*35*

Table 12 - Water Supply - Health, Levels of Service

	WATER UTILITY	HEALTH																LEVELS OF SERVICE																	
		Management Plan		Water Quality Compliance (%)														Water Quality Complaints			Water Service Complaints			Total Water Complaints	Customer with Restrictions	Average Customer Outage Time			Customer Interruption Frequency			Average Duration of Interruptions			Drought Water Restrictions		
		Risk Based?	External Assessmnt	Physical			Chemical			No. zones compliant	Microbiological (E. coli)			No. zones compliant	% Pop'n with complian			(per 1000 properties)			(per 1000 properties)			(per 1000 properties)	(per 1000 properties)	(mins/property-unplanned)			(No./1000 properties)			(Hours)			(% of time)		
		(69a) NWI 29 Y/N	(69b) NWI 30 Basis	(69) 1996 NHMRC/ARMCANZ Guidelines			(70) 1996 NHMRC/ARMCANZ Guidelines			(70a) NWI 34	(71) 1996 NHMRC/ARMCANZ Guidelines			(71a) NWI 32	(71b) NWI 33			(73) NWI 35			(74)			(75) NWI 36	(75a) NWI 23	(76)			(77) NWI 37			(78) NWI 38			(78A)		
				2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06			2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
LWUs with 200 - 1,500 Properties																																			
76	Harden (Reticulator)	N		80			100	100			90	100						21	15		37	21	34	56		2	2	3	27	27	26	2	2	2	0	0	0
79	Walgett (Dual Supply)		N	100	67	100	98	86	100	2/2	91	95	100	2/2				1			7	19	19											6	0	0
80	Greater Hume	N		100		100	100	100	100	1/1	100	100	100	1/1	100		5	2		4	4						4		7	20			3	38	41	41
81	Gwydir	N			66	100	99	89	50	2/4	87	83	100	3/4			10	7	5	12	5	5	13	22		5	3		30	15	7	3	3	18	0	0
82	Gloucester	N	N	100	100	100	97	100	100	2/2	92	96	97	1/2	73			1	6	116	117	62	68		1	26		110			4		25	0	0
83	Oberon (Reticulator)	N				100	100	100	100	1/1	100	100	100	1/1	10		4		15	12	13	11	30		1	1	1		7	7		2	2		100	100
84	Gilgandra (Groundwater)	N		100	100	100	100	100	100	1/1	100	100	100	1/1	100		4	4	3	16	26	21	36		5	4	2	38	34	15	2	2	2	0	0	0
85	Uralla			100	100	100		100	100		100	94	95				3	11		2	0				4	1		47	11		2	2		23	0	
86	Hay (Dual Supply)			100	100		98	100	100	1/1		100	100	1/1						12	12	10	12								8	5			0
87	Bourke (Dual Supply)	N		76		100	93	100	94	0/1	100	88	94	0/1			8	5	4	4	5		4	7		138	149	1	764	828	3	3	3	55	0	0
88	Wakool (Dual Supply)					100	98	100	94	5/8	100	100	100	5/8																				0		0
89	Bogan	N				100	100		100	1/1	97	100	92	0/1					2			4	6				14			118	2	2	2	66	100	100
90	Guyra	Y		100	100	100	100	100	100	1/1	100	90	93	0/1				1	1		10	23	24		4	8	13		65	85		2	3	0	0	0
91	Cabonne			50	100	100	99	100	100	2/2	100	100	100	2/2	100		13	20	2	13	87	25	46				8		28	27			5	0	0	0
92	Carrathool (Groundwater)			100	100	100	98	100	75	2/5	100	100	100	4/5	100		4	2	9	7	27	5	16					353	52		3			6	0	0
93	Tumbarumba					100	100	100	100	2/2	97	97	100	2/2	100		2	7	6	8	2	8	18				2		2	12	2	3	3	24	0	0
94	Gundagai	N		100	100	100	98	100	100	1/1	100	100	100	1/1	100			10	6	3	3	6	16		2	6	3	20	49	28	3	2	2	0	77	100
96	Warren (Dual Supply)	N		100	100		98	100	100	2/3	100	94	81	0/3			2	6	10	33	45	75	117												0	0
97	Bombala	N			100	100	100	100	100	2/2	97	100	100	1/2	67		3	2	2	6	2	13	17		3		19	123	82	78	3		4	26	36	41
98	Walcha			98	100	100	100	100	100	1/1	100	100	100	1/1			4	1		7	5	2	228		1	1	1	12	6	11	2	2	1	60	0	0
100	Balranald (Dual Supply)	N		100	100	100	98	100	100	2/2	100	100	100	2/2			7	9	2	5	16	7	10		141		58	809	651	647	2		2	35	0	0
101	Murrumbidgee (Groundwater)	N				100	99		100	2/2	100	100	40	1/2	100		16	9					2					3			2		2	0		0
103	Central Darling (Dual Supply)	N			100	100	100	96	94	1/2	100	100	100	2/2	100		18		3	124	93	7	29				25		73	106	4		4	49	99	0
104	Boorowa					1	100	100	100	1/1	93	100	50	0/1														18			3		3	25		0
105	Brewarrina			60	100	40	95	100	100	2/2	100	100	95	0/2				34	2	6	34	8	10					75			2			100	0	0
106	Jerilderie (Dual Supply)	N		100	100	100	100	100	100	1/1	100	95	91	0/1				4	4				4			7	6	30	22	22	3	5	5	0	0	0
	Medians (% of LWUs) for 200 to 1,500 Properties					*100*			*100*				*100*						*4*			*10*	*18*				*5*			*27*			*3*			*0*

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Table 13 - Water Supply - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

	WATER UTILITY	OPERATING & MAINTENANCE COST*										MANAGEMENT/ADMIN			RETAIL/WHOLESALE		O & M Cost Components for TYPE of ASSET												
		Components (1) - Process				Components (2) - Type of Asset						Components			Components		PUMPING STATION						WATER MAIN				TREATMENT			
		Maintenance	Operation	Energy	Chemicals	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical
			($/property)					($/property)				($/property)		(c/kL)	($/property)		(c/kL)	($/pumping station)				($/property)	(c/kL)	($'000/100km)			($/ML)	($/property)		
		(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)
		2005/06				2005/06						2005/06		2005/06	2005/06		2005/06	2005/06				2005/06	2005/06	2005/06			2005/06	2005/06		
	Sydney Water																													
	Hunter Water																													
LWUs with > 10,000 Properties																														
1	Gosford	67	27	21	6	8	63	6	26	18	0	138	18	66	111	166	11	85	4	11	70	21	27	437	65	372	75	9	3	6
2	Wyong	57	54	9	0	2	74	4	22	17	1	116		49	86	149	9	70	22	20	28	9	32	411	172	238	74	11	6	0
3	Shoalhaven	26	47	11	10	2	36	5	14	29	8	86	24	37	94	110	5	21	3	2	16	11	12	107	50	57	98	15	4	10
4	Rous (Bulk Supplier) (NO SGE)	26	43	7	16	8	12	5	8	30	29	76	19	29	103	84	2	25	1		23	7	4	114	3	112	93	9	6	16
5	MidCoast (Unfiltered)	86	102	15	7	2	76	10	21	23	77	37	14	17	104	156	7	30	2	7	21	15	25	230	42	189	76	10	6	7
6	Tweed	56	32	19	11	12	18	4	24	28	32	106	33	41	146	110	7	31	1	6	24	19	5	79		79	84	14	3	11
7	Port Macquarie-Hastings (Unfiltered)	79	132	20	4	17	26	9	57	7	118	74	29	44	118	220	24	87	12	43	31	20	11	96	10	86	31	0	4	4
8	Riverina (Groundwater) (NO SGE)	64	47	50	19		30	6	78	31	34	55	18	12	161	94	13	29	5	6	19	50	5	53	5	48	51	10	3	19
10	Coffs Harbour (Unfiltered)	49	44	11	10	12	43	13	14	17	15	68	34	39	82	133	5	46	7	2	37	11	17	166	35	131	65	6	1	10
11	Albury City	45	27	41	7		25	4	47	31	12	86	15	24	44	177	11	60		8	52	41	6	107		107	72	15	9	7
12	Fish River WS (Unfiltered, Bulk Supplier)																													
13	Tamworth Regional	47	174	4	16	55	51	8	13	109	5	45	60	19	138	208	2	16	0	11	5	4	9	153	147	6	200	77	15	16
14	Clarence Valley	53	49	5	14		46	5	7	19	44	88	83	42	15	276	2	16	0	5	11	5	11	61	2	59	46	3	2	14
15	Eurobodalla (Unfiltered)	49	75	22	1	1	75	16	36	3	15	171	0	73	121	197	15	45	11	6	27	22	32	186	92	94	12	0	2	1
16	Wingecarribee	39	23	20	16	1	25	7	22	43	0	91	10	37	40	159	8	26	1	1	24	20	9	68		68	154	17	10	16
17	Queanbeyan (Reticulator)	6	51	1			45	5	2		6	69	27	34	4	371	1	9		4	6	1	16	259	259					
18	Dubbo	79	108	18	31		47	6	24	105	53	134	15	26	219	166	4	54	2	11	40	18	8	157	11	146	185	50	25	31
19	Orange	74		13	16							74	39	31	208	117			14	6	40	13			69	148		44	11	16
20	Goulburn Mulwaree	57	90		20	36	31			62	38	86	23	49									14	143		143	277	30	11	20
21	Bathurst Regional	87	101	5	28	23	79	6	7	88	19	92	47	30			1	14	0	3	11	5	17	320	83	237	188	51	9	28
22	Lismore (Reticulator)	59	11	3			45	2	8		18	66	12	26	3	306	3	22		12	10	3	15	186		186				
23	Bega Valley (Unfiltered)	50	84	25		9	44	17	49	27	14	123	54	62	154	181	17	35	10	7	17	25	15	103	62	41	93	20	6	
24	Ballina (Reticulator)	25	48	1			26	11	5	4	27	75	13	39			2	24	20		4	1	12	113	54	60	18	4		
25	Kempsey (Groundwater)	93	51	22	4	8	55	5	42	56	5	80	14	28	161	103	12	25	2	10	13	22	16	113		113	164	37	14	4
26	Country Energy	341	63	117	37		148	40	189	182		197	188	78	557	387	38	293	15	96	182	117	30	443	26	417	366	38	107	37
27	Byron (Reticulator)	47	43		4		25	4		16	49	83	24	40	31	309							9	117	47	69	61	10	2	4
28A	Goldenfields (Reticulator) (NO SGE)	152	44	23	0		130	18	42	1	29	48	48	16	366	381	7	19	3	6	10	23	21	69	17	53	2	0	0	0
28B	Goldenfields (Bulk Supplier) (NO SGE)			64	13		21	5	84	32	18	22	22	8	99	1	16	106	6	19	81	64	4	121	33	88	60	14	6	13
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties	*56*	*51*	*16*	*11*	*8*	*45*	*6*	*22*	*28*	*17*	*86*	*24*	*38*	*111*	*166*	*7*	*30*	*4*	*7*	*22*	*16*	*14*	*143*	*52*	*107*	*76*	*15*	*6*	*11*
LWUs with 3,001 - 10,000 Properties																			4											
29	Armidale Dumaresq																													
30	Griffith	83		6	30		58	1	8	125	107	168	36	18	99	1	1	29	1	7	22	6	5	109	68	40	107	77	18	30
31	Lithgow	133	8	2	6		77	14	3	46	8	147	42	70	51	287	1	4		2	3	2	28	127		127	171		41	6
32	Mid-Western Regional	231	16	19			100	9	30	127		131		30	139	258	7	18		7	11	19	22	209	34	175	287		127	
33	Richmond Valley	58	78	10	31	0	58	6	15	74	24	112	52	36	187	203	3	20	7		13	10	13	198	27	171	161	42	2	31
34	Nambucca (Groundwater)	55	22	22			26	5	28	13	26	48	22	24	68	102	10	85		18	67	22	9	85		85	46		13	
35	Singleton	69	119	22	7		56	3	42	97	21	46	51	18	189	126	8	49	1	22	26	22	10	221	113	108	182	69	21	7
36	Parkes	81	162	134	29	8	52	7	201	78	60	46	30	8	121	362	21	137	22	24	92	134	6	66	53	13	83	38	10	29
37	Inverell	59	108	60	23		42	4	73	80	50	68	51	32	295	74	20	56		10	46	60	11	91		91	219	58		23
38	Moree Plains (Groundwater)	211	152	8	25	97	109	14	9	93	74	180	17	27			1					8	15	312		312	128	51	18	25
39	Cowra	105	41	38	39		90	7	45	81		280	7	55	102	408	9	59	10		50	38	17	196		196	154	34	8	39

Table 13 - Water Supply - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

	WATER UTILITY	OPERATING & MAINTENANCE COST*										MANAGEMENT/ADMIN			RETAIL/WHOLESALE		O & M Cost Components for TYPE of ASSET															
		Components (1) - Process				Components (2) - Type of Asset						Components			Components		PUMPING STATION						WATER MAIN				TREATMENT					
		Maintenance	Operation	Energy	Chemicals	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical			
			($/property)						($/property)			($/property)		(c/kL)	($/property)		(c/kL)		($/pumping station)			($/property)	(c/kL)		($'000/100km)		($/ML)		($/property)			
		(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)			
		2005/06				2005/06						2005/06		2005/06	2005/06		2005/06		2005/06			2005/06	2005/06		2005/06		2005/06					
40	Central Tablelands (NO SGE)	163	34	37	31	42	59	5	48	96	14	172	29	47	275	191	11	9		2	7	37	14	65		65	225	28	37	31			
41	Muswellbrook	197	60	29	32		23	64	77	99	55	64	53	22			14					29	4	88		88	184	6	62	32			
42	Corowa	89	32	8	17		26	2	14	103	2	41	82	15	202	67	2	16		6	10	8	3	66		66	126	30	56	17			
43	Tumut	119	42	17			26	5	27	90	31	69	14	22	105	157	7	11	1	3	7	17	7	66		66	240	35	55				
44	Gunnedah (Groundwater)		113	48			81	7	73			36	34	11	58	174	12	19	6		12	48	13	181	181							
45	Upper Hunter	152	42	28	2	7	128	4	38	43	4	73	67	31			9	26	3	4	19	28	29	321		321	96	26	14	2			
46	Narrabri (Groundwater)	77	22	36	2		48	2	52	12	22	27	31	7	115	80	6	112	17	18	77	36	6	154	11	143	14	7	3	2			
47	Bellingen (Unfiltered)	34	43	24	9		33	4	35	33	5	65	61	33	35	200	9	23	4	3	16	24	9	74	32	43	89	20	4	9			
48	Leeton	198		24	32							85	8	13	214	143				6	16	24			4	345		1	69	32			
49	Young (Reticulator)		56	0			34	3	0		19	6	11	5	25	288	0	1	0		0	0	9	123	123							
50	Cooma-Monaro	76	88	5	17		51	14	9	79	33	38	109	31			2					5	11	139	10	129	163	47	14	17			
51	Forbes	81	132	1	37		81	6	1	163		38	8	6	170	85	0	1			1	1	11	228	9	219	216	126		37			
52	Snowy River (Unfiltered)																																
53	Berrigan (Dual Supply)	6	234				66		5	163	6	39	58	29	203	135	1	1	1				20	106	106		482	163					
	Medians (% of LWUs basis) for 3,000 to 10,000 Properties	*83*	*56*	*22*	*25*	*8*	*57*	*5*	*29*	*86*	*23*	*65*	*35*	*24*	*121*	*157*	*7*	*20*	*3*	*7*	*16*	*22*	*11*	*125*	*34*	*117*	*162*	*37*	*18*	*25*			
LWUs with 1,501 - 3,000 Properties																																	
54	Deniliquin	91	121	10	24	121			19	105	0	177	23	28	268	178	3	15		7	8	10					148		82	24			
55	Warrumbungle																																
56	Yass Valley																																
57	Wellington	190	69	10	23		138	1	22	130		75	46	30	243	169	5	15		9	7	10	35	480	14	467	330	65	43	23			
58	Cootamundra (Reticulator)	46	6				41	5			6	44	11	19									14	127		127							
59	Lachlan	104	112	42	74		86	9	52	146	40	36	34	16			12					42	20	144		144	333	72		74			
60	Glen Innes Severn	71	70	24	27		57		28	67	41	79	24	35			9	39		5	34	24	19	166	2	164	224	28	11	27			
61	Liverpool Plains	150	12	32	15	11	35	2	67	52	43	76	8	22			18					32	9	90		90	138	3	34	15			
62	Narromine (Groundwater)	154		38			106	15	82	11	4	49	54	18			14	55		30	25	38	18	357	5	352	19	10	0				
63	Narrandera (Groundwater)	105		65	4		60	9	109	4	63	68	23	13	195	141	15	55	20	2	33	65	8	182	64	118	6			4			
64	Dungog (Reticulator)	53	67	9	1		47	3	18	15	46	53	46	32	284	71	6	12	6		6	9	15	98	69	29	48	8	5	1			
65	Murray (Dual Supply)	160	12	21	14		55	8	33	112		47	51	31			11	12	4		8	21	18	114		114	358		97	14			
67	Cobar	232	10	13	54	64		45	24	172	4		37	4			2	9	2	2	5	13					175		118	54			
66	Cobar WB (Bulk Supplier)																																
68	Tenterfield		160	15	21	20	57	3	28	85	3	125	54	79	150	225	12	27	13		14	15	25	166	166		372	64		21			
70	Kyogle	96	34	17	1		78	7	17	29	16	73	39	47	169	91	7	8			8	17	33	212		212	123	28		1			
71	Palerang																																
73	Upper Lachlan	29	162	27	12	12	43	8	89	59	20	63	31	45	227	97	42	45	24	8	14	27	21	169	169		279	47		12			
74	Wentworth (Dual Supply)	174	152	53			104	25	97	105	49	69	23	67	14	269	70	26	5	7	14	53	75	133		133	761	98	7				
75	Coonamble (Groundwater)	116	20	31			49	13	51		56	18		2			6	11		4	7	31	6	120		120							
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties	*105*	*68*	*24*	*18*	*20*	*57*	*8*	*33*	*76*	*30*	*68*	*34*	*29*	*211*	*155*	*11*	*15*	*6*	*7*	*8*	*24*	*19*	*155*	*64*	*130*	*200*	*37*	*34*	*18*			

Table 13 - Water Supply - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

	WATER UTILITY	OPERATING & MAINTENANCE COST*										MANAGEMENT/ADMIN			RETAIL/WHOLESALE		O & M Cost Components for TYPE of ASSET													
		Components (1) - Process				Components (2) - Type of Asset						Components			Components		PUMPING STATION						WATER MAIN				TREATMENT			
		Maintenance	Operation	Energy	Chemicals	Dams & Weirs	Mains	Reservoirs	Pumping Stations	Water Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical
			($/property)					($/property)				($/property)		(c/kL)	($/property)		(c/kL)	($/pumping station)				($/property)	(c/kL)	($'000/100km)			($/ML)	($/property)		
		(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)	(99)	(100)	(101)	(102)	(103)	(104)	(105)	(106)	(107)
		2005/06				2005/06						2005/06		2005/06	2005/06		2005/06	2005/06				2005/06	2005/06	2005/06			2005/06	2005/06		
LWUs with 200 - 1,500 Properties																														
76	Harden (Reticulator)	133	14	4	19		69	24	5	19	54	45	29	15		589	1	3	0		2	4	14	67		67	38			19
79	Walgett (Dual Supply)	177	316		65		156	42	87	272	2	52	74	13			9	20	19	1			16	243	55	188	287	191	15	65
80	Greater Hume	41		25	2	80			49	25	4	36	52	20			11	37	18		19	25					55		23	2
81	Gwydir																													
82	Gloucester	219	101	9	21		76	10	40	129	94	16	31	18	218	179	16	8	3	4	2	9	30	192		192	508	82	27	21
83	Oberon (Reticulator)	79	84		24		47	2		127	10	18	34	10	137	103							9	178		178	235	74	30	24
84	Gilgandra (Groundwater)	132	48	36	7		77	4	76	58	8	22	7	5	88	164	12	102	19	35	48	36	12	211		211	91	34	17	7
85	Uralla	10	132	15	41		29		21	141	7	46	88	54			8					15	12	105	105		564	90	10	41
86	Hay (Dual Supply)	121	85	36	11		55	10	66	90	33	81	4	29	230	78	22	29	9	4	16	36	19	82		82	305	57	22	11
87	Bourke (Dual Supply)	461		23			61	4	30	296	93	79	50	21	61	552	5	18		4	14	23	10	83		83	491		296	
88	Wakool (Dual Supply)	186	87	30	25		61	2	61	183	21	28	34	9	95	5	9	10	2	3	5	30	9	66	12	54	271	49	108	25
89	Bogan	291	70	15	77	50	41	44	54	180	84	256		29			6	57	7	34	16	15	5	90		90	207	63	40	77
90	Guyra	93	139	23	26	15	58		23	150	35	36	26	16	236	137	6	27			27	23	15	103		103	401	125		26
91	Cabonne	192	43	13	13	53	51	18	50	75	14	67	45	51			23	18		14	5	13	23	64		64	343	14	48	13
92	Carrathool (Groundwater)	312	116	224	3	95	132	11	394	24		44	21	10			64	31	4	9	18	224	21	30	13	18	38	7	14	3
93	Tumbarumba	61	76	7			71	45	9	15	4	80		21	123	101	2	3	1		2	7	18	105	87	18	40		15	
94	Gundagai	98	145		17		59			202		61	20	16	246	96							12	172	86	86	399	116	69	17
96	Warren (Dual Supply)	198		30	25		153	18	57	25		35	34	20	129	194	16	28		13	15	30	43	277		277	71			25
97	Bombala	63	97	23	47	6	23		68	116	17	114		23			14	19	7	6	6	23	5	52	52		239	49	20	47
98	Walcha	171	81	45	26	27	73	1	75	147		64	34	34	316	105	26	22	3	6	13	45	25	117		117	509	55	66	26
100	Balranald (Dual Supply)	258	2	45	25		88	14	163	27	37	67		30	119	278	72	44		32	12	45	39	237	7	230	120		2	25
101	Murrumbidgee (Groundwater)	35	12	47			14	12	66	2			100	10			6	18	3	2	13	47	1	38	7	31	2		2	
103	Central Darling (Dual Supply)	434	8	56	57	13	141	4	80	313	6	4		4			69	8		2	6	56	123	151		151	2724		256	57
104	Boorowa	29	225				84	6	32	131		10	28	11			10	20	20				25	52	38	14	386	131		
105	Brewarrina	207	336	81	106		150	19	169	392		50	21	9			22	20	8	3	10	81	19	188		188	501	263	23	106
106	Jerilderie (Dual Supply)	312	6	52	24		160		74	147	13	30	56	33	231	250	28	34		10	24	52	61	185		185	556	2	121	24
	Medians (% of LWUs basis) for 200 to 1,500 Properties	*171*	*85*	*30*	*25*	*39*	*70*	*11*	*61*	*129*	*15*	*46*	*34*	*18*	*137*	*150*	*12*	*20*	*7*	*6*	*13*	*30*	*17*	*105*	*45*	*97*	*287*	*63*	*23*	*25*

* OMA cost comprises Operating & Maintenance Cost (Cols 79 to 82 or Cols 83 to 88) plus Administration Cost (Col 89) plus Engineering and Supervision Cost (Col 90).

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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	Sewage Treatment Works	Pumping Stations	Properties Served per km of Main	Pumping Stations per 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	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)	(No.)	(No.)	(3) / (8)	(10) / [(8) x 100]	($'M)	($'M)	(No. /1000 props)	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	Due to Injury (%)
		(1)			(2)	(3) NWI 12	(4)	(5)	(5a)	(6)	(7)	(8) NWI 13	(9)	(10)	(11) NWI 14	(12)	(13)	(13a) NWI 65	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
	Sydney Water	1,611,000	1,635,000	1,656,000	1.00	1,656,000	0.93	1.00	1,544,600			23,404	30	659	71	3												
	Hunter Water	196,000	199,000	202,100	1.00	202,100	0.95	1.00	192,000			4,477	17	380	45	8												
	LWUs with > 10,000 Properties																											
1	Gosford	65440	65,890	66,110	0.96	63,750	0.96	0.96	61,100	152,200		1,395	2	184	46	13	3.5		1.3	8	22				14	3	47	0
2	Wyong	56630	57,420	58,500	0.98	57,160	0.94	0.98	53,700	140,000	180	1,215	6	142	47	12	7.3	0.0	1.6		100				0	0	0	
3	Shoalhaven	39840	40,710	41,510	0.90	37,360	0.94	0.91	35,500	84,000	440	1,028	10	208	36	20	22.4	7.0	1.7	7	82	2	8	1	3	3	14	0
5	MidCoast	30590	32,430	32,870	0.96	31,550	0.92	0.96	29,200	75,000	110	898	13	204	35	23	28.1	0.1	1.5	17	100				4	3	37	0
6	Tweed	27430	29,020	29,040	0.91	26,430	0.95	0.93	25,700	68,400	120	650	8	180	41	28	1.7	0.5	2.0	2	87	21	15	12	0	4	116	1
9	Wagga Wagga	21240	24,370	22,660	1.04	23,610	0.93	1.05	22,100	56,500	100	543	5	36	43	7	2.3		0.9	5	100	20	10	10	2	1	18	0
7	Port Macquarie-Hastings	25300	25,560	26,330	0.95	25,010	0.92	0.95	23,100	67,000	130	582	5	155	43	27	11.5	0.1	1.5	5	100				6	4	20	0
11	Albury City	20280	20,770	21,200	1.03	21,750	0.93	1.03	20,100	47,300	110	461	2	56	47	12	1.5		1.0	26	62	67	1	58	2	2	26	1
10	Coffs Harbour	21770	22,360	22,880	0.93	21,280	0.94	0.93	20,100	54,000	120	596	5	114	36	19	8.4	2.2	1.5		94				5	6	78	1
13	Tamworth Regional	16870	20,720	17,250	0.99	17,080	0.90	0.99	15,400	45,200	180	478	5	22	36	5	3.8	0.3	1.7		61	4			5	3	58	1
15	Eurobodalla	17600	18,060	18,050	0.94	16,970	0.96	0.94	16,300	34,200		522	5	122	33	23	18.2		1.8	3	100			46	3	5	37	1
17	Queanbeyan	15390	15,400	14,980	1.03	15,430	0.93	1.04	14,400	35,600	100	324	1	15	48	5	1.3		0.6	11	100		10		2	1	7	0
19	Orange	13990	14,260	14,250	1.01	14,390	0.91	1.01	13,200	35,800	100	385	2	14	37	4	1.8		1.1	13	100	10	5	5	1	2	4	0
20	Goulburn Mulwaree	9470	13,720	9,510	1.03	9,790	0.96	1.03	9,400	23,100		222	2	12	44	5	1.3		1.7	12				5	0	0	0	
18	Dubbo	12400	12,350	12,980	1.11	14,400	0.89	1.12	12,900	32,400	110	342	1	7	42	2	5.2	0.1	1.0	7	93				2	2	19	1
16	Wingecarribee	13670	13,980	14,030	0.95	13,330	0.94	0.96	12,600	38,800	100	447	5	69	30	15	11.2	3.4	1.9	10	31		10	15	1	5	57	1
14	Clarence Valley	12790	13,900	13,760	0.94	12,930	0.94	0.95	12,300	31,700		312	11	85	41	27	4.1	0.3	2.8		100				0	0	0	
21	Bathurst Regional	11450	11,790	12,590	1.08	13,600	0.92	1.08	12,500	32,000	190	354	1	15	38	4	1.4		0.7		100	1	1	4	5	2	3	0
24	Ballina	13180	13,500	13,380	0.93	12,440	0.93	0.93	11,500	33,300		303	4	110	41	36	3.0	0.1				30		10	0		0	
22	Lismore	11150	11,330	11,460	1.05	12,030	0.90	1.06	11,000	30,300		336	3	32	36	10	2.1	0.2	1.2		47		5	5	1	4	15	0
	Medians (% of LWUs basis excl bulk suppliers) for >10,000 Properties				*0.97*		*0.93*	*0.97*							*41*		*3.7*		*1.5*	*8*					*2*	*3*		
	LWUs with 3,001 - 10,000 Properties																											
23	Bega Valley	10340	10,100	10,620	0.97	10,350	0.93	0.98	9,700	23,700	150	314	7	58	33	18	18.3	8.5	1.8	3	100	6	14	7	3	4	5	0
27	Byron	10000	10,190	10,310	0.96	9,900	0.90	0.96	8,900	28,000	180	252	5	81	39	32	8.8	2.0	1.6	3	100			2	3	8	9	0
26	Country Energy	9410	9,580	9,590	1.01	9,690	0.92	1.01	8,900	22,000	100	215	2	11	45	5	0.4		0.9		100				0	2	0	
25	Kempsey	8110	8,330	8,470	1.04	8,810	0.92	1.03	8,000	24,300	140	255	7	79	35	31	0.8	0.0	1.6	11	100	5	5	5	0	8	0	
31	Lithgow	7800	7,800	7,140	0.98	7,000	0.95	0.98	6,700	21,000	100	366	3	32	19	9	0.0		1.7	8	58			20	1	7	45	2
29	Armidale Dumaresq	7550	7,650	7,700	0.98	7,540	0.93	0.98	7,000	23,000	110	240	1	1	31	0			1.9	11					0	0	0	
30A	Hawkesbury	7440	7,510	7,560	0.98	7,390	0.89	0.99	6,700	24,000							1.5											
30	Griffith	8500	8,500	7,950	0.85	6,760	0.91	0.84	6,000	24,000	110	211	3	27	32	13	0.6	0.0	2.8	11	105				0	1	0	
33	Richmond Valley	6400	6,340	6,510	0.95	6,180	0.89	0.95	5,500	16,700	120	173	4	30	36	17	1.4	0.0	3.2	3	51				5	6	89	2
32	Mid-Western Regional	5750	5,920	6,130	1.00	6,130	0.91	1.00	5,600	13,200	150	184	4	12	33	7	0.4	0.0	2.1		100	5		5	0	3	0	
34	Nambucca	6050	6,100	6,220	0.95	5,910	0.91	0.95	5,400	13,900	130	153	4	51	39	33	0.7	0.1	1.7	10	30	20	15	20	0	3	0	
35	Singleton	4930	5,170	5,310	0.95	5,040	0.92	0.95	4,600	14,300	100	167	1	14	30	8	1.1		0.9	1	23				0	4	0	
37	Inverell	4740	4,850	4,670	0.97	4,530	0.97	0.97	4,400	11,200	110	126	4	21	36	17	0.2								0		0	
41	Muswellbrook	4810	4,900	4,900	0.95	4,670	0.93	0.96	4,400	16,800							0.7											

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	Sewage Treatment Works	Pumping Stations	Properties Served per km of Main	Pumping Stations per 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	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)	(No.)	(No.)	(3) / (8)	(10) / [(8) x 100]	($'M)	($'M)	(No. /1000 props)	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	Due to Injury (%)
		(1)			(2)	(3) NWI 12	(4)	(5)	(5a)	(6)	(7)	(8) NWI 13	(9)	(10)	(11) NWI 14	(12)	(13)	(13a) NWI 65	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
36	Parkes	4850	4,870	4,950	0.95	4,700	0.89	0.95	4,200	11,300	100	98	2	2	48	2	0.4	0.0	0.6		100				0	4	0	
42	Corowa	4380	4,370	4,590	0.95	4,360	0.94	0.95	4,100	9,100	190	135	3	60	32	45	0.5		1.4		33				0	0	0	
38	Moree Plains	4280	4,280	3,880	0.97	3,760	0.81	0.96	3,000	10,400							0.9											
44	Gunnedah	3850	3,860	3,860	1.03	3,970	0.87	1.03	3,500	9,600		95	2	2	42	2			1.3		100	5	5	15	1	1	10	1
46	Narrabri	3700	3,870	3,890	0.98	3,820	0.85	0.98	3,300	10,200	110	97	3	22	39	23	0.2		1.0		100				2	1	2	0
43	Tumut	3770	3,890	4,010	0.95	3,810	0.89	0.95	3,400	8,400	110	128	4	14	30	11		0.0	1.3		100				7	6	64	6
49	Young	3250	3,250	3,350	1.04	3,480	0.89	1.04	3,100	8,200	110	106	1	5	33	5	0.5	0.1	1.4	30	100	10	30	30	2	5	12	1
39	Cowra	3570	3,560	3,720	0.95	3,530	0.88	0.95	3,100	8,600	100	95	1	7	37	7	0.3		0.6		100				0	4	0	
45	Upper Hunter	3630	3,670	4,000	0.92	3,680	0.91	0.92	3,300	8,900	120	115	3	10	32	9	0.6	0.0	1.5		0				0	0	0	
52	Snowy River	2300	2,300	2,140	1.43	3,060	0.86	1.43	2,600	4,600	640	75	4	19	41	25			1.3	25	100			60	0	0	0	
51	Forbes	3200	3,200	3,140	1.00	3,140	0.92	1.00	2,900	7,600	110	123	1	17	26	14	0.8	3.1	1.3		75		7	3	0	2	0	
50	Cooma-Monaro	3210	3,330	3,340	0.95	3,170	0.87	0.95	2,800	7,500		227	2	7	14	3	0.3	0.1							0		0	
53	Berrigan	3010	3,090	3,150	0.98	3,090	0.88	0.98	2,700	6,700	110	109	4	44	28	40	0.0		1.3		275			13	0	14	0	
Medians (% of LWUs basis) for 3,000 to 10,000 Properties					*0.97*		*0.91*	*0.97*							*33*		*0.6*		*1.4*	*10*					*0*	*3*		
LWUs with 1,501 - 3,000 Properties																												
48	Leeton	3130	3,180	3,220	0.94	3,030	0.87	0.94	2,600	8,400	110	86	3	30	35	35	0.5		1.7	20	20				5	0	5	0
54	Deniliquin	3050	3,050	3,230	0.96	3,100	0.88	0.95	2,700	7,500	15	70	1	23	44	33	0.3		1.6		10				1	3	16	1
47	Bellingen	2930	3,000	3,010	0.95	2,860	0.92	0.95	2,600	7,300	100	88	3	27	32	31	0.4		3.1	22	78			2	2	2	3	0
60	Glen Innes Severn	3120	3,120	2,840	0.91	2,580	0.88	0.91	2,300	6,300	120	91	2	5	28	5	1.2	0.5	2.3		100				0	3	0	
58	Cootamundra	2680	2,640	2,750	0.98	2,690	0.89	0.98	2,400	7,000	110	56	1	4	48	7	0.4		1.1		33				0	5	0	
57	Wellington	2410	2,580	2,480	0.98	2,430	0.87	0.98	2,100	5,700	100	59	1	12	41	20	4.6	1.8	1.6		100			3	0	2	0	
91	Cabonne	2440	2,460	2,490	0.92	2,290	0.88	0.92	2,000	3,700	100	56	3	10	41	18	0.1	0.0	2.2	10	60				0	1	0	
80	Greater Hume	2350	2,350	2,420	0.95	2,300	0.88	0.95	2,000	5,700	100	71	6	19	32	27	0.1		1.3		320				0	0	0	
59	Lachlan	2040	2,170	2,180	1.03	2,240	0.83	1.03	1,900	5,100		70	3	0	32		0.1								0		0	
65	Murray	2190	2,190	2,260	0.95	2,150	0.91	0.95	1,900	5,600	210	83	2	41	26	49	0.5		1.4						0	13	0	
62	Narromine	2190	2,190	2,010	0.95	1,910	0.87	0.95	1,700	5,000		49	2	13	39	27	0.4		1.6		67				0	0	0	
56	Yass Valley	2030	2,030	2,200	0.98	2,160	0.90	0.98	1,900	5,500	120	66	2	7	33	11			1.2		80			10	0	3	0	
61	Liverpool Plains	1970	1,970	1,890	0.98	1,850	0.97	0.98	1,800	4,800							0.0											
55	Warrumbungle	2360	1,940	2,350	0.99	2,330	0.91	0.99	2,100	5,300	100	116	4	9	20	8			4.7		100				0	0	0	
69	Temora	1890	1,890	2,040	1.00	2,040	0.87	1.00	1,800	4,700							0.1											
71	Palerang	1580	1,870	1,870	0.95	1,780	0.92	0.95	1,600	3,800		49	3	13	36	27			1.4		80				0	1	0	
72	Bland	1820	1,810	1,900	0.95	1,810	0.86	0.95	1,500	3,900	110	48	3	9	38	19	0.0								0		0	
63	Narrandera	1850	1,850	1,780	0.92	1,630	0.89	0.92	1,500	4,800							1.2											
67	Cobar	1750	1,730	1,730	0.95	1,640	0.91	0.95	1,500	5,000	100	72	1	4	23	6	0.1		4.3		100				0	0	0	
74	Wentworth	1560	1,680	1,690	0.95	1,600	0.87	0.95	1,400	4,000	120	95	5	25	17	26	0.0		3.1	20	80		3	2	0	19	0	
75	Coonamble	1530	1,540	1,530	1.02	1,560	0.87	1.02	1,400	4,200	110	43	2	12	36	28			2.6		100		1	1	2	12	80	9
Medians (% of LWUs basis) for 1,500 to 3,000 Properties					*0.95*		*0.88*	*0.95*							*34*		*0.3*		*1.6*	*20*					*0*	*2*		

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	Sewage Treatment Works	Pumping Stations	Properties Served per km of Main	Pumping Stations per 100km of Main	Capital Investment	Capital Works Grants	Total Work Force	% Female	% Undergoing Training	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)	(No.)	(No.)	(3) / (8)	(10) / [(8) x 100]	($'M)	($'M)	(No. /1000 props)	(%)	(2 or more days per year)	(% of Management Cost)	(% of Operation Cost)	(% of Maintenance Cost)	(No.)	Total (%)	Due to Injury (No.)	Due to Injury (%)	
		(1)			(2)	(3) NWI 12	(4)	(5)	(5a)	(6)	(7)	(8) NWI 13	(9)	(10)	(11) NWI 14	(12)	(13)	(13a) NWI 65	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)		
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06
LWUs with 200 - 1,500 Properties																												
70	Kyogle	1567	1,580	1,600	0.95	1,520	0.92	0.95	1,400	3,600	120	37	3	8	41	22	0.2	0.0	3.3		100	5	5		0	2	0		
77	Junee	1571	1,570	1,700	0.95	1,620	0.92	0.95	1,500	4,000		92	1		18		0.1								0		0		
78	Blayney	1355	1,430	1,490	1.03	1,530	0.86	1.03	1,300	3,600	110	62	1	7	25	11	0.2		1.3		100				0	0	0		
79	Walgett	1685	1,690	1,790	0.85	1,520	0.88	0.85	1,300	6,300	200	49	3	9	31	18									2		48		
68	Tenterfield	1525	1,500	1,490	0.95	1,410	1.00	0.95	1,400	3,400		65	1	3	22	5	0.2	0.0	4.2		100		5	5	0	0	0		
84	Gilgandra	1356	1,360	1,370	0.98	1,340	0.90	0.98	1,200	2,800	100	35	1	13	38	37	0.0		1.5		100				0	1	0		
73	Upper Lachlan	1254	1,330	1,380	1.00	1,380	0.86	1.01	1,200	3,500	110	44	2	7	31	16	0.0		2.9		100				20	2	0		
82	Gloucester	1371	1,350	1,560	0.95	1,480	0.84	0.95	1,200	3,000	120	47	1	7	31	15	0.1		1.0					60	0	0	0		
87	Bourke	1700	1,700	1,070	1.00	1,070	0.86	1.00	920	3,500		34	1	7	31	21	0.1		2.2	13	87				0	2	0		
86	Hay	1252	1,300	1,300	0.98	1,270	0.87	0.98	1,100	2,900		37	1	8	34	22	0.1		1.6		100			40	0	0	0		
83	Oberon	1172	1,190	1,170	1.02	1,200	0.85	1.02	1,000	3,000	130	36	1	3	33	8	0.1		1.7		150		5	10	0	2	0		
81	Gwydir	1206	1,160	1,160	0.95	1,100	0.90	0.95	990	2,600	120	41	2	8	27	19			2.7	8	100			10	0	6	0		
64	Dungog	1100	1,100	1,040	0.95	990	0.88	0.95	870	3,200	100	30	1	4	33	13	0.5		2.0		100			10	0	5	0		
85	Uralla	993	1,010	1,020	1.00	1,020	0.88	1.01	900	2,500							0.1												
95	Weddin	1007	1,060	1,010	0.94	950	0.86	0.93	810	2,000																			
89	Bogan	965	970	1,050	1.01	1,060	0.91	1.01	970	2,500		20	1	4	52	20			3.8	25	25	10		3	0	0	0		
76	Harden	981	1,000	1,010	0.96	970	0.89	0.95	850	2,000		45	1	0	21				2.1		100			10	0	1	0		
88	Wakool	970	1,010	1,110	0.95	1,050	0.76	0.95	800	2,000			3	14			0.6	0.0	1.1						0	0	0		
93	Tumbarumba	944	960	960	0.95	910	0.86	0.95	780	2,000	170	46	2	1	20	2	0.2		5.5	20	60				0	0	0		
94	Gundagai	857	860	890	1.01	900	0.88	1.01	790	2,400	130	73	1	5	12	7	0.0		1.7		67				0	0	0		
92	Carrathool	883	880	850	0.95	810	0.86	0.95	700	1,900	110	20	3	12	40	60			2.5		100				0	4	0		
96	Warren	887	880	880	0.92	810	0.90	0.92	730	1,900	130	17	2	8	48	47	0.2		2.5		100				0	3	4	1	
99	Coolamon	850	850	960	0.95	910	0.87	0.95	800	2,200		39	2	0	23		0.0								0		0		
102	Lockhart	808	810	810	0.95	770	0.88	0.95	670	1,800	100	42	6	6	18	14			2.6		50				0	2	0		
98	Walcha	757	760	780	1.01	780	0.79	1.01	620	1,700	110	29	1	1	27	3	0.0		2.5		50				0	0	0		
100	Balranald	801	800	800	0.95	760	0.89	0.95	670	2,000	100	38	2	12	20	32	0.1		2.6		100				0	0	0		
97	Bombala	785	790	790	0.95	750	0.86	0.95	650	1,800	110	35	2	5	22	14			2.5		100				0	0	0		
101	Murrumbidgee	691	700	710	1.03	730	0.93	1.05	690	1,700	100	21	2	12	34	56	0.0		2.7						0	0	0		
90	Guyra	769	740	1,010	0.95	960	0.85	0.95	820	2,700		36	1	2	27	6	3.3	2.7	2.1		50			5	0	1	0		
104	Boorowa	564	560	560	0.94	530	0.89	0.94	470	1,400	96	33	1	2	16	6	0.3		3.8		50				0	0	0		
105	Brewarrina	544	540	560	0.86	480	0.88	0.85	420	1,500	120	16	2	8	29	49			2.5		83	50			0	3	0		
106	Jerilderie	435	440	450	0.95	420	0.77	0.95	330	1,000		9	1	5	47	56	0.0		2.4		100				0	0	0		
103	Central Darling	360	360	200	1.00	200	0.91	1.00	180	700	110	14	1	4	14	29			2.6		0				0	0	0		
107	Urana	300	310	320	0.95	300	0.97	0.95	290	700	210	15	2	9	20	60			6.6		100				0	3	6	1	
Medians (% of LWUs basis) for 200 to 1,500 Properties					*0.95*		*0.88*	*0.95*							*27*		*0.1*		*2.5*	*17*					*0*	*0*			
TOTALS			*700,000*			*680,000*				*1,680,000*		*18,000*																	

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Table 15 - Sewerage - Asset Management, Resource Management

ASSET MANAGEMENT

	WATER UTILITY	Infiltration (ML per 100km of Main) (23)			Chokes & Collapses (No. per 100 km of Main) (24) NWI 56			Overflows (No. per 100 km of Main) (25) NWI 57			Interruptions to Service (No. per '000 properties) (26)			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)
		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	05/06	05/06	05/06	05/06	05/06
	Sydney Water				73	83	87	73	84	53				0.4		112		44
	Hunter Water				60	66	58	46	51	41								
LWUs with > 10,000 Properties																		
1	Gosford	120	120		43	49	44	58	48	44				0.3				139
2	Wyong				42	56	49	0	1	0				0.0				104
3	Shoalhaven	40	38		32	30	29	27	26	20				0.4	0.6	121	0.2	10
5	MidCoast	123	142	125		33	33	2	1	7				0.9				72
6	Tweed	76	116	188	8	17	13	4	5	1	23	24	46	0.1	0.2			140
9	Wagga Wagga	12	11		94	102	127	4	20	52	72	21		0.4	0.4			61
7	Port Macquarie-Hastings					19	20		1	0					0.3	61	0.2	108
11	Albury City				185	186	194	37	19	6				0.5	0.1	126	0.3	146
10	Coffs Harbour		62	112		64	88	47	23	2								68
13	Tamworth Regional		24		65	84	49	17	16	14				1.1		708	2.7	86
15	Eurobodalla	625	667	41	6	48	34	6	11	13				1.3				29
17	Queanbeyan	17	16	215	122	92	24	0	3	0				1.8	0.0			233
19	Orange	387	211	240	80	112	126	8	13	16					0.1			58
20	Goulburn Mulwaree		32			5			20							136		152
18	Dubbo	67	67		64	64	57	25	15	9	15	16	13			2	0.0	2
16	Wingecarribee			89	46	79	116	1	1	40				0.7		134	0.4	117
14	Clarence Valley		148			5	20	22	11	13				0.1		111	0.4	178
21	Bathurst Regional			104	20	23	20	2	3	4	12	12	15	0.3	0.3			85
24	Ballina					24			3									156
22	Lismore		234		73	67	77	4	4	4		0		0.6	0.4	535	1.4	175
Medians (% of LWUs basis) for >10,000 Properties				*119*			*47*			*8*			*15*	*0.4*			*0.3*	*106*
LWUs with 3,001 - 10,000																		
23	Bega Valley				28	44	49	23	35	46				1.0	0.2	201	0.6	93
27	Byron	196	127		15	22	34	2	16	13	10	4		0.8	0.7			38
26	Country Energy				109	125	183	22	16	7					0.0	61		226
25	Kempsey				15	2	6	7	6	6				0.2		43	0.1	167
31	Lithgow			19	2		2							0.4	0.4			77
29	Armidale Dumaresq				78	40	68	8	37	40				0.1	0.4			
30A	Hawkesbury	178			41			2										
30	Griffith	117	119		165	161	132	12	21	7		9	12	1.4	0.6	117	0.6	33
33	Richmond Valley				9	9	12	2	2	6	3	3	3	0.1	0.2	69	0.2	171
32	Mid-Western Regional		27		54	98	61	8	5	61		46	44	0.5	0.0			196
34	Nambucca				46	46	16	46	33	23								65
35	Singleton				33	23	32			16	16	15	15	0.2	0.1	104	0.4	174
37	Inverell	41	43		125	126		6	5		5	5	4		0.0	113	0.5	154
41	Muswellbrook	29	29		175	208		98	7		111	149						

