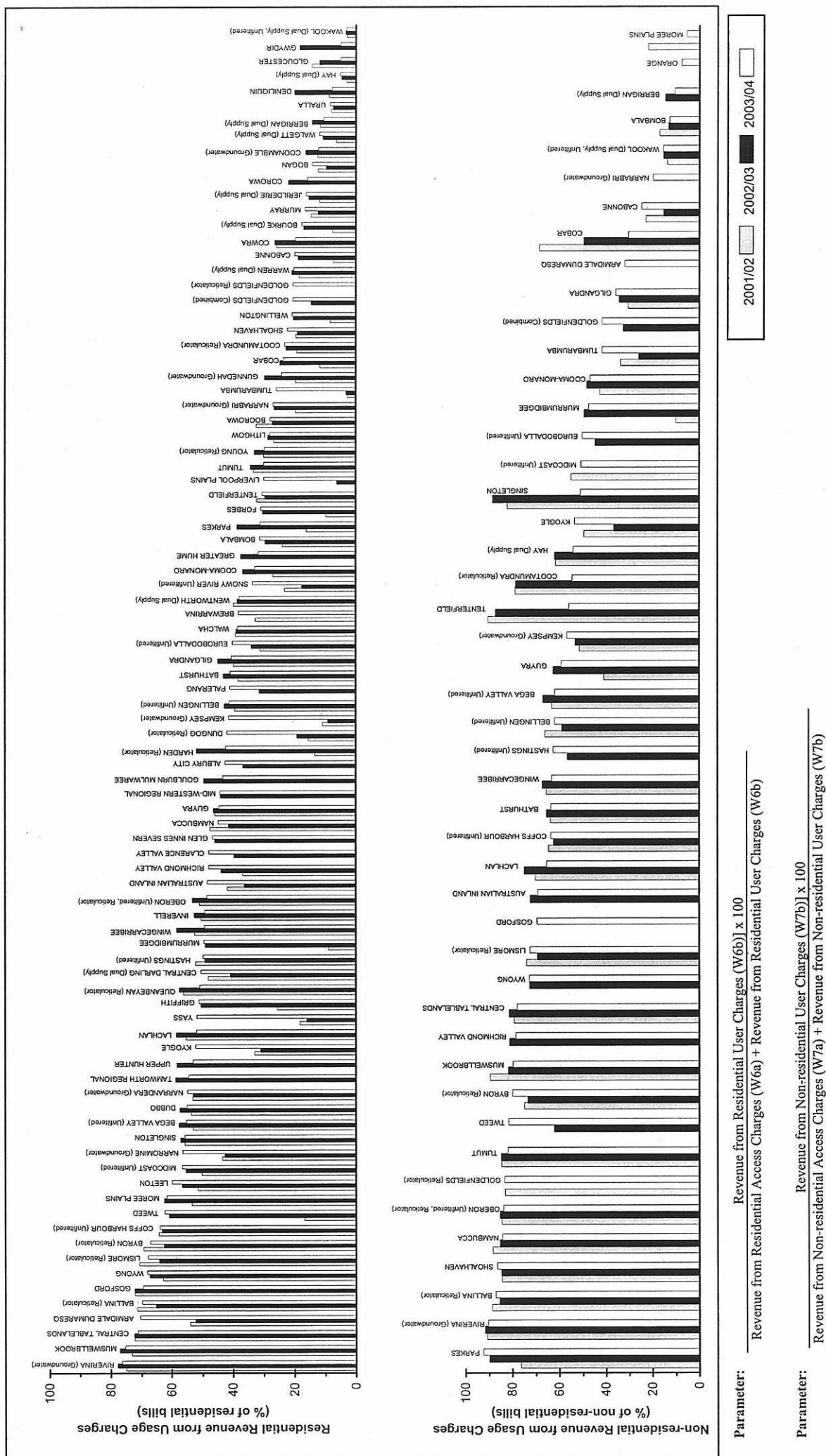


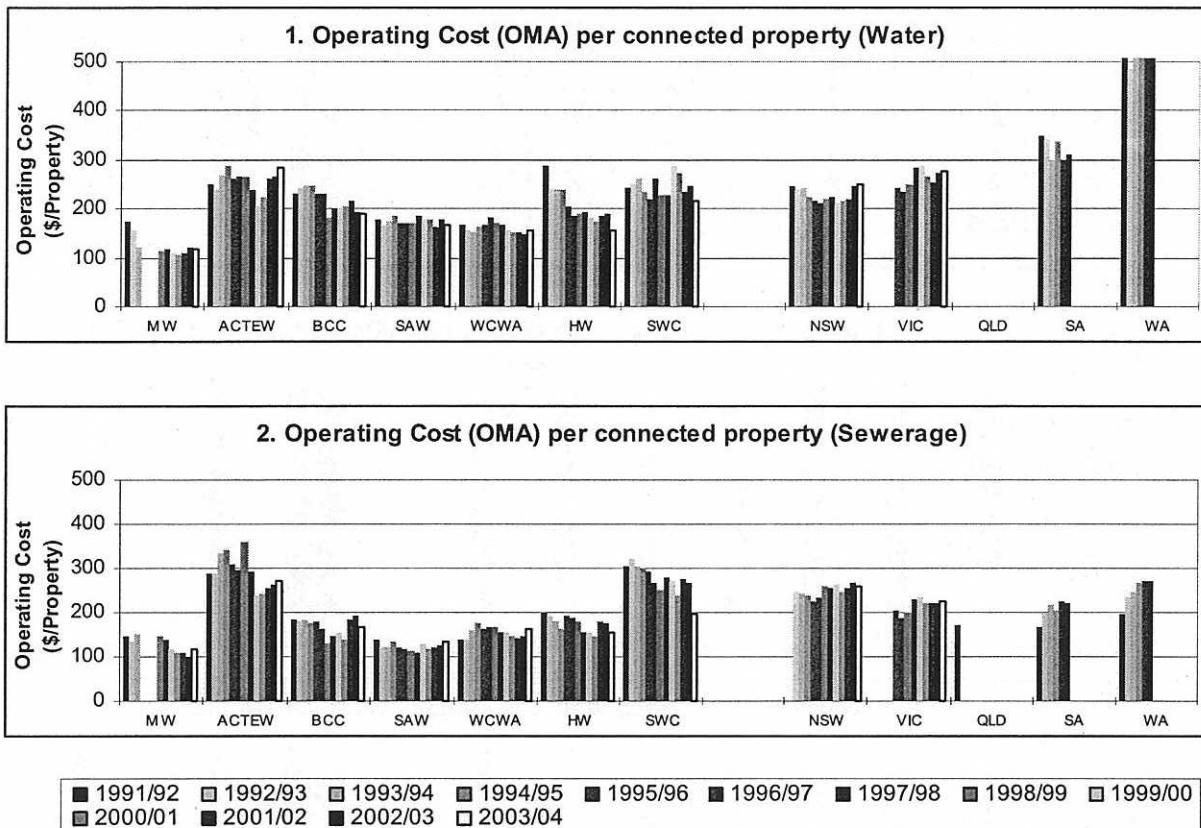
# Figure 1 Water Revenue from Usage Charges



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## APPENDIX A – ARMCANZ Performance Comparisons 1991/92 to 2003/04

### Water Supply and Sewerage Services



#### Metropolitan Water Utilities

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

#### Country Water Utilities

NSW	NSW Country
VIC	VIC Country
QLD	QLD Country
SA	SA Country
WA	WA Country

\* Melbourne Water was disaggregated into 4 constituent utilities in 1994.

Melbourne Water Consolidated results shown for 1994/95 to 2003/04 are either aggregated results of the constituent utilities or consolidated results reported in WSAA Facts (see note 2) or reported in Urban Water Review (see note 3).

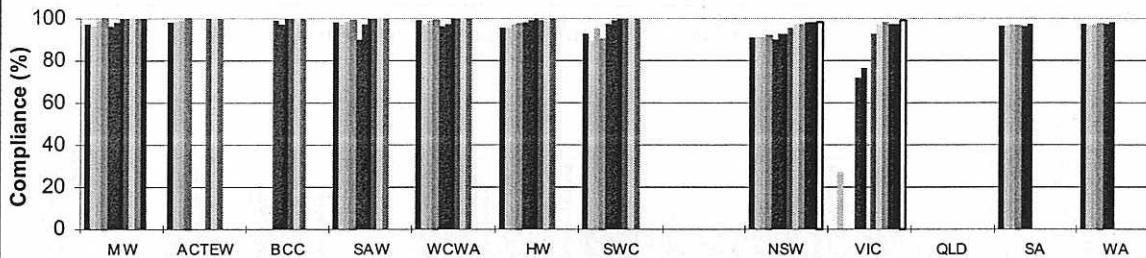
#### NOTES:

1. Operating Cost (OMA) is the Operation, Maintenance and Administration Cost in 2003/04\$.
2. Results for the metropolitan water utilities for 1994/95 to 2003/04 obtained from "The Australian Urban Water Industry - WSAA Facts 2004", and "The Australian Urban Water Industry - WSAA Facts 1999", Water Services Association of Australia.
3. Results for Victoria for 1996/97 to 2003/04 obtained from "Urban Water Review 2003/2004", and "Urban Water Review 1998", Victorian Water Industry Association.
4. 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.

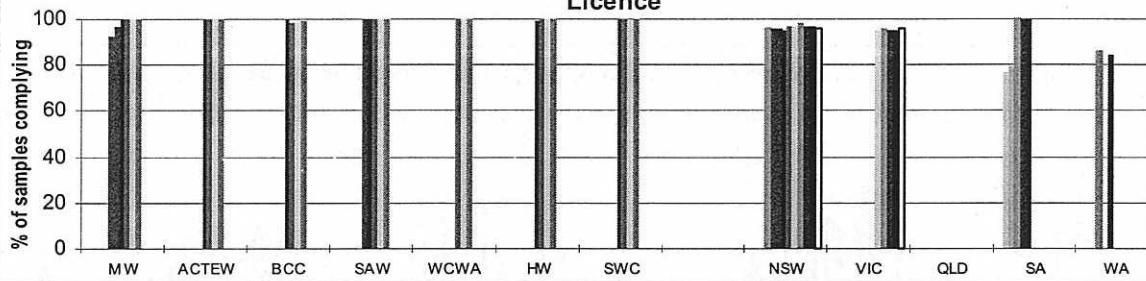
## APPENDIX A – ARMCANZ Performance Comparisons 1991/92 to 2003/04

### Water Supply and Sewerage Services

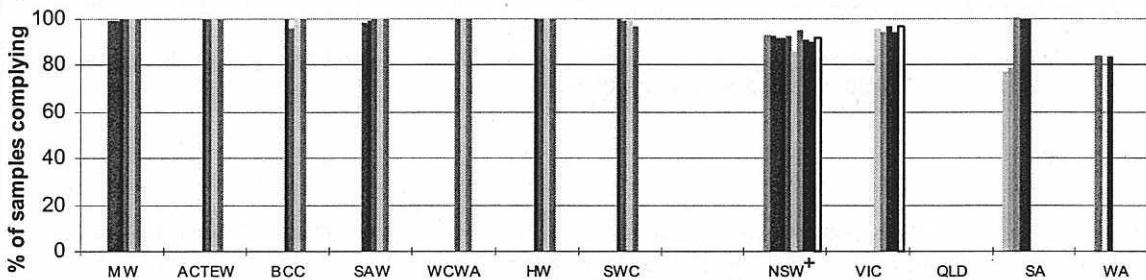
#### 3. Compliance\* with 1996 NHMRC/ARMCANZ Microbiological Australian Drinking Water Guidelines



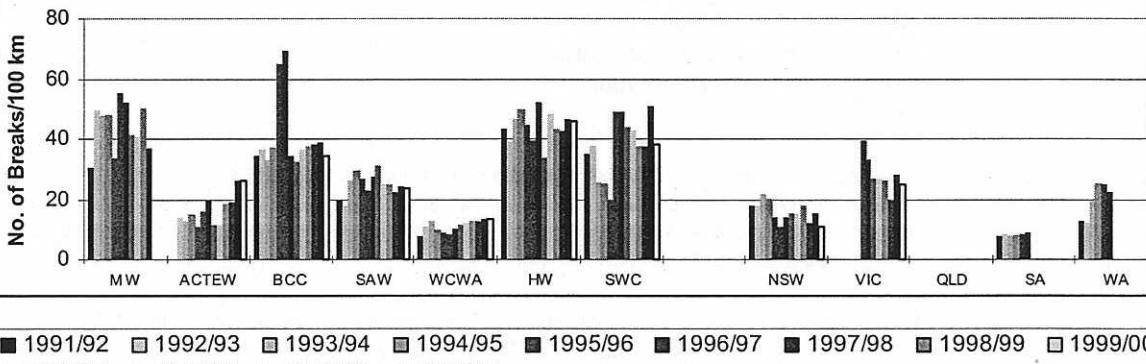
#### 4. Sewerage Compliance with Biochemical Oxygen Demand (BOD) in Licence