RESOURCE MANAGEMENT

	WATER UTILITY	Total Vol of Sewage Collected (ML) (32)			% Sewage Treated (%) (33)	% Sge Treated that was compliant (33a) NWI 53	STWs compliant at all times (33b) NWI 52	Percentage of Total Sewage Collected: Infiltration /inflow (34)	Res (35)	Non-Res (36)	Trade Waste (37)	Other (38)	% of Sge Treated: Primary Level (39a) NWI 45	Secondary Level (39a) NWI 46	Tertiary Level (39a) NWI 47	Vol of Sewage Collected per Property (kL/property) (39) NWI 58			Biosolids Reused (%) (40) NWI 61			Effluent Reused: Total Volume Reused (41a) NWI 60	Volume Reused for Town Water (41b)	% of Total Effluent that is Reused (41c) NWI 59		
		2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06
	Sydney Water	450,000	454,262	432,542	100				94		6		75	4	22	221	212	261	100	100	100	15,282		3	3	4
	Hunter Water	54,670	65,139	59,918	100				96		4			54	46	279	327	297	53	57	63	3,762		8	6	7
LWUs with > 10,000 Properties																										
1	Gosford	15,210	14,965	13,916	100	100	2/2		83	5	12			100		238	232	218		100	100	241		1	1	1.7
2	Wyong	11,200	11,327	11,822	100	100	6/6							92	8	202	203	207	100	100	100	954	716		0	8
3	Shoalhaven	6,700	6,530	6,569	100	85	5/10		82	17		1		49	51	188	180	176	21	64	100	1,939	214	30	25	30
5	MidCoast	6,570	7,960	6,811	100	86	3/10	17	66	16	2			53	47	211	256	216		100	100	56		1	1	1
6	Tweed	7,600	7,897	8,779	100	95	4/8	14	61	11	14			0.2	100	304	299	332		62	58	292	181	5	5	3
9	Wagga Wagga	6,320	5,850	5,061	100	32	0/3								100	286	230	214	26	100	99	785	408	17	15	16
7	Port Macquarie-Hastings	10,360	7,489	6,733	100	40	2/4		89	11					100	265	308	269		100	100	318	117	4	4	5
11	Albury City	5,066	4,479	5,326	100	88	1/3								100	244	211	245				3,911		97	100	73
10	Coffs Harbour	5,909	5,229	5,933	100	94	2/5	11				89			100	292	251	279				520	200	9	9	9
13	Tamworth Regional	5,364	4,712	4,774	100	64	1/3				19	81		100		292	230	280		200	97	103				2
15	Eurobodalla	2,810	3,114	3,217	100	99	3/5	7	89	4				91	9	170	183	190	15		64	324	143	8	6	10
17	Queanbeyan	3,590	3,400	3,886	100	100	1/1	18	69	5	8				100	214	214	252		100	100	100		2	4	3
19	Orange	4,680	4,475	4,235	100	94	1/2	22	54	22	3		3	1	97	331	311	294	63	100	2	3,136	3,121	75	76	74
20	Goulburn Mulwaree	1,780	1,588	1,684	100										100	183	112	172				***1,132***		100	71	***71***
18	Dubbo	2,800	2,849	2,852	100	64	0/1								100	204	208	198	53	100	100	2,304		58	76	81
16	Wingecarribee	2,850	2,716	3,220	100	98	4/5	12				88	2	0.1	98	219	205	241				67	2	1	3	2
14	Clarence Valley	2,672	2,392	3,403	100	76	0/10							68	32	202	183	263				263	138		11	8
21	Bathurst Regional	3,310	3,334	3,686	100	75	0/1	10	65	15	10				100	268	262	271		100	100	662				18
24	Ballina	3,650	3,920	***3,920***												315	312	314				***324***		8	8	***8***
22	Lismore	3,490	3,553	3,825	100	98	1/3							4	96	299	299	318	17	100	100	119		9	4	3
Medians (% of LWUs basis) for >10,000 Properties															*100*			*248*			*100*	*324*				*8*
LWUs with 3,001 - 10,000																										
23	Bega Valley	1,950	1,940	2,024	100	92	2/6		90	10				91	9	194	197	195				596	438	30	27	29
27	Byron	2,940	2,630	3,341	100	86	1/6							21	79	306	269	338	6	100	100	792	222	20	23	24
26	Country Energy	1,360	1,354	1,433	100	82	0/2								100	143	140	148	41			530	506	66	100	37
25	Kempsey	1,870	1,940	2,104	100	87	3/7							27	73	221	224	239		100	100	240	74	14	11	11
31	Lithgow	1,620	1,620	***1,620***											100	211	211									
29	Armidale Dumaresq	1,750	1,919	2,027	100	100	1/1								100	236	256	269		100	100	400		60	32	20
30A	Hawkesbury	2,390	2,390	***2,390***												329	325	324						10		
30	Griffith	2,430	2,256	2,630	100	78	0/2							8	92	358	334	389				734		8	18	28
33	Richmond Valley	1,780	1,804	2,106	100	98	2/4							100	0	293	299	341	3			116	19	11	33	6
32	Mid-Western Regional	1,322	1,340	***1,340***			0/3								100	226	226	199		91	98	90			7	
34	Nambucca	1,420	1,469	1,568	100	97	1/4								100	247	254	265		100	100	133		8		8
35	Singleton	1,130	1,278	1,285	100	83	0/1							2	98	235	260	255	99			643		100	50	50
37	Inverell	770	722	807	100	95	1/3		11			89		100		167	154	178								
41	Muswellbrook	1,330	1,300	***1,300***												290	278	278	75			***1,145***		83	88	***88***

Table 15 - Sewerage - Asset Management, Resource Management

	WATER UTILITY	ASSET MANAGEMENT																RESOURCE MANAGEMENT																									
		Infiltration			Chokes & Collapses			Overflows			Interruptions to Service			Rehabilitations		Renewals		Mains Maintenance Cost	Total Vol of Sewage Collected			% Sewage Treated	% Sge Treated that was compliant	STWs compliant at all times	Percentage of Total Sewage Collected					% of Sge Treated			Vol of Sewage Collected per Property			Biosolids Reused			Effluent Reused					
		(ML per 100km of Main)			(No. per 100 km of Main)			(No. per 100 km of Main)			(No. per '000 properties)			(% of Total Length)	(Service Connections %)	($'000 per 100 km of Main)	(% of CRC)	($'000 per 100 km of Main)	(ML)			(%)			Infiltration /inflow	Res	Non-Res	Trade Waste	Other	Primary Level	Secondary Level	Tertiary Level	(kL/property)			(%)			Total Volume Reused	Volume Reused for Town Water	% of Total Effluent that is Reused		
		(23)			(24) NWI 56			(25) NWI 57			(26)			(27)	(28)	(29)	(30)	(31)	(32)			(33)	(33a) NWI 53	(33b) NWI 52	(34)	(35)	(36)	(37)	(38)	(39a) NWI 45	(39a) NWI 46	(39a) NWI 47	(39) NWI 58			(40) NWI 61			(41a) NWI 60	(41b)	(41c) NWI 59		
		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	05/06	05/06	05/06	05/06	05/06	2003/04	2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06
36	Parkes				69	54	64	85	56	31				1.0	0.0			118	1,130	765	870	100				60	26		14			100	270	193	185	17			180	160	22	24	21
42	Corowa			93	38	39	53	7	4	5			13		0.1			92	880	698	1,073	77	16	0/1	12	70	16	2			100		212	177	189				562		59	62	52
38	Moree Plains		1,768		12	12		1	1		72	72							1,500	1,500	***1,500***											360	373	399	27	100				27	13	
44	Gunnedah	69	69		55	136	123	26	126	63	2	2	1	2.1					653	559	573	100	75	0/1							100		164	164	144	75			517		77	88	90
46	Narrabri				155		90			8					0.9	183	0.4	98	1,170	1,170	962	100		1/1		100					23	77	314	300	252			57	643				67
43	Tumut				99	131	153		11					0.6				95	961	1,097	962	100	99	3/4							87	13	268	297	252	3	98	100	1		3	2	0.1
49	Young			50	50	128		8	210	113	24	52	17	1.9	0.2				758	736	742	100	92	0/1	7	87	5	1			100		224	218	213	26			114	111	13	18	15
39	Cowra				11	11	11	89	79	74	1	1	2		0.3			98	772	771	***771***			0/1							100		228	228	217								
45	Upper Hunter				67	64	55	32	8	28		1	66			63	0.3	190	980	878	868	100		2/3							100		272	260	236				45			62	5
52	Snowy River			136	7	4	85	4	4	4					1.8				415	638	474	76	80	0/2	22				78			100	141	195	118								
51	Forbes	25	14	24	82	75	67	5	6	2	238	128	210		0.2			81	726	622	691	100	77	0/1	4	75	14	6	1	0		100	225	193	220				4		1.4		1
50	Cooma-Monaro				49	49		155	155		116	112				64	0.6	114	479	479	***479***											157	151	151		200						
53	Berrigan		0		22	24	102				1		2	0.5	0.6				315	523	532	100	23	0/1							100	163	173	172	15			39	39	18	39	7
	Medians (% of LWUs basis) for 1,500 to 3,000 Properties			*50*			*61*			*16*			*12*	*0.5*			*0.4*	*98*												*100*			*228*			*100*	*116*				*21*
	LWUs with 1,501 - 3,000 P																																									
48	Leeton	48	48		90	92	58	10	14	6	27	27	25	0.6	0.3			145	1,300	1,400	3,815	100		3/3		22	1	11	66	35	35	29	336	337	1,260	2		100					
54	Deniliquin	154	130		30	30	216		1		20		81		1.1	287	0.9	857	794	666	597	100	92	0/1							100	271	227	192	93			593		79	86	99
47	Bellingen			111	21	39	48	19	9	27					0.2			33	748	801	870	100	82	0/3	11				89			100	269	281	304								
60	Glen Innes Severn		5			15	29	8	5						1.1			95	623	589	861	100		1/1							100		219	208	333		100	100	13				2
58	Cootamundra			854	162	162	113											184	630	630	478	100	85	0/1	100							100	240	244	178				185	185	37	37	39
57	Wellington	67	67	3	100	100	19	145	145	17				0.1	0.2			125	411	411	***411***			0/1								100	174	162	169				1				
91	Cabonne				38	46	36		36						0.1			73	292	315	304	100		0/1		100					100		130	139	133				71	41	15	50	23
80	Greater Hume		25	18	39	49	42	3				11	7		0.2			49	442	480	503	100	72	3/4	3	96	1				1	99	190	215	219				112	23	37	27	22
59	Lachlan		69		40	17						1				4	0.0	110	649	559	***559***											282	251	249	14			***166***		28	30	***30***
65	Murray	30	33	32	7	6	8				15	3		0.3	0.2	637	6.3	84	547	536	590	100			5	55	32		8		91	9	263	258	275	45			295		37	15	50
62	Narromine						31								0.1			8			570	100									100			298								
56	Yass Valley			38	83	71	72	1					1	0.2	0.3				459	394	417	100	100	2/2	6	73	13	7	1		100		231	198	192				135		37	45	32
61	Liverpool Plains				28	23		2	8			8							362	368	***368***											189	191	198								
55	Warrumbungle				64	87	86		43		48			0.3					591	514	430	83									100		255	267	153				113			22	26
69	Temora	299	98		599	488		449	159		2	27							360	345	***345***											191	186	169				***345***		100	100	***100***
71	Palerang		2		6	74	90	15	30	10		6	3						271	254	***254***			0/3							31	69	181	143	156								
72	Bland			25	141	116		26	179		2	74							265	277	289	100	83	1/1	4	81	2		13		100		153	161	160	60			129		25	49	45
63	Narrandera	225	181		25	11		11	3										534	519	335	100	33								100		308	308	205								
67	Cobar		2		1	1													466	467	423	100	100	1/1							100		280	284	258				105	105	21	21	25
74	Wentworth		1	4	33	29	27			1					0.2			11	551	549	826	100	90	4/4					100	43	14	43	372	344	515				28	28	62	62	3
75	Coonamble		40	51	16	6	12			2								113	270	293	303	100	51	0/2	7	81	12				14	86	204	186	194				41	41	89	24	14
	Medians (% of LWUs basis) for1,500 to 3,000 Properties			*32*			*42*			*8*			*7*	*0.3*			*0.9*	*95*												*93*			*198*			*100*	*71*				*28*

Table 15 - Sewerage - Asset Management, Resource Management

	WATER UTILITY	ASSET MANAGEMENT: Infiltration (ML per 100km of Main) (23) 2003/04	Infiltration (23) 2004/05	Infiltration (23) 2005/06	Chokes & Collapses (No. per 100 km of Main) (24) NWI 56 2003/04	Chokes & Collapses (24) 2004/05	Chokes & Collapses (24) 2005/06	Overflows (No. per 100 km of Main) (25) NWI 57 2003/04	Overflows (25) 2004/05	Overflows (25) 2005/06	Interruptions to Service (No. per '000 properties) (26) 2003/04	Interruptions (26) 2004/05	Interruptions (26) 2005/06	Rehabilitations (% of Total Length) (27) 05/06	Rehabilitations (Service Connections %) (28) 05/06	Renewals ($'000 per 100 km of Main) (29) 05/06	Renewals (% of CRC) (30) 05/06	Mains Maintenance Cost ($'000 per 100 km of Main) (31) 05/06	RESOURCE MANAGEMENT: Total Vol of Sewage Collected (ML) (32) 2003/04	Total Vol (32) 2004/05	Total Vol (32) 2005/06	% Sewage Treated (%) (33) 2005/06	% Sge Treated that was compliant (33a) NWI 53 2005/06	STWs compliant at all times (33b) NWI 52 2005/06	Percentage of Total Sewage Collected: Infiltration /inflow (34) 2005/06	Res (35) 2005/06	Non-Res (36) 2005/06	Trade Waste (37) 2005/06	Other (38) 2005/06	% of Sge Treated: Primary Level (39a) NWI 45 2005/06	Secondary Level (39a) NWI 46 2005/06	Tertiary Level (39a) NWI 47 2005/06	Vol of Sewage Collected per Property (kL/property) (39) NWI 58 2003/04	(39) 2004/05	(39) 2005/06	Biosolids Reused (%) (40) NWI 61 2003/04	(40) 2004/05	(40) 2005/06	Effluent Reused: Total Volume Reused (41a) NWI 60 2005/06	Volume Reused for Town Water (41b) 2005/06	% of Total Effluent that is Reused (41c) NWI 59 2003/04	(41c) 2004/05	(41c) 2005/06
	LWUs with 200 - 1,500 Pro																																										
70	Kyogle	297	121	266	59	96	54	115	5	16	19	24	13	4.3	0.3	13	0.0	124	329	293	390	92	84	0/3	25	63	12			17	83		111	175	237	25		100	52	41	29	21	13
77	Junee				63	87												34	256	270	***270***												172	188	167				***160***		60	59	***59***
78	Blayney			60	29	26	27												258	301	320	100	100	1/1	12	78	5	5			100		185	204	209	39			223		80	82	70
79	Walgett					8	22											31	622	622	***622***			0/1									392	391	410	83			***517***		83	83	***83***
68	Tenterfield				111	100	112				48	12	7			32	0.2		276	289	323	100	28	0/2								100	191	203	228				84	76	38	37	26
84	Gilgandra	124	124	143	9	24	89	6		6	15	11	11	1.4	0.4			60	313	297	280	100	75	0/1	18	54	18	7	3			100	236	240	209		5		280		100	100	100
73	Upper Lachlan		41		63	23	23	2				8	7					11	258	300	***300***			1/2							27	73	204	226	218								
82	Gloucester	48	97		24	89	85	17	2	85		55						593	214	234	220	100	42	0/1		86	14					100	164	183	149		100	100					
87	Bourke							3	3	3					1.9			194	300	300	250	100		0/1		100					100		235	235	235								
86	Hay				54	54	57				2	2	2	5.4	1.2	365	2.4	70	369	307	326	100	90	0/1							100		301	290	257								
83	Oberon				26	42	39	11	8	14			2		0.9			167	313	326	384	100	25	0/1						1		99	261	269	321			100			0		
81	Gwydir	104	207	138	119	85	184	30	41	73	20	93	9		0.2				215	263	235	100	73	0/2	24	71	5					100	175	227	213		64	13		38		17	
64	Dungog			97	267	125	53	132	41	53	201	218	131	3.1	0.2	333	1.1	37	234	273	370	100	2	0/1	8	37	5		50	50	50		224	262	374	61			203		93	91	55
85	Uralla	64	55		14	28		14	28		4	8							147	145	***145***												148	143	143								
95	Weddin				64	132													171	162	***162***												181	162	171	18	17				24	18	
89	Bogan			20			10						2		0.3			93	281	339	622	100		0/1	1	47	1	2	49	50	50		289	346	589								
76	Harden				40	36	36	9	13	13								167	186	186	566	100	33	0/1		33			67	33	33	33	198	193	585	75	100	100	85	85	99	40	15
88	Wakool																0.1		73	73	147	100											80	76	139								
93	Tumbarumba	16	23		53	23					2	2		6.5	7.4	37	0.2		258	264	278	100										100	287	289	304								
94	Gundagai	14		1	27		14								0.1			8	105	105	***105***	100		0/1	1	76	24				100		121	121	116				105	105	100	100	100
92	Carrathool				51	118	100		5	5	2	2	1					20	107	127	97	96									100		128	152	115						1	1	
96	Warren				473	327	359			6						129	0.3	241	196	172	173	100		1/1							100		230	212	213								
99	Coolamon				8	8												18	95	95	***95***												118	118	104	25			***70***		74	74	***74***
102	Lockhart				20						10								136	157	***157***			2/2							1	99	177	181	196				56	56	3	11	
98	Walcha	77	52		14	41	38	28	38	21	5	5	4			141	0.7	162	188	172	183	100	75	0/1								100	246	226	233								
100	Balranald		3		11	11	8											34	250	250	***250***										100		329	331	313								
97	Bombala	79	38		44	9	91				13	13	3					29	170	171	173	100	80	1/1							100		228	227	229	17			35	35	21	21	20
101	Murrumbidgee				81	110	89						4	1.4				61	151	161	160	100									100		211	224	219				6		7	2	4
90	Guyra	356	453		30	8	28		3	8	15	24	10	0.56					129	164	202	86		0/1							100		177	233	181								
104	Boorowa				66	46	48											45	90	90	***90***			0/1							100		170	171	171								
105	Brewarrina				12	86												208	180	213	210	100									100		385	459	438	76			170		89	80	81
106	Jerilderie					71	33											44	90	88	89	100	75	0/1								100	218	209	210	4			40		44	45	45
103	Central Darling			2		38	66			15		58	154		3.6			441	100	100	100	100		0/1		99	1				100		292	292	513								
107	Urana				33	40	13	7			7							47	88	88	89	99									100		308	296	292								
	Medians (% of LWUs basis) for 200 to 1,500 Properties			*78*			*48*			*14*			*7*	*3.1*			*0.2*	*60*														*100*			*218*			*100*					*57*

Total volume of sewage collected = 166000 ML

Total volume of effluent reused = 30000 ML

(ie. 18% of sewage collected)

NOTE: 1. Approximately 30% of councils did not report the volume of sewage collected (column (32)). For these councils the previous year's data has been adopted and is shown in italics bold.

2. A slightly higher number of councils did not report the volume of effluent reused (column (41)). For these councils, where the effluent reused for the previous year was greater than 25%, then the previous years value of effluent reused has been adopted. For such Councils, the adopted value is shown in bold italics in column (41). For the remainder of Councils either not reporting or reporting zero effluent reuse, the cell is shown as blank.

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Table 16 - Sewerage - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)															EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity	ERRR			Cross Subsidies		Operating Result		Externalities (Annual Fees to EPA)	Operating Cost (OMA)				Total Cost				Management Cost			
		($'000)		Res Revenue (% of Annual rates and charges)	Res Vol collectd (% total excl infiltration & inflow)	Written Down Cost ($'M)	Current Replacement Cost ($'M)	Current Replacement Cost per Assessmnt ($)	(%)	(%)			Annual Fees & Charges ($/assessment) (49a)	Developer Charge ($/assessment) (49b)	($/property)		($/property)	($/property)				($/property)				($/property)			
		(42) NWI 64		(43)	(44)	(45)	(46)	(47)	(48) NWI 69	(48a) see also Table 7 Col (11) NWI 67					(50)		(51)	(52) NWI 77				(53) NWI 78				(54)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04 2004/05 2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2004/05	2005/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
	Sydney Water	675,000				14,749				4.1	3.8	2.7						272	199	199	131	360	288	288	249				
	Hunter Water	62,700				1,494				4.2	3.2	3.2			37			182	158	155	164	251	227	225	259				
LWUs with > 10,000 Properties																													
1	Gosford	27,400	33,300	88		285	402	6,100	-6.8	1.5	0.2	2.4			26	108	0.2	241	246	267	287	336	354	369	394	129	133	136	160
2	Wyong	24,800	23,400	85		229	380	6,500	0.1	1.1	0.2	0.3			6	10		261	231	233	251	396	351	363	382	90	64	68	76
3	Shoalhaven	27,600	26,900	89		391	530	12,800	4.2	4.1	4.7	2.4			283	224	0.0	313	323	333	335	437	449	460	461	124	127	136	128
5	MidCoast	26,100	26,400	82	80	189	316	9,600	27.4	-0.2	5.0	3.3			215	141	0.6	305	325	326	383	510	546	526	590	84	85	49	57
6	Tweed	25,300	18,600	89	71	174	243	8,400	-19.5	5.3	6.2	1.3			486	149	0.7	252	291	310	335	395	435	453	532	90	99	110	117
9	Wagga Wagga	10,000	12,200	76		53	63	2,800	-23.5	6.3	9.0	10.7			206	268		137	151	145	189	177	192	185	242	30	33	28	*53*
7	Port Macquarie-Hastings	15,700	15,800	87		112	164	6,200	-28.1	5.3	1.8	1.6	29213	29213	163	96		277	298	329	354	390	411	447	470	75	93	86	90
11	Albury City	10,300	10,600	77		122	211	10,000	9.0	0.2	0.3	0.8			-23	-2	0.8	273	263	272	300	399	412	417	434	135	111	99	119
10	Coffs Harbour	24,100	20,200	82		163	224	9,800	-5.6	4.8	7.0	4.1			524	293	0.5	314	334	352	377	463	483	508	534	84	106	114	119
13	Tamworth Regional	12,100	13,000	83		60	125	7,200	-18.3	1.1	4.9	7.7			224	310	0.1	341	289	231	284	496	439	351	431	87	82	86	*98*
15	Eurobodalla	14,000	9,200	89	***90***	99	143	7,900	6.7	4.3	4.7	0.3			201	-43		304	345	374	384	461	490	523	552	124	110	107	108
17	Queanbeyan	7,300	7,100	87	84	98	165	11,000	-21.9	4.3	0.1	-0.8			96	58	1.5	226	226	215	251	303	304	357	393	77	74	80	90
19	Orange	8,900	8,700	88	69	69	111	7,800	-18.8	0.4	0.2	1.0			86	-6	9.9	173	217	259	254	388	437	480	480	67	86	89	103
20	Goulburn Mulwaree	5,800	6,300	76			***37***	***3,900***	19.7	4.6	5.3	7.1			88	211	3.0	288	255	208	259	367	336	273	358	129	122	79	*122*
18	Dubbo	8,800	9,100	69		53	120	9,200	-5.9	2.4	2.8	3.3	1	1	137	141	2.9	266	365	371	338	402	529	503	479	107	113	122	134
16	Wingecarribee	9,300	10,400	88		110	150	10,700	5.7	1.9	1.7	2.9			108	165	0.4	252	271	284	312	446	456	466	495	96	108	128	157
14	Clarence Valley	9,193	8,800	89		43	87	6,300	-35.6	4.8		3.2				172		250	267		369	361	377		486	88	97		151
21	Bathurst Regional	5,400	6,700	72	72	77	94	7,400	-12.3	5.2	-1.4	1.1			-66	59		236	237	309	291	377	369	453	421	96	99	144	*137*
24	Ballina	7,100	7,600	80		63	94	7,100	-20.3	6.0	-1.1	0.5			35	76	1.5	310	323	375	366	436	446	499	495	100	115	119	118
22	Lismore	7,200	8,000	75		88	129	11,300	-14.4	2.7	3.5	2.6	17	17	184	223		243	278	279	305	373	411	414	441	44	52	56	61
	Medians (% of LWUs basis) for >10,000 Properties							*7,850*	*-9.6*			*2.4*				*141*					*308*				*465*				118
LWUs with 3,001 - 10,000 Properties																													
23	Bega Valley	7,400	7,000	84		62	106	10,000	0.7	-2.4	1.1	-0.1	42	34	69	-4	3.9	317	428	474	480	507	617	676	672	157	199	190	187
27	Byron	8,300	9,300	76		56	99	9,600	14.4	2.6	0.1	3.1			13	63	0.2	520	493	568	489	614	676	757	681	132	160	156	143
26	Country Energy	2,400	3,600	87		19	***35***	***3,600***		-0.3	-3.9	2.5			-45	34		175	201	201	245	249	283	282	326	59	68	81	113
25	Kempsey	5,800	5,500	77		75	119	14,000	-98.3	9.6	1.5	1.4			63	43	11.6	343	338	349	401	484	486	491	508	100	95	112	*129*
31	Lithgow	2,900	3,700	89		8	39	5,400	-23.2	3.0	2.8	9.3			45	106	9.3	221	183	259	349	290	254	331	426	55	41	106	142
29	Armidale Dumaresq	3,500	***3,500***	69			***59***	***7,700***		-1.1	0.0				35		1.6	294	313	300		432	441	427		129	131	135	
30A	Hawkesbury	3,800	4,100	77		52	***60***	***7,900***	-4.5	-0.2	-1.4	0.6			-81	58	9.1	329	348	379	379	463	522	594	498	149	154	165	
30	Griffith	5,000	4,900	61		34	39	4,900	-7.0	0.7	0.6	0.5			58	26	2.0	430	357	466	482	568	509	629	670	99	122	127	*146*
33	Richmond Valley	3,400	6,100	85		25	49	7,500	-17.5	3.2	1.6	11.0	17	17	101	484		308	320	343	381	438	434	457	490	144	148	162	161
32	Mid-Western Regional	3,200	3,400	75		18	***40***	***6,600***	-21.4	0.5	2.9	2.6			117	118	0.6	259	291	293	308	385	412	411	425	86	106	108	110
34	Nambucca	3,400	3,500	70		27	50	8,000	-9.1	2.6	3.2	2.7			155	134	0.3	225	262	261	285	368	408	392	414	86	103	90	91
35	Singleton	2,400	3,100	84		25	46	8,600	-20.1	5.2	1.3	3.2	36		116	210		199	191	201	223	354	349	358	381	59	49	66	*72*
37	Inverell	1,600	1,700	90		7	27	5,800	-26.8	-3.8	-2.3	0.2			-13	2		185	192	209	224	314	314	328	333	73	75	82	91
41	Muswellbrook	2,800	3,300	79		17	34	6,900	-18.7	2.9	3.8	5.5			168	242		309	288	311	309	425	403	427	463	56	63	74	82

Table 16 - Sewerage - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)															EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity	ERRR			Cross Subsidies		Operating Result		Externalities (Annual Fees to EPA)	Operating Cost (OMA)				Total Cost				Management Cost			
		($'000)		Res Revenue (% of Annual rates and charges)	Res Vol collectd (% total excl infiltration & inflow)	Written Down Cost ($'M)	Current Replacement Cost ($'M)	Current Replacement Cost per Assessmnt ($)	(%)	(%)			Annual Fees & Charges ($/assessment) (49a)	Developer Charge ($/assessment) (49b)	($/property)		($/property)	($/property)				($/property)				($/property)			
		(42) NWI 64		(43)	(44)	(45)	(46)	(47)	(48) NWI 69	(48a) see also Table 7 Col (11) NWI 67					(50)		(51)	(52) NWI 77				(53) NWI 78				(54)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04 2004/05 2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2004/05	2005/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
36	Parkes	1,600	1,900	82		8	23	4,700	-42.8	6.5	2.4	5.7			104	159		153	142	154	162	225	210	223	231	30	28	33	34
42	Corowa	1,800	2,000	86	80	15	41	9,000	-21.2	-0.5	0.5	-0.5			77	26	0.7	219	252	239	254	319	351	327	394	84	85	85	*94*
38	Moree Plains	2,900	***2,900***	88		18	36	9,300	11.1	1.6	3.5	3.1			130	161	2.9	360	376	347	455	492	511	483	611	121	166	131	143
44	Gunnedah	1,100	***1,100***	90		8	21	5,400	-29.8	1.7	-0.6	2.2	13		15	62		109	117	115	123	186	191	247	204	21	24	24	37
46	Narrabri	1,400	1,900	80		17	43	11,000	1.7	-1.3	-1.9	1.8			-110	56		202	204	259	220	384	383	431	386	87	84	51	59
43	Tumut	2,400	3,000			19	37	9,200	-21.9	1.5	1.5	5.0			133	340	1.6	261	281	274	240	479	510	499	443	83	82	49	*27*
49	Young	1,500	***1,500***	79	***90***	5	6	1,900	-43.6	11.4	15.4	17.2			245	258	3.1	127	121	126	101	158	150	157	135	33	33	20	20
39	Cowra	1,400	1,600	72		6	9	2,500	-30.0	5.9	3.8	9.4			43	144	0.7	161	183	252	190	249	268	337	273	88	114	178	117
45	Upper Hunter	1,800	1,900	78		13	25	6,400	-23.2	0.5	1.7	0.3			104	78	12.5	226	234	287	304	356	356	420	426	96	109	128	131
52	Snowy River	1,600	***1,600***	88			***22***	***10,300***		3.1							1.7	211	198			334	323			61	63		
51	Forbes	1,700	1,600	85	78	15	20	6,400	14.9	5.4	3.7	2.6			126	68	28.3	184	248	259	257	285	310	338	386	39	31	38	38
50	Cooma-Monaro	1,900	2,100	81		18	25	7,500	-0.4	0.2	0.0	1.4			-19	49	0.1	329	366	389	367	504	545	563	544	104	110	117	112
53	Berrigan	1,200	1,600	85		9	22	7,000	-22.5	-0.8	-0.3	-0.7	85	14	26	112	1.8	188	215	238	254	338	359	372	385	88	87	87	88
Medians (% of LWUs basis) for 3,000 to 10,000 Properties								*7,500*	*###*			*2.6*				*78*				*285*				*425*				102
LWUs with 1,501 - 3,000 Properties																													
48	Leeton	1,900	2,300	71		13	***24***	***7,400***	-26.5	4.7	1.9	5.8			140	331		257	253	347	298	374	371	467	422	64	74	140	120
54	Deniliquin	1,600	1,800	80		8	24	7,300	-24.2	0.8	1.9	2.1			98	53		288	285	273	320	424	409	410	450	95	100	108	101
47	Bellingen	1,700	1,900	85		18	***32***	***10,600***	-24.7	-0.3	-0.7	-5.6			52	-240	12.3	322	357	336	327	514	545	523	874	141	155	138	126
60	Glen Innes Severn	926	1,200	90		9	23	8,200	-6.6	5.0		4.5				177	1.6	141	145		174	195	200		265	63	62		*62*
58	Cootamundra	852	1,200	72		9	18	6,700	0.8	-8.8	-3.6	4.3			-74	125	1.1	151	164	176	187	347	360	376	311	44	43	46	45
57	Wellington	1,300	1,600	75		10	20	8,000	9.7	5.4	4.8	8.5			109	176	23.8	214	241	240	255	346	364	354	403	95	88	95	106
91	Cabonne	1,700	1,300	76		7	10	4,000	-20.6	3.8	7.0	6.2			392	158	1.0	195	158	173	188	337	301	315	296	45	38	46	45
80	Greater Hume	752	825	82	***90***	12	21	8,600	-10.6	-0.1	-0.1	-1.6			-8	-49	3.8	194	197	226	239	304	305	332	398	65	67	67	*90*
59	Lachlan	1,100	912	82		8	16	7,500	-31.2	0.3	2.4	-0.1			161	87		163	183	200	197	287	307	322	320	51	51	58	27
65	Murray	1,100	***1,100***	76	58	8	8	3,700	2.4	2.9	2.8	2.5			73	85	17.6	185	198	217	243	346	364	386	406	82	85	100	110
62	Narromine	996	1,000	79		8	17	8,600	-20.5	-0.8	-0.7	0.5				11		303	264	271	279	471	447	464	498	162	155	125	146
56	Yass Valley	1,400	***1,400***		78		***12***	***5,500***		11.5	10.2				274			258	261	286		347	349	376		80	87	90	
61	Liverpool Plains	653	713	81		3	18	9,500	-36.0	0.8	-1.4				6	28	0.4	175	157	187	220	334	313	333	356	35	40	44	62
55	Warrumbungle	773	***773***	86			***20***	***8,500***		-1.0	-2.4				-83			255	299	245		437	483	457		93	111	102	
69	Temora	440	461	90		3	9	4,500	-9.6	-0.2	-1.1	0.5			15	25		158	165	171	157	203	212	219	201	25	26	29	33
71	Palerang	869	***869***				***8***	***4,300***		2.1								312	320			425	433			91	91		
72	Bland	811	1,100	64	84	4	8	4,200	-36.4	0.7	1.0	4.9			67	180	1.3	215	227	256	257	356	372	405	402	45	41	66	75
63	Narrandera	1,100	***1,100***	77		4	14	7,700	-40.5	1.8	5.7	-0.6			212	89		222	284	310	491	332	371	398	555	67	84	137	128
67	Cobar	506	559	89		15	9	5,300	-32.8	-0.2	-4.6	-0.4			-46	37		152	215	236	185	270	215	355	305	68	68	20	20
74	Wentworth	749	938	90		14	15	8,900	7.1	0.7	-0.6	1.1			-114	-21	31.1	267	251	244	253	471	463	481	490	70	61	63	*62*
75	Coonamble	512	588	77	87	4	***13***	***8,600***	-45.5	-3.5	-5.2	-2.9			-52	29		168	165	172	143	396	400	372	344	21	21	20	20
Medians (% of LWUs basis) for 1,500 to 3,000 Properties								*7,500*	*###*			*1.1*				*69*				*241*				*400*				69

Table 16 - Sewerage - Financial, Efficiency

	WATER UTILITY	FINANCIAL (SEE ALSO COST RECOVERY TABLE 7)																EFFICIENCY (SEE ALSO COST RECOVERY TABLE 7)											
		Total Revenue (excl. Capital Works Grants)		Residential Revenue Vs Vol Collected		Current Replacement Cost (CRC) of System Assets			Net Debt to Equity	ERRR			Cross Subsidies		Operating Result		Externalities (Annual Fees to EPA)	Operating Cost (OMA)				Total Cost				Management Cost			
		($'000)		Res Revenue (% of Annual rates and charges)	Res Vol collectd (% total excl infiltration & inflow)	Written Down Cost ($'M)	Current Replacement Cost ($'M)	Current Replacement Cost per Assessmnt ($)	(%)	(%)			Annual Fees & Charges ($/assessment) (49a)	Developer Charge ($/assessment) (49b)	($/property)		($/property)	($/property)				($/property)				($/property)			
		(42) NWI 64		(43)	(44)	(45)	(46)	(47)	(48) NWI 69	(48a) see also Table 7 Col (11) NWI 67					(50)		(51)	(52) NWI 77				(53) NWI 78				(54)			
		2004/05	2005/06	2005/06	2005/06	2005/06	2005/06	2005/06	2003/04 2004/05 2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2004/05	2005/06	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06	2002/03	2003/04	2004/05	2005/06
LWUs with 200 - 1,500 Properties																													
70	Kyogle	766	769	85	84	7	13	8,200	-2.5	-1.3	-0.2	1.3			-6	47		260	279	300	313	451	474	500	446	95	91	93	104
77	Junee	542	***542***	86		3	7	4,100	-15.9	0.2	1.3	1.3			42	36	1.5	185	237	230	218	270	325	319	299	48	55	56	53
78	Blayney	1,100	989	82	89	9	10	6,800	-10.5	3.6	3.3	2.5			202	136	0.5	203	312	302	298	305	406	460	456	90	135	136	127
79	Walgett	576	619			5	12	6,500	-18.2	-2.7	-1.7	-1.7			-30	-16		211	226	189	194	450	466	426	418	60	82	76	*73*
68	Tenterfield	755	808	80		6	14	9,200	-22.7	1.9	-3.7	-1.1			-81	23	3.4	324	347	416	406	484	509	585	540	186	204	222	213
84	Gilgandra	398	452	81	66	3	***10***	***7,700***	-11.7	-0.9	-1.3	4.8			-23	92	101.8	150	144	167	144	276	267	290	205	41	41	41	20
73	Upper Lachlan	676	756	82		9	12	8,400	0.0	0.6	0.3	1.0			-29	37		265	249	298	279	437	425	454	430	41	38	87	87
82	Gloucester	1,400	738	69		5	11	7,200	-30.5	0.9	12.2	-2.6			514	-58	15.0	230	289	380	391	373	434	532	526	59	59	56	*64*
87	Bourke	571	615	76			***7***	***6,500***	-34.7	-10.4	-1.1	-0.2			7	8	2.2	271	381	263	326	441	551	435	538	102	140	89	114
86	Hay	543	573	84		5	6	4,300	-14.1	-1.2	-1.8	-0.3			-30	26	0.6	272	255	290	249	441	423	457	425	71	73	71	69
83	Oberon	611	455	53		4	5	3,800	-16.3	-2.0	0.7	-1.3	5	5	65	-20		368	325	304	323	464	420	401	421	58	58	59	67
81	Gwydir	360	***360***	82	***90***		***14***	***12,100***		-5.3							36.2	252	278			481	515			60	73		
64	Dungog	693	621	84	40	3	9	8,900	-19.1	12.8	10.3	6.5			244	189	43.4	254	270	274	278	351	361	389	405	88	89	93	102
85	Uralla	469	475	85		3	***6***	***6,000***	-25.1	0.0	0.7	-0.7			31	-11		265	248	275	319	426	408	432	477	145	115	114	156
95	Weddin	325	174			1	7	6,800	-34.2	-12.5	4.2	-13.8			50	-91		133	111	137	127	281	251	275	274	29	27	26	27
89	Bogan	477	464	85	47	3	*7*	***6,700***	-29.1	4.9	3.9	2.9			139	99	13.8	187	190	236	237	294	297	342	335	125	126	162	*149*
76	Harden	346	388	82		0	7	6,500	-30.2	-1.8	-12.0	-2.3			-56	-4	8.5	218	217	289	293	341	340	413	402	80	69	66	77
88	Wakool	571	539	76		5	9	7,900	-5.6	1.6	2.7	3.3			160	158	39.7	289	272	266	204	420	407	390	315	123	101	80	47
93	Tumbarumba	588	521	73		2	10	10,300	-40.4	-4.0	2.2	-0.5			146	54		216	197	244	244	442	423	468	474	56	59	66	70
94	Gundagai	229	252	55	77	1	1	1,200	-6.1	0.5	-1.2	0.4			-5	7		215	236	236	243	244	267	268	272	52	49	46	*51*
92	Carrathool	143	134	86			***4***	***4,700***	-4.5	-5.0	-1.7	-1.8			-31	-58		112	209	130	145	186	280	201	213	29	38	25	25
96	Warren	529	598	79		3	7	7,900	-32.5	4.7	3.6	6.9			214	305		212	230	254	230	412	387	414	390	51	55	58	64
99	Coolamon	722	453	81		4	4	4,400	-14.3	2.3	11.3	5.1			550	190	17.5	140	170	178	148	282	312	329	284	37	47	62	59
102	Lockhart	335	***335***	71			***11***	***13,600***		0.2	-0.2				0		3.1	206	189	186		371	343	404		93	92	86	
98	Walcha	248	327	69		3	6	7,600	-4.4	-3.1	-2.6	-1.0			-70	-8		268	200	220	301	390	323	345	422	48	38	50	54
100	Balranald	305	325	85		7	10	12,600	-7.5	0.5	0.5	0.7			46	62		101	162	154	161	307	364	356	367	41	45	34	34
97	Bombala	393	385	69		3	6	7,000	-12.1	4.9	4.7	5.5			207	223	3.1	207	168	203	180	278	243	277	255	66	56	78	74
101	Murrumbidgee	265	286	85		3	4	5,400	-24.6	3.2	3.1	2.6			172	168	33.4	138	124	133	165	199	183	191	224	56	56	55	*58*
90	Guyra	549	498	81		10	14	14,000	3.2	1.2	1.1	0.6			159	25		196	248	273	228	414	463	496	392	52	82	97	54
104	Boorowa	139	312	78		3	5	8,800	-1.8	-1.4	-1.2	4.4			-61	291	4.5	151	177	205	171	328	287	315	298	21	25	36	21
105	Brewarrina	250	***250***	90		1	6	9,900	-35.5	-3.7	-1.2	4.7	79		-11	54	1.0	378	400	411	363	446	477	536	461	39	39	37	21
106	Jerilderie	267	297	89		1	4	8,100	-40.9	7.1	6.6	6.9			239	306	5.6	254	257	299	311	334	322	363	377	97	87	100	*104*
103	Central Darling	97	84	81	***90***	2	2	11,500	-8.8	-0.2	-1.5	-2.1			-61	-174	83.4	219	129	257	436	304	216	345	590	27	27		
107	Urana	195	189			3	4	11,400	-7.1	0.0	0.3	0.1			-3	-66		235		276	325	404		430	488	84	84	111	116
Medians (% of LWUs basis) for 200 to 1,500 Properties								*7,650*	*###*			*0.6*				*37*					*247*				*404*				67

NOTE: 1. If the reported management cost is <$20/property or not reported, the previous year's management cost has been adopted. 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 is reported to be greater than 90%, a maximum value of 90% has been adopted. This is shown in ***italics bold***.

4. The Total Cost (col (53)) is OMA plus depreciation. It is noted that this takes no account of future expenditure for capital works.

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Table 17 - Sewerage - Environmental, Levels of Service

	WATER UTILITY	ENVIRONMENTAL															LEVELS OF SERVICE																	
		BOD				SS																												
		DEC Discharge Licence Compliance (%) (55)			90 %-ile Limit (mg/L) (56)	DEC Discharge Licence Compliance (%) (57)			90 %-ile Limit (mg/L) (58)	Compliance with Environmental Regulator (58a) NWI 54		Sewer Main Chokes & Collapses see Col(24) Table 15 (per 100 km of Main) (59) NWI 56			Sewer Overflows to the Environment see Col(25) Table 15 (per 100 km of Main) (60) NWI 57			Odour Complaints (per 1000 properties) (61) NWI 41			Service Complaints (per 1000 properties) (62) NWI 42			Total Complaints (per 1000 properties) (62a) NWI 43			Average Customer Outage Time (mins/property-unplanned) (63)			Customer Interruption Frequency (per 1000 properties) (64)			Average Duration of Interruption (hours) (65) NWI 44		
		2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
	Sydney Water									N		73	83	87	73	84	53	1	1	1.1			0.3			1						1	1	1
	Hunter Water									N		60	66	58	46	51	41	2	2	2.7			29			32						3	3	3
LWUs with > 10,000 Properties																																	
1	Gosford	100	100	100	30	100	100	100	50	Y		43	49	44	58	48	44	1	1	1.7	13	15		2					0	3	3	2		
2	Wyong	100	100	100		100	100	100	50	Y		42	56	49	1	1	0	1.0	1	1.0	10	12	10	11					0	2	2	2		
3	Shoalhaven	100	100	96	40	93	95	94	40	Y		32	30	29	27	26	20	0	1	0.8	16	16	16	22					0	2	2	2		
5	MidCoast	100	98	98	30	100	96	97	30	N			33	33	2	1	7	1	2	1.0	9	10	11	14					0			0		
6	Tweed	97	94	91	25	96	87	94	50	N		8	17	13	4	5	1	1.2	1	1.1	6	12	10	13	3	4	8	23	24	46	3	3	3	
9	Wagga Wagga	100	98	92	20	90	93	71	30		Y	94	102	127	4	20	52		0	0.1	85	75	89	89	5	2		72	21	0	1	1	0	
7	Port Macquarie-Hastings	100	77	75	30	96	90	96	30		Y		19	20		1	0			1.0	6	4	5	6					0	1	1	1		
11	Albury City	85	82	95	20	58	94	95	30		Y	187	186	194	37	19	6	0	0	0.3	40	39	41	42		0			0	2	2	3		
10	Coffs Harbour	100	100	95	50	100	98	95	50		Y	81	64	88	47	23	2	3.1	0	0.0	37	30	23	23					0		2	2		
13	Tamworth Regional	100	99	100	30	81	92	96	30		Y	65	84	49	17	16	14	0.1		0.0	33	30	18	19		0			0	5	1	0		
15	Eurobodalla	99	98	99	20	100	100	99	30	N		6	48	34	6	11	13	2	3	0.2	52	27			0	0		0	0	0	5	5	0	
17	Queanbeyan	100	100	100	10	100	100	100	20		Y	122	92	24		3	0		0	0.0	22	19	5	7		0			0	3	1	1		
19	Orange	95	100	100	20	95	100	100	50	N		80	112	126	8	13	16	0.1		0.1	34	32	46	46					0	2		0		
20	Goulburn Mulwaree	90	100			70	100						5	0		20		3.2	1	0.0	78	31							0		3	0		
18	Dubbo	100	92	100	30	67	92	96	30	N		64	64	57	25	15	9		0	0.0	15	16	13	14	1	1	1	15	16	13	1	1	1	
16	Wingecarribee	96	99	100	20	98	98	99	30	N		46	79	116	1	1	40	1	1	0.3	30	35	39	45					0	4	4	4		
14	Clarence Valley	90	95	90	50	86	71	78	50	N		23	5	20	22	11	13	1.0	1	0.9	17	5	7	15					0		2	2		
21	Bathurst Regional	100	100	100	20	96	90	75	25	N		20	23	20	2	3	4	0.2	0	0.1	14	14	19	19	1	1	2	12	12	15	2	2	2	
24	Ballina		100				100						24	0		3			1	0.0		10				0			0	0.0		6	0	
22	Lismore	100	100	100	20	87	100	98	30		Y	73	67	77	4	4	4	0	0	0.2	24	19	21	22		0			0	0.0	1	1	0		
	Medians (% of LWUs basis) for >10,000 Properties			*100*				*96*						*39*			*8*			*0.2*			*12*	*15*			*2*			*0*			*1*	
LWUs with 3,001 - 10,000 Properties																																	
23	Bega Valley	96	99	99	30	96	99	95	30		Y	28	44	49	23	35	46	1	3	0.6	10	10	2	3					0	2	2	2		
27	Byron	100	100	100	30	100	99	100	30		Y	15	22	34	2	16	13	2	2	2.6	10	10		5	1	0		10	4	0	1	2	1	
26	Country Energy	100	100	94	50	96	100	94	50	N		109	125	183	22	16	7	3.5	0	0.2	2	1									1	1	1	
25	Kempsey	100	99	99	20	92	96	92	30		Y	15	2	6	7	6	6	1.3	0	1.7	1	1	1	3					0	3	3	3		
31	Lithgow	80		88	15	75		83	30			2		2						0.0	11		15	15					0	1		1		
29	Armidale Dumaresq	100	100	100	20	100	100	100	30	N		78	40	68	8	37	40	1	1	0.3	49	60	84	84					0		2	2		
30A	Hawkesbury	100				100						41			2			0.8			10									1				
30	Griffith	100	54	87	50	75	45	80	50		Y	165	161	132	12	21	7	40.8	2	2.7	54	56	41	51		1	1		9	12	2	2	2	
33	Richmond Valley	100	100	100	35	91	87	91	35	N		9	9	12	2	2	6	2	2	3.2	7	5	6	9		0	0	3	3	3		2	2	
32	Mid-Western Regional	100	100	96	20	96	92	77	30			54	98	61	8	5	61			0.0	32	47	41	41		5	5		46	44	3	2	2	
34	Nambucca	92	90	97	20	96	96	99	30		Y	46	46	16	46	33	23	3.1	1	1.7	12	16	11	16		0			0	0	1	1	0	
35	Singleton	100	100	100	30	100	100	100	30			33	23	32			16	0.9	0	0.8	13	17	16	18	3	3	3	16	15	15	3	3	3	
37	Inverell	100	100	100	20	100	87	92	30	N		125	126	0	6	5		0	0	0.0	45	44	44	44	0	0	0	5	5	4	1	1	1	
41	Muswellbrook	100	100			100	100					175	208		98	7		1	1	0.0	52	77			8	15		111	149		1	2		
36	Parkes		66	100	20		42	66	25			69	54	64	85	56	31	1.1	1		14	11	13	17					0	1	1	1		
42	Corowa	80		83	20	40		89	30		Y	38	39	53	7	4	5	2.8	2	1.1	31	18	26	30					13	4	2	2		