#### 5. Sewerage Compliance with Suspended Solids (SS) in Licence



#### 6. Water Main Breaks



\* 1990/91 to 1997/98 results are generally on the basis of the 1987 NHM RC/AWRC Drinking Water Quality Guidelines.

1998/99 and subsequent results are generally on the basis of E. coli in the more stringent 1996 NHM RC/ARMCANZ Australian Drinking Water Guidelines. The exceptions are Victorian country utilities where results are on the basis of the less stringent 1984 World Health Organisation Guidelines and Melbourne Water where the results are on the basis of E. coli in the above 1987 Guidelines.

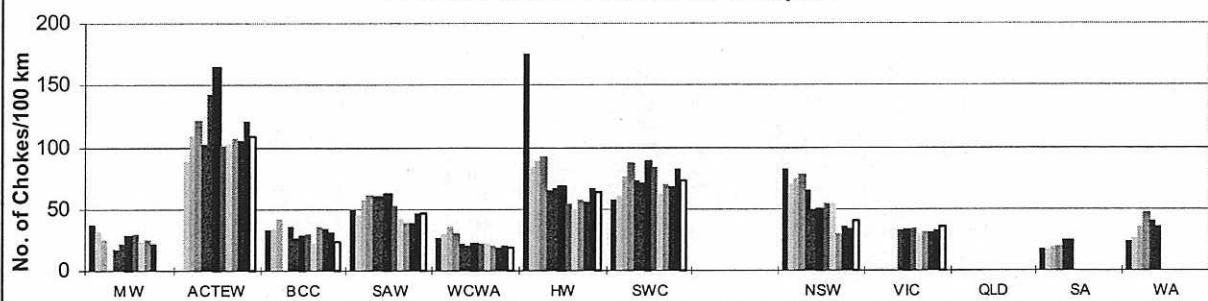
+ The major cause of non-compliance is due to the growth of algae in maturation ponds being measured as suspended solids (SS).

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.

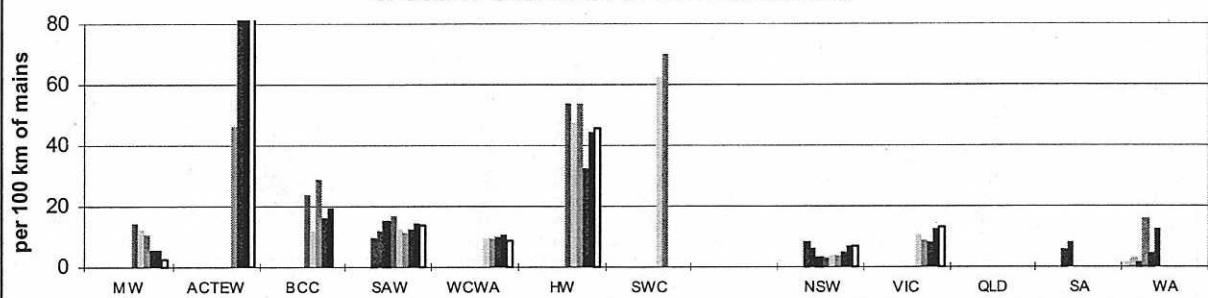
## APPENDIX A – ARMCANZ Performance Comparisons 1991/92 to 2003/04

### Water Supply and Sewerage Services

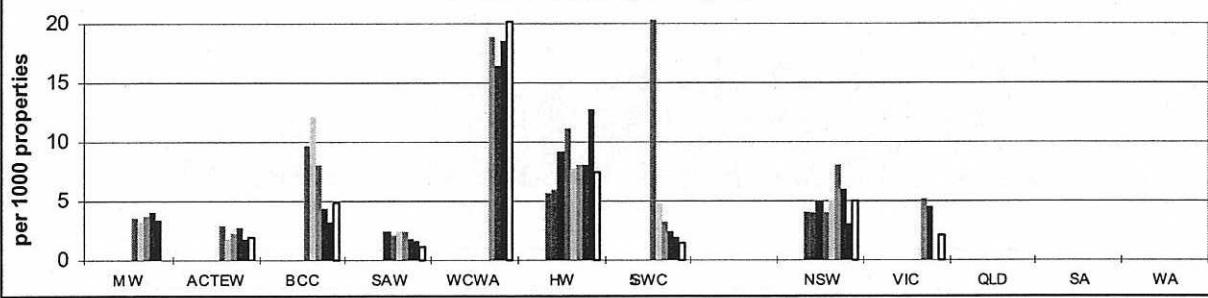
**7. Sewer Main Chokes and Collapses**



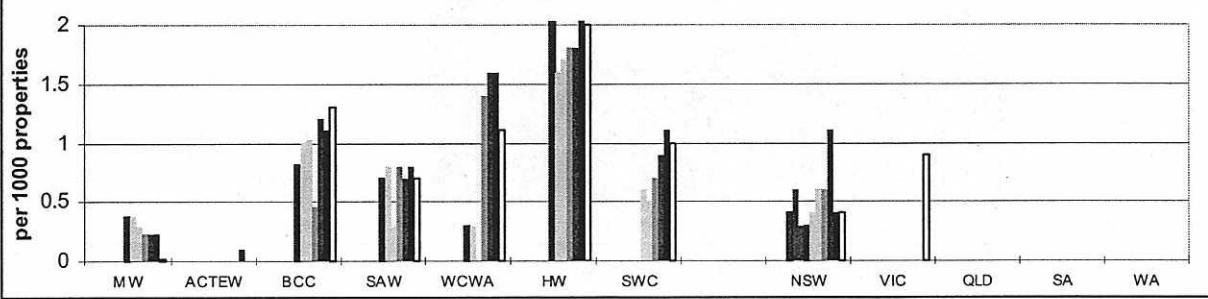
**8. Sewer Overflows to the Environment**



**9. Water Quality Complaints**



**10. Sewage Odour Complaints**

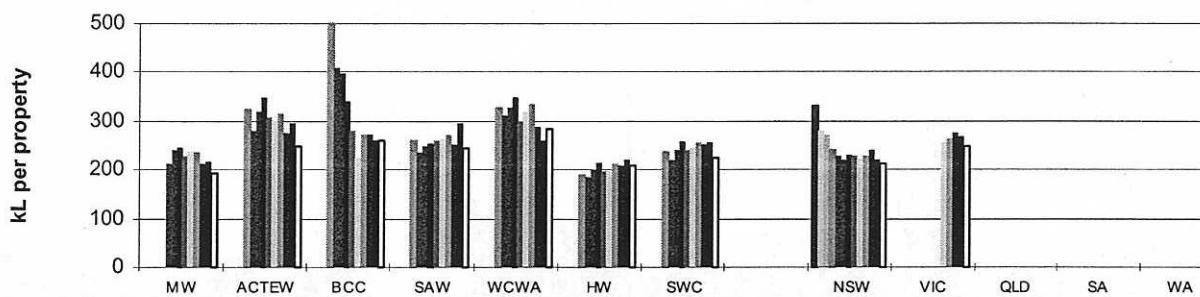


■ 1991/92   ■ 1992/93   ■ 1993/94   ■ 1994/95   ■ 1995/96   ■ 1996/97   ■ 1997/98   ■ 1998/99   ■ 1999/00  
 □ 2000/01   □ 2001/02   □ 2002/03   □ 2003/04