Table 17 - Sewerage - Environmental, Levels of Service

	WATER UTILITY	ENVIRONMENTAL																LEVELS OF SERVICE																	
		BOD				SS																													
		DEC Discharge Licence Compliance (%) (55)			90 %-ile Limit (mg/L) (56)	DEC Discharge Licence Compliance (%) (57)			90 %-ile Limit (mg/L) (58)	Compliance with Environmental Regulator (58a) NWI 54	Sewer Main Chokes & Collapses see Col(24) Table 15 (per 100 km of Main) (59) NWI 56			Sewer Overflows to the Environment see Col(25) Table 15 (per 100 km of Main) (60) NWI 57			Odour Complaints (per 1000 properties) (61) NWI 41			Service Complaints (per 1000 properties) (62) NWI 42			Total Complaints (per 1000 properties) (62a) NWI 43			Average Customer Outage Time (mins/property-unplanned) (63)			Customer Interruption Frequency (per 1000 properties) (64)			Average Duration of Interruption (hours) (65) NWI 44		
		2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
38	Moree Plains		58				92					12	12		1	1			1			34	34					17	17		72	72		4	4	
44	Gunnedah	100	100			92	78		30	Y		55	136	123	26	126	63	0	0	0.0	26	42	46		47		0	0	0	2	2	1	1	1	1
46	Narrabri	80		100	20			100	45	Y		155		90			8	2.2		0.5	95				1							0	3		3
43	Tumut	88	88	100	40	95	98	97	45			99	131	153		11		1.1		0.0	48	55	55		55			0			0	0	5	5	2
49	Young	100	100	100	30	83	92	92	25	Y		50	128	0	8	210	113		1	0.0	44	78	55		58		1	5	2	24	52	17	1	2	2
39	Cowra	75	100	100	20	58	75	75	30			11	11	11	89	79	74	0	1	0.0	39	34	29		29		0	0	0	1	1	2	4	4	4
45	Upper Hunter	100	100	100	20	90	89	90	30	Y		67	64	55	32	8	28	0.6	1		30	52	32		34			0	13		1	66	5	2	3
52	Snowy River	100	84	85	20	100	77	91	30	Y		7	4	85	4	4	4	6.1	1	2.0	15	18	21		18				0			0	2	4	2
51	Forbes	93	31	92	10	100	92	100	15	Y		82	75	67	5	6	2	0	0	0.6	80	72			2		44	11	38	238	128	210	3	2	3
50	Cooma-Monaro	100				100						49	49		155	155		2	2		118	114					14			116	112	0	2		
53	Berrigan	100	100	92	20	100	100	92	30			22	24	102					1	2.9	7	8	71		80		0.1	0.0	0	1	0	2	2	2	2
Medians (% of LWUs basis) for 3,000 to 10,000 Properties				*100*				*92*						*55*			*16*			*0.6*			*18*		*17*			*1*			*1*			*2*
LWUs with 1,501 - 3,000 Properties																																			
48	Leeton	100	100	100	70	100	100	100	70	Y		90	92	58	10	14	6	0	4	3.0	0	7	7		14		3	3	3	27	27	25	2	2	2
54	Deniliquin	69	85	100	20	77	100	92	30	Y		30	30	216		1		1		2.6	30	41	48		53		2	0	10	20	0	81	2	2	2
47	Bellingen	97	92	99	20	95	91	94	30	Y		21	39	48	19	9	27	1.1	1	2.4	5	22	12		17			0			0	0	1	1	1
60	Glen Innes Severn	100	100	100	20	100	100	100	30			17	15	29	8	5		0.4			17	0	14		15						0	0			0
58	Cootamundra	100	100	100	30	85	85	85	40			162	162	113						0.0	48	49	67		67			0			0	0	2	2	2
57	Wellington	100	100	100	15	50	50	100	30	Y		100	100	19	145	145	17			0.0	26	24	8		56			0			0	0	1	1	1
91	Cabonne	100	100	97	30	87	100	79	30			38	46	36		36					11	10	11		14			0			0	0		1	0
80	Greater Hume	90	100	100	20	100	100	92	30	N		39	49	42	3					0.0	25	26						2	1		11	7	4	3	3
59	Lachlan	100	100			100	60					40	17								20	19						0			1	0	1	1	
65	Murray	NL		100		NL		100		Y		7	6	8				0		0.9	0	0			1		4			15	3	0	4		0
62	Narromine	NL		100		NL		100		Y			0	31						0.5	5	4			1							0			0
56	Yass Valley	100	100		30	100	100		30	Y		83	71	72	1				1	0.0	58	55	50		50			0	0		0	1	3	3	3
61	Liverpool Plains	100	92			15	37					28	23		2	8					11	8						0			8		2	1	
55	Warrumbungle			92	20			66	25	Y		64	87	86		43				0.0	43	78	60		60							0	2	2	0
69	Temora	100	100			95	90					599	488		449	159			1	0.0	80	106					0	2		2	27		2	2	
71	Palerang	97	95	95	20	92	87	85	30	Y		6	74	90	15	30	10	2.7		0.0	11	26	1		1			0	0		6	3		1	2
72	Bland	100	92	100	20	77	95	100	30	Y		141	116	0	26	179			2	0.0	120	128					0	9		2	74	0	2	2	0
63	Narrandera	100	100	100	15	42	33	33	20			25	11		11	3		1		0.6	42	94											2	2	
67	Cobar	NL	100	100	11	NL	100	100	20	Y		1	1	0						0.0	1	1						0			0	0	2	2	2
74	Wentworth	100	100	100	50	100	100	100	50	Y		33	29	27			1	2.0	3		14	22			1			0			0	0	2	1	1
75	Coonamble	92	92	92	30	25	41	54	50	N		16	6	12			2			0.0	28	16	33		34			0			0	0		1	0
Medians (% of LWUs basis) for 1,500 to 3,000 Properties				*100*				*94*						*36*			*8*			*0.0*			*7*		*1*			*1*			*0*			*1*

Table 17 - Sewerage - Environmental, Levels of Service

WATER UTILITY	ENVIRONMENTAL																LEVELS OF SERVICE																	
	BOD				SS																													
	DEC Discharge Licence Compliance (%) (55)			90 %-ile Limit (mg/L) (56)	DEC Discharge Licence Compliance (%) (57)			90 %-ile Limit (mg/L) (58)	Compliance with Environmental Regulator (58a) NWI 54		Sewer Main Chokes & Collapses see Col(24) Table 15 (per 100 km of Main) (59) NWI 56			Sewer Overflows to the Environment see Col(25) Table 15 (per 100 km of Main) (60) NWI 57			Odour Complaints (per 1000 properties) (61) NWI 41			Service Complaints (per 1000 properties) (62) NWI 42			Total Complaints (per 1000 properties) (62a) NWI 43			Average Customer Outage Time (mins/property-unplanned) (63)			Customer Interruption Frequency (per 1000 properties) (64)			Average Duration of Interruption (hours) (65) NWI 44		
	2003/04	2004/05	2005/06	2005/06	2003/04	2004/05	2005/06	2005/06	2005/06		2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06	2003/04	2004/05	2005/06
LWUs with 200 - 1,500 Properties																																	
70 Kyogle	92	66	97	20	78	37	69	30	Y		59	96	54	115	5	16	4	5	2.0	30	24	13	25			1	1	1	19	24	13	1	1	1
77 Junee		100				100					63	87								82	101								0	0			
78 Blayney	100	100	100	30	100	100	100	30			29	26	27					1	0.0	13	11	11	11				0			0	0	1	1	1
79 Walgett	**NL**											8	22						0.0		1	1	1							0			0
68 Tenterfield	100	95	88	40	90	43	50	45	N		111	100	112						0.0	48	42	52	52	4	1	1	48	12	7	2	2	2
84 Gilgandra	100	100	100	20	100	100	75	50	N		9	24	89	6		6	4	5	3.7	5	14	34	46	1	1	1	15	11	11	1	1	1
73 Upper Lachlan	100	100	65	100	100	100	58	100			63	23	23	2					0.0	0	8	7	7			1	1		8	7		2	2
82 Gloucester	100	100	83	30	54	85	42	40	N		24	89	85	17	2	85	1.5	3	2.0	20	23	27	29			13			55	0		4	0
87 Bourke	NL	42	33	15	NL	8		20					0	3	3	3	5	5	4.7	89	89	140	145			0			0	0	3	3	3
86 Hay	100	100	100	30	90	90	90	40			54	54	57						0.0	37	35	32	33	1	1		2	2	2	8	8	0
83 Oberon		92	92	20		50	50	25	N		26	42	39	11	8	14		1	0.0	12	12	13	14						2	3	2	2
81 Gwydir	100	94	92	20	52	46	71	30	N		119	85	184	30	41	73	8.3	4	0.0	49	32	4	6			11	1		93	9	6	2	1
64 Dungog			2	7	NL		2	30		Y	267	125	53	132	41	53		1	0.0	85	98	2	2	24	26	16	201	218	131	2	2	2
85 Uralla	100	100			100	100					14	28		14	28			1		8	11			0	1		4	8		2	2	
95 Weddin											64	132					1.1	4		19	41									2	4	
89 Bogan	**NL**				NL								10						3.8		2		2						2	2	2	2	2
76 Harden	100	90	92	20	100	90	33	30	N		40	36	36	9	13	13		7	0.0	37	24	26	29			0			0	0	2	2	2
88 Wakool	**NL**				NL						0									0									0				0
93 Tumbarumba			100				100			Y	53	23	0							17	16			1	1		2	2	0	4	4	0
94 Gundagai			90				95			Y	27		14						0.0	17		11	16						0				0
92 Carrathool	**NL**				NL						51	118	100		5	5				24	38	35	35	0	0	0	2	2	1	2	2	2
96 Warren			100	55	100	100	100	65		Y	473	327	359			6				5	58	75	75						0				0
99 Coolamon											8	8								4	4								0	4	4	
102 Lockhart	100	100		20	100	100		30			20	0	0				14.3	13	0.0	18	22	17	17	1			10	0	0	2		0
98 Walcha	100	92	92	20	83	58	75	30			14	41	38	28	38	21		4	0.0	10	20	8	8	1	1	0	5	5	4	2	2	1
100 Balranald	**NL**				NL						11	11	8						0.0	12	12	11	16		0			0	0	1	1	0
97 Bombala	100	100	100	20	100	100	100	30		Y	44	9	91				1.3		0.0	23	42	3	3	1	1	0	13	13	3	2	2	2
101 Murrumbidgee		9		10		17		15	N		81	110	89						0.0	30	35	21	21		0	1		0	4	2	2	3
90 Guyra	100	100			92	83					30	8	28		3	8		1	0.0	15	28	17	17	2	3	1	15	24	10	2	2	2
104 Boorowa											66	46	48						0.0	25	21	30	30						0	1		0
105 Brewarrina	100		100	20	100		100	30			12	86	0							34	73	38	38					0	0	2		0
106 Jerilderie	100	100	100	20	75	75	75	30	N			71	33						0.0	0						0			0	0		5	5
103 Central Darling	**NL**				NL					Y		38	66			15	15	15	15.4	73	61	138	154			7.0	18		58	154	1	2	2
107 Urana			100				100				33	40	13	7			14	27	13.3	4	3	10	23	0.4	0.0		7	0	0	1	1	1
Medians (% of LWUs basis) for 200 to 1,500 Properties			*95*				*75*						*38*			*14*			*0.0*			*12*	*16*			*1*			*0*			*1*

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Table 18 - Sewerage - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

WATER UTILITY	OPERATING & MAINTENANCE COST*								MANAGEMENT/ADMIN			RETAIL/WHOLESALI		O&M COST COMPONENTS for TYPE of ASSET													
	Components (1) - Process				Components (2) - Type of Asse				Components			Components		Pumping						Sewer Main				Treatment			
	Maintenance	Operation	Energy	Chemicals	Mains	Pumping Stations	Sewage Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical
	($/property)				($/property)				($/property)		(c/kL)	($/property)		(c/kL)	($/pumping station)				($/property)	(c/kL)	($'000/100km)			($/ML)	($/property)		
	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)
	2005/06				2005/06				2005/06		2005/06	2005/06		2005/06	2005/06					2005/06				2005/06			
Sydney Water																											
Hunter Water																											
LWUs with > 10,000 Properties																											
1 Gosford	60	51	16		35	49	36	7	142	19	160	36	84	22	16,853	3,848	10,228	2,777	8	162	162	24	139	164	17		
2 Wyong	86	71	19	0	28	64	80	4	76		76	80	92	31	25,641	8,761	14,127	2,754	7	134	131	27	104	385	40	27	
3 Shoalhaven	35	154	16	2	34	54	79	40	100	28	128	79	88	31	9,784	5,971	2,404	1,409	8	191	122	112	10	448	44	11	2
5 MidCoast	96	198	27	4	26	56	107	137	44	13	57	107	81	26	8,608	1,975	4,789	1,843	12	119	90	18	72	495	30	28	4
6 Tweed	94	90	29	5	34	65	108	11	86	31	117			19	9,478	3,283	4,344	1,850	13	104	140		140	324	47	29	5
9 Wagga Wagga (NO WS)	17	91	18	9	39	21	67	8	53		53	67	60	10	13,667	10,611	1,722	1,333	2	183	171	110	61	313	40		9
7 Port Macquarie-Hastings	124	103	32	6	35	91	120	18	64	26	90	120	126	34	14,716	4,548	7,684	2,484	15	129	149	42	108	445	22	50	6
11 Albury City	69	82	25	5	31	33	80	37	108	11	119	80	64	14	12,875	125	9,071	3,679	9	127	146		146	325	22	14	5
10 Coffs Harbour	55	162	34	7	29	71	130	27	74	45	119	130	100	26	13,289	7,614	3,281	2,395	13	104	104	36	68	467	45	18	7
13 Tamworth Regional	65	100	13	8	40	21	102	23	30	68	98	102	61	8	16,500	1,227	12,045	3,227	4	141	141	55	86	363	46	25	8
15 Eurobodalla	40	197	27	11	51	75	101	48	108		108	101	126	39	10,385	5,484	2,984	1,918	14	270	166	137	29	534	67	10	11
17 Queanbeyan	100	35	12	16	49	23	66	23	67	22	90	66	72	9	23,933		20,933	3,000	3	194	233		233	264		27	16
19 Orange	27		21	14	41	12	98		64	39	103	98	53	4	11,929	5,714	3,071	3,143	3	140	154	96	58	334	44	8	14
20 Goulburn Mulwaree	40	95	3		34	19	77	7	89	32	122	77	54	11	15,833	9,167	4,417	2,250	3	200	152		152	447	77		
18 Dubbo	40	136	22	6	9	22	116	57	103	31	134	116	31	11	45,286	8,429	27,571	9,286	5	44	37	35	2	587	67	25	6
16 Wingecarribee	57	60	19	19	39	37	79		132	25	157	79	76	15	7,116	3,029	1,145	2,942	15	163	117		117	326	39	11	19
14 Clarence Valley	174	23	17	5	43	51	125	0	97	54	151	125	94	19	7,718	529	5,682	1,506	10	163	178		178	474	8	94	5
21 Bathurst Regional	48	78	20	7	38	11	105	0	92	46	137	105	49	4	9,667	267	7,200	2,200	2	140	146	61	85	387	45	18	7
24 Ballina	117	95	36		38	77	112	21	97	21	118	112	115		8,736		6,836	1,900	17		156	1	156	357	65	14	
22 Lismore	107	87	22	29	61	41	109	33	38	22	61	109	102	13	15,531	625	11,906	3,000	8	192	218	43	175	343	26	25	29
Medians (% of LWUs basis) for >10,000 Properties	*62*	*91*	*21*	*7*	*37*	*45*	*101*	*22*	*88*	*28*	*118*	*101*	*81*	*15*	*13,082*	*4,198*	*6,259*	*2,439*	*8*	*141*	*148*	*42*	*106*	*374*	*44*	*25*	*7*
LWUs with 3,001 - 10,000 Properties																											
23 Bega Valley	56	230	8		39	62	192		138	48	187	192	102	32	11,103	5,121	4,638	1,345	8	201	130	37	93	982	184	2	
27 Byron	83	192	47	24	29	75	192	50	111	32	143	192	104	22	9,123	1,716	4,938	2,469	20	86	114	75	38	569	76	25	24
26 Country Energy	118	7	6	1	50	16	66		54	59	113	66	66	11	14,000		11,636	2,364	3	338	226		226	449	6	55	1
25 Kempsey	116	113	26	17	48	69	152	2	113	16	129	152	118	29	7,747	3,747	2,544	1,456	13	202	167		167	636	56	43	17
31 Lithgow	162	28	17		40	32	135		103	39	142	135	72		6,906		5,594	1,313	6		77		77			97	
29 Armidale Dumaresq																											
30A Hawkesbury (NO WS)	159	25	24		24	60	116	7	121	49	171	116	84						24					359		101	
30 Griffith	46		24	23	60	118	138	21	107	38	146			30	29,556	23,926	3,222	2,407	10	154	191	158	33	354	46	18	23
33 Richmond Valley	93	106	20		48	61	91	20	119	42	161	91	109	18	12,667	8,700	967	3,000	15	141	171		171	266	64	21	
32 Mid-Western Regional	183	9	6		68	16	115		110		110	115	83		8,083		6,417	1,667	3		225	29	196	578		112	
34 Nambucca (Groundwater)	113	55	26		17	46	81	51	62	29	91	81	63	17	5,353		3,765	1,588	14	63	65		65	304		64	
35 Singleton	97	40	14	1	65	21	63	2	31	41	72	63	86	8	7,500	143	7,286	71		257	198	23	174	246	29	19	1
37 Inverell	43	73	18		43	24	67		45	45	91	67	67	14	5,190	4,143		1,048	5	240	154		154	375	54		
41 Muswellbrook	135	73	17	1	50	40	137		43	39	82	137	90						5					492	56	51	1

Table 18 - Sewerage - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

WATER UTILITY	OPERATING & MAINTENANCE COST*								MANAGEMENT/ADMIN			RETAIL/WHOLESALI		O&M COST COMPONENTS for TYPE of ASSET														
	Components (1) - Process				Components (2) - Type of Asse				Components			Components		Pumping						Sewer Main				Treatment				
	Maintenance	Operation	Energy	Chemicals	Mains	Pumping Stations	Sewage Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical
	($/property)				($/property)				($/property)		(c/kL)	($/property)		(c/kL)	($/pumping station)				($/property)	(c/kL)	($'000/100km)			($/ML)	($/property)		
	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)
	2005/06				2005/06				2005/06		2005/06	2005/06		2005/06	2005/06					2005/06				2005/06			
36 Parkes	33	90	4	2	33		95		18	16	34	95	33							178	158	40	118	513	71	8	2
42 Corowa	88	57	15		28	54	78	0	21	73	94	78	82	22	3,900		3,083	817	11	116	92		92	413	37	17	
38 Moree Plains	137	136	38	0	56	69	78	109	115	28	143	78	125						11					195	10	39	0
44 Gunnedah		81	5		31	6	45	3	23	14	37	45	38	4	12,500	10,000		2,500	1	218	132	132		314	41		
46 Narrabri	71	68	22		39	37	80	5	29	31	59	80	76	15	6,500	1,591	2,591	2,318	13	153	152	54	98	316	39	30	
43 Tumut	72	117	24		32	32	112	38	13	13	27	112	64	13	8,643	643	6,000	2,000	7	127	95		95	442	95		
49 Young		74	4	7	16	5	47	17	5	10	16	47	22	2	3,600	3,200		400	1	77	54	54		220	36		7
39 Cowra	35	28	10		26	17	30		110	7	117	30	43		8,429	3,857	2,286	2,286	5		98		98	138	21	4	
45 Upper Hunter	94	62	18		60	32	72	9	75	55	131			14	11,800	4,300	2,100	5,400	15	255	192	3	190	305	40	27	
52 Snowy River																											
51 Forbes	74	101	26	18	32	17	170		25	13	38	170	48	8	3,118	1,000		2,118	11	143	81		81	773	95	42	18
50 Cooma-Monaro	104	104	28	19	88	17	151		36	76	112	151	105		7,714	2,857	3,714	1,143	3		122	8	114	997	62	14	19
53 Berrigan		166			69	72		26	31	57	88		141	42	5,045	5,045				400	195	195					
Medians (% of LWUs basis) for 3,000 to 10,000 Properties	*94*	*74*	*18*	*7*	*40*	*35*	*93*	*17*	*54*	*39*	*110*	*93*	*82*	*15*	*7,747*	*3,802*	*3,739*	*1,833*	*8*	*166*	*142*	*47*	*98*	*375*	*50*	*28*	*7*
LWUs with 1,501 - 3,000 Properties																											
48 Leeton	152		12						114	7	120						3,733	933	9				145			74	
54 Deniliquin	201		18		193	7	19		101		101	19	200	4	913		130	783	6	1005	857		857	99		7	
47 Bellingen	65	98	26	13	14	50	133	4	68	58	126	133	64	17	5,333	2,148	1,963	1,222	12	46	45	12	33	436	55	33	13
60 Glen Innes Severn	45	56	11		33	2	55	21	41	22	62	55	35	1	1,000			1,000	2	100	95		95	166	35	12	
58 Cootamundra	47	67	26	2	38	19	70	14	24	22	45	70	57	11	12,750	5,750	5,750	1,250	2	215	184		184	391	28		2
57 Wellington	51	74	14	10	30	26	93		53	52	106	93	56		5,167		4,167	1,000	5		125		125	552	34		10
91 Cabonne	47	82	14		18	51	52	21	18	27	45	52	69	38	11,700	9,100	1,400	1,200	5	135	73		73	395	21	23	
80 Greater Hume	135		13		15	35	97	1	39	51	90			16	4,211		3,474	737	6	70	49		49	445		91	
59 Lachlan	47	109	14		34	33	81	21	27		27	81	68						4		110		110	324	64	7	
65 Murray	113	1	19		33	82	17	1	61	48	110	17	115	30	4,317		3,415	902	17	119	84		84	61		15	
62 Narromine	2		11		4	72	42	14	90	56	146			24	10,615	9,000		1,615	11	14	16	8	8	142	42		
56 Yass Valley																											
61 Liverpool Plains	138	11	9		25	27	98	8	56	6	62	98	52						2					495	3	88	
55 Warrumbungle																											
69 Temora (NO WS)	42	72	9		22	3	98	0	33		33	98	25											580		38	
71 Palerang																											
72 Bland (NO WS)	136	36	10		22	33	127		22	53	75	127	55	21	6,667		6,222	444	2	138	83	83		792		105	
63 Narrandera	92		16	21	46	76	116	125	127	1	128			37					2	227				564	55	19	21
67 Cobar	45	118	12	2		49	129			7	7	129	49	19	20,000		17,750	2,250	5					499	94	2	2
74 Wentworth	53	111	27		29	79	65	18	44	19	62	65	108	15	5,040	1,480	1,920	1,640	26	57	49	39	11	126		9	
75 Coonamble	78	41	8		31	36	60			16	16	60	67	18	4,667	1,667	2,000	1,000	8	162	113		113	307	28	31	
Medians (% of LWUs basis) for 1,500 to 3,000 Properties	*59*	*72*	*13*	*10*	*30*	*35*	*81*	*14*	*49*	*22*	*69*	*75*	*61*	*18*	*5,167*	*3,949*	*3,444*	*1,000*	*5*	*127*	*84*	*26*	*95*	*395*	*35*	*23*	*10*

Table 18 - Sewerage - Benchmarking Cost Data (Operating, Management, Wholesale/retail)

WATER UTILITY	OPERATING & MAINTENANCE COST*								MANAGEMENT/ADMIN			RETAIL/WHOLESALI		O&M COST COMPONENTS for TYPE of ASSET													
	Components (1) - Process				Components (2) - Type of Asse				Components			Components		Pumping						Sewer Main				Treatment			
	Maintenance	Operation	Energy	Chemicals	Mains	Pumping Stations	Sewage Treatment	Other	Administration	Engineering & Supervision	Total	Wholesale	Retail	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Energy Cost	Energy Cost	Total O&M Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Total O&M Cost	Operation Cost	Maintenance Cost	Chemical
	($/property)				($/property)				($/property)		(c/kL)	($/property)		(c/kL)	($/pumping station)				($/property)	(c/kL)	($'000/100km)			($/ML)	($/property)		
	(66)	(67)	(68)	(69)	(70)	(71)	(72)	(73)	(74)	(75)	(76)	(77)	(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)	(91)	(92)
	2005/06				2005/06				2005/06		2005/06	2005/06		2005/06	2005/06					2005/06	2005/06			2005/06	2005/06		
LWUs with 200 - 1,500 Properties																											
70 Kyogle	35	152	15	9	30	41	139		67	36	104	139	71	16	7,750	5,250	875	1,625	9	118	124		124	585	124		9
77 Junee (NO WS)	123	24	18		19		146		35	17	53	146	19								34		34	874		104	
78 Blayney (NO WS)		151	20		25	38	108		127		127	108	63	18	8,286	7,143		1,143	5	119	61	61		519	85		
79 Walgett	32	88			10	47	61	3	40	34	73	61	57		7,889	6,667	1,222				31		31	150	46	15	
68 Tenterfield		169	20	4	42	17	133		146	68	213	133	59	7	8,000	5,333		2,667	6	186	92	92		582	103		4
84 Gilgandra	30	95	6		25	50	56		13		13	56	75	24	5,154	3,385	1,154	615	6	118	94	34	60	268	53	3	
73 Upper Lachlan	28	134	16	14	21	45	121	4	58	29	87	121	66		8,857	5,429	1,000	2,429	12		66	55	11	557	86	18	14
82 Gloucester	216	88	24		189	32	106		24	40	64	106	222	22	6,857	2,714	2,714	1,429	7	1273	593		593	714	75	14	
87 Bourke	154	21	38		62	130	21		70	43	114	21	192	55	19,714		14,000	5,714	38	264	194		194	88	21		
86 Hay	43	118	19		28	39	93	19	65	4	69	93	68	15	6,250	3,250	1,500	1,500	9	110	97	27	70	362	71	13	
83 Oberon	84	129	21	23	50	20	181	5	10	57	67	181	70	6	8,000	4,667	333	3,000	8	156	167		167	565	112	33	23
81 Gwydir																											
64 Dungog	54	102	20		25	25	114	11	25	77	102	114	51	7	6,250		4,500	1,750	7	68	83	47	37	305	77	24	
85 Uralla	22	103	25	13	16	7	140		75	82	156	140	23						2					979	88	17	13
95 Weddin (NO WS)	18	76	6		14		61	25	8	19	27	61	14											358	55		
89 Bogan	54	27	7		18	37	32	1	149		149	32	55	6	9,750	4,000	4,500	1,250	5	31	93		93	55		18	
76 Harden	95	112	9		106		110	1	44	32	77	110	106							180	227	60	167	187	74	18	
88 Wakool	47	86	23		16	65	74	2	24	24	47	74	81	46	4,857	1,929	1,929	1,000	13	116				532	53	11	
93 Tumbarumba	121	48	4		46		128		70		70	128	46							151	91	91		421	2	121	
94 Gundagai	81	92	11	8	13	48	131		48	3	51	131	61	41	8,600	3,800	3,800	1,000	6	114	16	8	8	1124	53	53	8
92 Carrathool	79	25	16		5	35	56	25	14	11	25	56	40	29	2,333		1,917	417	6	41	20		20	484		46	
96 Warren	97	57	12		50	52	64		30	34	64	64	102	24	5,250		4,750	500	5	237	241		241	301			
99 Coolamon (NO WS)	24	57	8		8	16	64		22	37	59	64	24								18		18	618	57		
102 Lockhart (NO WS)																											
98 Walcha	98	129	20		61	25	101	60	32	22	54	101	87	11	20,000	3,000	12,000	5,000	6	262	166	3	162	432	64	23	
100 Balranald	74	32	15	7	49	71	7		34		34	7	120		4,500		3,583	917	15		97	63	34	21			7
97 Bombala	24	69	13		13	29	64		74		74	64	42	13	4,400	3,200	400	800	5	58	29		29	277	48	8	
101 Murrumbidgee	87	3	14	4	18	45	44			58	58	44	63	21	2,750	83	2,167	500	8	82	61		61	201		33	4
90 Guyra	24	123	19	8	16	2	125	31	20	34	54	125	18	1	1,000			1,000	2	74	42	42		690	89	1	8
104 Boorowa	42	97	11		28	17	104		2	19	21	104	46		4,500		3,500	1,000	4		45		45	611	97		
105 Brewarrina	111	194	38		71	123	148		21		21	148	194	28	7,375	4,000	1,625	1,750	29	162	208		208	338	127	13	
106 Jerilderie	181	5	21		9	78	108	12	42	61	104	108	87	37	6,600		4,800	1,800	21	45	44		44	517		108	
103 Central Darling	400		36		308	128							436	25	6,250		4,500	1,750	36	600	441		441				
107 Urana (NO WS)	186	17	7		27	133	50		23	93	116	50	159	45	4,444	444	3,778	222	7	90	53	7	47	170		50	
Medians (% of LWUs basis) for 200 to 1,500 Properties	*77*	*88*	*16*	*8*	*25*	*40*	*104*	*11*	*35*	*34*	*67*	*104*	*65*	*21*	*6,425*	*3,800*	*2,714*	*1,250*	*7*	*118*	*91*	*47*	*60*	*432*	*74*	*18*	*8*

* OMA cost comprises Operating & Maintenance Cost (Cols 66 to 69 or Cols 70 to 73) plus Administration Cost (Col 74) plus Engineering and Supervision Cost (Col 75).

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APPENDIX A

NATIONAL PERFORMANCE COMPARISONS 1991/92 to 2005/06

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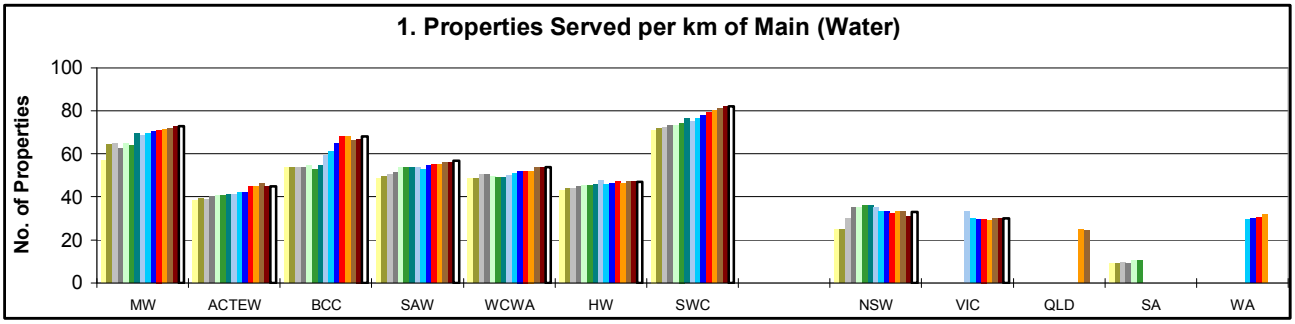
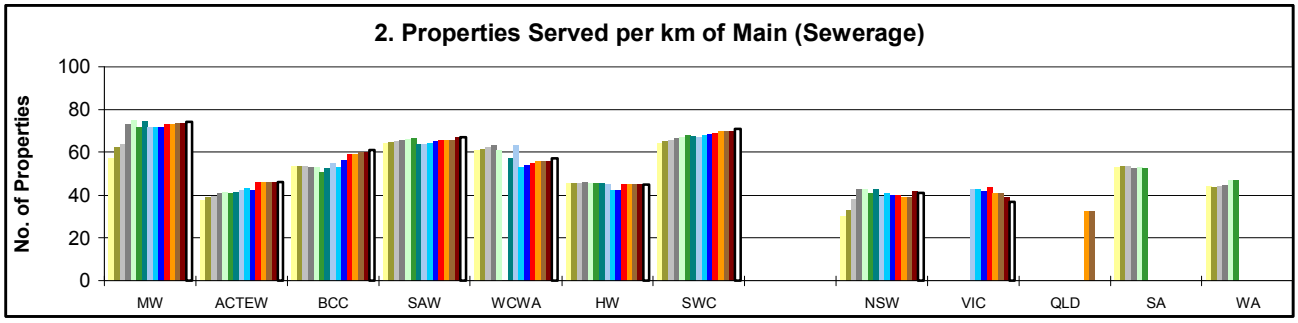
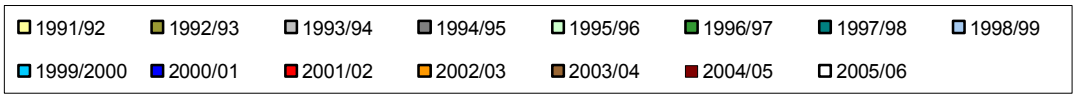
PERFORMANCE COMPARISONS - Utility Characteristics







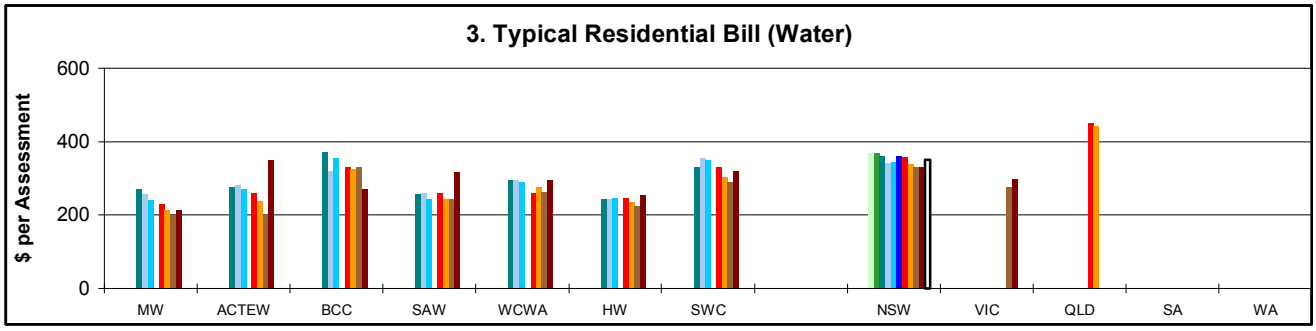
Metropolitan Water Utilities		Country Water Utilities	
MW	Melbourne Water Consolidated*	NSW	NSW Country
ACTEW	ACT Electricity and Water	VIC	VIC Country
BCC	Brisbane City Council	QLD	QLD Country
SAW	SA Water Corporation (Adelaide)	SA	SA Country
WCWA	WA Water Corporation (Perth)	WA	WA Country
HW	Hunter Water Corporation		
SWC	Sydney Water Corporation		

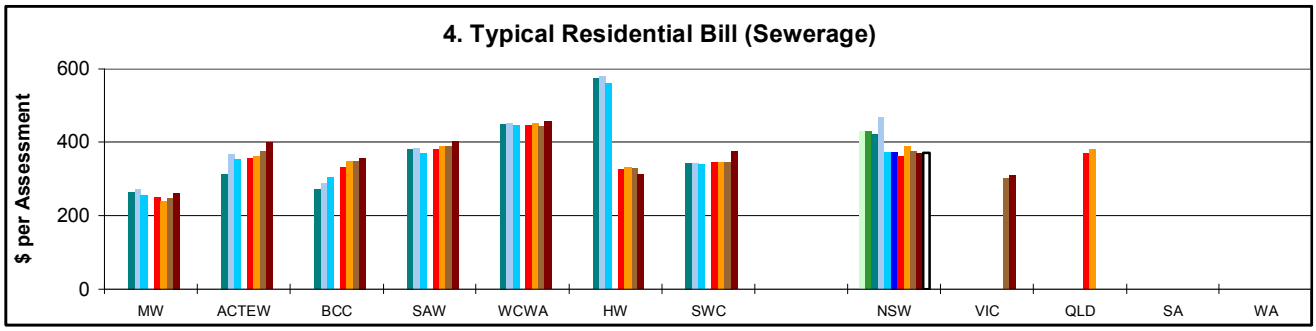
** Melbourne Water was disaggregated into 4 constituent utilities in 1994. Melbourne Water Consolidated results shown for 1994/95 to 2005/06 are either aggregated results of the constituent utilities or consolidated results reported in the National Performance Report 2005-06, WSAA Facts (see note 1) or reported in Urban Water Review (see note 2).*

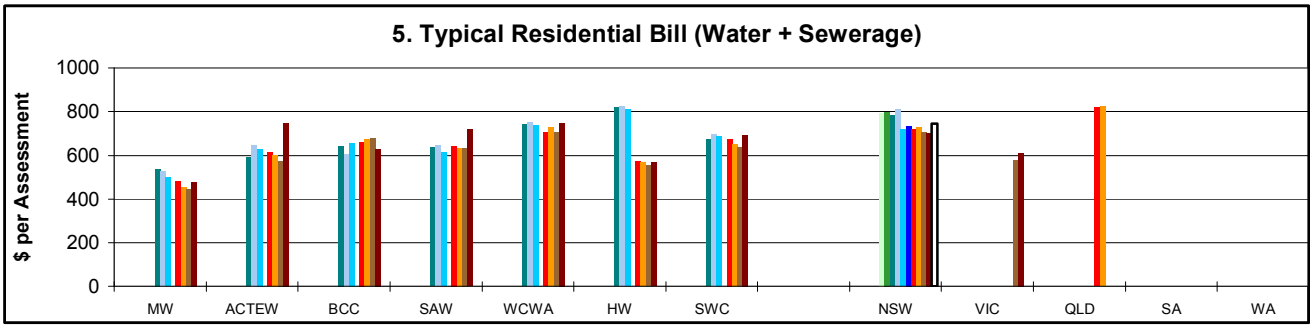
NOTES:

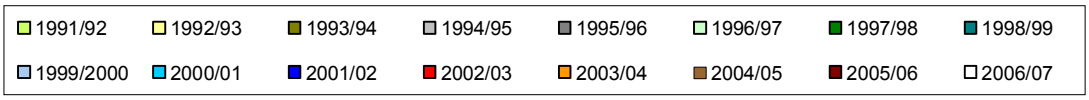
1. Results for 2005/06 obtained from the National Performance Report 2005-06 for Major Urban Water Utilities and Non Major Urban Water Utilities. Results for the metropolitan water utilities for 1994/95 to 2004/05 obtained from "The Australian Urban Water Industry - WSAA Facts 2005", and "*The Australian Urban Water Industry - WSAA Facts 1999*", Water Services Association of Australia.
2. Results for Victoria for 1996/97 to 2004/05 obtained from *"Urban Water Review 2004/2005"*, and "*Urban Water Review 1998*", Victorian Water Industry Association.
3. Results for SA Country and WA Country for 1990/91 to 1996/97 obtained from *"Government Trading Enterprises Performance Indicators 1992/93 to 1996/97" and "1990/91 to 1994/95"*, Steering Committee on National Performance Monitoring of Government Trading Enterprises, April 1998.
4. Results for QLD Country for 2002/03 and 2003/04 obtained from "*Urban Water Service Providers Queensland Report 2003/2004*", Queensland Department of Natural Resources and Mines. These results are for 18 large and medium utilities and exclude Brisbane City Council. These results therefore do not report the overall performance of the Queensland country utilities and have been included only for illustrative purposes.
5. Results for WA for 1999/2003 obtained from "*Water Performance Information on 32 Major WA Towns 1999/2003*", Western Australia Economic Regulation Authority. The results do not include Perth.

PERFORMANCE COMPARISONS - Social





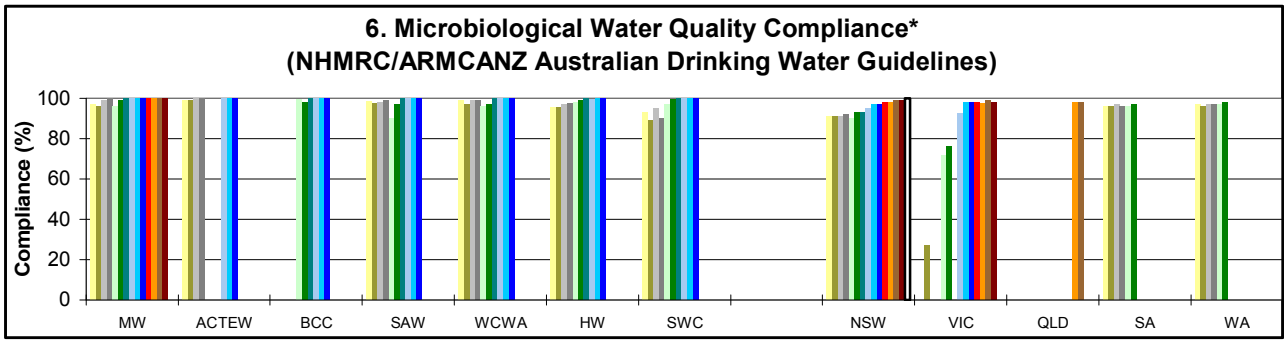


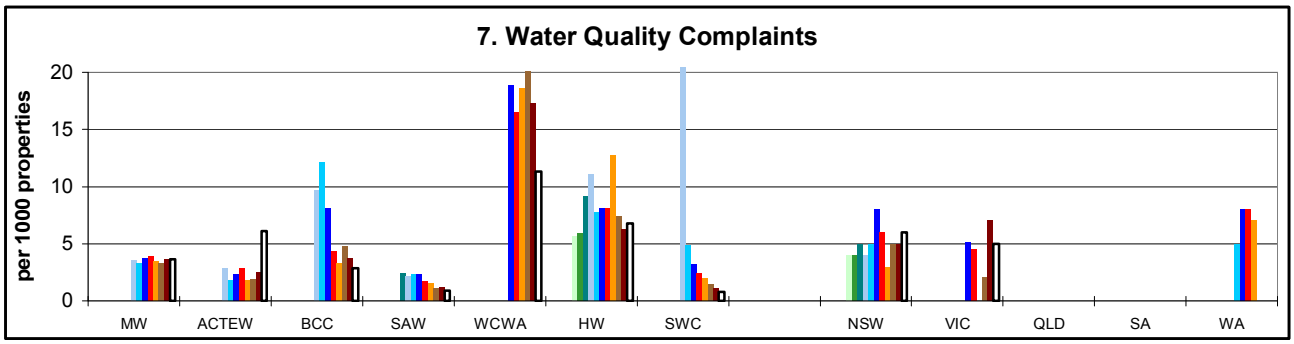


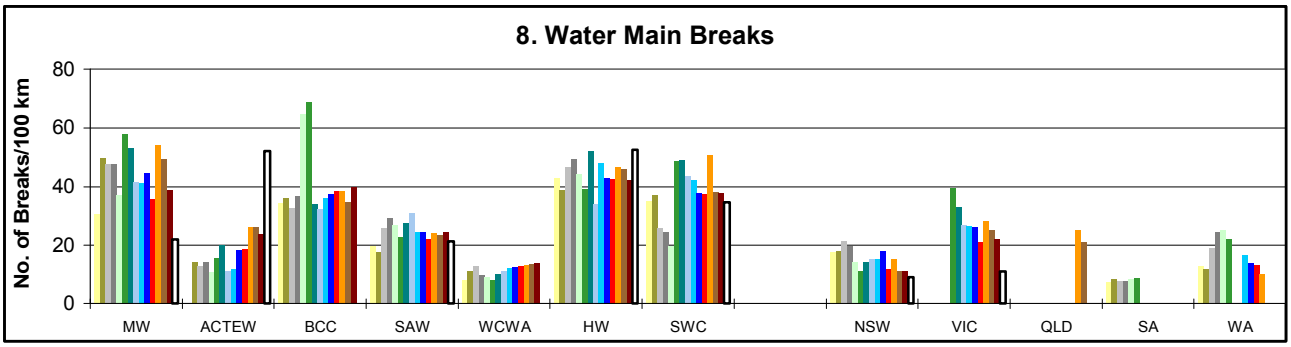
NOTES

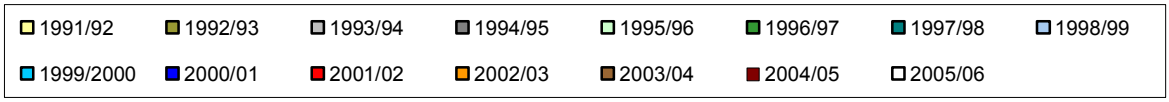
1. The Typical Residential Bill (TRB) is the annual bill paid by a residential customer using the utility's average annual residential potable water consumption.
2. The TRB is the principal indicator of the overall cost of a water supply or sewerage system.

PERFORMANCE COMPARISONS - Social (Water)







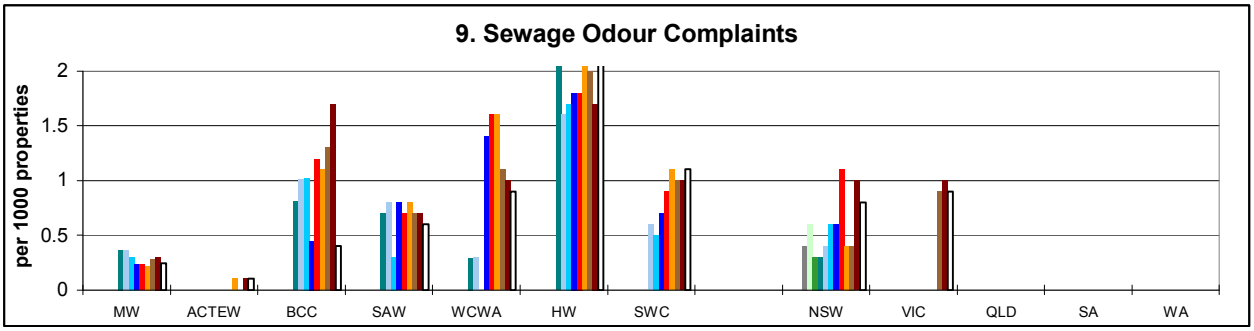


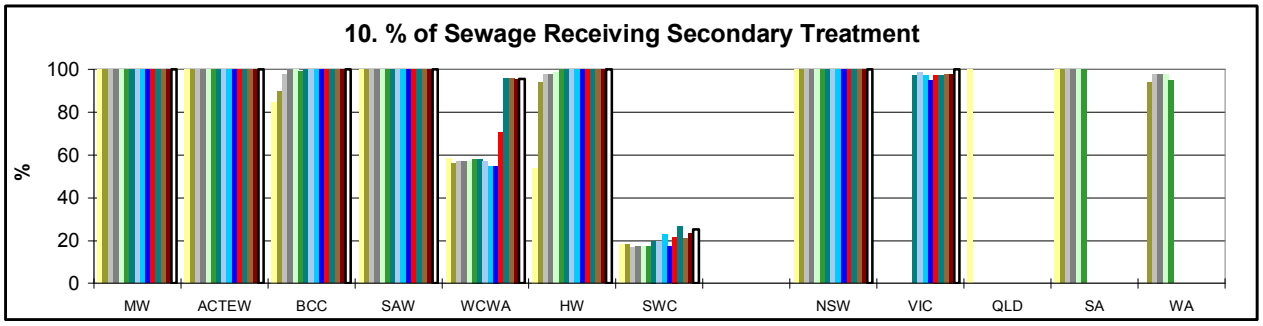
*** Microbiological Water Quality Compliance**

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).

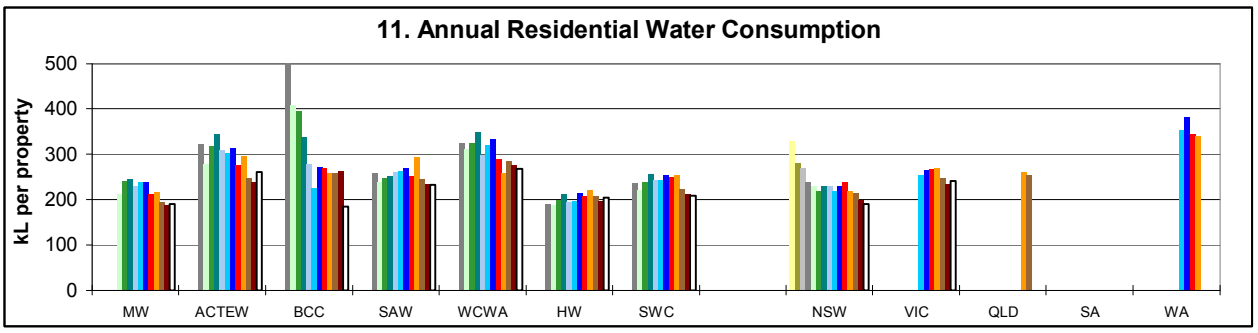
The exceptions are Victorian country utilities where results up to 2003/04 are on the basis of the less stringent *1984 World Health Organisation Guidelines* and which are now on the basis of the Victorian Safe Drinking Water Regulations 2005, and also Melbourne Water where prior to 2004/05 the results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

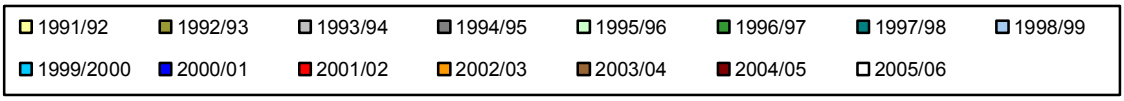
PERFORMANCE COMPARISONS - Social (Sewerage)



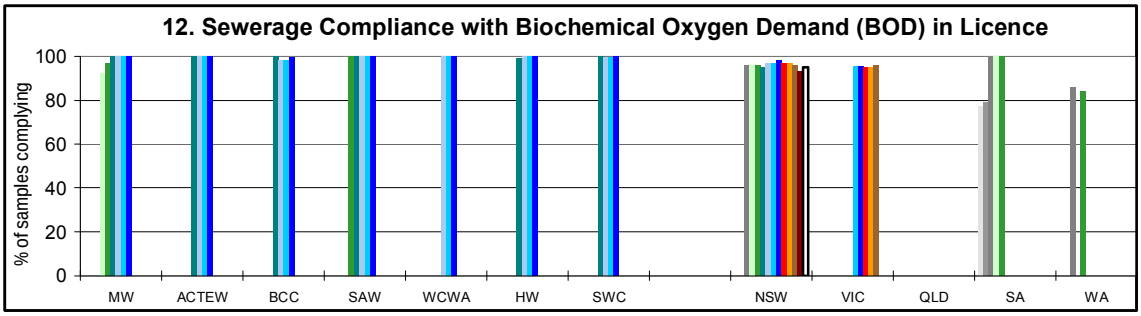


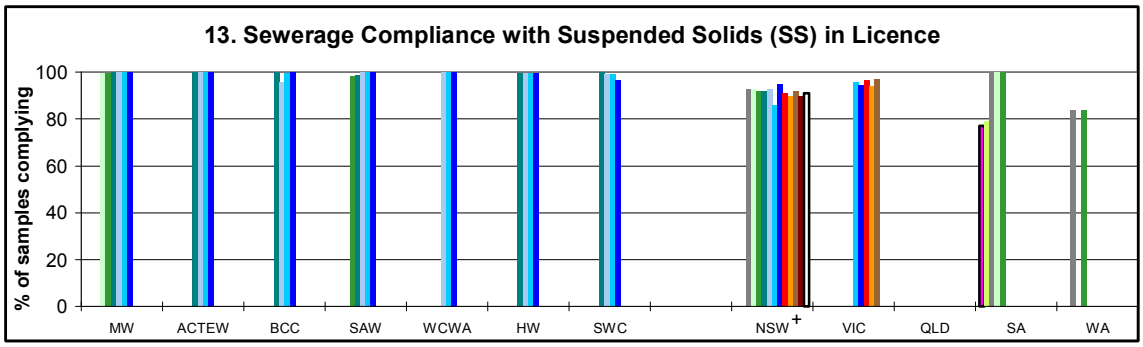
PERFORMANCE COMPARISONS - Environmental (Water)

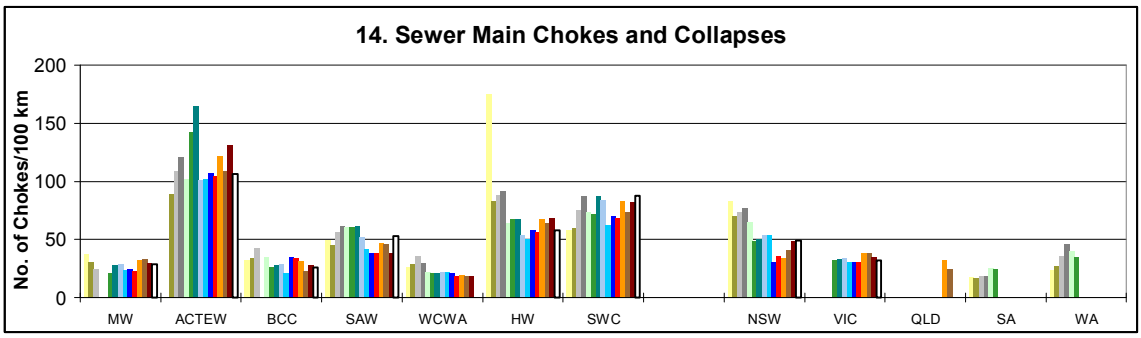


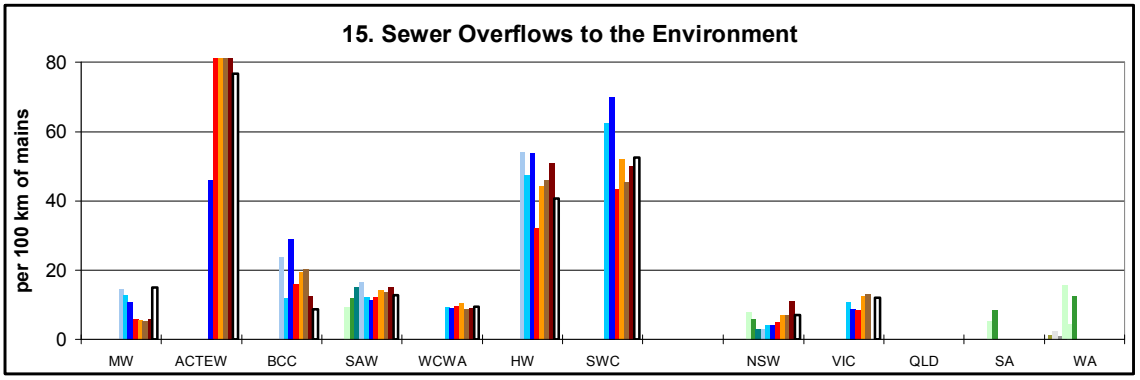


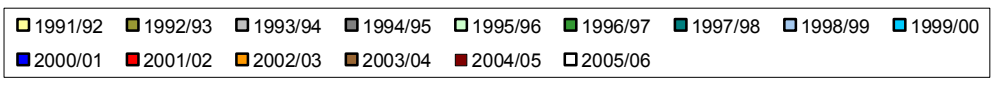
PERFORMANCE COMPARISONS - Environmental (Sewerage)





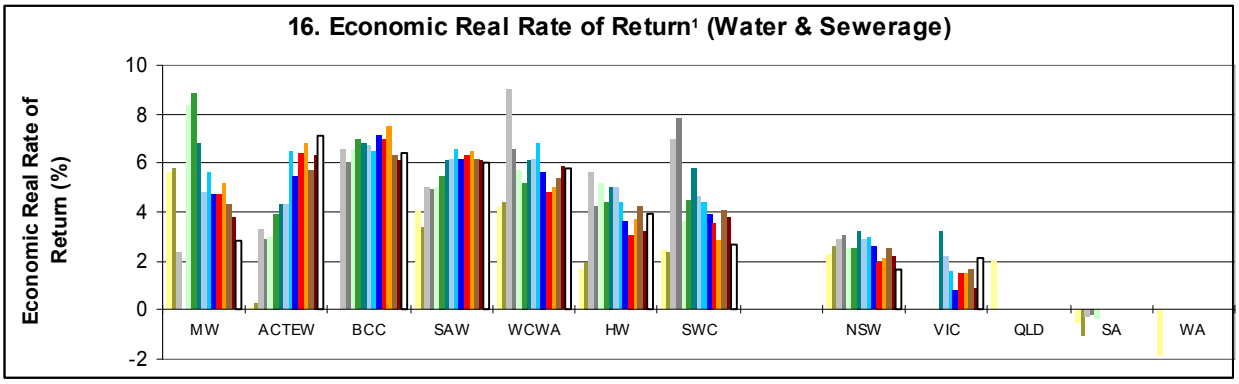


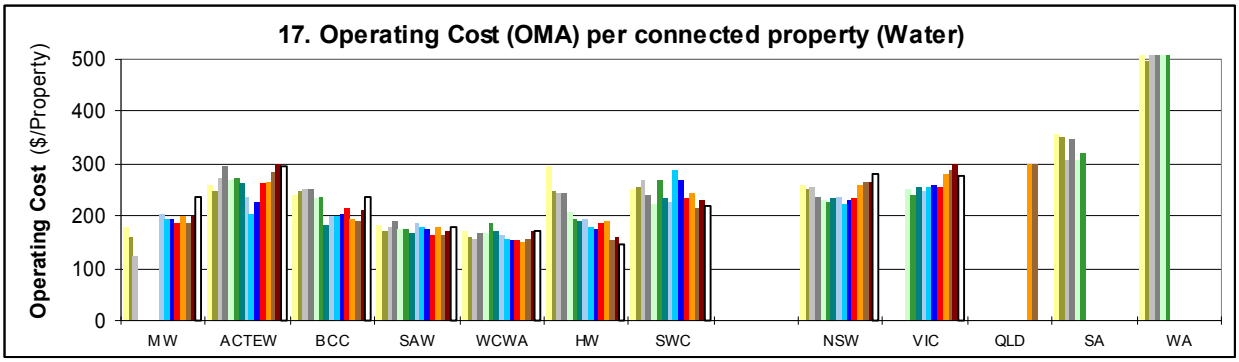


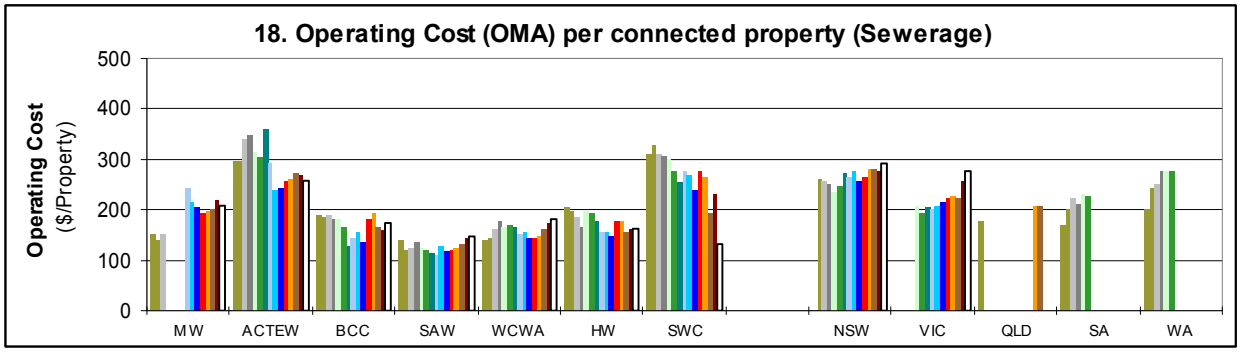


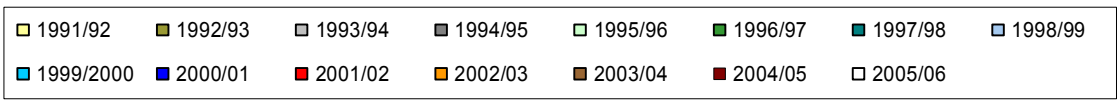
+ The major cause of non-compliance in non-metropolitan NSW is due to the growth of algae in maturation ponds being measured as suspended solids (SS). Most treatment works in non-metropolitan NSW have maturation ponds due to previous Department of Environment and Conservation (DEC) preference for ponding 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 only reported by 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 2005/06$.

APPENDIX B

NSW ANNUAL WATER SUPPLY & SEWERAGE REPORTING FORMS

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2005/06 ANNUAL WATER SUPPLY REPORT

NOTES: 1. * indicates you should provide an estimation of the accuracy and reliability of the data according to the following confidence grades:
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7. Questions marked ◆ are questions that are new or have been changed from previous years

ATTRIBUTES	Reference No. NSW	Reference No. NWI	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
LWU CHARACTERISTIC - Population												
Population Served	1.		Permanent *	70000	85000	85000	85000	85000		no.		**Exclude** population in unserviced areas (see indicator 39).
	2.		Peak	90000	90000	92000	90000	85000		no.		Population shown is that adopted by DEUS in consideration of previous years trends
Rainfall	3.		Rainfall in reporting period	1305	1343	935	691	1452		mm		DEUS will obtain this data from the Bureau of Meteorology.
	4.		Average annual rainfall	1220	620	600	720	1120		mm		DEUS will obtain this data from the Bureau of Meteorology.
Temperature	5.		Average daily maximum	na	na	na	40	30		°C		DEUS will obtain this data from the Bureau of Meteorology.
	6.		Average daily minimum	na	na	na	5	11		°C		DEUS will obtain this data from the Bureau of Meteorology.
LWU CHARACTERISTIC - Infrastructure												
Dams	7.		Number	2	2	2	2	2		no.		Dams owned by the LWU for seasonal water storage as distinct from daily balancing storages for distribution systems. **Include** on and off-stream storages.
	8.		Capacity	2277	2277	2277	2277	2277		ML		
Service Reservoirs	9.		Number	36	37	39	38	38		no.		Distribution storage facilities used in the delivery of potable water to customers (eg. Steel or concrete tanks used as daily balancing storages). **Include** clear water tanks at water treatment works
	10.		Capacity	133.4	136	129	131	131		ML		
Weirs	11.		Number	2	2	2	2	2		no.		Low barriers, generally within the stream banks, to divert flow into an offtake.
	12.		Capacity	120	120	120	120	120		ML		
Bores	13.		Number	14	17	15	15	15		no.		Bore holes connecting to an underground aquifer, from which water is drawn under hydrostatic pressure or by pumping.
	14.		Capacity	4	4.5	4.5	4.5	5		ML/d		
Pumping Stations	15.		Number	25	25	27	27	24		no.		Pumping stations include both headworks and distribution system pumping stations. They may involve pumping of potable or non-potable water. **Include** a pumping station at a treatment works which is used to deliver treated water into the distribution system. Note that a pump station may include
	16.		Capacity	213	213	230	230	230		ML/d		
Treatment Works	17.	*(11)*	Number	3	3	3	3	3		no.		Treatment works providing comprehensive water treatment to achieve high quality water. Generally includes processes that remove colour and/or turbidity as well as providing filtration, disinfection and pH adjustment. **Exclude** facilities that do not provide filtration and disinfection.
	18.		Capacity	8	8	8	8	8		ML/d		
	19.		Total delivery capacity into reticulation	80	80	80	80	80		ML/d		Delivery capacity from all sources into the distribution network
Length of Water Supply Mains	20.		Length of trunk mains	na	na	310	294	340		km		A trunk main is a transfer main delivering potable or non-potable water to a distribution area. **Include** both gravity and rising mains. **Exclude** recycled water mains.
	21.		Length of reticulation	1019.7	1036	771	811	783		km		Reticulation mains consist of relatively small pipework used to distribute and reticulate potable and non-potable supply to customers. **Exclude** pipework associated with property water services (mains to property meter or service connections) and recycled water mains.
	22.	*2, (3)*	**TOTAL** Length of Mains	1020	1036	1081	1105	1123	0	km		Sum of reticulation and trunk mains.
Renewals	23.		Mains renewed/replaced in reporting period	5.24	2.8	5	5	7		km		Existing mains renewed or replaced in the reporting period. **Exclude** maintenance work (Sect 5 of NSW Local Government Asset Accounting Manual, 1999).
	24.		Property service connnections renewed/replaced in reporting period	na	na	na	na	na		no.		
◆	25.		Customer water meters renewed/replaced in reporting period	na	na	na	na	na		no.		This indicates the extent of the utility's water meter replacement program.

2005/06 ANNUAL WATER SUPPLY REPORT

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ATTRIBUTES	Reference No. NSW	Reference No. NWI	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
LWU CHARACTERISTIC - Connections												
Existing Connections ◆	26.	(50)	Number of single residential dwellings	26262	27050	27819	28400	28889		no.		**Include** all residential dwellings with a separate connection to the utility's water supply network. **Exclude** townhouses or blocks of units where there is a shared connection to the utility's water main, even though each townhouse or unit may be separately metered.
Existing Connections ◆	27.	(50)	Number of multiple residential dwellings with a single property connection	na	na	na	3552	3600		no.		Report as one multiple residential dwelling each block of units or group of townhouses where there is a single shared connection to the utility's water main, irrespective of the configuration and number of residential units in the multiple dwelling and whether each unit is individually metered or not.
Existing Connections	28.	(50)	Number of non-residential connections	na	na	na	na	1758		no.		All properties that are connected to the water supply system other than those categorised as single residential or multiple residential. **Exclude** properties that have an assessment but are not connected.
Existing Connections	29.	(50)	Number of fire connections	na	na	na	na	na				A fire connection consists of a mains connection, a length of fire service pipe off the utility's main and a stop valve.
Existing Connections	30.	(50)	**TOTAL** Number of Connections	26262	27050	27819	31952	34247	0	no.		Sum of residential, non-residential and fire connections. Note that a connection is not the same as a connected property.
New Residential Dwellings	31.		New residential dwellings in this period	465	788	769	762	537		no.		Number of new residential dwellings within the reporting period. **Include** each individual house, flat, villa, unit, townhouse etc whether separately metered or not.
Assessments	32.	(1)	Reported assessments - residential*	33628	34416	31674	31700	34651		no.		Number of residential bills rendered by the utility for water supply services. **Include** vacant lots.
Assessments	33.	(1)	Reported assessments - non-residential*	na	na	na	1208	1758		no.		Number of non-residential bills rendered by the utility for water supply services. **Include** vacant lots.
Assessments ◆	34.	(1)	Adopted assessments - residential	31700	31700	32400	34240	34651		no.		Number of residential and non-residential assessments adopted by DEUS.
Assessments ◆	35.	(1)	Adopted assessments - non-residential	1928	2716	2785	1208	1758		no.		
Assessments ◆	36.		**TOTAL** Adopted Assessments	33628	34416	35185	35448	36409	0	no.		Sum of adopted residential assessments plus adopted non-residential assessments.
Ratios of Connected Properties to Assessments ◆	37.		Connected properties to total assessments	0.96	0.96	0.96	0.96	0.96				These ratios have been obtained from previous performance reports. They do not normally change from year to year for water supply systems and will be continued unless the utility considers change is warranted, in which case evidence of a different ratio should be provided by the utility.
Ratios of Connected Properties to Assessments ◆	38.		Connected residential properties to residential assessments	0.96	0.96	0.96	0.96	0.96				
Unserved In Reporting Period	39.		Unserved urban properties	2668	2668	2218	2300	1900		no.		Number of properties in urban zoned land in towns and villages in the utility's area of operations that are not served by a reticulated public water supply service. Exclude premises in land zoned rural residential. If the LWU is separately reporting a number of water supply schemes, only answer this question once for the main scheme.
Unserved In Reporting Period	40.		Unserved urban population (persons)	6670	6670	5400	5500	4500		no.		Estimated permanent population in unserved urban properties.
WATER RESOURCES - Water Sources												
Water Source	41.	4	Off-stream dams	10153	11049	10143	10408	9532		ML		Volume of water abstracted from off-stream dams. Measurement is at the point of abstraction.
Water Source	42.	4	On-stream dams	183	177	185	188	203		ML		Volume of water abstracted from on-stream dams. Measurement is at the point of abstraction.
Water Source	43.	5	Run-of-river pumping (not including volume pumped to off-stream dams)	0	0	0	0	0		ML		Volume of water abstracted from run-of-river pumping. **Exclude** volume pumped to an off-stream dam or to a desalination plant. Measurement is at the point of abstraction.
Water Source	44.	5	River release from State Water dams	0	0	0	0	0		ML		Volume of water drawn as a release from a State Water dam.
Water Source	45.	7	Groundwater extraction	644	660	730	700	673		ML		Volume abstracted from groundwater is the sum of water abstracted from all reported sources. Measurement is at the point of abstraction, not delivery. **Exclude** groundwater treated by a desalination plant.
Water Source	46.	6	Desalinated water	na	na	na	na	na		ML		Volume of water treated using a desalination plant.
Water Source	47.	8	Recycled water	0	0	0	0	0		ML		Volume of non-potable water sourced from recycled water. e.g. treated sewage effluent or stormwater.
Water Source	48.	9	**TOTAL** Water Supply from Utility's Own Sources	10980	11886	11058	11296	10408	0	ML		Sum 41 to 47.
Water Source	49.	10	Bulk purchase - potable	0	0	0	0	0		ML		Volume of potable water purchased from a bulk supplier outside your LWU's area of operations.
Water Source	50.	10	Bulk purchase - non-potable	0	0	0	0	0		ML		Volume of non-potable water purchased from a bulk supplier outside your LWU's area of operations.
Water Source	51.		Bulk supplier - supply scheme									Name of bulk supply scheme.
Water Source	52.		Price per kL of bulk purchase	na	na	na	na	na		c/kL		
Water Source	53.	17	**TOTAL** Volume of Water from All Sources	10980	11886	11058	11296	10408	0	ML		Sum of indicators 41 to 47 plus indicators 49 and 50.

2005/06 ANNUAL WATER SUPPLY REPORT

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WATER RESOURCES - Water Consumption

ATTRIBUTES	Reference No. NSW	Reference No. NWI	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
Authorised Potable Consumption	54.	49	Residential *	7120	7444	7041	7188	6785		ML		Potable water delivered to residential properties for in-house and outdoor use. Includes metered and estimated unmetered consumption.
	55.		Commercial	1010	939	946	1003	1111		ML		Potable water delivered to commercial customers. Includes metered and estimated unmetered consumption.
	56.		Industrial	544	528	482	535	628		ML		Potable water delivered to manufacturing/industrial customers. Includes metered and estimated unmetered consumption.
	57.		Rural	na	na	na	na	na		ML		Potable water delivered to farms and hobby farms outside urban zoned land. Includes metered and estimated unmetered consumption.
	58.		Institutional	60	80	88	70	83		ML		Potable water delivered to institutional customers. Includes metered and estimated unmetered consumption.
	59.		Bulk Sales	na	na	na	na	na		ML		Potable water sold to other utilities.
	60.		Public Parks	80	85	60	75	71				Potable water delivered for watering public parks and gardens. Includes metered and estimated unmetered consumption.
◆	61.		Unbilled, authorised potable consumption	na	na	na	na	125		ML		Metered and estimated unmetered authorised consumption for which a bill is not issued to the consumer. e.g. firefighting (customer fire connections or street hydrants), mains flushing etc.
◆	62.	17	**TOTAL** Authorised Potable Consumption	8814	9076	8617	8871	8803	0	ML		Total potable consumption (metered and unmetered)
Authorised Non-Potable Consumption	63.		Non-potable consumption - residential	na	na	na	na	0		ML		Non-potable water or recycled water reticulated to residential customers as part of a dual supply. Includes metered and estimated unmetered consumption.
	64.	17	Non-potable consumption - Total	na	na	na	na	na		ML		Non-potable water or recycled water for town water supply (reticulated to residential and non-residential customers as par of a dual supply). Includes metered and estimated unmetered consumption.
Water Losses	65.		Unauthorised potable consumption	566	2810	1	na	na		ML		Includes theft and illegal use (illegal connections, illegal use of unmetered fire connections).
	66.		Metering inaccuracies	na	na	770	na	na		ML		Under-registration of customer meters and errors in system meters.
	67.	(50)	Apparent Losses	566	1453	771	925	746	0	ML		Apparent losses are the sum of unauthorised potable consumption (indicator 65) plus metering inaccuracies (indicator 66).
	68.	(50)	Real losses (leakage)	1600	713.16	1670	1500	984				Leakage from mains, reservoirs and connections including from property service connections up to point of customer meters.
	69.	(50)	**TOTAL** Water Losses	2166	2166	2441	2425	1730	0	ML		Water Losses are the sum of "apparent losses" (theft or illegal use and metering inaccuracies) plus "real losses" (leakage).
Water Balance	70.		Total water supplied from all sources	10980	11886	11058	11296	10408	0	ML		See Indicator 53.
	71.		Total potable water consumption	10980	11242	11058	11296	10533	0	ML		Indicator 62 + Indicator 69.
	72.		Total non-potable water consumption	na	na	na	na	na	0	ML		See Indicator 64.
	73.		**TOTAL** WATER CONSUMED	10980	11242	11058	11296	10533	0	ML		Sum of indicators 71 and 72. Should equal total water supplied (indicator 70)
◆	74.		Type of leakage measurement carried out	na	na	na	na	N		RDT/WM		RDT = reservoir drop test, WM = waste metering. If no test leave blank.
Leakage Testing	75.		Year of leakage measurement	na	na	na	na	na				Year that leakage measurement was carried out. If it was undertaken over several years (eg. 2003/2004) insert latest year (ie. 2004).
	76.		Result of measurement (% leakage)	na	na	na	na	na		%		
◆	77.		Average pressure of system	na	na	na	na	na		m		Estimated average operating pressure in the distribution system.
◆	78.		Average length of private pipeline	na	na	na	na	na		m		Estimated average length of private pipeline from the property boundary to the customer meter.
Leakage ◆	79.	50	Infrastructure leakage index (ILI)	na	na	na	na	na				DEUS will calculate the ILI.
◆	80.		Leakage (% total potable water consumed)	15	6	15	13	9		%		Indicator 68 divided by indicator 71.
◆	81.	50A	Water losses per connection per day	167	72	164	129	79		L/d/connec		Real losses per connection per day = (indicator 68 / indicator 30 / 365)*1000000
Peak Potable Consumption	82.		Peak day consumption	60.4	59.8	51.0	54.8	45.0		ML		The maximum potable consumption for any day in the reporting period.
◆	83.		Peak week consumption	340.5	363.0	323.0	335.0	281.0		ML		The maximum potable consumption for any week in the reporting period.

2005/06 ANNUAL WATER SUPPLY REPORT

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ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
WATER CONSERVATION - Demand Management												
Demand Management Initiatives	84.		Customer education program	na	na	na	YES	YES		Y/N		
◆	85.		Permanent water savings measures in place							Y/N		Permanent water savings measures in place to conserve water. For example, no hosing of concrete or hard surfaces at any time.
	86.		Effluent or stormwater reuse	na	na	na	YES	YES		Y/N		
	87.		Leakage reduction program	na	na	na	YES	YES		Y/N		
	88.		Retrofit program	na	na	na	NO	NO		Y/N		
	89.		Rebates for water efficient appliances	na	na	na	NO	NO		Y/N		
	90.		Customer billing interval	na	na	na	na	na		mths		
	91.		Other Initiative - please indicate									
	92.		Other Initiative - please indicate									
Rainwater Tanks	93.		Rebates for rainwater tanks	na	na	na	NO	NO		Y/N		
	94.		Maximum rainwater tank rebate	na	na	na	na	na		$		
Restrictions	95.		Days of water restriction due to drought	0	7	84	177	0		days		Include all days of water restrictions no matter what level of restriction is applied.
SOCIAL - Levels of Service												
Complaints	96.	*(36)*	Service complaints *	1391	1825	1584	1396	1717		no.		Complaints relating to service quality and reliability, including leaks. **Exclude** water quality complaints, which are reported for each water treatment works. **Exclude** billing complaints.
	97.		Common service complaint 1 - please indicate									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.
	98.		Common service complaint 2 - please indicate									Complaints from separate customers arising from the same cause, count as separate complaints.
	99.	*26, (36)*	Billing complaints	na	na	na	na	na		no.		Complaints concerning account payment, financial loss or overcharging and billing errors.
	100.	*(36)*	Other complaints	44	52	41	81	94		no.		Complaints other than water quality, service or billing.
	101.		Water quality complaints	0	0	483	914	747	0			Sum of water quality complaints for all treatment works within this water supply business.
	102.	*36*	**Total** Complaints	1435	1877	2108	2391	2558	0	no.		Sum of all complaints for this water supply business.
Accessibility ◆	103.	*48*	Average time to connect to a telephone operator	na	na	na	na	na		secs.		The average time for a caller to be connected to an operator should they elect to, or be required to do so.
Unplanned Interruptions	104.	*40*	Pipeline breaks *	251	272	202	148	146		no.		An unplanned event in which water is lost which is attributable to failure of a pipe, hydrant, fitting or joint material regardless of cause. A break or leak may not necessarily result in loss of supply. Pipeline breaks = total number of Priority 1 plus Priority 2 breaks.
	105.		Property service connection failures	na	na	na	na	na		no.		An unplanned event in which water is lost which is attributable to failure of the property service connection.
	106.	*(37)*	Properties affected by unplanned interruptions *	na	na	na	na	na		no.		An unplanned interruption to supply is a total loss of water supply due to failure of the water asset. Include each occurrence of interruption.
	107.	*38*	Average duration of an unplanned interruption *	na	na	na	na	na		hrs		The time is measured from the time of notification to the time that normal service is restored. This indicator includes interruptions due to bursts or leaks in the property service connection.

2005/06 ANNUAL WATER SUPPLY REPORT

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ATTRIBUTES	Reference No. NSW	Reference No. NWI	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
SOCIAL - Health												
Water Quality Management Plan	108. ◆	28	Water quality guidelines									The water quality guidelines in the licence agreement or required by health agency against which the water utility measures verification of water quality (eg. ADWG 2004).
	109. ◆	32	No. of water supply zones where microbiological compliance was achieved									DEUS will report on an assessment of each zone with the microbiological requirements of the water quality guidelines. For example, DEUS will report compliance as 3/4 where 3 out of 4 zones (ie. water treatment works) complied with microbiological requirements.
	110. ◆	33	% of population where microbiological compliance was achieved							%		DEUS will report using a similar criterion to indicator 108 above, but based on the percentage of the total population served being within the complying zones eg. 95%.
	111. ◆	34	No. of water supply zones where health related chemical compliance was achieved									DEUS will report on an assessment of each zone with the health related chemical requirements of the water quality guidelines. For example, DEUS will report as 3/4 where 3 out of 4 zones complied with chemical requirements.
	112. ◆	31	Public disclosure of drinking water performance									DEUS provides public disclosure through publication of the annual *NSW Water Supply and Sewerage Performance Monitoring Report and Benchmarking Report.*
	113. ◆	29	Risk based drinking water quality plan in place?	na	na	na	na	na		Y/N		Minimum requirement for answering "YES" is a documented water quality management plan in accordance with the framework in the Australian Drinking Water Quality Guidelines 2004. Any other more rigorous statutory requirements are also satisfactory.
	114. ◆	30	Plan assessed externally?									State the basis for the external assessment of your Drinking Water Quality Management Plan. Eg. HACCP, ISO 9001, WSAA (National Water Quality Framework Continuous Improvement Tool).
Public Health Incidents	115.		Category 1 Public Health Incidents	22	na	0	0	0		no.		An event with nil or inconsequential public health effects.
	116.		Category 2 Public Health Incidents	0	na	0	0	0		no.		An event that had a limited public health impact.
	117.		Category 3 Public Health Incidents	0	na	0	0	0		no.		An incident with a major impact on public health.
	118.		Details of Category 3 Incidents									
Public Health Investment	119.		Capital investment in improving health performance	na	na	5190	7456	2322		$,000		Component of capital expenditure that has a principal outcome of improved health performance. Includes all expenditure undertaken for compliance purposes, but also having IMPROVED performance as an outcome. Includes new water treatment works.
SOCIAL - Workforce												
Employees	120.		Number of employees in water supply business	45	37	35	36.5	37		FTE		**Include** water supply business employees engaged in operation, maintenance and management including billing. **Include** equivalent contractor staff. **Exclude** staff engaged on design and construction.
	121.		Number of female employees	na	6	7	7	7		no.		Female employees in water supply business.
	122.		Employees undergoing 2 or more training days in Reporting Period	na	37	35	7	37		FTE		Number of water supply business employees that have undertaken at least 2 days of training. This number will be less than or equal to the total number of employees (indicator 120).
Days Lost	123.		Total days lost in Reporting Period	40	100	357	284	319		days		**Include** water supply business employee days lost for all reasons eg. Industrial disputes, sick leave, carer's leave, industrial accidents.
	124.		Number of confirmed injuries in Year	na	na	2	1.3	1		no.		**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.		Number of days lost in Year due to injury	na	na	13	2	8		days		**Include** water supply business days lost due to injuries. **Include** days lost for injuries for equivalent contractor employees. **Exclude** days lost for injuries for employees engaged in design or construction.
Long Term Unemployed	126.		Employment provided to long-term unemployed	na	na	0	0	0		hrs		These indicators recognise a utility's contribution to the community through addressing long-term unemployment in the community and increasing community skills.
	127.		Number of identified long-term unemployed engaged	na	na	0	0	0		no.		
Outsourcing	128.		Management cost outsourced	na	na	na	na	na		%		The percentage expended by the water supply business on outsourcing of management cost.
	129.		Operational cost outsourced	na	na	na	na	na		%		The percentage expended by the water supply business on outsourcing of operational cost.
	130.		Maintenance cost outsourced	na	na	na	na	na		%		The percentage expended by the water supply business on outsourcing of maintenance cost.

2005/06 ANNUAL WATER SUPPLY REPORT

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ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
SOCIAL - Charges and Bills												
Community	131.		Reduction in fees and charges to community organisations	na	na	36.44	27.86	28		$,000		The value of reductions in fees or charges permitted by legislation which are provided by the water supply business to the community. Exclude pensioner rebates.
◆	132.	*23*	Restrictions or legal action for non-payment of water bill	na	na	na	na	na		no.		Number of restrictions or legal action applied for non-payment of water bills in the reporting period.
OMA Expenses	133.		Headworks component	42	45	45	45	45		%		Financial data is provided by Council in Special Schedule No.3 to its Annual Financial Statement. This data includes amounts under the item "Operation and Maintenance Expenses". Please break-up this total under this item into "headworks" and "distribution and reticulation" components.
	134.		Distribution and reticulation component	58	55	55	55	55		%		
Typical Developer Charge	135.		Typical developer charge this reporting period	na	na	na	3500	3800		$		This is the typical developer charge determined by the utility to recover part of the cost of water supply infrastructure for new development.
	136.		Typical developer charge next reporting period	na	na	3500	3800	4000		$		
ENVIRONMENTAL												
Environmental Incidents	137.		Category 1 Environmental Incidents	0	0	0	0	0		no.		A minor event with little or no impact on the environment.
	138.		Category 2 Environmental Incidents	0	na	0	0	0		no.		An event with limited and non-permanent impact on the environment.
	139.		Category 3 Environmental Incidents	0	na	0	0	0		no.		Incidents with a major and irreversible impact on the environment.
	140.		Details of Category 3 Environmental Incidents									
Environmental Management	141.		Environmental Management Plan prepared?	NO	na	NO	YES	YES		Y/N		This indicator provides a reflection of the level of sophistication or readiness of a utility's environmental management and its commitment to remediation programs.
	142.		Plan developed in consultation with other bodies including Catchment Management Board?	NO	na	na	NO	NO		Y/N		
	143.		Environmental consultative process in place?	YES	na	YES	YES	YES		Y/N		
	144.		Capital investment in improving environmental performance	0	na	500	750	279		$,000		Component of capital expenditure that has a principal outcome of improved environmental performance. Includes all expenditure undertaken for compliance purposes, but also having IMPROVED performance as an outcome. Includes new treatment works but excludes renewals expenditure.
Energy	145.		Total Energy Use *	6820	6600	6090	5540	5104		kWh		Total energy used in supplying sewerage service.
	146.		Renewable Energy Use	na	37	0	0	0		kWh		Energy used in supplying sewerage service that is derived from renewable sources.
Greenhouse Gas Emissions ◆	147.	*51*	Net Greenhouse Gas Emissions	na	na	na	na	na		t $CO_{2\text{-eq}}$		Net tonnes of CO2 equivalent emissions generated by the whole of the business, including both water supply and sewerage, directly and indirectly through all its operations allowing for sequestration. Conversion factors should be based on those provided by the Australian Greenhouse Office.

2005/06 ANNUAL WATER SUPPLY REPORT - TREATMENT

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TREATMENT WORKS No. *1*

TREATMENT WORKS - Attributes

ATTRIBUTES		Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
Treatment Works Attributes		1.		Year built or augmented	na	na	na	na	na				If the treatment works has been augmented show year of latest major augmentation.
		2.		Design capacity	70.0	70.0	70.0	70.0	70.0		ML/d		
		3.		Type of treatment works	CH	CH	CH	CH	CH				A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, DES = Desalination, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection
		4.		Comment									
		5.		Percentage of population served by this treatment works	na	na	na	na	na		%		Estimate the percentage of your utility's permanent population receiving a reticulated water supply served by this treatment works.
		6.		Volume treated *	9990	10898	10036	10262	9389		ML		Volume of water treated by this treatment works in this reporting period.
	◆	7.		Operator 1 qualification Operator 2 qualification Operator 3 qualification Operator 4 qualification									Qualification type and year obtained for each operator at this treatment works, together with the year of the most recent DEUS treatment update seminar attended if applicable, for example: DEUS 2004, Update 2006; or TAFE 2002, Update 2005; or BE 2000, Update 2006; or No Qualification, No Update

SOCIAL - Health

Colour		8.		Raw water colour units - max	19	23	25	18	28				Only report for this treatment works.
		9.		Raw water colour units - avge	11	10.5	9	11	11				
		10.		Treated water colour units - max	9	9	10	43	9				Only report for this treatment works.
		9.		Treated water colour units - avge	4.4	4	2	4.4	4				
Turbidity		10.		Raw water turbidity units - max	10	9.6	380	10.2	4				Only report for this treatment works.
		13.		Raw water turbidity units - avge	5	2.8	4.2	5.6	2				
		14.		Treated water turbidity units - max	7.2	5.9	38.0	19.4	12.6				Only report for this treatment works.
		15.		Treated water turbidity units - avge	1.8	1.6	0.2	1.3	1.1				
Physical		16.		Physical - Number of samples	3633	3432	3126	3081	4162		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		17.		Physical - Percent complying	97.3	97.9	98	97.5	98		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
Chemical		18.		Chemical - Number of samples	na	2950	2667	2054	3734		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		19.	*34*	Chemical - Percent complying	na	99	98.9	98.3	99		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
Turbidity		20.		Turbidity - Number of samples	1346	1144	1042	1027	1042		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		21.		Turbidity - Percent complying	99.5	99.6	98.5	99	100		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
pH		22.		pH - Number of samples	na	1144	1042	1027	1043		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		23.		pH - Percent complying	na	94.2	95.4	94.3	96		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
Colour		24.		Colour - Number of samples	1346	1144	1042	1027	1043		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		25.		Colour - Percent complying	100	100	100	99.2	100		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
E. coli		26.		E. coli - Number of samples	1120	1132	1042	1027	1462		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		27.	*32*	E. coli - Percent complying	98	98.2	98.4	96.1	98		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
Total Coliforms		28.		Total coliforms - Number of samples	1120	1132	1042	1027	1462		no.		Report samples taken at this treatment works for System Performance Monitoring. **Exclude** samples for Operational Monitoring.
		29.		Total coliforms - Percent complying	75.8	84.6	81.6	80.6	79		%		Number of samples taken for system monitoring complying divided by the total number of such samples.
Reason for Non-compliance		30.		Common reason for less than 100% compliance									
Chemical Usage		31.		Alum	0	0	0	0	0		tonnes		Only report chemical usage for this treatment works.
		32.		Alkali	0	0	0	0	0		tonnes		
		33.		Chlorine	32.1	25.89	31.3	29.14	26		tonnes		
		34.		Fluoride	14.7	14.79	14.2	13.79	14		tonnes		

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SOCIAL - Levels of Service

ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
Malfunctions	35.		Number of days chlorination system failed to operate	0	0	0	0	0		no.		Only report malfunctions for this treatment works.
	36.		Number of days of major malfunction of treatment process*	0	8	0	0	3		no.		
Complaints	37.	*35*	No. of water quality complaints	0	0	473	896	736		no.		Only report water quality complaints from customers supplied from this treatment works.
	38.		Common water quality complaints 1									Only report water quality complaints from customers supplied from this treatment works.
	39.		Common water quality complaints 2									Only report water quality complaints from customers supplied from this treatment works.

2005/06 ANNUAL SEWERAGE REPORT

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LWU CHARACTERISTIC - Population												
Population Served	1.		Permanent *	69500	69500	69000	69000	70000		no.		**Exclude** population in unserviced areas (see indicator 21).
	2.		Peak	80000	80000	83000	86000	85000		no.		
LWU CHARACTERISTIC - Infrastructure												
Treatment Works	3.		Number	10	13	13	14	13		no.		**Include** all treatment works (primary, secondary and tertiary).
	4.		Total capacity	114900	116900	114900	116700	118900		EP		
Pumping Stations	5.		Number	179	195	195	196	196		no.		Pumping station in system delivering services to customers. **Include** pumping stations delivering sewage to the first stage of treatment, regardless of whether the pumping station is off or actually on the treatment works site. **Include** vacuum pumping stations. **Exclude** grinder pumping stations.
	6.		Total capacity	0	0	0	na	na		ML/d		
Length of Sewerage Mains	7.	*13*	Reticulation/gravity mains*	632	654.1	694	717	751		km		Length of mains, including all trunk and reticulation mains, aqueducts, etc. of all diameters. **Exclude** pressure (rising) mains. **Exclude** property or house connections and conduits carrying treated effluent.
	8.	*13*	Rising mains*	135	135	154	156	148		km		Length of pressure (rising) mains.
	9.	*13, (14)*	Total length of mains	767	789.1	848	873	899	0	km		Sum of reticulation/gravity mains plus rising mains.
Renewals	10.		Mains renewed/replaced in reporting period	0.57	1.5	2	5	2		km		Existing mains renewed or replaced in the reporting period. **Exclude** maintenance work (Sect 5 of NSW Local Government Asset Accounting Manual, 1999).
	11.		Property connections renewed/replaced in reporting period	0	0	0	na	na		no.		A house or property connection is a short sewer owned and operated by the utility which connects the main sewer and the customer sanitary drain.
LWU CHARACTERISTIC - Connections												
New Residential Dwellings	12		New residential dwellings connected in this period	615	697	535	971	697		no.		Number of new residential dwellings within the reporting period. **Include** each individual flat, villa, unit, townhouse etc whether separately metered or not.
Assessments	13	*(12)*	Reported assessments - residential*	26569	27266	29479	30314	30673		no.		Number of residential bills rendered by the LWU for sewerage services. **Include** vacant lots.
	14	*(12)*	Reported assessments - non-residential*	1670	1670	0	1434	1758		no.		Number of non-residential bills rendered by the LWU for sewerage services. **Include** vacant lots.
◆	15	*(12)*	Adopted assessments - residential	26569	27266	29451	29451	30673		no.		Number of residential and non-residential assessments adopted by DEUS.
◆	16	*(12)*	Adopted assessments - non-residential	7059	7150	5734	1137	1758		no.		
◆	17		Adopted total assessments	28239	28936	30588	30588	32431	0	no.		Sum of adopted residential assessments plus adopted non-residential assessments.
Ratios of Connected Properties to Assessments ◆	18		Connected properties to total assessments	0.96	0.96	0.96	0.96	0.96				These ratios have been obtained from previous performance reports. They do not normally change from year to year for sewerage systems and will be continued unless the LWU considers change is warranted, in which case evidence of a different factor should be provided by the LWU.
◆	19		Connected residential properties to residential assessments	0.96	0.96	0.96	0.96	0.96				
Unserved In Reporting Period	20		Unserved urban properties	2668	2700	2500	2300	1900		no.		Number of properties in urban zoned land in towns and villages in the utility's area of operations that are not served by a reticulated public sewerage service. **Exclude** premises in land zoned rural residential. If the utility is separately reporting a number of sewerage schemes, only answer this question once for the main scheme.
	21		Unserved urban population (persons)	6600	6600	6000	5500	4500		no.		Estimated permanent population in unserved urban properties.

2005/06 ANNUAL SEWERAGE REPORT

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ATTRIBUTES	Reference No. NSW	Reference No. NWI	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
LWU CHARACTERISTIC - Sewage Management												
Volume Collected	22		Infiltration, inflow (sum of each treatment works)	1143	1058	1124	1077	1273	0	ML		Estimated groundwater infiltration and stormwater inflow into the sewerage system.
	23		Residential (sum of each treatment works)	4486	4209	4532	4342	5066	0	ML		The sewage from residential dwellings connected to the sewerage system.
	24		Non-residential (sum of each treatment works)	na	na	na	na	1260	0	ML		The sewage from non-residential customers.
	25		Trade waste (sum of each treatment works)	103	93	80	77	61	0	ML		The volume of estimated and metered liquid trade waste collected.
	26	*(58)*	Total volume collected (sum of each treatment works)	6920	6430	6860	6570	7960	0	ML		This volume is the sum of all measured treatment works inflow.
Large Trade Waste Dischargers	27		Number of large trade waste dischargers (sum of each treatment works)	5	3	3	3	3	0	no.		A large trade waste discharger is one approved to discharge over 20 kL/d into the sewerage system.
	28		Daily maximum volume (sum of each treatment works)	420	236	220	189	152	0	kL/d		Maximum day volume from large trade waste dischargers.
	29		Equivalent BOD load (sum of each treatment works)	2333	1355	1263	1194	943	0	EP		Equivalent BOD load from large trade waste dischargers.
	30		Equivalent SS load (sum of each treatment works)	927	560	522	448	354	0	EP		Equivalent SS load from large trade waste dischargers.
Volume Treated and Discharged	31		Discharge to ocean (sum of each treatment works)	2047	2038	2127	1876	2305	0	ML		
	32		Discharge to river (sum of each treatment works)	3059	2446	2688	2522	3044	0	ML		
	33		Discharge to land (sum of each treatment works)	1812	1943	2041	2171	2612	0	ML		Excludes the volume of effluent recycled (see indicator 25 for Sewage Treatment Works).
SOCIAL - Levels of Service												
Complaints	34	*42*	Sewage service/choke complaints *	331	239	333	256	298		no.		Complaints relating to service quality and reliability. **Exclude** odour complaints, which are reported for each sewage treatment works. **Exclude** billing complaints.
	35		Common service complaint 1 - please indicate									
	36		Common service complaint 2 - please indicate									
	37	*26*	Billing complaints	0	0	0	na	na		no.		Complaints concerning account payment, financial loss or overcharging and billing errors.
	38		Other complaints	81	25	30	na	119		no.		Complaints other than quality, service or billing.
	39		Odour complaints	0	0	22	21	37	0			Sum of odour complaints for all treatment works and pumping stations within this sewerage business.
	40	*(43)*	**Total** Complaints	412	264	385	277	454	0	no.		Sum of all complaints for this sewerage business.
Accessibility ◆	41	*48*	Average time to connect to a telephone operator	na	na	na	na	na		secs.		The average time for a caller to be connected to an operator should they elect to, or be required to do so.
Uplanned Interruptions	42.	*(37)*	Properties affected by unplanned interruptions *	0	0	0	na	na		no.		An unplanned interruption is an event where a customer has not received al least 24 hours notification of the interruption and which causes significant reduction of sewerage services due to any cause including breaks or chokes in the property connection service.
	43.	*44*	Average duration of an unplanned interruption *	0	0	0	na	na		hrs		An interruption commences when the utility is aware that sewerage services are no longer available and ceases when normal services are restored.
SOCIAL - Health												
Public Health Incidents	44.		Category 1 Public Health Incidents	8	na	3	1	4		no.		An event with nil or inconsequential public health effects, eg. minor failure of sewage treatment processes.
	45.		Category 2 Public Health Incidents	1	na	0	0	0		no.		An event that had a limited public health impact. This would include algal problems/outbreaks.
	46.		Category 3 Public Health Incidents	0	na	na	0	0		no.		An incident with a major impact on public health.
	47.		Details of Category 3 Incidents									
Public Health Investment	48.		Capital investment in improving health performance	4733	na	2617	3500	697		$,000		Component of capital expenditure that has a principal outcome of improved health performance. Includes all expenditure undertaken for compliance purposes, but also having IMPROVED performance as an outcome. Includes backlog sewerage or new treatment works

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1 (accuracy within ± 1%), 2 (± 5%), 3 (±10%), 4 (± 25%), 5 (± 50%), 6 (±100%), 7 (not within ± 100%). For further information see Instruction Worksheet.
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3. Greyed numbers show data for the previous 5 years. This cannot be altered without reference to DEUS.
4. Definitions are in accordance with the National Performance Framework - 2006 Urban Performance Reporting, National Water Commission/Water Services Association of Australia, June 2006.
5. NSW reporting form reference numbers are shown in the second column below. The equivalent National Water Initiative indicator number is shown in italics in the third column below and in brackets where the NSW indicator is used as input to determine the NWI indicator.
6. All questions refer to data at 30 June of the reporting year.
7. Questions marked ◆ are questions that are new or have been changed from previous years.

ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
SOCIAL - Workforce												
Employees	49.		Number of employees in sewerage business	36	38	35	36.5	37		FTE		**Include** sewerage business employees engaged in operation, maintenance and management including billing. **Include** equivalent contractor employees. **Exclude** employees engaged on design and construction.
	50.		Number of female employees	na	6	6	7	7		no.		Female employees in sewerage business.
	51.		Employees undergoing 2 or more training days in Reporting Period	na	51	0	36.5	37		FTE		Number of sewerage business employees that have undertaken at least 2 days of training. This number will be less than or equal to the total number of employees (indicator 48).
Days Lost	52.		Total days lost in Reporting Period	41	100	356	284	319		days		**Include** sewerage business employee days lost for all reasons eg. Industrial disputes, sick leave, carer's leave, industrial accidents.
	53.		Number of confirmed injuries in Year	na	na	2	1.3	2		no.		**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.		Number of days lost in Year due to injury	na	na	14	2	9		days		**Include** sewerage business days lost due to injuries. **Include** days lost for injuries for equivalent contractor employees. **Exclude** days lost for injuries for employees engaged in design or construction.
Long Term Unemployed	55.		Employment provided to long-term unemployed	na	na	0	0	0		hrs		These indicators recognise an LWU's contribution to the community through addressing long-term unemployment in the community and increasing community skills.
	56.		Number of identified long-term unemployed engaged	na	na	0	0	0		no.		
Outsourcing	57.		Management cost outsourced	na	na	na	na	na		%		The percentage expended by the sewerage business on outsourcing of management cost.
	58.		Operational cost outsourced	na	na	na	na	na		%		The percentage expended by the sewerage business on outsourcing of operational cost.
	59.		Maintenance cost outsourced	na	na	na	na	na		%		The percentage expended by the sewerage business on outsourcing of maintenance cost.
SOCIAL - Charges and Bills												
Community	60.	*(73)*	Reduction in fees and charges to community organisations	na	0	52.32	56.92	64		$,000		The value of reductions in fees or charges permitted by legislation which are provided by the sewerage business to the community. **Exclude** pensioner rebates.
Typical Developer Charge	61.		The typical developer charge this reporting period		0	0	na	na		$/ET		This is the typical developer charge determined by the LWU to recover part of the cost of sewerage infrastructure for new developments.
	62.		The typical developr charge next reporting period	0	0	na	na	3700		$/ET		ET = Equivalent Tenement

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2. Data entry should be in green shaded cells only.
3. Greyed numbers show data for the previous 5 years. This cannot be altered without reference to DEUS.
4. Definitions are in accordance with the National Performance Framework - 2006 Urban Performance Reporting, National Water Commission/Water Services Association of Australia, June 2006.
5. NSW reporting form reference numbers are shown in the second column below. The equivalent National Water Initiative indicator number is shown in italics in the third column below and in brackets where the NSW indicator is used as input to determine the NWI indicator.
6. All questions refer to data at 30 June of the reporting year.
7. Questions marked ◆ are questions that are new or have been changed from previous years.

ENVIRONMENTAL

ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
Overflows and Chokes	63.	*57*	Sewer overflows to environment *	82	44	58	21	9		no.		Any overflow/surcharge in LWU sewers, access chambers and pumping stations in wet and dry weather. **Include** both 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.
	64.	*56*	Sewer main chokes and breaks *	37	195	275	na	298		no.		Sewer main chokes, breaks and leaks are confirmed partial or total blockages or failure of the utility's sewer reticulation or trunk mains resulting in an interruption to the sewerage service. **Exclude** breaks and chokes in rising mains, property connections or chokes within customers house drains.
	65.	*56*	Sewer rising main chokes and breaks *	na	na	na	2	3		no.		Chokes. breaks and leaks in sewer rising mains resulting in a significant interruption to the sewerage service.
	66.		Sewer chokes or breaks attended to within 5 hours	0	0	0	na	na		no.		
	67.		Chokes or breaks in property connections	0	0	0	na	na		no.		Chokes, breaks or leaks in property connections resulting in an interruption to the sewerage service. Exclude blockages in customer's house drains (internal drains).
	68.		Chokes in house drains	0	0	0	na	na		no.		Blockages in customer's internal drains (house drains).
Environmental Incidents	69.		Category 1 Environmental Incidents	64	na	85	90	123		no.		A minor event with little or no impact on the environment.
	70.		Category 2 Environmental Incidents	7	na	4	5	9		no.		An event with limited and non-permanent impact on the environment.
	71.		Category 3 Environmental Incidents	0	na	0	0	2		no.		Incidents with a major and irreversible impact on the environment.
	72.		Details of Category 3 Environmental Incidents									
Environmental Management	73.		Environmental Management Plan prepared?	NO	na	NO	YES	YES		Y/N		These indicators provides a reflection of the level of sophistication or readiness of an LWU's environmental management and its commitment to remediation programs.
	74.		Plan developed in consultation with other bodies including Catchment Management Board?	NO	na	na	NO	NO		Y/N		
	75.		Environmental consultative process in place?	YES	na	YES	YES	YES		Y/N		
	76.		Capital investment in improving environmental performance	4910	na	10470	11500	9684		$,000		Component of capital expenditure that has a principal outcome of improved environmental performance. Includes all expenditure undertaken for compliance purposes, but also having IMPROVED performance as an outcome. Includes new treatment works but excludes renewals expenditure.
Energy	77.		Total Energy Use *	5340	4820	4485	4010	4860		kWh		Total energy used in supplying sewerage service.
	78.		Renewable Energy Use	na	0	0	0	0		kWh		Energy used in supplying sewerage service that is derived from renewable sources.
Greenhouse Gas Emissions ◆	79.	*51*	Net Greenhouse Gas Emissions	na	na	na	na	na		t $CO_{2\text{-eq}}$		Net tonnes of CO2 equivalent emissions generated by the whole of the business, including both water supply and sewerage, directly and indirectly through all its operations allowing for sequestration. Conversion factors based on those provided by the Australian Greenhouse Office.

2005/06 ANNUAL SEWERAGE REPORT - TREATMENT

NOTES:
1. * indicates you should provide an estimation of the accuracy and reliability of the data according to the following confidence grades:
   1 (accuracy within ± 1%), 2 (± 5%), 3 (±10%), 4 (± 25%), 5 (± 50%), 6 (±100%), 7 (not within ± 100%). For further information see Instruction Worksheet.
2. Data entry should be in green shaded cells only.
3. Greyed numbers show data for the previous 5 years. This cannot be altered without reference to DEUS.
4. Definitions are in accordance with the National Performance Framework - 2006 Urban Performance Reporting, National Water Commission/Water Services Association of Australia, June 2006.
5. NSW reporting form reference numbers are shown in the second column below. The equivalent National Water Initiative indicator number is shown in italics in the third column below and in brackets where the NSW indicator is used as input to determine the NWI indicator.
6. All questions refer to data at 30 June of the reporting year.
7. Questions marked ◆ are questions that are new or have been changed from previous years.

ATTRIBUTES	Reference No. NSW	Reference No. *NWI*	INDICATOR	00-01	01-02	02-03	03-04	04-05	05-06	unit	*	DEFINITIONS
TREATMENT WORKS No. *1*												
TREATMENT WORKS - Attributes												
Attributes	1.		Year built or augmented	na	na	na	1995	1995				If the treatment works has been augmented show year of latest major augmentation.
	2.		Type of treatment works	IEA	IEA	IEA	IEA	IEA				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
	3.		Standard of treatment	na	AT	AT	AT	AS				P = Primary; S = Secondary; AS = Advanced Secondary; T = Tertiary; AT = Advanced Tertiary.
	4.		Effluent discharge	O	L	O	O	O		L/O/R		L = Land, O = Ocean, R = River.
	5.		Nitrogen removal	YES	YES	YES	YES	YES		Y/N		
	6.		Phosphorus removal	YES	YES	YES	NO	YES		Y/N		
◆	7.		Operator 1 qualification Operator 2 qualification Operator 3 qualification Operator 4 qualification									Qualification type and year obtained for each operator at this treatment works, together with the year of the most recent DEUS treatment update seminar attended if applicable, for example: DEUS 2004, Update 2006; or TAFE 2002, Update 2005; or BE 2000, Update 2006; or No Qualification, No Update
	8.		DEC discharge licence expiry date	h AUGUSt	AUGUSth	Augus	AUGUSt	AUGUST				
	9.		Effluent volume licenced	10	10	na	10	10		ML/d		
ENVIRONMENTAL Sewage Management												
Volume Collected	10.		Treatment works capacity	32000	32000	32000	30000	32,000		EP		
	11.		Volume received through sewerage network*	2046.6	2038.2	2127.3	1476	2305		ML		Report volume for this treatment works.
	12.		Tankered flows - septic tank effluent	7194.7	7200	na	0	200000		kL		Report volume for this treatment works.
	13,		Tankered flows - septic tank sludge/pan	na	na	na	0	0		kL		Report volume for this treatment works.
	14,		Tankered flows - grease trap waste	0	0	0	0	0		kL		Report volume for this treatment works.
	15.	*(58)*	Total sewage collected	2053.8	2045.4	2127.3	1476	2505	0	ML		Sum of sewage volume received through sewerage network plus tankered flows for this treatment works.
Volume Treated	16.		No treatment*	0	0	0	0	0		MI		The volume of sewage at this treatment works receiving no treatment.
◆	17.	*45*	Primary treatment only*	0	0	0	0	0		ML		The volume of sewage at this treatment works receiving only primary treatment.
◆	18.	*46*	Secondary treatment*	0	0	0	0	0		ML		The volume of sewage at this treatment works receiving secondary treatment but not including that secondary treated sewage that is further treated to tertiary level.
◆	19.	*47*	Tertiary treatment*	2046.6	2038.2	2127.3	1876	2305		ML		The volume of sewage at this treatment works receiving tertiary treatment.
Volume Recycled	20.		Woodlots, pasture improvement	0	0	0	0	0		ML		Low value uses for this treatment works.
	21.		Horticulture, viticulture	0	0	0	0	0		ML		High value uses for this treatment works.
	22.		Golf courses	0	0	0	0	0		ML		For this treatment works.
	23.	*19, (18)*	Non-potable town supply	0	0	0	0	0		ML		Highest value uses: recycled water supplied to customers for non-potable water use (eg. watering of race courses, parks, ovals, mining or industrial uses) for this treatment works.
◆	24.		Other	0	0	0	0	0		ML		**Include** on-site reuse at this treatment works. **Exclude** evaporation.
	25.	*60, (59)*	Total volume recycled	0	0	0	0	0	0	ML		Sum of indicators 20 to 24 for this treatment works.
Biosolids	26.	*(61)*	Biosolids produced*	450	444	464	413	502		tonnes		Biosolids are stabilised organic solids derived from sewage treatment processes. Report biosolids for this treatment works.
	27.	*61*	Biosolids reused/recycled*	100	100	100	100	100		%		Reuse involves managing biosolids safely and sustainably to beneficially utilise their nutrient, energy or other values. This may include biosolids beneficially used for agriculture (eg. fertiliser) soil conditioning, mine rehabilitation and other applications recognised as reuse. **Include** land spreading on farmland and forests. Report reuse for this treatment works.
	28.		Biosolids to farmland	100	100	100	100	100		%		**Include** land spreading on farmland and forests.
	29.		Biosolids to land fill	0	0	0	0	0		%		**Include** disposal to wetlands. **Exclude** land spreading on farmland and forests.
	30.		Biosolids to other	0	0	0	0	0		%		**Include** incineration and ocean dumping.

ENVIRONMENTAL - Sewage Volumes

Volume Collected at This Treatment Works	31		Infiltration, inflow	na	na	na	na	na		ML	Estimated groundwater infiltration and stormwater inflow into the sewerage system.
	32		Residential	na	na	na	na	na		ML	The sewage from residential dwellings connected to the sewerage system.
	33		Non-residential	na	na	na	na	na		ML	The sewage from non-residential customers.
	34		Trade waste	na	na	na	na	na		ML	The volume of estimated and metered liquid trade waste collected.
	35	(58)	Total volume collected	0	0	0	0	0	0.0	ML	This volume is the sum of all measured treatment works inflow.
Large Trade Waste Dischargers at This Treatment Works	36		Number of large trade waste dischargers	na	na	na	na	na		no.	A large trade waste discharger is one approved to discharge over 20 kL/d into the sewerage system.
	37		Daily maximum volume	na	na	na	na	na		kL/d	Maximum day volume from large trade waste dischargers.
	38		Equivalent BOD load	na	na	na	na	na		EP	Equivalent BOD load from large trade waste dischargers.
	39		Equivalent SS load	na	na	na	na	na		EP	Equivalent SS load from large trade waste dischargers.
Volume Treated and Discharged at This Treatment Works	40		Discharge to ocean	na	na	na	na	na		ML	
	41		Discharge to river	na	na	na	na	na		ML	
	42		Discharge to land	na	na	na	na	na		ML	Excludes the volume of effluent recycled (see indicator 25).
Sewage Flows at This Treatment Works	43.		Average dry weather flow - permanent population	64.2	60.5	68.0	68.0	68.0		L/s	
	44.		Average dry weather flow- peak population	66.6	66.6	81.0	81.0	81.0		L/s	
	45.		Peak dry weather flow - permanent population	150.3	102.5	115.0	115.0	115.0		L/s	
	46.		Peak dry weather flow - peak population	7.5	125.5	138.0	138.0	138.0		L/s	
	47.		Peak wet weather flow - max volume received in 24 hours	0.0	16.7	na	13.8	22.6		ML	The maximum volume of sewage received at the treatment works in 24 hours (ML). This data should be available from the meter at the inlet to the treatment works.
	48.		Peak wet weather flow - max flow received in 1 hour	0.0	na	337.0	159.0	262.0		L/s	The maximum flow received at the treatment works in 1 hour (L/s). This data should be available from the meter at the inlet to the treatment works.

ENVIRONMENTAL - Treatment Works Compliance

BOD	49.		BOD - 90th percentile licence limit	30	30	30	30	30		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	50.	53	BOD % compliance	100	100	100	100	100		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
SS	51.		SS - 90th percentile licence limit	30	30	30	30	30		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	52.	53	SS % compliance	100	100	100	100	100		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
Total N	53.		Total N - 90th percentile licence limit	na	na	na	na	na		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	54.	53	Total N % compliance	na	na	na	na	na		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
Ammonia	55.		Ammonia - 90th percentile licence limit	na	na	na	5	na		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	56.	53	Ammonia % compliance	na	na	na	100	na		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
Oil and Grease	57.		Oil and grease - 90th percentile licence limit	10	10	10	na	10		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	58.	53	Oil and grease % compliance	100	100	96.2	na	100		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
Total Phosphorus	59.		Total Phosphorus - 90th percentile licence limit	na	na	na	na	na		mg/L	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	60.	53	Total Phosphorus % compliance	na	na	na	na	na		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
E. coli	61.		E. coli - 90th percentile licence limit	na	na	na	na	na		cfu/100ml	Utilities which only have 100% limits should report on the basis of the 100% values. Report for this treatment works.
	62.	53	E. coli % compliance	na	na	na	na	na		%	Number of samples complying divided by the total number of scheduled samples including DEUS sampling days. The sampling schedule is that specified in the utility's licence.
Sampling Days	63.		No. of scheduled sampling days	28	26	26	53	26		no.	The number of scheduled sampling days for this treatment works, including the number of DEUS sampling days.
Compliance with Environmental Legislation	64.	54	Compliance with Licence	na	na	na	na	na		Y/N	Report compliance for this treatment works.
	65.	54	Penalty or litigation for non-compliance	na	na	na	na	na		Y/N	
	66.	54	Details of penalty or litigation								

SOCIAL - Levels of Service

Malfunctions	67.		No. of days of treatment process major malfunction*	0	0	0	0	0		no.	Refers to the number of days in the year when a significant portion of the treatment works was either not operating (other than routine maintenance) or not functioning properly (odours, loss of MLSS etc).
Complaints	68.	(41)	Odour complaints for this treatment works*	na	na	0	0	0		no.	**Include** all complaints received, except in the instance that the business can prove beyond reasonable doubt that the odour was attributable to an external source.
	69.	(41)	Odour complaints for pumping stations within the catchment of this treatment works*	na	na	12	8	18		no.	**Include** all complaints received, except in the instance that the business can prove beyond reasonable doubt that the odour was attributable to an external source.

ATTACHMENT 2

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*. The measurable characteristics fall into the following categories:

- *Microbiological,*
- *Physical,*
- *Chemical, and*
- *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 pages in this attachment refer to the 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
Iron, manganese, copper, nitrate, nitrite, lead, fluoride, manganese, antimony, arsenic, barium, boron, cadmium, chromium, cyanide, iodide, mercury, molybdenum, nickel, selenium, silver, sodium, sulfate	Monthly in systems serving a population of 5,000 or more, otherwise biannually

 # All of these chemicals are health related with the exception of:
- *iron*
- *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% 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

Q1 - Environmental Incidents

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
  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

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

Q5 – Public Health Incidents

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 1996 NHMRC water quality guidelines for over 7 days
- A system-wide boil water notice
- A failure of a disinfection system for over 3 days
- A failure of major treatment processes at a treatment works for over 4 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 2 days (if over 7 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 7 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

Q1 - Environmental Incidents

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 eg:
  - ⇒ Discharge of partially treated effluent to receiving waters
  - ⇒ Embankment failure of an effluent pond
- A wet weather sewer overflow for under 3 hours
- 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 waterways or land

Category 3 – Severe Incident with Irreversible Environmental Effects

- A dry weather sewer overflow
- A major breach of environmental regulations eg:
  - ⇒ A major wet weather sewer overflow or an overflow for over 3 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

Q5 – Public Health Incidents

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 4 days
- An incident resulting in unplanned interruptions to service for over 3 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

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 3

WATER SUPPLY STATEMENT OF FINANCIAL PERFORMANCE
(Gross Including Internal Transactions)
for the year ended 2005/2006
($'000)

		2005/06	2004/05
A. EXPENSES & REVENUES			
	Expenses		
1.	Management Expenses		
	a. Administration		
	b. Engineering and Supervision		
2.	Operation and Maintenance Expenses		
	- 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		
	h. Energy Costs		
	i. Maintenance Expenses		
	- Treatment		
	j. Operation Expenses (excluding chemical		
	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		
	a. Interest Expenses		
	b. Other Expenses		
5.	**Total Expenses**		
	Revenues		
6.	Residential Charges		
	a. Access (including rates)		
	b. User Charges		
7.	Non-residential Charges		
	a. Access (including rates)		
	b. User Charges		
8.	Extra Charges		
9.	Interest Income		
10.	Other Revenues		
11.	Grants		
	a. Grants for Acquisition of Assets		
	b. Grants for Pensioner Rebates		
	c. Other Grants		
12.	Contributions		
	a. Developer Charges		
	b. Developer Provided Assets		
	c. Other Contributions		
13.	**Total Revenues**		
14.	Gain or Loss on Disposal of Assets		
15.	Operating Result		
15a.	**Operating Result** (less Grants for Acquisition of Assets)		

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 3 (Cont'd)

WATER SUPPLY STATEMENT OF FINANCIAL PERFORMANCE
(Gross Including Internal Transactions)
for the year ended 2005/2006
($'000)

		2005/06	2004/05
B. CAPITAL TRANSACTIONS			
	Non-Operating Expenditures		
16.	Acquisition of Fixed Assets		
	a. Subsidised Scheme		
	b. Other New System Assets		
	c. Renewals		
	d. Plant & 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)	.....	
	c. Non-Residential (occupied)	.....	
	d. Non-Residential (unoccupied)	.....	
25.	Number of ETs for which Developer Charges were received	..... ET	
26.	Total Amount of Pensioner Rebates	$.....	

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 3 (cont'd)

WATER SUPPLY – CROSS-SUBSIDIES
as at 2005/2006
($'000)

	Yes	No	Amount
D. BEST PRACTICE ANNUAL CHARGES & 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)?			
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 2006/07 (page 47 of Guidelines)			
29. **Disclosure of Cross Subsidies** **TOTAL OF CROSS SUBSIDIES** (27b + 27c + 27d + 28b)			

* 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 Land and Water Conservation, December, 2002. Such charges do not involve significant cross-subsidies.

** In accordance with page 9 of *Developer Charges Guidelines for Water Supply, Sewerage and Stormwater*, Department of Land & Water Conservation, December, 2002.

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 3 years.

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 4

WATER SUPPLY – NET ASSETS COMMITTED
(Gross Including Internal Transactions)
as at 2005/2006
($'000)

		Current	Non-Current	Total
	ASSETS			
30.	Cash and Investments			
	a. Developer Charges			
	b. Specific 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. Dividend			
	b. 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			

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 5

SEWERAGE STATEMENT OF FINANCIAL PERFORMANCE
(Gross Including Internal Transactions)
for the year ended 2005/2006
($'000)

		2005/06	2004/05
A. EXPENSES & REVENUES			
	Expenses		
1.	Management Expenses		
	a. Administration		
	b. Engineering and Supervision		
2.	Operation 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. Other Expenses		
5.	**Total Expenses**		
	Revenues		
6.	Residential Charges (including rates)		
7.	Non-residential Charges		
	a. Access (including rates)		
	b. User Charges		
8.	Trade Waste Charges		
	a. Annual Fees		
	b. User Charges		
	c. Excess Mass Charges and Re-inspection Fees		
9.	Extra Charges		
10.	Interest Income		
11.	Other Revenues		
12.	Grants		
	a. Grants for Acquisition of Assets		
	b. Grants for Pensioner Rebates		
	c. Other Grants		
13.	Contributions		
	a. Developer Charges		
	b. Developer Provided Assets		
	c. Other Contributions		
14.	**Total Revenues**		
15.	Gain or Loss on Disposal of Assets		
16.	Operating Result		
16a.	**Operating Result** (less Grants for Acquisition of Assets)		

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 5 (Cont'd)

SEWERAGE STATEMENT OF FINANCIAL PERFORMANCE
(Gross Including Internal Transactions)
for the year ended 2005/2006
($'000)

		2005/06	2004/05
B. CAPITAL TRANSACTIONS			
	Non-Operating Expenditures		
17.	Acquisition of Fixed Assets		
	a. Subsidised Scheme		
	b. Other New System Assets		
	c. Renewals		
	d. Plant & Equipment		
18.	Payment 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)	.....	
	c. Non-Residential (occupied)	.....	
	d. Non-Residential (unoccupied)	.....	
26.	Number of ETs for which Developer Charges were received	..... ET	
27.	Total Amount of Pensioner Rebates	$.....	

COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 5 (cont'd)

SEWERAGE – CROSS-SUBSIDIES
as at 2005/2006
($'000)

	Yes	No	Amount
D. BEST PRACTICE ANNUAL CHARGES & 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)?			
b. Cross-subsidy to non-residential customers (page 45 of Guidelines)			
c. Cross-subsidy to trade waste dischargers (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 2006/07 (page 47 of Guidelines)			
30. **Disclosure of Cross Subsidies**			
TOTAL OF CROSS SUBSIDIES (28b + 28c + 29b)			

* Such charges for residential customers, non-residential customers and trade waste dischargers comply with sections 4.2 and 4.3 of *Water Supply, Sewerage and Trade Waste Pricing Guidelines*, Department of Land and Water Conservation, December, 2002. Such charges do not involve significant cross-subsidies.

** In accordance with page 9 of *'Developer Charges Guidelines for Water Supply, Sewerage and Stormwater*, Department of Land & Water Conservation, December, 2002.

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 3 years

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COUNCIL OF / COUNCIL OF THE CITY OF .....

SPECIAL SCHEDULE NO. 6

SEWERAGE SERVICES – NET ASSETS COMMITTED
(Gross Including Internal Transactions)
as at 2005/2006
($'000)

		Current	Non-Current	Total
	ASSETS			
31.	Cash and Investments			
	a. Developer Charges			
	b. Specific 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. Dividend			
	b. 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 SCHEDULE NOS. 3 AND 5

Administration* (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* (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 4b of Special Schedules 3 and 5) include all expenses not recorded elsewhere.

Residential Charges** (items 6a, 6b and item 6 of Special Schedules 3 and 5 respectively) include all revenues from residential charges. Item 6 of Schedule 3 should be separated into 6a Access Charges (including rates if applicable) and 6b User Charges.

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

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

Other Revenues (items 10 and 11 of Special Schedules 3 and 5 respectively) include all revenues 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.

* 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).

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

Special purpose financial reports 2 and 3

Note 2 Water Supply Business best practice management disclosure requirements

			2006
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)	Amounts paid for Tax Equivalents	$	
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 2007, less cumulative dividends paid for 2 years to 30 June 2006	$	
(iv)	Maximum Dividend from Surplus *(least of (i), (ii) and (iii))*	$	**0**
(v)	Dividend paid from Surplus	$	
Required Outcomes for 6 Criteria			
(i)	Completion of Strategic Business Plan (including Financial Plan)	Yes/No	
(ii)	Full cost-recovery, without significant cross subsidies	Yes/No	
	(Item 2(a) in Table 1 on page 22 of Best Practice Management Guidelines)		
	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 Form *(by 15 September each year)*	Yes/No	
(vi)	Integrated Water Cycle Management Evaluation *(by June 2007)*	Yes/No	

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

			2006
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)	Amounts paid for Tax Equivalents	$	
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 2007, less cumulative	$	
	dividends paid for 2 years to 30 June 2006		
(iv)	Maximum Dividend from Surplus *(least of (i), (ii) and (iii))*	$	**0**
(v)	Dividend paid from Surplus	$	
Required Outcomes for 4 Criteria			
(i)	Completion of Strategic Business Plan (including Financial Plan)	Yes/No	
(ii)	Pricing with full cost-recovery, without significant cross subsidies	Yes/No	
	(Item 2(a) in Table 1 on page 22 of Best Practice guidelines)		
	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)	Integrated Water Cycle Management Evaluation *(by June 2007)*	Yes/No	

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.

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Formulae for Calculation of Performance Indicators in Table 5

5. 2005/06 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) (ML)	Total annual water supplied (Residential plus Non-residential). 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 Consumption (Potable) (kL/ connected property)	Where an LWU has not reported potable residential water consumption, the residential consumption has been estimated as 58% of the reported annual potable water consumption. As shown in Note 8 of Table 8, the average reported residential consumption is 58% of the total potable water supplied.	From Col (56) Table 10
(4)	Revenue ($M)	Total Revenue including gain/loss on disposal of assets, less grants for acquisition of assets, less interest income [Residential Charges + Non-residential Charges + Extra Charges + Grants (excluding grants for Acquisition of Assets) + Contributions (Developer Charges + Developer Provided Assets + Other Contributions)] + Gain/loss on disposal of assets.	From Col (57) Table 11
(7)	Water Quality Compliance - Chemical (%)	Chemical water quality compliance	From Col (70) Table 12
(7a)	No. of Zones Complying	Number of supply zones where chemical compliance was achieved.	From Col (70a) Table 12
(8)	Water Quality Compliance - Microbiological - E. coli (%)	Number of samples tested that meet the water quality requirements divided by the total number of samples tested. Note that this is the number of samples not tests, one sample may have a number of tests performed.	From Col (71) Table 12
(8a)	No. of Zones Complying	Number of supply zones where microbiological compliance was achieved.	From Col (71a) Table 12
(8b)	% Population with Microbiological Compliance		From Col (71b) Table 12
	Sewerage		
(9)	Revenue ($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 (33) Table 15
(11)	Sewage Odour Complaints	Sum of odour complaints from all sewage treatment works.	From Col (61) Table 17
(12)	Recycled Water		From Col (41c) Table 15
	Water Supply and Sewerage		
(13)	Total Revenue ($M)	Water Supply Turnover + Sewerage Turnover	Col (4) Table 5 + Col (9) Table 5
(13a)	Net Profit After Tax		
(13b)	Typical Residential Bill ($/assessment)	Sum of water and sewerage Typical Residential Bills.	Col (8) Table 6 + Col (8) Table 7
(14)	Typical Developer Charge ($/ET)	Sum of water and sewerage Typical Developer Charges.	Col (7) Table 6 + Col (7) Table 7
(17)	OMA Cost ($/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
(17a)	Total Cost ($/connected property)	OMA costs plus current cost depreciation for water supply and sewerage assets divided by number of connected properties.	
(18)	Management Cost ($/connected property)	Total water supply and sewerage management costs divided by number of connected properties.	Col (69) Table 11 + Col (54) Table 16
(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_6) 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 Table 5A

5A. 2005/06 NSW Water Utility Performance Summary

Column No.	Performance Indicator	Background to Formula	Formula
	Water Supply & Sewerage		
(22)	Billing Complaints	Billing complaints for both water supply and sewerage businesses.	$(Q_{99\ Water} + Q_{37\ Sewerage}) \div$ Col(20) Table 9
(23)	Average Connect Time to a Telephone Operator (secs)	Connect time to a telephone operator for both water supply and sewerage businesses.	$(Q_{103\ Water} + Q_{41\ Sewerage})$
(24)	Net Greenhouse Emissions (tonnes)	Net greenhouse emissions for the whole water utility.	(Q_{147})
(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.	$[(W_{15} - W_9 - W_{11a} - W_{14} + W_{4a}) + (S_{16} + S_{4a} - S_{10} - S_{12a} - S_{15})] \times 100 \div (S_{34}+W_{33})$
(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.	$[(W_{36} + W_{38} - W_{30}) + (S_{37} + S_{39} - S_{31})] \times 100 \div (W_{44}+ S_{45})$
(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		From SPFR Notes 2 & 3
(30)	CSOs	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).	

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_6) 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. $Q_{99Water}$) refer to questions on each LWU's Annual Water Supply or Sewerage Reporting Form.

Formulae for Calculation of Performance Indicators in Table 6 and 7

6. Water Supply - 2005/06 Charges, 2006/07 Bills

Column No.	Performance Indicator	Background to Formula	Formula
(1)	Type of Tariff	Description of tariff.	From Council's Schedule of Fees and Charges
(2)	Access Charge ($)	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 (12) Table 8]
(7)	Typical Developer Charge 2006/07 ($/Equivalent Tenement(ET))	Upfront infrastructure contribution for new developments.	Q_{136} (see notes C & D)
(8)	Typical Residential Bill 2006/07 ($/assessment) (see note D)	Calculated using the average residential water consumption for 2005/06 multiplied by the usage charges for 2006/07 plus the access charge for 2006/07.	Col(5) x Col(14) ÷ 100 + Col(2) Table 6
(9)	Average Residential Bill 2005/06 ($/property) (see Note D)	Calculated using the revenue from residential rates and usage charges for 2005/06 divided by the number of connected residential properties.	$(W_{6a} + W_{6b}) \div$ [Cols (18)x(21)x(22) Table 9]
(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 but includes gain/loss on disposal of assets. Operational assets include system assets plus plant and equipment.	$[(W_{15} + W_{4a} - W_9 - W_{11a} - W_{14})] \times 100 \div (W_{33})$
(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).	$W_{6b} \times 100 \div [W_{6a} + W_{6b}]$
(14)	Average Annual Residential Consumption (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]
(15)	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 - Charges, Bills

Column No.	Performance Indicator	Background to Formula	Formula
(1)	Access Charge ($)	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)	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
(4)	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 2006/07 ($/Equivalent Tenement(ET))	Upfront infrastructure contribution for new developments.	Q_{62} (see notes C & D)
(8)	Typical Residential Bill 2006/07 ($/assessment) (see note D)	Calculated using the access charge for 2006/07 plus, if council has residential sewer usage charges, the average residential water consumption for 2005/06 multiplied by the usage charges and usage factor for 2006/07.	(1)
(9)	Average Residential Bill 2005/06 ($/property) (see Note D)	Calculated using the revenue from residential rates and usage charges for 2005/06 divided by the number of connected residential properties. This is generally less than the TRB, due largely to pensioner rebates.	$[S_6] \div$ [Col(3) Table 14]
(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 or gain/loss on disposal. Operational assets include system assets plus plant and equipment.	$[(S_{16} + S_{4a} - S_{10} - S_{12a} - S_{15})] \times 100 \div (S_{34})$
(12)	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(3) Table 14

Notes:

A. References to Q (eg. Q_{4a}) refer to questions on each LWU's Annual Water Supply Reporting Form. For table 7, this refers to the LWU's Annual Sewerage Reporting Form.

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 Table 8 & 9

8. 2005/06 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)	Bulk Sales	Sales to other Local Water Utilities (LWUs) of potable water.	Q_{59}
(7)	Public Parks and Gardens	Watering of public parks, gardens, ovals etc using potable water.	Q_{60}
(8)	Unbilled Authorised Consumption (see note C)	Includes fire fighting and flushing.	Q_{61}
(8a)	Water Losses (see note C)	Apparent losses plus real losses. Includes leakage (real loss), theft and illegal connections, illegal use of unmetered customer fire services, under-registration of customer meters and errors in system meters.	Q_{69}
(8b)	Real Loss (Leakage) (see note C)	Leakage. Real loss is included in water losses.	Q_{68}
(10)	Total Potable Town Water Supply (see note C)	Sum of columns (1) to (8).	Q_{71}
(11)	Non- Potable Town Water Supply	Includes untreated water for industry or non-potable water component in a dual water supply system and may also include recycled water .	Q_{72}
(12)	Total Annual Town Water Supply	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.	$Q_{71} + Q_{72} - Q_{22} - Q_{23}$
(13)	Recycled Water for Non-Potable Town Water Supply	The volume of recycled water should be consistent with the volume shown in Q22 and Q23 of the Sewerage Treatment Report.	$Q_{22} + Q_{22}$ (sewage treatment)
(14)	Recycled Water for Agricultural use	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)
(15)	Surface Water Source	Surface water plus ground water plus bulk purchases should equal total annual water consumption.	Q_{41} to Q_{44}
(16)	Groundwater Source		Q_{45}
(17)	Bulk Purchases	Potable plus non-potable	$Q_{48} + Q_{49}$

9. Water Supply - Utility Characteristics

Column No.	Performance Indicator	Background to Formula	Formula
(18)	Total No. of Assessments (see notes C & D)	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 connection).	Q_{30}
(19)	Ratio of Connected Properties to Assessments (see notes C & D)	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.	
(20)	Connected Properties (see note E)	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 notes C & D)	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.	
(22)	Ratio of Residential Connections to Residential Assessments (see notes C & D)	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.	
(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		Q_{2}
(25)	Mains	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.	Q_{17}
(27a)	Other Limited Treatment	Number of Chlorinators	
(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 Investment	The amount spent on acquisition of system assets (subsidised or other new system assets) and on system renewals.	W16a + W16b + W16c
(32)	Total Workforce (water supply)	Equivalent full time employees involved with water supply.	Q_{120}
(33)	% Female	% of equivalent full time female employees in total water supply workforce.	$Q_{120} \times 100 \div Q_{121}$
(34)	% Undergoing Training	% of employees in water supply workforce undergoing training for 2 or more days during the year.	$Q_{122} \times 100 \div Q_{120}$
(35)	Outsourcing % of Management Cost	% expended on outsourcing for management of water supply business.	Q_{128}
(36)	Outsourcing % of Operation Cost	% expended on outsourcing for operation of water supply business.	Q_{129}
(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.	$Q_{123} \div (230 \times Q_{120})$
(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}
(40)	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.	$(Q_{125} \times 100) / Q_{123}$

Notes:

A. References to Q (eg. Q_{12a}) refer to questions on each LWU's Annual Water Supply Reporting Form.

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).

D. Many LWUs have provided insufficient data to calculate the number of Connected Properties per Assessment. A value has been estimated by DWE for such LWUs (see also note E).

E. The number of connected properties is generally not well reported. A common error is to report the number of flats served rather than the number of blocks of flats in Question 2b of the Performance Reporting Forms. See Note 4 on page 3 of the report.

Formulae for Calculation of Performance Indicators in Table 10 & 11

10. Water Supply - 2005/06 Asset Management

Column No.	Performance Indicator	Background to Formula	Formula
(41)	Leakage	Real loss or leakage L per day per connection.	$Q_{68} \div 365$ ÷ column (18a) Table 9
(41b)	Infrastructure Leakage Index (ILI)	Ratio of Current Annual Real Loss to Unavoidable Annual Real Loss	
(41c, 41d, 41e)	Reservoir Drop Test	Whether Drop Test undertaken, the year and the result of the test.	
(42)	Main Breaks	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.	$Q_{104} \div (Q_{22} \div 100)$
(43)	Unplanned Interruptions to Supply	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	Length of mains rehabilitated per 100km of main.	$Q_{23} \div (Q_{22} \div 100)$
(45)	Rehabilitation of service connections	Number of service connections rehabilitated as % of total.	Q_{24} x 100 ÷ Col(20) Table 9
(46)	Renewals per 100km of main	Expenditure on renewals of mains per 100km of main.	$W_{16c} \div (Q_{22} \div 100)$
(47)	Renewals as % 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	Expenditure on maintenance of mains per 100km of main.	$W_{2d} \div (Q_{22} \div 100)$
(49)	Total Town 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 Town Water Supply (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 town water supply.	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 .	$W_{13b} \div$ [Col(49) ÷ 365]
(54)	Drought Management Policy in Place	Yes or No.	
(55)	Water Conservation Policy in Place	Yes or No.	
(56)	Average Annual Residential Consumption (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 - 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 and interest income but including 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)].	$(W_{13} - W_{11a}) \div 1000$
(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.	$(W_{6a} + W_{6b}) \times 100 \div (W_6 + W_7)$
(59)	Residential Consumption (% of potable consumption excluding water losses)	% of potable water excluding water losses.	$(Q_{54} \div (Q_{62})) \times 100$
(60)	Written Down Replacement Cost ($M)	Written down replacement cost of system assets.	$W_{47} \div 1{,}000$
(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).	$W_{45} \div 1{,}000$
(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)	Debt to Equity (%)	All overdrafts, repayable borrowings, interest bearing non-repayable borrowings, advances and leases divided by total equity.	$(W_{36} + W_{38}) \times 100 \div W_{44}$
(63a)	Economic Real Rate of Return (%)	From column (12) Table 6.	
(64a)	Cross Subsidies (Annual Charges & Fees)	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)	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
(67)	Operating Cost OMA ($/property)	Total operation, maintenance and administration costs (excluding cost of purchasing water) divided by total number of connected properties.	$[W_1 + W_{2(a\ to\ n)}]$ ÷ Col(20) Table 9 plus bulk suppliers OMA
(68)	Total Cost (OMA + Depreciation) ($/property)	Total operation, maintenance and administration costs (excluding cost of purchasing water) + depreciation costs (system assets plus plant & equipment) divided by total number of connected properties.	$[W_1 + W_{2(a\ to\ n)} + W_3]$ ÷ Col(20) Table 9 plus bulk suppliers OMA and depreciation
(68a)	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_{12a}) refer to questions on each LWU's Annual Water Supply Reporting Form.

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 - 2005/06 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
(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
(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
(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
(75)	Total Water Complaints (per 1000 properties)		Q_{102} x 1000 ÷ Col(20) Table 9
(76)	Average Customer Outage Time (min)	Number of interruptions multiplied by average time to restore supply divided by connected properties.	(Q_{106} x Q_{107} x 60) ÷ Col(20) Table 9
(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 (hours)	Average duration of unplanned interruptions.	Q_{107}
(78a)	Drought Water Restrictions	Percent of time that water restrictions apply.	(Q_{95} ÷ 365) x 100

Notes:

A. References to Q (eg. Q_{4a}) refer to questions on each LWU's Annual Water Supply Reporting Form.

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 Q16 multiplied by Q17 for each treatment works. Divide the total by the sum of Q16 for all treatment works.
Chemical compliance - sum for all treatment works, the product of Q18 multiplied by Q19 for each treatment works. Divide the total by the sum of Q18 for all treatment works.

D. Sum for all treatment works, the product of Q26 multiplied by Q27 for each treatment works. Divide the total by the sum of Q26 for all treatment works.
An LWU complied with the 1996 NHMRC/ARMCANZ 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 - 2005/06 Benchmarking Cost Data

Column No.	Performance Indicator	Background to Formula	Formula
(79)	Operating Cost Components - Maintenance ($/property)	Maintenance cost of all water system assets.	$[W_{2b} + W_{2d} + W_{2f} + W_{2i} + W_{2l} + W_{2n}] \div$ Col(20) Table 9
(80)	Operating Cost Components - Operation ($/property)	Operation cost of all water system assets.	$[W_{2a} + W_{2c} + W_{2e} + W_{2g} + W_{2j} + W_{2m}] \div$ Col(20) Table 9
(81)	Operating Cost Components - Energy ($/property)	Energy cost of water pumping and treatment.	$[W_{2h}] \div$ Col(20) Table 9
(82)	Operating Cost Components - Chemicals ($/property)	The chemicals cost for water treatment.	$[W_{2k}] \div$ Col(20) Table 9
(83)	Operating Cost Components - Dams & Weirs ($/property)	Operation and Maintenance cost of dams and weirs.	$[W_{2a} + W_{2b}] \div$ Col(20) Table 9
(84)	Operating Cost Components - Mains ($/property)	Operation and Maintenance cost of water mains.	$[W_{2c} + W_{2d}] \div$ Col(20) Table 9
(85)	Operating Cost Components - Reservoirs ($/property)	Operation and Maintenance cost of reservoirs.	$[W_{2e} + W_{2f}] \div$ Col(20) Table 9
(86)	Operating Cost Components - Pumping Stations ($/property)	Operation and Maintenance cost of water pumping stations.	$[W_{2g} + W_{2h} + W_{2i}] \div$ Col(20) Table 9
(87)	Operating Cost Components - Water Treatment ($/property)	Operation and Maintenance cost of water treatment works.	$[W_{2j} + W_{2k} + W_{2l}] \div$ Col(20) Table 9
(88)	Operating Cost Components - Other ($/property)	Operation and Maintenance cost of other water system assets.	$[W_{2m} + W_{2n} + W_{2o}] \div$ Col(20) Table 9
(89)	Management Cost Components - Administration ($/property)	From special schedule No. 3.	$[W_{1a}] \div$ Col(20) Table 9
(90)	Management Cost Components - Engineering & Supervision ($/property)	From special schedule No. 3.	$[W_{1b}] \div$ Col(20) Table 9
(91)	Management Cost Components - Total (c/kL)	From special schedule No. 3.	$[W_{1a} + W_{1b}] \times 100 \div$ Col(49) Table 10
(92)	Wholesale Component ($/property)	From the wholesale component estimated in the reporting forms.	$[W_1 + W_2] \times Q_{18a} \div$ Col(20) Table 9
(93)	Retail Component ($/property)	From the retail component estimated in the reporting forms.	$[W_1 + W_2] \times Q_{18b} \div$ Col(20) Table 9
(94)	Pumping Cost Components - Total Water Pumping Cost (c/kL)	From special schedule No. 3.	$[W_{2g} + W_{2h} + W_{2i}] \times 100 \div$ Col(49) Table 10
(95)	Pumping Cost Components - Total Water Pumping Cost ($/pumping station)	From special schedule No. 3.	$[W_{2g} + W_{2h} + W_{2i}] \div$ Col(28) Table 9
(96)	Pumping Cost Components - Operation ($/pumping station)	From special schedule No. 3.	$[W_{2g}] \div$ Col(28) Table 9
(97)	Pumping Cost Components - Maintenance ($/pumping station)	From special schedule No. 3.	$[W_{2i}] \div$ Col(28) Table 9
(98)	Pumping Cost Components - Energy ($/pumping station)	From special schedule No. 3.	$[W_{2h}] \div$ Col(28) Table 9
(99)	Pumping Cost Components - Energy Cost ($/property)	From special schedule No. 3.	$[W_{2h}] \div$ Col(20) Table 9
(100)	Water Main Cost Components - Total Water Main Cost (c/kL)	From special schedule No. 3.	$[W_{2c} + W_{2d}] \times 100 \div$ Col(49) Table 10
(101)	Water Main Cost Components - Total Water Main Cost ($'000/100km)	From special schedule No. 3.	$[W_{2c} + W_{2d}] \times 100 \div$ Col(25) Table 9
(102)	Water Main Cost Components - Operation ($'000/100km)	From special schedule No. 3.	$[W_{2c}] \times 100 \div$ Col(25) Table 9
(103)	Water Main Cost Components - Maintenance ($'000/100km)	From special schedule No. 3.	$[W_{2d}] \times 100 \div$ Col(25) Table 9
(104)	Treatment Cost Components - Total Water Treatment Cost (c/kL)	From special schedule No. 3.	$[W_{2j} + W_{2k} + W_{2l}] \times 100 \div$ Col(49) Table 10
(105)	Treatment Cost Components - Total Water Treatment Cost ($/property)	From special schedule No. 3.	$[W_{2j} + W_{2k} + W_{2l}] \div$ Col(20) Table 9
(106)	Treatment Cost Components - Operation ($/property)	From special schedule No. 3.	$[W_{2j}] \div$ Col(20) Table 9
(107)	Treatment Cost Components - Maintenance ($/property)	From special schedule No. 3.	$[W_{2l}] \div$ Col(20) Table 9

Notes:

A. References to Q (eg. Q_{4a}) refer to questions on each LWU's Annual Water Supply Reporting Form.

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 notes D & E)	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 notes D & E)	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 (see note E)	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 (see notes D & E)	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 (see notes D & E)	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.	
(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		Q_2
(8)	Mains	Total length of sewer mains including reticulation, gravity and rising mains.	Q_9
(9)	Sewage Treatment Works	Number of treatment works.	Q_3
(10)	Pumping Stations	Number of sewage pumping stations.	Q_5
(11)	Properties Served per km of main	Total number of connected properties divided by length of mains.	Col(3) ÷ Col(8)
(12)	Pumping Stations per 100km of main	Number of pumping stations divided by length of main.	Col(10) ÷ Col(8) ÷ 100
(13)	Capital Investment	The amount spent on acquisition of system assets (subsidised or other new system assets) and on system renewals.	S17a + S17b + S17c
(14)	Total Workforce (water supply)	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}
(16)	% Undergoing Training	% of employees in water supply workforce undergoing training for 2 or more days during the year.	Q_{51} x 100 ÷ Q_{49}
(17)	Outsourcing % of Management Cost	% expended on outsourcing for management of sewerage business.	Q_{57}
(18)	Outsourcing % of Operation Cost	% expended on outsourcing for operation of sewerage business.	Q_{58}
(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}
	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_{12a}) refer to questions on each LWU's Annual Sewerage Reporting Form.

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).

D. Many LWUs have provided insufficient data to calculate the number of Connected Properties per Assessment. A value has been estimated by DWE for such LWUs (see also note E).

E. The number of connected properties is generally not well reported. A common error is to report the number of flats served rather than the number of blocks of flats in Question 2b of the Performance Reporting Forms. See Note 4 on page 3 of the report.

Formulae for Calculation of Performance Indicators in Table 15 & 16

15. Sewerage - 2005/06 Asset Management

Column No.	Performance Indicator	Background to Formula	Formula
(23)	Infiltration	Estimated groundwater infiltration and stormwater inflow into the system per 100km of main.	$Q_{22} \div (Q_9 \div 100)$
(24)	Chokes and Collapses	Chokes and collapses 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	Recorded overflows in sewers, access chambers and pumping stations. Overflows in risers and sidelines are excluded.	$Q_{63} \div (Q_9 \div 100)$
(26)	Interruptions to Service	Number of properties affected by unplanned interruptions to service per 1000 properties. Includes each occurrence.	Q_{42} x 1000 ÷ Col(3) Table 14
(27)	Rehabilitation of mains	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 per 100km of main	Expenditure on renewals of mains per 100km of main.	$S_{17c} \div (Q_9 \div 100)$
(30)	Renewals as % 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	Expenditure on maintenance of mains per 100km of main.	$S_{2b} \div (Q_9 \div 100)$
(32)	Total Volume of Sewage Collected (ML)	Total volume transported through sewerage network.	Q_{26}
(33)	Percentage of Sewage Treated	% of total sewage collected.	$(Q_{18} + Q_{19})$ x 100 ÷ Q_{26}
(34)	Infiltration	% of total sewage collected.	Q_{31} x 100 ÷ Q_{26}
(35)	Residential	% of total sewage collected.	Q_{32} x 100 ÷ Q_{26}
(36)	Non-residential	% of total sewage collected.	Q_{33} x 100 ÷ Q_{26}
(37)	Trade Waste	% of total sewage collected.	Q_{34} x 100 ÷ Q_{26}
(38)	Other	Remainder not reported under columns (34), (35), (36) or (37). % of total sewage collected.	100 - (34) - (35) - (36) - (37)
(39)	Volume of Sewage Treated per property		$(Q_{18} + Q_{19})$ x 100 ÷ Col(3) Table 14
(40)	Biosolids Reused	% of biosolids (sludge) to farmland, landfill etc.	Q_{27}
(41)	% of Effluent Reclaimed		Q_{25}

16. Sewerage - 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 and interest income but including gain/loss on disposal of assets [Residential Charges + Non-residential Charges + Trade Waste Charges + Extra Charges + Interest + Other Revenues + Grants (excluding receipts from government for Acquisition of Assets) + Contributions (Developer Charges +	$(S_{14} - S_{12a}) \div 1000$
(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 ÷ $(S_6 + S_7)$
(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 / Assessment ($)	The value of the infrastructure assets divided by the number of assessments.	$S_{46} \div$ Col(1) Table 14
(48)	Debt to Equity (%)	All overdrafts, repayable borrowings, interest bearing non-repayable borrowings, advances and leases divided by total equity.	$(S_{37} + S_{39})$ x 100 ÷ S_{45}
(48a)	Economic Real Rate of Return (%)	From column 11 Table 7.	
(49a)	Cross Subsidies (Annual Charges & Fees)	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)	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 ($/property)	Sewage treatment works licence fees paid by LWU.	From DEC records
(52)	Operating Cost OMA ($/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
(53)	Total Cost (OMA + Depreciation) ($/property)	Total operation, maintenance and administration costs + depreciation costs (system assets plus plant & equipment) divided by total number of connected properties.	$[S_1 + S_{2(a\ to\ m)} + S_3] \div$ 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_{12a}) refer to questions on each LWU's Annual Sewerage Reporting Form.