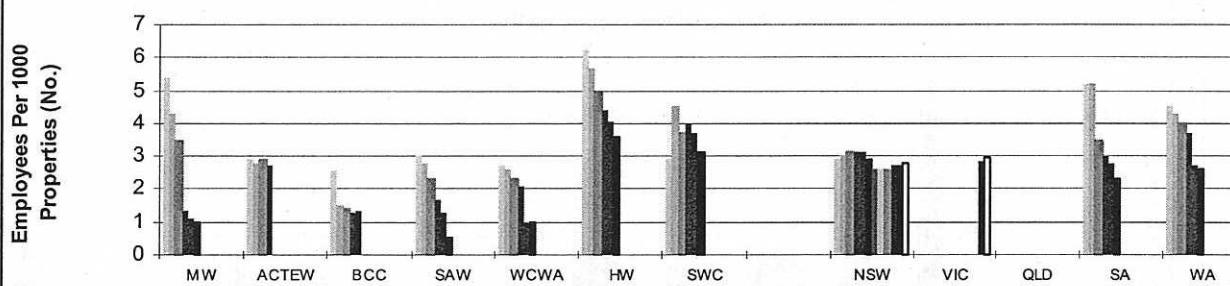
## APPENDIX A – ARMCANZ Performance Comparisons 1991/92 to 2003/04

### Water Supply and Sewerage Services

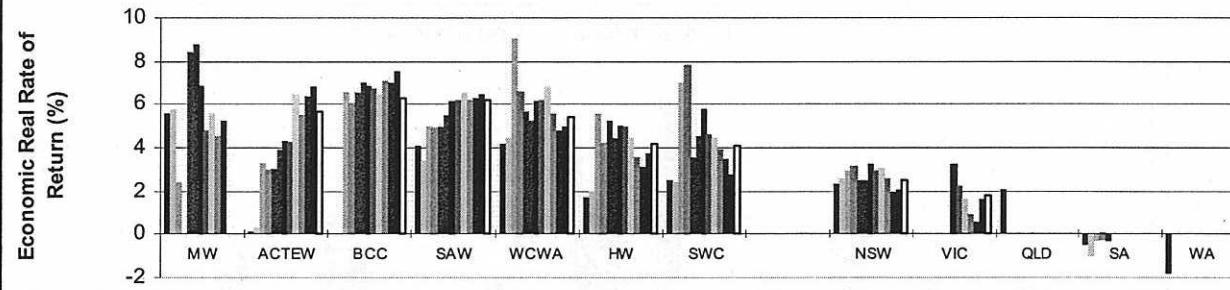
11. Annual Residential Water Consumption



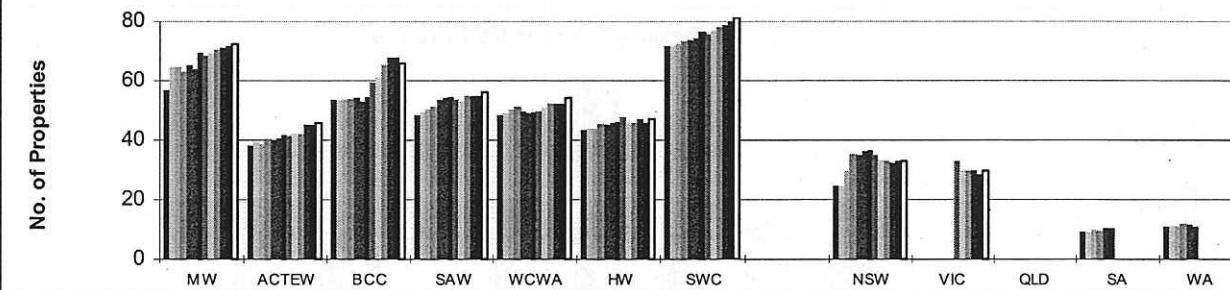
12. Employees (Water & Sewerage)