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 - 2005/06 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	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	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.	$Q_{64} \div (Q_9 \div 100)$
(60)	Sewer Overflows to the Environment	See Column (25) on Table 15.	$Q_{63} \div (Q_9 \div 100)$
(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
(63)	Average Customer Outage Time (min)	No. of interruptions multiplied by average time to restore service divided by connected properties.	$(Q_{42} \times Q_{43} \times 60) \div$ Col(3) Table 14
(64)	Customer Interruption Frequency (No./1000 properties)	Include each occurrence of unplanned interruptions to service. Do not include breaks in service connections.	$[Q_{42} \times 1000] \div$ Col(3) Table 14
(65)	Average Duration of Interruptions (Hours)	Average duration of unplanned interruptions.	Q_{43}

Notes:

A. References to Q (eg. Q_{4a}) refer to questions on each LWU's Annual Sewerage Reporting Form.

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 Q50 multiplied by Q50 for each treatment works.
Divide this total by the sum of Q50 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 Q52 multiplied by Q50 for each treatment works.
Divide the total by the sum of Q50 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 - 2005/06 Benchmarking Cost Data

Column No.	Performance Indicator	Background to Formula	Formula
(66)	Operating Cost Components - Maintenance ($/property)	Maintenance cost of all sewerage system assets.	$[S_{2b} + S_{2e} + S_{2k} + S_{2m}] \div$ Col(3) Table 14
(67)	Operating Cost Components - Operation ($/property)	Operation cost of all sewerage system assets.	$[S_{2a} + S_{2c} + S_{2f} + S_{2l}] \div$ Col(3) Table 14
(68)	Operating Cost Components - Energy ($/property)	Energy cost of sewage treatment and pumping	$[S_{2h}] \div$ Col(3) Table 14
(69)	Operating Cost Components - Chemical Treatment ($/property)	The chemical cost of sewage treatment.	$[S_{2g}] \div$ Col(3) Table 14
(70)	Operating Cost Components - Mains ($/property)	Operation and Maintenance cost of sewage mains.	$[S_{2a} + S_{2b}] \div$ Col(3) Table 14
(71)	Operating Cost Components - Pumping Stations ($/property)	Operation and Maintenance cost of sewage pumping stations.	$[S_{2c} + S_{2d} + S_{2e}] \div$ Col(3) Table 14
(72)	Operating Cost Components - Sewage Treatment ($/property)	Operation and maintenance cost of sewage treatment.	$[S_{2f} + S_{2g} + S_{2h} + S_{2i} + S_{2j} + S_{2k}] \div$ Col(3) Table 14
(73)	Operating Cost Components - Other ($/property)	Operation and maintenance cost of other sewerage system assets.	$[S_{2l} + S_{2m}] \div$ Col(3) Table 14
(74)	Management Cost Components - Administration ($/property)	From special schedule No. 5.	$[S_{1a}] \div$ Col(3) Table 14
(75)	Management Cost Components - Engineering & Supervision ($/property)	From special schedule No. 5.	$[S_{1b}] \div$ Col(3) Table 14
(76)	Management Cost Components - Total (c/kL)	From special schedule No. 5.	$[S_{1a} + S_{1b}] \times 100 \div$ Col(32) Table 15
(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.	$[S_{2c} + S_{2d} + S_{2e}] \times 100 \div$ Col(32) Table 15
(80)	Pumping Cost Components - Total Sewage Pumping Cost ($/pumping station)	From special schedule No. 5.	$[S_{2c} + S_{2d} + S_{2e}] \div$ Col(10) Table 14
(81)	Pumping Cost Components - Operation ($/pumping station)	From special schedule No. 5.	$[S_{2c}] \div$ Col(10) Table 14
(82)	Pumping Cost Components - Maintenance ($/pumping station)	From special schedule No. 5.	$[S_{2e}] \div$ Col(10) Table 14
(83)	Pumping Cost Components - Energy ($/pumping station)	From special schedule No. 5.	$[S_{2d}] \div$ Col(10) Table 14
(84)	Pumping Cost Components - Energy Cost ($/property)	From special schedule No. 5.	$[S_{2d}] \div$ Col(3) Table 14
(85)	Sewer Main Cost Components - Total Sewer Main Cost (c/kL)	From special schedule No. 5.	$[S_{2a} + S_{2b}] \times 100 \div$ Col(32) Table 15
(86)	Sewer Main Cost Components - Total Sewer Main Cost ($'000/100km)	From special schedule No. 5.	$[S_{2a} + S_{2b}] \times 100 \div$ Col(8) Table 14
(87)	Sewer Main Cost Components - Operation ($'000/100km)	From special schedule No. 5.	$[S_{2a}] \times 100 \div$ Col(8) Table 14
(88)	Sewer Main Cost Components - Maintenance ($'000/100km)	From special schedule No. 5.	$[S_{2b}] \times 100 \div$ Col(8) Table 14
(89)	Treatment Cost Components - Total Sewage Treatment Cost ($/ML)	From special schedule No. 5.	$[S_{2f} + S_{2g} + S_{2h} + S_{2i} + S_{2j} + S_{2k}] \div$ Col(32) Table 15
(90)	Treatment Cost Components - Operation ($/property)	From special schedule No. 5.	$[S_{2f}] \div$ Col(3) Table 14
(91)	Treatment Cost Components - Maintenance ($/property)	From special schedule No. 5.	$[S_{2k}] \div$ Col(3) Table 14
(92)	Treatment Cost Components - Chemical ($/property)	From special schedule No. 5.	$[S_{2g}] \div$ Col(3) Table 14

Notes:

A. References to Q (eg. Q_{4a}) refer to questions on each LWU's Annual Sewerage Reporting Form.

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).

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APPENDIX C

2005/06 LOCAL WATER UTILITY TBL PERFORMANCE REPORTS

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Shoalhaven City Council Water Supply (Page 1)

Shoalhaven City Council	TBL Water Supply Performance	2005/06

WATER SUPPLY SYSTEM - Shoalhaven City Council serves a population of 75,500 (48,510 assessments). 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 13,600 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), 38 service reservoirs (201 ML) 29 pumping stations, 116 ML/d delivery capacity into the distribution system, 465 km of trunk mains and 1035 km of reticulation. 70% of the supply is fully treated (Northern areas) and 30% is unfiltered (chlorinated - Southern areas).

PERFORMANCE - Shoalhaven City Council complied with all of the 6 Best Practice Criteria. The typical residential bill was $216 which was less than the statewide median (Indicator 13). The economic real rate of return was 0.8% which was less than the statewide median (Indicator 41). The operating cost per property was less than the statewide median (Indicator 47). Water quality complaints were less than the statewide median (Indicator 23). Compliance with microbiological water quality was 100% with 4 of 5 zones compliant (Indicator 18), physical compliance was 100% (Indicator 16) and chemical compliance was 100% with 4 of 5 zones compliant (Indicator 17). Current replacement cost of system assets was $537M ($11,100 per assessment), cash and investments were $26.2M, debt was $4M and revenue was $17M (excluding capital works grants).

COMPLIANCE WITH BEST- PRACTICE MANAGEMENT GUIDELINES CRITERIA

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

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

				Ranking			
				LWU Result	>10,000 properties	All LWUs	Statewide Median
					Note 1	Note 2	Note 3
UTILITY CHARACTERISTICS		1	**Population served: 75500**	**Number of connected properties: 44630**			
		2	**Number of assessments: 48510**	**0.92 connected properties per assessment**			
		3	**Residential assessments** (% of total)		93		92
		4	**New residences connected to water supply** (%)		0.7	4	3	1.0
		5	**Properties served per kilometre of main**		30	4	2	33
		6	**Rainfall** (% of average annual rainfall)		61	5	5	86
		7	**Total water supplied at master meters** (ML)		16,000	1	1	7,400
		8	**Peak week to average consumption** (%)		184	4	4	155
		9	**Renewals expenditure** (% of current replacement cost of system assets)		0.2	2	2	0.0
		10	**Employees per 1000 properties**		1.0	1	1	1.3
SOCIAL	2006/07 CHARGES & BILLS		**Residential tariff structure:**	inclining block; independent of land value				
		11	**Residential water usage charge (c / kL) for usage (Note 5)**		80	5	3	105
		12	**Residential access charge / assessment** ($)		79	1	1	110
		13	**Typical residential bill / assessment** ($)		216	1	1	345
		14	**Typical developer charge / equivalent tenement** ($)		4,100	3	2	4,100
	HEALTH	15	**Urban population without reticulated water supply** (%)		1.0	4	2	0.9
		16	**Physical water quality compliance** (%)		100	1	1	100
		17	**Chemical water quality compliance** (%)		100	1	1	100
		18	**Microbiological (E. coli) water quality compliance** (%)		100	1	1	100
		19	**Category 1 (minor) public health incidents per 1000 properties**		0.0		1	0.0
		20	**Category 2 (limited effects) public health incidents per 1000 properties**		0.0		1	0.0
		21	**Category 3 (major) public health incidents per 1000 properties**		0.00		1	0.00
		22	**Capital investment on improving public health performance per property** ($)		3		3	6
	SERVICE LEVELS	23	**Water quality complaints per 1000 properties**		3	3	3	6
		24	**Water service complaints per 1000 properties**		4	3	2	6
		25	**Customer interruption frequency per 1000 properties**		3		1	38
		26	**Average duration of interruption** (h)		3	5	4	3
		27	**Average customer outage time** (min)		1	1	1	6
		28	**Number of main breaks per 100 km**		9	4	2	10
		29	**Drought water restrictions** (% of time)		13	3	4	3
		30	**Total days lost** (%)		4.0	4	4	3.2
ENVIRONMENTAL	MANAGEMENT	31	**Average annual residential consumption per property** (kL)		171	1	1	190
		32	**Water losses** (including leakage) (%)		10		4	10
		33	**Energy consumption per Megalitre** (kiloWatt hours)		811		4	660
		34	**Renewable energy consumption per property** (kiloWattt hours)		0		1	216
	PERFORMANCE	35	**Category 1 (minor) environmental incidents per 1000 properties**		0.0		1	0.0
		36	**Category 2 (limited effects) environmental incidents per 1000 properties**		0.0		1	0.0
		37	**Category 3 (major) environmental incidents per 1000 properties**		0.00		1	0.00
		38	**Capital investment on improving environmental performance per property** ($)		0.9		2	0.9
ECONOMIC	FINANCE	39	**Residential revenue from usage charges** (% of residential bills)		55	4	3	67
		40	**Non-residential revenue from usage charges** (% of non-residential bills)		84	1	1	71
		41	**Economic real rate of return** (%)		0.8	4	4	1.4
		42	**Return on assets** (%)		2.2	2	3	1.6
		43a	**Net Debt to equity** (%)		-12	4	3	-11
		44	**Interest cover**		>100	1	1	>100
		45	**Loan payment per property** ($)		15	3	4	23
	EFFICIENCY	46	**Operating cost (OMA) per 100km of main** ($'000)		605	1	2	1040
		47	**Operating cost (OMA) per property** ($) (Note 6)		203	1	1	280
		48	**Operating cost (OMA) per kilolitre** (cents)		57	1	2	86
		49	**Management cost per property** ($)		110	3	4	110
		50	**Treatment cost per property** ($)		29	2	2	27
		51	**Pumping cost per property** ($)		14	2	1	24
		52	**Energy cost per property** ($)		11	3	2	17
		53	**Water main cost per property** ($)		36	2	2	49

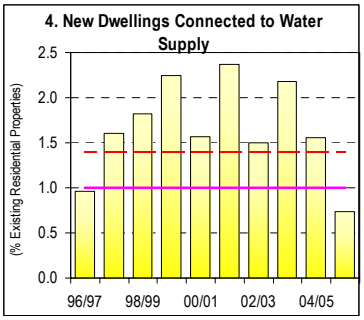
NOTES :

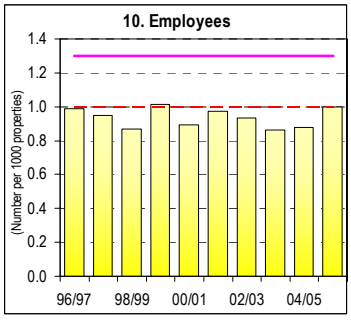
1. Ranking for LWUs with >10,000) connected properties is based on dividing the results for LWUs in this group into 5 equal divisions of 20%:
   ie. a ranking of 1 indicates the LWU is in the top 20% of LWUs; a ranking of 5 indicates the LWU is in the bottom 20% of LWUs. (Relevant for comparison with LWUs of similar size).
2. Ranking (1 to 5) for all LWUs is on a percentage of LWUs basis. (Relevant for comparing performance with all other LWUs).
3. The Statewide Median is on a percentage of connected properties basis (Table 1 of Monitoring Report) as this is the most appropriate for statewide comparisons.
4. Annual review of key projections and actions in LWU's 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:$244), TwoPart Tariff; All usage 80 c/kL.
   Water consumption by non-residential customers was 41% of potable water consumption excluding non-revenue water.
   2005/06 revenue from non-residential customers was 30% of annual rates and charges.
6. The operating cost (OMA)/property was $203. The components of operating cost were: management ($110), operation ($47), maintenance ($26), energy ($11) and chemical ($10).

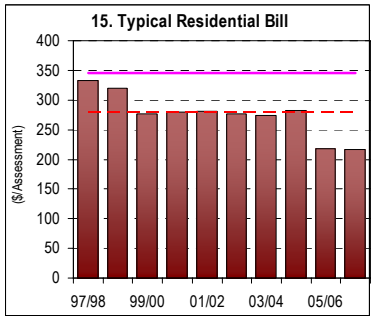
Shoalhaven City Council Water Supply (Page 2)

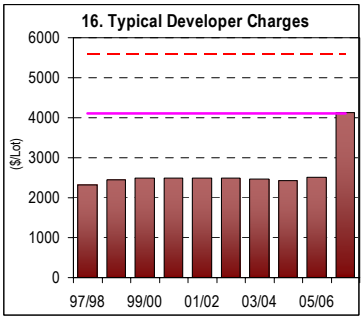
Shoalhaven City Council **TBL Water Supply Performance (page 2)** **2005/06**

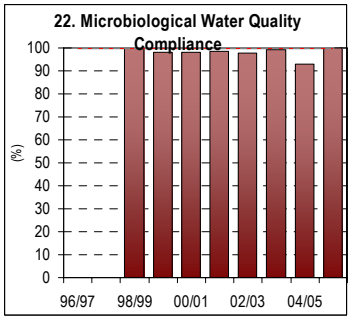
(Results shown for 10 years together with 2004/05 Statewide Median and Top 20%)

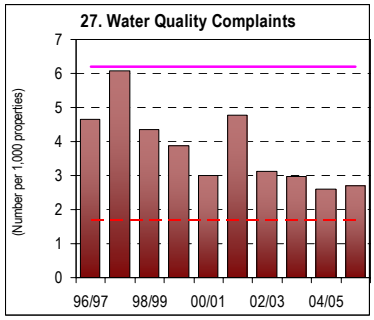


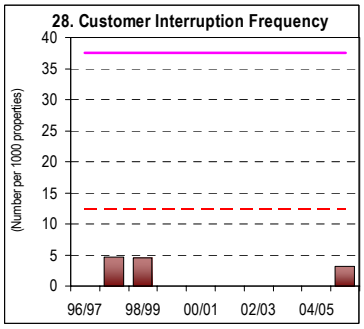


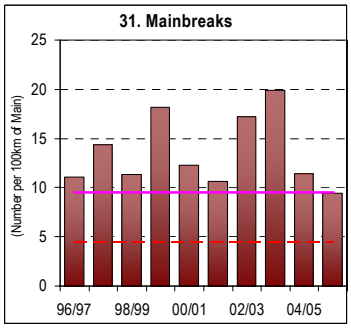


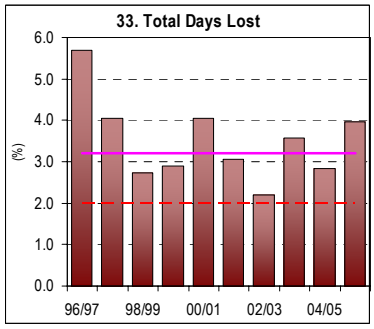


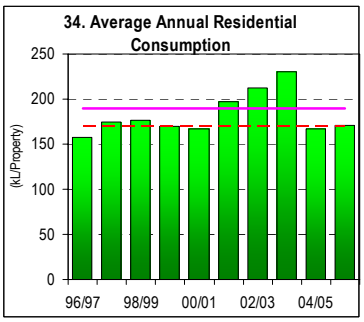


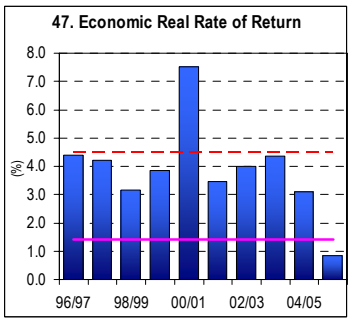


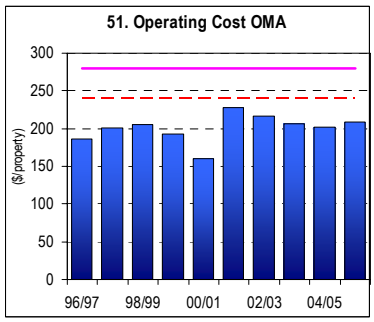


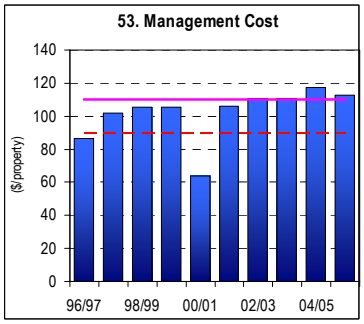


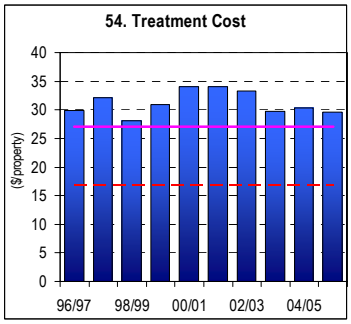


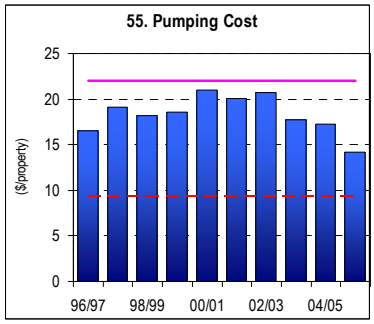












1 *Costs are in Jan 2006$.*

2 *Microbiological water quality compliance from 1998/99 to 2003/04 was on the basis of E. coli in the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines; from 2004/05 compliance was on the basis of the 2004 NHMRC/NRMMC Australian Drinking Water Guidelines.*

LEGEND
2005/06 State Median
2005/06 Top 20%

Shoalhaven City Council Sewerage (Page 1)

Shoalhaven City Council | **TBL Sewerage Performance** | **2005/06**

SEWERAGE SYSTEM - Shoalhaven Council has 10 sewage treatment works providing advanced secondary and tertiary treatment. The system comprises 126,500 EP treatment capacity (Intermittent and Continuous Extended Aeration/Activated Sludge and Trickling Filter), 208 pumping stations (554 ML/d), 148 km of rising mains and 880 km of gravity trunk mains and reticulation. Treated effluent is discharged to ocean and river.

PERFORMANCE - Shoalhaven City Council complied with all 4 out of 4 Best Practice Criteria. The typical residential bill was $526 which was above the statewide median (Indicator 11). The economic real rate of return was equal to the statewide median (indicator 41). The operating cost per property was above the statewide median (Indicator 47). Sewage odour complaints were close to the statewide median (Indicator 18). 85% of treated effluent complied with DEC licence limits and 6 of 10 sewage treatment works were compliant at all times (Indicators 29 to 31). The current replacement cost of system assets was $530M ($12,800 per assessment), cash and investments were $14.5M, debt was $24.3M and revenue was $26.9M (excluding capital works grants).

COMPLIANCE WITH BEST-PRACTICE MANAGEMENT GUIDELINES CRITERIA

(1) Complete current strategic business plan & financial plan	**YES**	(2e) DSP with commercial developer charges	Yes
(2) (2a) Full cost recovery (without significant cross-subsidies)	Yes	(2f) Liquid trade waste approvals & policy	Yes
(2b) Complying residential charges	Yes	**(3) Complete performance reporting form (by 15 September)**	**YES**
(2c) Complying non-residential charges	Yes	**(4) Integrated water cycle management strategy commenced**	**YES**
(2d) Complying trade waste fees and charges	Yes	**COMPLIANCE WITH ALL REQUIRED CRITERIA**	**YES**

TRIPLE BOTTOM LINE (TBL) PERFORMANCE INDICATORS

				Ranking		
			LWU Result	>10,000 properties	All LWUs	Statewide Median
				Note 1	Note 2	Note 3
UTILITY CHARACTERISTICS	1	**Population served: 84000**	**Number of connected properties: 37360**			
	2	**Number of assessments: 41510**	**0.90 connected properties per assessment**			
	3	**Residential Assessments** (% of total)		94			90
	4	**New residences connected to sewerage** (%)		0.9	4	3	1.3
	5	**Properties served per kilometre of main**		36	4	3	41
	6	**Volume of sewage collected** (ML)		6,570	2	1	5,100
	7	**% Renewals expenditure of current replacement cost of system assets**		0.2	2	1	0.2
	8	**Employees per 1000 properties**		1.7	4	3	1.5
	9	**Employees undergoing 2 or more days of training** (% of total)		82		1	8
SOCIAL – 2006/07 CHARGES & BILLS		**Description of residential tariff structure:**	access charge per property; independent of land value (Note 5)				
	10	**Residential access charge / assessment** ($)		526	4	**5**	385
	11	**Typical residential bill / assessment** ($)		526	**5**	**5**	400
	12	**Typical developer charge / equivalent tenement** ($)		4,200	3	2	3,500
	12a	**Non-residential sewer usage charge** (c/kL)		80	3	4	80
SOCIAL – HEALTH	13	**Urban properties without reticulated sewerage service** (%)		11.1	**5**	4	3.7
	14	**Category 1 (minor) public health incidents per 1000 properties**		6.3		**5**	0.4
	15	**Category 2 (limited effects) public health incidents per 1000 properties**		0.0		1	0.0
	16	**Category 3 (major) public health incidents per 1000 properties**		0.00		1	0.00
	17	**Capital expenditure on improving public health performance per property** ($)		65		1	68
SOCIAL – SERVICE LEVELS	18	**Odour complaints per 1000 properties**		0.8	4	3	0.8
	19	**Service complaints per 1000 properties**		16	3	3	14
	20	**Customer interruption frequency per 1000 properties**		0		1	15
	21	**Average duration of interruption** (hours)		2	2	2	2
	22	**Average customer outage time** (minutes)					1.5
	23	**Total days lost** (%)		3.4	4	3	3.3
ENVIRONMENTAL – NATURAL RESOURCE MANAGEMENT	24	**Volume of sewage treated per property** (kL)		176	5	4	200
	25	**Percentage effluent reclaimed for recycling**		30	2	2	9
	26	**Biosolids reuse** (%)		100	1	1	100
	27	**Energy consumption per Megalitre** (kiloWatt hours)		932		**5**	540
	28	**Renewable energy consumption per property** (kiloWatt hours)					148
ENVIRONMENTAL – ENVIRONMENTAL PERFORMANCE	29	**90 Percentile licence limits for effluent discharge:** BOD 40 mg/l; SS 40 mg/l; Total N 15 mg/l; Total P 0 mg/l					
	30	**Compliance with BOD in licence** (%)		96	3	4	100
	31	**Compliance with SS in licence** (%)		94	4	3	98
	32	**Sewer main chokes and collapses per 100 km of main**		29	4	2	49
	33	**Sewer overflows to the environment per 100 km of main**		20	**5**	4	8
	34	**Category 1 (minor) environmental incidents per 1000 properties**		5.5		**5**	5
	35	**Category 2 (limited effects) environmental incidents per 1000 properties**		0.1		4	0.1
	36	**Category 3 (major) environmental incidents per 1000 properties**		0.00		1	0.00
	37	**Capital investment on improving environmental performance per property** ($)		450		1	35
ECONOMIC – FINANCING	38	**Revenue from non-residential plus trade waste charges** (% of total revenue)		11	4	4	15
	39	**Revenue from trade waste charges** (% of total revenue)					1.5
	41	**Economic real rate of return** (%)		2.4	4	3	2.4
	42	**Return on assets** (%)		3.7	2	2	2.3
	43a	**Net Debt to equity** (%)		4	2	1	-7
	44	**Interest cover**		16	4	4	>100
	45	**Loan payment per property** ($)		85	2	1	45
ECONOMIC – EFFICIENCY	46	**Operating cost (OMA) per 100 km of main** ($'000)		1220	4	4	1200
	47	**Operating cost (OMA) per property** ($)		335	4	4	290
	48	**Operating cost (OMA) per kilolitre** (cents)		190	**5**	**5**	122
	49	**Management cost per property** ($)		128	4	4	100
	50	**Treatment cost per property** ($)		79	2	2	85
	51	**Pumping cost per property** ($)		54	4	4	48
	52	**Energy cost per property** ($)		16	2	3	20
	53	**Sewer main cost per property** ($)		34	2	3	31

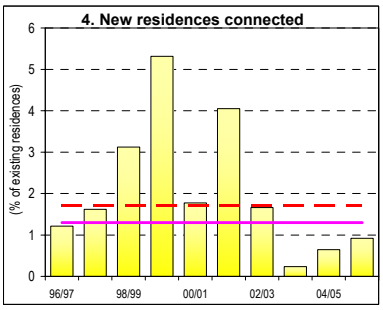
NOTES :

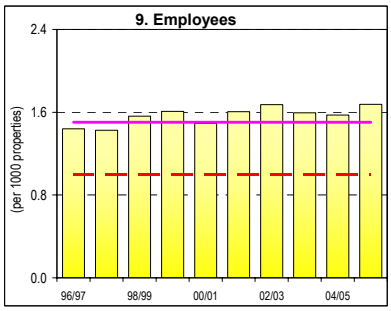
1 Ranking for LWUs with >10,000) connected properties is based on dividing the results for LWUs in this group into 5 equal divisions of 20% :
ie. a ranking of 1 indicates the LWU is in the top 20% of LWUs; a ranking of 5 indicates the LWU is in the bottom 20% of LWUs. (Relevant for comparison with LWUs of a similar size).
2 Ranking (1 to 5) for all LWUs is on a percentage of LWUs basis. (Relevant for comparing performance with all other LWUs).
3 The Statewide Median is on a percentage of connected properties basis (Table 2 of 2005/06 NSW Performance Benchmarking Report) as this is the most appropriate for statewide comparisons.
4 Annual review of the key projections and actions in LWU's Business Plan are required, together with annual updating of LWU's Financial Plan. The business plan should be updated after 3 years.
5 Non-residential: Access Charge based on meter size, sewer usage charge - 80c/kL.
6 Trade waste & non-residential rates & charges provided 11% of the annual rates & charges revenue, including usage.
7 Compliance with Total N in Licence was 100%. Compliance with Total P in Licence was 100%.
8 The operating cost (OMA)/property was $335. The components of operating cost/property were: management ($128), operation ($154), maintenance ($35), energy ($16) and chemical ($2).

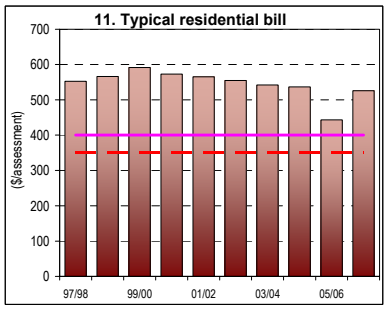
Shoalhaven City Council Sewerage (Page 2)

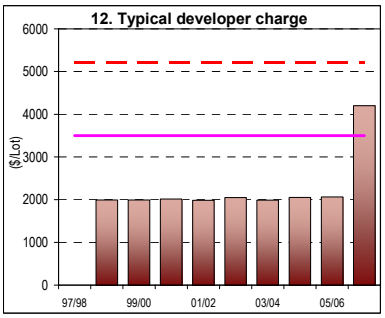
Shoalhaven City Council | **TBL Sewerage Performance (page 2)** | **2005/06**

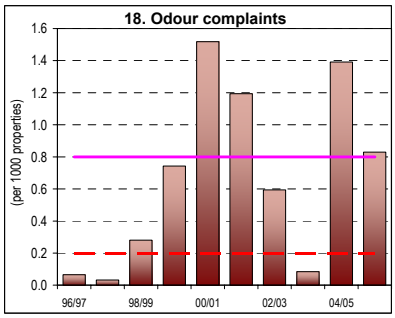
(Results shown for 10 years together with 2005/06 Statewide Median and Top 20%)

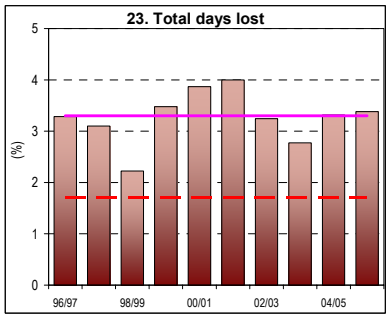


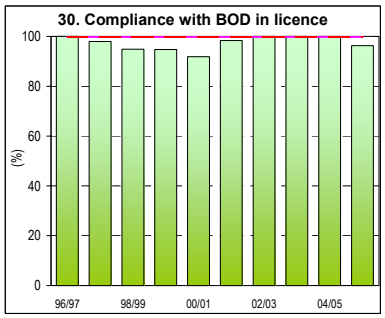


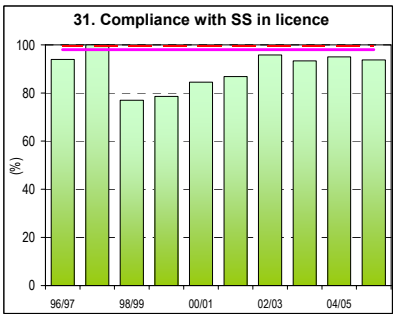


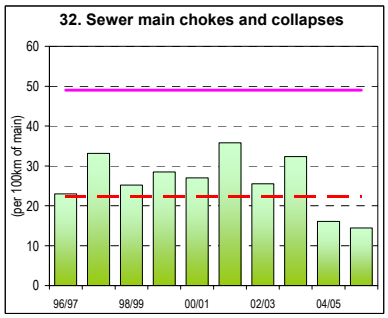


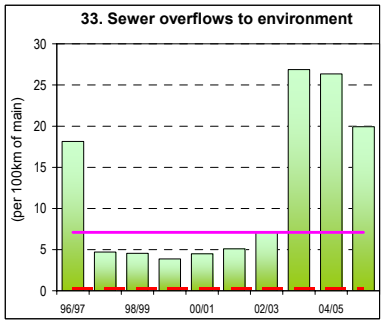


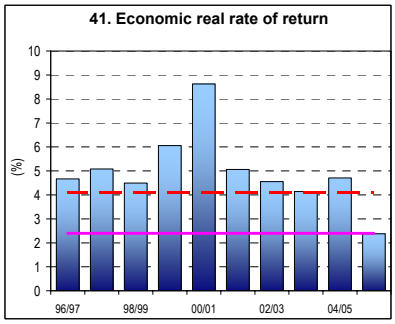


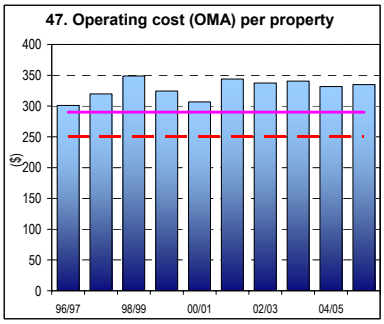


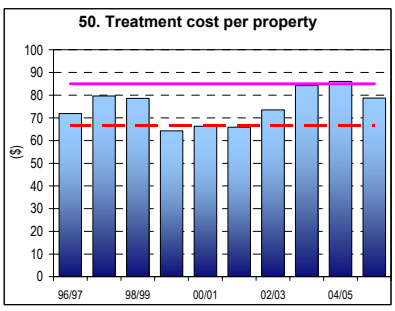


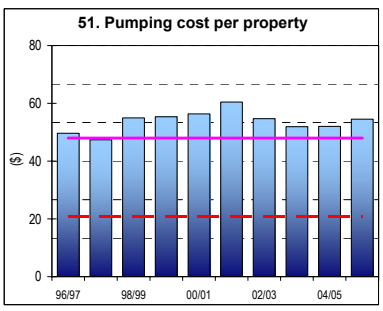












NOTES:

1. Costs are in Jan 2006$.

LEGEND

2005/06 State Median

2005/06 Top 20%

2005/06 Water Performance Percentiles (% of LWUs Basis)

	UTILITY CHARACTERISTICS	20%	40%	Median (50%)	60%	80%
	Connected Properties	13,800	4,600	3,600	2,700	1,350
3	Residential Assessments (% of total)	85	88	88	90	92
4	New Residential Dwellings Connected to Water Supply (%)	1.5	1.1	0.8	0.6	0.0
5	Properties Served per km of Main	37	29	27	23	16
6	Rainfall (% of average annual rainfall)	106	95	91	88	79
7	Total Water Supplied (at Master Meters - ML)	5,120	2,660	1,950	1,450	740
8	Peak Week to Average Consumption (%)	140	160	170	180	200
9	Renewals Expenditure (% of current replacement cost of system assets)	0.8	0.1	0.0	0.0	0.0
10	Employees (employees per 1000 properties)	1.2	1.5	1.8	2.2	2.7
	SOCIAL - Charges/Bills (2006/07)					
11	Residential Water Usage Charge (c/kL)	125	100	90	80	65
12	Residential Access Charge ($/assessment)	100	155	180	195	260
13	Typical Residential Bill ($/assessment)	340	415	435	475	570
14	Typical Developer Charge ($/equivalent tenement)	4,150	2,500	2,700	2,340	1,100
	SOCIAL - Health					
15	Urban Population without Reticulated Public Water Supply (%)	1	3	5	6	10
16	Physical water quality compliance (%)	100	100	100	100	80
17	Chemical water quality compliance (%)	100	100	100	100	94
18	Microbiological Water Quality Compliance (E.coli) (%)	100	100	100	100	97
19	Category 1 Public Health Incidents - Minor (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
20	Category 2 Public Health Incidents - Limited Effects	0.0	0.0	0.0	0.0	0.0
21	Category 3 Public Health Incidents - Major	0.0	0.0	0.0	0.0	0.0
22	Capital Expenditure on Improving Public Health ($/property)	39	6	2	0	0
	SOCIAL - Levels of Service					
23	Water Quality Complaints (per 1000 properties)	2	2	3	4	9
24	Service Complaints (per 1000 properties)	3	6	10	14	26
25	Customer Interruption Frequency (per 1000 properties)	12	22	28	38	79
26	Average Duration of Interruption (hr)	2.0	2.0	2.0	2.5	3.0
27	Average Customer Outage Time (min)	1	4	6	8	18
28	Number of Main Breaks (per 100 km of main)	6	13	14	17	27
29	Drought Water Restrictions (% of time)	0	0	0	0	100
30	Total Days Lost (%)	0	2	2	3	4
	ENVIRONMENTAL					
31	Average Annual Residential Consumption (kL/property)	180	220	240	290	420
32	Water Losses (including leakage %)	10	10	10	10	14
33	Energy Consumption (kWh/ML)	210	430	540	650	930
34	Energy Consumption (kWh/property)	70	190	230	260	400
35	Category 1 Environmental Incidents - Minor (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
36	Category 2 Environmental Incidents - Limited Effects (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
37	Category 3 Environmental Incidents - Major (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
38	Capital Expenditure on Improving Environmental Performance ($/property)	8	0	0	0	0
	ECONOMIC - Financial					
39	Residential Revenue from Usage Charges (% of total)	69	59	55	49	37
40	Non-residential Revenue from Usage Charges (% of total)	83	74	70	64	47
41	Economic Real Rate of Return (%)	5	2	2	1	-1
42	Return on Assets (%)	4	2	2	1	0
43	Debt to Equity (%)	8	2	1	0	0
	Net Debt to Equity (%)	-1	-10	-12	-14	-22
44	Interest Cover	100	100	100	100	6
45	Loan Payment ($/property)	85	40	35	20	0
	ECONOMIC - Efficiency					
46	Operating Cost (OMA) per 100 km of Main ($'000)	545	705	830	945	1,235
47	Operating Cost (OMA) per property ($/property)	260	320	340	350	430
48	Operating Cost (OMA) per kL (c/kL)	50	70	80	85	115
49	Management Cost ($/property)	70	95	100	105	140
50	Treatment Cost ($/property)	20	45	75	95	135
51	Pumping Cost ($/property)	14	26	33	48	74
52	Energy Cost ($/property)	9	18	22	25	42
53	Water Main Cost ($/property)	34	49	57	62	82

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 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).

2005/06 Sewerage Performance Percentiles (% of LWUs Basis)

	UTILITY CHARACTERISTICS	20%	40%	Median (50%)	60%	80%
	Connected Properties	10,400	3,700	2,600	1,850	1,050
3	**Residential Connections** (% of total)	87	88	90	91	93
4	**New Residential Dwellings Connected to Sewerage** (%)	1.7	1.3	1.1	0.8	0.4
5	**Properties Served per km of Main**	45	40	35	35	30
6	**Volume of Sewage Collected (ML / LWU)**	3,410	970	700	540	290
7	**Renewals Expenditure** (% of current cost of system assets)	0.2	0.0	0.0	0.0	0.0
8	**Employees** (per 1000 properties)	1.2	1.5	1.7	1.8	2.6
9	**Employees Undergoing 2 or more Days of Training** (%)	20	12	11	10	5
	SOCIAL - Charges/Bills (2006/07)					
10	**Residential Access Charge ($/assessment)**	300	355	380	425	485
11	**Typical Residential Bill ($/assessment)**	300	355	385	425	495
12	**Typical Developer Charge ($/equivalent tenement)**	4,300	3,200	2,100	1,800	1,000
12a	**Non-residential sewer usage charge (c/kL)**	140	110	100	90	75
	SOCIAL - Health					
13	**Urban Properties without Reticulated Sewerage** (%)	3	6	7	7	13
14	**Category 1 Public Health Incidents - Minor** (per 1000 properties)	0.0	0.0	0.0	0.0	0.2
15	**Category 2 Public Health Incidents - Limited Effects** (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
16	**Category 3 Public Health Incidents - Major** (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
17	**Capital Investment on Improving Public Health Performance** ($/property)	25	0	0	0	0
	SOCIAL - Level of Service					
18	**Odour Complaints** (per 1000 properties)	0.0	0.1	0.5	1.0	3.0
19	**Service or Choke Complaints** (per 1000 properties)	0	7	11	16	39
20	**Customer Interruption Frequency** (per 1000 properties)	0	0	0	0	7
21	**Average Duration of Interruptions** (hr)	1.0	2.0	2.0	2.0	3.0
22	**Average Customer Outage Time** (hr)	0.2	1	1	1	3
23	**Total Days Lost** (%)	1	2	3	3	5
	ENVIRONMENTAL					
24	**Volume of Sewage Treated per property** (kL/a)	215	200	190	180	155
25	**Reclaimed Water** (% of effluent reclaimed)	52	26	20	15	5
26	**Biosolids Reuse** (%)	100	0	0	0	0
27	**Energy Consumption** (kWh/ML)	220	400	490	520	900
28	**Energy Consumption** (kWh/property)	48	99	118	164	194
30	**Compliance with BOD in Licence** (%)	100	100	100	100	92
31	**Compliance with SS in Licence** (%)	100	99	94	91	75
32	**Confirmed Sewer Chokes and Collapses** (per 100 km of main)	13	33	44	55	90
33	**Sewer Overflows to the Environment** (per 100 km of main)	4	7	13	14	40
34	**Category 1 Environmental Incidents - Minor** (per 1000 properties)	0.0	0.0	0.0	0.0	2.9
35	**Category 2 Environmental Incidents - Limited Effects** (per 1000 properties)	0.0	0.0	0.0	0.0	0.1
36	**Category 3 Environmental Incidents - Major** (per 1000 properties)	0.0	0.0	0.0	0.0	0.0
37	**Capital Investment on Improving Environmental Performance** ($/property)	35	0	0	0	0
	ECONOMIC - Financial					
38	**Revenue from non-residential and trade waste charges** (% of total revenue)	24	19	16	15	8
39	**Revenue from Trade Waste Charges** (% of total)	2	0	0	0	0
40	**Revenue from Other** (% of total)	34	24	22	19	11
41	**Economic Real Rate of Return** (%)	5.0	2.6	1.8	1.0	-0.4
42	**Return on Assets** (%)	4.5	2.5	1.7	1.1	0.2
43	**Debt to Equity** (%)	13	8	4	3	0
	Net Debt to Equity (%)	0	-11	-17	-20	-30
44	**Interest Cover** (%)	100	100	100	10	0
45	**Loan Payment** ($/property)	75	20	15	5	0
	ECONOMIC - Efficiency					
46	**Operating Cost (OMA) per 100 km of Main** ($'000)	570	780	890	1,030	1,250
47	**Operating Cost (OMA)** ($/property)	190	260	260	300	340
48	**Operating Cost (OMA)** (c/kL)	85	105	110	125	150
49	**Management Cost** ($/property)	55	75	90	105	130
50	**Treatment Cost** ($/property)	60	80	105	105	130
51	**Pumping Cost** ($/property)	18	32	36	49	70
52	**Energy Cost** ($/property)	7	14	16	19	25
53	**Sewer Main Cost** ($/property)	18	31	32	40	51

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 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).