13. Economic Real Rate of Return\* (Water & Sewerage)



14. Properties Served per km of Main (Water)



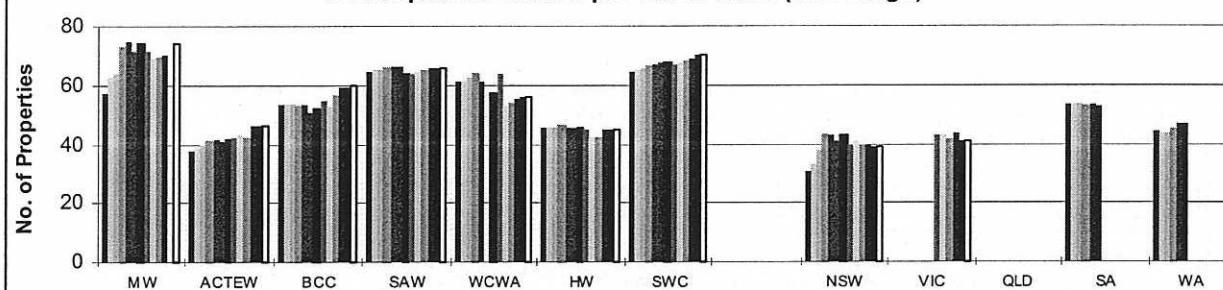
\* As the economic real rate of return (ERRR) was only reported by Country NSW in 2001/02 to 2003/04, the reported values for 'return on assets' have been shown in graph 13 for all the other utilities for these years.

■ 1991/92	□ 1992/93	□ 1993/94	■ 1994/95	■ 1995/96	■ 1996/97	■ 1997/98	■ 1998/99	□ 1999/00
■ 2000/01	■ 2001/02	■ 2002/03	□ 2003/04					

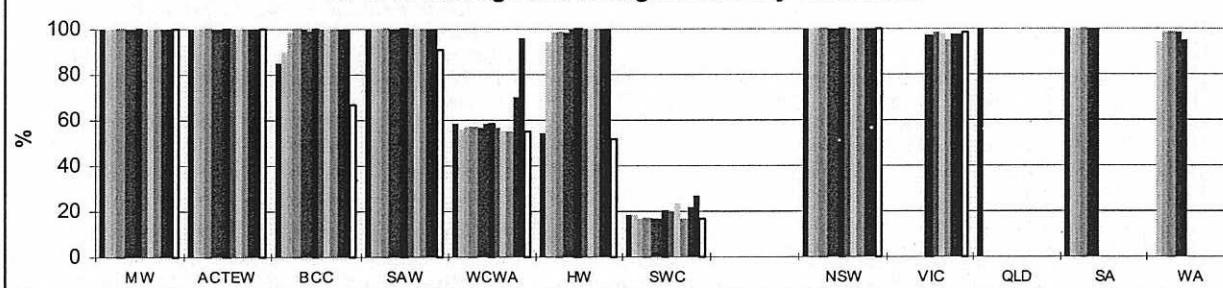
## APPENDIX A – ARMCANZ Performance Comparisons 1991/92 to 2003/04

### Water Supply and Sewerage Services

15. Properties Served per km of Main (Sewerage)



16. % of Sewage Receiving Secondary Treatment



■ 1991/92   ■ 1992/93   ■ 1993/94   ■ 1994/95   ■ 1995/96   ■ 1996/97   ■ 1997/98   ■ 1998/99   ■ 1999/00  
 □ 2000/01   ■ 2001/02   ■ 2002/03   □ 2003/04

## APPENDIX B – Example TBL Water Supply Performance Report

### Riverina Water – Review of Performance

An example Performance Report is shown on pages 29 and 30 for Riverina Water which has 5 water treatment works and 10 aerators/chlorination stations.

#### Summary

The performance of Riverina Water is very good. Riverina Water is commended for achieving 76% of residential revenue from water usage charges. In addition to continuing to monitor and improve its performance, Riverina Water should introduce a step price increase for discretionary water usage by residential customers and best-practice non-residential charging as indicated in the action for indicator 12 below.