APPENDIX D1

2005/06 WATER TREATMENT PERFORMANCE

APPENDIX D1 – 2005/06 Water Treatment Performance

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Appendix D1 - 2005/06 Water Treatment Data

Notes:

1. Where a water utility 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 fo that water utility. Totals are shown for capacity (2), treated volume (6), and number of samples (eg. 16). The days of chlorination system failure (35), and days of major malfunction of treatment processes (36) shown are the weighted average based on treatment.
2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines														Water Quality Complaints[3]	Chemical Monitoring Compliance	E.coli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
				ML/d	3	ML	Max 8	Avg 9	Max 10	Avg 11	Max 12	Avg 13	Max 14	Avg 15	Samples 16	% 17	Samples 18	% 19	Samples 20	% 21	Samples 22	% 23	Samples 24	% 25	Samples 26	% 27	Samples 28	% 29	per 1,000 properties	%	%	days 35	days 36
		Albury	1992	140.0	D	9705	50	4.86	4	0.07	61	5.16	2.1	0.2	170	98.8	755	99.8	15	100	113	98.2	14	100	202	100	202	98		100	100		
		Lake Hume Chlorinator	1984	1.6	CH	34																					97		99				
Albury City Council		**Total/Weighted Average [1,3]**		**142**		**9739**	**50**	**5**	**4**	**0**	**61**	**5**	**2**	**0.2**	**170**	**99**	**755**	**100**	**15**	**100**	**113**	**98**	**14**	**100**	**202**	**100**	**202**	**98**		100	92		
Armidale Dumaresq Shire Council		Armidale	1988	42.0	C	3028	37	24	1	1	2	1	0	0	365	100	365	100	365	100	365	100	365	100	12	100	52	100			100		
Ballina Shire Council	*bulk supply from Rous Water*	Marom Creek	1977	3.0	D	116																			800	100	800	100	0.4		100		
	non-potable	Euston	2006	1.5	CH	297									2	100	2	100	2	100	2	100	2	100	26	100				100	100		
	potable	Balranald	1988	1.1	C	167	100	20	5		60	4	1		2	100	2	100	2	100	2	100	2	100	52	100				100	100		
Balranald Shire Council	*dual supply*	**Total/Weighted Average [1,3]**		**2.6**		**464**	**100**	**7**	**5**		**60**	**1**	**1**																**2.5**				
Bathurst Regional Council		Bathurst	1989	60.0	C	6565	550	54	14	4	1,370	13	2	0	577	100	577	99	577	100	531	92	577	100	321	100	321	84	10.5		100		
	unfiltered	Yellow Pinch	1988	25.0	CH	910	18	15	5	3	7	2	2	1.3	50	100	260	100	10	100	10	100	10	100	143	100	143	96		100	100		
	unfiltered	Bega	1987	16.0	CH	1187			2	1		1	1	1	50	100	260	100	10	100	10	100	10	100	90	100	90	99		100	100		
	unfiltered	Brogo	1984	6.0	CH	408			8	7		2	1	1	20	100	104	100	4	100	4	100	4	100	66	100	66	94		100	100		
	unfiltered	Kiah	1972	6.0	CH	1121			3	2			2	1	50	100	260	100	10	100	10	100	10	100	52	100	52	100		100	100		
	unfiltered	Bemboka	1988	1.0	CH	38			13	11			1	1	10	100	52	96	2	100	2	100	2	100	27	100	27	96		100	100		
	unfiltered	Tilba	1985	1.0	CH	11			8	7			1	0.6	10	100	51	100	2	100	2	100	2	100	51	100	51	98		100	100		
Bega Valley Shire Council		**Total/Weighted Average [1,3]**		**55.0**		**3675**	**18**	**4**	**13**	**3**	**7**	**1**	**2**	**0.8**	**190**	**100**	**987**	**100**	**38**	**100**	**38**	**100**	**38**	**100**	**429**	**100**	**429**	**97**	**3.0**				
	groundwater	Bellingen / Seaboard	1993	12.0	CH	1312											12													100	100		
		Dorrigo	1994	2.7	L	177		35		3		4		0.1																100	100		
Bellingen Shire Council		**Total/Weighted Average [1,3]**		**14.7**		**1489**		**4**		**0**		**0**		**0.0**			**12**												**2.3**				
		Tocumwal	1999	7.0	DAF	690	60	25	5	5	42.3	14.3	3.6	0.42	6	100	6	100	6	100	6	100	6	100	45	100	45	100		100	100		
		Finley	1997	2.0	C	227	45	25	5	5	50	30	4	0.2	365	100	6	100	6	100	6	50	6	100	45	100	45	100		100	100		
		Berrigan	1990	1.0	DAF	130	30	28	5	5	27	15	3	0.3	6	100	6	100	6	100	6	100	6	100	45	100	45	100		100	100		2
		Barooga	2000	1.0	DAF	136	250	41	5	5	36	13	2	0.2	6	100	6	100	6	100	6	100	6	100	48	100	48	95		100	100		
Berrigan Shire Council	*dual supply*	**Total/Weighted Average [1,3]**		**11.0**		**1183**	**250**	**27**	**5**	**5**	**50**	**17**	**4**	**0.3**	**383**	**100**	**24**	**100**	**24**	**100**	**24**	**88**	**24**	**100**	**183**	**100**	**183**	**99**	**2.1**				
Bogan Shire Council		Nyngan	1984	8.6	C	833	250	84	5	5	96	20	3	1	60	97	6	100	60	92	60	100	60	100		100			1.9		92		
		Bombala	1983	3.2	C	285									52	100	52	100			52	100			52	100	52	100		100	100		
		Delegate		1.3	CH	170									26	100	26	100			26	100			26	100	26	100		100	96		
Bombala Council		**Total/Weighted Average [1,3]**		**4.5**		**455**									**78**	**100**	**78**	**100**			**78**	**100**			**78**	**100**	**78**	**100**	**2.4**				
Boorowa Council		Boorowa	1993	3.0	L		100	33	5	5	120	21	1	1	52	1	365	100	365	100	365	100	365	100	52	50					50		
Bourke Shire Council	*dual supply*	Bourke	1988	3.3	C	238			16	5			76	10.1			527	94	17	76	17	100	17	94	47	94	47	81	4.2		94		
	potable	Brewarrina	1990	0.8	C	244			3	3			1	1.0	2	100	2	100	2	100	2	100	2	100	37	97	37	92		100	97		
	potable groundwater	Goodooga	1996	0.5	A	100			1	1			0	0.2	3	100	3		3	100	3	100	3	100	19	89	19	74		100	89		
Brewarrina Shire Council	*dual supply*	**Total/Weighted Average [1,3]**		**1.3**		**344**			**3**	**2**			**1**	**1**	**5**	**100**	**5**	**40**	**5**	**100**	**5**	**100**	**5**	**100**	**56**	**94**	**56**	**86**					
Byron Shire Council	*bulk supply from Rous Water*	Mullumbimby		2.9	C	428	83	21	52	8	52	13	15	2	52	100	52	100	52	91	52	96	50	100	52	100	52	97	1.4		100		
		Molong	1986	2.3	C	218	10	10	10	10	5	5	5	5	1	100	1	100	1	100	1	100	1	100	52	100	52	96		100	100		
	non-potable groundwater	Cumnock		2.0	CH	33									1	100	1	100	1	100	1	100	1	100	12	100	12	58		100	100		
	non-potable groundwater	Yeoval		0.8	CH	66									1	100	1		1		1	100	1	100	12	100	12	83		100	100		
	non-potable groundwater	Delgany		1.4	CH	5									1	100	1	10	1	100	1	100	1	100	12	100	12	100		100	100		
Cabonne Council		**Total/Weighted Average [1,3]**		**6.5**		**321**	**10**	**7**	**10**	**7**	**5**	**3**	**5**	**3**	**4**	**100**	**4**	**53**	**4**	**75**	**4**	**100**	**4**	**100**	**88**	**100**	**88**	**90**	**1.8**				
	groundwater	Hillston		5.6	CH	451			1	1			5	2.3	2	100	2	100	2	100	17	100	2	100	51	100	51	98		100	100		
	groundwater	Rankins Springs		3.0	UV																				24	100	24	75			100		
	groundwater	Goolgowi/Merriwagga	1995	2.0	CH	182			0	0			0	0	1	100	1	100	1	100	1	100	1	100	26	100	26	88			100		
		Carrathool			CH	45							9		1		1	100	1		1	100	1		13	100	13	69		100	100	5	
	groundwater	Melbergen			CH																												
Carrathool Shire Council		**Total/Weighted Average [1,3]**		**10.6**		**678**				**659**				**660**	**4**	**75**	**4**	**100**	**4**	**75**	**19**	**100**	**4**	**75**	**114**	**100**	**114**	**88**	**9.2**				
	potable	Ivanhoe	1985	0.6	C	50					7	6	1	1	26	100			26	100	26	100	26	100	26	100	26	100			100		
	potable	Wilcannia	1985	0.5	C	55					9	6	0.9	0.6	50	100	50	100	50	100	50	100	50	100	50	100	50	100		100	100		
	non-potable	White Cliffs	1992	0.2	C	44					4	3	1	1	5	100	5	100	5	100	5	100	5	100	5	100	5	100		100	100		
Central Darling Shire Council	*dual supply*	**Total/Weighted Average [1,3]**		**1.3**		**149**					**9**	**5**	**1**	**0.7**	**81**	**100**	**55**	**100**	**81**	**100**	**81**	**100**	**81**	**100**	**81**	**100**	**81**	**100**	**2.8**				
		Carcoar	2002	9.0	DAF	1397	140	15	5	1	150	8	2.0	0.4	24	100	24	100	365	100	365	100	365	100	154	100	154	98		100	100		
		Blayney	1966	6.0	C	585	140	15	5	1	150	8	1	0.3	2	100	2	100	365	100	365	100	365	100	52	100	52	99		100	100		
	non-potable groundwater	Quandialla																													100		
Central Tablelands Water		**Total/Weighted Average [1,3]**		**15.0**		**1982**	**140**	**15**	**5**	**1**	**150**	**8**	**2**	**0.4**	**26**	**100**	**26**	**100**	**730**	**100**	**730**	**100**	**730**	**100**	**206**	**100**	**206**	**98**	**10.1**				
		Rushforth Road (North Coast		70.0	CH	6820	11	6	11	6	3	1	3	0.7	12	100	12	100	13	100	13	77	12	100	52	100	52	100		100	100		
		Wooli		20.0	CH	128																			10	100	10			100	100		
		Coutts Crossing			CH																				8	100	8			100	100		
		North Coast Water																															
		Glenreagh			CH	49																								100	100		
		Minnie Water		8.0	CH	40																			13	69	13			100	84		
		Copmanhurst																															
Clarence Valley Council		**Total/Weighted Average [1,3]**		**98.0**		**7036**	**11**		**11**		**3**		**3**		**12**	**100**	**12**	**100**	**13**	**100**	**13**	**77**	**12**	**100**	**83**	**95**	**83**	**63**	**6.4**				

Appendix D1 - 2005/06 Water Treatment Data

Notes:
1. Where a water utility 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 fo that water utility. Totals are shown for capacity (2), treated volume (6), and number of samples (eg. 16). The days of chlorination system failure (35), and days of major malfunction of treatment processes (36) shown are the weighted average based on treatment.
2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines														Water Quality Complaints[3]	Chemical Monitoring Compliance	E.coli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
							Max	Avg	Max	Avg	Max	Avg	Max	Avg	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%					
				ML/d		ML	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	per 1,000 properties	%	%	days	days
		Cobar	1983	7.0	C	1094	100	42			500	10			330	100	330	100	330	100	365	100	365	100	26	100	26	100		100	100		
	non-potable groundwater	Euabalong Village (Non-Potal																														
	non-potable groundwater	Euabalong West (Non-Potabl																														
	non-potable groundwater	Euabalong West (Non-Potabl																														
	non-potable groundwater	Mt Hope (Non- Potable)																														
Cobar Shire Council		**Total/Weighted Average** [1,3]		**7.0**		**1094**	**100**	**42**			**500**	**10**			**330**	**100**	**330**	**100**	**330**	**100**	**365**	**100**	**365**	**100**	**26**	**100**	**26**	**100**					
	unfiltered	Nana Glen	1996		C	17	45	33	8	3	4	2	2	1.0	22	100	22	100	22	100	22	96	22	100	24	100	24	100		100	100		
	unfiltered	Karangi	1980	60.0	CH	5735	47	23			6	2	1	1.0	17	100	17	100	17	100	17	100	17	100	516	100	516	90		100	100		
	unfiltered	Coramba			CH	32																			26	100	26	100		100	100		
Coffs Harbour City Council		**Total/Weighted Average** [1,3]		**60.0**		**5784**	**47**	**23**	**8**	**0**	**6**	**2**	**2**	**1**	**39**	**100**	**39**	**100**	**39**	**100**	**39**	**98**	**39**	**100**	**566**	**100**	**566**	**91**	**11.2**				
		Cooma	1985	15.0	C																									100	100		
		Nimmitabel			CH																									100	100		
		Bredbo			CH																									100	100		
Cooma-Monaro Council		**Total/Weighted Average** [1,3]		**15.0**																													
Coolamon	bulk supply from Goldenfields																																
		Coonamble	1993	8.1	CH	1003											2		2	100	2	100	2	100	47	100	47	96			100		
		Gulargambone		1.8	CH	204											2		2	100	2	100	2	100	47	100	47	85			100		
		Quambone		1.5	CH	37											2	50	2	100	2	100	2	100	12	100	12	92		67	100		
Coonamble Shire Council		**Total/Weighted Average** [1,3]		**11.4**		**1244**											**6**	**17**	**6**	**100**	**6**	**100**	**6**	**100**	**106**	**100**	**106**	**91**	**96.1**				
		Corowa	2002	15.0	DAF	1542	200	52	15	0	135	23	3	0.7	365	100	12	100	365	100	365	50	365	100	46	100	46	96		100	100		1
		Mulwala	1994	13.0	C	1624					46	12	1	0.4	365	100	12	100	365	100	365	100	12	100	50	100	50	100		100	100		
		Howlong	1989	5.0	L	279	986	141	7	0	220	20	2	0.6	365	100	12	100	1	100	1	100	1	100	44	100	44	100		100	100		4
		Balldale																													80		
Corowa Shire Council		**Total/Weighted Average** [1,3]		**33.0**		**3445**	**986**	**35**	**15**	**0**	**220**	**17**	**3**	**1**	**1,095**	**100**	**36**	**100**	**731**	**100**	**731**	**75**	**378**	**100**	**140**	**100**	**140**	**99**	**6.1**				
Cowra Shire Council		Cowra	1987	28.0	C	2536					86	7	2	0.9	75	99	420	97	15	100	15	100	15	100	143	95			58.2		95		
		Broken Hill (Mica St)	2002	36.0	C	5141	23	6.5	3		258	102	1.9	0.3	454	100	312	100	64	100	64	100	64	100	229	99	229	97		100	100		
		Menindee	1997	1.1	C	140	6.5	3	1.1	1	880	178	4.6	2.5	208	100	78	100	52	100	64	100	52	100	52	100	52	99		100	100		
Country Energy		**Total/Weighted Average** [1,3]		**37.1**		**5281**	**23**	**6.41**	**3**	**0.03**	**880**	**104**	**4.6**	**0.36**	**662**	**100**	**390**	**100**	**116**	**100**	**128**	**100**	**116**	**100**	**281**	**99**	**281**	**97.37**	**0.5**				
Deniliquin Council		Deniliquin	1986	26.0	C	2252	150	66	8	3	45	33	0	0	60	100	12	100	12	100	12	100	12	100	60	98	60	90	3.8		92		
Dubbo City Council		John Gilbert	1977	55.0	C	8710	89	40	7	1	50	6	1	0	120	100	120	100	120	100	120	100	120	100	120	100	120	100	1.0		100		
Dungog Shire Council		Gresford	2000	0.4	M	45			8	6			1	0.4	26	85	2	100	2	100	2	100	2	100	26	88	26	85	0.5		88	2	
Eurobodalla Shire Council	unfiltered	Eurobodalla			CH																								0.1		100		
Fish River Water Supply		Duckmaloi	2003	11.0	M	1187	30	10	20	5	5	2	1	0.5	528	95	48	100	528	100	528	100	528	92	156	98			0.0		100		
Forbes Shire Council		Forbes	1966	26.0	C	2472	75	25	5	3	300	19	2	0.4	12	100	336	99	12	92	12	100	12	100	63	100	63	94	1.7		100		
Gilgandra Shire Council	groundwater	Gilgandra	1984	5.5	C	860	3	2	1	0	40	10	2	0.5	2	100	2	100	2	100	2	100	2	100	2	100	2	100	3.0		100	2	
		Martins Lookout	1982	12.0	C	731	550	82	3	0	289	15	8	0	365	100	12	100	365	100	365	100	365	100	24	98	24	100		100	96		
		Deepwater		12.0	CH	35									12		12														92		
Glen Innes Severn Shire Council		**Total/Weighted Average** [1,3]		**24.0**		**766**	**550**	**78**	**3**	**0**	**289**	**14**	**8**	**0**	**377**	**97**	**24**	**50**	**365**	**100**	**365**	**100**	**365**	**100**	**24**	**98**	**24**	**100**	**1.8**				
		Gloucester	1981	4.5	C	379	250	29	5	5	200	6	13	1	2	100	2	100	2	100	2	100	2	100	52	98	52	94		100	100		
		Barrington		0.5	CH	1	250	29	25	10	200	6	5	1.5	2	100	2	100	2	50	2	100	2	50	52	96	52	76		100	96		
Gloucester Shire Council		**Total/Weighted Average** [1,3]		**5.0**		**380**	**250**	**29**	**25**	**5**	**200**	**6**	**13**	**1**	**4**	**100**	**4**	**100**	**4**	**75**	**4**	**100**	**4**	**75**	**104**	**97**	**104**	**85**	**6.2**				
		Jugiong	1991	40.0	C	4184	400	63	10	5	285	16	0	0	1,466	100	849	100	365	100	367	98	367	100	80	99	80	90		100	100		
	groundwater	Oura	1975	26.0	A	4404									702	94	1,988	98	369	100	315	87	9	100	259	100	259	98			100		3
	groundwater	Mount Arthur		4.0	CH	618									2	100	2	100	2	100	2	100	2	100	60	100	60	90		100	100		
	groundwater	Mount Daylight		1.0	CH	237									1	100	1		1		1	100	1	100	26	96	26	96			96		
	non-potable dual supply	Hylands Bridge				185																											
		Weethalle																															
Goldenfields Water County Cour	bulk supplier and reticulator	**Total/Weighted Average** [1,3]		**45.0**		**5224**	**400**	**50**	**10**	**4**	**285**	**13**	**0**	**0**	**1,469**	**100**	**852**	**100**	**368**	**100**	**370**	**98**	**370**	**100**	**166**	**99**	**166**	**91**	**1.9**				
Gosford City Council		Somersby	1986	140.0	C	17640	880	75	10	5	90	8	1	0	12	100	12	92	12	100	12	92	12	100	408	100	408	96	57.5		100		
		Goulburn	1975	35.0	C	2061	1,651	158	17	4	144	9	1	0																100	100		
		Marulan	1997	1.3	M	104	130	81	78	29	202	32	0.7	0.3			12	100	12	100	12	100	12	33						100	100		
Goulburn Mulwaree Council		**Total/Weighted Average** [1,3]		**36.3**		**2165**	**1,651**	**154**	**78**	**5**	**202**	**10**	**1**	**0**			**12**	**100**	**12**	**100**	**12**	**100**	**12**	**33**									
Greater Hume Shire Council		Culcairn	1981	2.2	A	212					0	0	0	0	12	100	2	100	12	100	85	100		100	52	100	52	100		100	100		
		Griffith	1987	60.0	DAF	7431									13	100	876	95	13	100	13	100	13	100	75	99	75	97		100	100		
		Yenda	2001	2.5	M	503									4	100	584	90	3	100	6	100	1	100	50	100	50	100		90	100		
Griffith City Council		**Total/Weighted Average** [1,3]		**62.5**		**7934**									**17**	**100**	**1,460**	**93**	**16**	**100**	**19**	**100**	**14**	**100**	**125**	**99**	**125**	**98**	**1.9**				
Gundagai Shire Council		Gundagai	1988	5.0	C	602	200	65	10	5	145	21	1.2	0.4	2	100	66	99	2	100	2	100	2	100	50	100	50	100	5.7		100		
	good quality untreated groundwate	Gunnedah																												100	83		
	good quality untreated groundwate	Curlewis																												100	100		
	good quality untreated groundwate	Tambar Springs																												100	71		
	good quality untreated groundwate	Mullaley																												100	71		
Gunnedah Shire Council		**Total/Weighted Average** [1,3]																															

Appendix D1 - 2005/06 Water Treatment Data

Notes:
1. Where a water utility 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 fo that water utility. Totals are shown for capacity (2), treated volume (6), and number of samples (eg. 16). The days of chlorination system failure (35), and days of major malfunction of treatment processes (36) shown are the weighted average based on treatment.
2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines														Water Quality Complaints[3]	Chemical Monitoring Compliance	E.coli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
				ML/d		ML	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	per 1,000 properties	%	%	days	days
				2	3	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29				35	36
Guyra Shire Council		Guyra	1983	6.0	C	408	250	100	10	5	7	4	1	0	200	100	200	100	200	100	200	100	200	100	12	100	12	100	0.9		93		
	good quality untreated groundwate	North Star		0.4	CH	37	3	2			233	83			4	25	4		4	25	4	100	4	100	11	100	11	91					
		Warialda	2003	3.0	A	330			1	1			0	0	2	100	2	100	2	100	2	100	2	100	50	98	50	96					
		Bingara		4.0	CH	306																			51	100	51	71					
	non-potable groundwater	Gravesend	2003	0.5	CH	49	2	2			1	1			2	100	2	100	2	100	2	100	2	100	19	89	19	89				10	
Gwydir Shire Council		**Total/Weighted Average** [1,3]		**7.9**		**722**	**3**	**0**	**1**	**0**	**233**	**4**	**0**	**0**	**8**		**8**		**8**		**8**		**8**		**131**		**131**		**5.1**				
Harden Shire Council	*bulk supply from Goldenfields*	Harden																															
Hay Shire Council		Hay	1988	**2.1**	C	345	70	20	3	2	82	20	0	0		100				100				100		100				100		
Hunter Water	*metropolitan utility*																																
		Copeton	1982	18.0	C	1849	185	70	4	3	9	3	1	0.2	360	100	14	100	360	99	360	100	360	99	12	100	12	100		100	100		
		Ashford																												100	100		
	groundwater	Yetman																												67	100		
Inverell Shire Council		**Total/Weighted Average** [1,3]		**18.0**		**1849**	**185**	**70**	**4**	**3**	**9**	**3**	**1**	**0**	**360**	**100**	**14**	**100**	**360**	**99**	**360**	**100**	**360**	**99**	**12**	**100**	**12**	**100**	**1.9**				
Jerilderie Shire Council	*dual supply*	Jerilderie	1980	0.8	C	109	500	350	4	2	100	33	4	1	2	100	2	100	365	100	365	100	365	100	52	100	52	100			91	1	1
	groundwater	Sherwood	2000	38.0	CH	3088			5	1			1	0.3			372	100	12	100	146	99	12	100	139	99	139	99		100	100	2	
		Belgrave Falls			CH				0	0			0	0.2			62	100	2	100	53	98	2	100	51	100	51	100		100	100		
	groundwater	South West Rocks	2006	6.0	M	563			11	11			1	1.0			62	97	2	100	52	100	2	100	50	100	50	90		100	100		
	groundwater	Crescent Head		2.6	A	205			11	10			3.6	3.1			62	95	2	100										100	100		
	groundwater	Stuarts Point	1999	2.8		183			2	1			3	1			219	97	7	100	56	100	7	100	50	100	50	100		100	100		
	groundwater	Willawarrin		0.2	CH	14			3	2			1	0.9			62	98	2	100	27	96	2	100	26	100	26	92		100	100		
	groundwater	Bellbrook		0.2	CH	11			2	2			2	1.3			62	97	2	100	27	93	2	100	26	100	26	100		100	100		
	groundwater	Hat Head		1.3	A	95			6	5			0	0			62	97	2	100	28	100	2	100	26	100	26	96		100	100		
	groundwater - not in use 2005/06	Kinchela		2.0																													
Kempsey Shire Council		**Total/Weighted Average** [1,3]		**53.1**		**4159**				**3**				**0.6**			**963**	**98**	**31**	**100**	**389**	**99**	**29**	**100**	**368**	**100**	**368**	**97**	**13.0**				
		Kyogle	1988	3.0	C	326	250	18	2	2	28	3	1	0.8	2	100	2	100	2	100	2	100	2	100	94	99	94	82		100	100		
	non-potable supply from Tenterfie	Woodenbong																															
	non-potable	Bonalbo	1967	0.6	CH	36	25	20	25	20	1	1	1	1	2	100	2	100	2	100	2	100	2	100	50	100	51	22		100	100		
Kyogle Council		**Total/Weighted Average** [1,3]		**3.6**		**362**	**250**	**18**	**25**	**4**	**28**	**3**	**1**	**0.8**	**4**	**100**	**4**	**100**	**4**	**100**	**4**	**100**	**4**	**100**	**144**	**99**	**145**	**61**	**3.4**				
		Condobolin	1941	7.5	C																									100	100		
		Lake Cargelligo	1930	4.5	C																									100	100		
		Tottenham	1994	1.1	L, D																									100	91		
Lachlan Shire Council		**Total/Weighted Average** [1,3]		**13.1**																													
		Leeton	1993	25.0	C	2768	94	35	5	1	54	25	2	0.3	4	100	4	100	300	100	300	100	300	100	6	100	6	100		100	100		
		Whitton		0.9	C	107	166	90	8	2	95	55	2	0.6	4	100	4	100	300	100	300	100	300	100	27	100	27	100		100	100		
		Murrami	1993	0.3	C	15	196	65	9	6	165	50	6	3	4	100	4	100	300	100	300	100	300	100	26	100	26	100		100	100		
		Yanco																															
Leeton Shire Council		**Total/Weighted Average** [1,3]		**26.2**		**2890**	**196**	**37**	**9**	**1**	**165**	**26**	**6**	**0**	**12**	**100**	**12**	**100**	**900**	**100**	**900**	**100**	**900**	**100**	**59**	**100**	**59**	**100**	**0.5**				
Lismore City Council	*unfiltered*	Nimbin			CH	144										100			3	100	3	100	3	100	24	100	24	88			100		
Lithgow City Council		Oakey Park	1985	15.0	CH	1326	60	34	8	4	10	3	1	0.2	12	100	12	100			12	100			74	95	74	95	4.5		100		
	groundwater	Werris Creek	1991	2.9	CH																										100		
		Willow Tree		0.7	CH																										100		
Liverpool Plains Shire Council		**Total/Weighted Average** [1,3]		**3.6**																													
	unfiltered	Bootawa Dam Chlorinator	1986	70.0	CH	9656	25	13	7	4	3	2	7	1.3	2,563	98	1,610	99	646	100	648	94	647	100	1,084	98	1,084	46		100	98	3	
	groundwater	Tea Gardens	1968	4.0	A	726	17	10	17	10	7	2	2	1	377	93	400	65	104	100	104	83	104	99	157	99	157	57		65	100		3
		Bulahdelah	1986	2.0	D, C	188	89	60	24	3	72	18	3	1	379	97	426	74	104	100	104	89	103	99	154	99	154	86		74	100	3	
		Stroud	1997	2.0	D, C	170	33	22	2	2	25	5	2	0.5	477	99	495	100	131	100	130	99	131	100	176	100	176	96		100	100		
MidCoast County Council		**Total/Weighted Average** [1,3]		**78.0**		**10740**	**89**	**14**	**24**	**4**	**72**	**2**	**7**	**1**	**3,796**	**98**	**2,931**	**91**	**985**	**100**	**986**	**92**	**985**	**100**	**1,571**	**98**	**1,571**	**57**	**31.8**				
		Mudgee	2005	10.0	C	1875	5	5	5	5	10	1	0	0.1	12	75	4	75	9	89	12	56	9	100	54	100				100	100		
		Rylstone	1971	5.0	C	468	50	20	5	2	60	10	1	0.1	4	100	4	100	1	100	1	100	1	100	52	100				100	100		
		Gulgong	2005	4.0	C	481	5	5	5	5	10	1	1	0.1	4	100	4	100	2	100	2	100	2	100	53	100				100	100		
		Mudgee																															
Mid-Western Regional Council		**Total/Weighted Average** [1,3]		**19.0**		**481**	**50**	**44**	**5**	**26**	**60**	**15**	**1**	**1**	**20**		**12**		**12**		**15**		**12**		**159**				**0.5**				
	groundwater	Broadwater Creek	1986	16.0	CH																									100	100		
	groundwater	Mash		5.1	C																												
	groundwater	Industrial Drive		3.4	CH																												
	dual supply	Boggabilla		1.5	C																									100	100		
		Mungindi		0.8	C																									100	83		
	groundwater	Pallmallawa		0.6	CH																									100	100		
Moree Plains Shire Council		**Total/Weighted Average** [1,3]		**27.4**																													
		Moama	1991	6.0	DAF	595	175	106	5	5	39	8	1	0	1	100	1	100	1	100	1	100	1	100	10	100	10	100		100	100		
	dual supply	Mathoura	1989	2.3	C	203	80	50	5	5	31	18	1	0.4	2	100	2	100	2	100	2	100	2	100	10	100	10	100		100	100		
Murray Shire Council		**Total/Weighted Average** [1,3]		**8.3**		**798**	**175**	**92**	**5**	**5**	**39**	**11**	**1**	**0.1**	**3**	**100**	**3**	**100**	**3**	**100**	**3**	**100**	**3**	**100**	**20**	**100**	**20**	**100**	**0.8**				
	groundwater	Coleambally		5.0	A																					100		98		100	100		
	groundwater	Darlington Point			A	370																			54					100			
Murrumbidgee Shire Council		**Total/Weighted Average** [1,3]		**5.0**		**370**																			**54**								

Appendix D1 - 2005/06 Water Treatment Data

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2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines												Water Quality Complaints[3]	Chemical Monitoring Compliance	E.oli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
							Max	Avg	Max	Avg	Max	Avg	Max	Avg	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%					
				ML/d		ML	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	per 1,000 properties	%	%	days	days
		Muswellbrook																										100	100		
		Denman																										100	100		
	non-potable	Sandy Hollow																										100	100		
Muswellbrook Shire Council		**Total/Weighted Average** [1,3]																													
Nambucca Shire Council		Nambucca	1988	23.0	CH	1750			2	1			2	1	14	100	14	100	14	100	14	100	14	100	137	100	137	97	3.6		100		
	groundwater	Narrabri		18.1	CH	2242	4	2			1,008	78			13	100	13	100	13	92	13	100	13	100	55	100	55	96		100	100		
	groundwater	Gwabegar		0.4	CH	12	3	2			0	0							2	100	2	100	2	100	28	100	28	100		100	100		
	groundwater	Pilliga		1.2	CH	28	2	2			0	0					2	100	2	100	2	100	2	100	29	100	29	90		100	100		
	groundwater	Bellata		0.4	CH	35	2	1			0	0					3	100	3	100	3		3	100	27	96	27	74		100	96		
	groundwater	Wee Waa		10.1	CH	648	1	1			0	0					2	100	2	100	2	100	2	100	55	100	55	91		100	100		
	groundwater	Boggabri		4.1	CH	256	1	1			0	0					3	100	3	100	3	100	3	100	55	100	55	93		100	100		
Narrabri Shire Council		**Total/Weighted Average** [1,3]		**34.4**		**3221**	**4**	**2**			**1,008**	**54**			**13**	**100**	**23**	**100**	**25**	**96**	**25**	**88**	**25**	**100**	**249**	**100**	**249**	**92**	**14.5**				
Narrandera Shire Council	groundwater	Narrandera		22.0	CH	1460									11	100	11	80	11	100	11	100	11	100	72	100			7.5		100		
		Tomingley	2005	0.1	D	9					150	100	12	4.0			3		3		3												
	groundwater	Narromine			A	910																									100		
Narromine Shire Council		**Total/Weighted Average** [1,3]		**0.1**		**919**					**150**	**1**	**12**	**0**			**3**		**3**		**3**												
Oberon Council	bulk supply from Fish River WS	Oberon	2002	6.5	M	732	29	25			3	2	0	0	12	100	2	100	2	100	4	100	4	100	52	100	52	100	14.8		100		
		Icely Road	1982	38.0	C,OZ	5423	10	8			6	3	0	0.1	12	100	12	100	12	100	12	100	12	100	187	100	187	96		100	100		
	not in use 2005/06	Spring Creek	1931	12.0	C																												
	groundwater	Spring Hill/Lucknow		0.8	CH	68									2	100	2	100	2	100	2	100	2	100	52	100	52	90		100	100		
Orange City Council		**Total/Weighted Average** [1,3]		**50.8**		**5491**	**10**	**7**			**6**	**3**	**0**	**0**	**14**	**100**	**14**	**100**	**14**	**100**	**14**	**100**	**14**	**100**	**239**	**100**	**239**	**95**	**1.9**				
		Braidwood		10.0	CH	162									123	43	1	100	1	100	55	4	1	100	57	100				100	100		
	groundwater	Bungendore		1.7	CH	256							1	0.5	10	100	52	100	2	100	2	100	2	100	55	100				100	100		
		Captains Flat	2002	0.7	M	46	110	83	9	6	17	8	1	1	10	100	52	100	2	100	2	100	2	100	31	97				100	96		
Palerang Council		**Total/Weighted Average** [1,3]		**12.4**		**464**	**110**	**8**	**9**	**1**	**17**	**1**	**1**	**0.3**	**143**		**105**		**5**		**59**		**5**		**143**				**1.1**				
Parkes Shire Council		Parkes	1987	8.6	C	2497	70	20	2	1	80	10	2	0.5	12	100	12	90	12	100	12	100	12	100	107	100	107	88	2.9		100		
	unfiltered	Hastings		218.0	CH	5774									1,370	63	17	100	1,385	100	1,386	63	17	100	224	100	445	100		100	100		
	unfiltered	Long Flat		0.3	M	10	376	26	80	8	59	4	1	0	52	100	51	100	103	100	103	100	51	84	26	100	52	98		100	100		
	unfiltered	Comboyne		0.5	M	16	97	41	77	10	16	7	1	0.3	53	100	51	100	104	100	104	97	51	82	26	100	53	100		100	100		
	unfiltered	Telegraph Point		0.9	M	43	134	28	75	12	53	5	1	0.3	51	100	50	100	101	100	101	100	50	80	26	100	51	100		100	100		
Port Macquarie-Hastings Council		**Total/Weighted Average** [1,3]		**219.6**		**5843**	**376**	**0**	**80**	**0**	**59**	**0**	**1**	**0.0**	**1,526**	**67**	**169**	**100**	**1,693**	**100**	**1,694**	**70**	**169**	**84**	**302**	**100**	**601**	**100**	**7.7**				
Queanbeyan City Council	bulk supply from ACTEW	Weetalabah																												100		
		Casino	1985	23.0	C	2535	400	41	5	2	185	9	1	0.1	555	97	370	92	106	100	106	100	19	100	106	99	106	87		92	100		
	bulk supply from Rous Water	Broadwater																															
		Lower River																															
Richmond Valley Council		**Total/Weighted Average** [1,3]		**23.0**		**2535**	**400**	**41**	**5**	**2**	**185**	**9**	**1**	**0.1**	**555**	**97**	**370**	**92**	**106**	**100**	**106**	**100**	**19**	**100**	**106**	**99**	**106**	**87**	**2.9**				
		Nightcap	1991	70.0	DAF, D	11078	49	27	4	3	4	3	0	0.2	52	100	52	100	52	100	52	100	52	100	52	100	52	100		100	100		
		Emigrant Creek (New In 2006	2006	7.5	M, OZ	522	46	17	3	1	12	5	0	0.1	26	100	26	100	26	100	26	100	26	100	26	100	26	100		100	100		
Rous County Council	bulk supplier, retailer	**Total/Weighted Average** [1,3]		**77.5**		**11600**	**49**	**27**	**4**	**3**	**12**	**3**	**0**	**0.2**	**78**	**100**	**78**	**100**	**78**	**100**	**78**	**100**	**78**	**100**	**78**	**100**	**78**	**100**	**0.0**				
		Waterworks	1961	80.0	A, C	6801	312	40	18	4	60	10	1	0.3	281	98	351	100	111	100	109	95	35	94	113	100	113	96		100	100		
		North Wagga		25.0	A	2396	36	5	19	2	2	1	2	0.6	223	96	260	100	88	99	77	94	34	94	84	100	84	100		100	100		
		West Wagga	1979	32.0	A	5632	12	4	17	3	11	2	3	0.7	250	97	294	100	98	100	97	95	33	94	103	100	103	97		100	100		
		Ralvona		4.0	A	343	44	7	6	9	2	1	2	0.6	142	90	230	100	51	98	52	81	28	89	51	100	51	100		100	100	1	
		Bulgary		3.0	A	533	11	7	20	4	3	1	1	0.3	189	77	261	100	67	100	67	63	45	98	68	100	68	100		100	100	2	
		Rand																												50	100		
	groundwater	Collingullie		0.6	A, D	71	30	2	14	3	6	2	1	0.3	93	100	180	100	27	100	27	100	28	100	26	100	26	100		100	100		
	groundwater	Tarcutta		0.8	A, D	59	274	109	100	10	106	36	2	0.6	83	98	126	87	23	100	24	100	27	93	26	96	26	65		87	96		
	groundwater	Oura		0.6	A	47	17	6	29	6	1	1	3	1.1	90	94	183	100	26	100	27	100	26	81	26	100	26	100		100	100	4	
		Gardiners Crossing	1961	1.5	A	165	3	3	17	7	1	1	0	0.3	69	94	132	100	20	100	30	85	13	92	18	100	18	94		100	100	2	
		Urana		1.1	C	34	325	208	31	6	220	122	0	0.3	56	88	134	100	20	100	20	70	10	90	18	100	18	100		100	100		
	groundwater	Woomargama		0.2	CH	18	439	76	88	12	91	11	1	0.4	88	93	175	98	24	95	25	100	28	82	24	100	24	100		100	100	2	
	groundwater	Humula		0.3	A, CH	10	30	10	18	4	1	1	2	0.6	89	96	177	99	25	100	25	92	28	93	25	100	25	96		100	100	10	
		Morundah		0.2	C	10			68	7	381	31	1	0.3	86	94	164	98	25	100	25	100	27	81	25	100	25	96		100	100	5	3
		Walbundrie	2005	1.0	A	34	16	3	17	4	2	1	0	0.2	163	94	342	97	48	100	48	100	52	88	50	100	50	100		100	100	1	
Riverina Water County Council		**Total/Weighted Average** [1,3]		**150.3**		**16153**	**439**	**20**	**100**	**4**	**381**	**5**	**3**	**0.5**	**1,902**	**94**	**3,009**	**99**	**653**	**100**	**653**	**90**	**414**	**91**	**657**	**100**	**657**	**97**	**1.7**				
		Bamarang	1999	75.0	C	7851	45	34	15	3	3	2	1.6	0.4	132	100	240	100	12	100	12	100	12	100	577	100	577	98		100	100		
		Flatrock	1998	28.0	C	3756	45	34	3	3	3	2	1	0.3	132	100	240	100	12	100	12	100	12	100	65	100	65	99		100	100		
		Milton	1998	10.5	D	1540	70	63	5	3	5	3	1	0.2	132	99	240	100	12	100	12	92	12	100	140	100	140	100		100	100		
		Kangaroo Valley	1993	1.0	M	78	100	55	30	6	16	6	1	0	127	100	240	100	11	100	11	100	11	100	50	98	50	94		100	100		
Shoalhaven City Council		**Total/Weighted Average** [1,3]		**114.5**		**13225**	**100**	**38**	**30**	**3**	**16**	**2**	**2**	**0.3**	**523**	**100**	**960**	**100**	**47**	**100**	**47**	**98**	**47**	**100**	**832**	**100**	**832**	**98**	**2.7**				
Singleton Shire Council		Obanvale	1993	30.0	D	3135	5	5	5	5	4	1	2.0	0.3	600	100	600	100	600	100	600	100	600	100	102	96	102	96	2.0		100		
	unfiltered	East Berridale		8.6		180									3	100		100	3	100													
	unfiltered	East Jindabyne		8.6	CH	179			3						3	100	12	100	3	67	3	100	52	98	52	81			100	100		
	unfiltered	Jindabyne		8.0	CH	160			5	5			8	8.0	12	100	12	100	12	100	12	100	12	100	76	100	76	82		100	100	2	
	unfiltered	Kalkite		1.8	CH	19			3	3			3	3.0	3		12	100	3	67	3	100	3	100	33	94	33	85		100	94		
	unfiltered	Adaminaby	2005	2.0	CH	45			19	16			5.0	5.0	2	100	12	100	2	100	2	100	2	100	25	100	25	16		100	100		
	unfiltered	Dalgety		0.7	CH	20		36	9						2	100	26	98	2	100	2	100	2	100	25	100	25	92		100	96		
Snowy River Shire Council		**Total/Weighted Average** [1,3]		**29.7**		**603**		**1**	**19**	**3**			**8**	**2.6**	**25**	**88**	**74**	**99**	**25**	**96**	**22**	**96**	**22**	**100**	**211**	**99**	**211**	**76**					

Appendix D1 - 2005/06 Water Treatment Data

Notes:
1. Where a water utility 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 fo that water utility. Totals are shown for capacity (2), treated volume (6), and number of samples (eg. 16). The days of chlorination system failure (35), and days of major malfunction of treatment processes (36) shown are the weighted average based on treatment.
2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines												Water Quality Complaints[3]	Chemical Monitoring Compliance	E.oli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
				ML/d		ML	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	per 1,000 properties	%	%	days	days
				2	3	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29				35	36
Sydney Water	*metropolitan utility*																															
		Calala	1991	80.0	C	9220	20	8	5	2	27	6	0	0.1	24	100	913	97	12	100	12	75	12	100	118	100	118	98		100	100		
		Manilla	1990	4.6	C	390	250	58	4	206	5	10	1	0.3	4	100	520	87	2	100	2	100	2	100	57	100	57	75		87	100		
		Kootingal/Moonbi	1991		CH	289									2	100	54	100	1	100	1	100	1	100	28	100	28	100		100	93		
	groundwater	Barraba	1995	3.6	DAF	173	505	223	4	3	107	36	0	0.2	2	50	77	95	1	100	1	100	1	100	52	100	52	98		100	100		
	groundwater	Nundle	1995	0.9	L	69	40	14	40	8	4	2	4	1.6	2	100	53	98	1	100	1	100	1	100	28	100	28	89		100	100		
	groundwater	Attunga	1991	2.9	CH	52									2	100	53	98	1	100	1	100	1	100	26	100	26	100		100	100		
		Bendemeer		0.6	CH	36									2	50	57	96	1		1	100	1	100	32	88	32	75		100	88	1	
Tamworth Regional Council		**Total/Weighted Average [1,3]**		**92.6**		**10229**	**505**	**13**	**40**	**9**	**107**	**6**	**4**	**0.1**	**38**	**95**	**1,727**	**94**	**19**	**95**	**19**	**84**	**19**	**100**	**341**	**99**	**341**	**92**					
		Tenterfield	1986	5.5	C	390	177	75	63	10	15	4	3.9	0.3	18	100	4	100	11	100	11	100	11	100	36	100	36	100		100	100	2	3
		Urbenville		1.8	CH	95																			36	92	36	92		100	90	3	
		Jennings			C																				15	100	15	100			100		
Tenterfield Shire Council		**Total/Weighted Average [1,3]**		**7.3**		**485**	**177**	**60**	**63**	**8**	**15**	**3**	**4**	**0.2**	**18**	**100**	**4**	**100**	**11**	**100**	**11**	**100**	**11**	**100**	**87**	**97**	**87**	**97**	**9.5**				
		Tumbarumba		4.0	CH	389			9	9			1	1.4			1	100	1	100	1	100	1	100	53	100	53	43		100	100	1	
		Khancoban		2.5	CH	91			2	2			1	0.8			1	100	1	100	1	100	1	100	20	100	20	100		100	100		
Tumbarumba Shire Council		**Total/Weighted Average [1,3]**		**6.5**		**480**			**9**	**7**			**1**	**1.3**			**2**	**100**	**2**	**100**	**2**	**100**	**2**	**100**	**73**	**100**	**73**	**59**	**6.1**				
		Tumut	1987	16.0	C		250	14	10	5	170	24	3	0.2	64	97	7		7	100	7	100	7	100	64	100	64	97			100		
		Adelong	1996	2.7	L,D		550	106	14	0	229	12	1	0.2	45	100	1		1	100	1	100	1	100	45	100	45	100			100		
		Batlow		2.1	M		250	57	0	5	22	4	3	0.2	52	96	2		2	100	2	50	2	100	52	100	52	96			100		
		Talbingo		2.1	D		70	22	5	5	4	1	2	0.1	26	100	2		2	100	2	100	2	100	26	100	26	100			100		
		Brungle		0.3	M		225	28	10	5	41	7	1	0.2	9	100	2		2	100	2	100	2	100	9	100	9	100			100		
Tumut Council		**Total/Weighted Average [1,3]**		**23.2**			**550**		**14**		**229**		**3**		**196**	**98**	**14**		**14**	**100**	**14**	**93**	**14**	**100**	**196**	**100**	**196**	**98**					
		Bray Park	1998	60.0	C	9428	29	24	5	1	104	6	1	0.1	2,681	100	9,362	93	499	100	1,177	47	431	100	396	100	437	90		93	100		
		Uki	1998	0.5	C	46	58	23	7	1	52	5	1	0.2	601	100	1,540	99	101	100	147	89	97	100	100	100	98	99		100	100	30	18
		Tyalgum	1969	0.3	D	27	43	12	11	5	23	5	11	0.4	602	99	1,387	94	101	91	148	89	97	100	101	100	99	100		94	100		
Tweed Shire Council		**Total/Weighted Average [1,3]**		**0.7**		**9501**	**58**	**24**	**11**	**1**	**104**	**6**	**11**	**0.1**	**3,884**	**100**	**12,289**	**94**	**701**	**99**	**1,472**	**56**	**625**	**100**	**597**	**100**	**634**	**93**	**2.3**				
		Murrurundi	1983	2.4	CH	131																			36	100	36	89			100		
	groundwater	Merriwa	1980	2.3	A	310			1	1			0	0.3	2	100	2	100	2	100	2	100	2	100	2	100	49	100		100	100		
	groundwater	Cassilis	2001	0.6	CH	20			1	1			1	0.5	2		2	100	2	100	2	100	2	100	29	100	29	100		100	100	2	
		Scone And Aberdeen			CH										11	100	11	100	11	100	11	100	11	100	161	100	161	99		100	100		
Upper Hunter Shire Council		**Total/Weighted Average [1,3]**		**5.3**		**461**			**1**	**1**			**1**	**0.2**	**15**	**87**	**15**	**100**	**15**	**100**	**15**	**100**	**15**	**100**	**228**	**100**	**275**	**98**	**0.5**				
		Crookwell	1990	3.0	C	320	68	50	5	4	4	3	1	0.2	100	100	1	100	100	100	100	100	100	100	38	95				100	95		
	groundwater	Gunning		2.0	CH	50			12	9			6.3	3.2	2	50	2	50	2	100	2	100	2	100	40	88				100	88		
		Dalton	1977	1.0	CH	20			1	1			5	3	2	100	2		2	100	2	100	2	100	25	92				50	92		
		Taralga		1.30	D, UV	35			6	6			1	0	3	33	2	100	2	100	3	33	2	100	28	86				100	86		
Upper Lachlan Council		**Total/Weighted Average [1,3]**		**7.3**		**425**	**68**	**38**	**12**	**5**	**4**	**2**	**6**	**1**	**107**		**7**		**106**		**107**		**106**		**131**				**2.0**				
		Kentucky Creek	1985	5.0	C																									100	97		
		Bundarra	1994	0.8	L																									100	92		
Uralla Shire Council		**Total/Weighted Average [1,3]**		**5.8**																													
	dual supply	Barham	1993	2.0	L																									100	100		
	unfiltered	Wakool Rural/Town		1.2	M																												
		Lower Murray Water Swanhill		1.0	L																												
		Murray Downs		1.0	L																									80	100		
		Moulamein		0.5	D																									100	100		
	unfiltered	Koraleigh		0.1	M																									100	100		
		Tooleybuc		0.3	M																									100	100		
		Wakool																												100	92		
Wakool Shire Council		**Total/Weighted Average [1,3]**		**4.1**																													
Walcha Council		Walcha	1985	4.8	C	232	500	47	7	0	75	5	3	0.1	400	100	2	100	300	100	400	100	300	100	8	100	8	100			100		
	dual supply	Walgett	1964	0.7	C																									100	100		
	dual supply	Collarenebri	1996	0.5	M																									100	100		
Walgett Shire Council		**Total/Weighted Average [1,3]**		**4.4**																													
	dual supply	Warren Chlorinator		3.5	CH	309	1	1	1	1	0	0	0	0.2	1	100	1		1	100	1	100	1	100	16	88	16	69		100	88		
	groundwater	Nevertire		0.3	CH	23	1	1	1	1	0	0	0	0.2	1	100	1		1	100	1	100	1	100	10	70	10	30		100	70		
	groundwater	Collie		0.0	CH	6																			5	100	5	80			83		
Warren Shire Council		**Total/Weighted Average [1,3]**		**3.8**		**338**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0.2**	**2**	**100**	**2**		**2**	**100**	**2**	**100**	**2**	**100**	**31**	**84**	**31**	**58**	**10.4**				
		Coonabarabran	1993	7.5	C,D,L	544																									100		
	groundwater	Dunedoo		1.5	CH	213																								100	100		
		Binnaway	1993	1.3	C,D,L	111																									100		
	groundwater	Coolah		1.0	CH	141																								100	100		
		Mendooran		0.3	CH	60																								67	83	20	
	groundwater	Baradine	1999	1.0	D	188																									100		
	groundwater	Bugaldie																													100		
	groundwater	Kenebri																													100		
Warrumbungle Shire Council		**Total/Weighted Average [1,3]**		**12.6**		**1257**																							**8.3**				
		Wellington	1993	14.6	L	1099	30	5	2	1	20	4	2	1.0	365	100	12	100	365	100	365	100	365	100	52	100				100	100		
		Geurie	1994	1.5	L	138	46	15	1	1	36	8	1	0.4	365	100	12	100	365	100	365	100	52	100	12	100				100	100		
Wellington Council		**Total/Weighted Average [1,3]**		**16.1**		**1237**	**46**	**6**	**2**	**1**	**36**	**4**	**2**	**0.9**	**730**		**24**		**730**		**730**		**417**		**64**				**10.6**				

Appendix D1 - 2005/06 Water Treatment Data

Notes:

1. Where a water utility 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 fo that water utility. Totals are shown for capacity (2), treated volume (6), and number of samples (eg. 16). The days of chlorination system failure (35), and days of major malfunction of treatment processes (36) shown are the weighted average based on treatment.
2. For "Type of Treatment Works"; A = Aerated and Disinfected, C = Conventional Water Treatment, CH = Chlorination Only, D = Direct Filtration, DAF = Dissolved Air Flotation, L = Lagoon Sedimentation, M = Microfiltration, OZ = Ozonation, UV = Ultra-Violet Disinfection.
3. For water quality complaints, the weighted average values shown are on the basis of the total water complaints divided by the number of connected properties.

Water Utility	Comment	Water Treatment Works	Year built or Augmented	Capacity	Type of Treatment Works[2]	Volume Treated	Colour Units				Turbidity Units				Percentage Test Compliance With 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines												Water Quality Complaints[3]	Chemical Monitoring Compliance	E.oli Monitoring Compliance	Chlorination System Failure	Major Malfunction of Treatment Processes
							Raw Water		Treated Water		Raw Water		Treated Water		Physical		Chemical		Turbidity		pH		Colour		E. coli		Total Coliforms						
				ML/d		ML	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	Samples	%	per 1,000 properties	%	%	days	days
				2	3	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29				35	36
		Buronga/Gol-Gol/Dareton	1994	3.7	L	210	145	35	1		250	35	1	0.4	78	100	78	100	78	100	78		78	100	78	100	78	92		100	100		
		Wentworth	1991	1.4	C	219	120	20	3	2	140	35	5	1.0	50	100	50	100	50	100	50	100	50	100	50	100	50	100		100	100		
	dual supply	Pooncarie	1994	0.2	L	11	125	50	5	1	250	55	5	1.0	22	100	22	100	22	100	22	100	22	100	22	98	22	75		100	100		
Wentworth Shire Council		**Total/Weighted Average [1,3]**		**5.3**		**440**	**145**	**28**	**5**	**1**	**250**	**35**	**5**	**0.7**	**150**	**100**	**150**	**100**	**150**	**100**	**150**	**48**	**150**	**100**	**150**	**100**	**150**	**92**	**7.5**				
		Wingecaribee	1989	40.0	DAF	3452	200	65	3	1	11	6	1	0.3	12	100	12	92	12	100	12	75	12	100	275	100	275	90		92	100		
		Bundanoon	1988	10.0	DAF	568	100	57	5	3	13	3	2	0.6	2	100	2	100	2	100	2	100	2	100	55	100	55	93		100	100		
		Medway	1982	8.0	C	717	30	19	5	205	2	1	1	0.3	11	100	11	91	11	100	11	100	11	100	88	99	88	85		91	100		
Wingecarribee Shire Council		**Total/Weighted Average [1,3]**		**58.0**		**4737**	**200**	**57**	**5**	**32**	**13**	**5**	**2**	**0.3**	**25**	**100**	**25**	**92**	**25**	**100**	**25**	**88**	**25**	**100**	**418**	**100**	**418**	**89**	**7.1**				
Wyong Shire Council		Mardi	1994	160.0	D	9205	60	49	8	3	5	2	1	0.3	511	99	562	100	511	100	511	99	511	100	415	100	415	79	9.0		100		
Yass Valley Council		Yass	1989	13.0	DAF	813	250	78	10	5	81	6	2	0.6	365	100	12	98	365	100	365	100	365	100	84	98	84	76	1.4		100		
Young Council	*bulk supply from Goldenfields*						46	17	3	1	12	5	0	0.1	26	100	26	100	26	100	26	100	26	100	26	100	26	100		100	100		

Supplementary Notes:

1. Chemical, Turbidity, pH, E. coli or Total coliforms results are from the NSW Health Drinking Water Monitoring Program and NSW Performance Reporting except for for the following LWUs which are only from NSW Health: Gunnedah, Lithgow, Moree Plains, Narromine, Wakool and Young.
2. The additional Chemical, Turbidity, pH, E. coli or Total coliforms results from NSW Health Drinking Water Monitoring Program have also been included in Tables 5 and 12 and Figures 15 to 17.
3. NSW Health has also provided the Chemical Monitoring Compliance and the Microbiological Monitoring Compliance results for each LWU. These results have been adjusted to include sampling reported by LWUs, but not included in the Drinking Water Monitoring Program and are shown before column 44. LWUs with under 100% in these columns should increase their future sampling to comply with the sample numbers recommended by NSW Health.

APPENDIX D2

2005/06 SEWAGE TREATMENT PERFORMANCE

APPENDIX D2 – 2005/06 Sewage Treatment Performance

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Appendix D2 - 2005/06 Sewage Treatment Data

Notes: 1. Where a water utility has more than one treatment work, 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 utility. Totals are shown for capacity (10), sewage volume treated (15), and sampling days (63). The days of major malfunction of treatment processes (67) shown are the weighted average based on treatment works capacity.

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"**; 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"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

Water Utility	Comment	Sewage Treatment Works Name	Year built or Augmented 1	Capacity EP 10	Standard of Treatment 3	Type of Treatment Works 4 2	Nitrogen Removal Yes/No 5	Phosphorus Removal Yes/No 6	Effluent Discharge 3	Volume of Sewage Receiving Treatment ML 15	90 Percentile Licence Limits 5 and DEC Licence Compliance												Odour Complaints per 1,000 properties 6 68,69	Sampling Days days 63	Major Malfunction of Treatment days 67
											BOD mg/L 49	BOD % 50	SS mg/L 51	SS % 52	Total N mg/L 53	Total N % 54	NH_3N mg/L 55	NH_3N % 56	Oil & Grease mg/L 57	Oil & Grease % 58	Total P mg/L 59	Total P % 60	Faecal Coliforms cfu /100mL 61	Faecal Coliforms % 62			
		Albury	1987	40,000	AT	BNR	Y	Y	L		15	100	20	100	15	100	5	100	10	100	1	100				13	
		Albury (Waterview)	1999	26,500	AT	BNR	Y	Y	L		12	100	15	100	15	100	5	92	2	92	1	100	300	77		13	1
		Hume Weir	1980	500	T	IEA	N	N	R		20	85	30	85					10	100						13	4
		Lara Lakes	1990	200	S	A	N	N	L		NL		NL														
Albury City Council		**Total/Weighted Average** 1,6		**67,200**						**5,326**	**20**	**95**	**30**	**95**	**15**	**100**	**5**	**97**	**10**	**97**	**1**	**100**	**300**	**92**		**39**	**5**
Armidale Dumaresq Council		Armidale	1989	22,000	S	TF	N	N	R L		20	100	30	100		100		100	10	100		100		100		12	
	100% limits	Ballina	1998	12,000	AS	TF, IEA	Y	N	R																		
	100% limits	Lennox Head	1998	8,000	AS	IEA	Y	N	O																		
	100% limits	Alstonville	1986	4,000	AS	IEA	Y	N	R																		
	100% limits	Wardell		1,750	AS	IEA	Y	N	R																		
Ballina Shire Council		**Total/Weighted Average** 1,6		**25,750**																							
	No Discharge Licence	Balranald		2,000	S	A	N	N	L		NL		NL														
		Euston		1,100	S	A	N	N	L		NL		NL														
Balranald Council		**Total/Weighted Average** 1,6		**3,100**						**237**	**NL**		**NL**														
Bathurst Regional Council		Bathurst	1998	**55,000**	T	BNR, IEA	Y	Y	R		20	100	25	75	15	100			10	100	1	83			0.1	52	
		Tura Beach	2006	4,500	AS	IEA	Y	N	L		20	100	30	100					10	100						12	
		Eden	1998	8,000	AS	IEA	Y	N	L O		20	100	30	92					10	100						12	
		Tathra	2004	6,200	T	CEA	Y	Y	L		30	100	20	100					10	100			10	92		12	
		Bega	1927	4,000	S	TF	Y	N	L R		20	92	30	83					10	100						12	
		Bermagui	1975	2,000	AS	IEA	Y	N	L O		20	100	30	100					10	100						12	1
		Merimbula	1992	15,500	AS	IEA	Y	N	L O		20	100	30	92					10	100						12	
Bega Valley Shire Council		**Total/Weighted Average** 1,6		**40,200**						**2,023**	**30**	**99**	**30**	**95**		**100**		**100**	**10**	**100**		**100**	**10**	**99**		**72**	**1**
		Urunga	1989	6,650	T	IEA	Y	Y	R		10	100	15	96	10	100	2	100	2	100	0	81	200	96		26	
		Bellingen	1994	400	T	IEA	Y	Y	R		10	100	15	100	10	100	2	85		100	0	100	200	100		26	
		Dorrigo	1970	1,500	T	TF	N	N	R		20	92	30	75												12	
Bellingen Shire Council		**Total/Weighted Average** 1,6		**8,550**						**870**	**20**	**99**	**30**	**94**	**10**	**100**	**2**	**94**	**2**	**100**	**0**	**92**	**200**	**98**		**64**	
	No licence limits	Tocumwal	1944	4,000	S	TF	N	N	L		NL		NL													4	2
		Finley	1967	3,200	S	TF	N	N	L		20	75	30	75												4	7
	No licence limits	Barooga	1992	3,000	S	A	N	N	L		NL		NL													4	
	No licence limits	Berrigan	1996	1,500	S	TF	N	N	L		NL		NL														
Berrigan Shire Council		**Total/Weighted Average** 1,6		**11,700**						**532**	**20**	**25**	**30**	**25**		**100**		**100**		**100**		**100**		**100**		**12**	**9**
		West Wyalong	1986	7,200	AS	TF, IEA	N	N	R		20	100	30	100												8	
		Ungarie	1961	600	AS	IEA	N	N	R		NL		NL														
		Barmedman	1940	400	S	TF	N		R		NL		NL													2	
Bland Shire Council		**Total/Weighted Average** 1,6		**8,200**						**289**	**20**	**80**	**30**	**80**		**100**		**100**		**100**		**100**		**100**		**10**	
Blayney Shire Council		Blayney	1991	7,000	AS	IEA	Y	Y	R		30	100	30	100	15	100	2	100	10	100	1	100	600	100	0.7	17	
Bogan Shire Council	*No licence limits*	Nyngan	1991	3,735	S	A	N	N	L		NL		NL												3.8	4	
		Bombala		3,000	S	TF, AN	N	N	R		20	100	30	100					10	100						8	
	No licence limits	Delegate	1992	680	AS	IEA	N	N	R		NL		NL														
Bombala Council		**Total/Weighted Average** 1,6		**3,680**						**173**	**20**	**100**	**30**	**100**		**100**		**100**	**10**	**100**		**100**		**100**		**8**	
Boorowa Council		Boorowa		3,430	S	TF	N	N	L		NL		NL													52	
Bourke Shire Council		Bourke	1990	5,000	S	A	N	N	L		15	33	20		15				10	100	10	100			0.9	12	
		Brewarrina	1971	1,600	S	TF	N	N	L		20	100	30	100	15	100			10	100	10	100				52	
		Goodooga		1,600	S	A	N	N	L		NL		NL														
		Barwon Four						N			NL		NL														
Brewarrina Shire Council		**Total/Weighted Average** 1,6		**3,200**						**210**	**20**	**100**	**30**	**100**	**15**	**100**		**100**	**10**	**100**	**10**	**100**		**100**		**52**	
		Byron Bay West	2005	28,958	T	BNR	Y	Y	L		10	100	15	100	10	100	2	100	2	100	1	100	200	100		52	
		Ocean Shores	1997	8,000	AS	IEA	Y	Y	R		15	100	20	100	15	96	5	92	10	100	1	100	200	88		52	
		Byron Bay	1973	4,700	TF	TF	Y	Y	R		15	100	20	100	30	100	10	64	10	100	1	100	200	100		52	
		Mullumbimby	1976	3,200	S	TF	Y	Y	R		15	100	20	100					10	100	1	76	200	92		52	
		Brunswick Heads	1980	1,600	S	TF	Y	Y	R		30	100	30	100					10	100			200	76		52	
		Bangalow	1990	1,400	AS	IEA	Y	Y	R		20	100	20	100	15	88			10	100	1	100	200	92		52	
Byron Shire Council		**Total/Weighted Average** 1,6		**47,858**						**3,341**	**30**	**100**	**30**	**100**	**30**	**97**	**10**	**93**	**10**	**100**	**1**	**96**	**200**	**91**		**312**	
		Canowindra	1978	2,500	S	TF	N	N	R		30	80	30	na	15	100			10	100	10	100				2	
		Molong	1979	2,000	AS	IEA	N	N	R		30	100	30	92	15	92			10	100	10	100				12	
		Eugowra	1999	550	S	TF	N	N	L		NL		NL														
Cabonne Council		**Total/Weighted Average** 1,6		**5,050**						**304**	**30**	**97**	**30**	**79**	**15**	**93**		**100**	**10**	**100**	**10**	**100**		**100**		**14**	
		Hillston	1978	1,000	AS	IEA	N	N	L		NL		NL														
		Goolgowi	1973	400	S	A			L		NL		NL														6
		Rankins Springs	1986	150	S	A			L		NL		NL														
Carrathool Shire Council		**Total/Weighted Average** 1,6		**1,550**						**97**	**NL**		**NL**														
Central Darling Shire Council		Wilcannia		1,510	S	A	N	N	L		NL		NL													2	

Appendix D2 - 2005/06 Sewage Treatment Data

Notes: 1. Where a water utility has more than one treatment work, 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 utility. Totals are shown for capacity (10), sewage volume treated (15), and sampling days (63). The days of major malfunction of treatment processes (67) shown are the weighted average based on treatment works capacity.

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"**; 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"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

Water Utility	Comment	Sewage Treatment Works Name	Year built or Augmented 1	Capacity EP 10	Standard of Treatment 3	Type of Treatment Works 4	Nitrogen Removal Yes/No 5	Phosphorus Removal Yes/No 6	Effluent Discharge 3	Volume of Sewage Receiving Treatment ML 15	90 Percentile Licence Limits 5 and DEC Licence Compliance														Odour Complaints per 1,000 properties 6 68,69	Sampling Days days 63	Major Malfunction of Treatment days 67
											BOD mg/L 49	BOD % 50	SS mg/L 51	SS % 52	Total N mg/L 53	Total N % 54	NH_3N mg/L 55	NH_3N % 56	Oil & Grease mg/L 57	Oil & Grease % 58	Total P mg/L 59	Total P % 60	Faecal Coliforms cfu /100mL 61	Faecal Coliforms % 62			
		Grafton North	1989	14,700	S	TF	N	N	R		20	93	30	66					10	100						15	
		Yamba	1983	7,500	AS	IEA	Y	Y	L		15	100	20	92	15	92	5	92	10	100	1	83				14	
		Grafton South	1989	6,400	S	TF	N	N	R		20	91	30	55					10	100						22	
		Clarenza	1988	5,000	AS	EA	N	N	L R		20	95	30	86					10	100						22	
		Maclean	1976	3,000	S	TF	N	N	R		20	92	30	75					10	92						12	
		Coutts Crossing	1998	1,000	AS	IEA	N	N	R		20	100	30	75					10	100						12	
		Junction Hill No.2	1982	500	S	IEA	N	N	R		20	91	30	82					10	100						11	
		Townsend	1983	500	S	A	N	N	L		50	69	50	92					10	100						13	
		Junction Hill No.1	1998	450	S	TF	N	N	R		20	91	30	82					10	100						11	
		Ilarwil	1991	160	S	A	N	N	R		50	75	50	92					10	92						12	
Clarence Valley Council		**Total/Weighted Average** 1,6		**39,210**						**2,592**	**50**	**90**	**50**	**78**	**15**	**99**	**5**	**99**	**10**	**99**	**1**	**98**		**100**		**144**	
		Cobar	1952	8,000	S	AL	N	N	L		11	100	20	100	1	100			2	100	4	100				12	
		Murrin Bridge									NL		NL														
Cobar Shire Council		**Total/Weighted Average** 1,6		**8,000**						**423**	**11**	**100**	**20**	**100**	**1**	**100**		**100**	**2**	**100**	**4**	**100**		**100**		**12**	
		Coffs Harbour	1986	42,000	AS	TF, IEA	Y	N	O		50	100	50	100					10	100						52	
		Sawtell	1986	18,000	AS	IEA	Y	N	O		20	100	30	100					10	100						52	
		Woolgoolga	2005	18,000	AS	IEA	Y	Y	O R		10	100	15	100	15	2			2	100	2	6	1	14		52	
		Moonee/Emerald	1999	7,000	AT	BNR	Y	Y	O R		10	100	15	100	15	100			2	100	2	100	1	4		52	1
		Corindi Beach	2000	1,500	AS	IEA	Y	Y	L		15	6	20	4	15	100	5	100	10	100	5	100	200	4		12	
Coffs Harbour City Council		**Total/Weighted Average** 1,6		**86,500**						**5,931**	**50**	**95**	**50**	**95**	**15**	**77**	**5**	**100**	**10**	**100**	**5**	**78**	**200**	**52**		**220**	**1**
		Coolamon	1965	1,200	S	TF	N	N	L		NL		NL														
		Ganmain		1,000	S	A	N	N	L		NL		NL														
Coolamon Council		**Total/Weighted Average** 1,6		**2,200**																							
		Cooma (The Glen)	1998	15,000	S	TF	Y	Y	L																		
		Nimmitabel		500	AS	IEA	N	Y	R																		
Cooma-Monaro Council		**Total/Weighted Average** 1,6		**15,500**																							
		Coonamble	1956		TF	TF	N	N	L		20	92	50	50	20	100			10	92	10	100				12	
		Gulargambone	1975	750	S	AL	N	N	L		30	92	30	58	15	92			10	100	15	100	600	84		12	
Coonamble Council		**Total/Weighted Average** 1,6		**750**						**303**	**30**	**92**	**50**	**54**	**20**	**96**		**100**	**10**	**96**	**15**	**100**	**600**	**92**		**24**	
Cootamundra Council		Cootamundra	1992	14,000	AT	CEA	Y	Y	R		30	100	40	85	20	100			10	100	1	100	200	100		6	
		Corowa	1988	7,600	S	TF	N	N	L		20	100	30	100	40	100			10	100						13	1
		Mulwala	1968	1,200	S	TF	N	N	L		20	50	30	66	40	100			10	100	10	100				13	
		Howlong	1968	2,500	S		N	N	L		NL		NL													13	
Corowa Council		**Total/Weighted Average** 1,6		**11,300**						**830**	**20**	**50**	**30**	**55**	**40**	**100**		**100**	**10**	**100**	**10**	**100**		**100**		**39**	**1**
		Broken Hill (Wills St)	1988		T	TF	N	N	L		40	88	45	88					10	100						26	
		Broken Hill South	1968		S	TF	N	N	L		50	100	50	100					10	92				60		26	
Country Energy		**Total/Weighted Average** 1,6								**1,433**	**50**	**94**	**50**	**94**					**10**	**96**				**30**		**52**	
		Cowra	1977	10,000	S	TF	N	N	R		20	100	30	75					10	100						12	
		Wyangala									NL		NL														
Cowra Council		**Total/Weighted Average** 1,6		**10,000**						**768**	**20**	**100**	**30**	**75**		**100**		**100**	**10**	**100**		**100**		**100**		**12**	
Deniliquin Council		Deniliquin	1996		T	TF	Y	Y	L		20	100	30	92	40	100			10	100	10	100	200	100	0.3	12	
Dubbo City Council		Dubbo (Troy Junction)	1985	40,000	AS	IEA	Y	N	L R		30	100	30	96	15	96	5	100	10	100	10	96	200	64	0.1	14	
Dungog Council		Dungog	1949	2,000	S	TF	N	N	R		7	2	30	2	29	2	11	2			8	2			3.0	2	
		Batemans Bay	1984	15,000	AS	CEA	Y	N	O		20	100	30	100					10	100						30	
		Narooma	1984	12,000	AS	CEA	Y	N	O		20	96	30	96					10	100						30	
		Moruya	2000	8,000	T	CEA	Y	Y	R		20	100	30	100	15	100			10	100	1	92				30	
		Tomakin	1984	8,000	AS	CEA	Y	N	O		20	100	30	100					10	100						30	
		Tuross Heads		4,000	AS	IEA	Y	N	L		20	100	30	100					10	100						30	
Eurobodalla Council		**Total/Weighted Average** 1,6		**47,000**						**3,217**	**20**	**99**	**30**	**99**	**15**	**100**		**100**	**10**	**100**	**1**	**98**		**100**		**150**	
Forbes Council		Forbes	2005	12,000	T	CEA	Y	Y	L R		10	92	15	100	10	85	2	92	10	100	1	77	200	83	0.3	13	
Gilgandra Council		Gilgandra		3,000	T	TF, A	N	N	L		20	100	50	75	10	100			10	100	10	100			0.7	5	1
		Deepwater	1987	500	S	A	N	N	L		NL		NL														
		Glen Innes	1930	6,000	S	TF	Y	Y	R		20	100	30	100					10	100						12	
Glen Innes Severn Council		**Total/Weighted Average** 1,6		**6,500**						**861**	**20**	**100**	**30**	**100**		**100**		**100**	**10**	**100**		**100**		**100**		**12**	
Gloucester Council		**Gloucester**	1988	4,600	T	TF	Y	Y	R		30	83	40	42	40	100	10	100							0.7	13	
		Kincumber	1983	180,000	AS	C	Y	N	O		30	100	50	100					10	100						365	
		Woy Woy	1989	50,000	AS	CEA	Y	N	O		30	100	50	100					10	100						65	
Gosford City Council		**Total/Weighted Average** 1,6		**230,000**						**13,912**	**30**	**100**	**50**	**100**		**100**		**100**	**10**	**100**		**100**		**100**		**430**	
		Goulburn	1987	31,500	S	TF	N	Y	L																		
		Marulan																									
Goulburn Mulwaree Council		**Total/Weighted Average** 1,6		**31,500**						**1,684**																	

Appendix D2 - 2005/06 Sewage Treatment Data

Notes: 1. Where a water utility has more than one treatment work, 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 utility. Totals are shown for capacity (10), sewage volume treated (15), and sampling days (63). The days of major malfunction of treatment processes (67) shown are the weighted average based on treatment works capacity.

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"**; 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"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

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 per 1,000 properties[6]	Sampling Days	Major Malfunction of Treatment
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms				
		Name		EP			Yes/No	Yes/No		ML	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	cfu /100mL	%		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
		Holbrook	1969	1,600	T	TF	N	N	R		20	100	30	60					10	100						5	
		Jindera	1986	1,000	S	A	N	N	L		NL		NL													4	
		Henty	1971	1,000	T	IEA	Y	N	L		20	100	30	100	20	100			10	100	10	100				5	
		Culcairn	1971	1,000	T	IEA	N	N	L		20	100	30	100	20	100			10	100	10	100				5	
		Walla Walla	1981	1,000	T	IEA	N	N	R		20	100	30	100					10	100						5	
		Burrumbuttock	1990	100	S	A	N	N	L		NL		NL														
Greater Hume Council		**Total/Weighted Average**[1,6]		**5,700**						**499**	**20**	**83**	**30**	**75**	**20**	**100**		**100**	**10**	**100**	**10**	**100**		**100**		**24**	
		Griffith	1992	65,000	T	TF, A	N	Y	R		30	88	30	78					10	100			200	100		12	
		Yenda	1981	34,000	S	AL	N	N	R		50	85	50	85									600	100		6	
		Bilbul	1990	310	S	A	N	N	R		NL		NL														
Griffith City Council		**Total/Weighted Average**[1,6]		**99,310**						**2,630**	**50**	**87**	**50**	**80**		**100**		**100**	**10**	**100**		**100**	**600**	**100**		**18**	
Gundagai Council	*No licence limits*	Gundagai	1972	3,500	S	TF	N	N	L		NL	90	NL	95												10	
		Gunnedah	1969	11,000	S	TF	N	N	L		20	100	30	75					10	100						13	
		Curlewis	1990	1,650	S	A	N	N	L		NL	100	NL	100						100						1	
Gunnedah Council		**Total/Weighted Average**[1,6]		**12,650**						**573**	**20**	**100**	**30**	**77**		**100**		**100**	**10**	**100**		**100**		**100**		**14**	
Guyra Council		**Guyra**	2000	3,300	AS	IEA	Y	Y	R		15	100	20	100	15	na	5	100	10	100	1	na				12	
		Bingara	1970	2,000	T	TF	N	N	R		20	83	30	66					10	100						12	
		Warialda	1969	1,500	T	TF	N	N	R		20	100	30	75					10	100						12	
Gwydir Shire Council		**Total/Weighted Average**[1,6]		**3,500**							**20**	**92**	**30**	**71**		**100**		**100**	**10**	**100**		**100**		**100**		**24**	
Harden Council		Harden Murrumburrah	1937	4,000	S	TF	N	N	L R		20	92	30	33												12	
		McGraths Hill																									
		South Windsor																									
		McGraths Hill																									
		South Windsor																									
Hawkesbury City Council		**Total/Weighted Average**[1,6]									**20**		**5**														
Hay Council		Hay		3,000	S	TF	Y	Y	L		30	100	40	90	40	100			10	90	10	100				10	
Hunter Water	*Metropolitan utility*																										
		Inverell	1986	12,000	AS	IEA	N	N	R		20	100	30	100					10	100						14	
		Ashford	1970	1,000	AS	IEA	N	N	R		20	100	30	80					10	100						14	
		Delungra		500	AS	IEA	N	N	R		20	100	30	90					10	100						14	
		Gilgai		50	S	A	N	N	R		NL		NL													10	
Inverell Council		**Total/Weighted Average**[1,6]		**13,550**						**757**	**20**	**81**	**30**	**73**		**100**		**100**	**10**	**100**		**100**		**100**		**52**	
Jerilderie Council		Jerilderie		2,000	S	TF	N	N	L		20	100	30	75					10	100						4	
Junee Council		Junee	1992	7,000	AS	IEA, TF	N	N	R																		
		Kempsey West	1991	12,000	T	TF	Y	Y	R		15	96	20	73	15	73	5	100	10	100	1	100	600	100		26	
		South West Rocks		6,000	S	IEA	Y	N	L		20	100	30	100					10	100						12	
		Kempsey South		5,400	T	TF, IEA	Y	Y	R		20	100	30	100					10	100						26	
		Hat Head	2003	2,500	T	IEA	Y	Y	L		10	100	15	100	10	100	2	100	2	100	1	100	200	86		7	1
		Crescent Head	1991	2,000	T	IEA	Y	Y			15	100	20	96	15	100	5	96	10	100	1	100	200	100		26	
		Smithtown\Gladstone		2,000	AS	IEA	Y	N	R		20	100	30	100					10	100						12	
		Frederickton		1,000	AS	IEA	Y	N	R		20	100	30	83					10	100						12	
Kempsey Council		**Total/Weighted Average**[1,6]		**30,900**						**2,104**	**20**	**99**	**30**	**92**	**15**	**94**	**5**	**99**	**10**	**100**	**1**	**100**	**600**	**99**		**121**	**1**
		Kyogle	1988	2,500	AS	TF	N	Y	R		20	100	30	91					10	100						12	
		Bonalbo	2002	500	AS	IEA	Y	N	L		20	91	30	83					10	100						12	1
		Woodenbong	2001	500	AS	IEA	Y	N	L		20	100	30	33					10	100						12	
Kyogle Council		**Total/Weighted Average**[1,6]		**3,500**						**390**	**20**	**97**	**30**	**69**		**100**		**100**	**10**	**100**		**100**		**100**		**36**	**1**
		Condobolin	1982	4,000	AS	IEA, TF	N	N	L																		
		Tottenham	1979	1,000	AS	IEA	N	N	L																		
		Lake Cargelligo	1981	2,000	AS	IEA	N	N	L																		
Lachlan Council		**Total/Weighted Average**[1,6]		**7,000**							**20**		**30**														
		Leeton	1987	27,000	AS	TF,IEA	N	N	L		70	100	70	100												7	
		Yanco	1980	1,000	AS	IEA	N	N	R		30	100	40	100					15	100						14	
		Whitton	2000	500	S	A	N	N	L		NL		NL														
Leeton Council		**Total/Weighted Average**[1,6]		**28,500**						**1,345**	**70**	**100**	**70**	**100**		**100**		**100**	**15**	**100**		**100**		**100**		**21**	
		Lismore East	1993	30,500	AT	IEA, BNR	Y	Y	R		15	100	20	100	15	100	5	100	10	100	1	96	200	98		52	
		Lismore South	1978	22,500	S	TF	Y	Y	R		15	100	20	100	15	100	5	100	10	100	1	100				52	
		Nimbin	1993	600	AS	IEA	Y	Y	R		20	100	30	82	15	100	5	100	10	100	3	100				15	
Lismore City Council		**Total/Weighted Average**[1,6]		**53,600**						**3,825**	**20**	**100**	**30**	**98**	**15**	**100**	**5**	**100**	**10**	**100**	**3**	**98**	**200**	**99**		**119**	
		Lithgow	1987	23,000	T	TF	N	N	R		15	91	25	83	15	91			10	100			200	91		12	
		Portland	1990	2,500	T	TF	N	N	R		15	83	30	83	15	na			10	83			200	100		12	
		Wallerawang	1990	2,500	T	TF	N	N	R		15	91	30	83	15	na			10	91			200	83		12	
City of Lithgow		**Total/Weighted Average**[1,6]		**28,000**						**2,305**	**15**	**88**	**30**	**83**	**15**	**30**		**100**	**10**	**91**		**100**	**200**	**91**		**36**	
		Quirindi	1984	7,000	AS	TF, IEA	N	N	R																		
		Werris Creek	1969	3,200	S	A, BNR	N	N	L R																		
Liverpool Plains Council		**Total/Weighted Average**[1,6]		**10,200**							**20**		**30**														

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4. For **"Type of Treatment Works"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

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 per 1,000 properties[6]	Sampling Days	Major Malfunction of Treatment
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms				
		Name		EP			Yes/No	Yes/No		ML	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	cfu /100mL	%		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
		Lockhart	1967	3,000	T	TF	N	Y	R		20	100	30	100					10	100						4	
		The Rock	1979	2,000	AS	IEA	Y	Y	R		20	100	30	100					10	100							
		Yerong Creek		250	S	A	N	N			NL		NL													4	
Lockhart Council		**Total/Weighted Average** [1,6]		**5,250**						**151**	**20**		**30**						**10**								
		Forster	1995	32,000	AT	IEA	Y	Y	O		30	100	30	100					10	100						26	
		Dawson River	1999	30,000	AS	CEA	Y	N	R		30	100	30	100			5	90								51	
		Tea Gardens	1996	14,000	AT	IEA	Y	Y	L		10	100	15	100	10	77	2	77	5	96	1	12				26	2
		Tuncurry	1970	10,000	S	TF	N	N	L		25	85	25	85	30	92	20	100	12	100	8	100				13	1
		Harrington	1994	8,000	AS	CEA	Y	N	L		20	100	30	100												13	
		Wingham	1992	7,100	AS	TF, IEA	Y	N	R		30	100	30	100			10	100								26	
		Old Bar	2004	7,000	AS	CEA	Y	Y	L		20	85	30	100					10	100						13	5
		Hallidays Point	2006	5,000	AS	CEA	Y	Y	L		30	100	20	79					10	100						14	
		Bulahdelah	1995	3,000	AT	IEA	Y	Y	R		10	100	15	89			1	73	10	100	1	100				26	
		Stroud	2002	1,000	AS	IEA	Y	N	L R		15	100	30	100	15	100			10	93						14	
		Manning Point	2003	600	AS	IEA	Y	Y	L		NL		NL													13	1
		Lansdowne	2002	600	AS	IEA	Y	N	L		NL		NL													13	
		Coopernook	2002	600	AS	IEA	Y	N	L		NL		NL													14	
MidCoast County Council		**Total/Weighted Average** [1,6]		**118,900**						**6,808**	**30**	**83**	**30**	**82**	**30**	**97**	**20**	**93**	**12**	**99**	**8**	**91**		**100**		**262**	**9**
		Mudgee	1931	10,000	T	TF, A	Y	N	R		20	92	28	67	20	92			10	100	1	na				12	
		Gulgong	1997	3,000	AS	IEA	Y	N	L		20	100	20	100	20	100			10	100	10	92				12	
		Kandos	1972	2,500	T	TF	N	N	R		20	100	30	58	15	33			10	100	6	17				12	
		Rylstone	1972	1,250	T	TF	N	N	R		20	92	30	83	15	67			10	100	6	50				12	
Mid-Western Regional Council		**Total/Weighted Average** [1,6]		**16,750**						**1,218**	**20**	**96**	**30**	**77**	**20**	**73**		**100**	**10**	**100**	**10**	**40**		**100**		**48**	
		Moree	1986	11,000	S	TF					13		57														
		Mungindi	1998	1,000	AS	IEA					NL		NL														
Moree Plains Council		**Total/Weighted Average** [1,6]		**12,000**							**13**		**57**														
	No licence limits	Moama	1997	10,000	S	A	N	N	L		NL	100	NL	70		100				100		90				13	
	No licence limits	Mathoura	1997	1,600	S	A	N	N	L		NL		NL														
Murray Council		**Total/Weighted Average** [1,6]		**11,600**						**540**	**NL**		**NL**													**13**	
		Darlington Point		1,000	AS	IEA	N	N	R		10	na	15	na	10	na					10	na	1000	na		7	
		Coleambally		600	S	A	N	N	L		NL		NL														
Murrumbidgee Council		**Total/Weighted Average** [1,6]		**1,600**						**160**	**10**		**15**		**10**						**10**		**1000**			**7**	
		Muswellbrook	1986	20,000	S	TF	N	N	R		20		30														
		Denman		2,000	AS	IEA	N	N	R		20		30														
Muswellbrook Council		**Total/Weighted Average** [1,6]		**22,000**							20		30														
		Nambucca Heads	1986	10,000	AS	TF, IEA	Y	Y	R		20	100	30	100					10	100						26	
		Macksville	1998	5,500	AS	IEA	Y	Y	R		15	100	20	100	15	100	5	100	10	100	1	100	200	97		26	
		Scotts Head	1985	2,000	AS	IEA	Y	N	R		20	100	30	97					10	100						12	
		Bowraville	1985	1,200	S	TF	N	N	L		20	81	30	95					10	100						12	
Nambucca Council		**Total/Weighted Average** [1,6]		**18,700**						1,568	**20**	**97**	**30**	**99**	**15**	**100**	**5**	**100**	**10**	**100**	**1**	**100**	**200**	**99**		**76**	
		Narrabri	1996	8,300	T	TF	N	N	L		20	100	45	100		100		100	10	100		100		100		12	
		Wee Waa	1972	1,600	S	TF	N	N	L		NL		NL														
		Boggabri	1956	1,000	S	TF	N	N	L		NL		NL														
Narrabri Council		**Total/Weighted Average** [1,6]		**10,900**						**962**	**20**	**100**	**45**	**100**		**100**		**100**	**10**	**100**		**100**		**100**		**12**	
Narrandera Council		Narrandera	1977	6,000	AS	IEA	N	Y	L		15	100	20	33									600	83		14	
		Narromine	2005	5,000	S	A	N	N	L		NL		NL													6	
		Trangie	1979	1,000	AS	IEA	N	N	L		NL		NL														
Narromine Council		**Total/Weighted Average** [1,6]		**6,000**						**570**	**NL**		**NL**			**100**		**100**		**100**		**100**		**100**		**6**	
Oberon Council		Oberon	1989		S	TF	N	Y	R		20	92	25	50	15	58			10	100	1	25	600	83		16	
		Orange	1988	60,000	AS	TF, CEA	Y	Y	R		20	100	25	100	15	100			10	100	1	94	400	100		18	
		Spring Hill	1990	1,000	AS	CEA, A	Y	N	L		20	100	50	100												16	
Orange City Council		**Total/Weighted Average** [1,6]		**61,000**						**4,235**	**20**	**100**	**50**	**100**	**15**	**100**		**100**	**10**	**100**	**1**	**97**	**400**	**100**		**34**	
		Braidwood		300	S	TF	N	N	R		20	95	30	83					10	100						13	
		Bungendore		2,000	AS	IEA	Y	N	R		10	100	15	92					10	100		100				4	
		Captains Flat		500	AS	IEA	Y	N	R		20	92	30	83					10	100						4	
Palerang Council		**Total/Weighted Average** [1,6]		**2,800**						**276**	**20**	**95**	**30**	**85**		**100**		**100**	**10**	**100**		**100**		**100**		**21**	
		Parkes	1994	14,500	AS	TF	N	Y	R		20	100	25	66	15	100			10	100	1	na				12	
		Peak Hill	1983	2,000	AS	TF	N	N	L		NL		NL														
Parkes Council		**Total/Weighted Average** [1,6]		**16,500**						**870**	**20**	**100**	**25**	**66**	**15**	**100**		**100**	**10**	**100**	**1**			**100**		**12**	

Appendix D2 - 2005/06 Sewage Treatment Data

Notes: 1. Where a water utility has more than one treatment work, 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 utility. Totals are shown for capacity (10), sewage volume treated (15), and sampling days (63). The days of major malfunction of treatment processes (67) shown are the weighted average based on treatment works capacity.

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"**; 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"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

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 per 1,000 properties[6]	Sampling Days	Major Malfunction of Treatment
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms				
		Name		EP			Yes/No	Yes/No		ML	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	cfu /100mL	%		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
		Port Macquarie	1993	52,000	AT	IEA, BNR	Y	Y	R		10	100	15	92	20	100	5	100	10	100	1	20	200	100		20	
		Camden Haven (Dunbogan)	1991	9,000	S	TF	N	N	O		20	38	30	93					10	100						58	
		Wauchope	1991	8,000	AS	IEA	Y	N	R		30	100	30	100					10	100						52	
		Lake Cathie\Bonny Hills	1989	6,000	AS	IEA	Y	N	L		20	100	30	100					10	100						16	
		Kew/Kendall	2001	2,200	T	IEA	Y	N	L		30		20										500				
Port Macquarie-Hastings Council		**Total/Weighted Average [1,6]**		**77,200**						**6,733**	**30**	**62**	**30**	**84**		**86**		**86**	**10**	**86**		**86**	**500**	**86**		**146**	
Queanbeyan City Council		Queanbeyan	1986	34,500	AS	TF, CEA	Y	Y	R	**3,886**	10	100	20	100	35	100		100			0	100	1000	100		365	
		Casino	1986	13,300	AS	TF, IEA	Y	N	R		20	100	30	100					10	100						26	
		Evans Head	2004	3,700	T	TF	N	N	R		35	100	35	100					10	100						26	
		Coraki	1968	1,200	AS	TF	N	Y	R		20	100	30	68					10	100						25	
		Rileys Hill	1996	200	T	CEA	Y	Y	R		15	100	20	100	15	100	5	100	10	100	1	69	200	100		13	
Richmond Valley Council		**Total/Weighted Average [1,6]**		**18,400**						**2,106**	**35**	**100**	**35**	**91**	**15**	**100**	**5**	**100**	**10**	**100**	**1**	**96**	**200**	**100**		**90**	
		Nowra	1989	21,000	AS	TF, CEA	Y	N	R		40	83	40	75					10	100							
		St Georges Basin	1992	16,000	AS	IEA	Y	Y	O		10	83	15	92	15	100	5	100	2	100			200	83		12	
		Huskisson	2002	14,000	T	IEA	Y	Y	O		10	83	15	100	15	100	5	100	2	100			200	100		12	
		Bomaderry	1990	12,500	AS	TF, IEA	Y	N	R		20	100	40	58					10	100						12	
		Milton Ulladulla	2006	31,500	T	IEA	Y	N	O		15	100	20	100					2	100			200	100		12	
		Culburra	2002	10,500	T	IEA	Y	Y	O		10	100	15	100	15	100	5	100	2	100			200	100		12	
		Sussex Inlet	1990	8,000	T	IEA	Y	Y	O		20	100	30	100					10	100						14	
		Callala	2000	6,000	T	IEA	Y	Y	O		10	100	15	100	15	100	5	100	2	100			200	100		12	
		Shoalhaven Heads	1983	4,000	AS	IEA	Y	N	R		30	100	30	100					10	100						12	
		Berry	2006	3,000	T	IEA	Y	Y	R		30	100	30	93					10	100						12	
Shoalhaven City Council		**Total/Weighted Average [1,6]**		**126,500**						**6,569**	**40**	**96**	**40**	**94**	**15**	**100**	**5**	**100**	**10**	**100**		**100**	**200**	**98**		**110**	
Singleton Council		Singleton	1988	20,000	AS	IEA	Y	N	R		30	100	30	100	15	100			10	100	10	83				12	
		Jindabyne		2,900	AT	IEA	Y	Y	R		10	100	15	100	10	100	2	100	2	100		100	200	80		20	
		Berridale		750	AS	IEA	N	N	R		20	65	30	80			2	na	10	100						15	
		Adaminaby		750	S	TF	Y	Y	R		20	85	30	100					10	100							
		Interlaken									NL		NL														
Snowy River Council		**Total/Weighted Average [1,6]**		**4,400**						**474**	**20**	**85**	**30**	**91**	**10**	**100**	**2**	**57**	**10**	**100**		**100**	**200**	**89**		**35**	
Sydney Water	*Metropolitan utility*																										
		Tamworth (Westdale)	1983	33,000	AS	TF, IEA	Y	Y	R		30	100	25	94												54	
		Tamworth (Swan St)	1968	15,000	S	TF	N	Y	L		NL		NL													54	
		Manilla	1955	2,850	S	TF	N	N	L		20	100	30	50												6	
		Kootingal	1992	2,000	S	A	N	N	L		NL		NL													12	
		Barraba	1956	1,500	S	TF	N	N	L		20	100	30	100												14	
Tamworth Regional Council		**Total/Weighted Average [1,6]**		**54,350**						**4,774**	**30**	**53**	**30**	**48**		**100**		**100**		**100**		**100**		**100**		**140**	
Temora Council		Temora	2005	4,300	S	TF	N	N	L																		
		Tenterfield	1983	1,900	T	TF	N	N	L R		40	75	45	25												15	
		Urbenville	1988	500	T	IEA	N	N	L R		20	100	30	75					10	100						15	
Tenterfield Council		**Total/Weighted Average [1,6]**		**2,400**						**323**	**40**	**88**	**45**	**50**		**100**		**100**	**10**	**100**		**100**		**100**		**30**	
		Khancoban	1998	5,000	S	TF	N	N	L		NL		NL													4	
		Tumbarumba		3,500	T	TF	N	N	R		NL		NL														
Tumbarumba Council		**Total/Weighted Average [1,6]**		**8,500**						**278**	**NL**		**NL**			**100**		**100**		**100**		**100**		**100**		**4**	
		Tumut	1994	7,500	S	TF, A	N	Y	R		40	100	45	100					10	100	2	100				11	
		Batlow	1968	1,400	S	TF, A	N	N	R		40	100	45	100					10	100						11	
		Talbingo	1995	1,100	AT	EA, BNR	Y	Y	R		25	100	35	100	25	100	10	100	10	100	2	100				4	
		Adelong	1967	1,000	AS	IEA	Y	Y	R		20	100	40	91	30	100	10	100	10	100	2	100				11	
Tumut Council		**Total/Weighted Average [1,6]**		**11,000**						**962**	**40**	**100**	**45**	**97**	**30**	**100**	**10**	**100**	**10**	**100**	**2**	**100**		**100**		**37**	
		Banora Point	1995	62,500	AT	CEA , BNR	Y	Y	R		15	100	20	100					10	100			10000	100		56	
		Murwillumbah	2000	16,000	T	IEA	Y	Y	R		10	97	15	97	10	88	2	88	2	81	1	76	200	91		33	
		Kingscliff	1994	14,000	T	IEA	Y	Y	R		25	100	25	100					10	100						30	
		Tweed Heads	1988	12,000	TF	TF	Y	N	R		25	86	25	83					10	97						29	
		Hastings Point	1985	16,000	T	IEA	Y	Y	L		25	100	25	100					10	100						30	
		Tumbulgum	1996	700	T	IEA	Y	Y	R		15	100	20	100	15	83	5	83			1	90	200	90		30	
		Tyalgum	1988	500	AS	IEA	Y	Y	L		25	100	50	100					10	100						29	
		Uki	2004	600	T	CEA	Y	N	L		15	60	20	77	15	100	5	95	10	98	1	11	600	89		57	
Tweed Council		**Total/Weighted Average [1,6]**		**122,300**						**8,779**	**25**	**91**	**50**	**94**	**15**	**97**	**5**	**96**	**10**	**97**	**1**	**79**	**10000**	**96**		**294**	
		Scone	1988	7,000	AS	TF, IEA	N	N	R		20	100	30	100					10	100						12	
		Aberdeen	1983	4,000	AS	IEA	N	N	L		20	100	30	75					10	92						12	
		Merriwa	1970	1,600	S	TF	N	Y	R		20	100	30	100					10	100						6	
		Murrurundi	1979	1,000	AS	IEA	N	N	R																		
Upper Hunter Council		**Total/Weighted Average [1,6]**		**13,600**						**868**	**20**	**100**	**30**	**90**		**100**		**100**	**10**	**97**		**100**		**100**		**30**	

Appendix D2 - 2005/06 Sewage Treatment Data

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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"**; 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"**; 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 for questions 50, 52, 54, 56, 58, 60 and 62.

6. For odour complaints, the weighted average values shown are on the basis of the total odour complaints divided by the number of connected properties.

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 per 1,000 properties[6]	Sampling Days	Major Malfunction of Treatment
											BOD		SS		Total N		NH_3N		Oil & Grease		Total P		Faecal Coliforms			
		Name		EP			Yes/No	Yes/No		ML	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	mg/L	%	cfu /100mL	%		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
		Crookwell	1996	5,000	AS	TF, IEA	Y	Y	R		100	30	100	15	15	92	5	92	10	100	1	85				14	
		Gunning		1,000	AS	IEA	N	Y	R		20	100	30	100												14	
Upper Lachlan Council		**Total/Weighted Average**[1,6]		**6,000**						300	100	65	100	58	15	96	5	96	10	100	1	93		100		28	
Uralla Council		Uralla	1995	3,960	AS	IEA	Y	Y	R																		
		Urana		754	S	A			L		NL		NL													51	
		Oaklands		520	S	A			L		NL		NL													51	
Urana Council		**Total/Weighted Average**[1,6]		**1,274**						89	**NL**		**NL**			**100**		**100**		**100**		**100**		**100**		**102**	
		Wagga (Narrung St)	1992	67,200	AS	TF, CEA	Y	Y	L R		10	83	15	50	10	8			2	100	0	25				13	
		Wagga (Kooringal)	1992	20,000	AS	TF, CEA	N	Y	L R		15	100	20	92	15	75	5	100	10	100	1	100				12	
		Forest Hill	1974	3,500	AS	AL, IEA	N	N	L		20	100	30	75					10	100						4	
		Uranquinty	1984	1,000	S	A	N	N	L		NL		NL														
		Tarcutta	1988	500	S	A	N	N	L		NL		NL														
Wagga Wagga City Council		**Total/Weighted Average**[1,6]		**92,200**						5,061	**20**	**92**	**30**	**71**	**15**	**49**	**5**	**100**	**10**	**100**	**1**	**66**		**100**		**29**	
		Barham		1,600	S	TF, A	N	N	L		NL		NL														
		Moulamein	1967	700	AS	IEA	N	N	L		NL		NL														
		Murray Downs	1979	260	S	A	N	N	L		NL		NL														
		Tooleybuc									NL		NL														
Wakool Council		**Total/Weighted Average**[1,6]		**2,560**						147	**NL**		**NL**														
Walcha Council		Walcha	1971	2,400	S	TF	N	N	R		20	92	30	75					10	100					1.3	12	
Walgett Council		Walgett	1958	3,200	S	TF	N	N	L		NL		NL														
		Warren	1958	2,180	S	TF	N	N	L		55	100	65	100	40	100			10	100	10	100				4	
		Nevertire	1983	200	S	A	N	N	L																		
Warren Council		**Total/Weighted Average**[1,6]		**2,380**						173	**55**	**100**	**65**	**100**	**40**	**100**		**100**	**10**	**100**	**10**	**100**		**100**		**4**	
		Coonabarabran	1964	3,200	S	TF, A	Y	Y	L R		20	92	25	66	20	92			10	na	10	100				12	
		Coolah	1970	1,000	S	A	Y	Y	L R																		
		Baradine	1997	1,000	P	A	N	N	L																		
		Dunedoo	1970	800	S	IEA	N	N	R		NL		NL														
Warrumbungle Shire Council		**Total/Weighted Average**[1,6]		**6,000**						430	**20**	**92**	**25**	**66**	**20**	**92**		**100**	**10**		**10**	**100**		**100**		**12**	
Weddin Council		Grenfell	1943	2,500	S	TF	N	N	R		NL		NL														
		Wellington	2006	8,000	T	IEA	Y	Y	R		15	100	30	100	20	100	2	90	10	100	1	90	600	100		12	
		Nanima									NL		NL														
Wellington Council		**Total/Weighted Average**[1,6]		**8,000**						411	**15**	**100**	**30**	**100**	**20**	**100**	**2**	**90**	**10**	**100**	**1**	**90**	**600**	**100**		**12**	
		Buronga Gol Gol	1994	5,000	S	A	N	N	L		50	100	50	100												6	
		Wentworth	1964	3,500	S	TF	N	N	L		30	100	45	100												6	
		Dareton	1964	2,000	S	TF	N	N	L		30	100	45	100												6	
		Namatjira	1988	1,200	S	A	N	N	L		NL		NL														
		Wentworth (East)	1991	600	S	A	N	N	L		40	100	40	100									200	100		6	
Wentworth Council		**Total/Weighted Average**[1,6]		**12,300**						587	**50**	**100**	**50**	**100**		**100**		**100**		**100**		**100**	**200**	**100**		**24**	
		Mittagong	2002	14,000	AT	IEA	Y	Y	R		10	100	15	100	10	100	2	100	10	100	0	100	200	100		26	
		Bowral	1994	10,500	T	TF, IEA	Y	Y	R		20	100	30	96	45	100					2	100				26	
		Moss Vale	1995	9,000	AT	IEA	Y	Y	R		20	100	30	100	15	100	2	100			1	100	200	100		26	
		Bundanoon	1990	2,000	T	IEA	Y	Y	R		20	100	30	100	15	100	2	100			2	100				13	
		Berrima	1990	2,000	T	IEA	Y	Y	R		20	100	30	100	15	100	2	100			1	100				13	
Wingecarribee Council		**Total/Weighted Average**[1,6]		**37,500**						3,220	**20**	**100**	**30**	**99**	**45**	**100**	**2**	**100**	**10**	**100**	**2**	**100**	**200**	**100**		**104**	
		Bateau Bay		58,000	T	TF, IEA	N	N	L O		NL	100	50	100					10	100						31	
		Wyong South		48,000	S	IEA	N	N	L O		NL	100	NL														
		Charmhaven		40,000	S	IEA	N	N	L O		NL	100	NL														
		Toukley		40,000	S	TF	N	N	L O		NL	100	50	100					10	100						31	
		Gwandalan		12,000	AS	IEA	N	N	L O		NL	100	NL														
		Mannering Park		12,000	T	IEA	N	N	L O		NL	100	NL														
Wyong Council		**Total/Weighted Average**[1,6]		**210,000**						11,822	**NL**	**100**	**50**	**100**		**100**		**100**	**10**	**100**		**100**		**100**		**62**	
		Yass No 2	1974	4,000	AS	IEA	N	N	L R		30	100	30	100												8	
		Yass	1935	3,500	AS	TF	N	N	L R		30	100	30	100												8	
Yass Valley Council		**Total/Weighted Average**[1,6]		**7,500**						415	**30**		**30**														
Young Council		Young	1970	7,000	S	TF	N	N	L R		30	100	25	92					10	100					1.1	12