INDICATOR	ISSUE	ANALYSIS / ACTION PLAN
<b>Strategic Business Plan</b>		
	Riverina Water has completed a satisfactory strategic business plan and 30-year financial plan	Satisfactory.
<b>Compliance with Best-Practice Pricing and Developer Charges</b>		
12	Two part tariff with an access charge of \$80 for a 20mm connection in Wagga Wagga. The usage charge is 65 c/kL. Riverina Water has a uniform Access Charge of \$120 for non-residential connections in Wagga Wagga.	<p>Residential tariff structure is generally satisfactory. However, Riverina Water should introduce a step price increase (known as "excess water charge") of at least 50% for incremental residential water usage above a specified threshold. This threshold should not exceed 450kL/a per household.</p> <p>Riverina Water should revise its non-residential access and usage charges to comply with the Best-Practice Management Guidelines. This would involve:</p> <ul style="list-style-type: none"> <li>• Basing access charges for larger than 20mm service connections on their capacity requirements</li> <li>• Abolition of the lower usage charge for usage over 36 ML/a.</li> </ul>
15, 18	Typical residential bill (ranking <sup>#</sup> of 2(1)), indicating it is within the top 40% of LWUs with over 10,000 connected properties and within the top 20% for all LWUs. The bill for a residential customer using 250 kL/a is low with a ranking of 1(1)).	Performance is satisfactory and the typical residential bill is lower than the statewide median. Riverina Water's recent movement to commercial developer charges (Indicator 16) may further improve this indicator.
16	Typical Developer charges (ranking of 2(2)).	Satisfactory.
<b>Performance Improvement</b>		
10	Employees. Moderate ranking of 3(3).	Satisfactory.
23	Public health incidents. Ranking of 1.	No incidents reported.
27	Water Quality Complaints. High ranking of 2(2).	Riverina Water is commended for significantly reducing the water quality complaints. There has been a vast improvement in this parameter over the last 3 years.
28	Service complaints. High ranking of 2(2).	Satisfactory performance.
29	Customer Interruption frequency. Low ranking of 5(5).	Analyse options for improvement. This parameter is double the statewide median of 45.
31	Number of Main Breaks was 12 per 100 km of main (ranking of 3(3)).	Satisfactory Performance. Examine options for further improvement.
33	Total Days Lost was high (ranking of 5(5)).	There was a significant improvement in this parameter from 2002/03. However, further improvement should be targeted.
34	Average Annual Residential Consumption at 354 kL/a was significantly higher than the Statewide median (ranking of 5(4)).	Performance is satisfactory in view of Riverina Water's inland location.
35	Water losses relatively high (ranking of 4(4)).	Analyse the components to determine options for improvement.
40, 41, 42, 43	Environmental incidents ranking of 1.	No incidents reported.
44	Residential Revenue from usage charges. High ranking of 1(1).	Excellent performance.
45	Economic Real Rate of Return is 3.9% with ranking of 1(1).	Satisfactory performance.
50, 51, 52	The operating cost (OMA) per property & per 100km of Main and operating (OMA) cost/kL was low (ranking of 1(1), 2(1) & 1(1) respectively).	Performance is satisfactory. A lower than average operating cost should be expected as Riverina Water has access to good quality groundwater and only needs to provide conventional water treatment for 30% of its supply.
55, 57	Pumping cost was high (\$68 per property, ranking of 5(4)). Water main cost was low ((\$22 per property, ranking of 1(1)).	The cost for Indicators 55 is mitigated by the low number of properties per km of main (Indicator 5).

<sup>#</sup> The ranking relative to similar size LWUs is shown first, followed by the ranking relative to all LWUs within brackets)

#### Performance Trends

The graphs on page 2 of Riverina Water's Performance Report (page 30) show trends in performance over the last 9 years. These graphs indicate (Fig 10) a higher number of employees per 1000 properties than the Statewide median – this is not unreasonable in view of Riverina Water's 39 groundwater bores and 26 pumping stations. The typical residential bill is slightly lower than the Statewide median (Fig 15), and typical developer charges are now slightly higher than the Statewide median (Fig 16).

Microbiological compliance (Fig 22) is excellent at 100% and water quality complaints (Fig 27) are significantly lower than the Statewide median. Mainbreaks were slightly higher than the Statewide median in 2003/04 (Fig 31). The operating cost (Fig 51) and management cost (Fig 53) were consistently at about the top 20% level while pumping costs (Fig 55) were consistently much higher than the Statewide median – these pumping costs are considered reasonable in view of Riverina Water's 98 bores and pumping stations.

## APPENDIX B – Example TBL Water Supply Performance Report

### Riverina Water (Page 1)

#### Riverina Water County Council TBL Water Supply Performance 2003/04

Water is drawn from Murrumbidgee River and 28 groundwater bores (103 ML/d) to supply Wagga Wagga, Holbrook, Lockhart and Henty. The system comprises 4 filtration, 7 aeration, and 2 aeration/filtration treatment works (106 ML/d) and 2 chlorination stations, 61 service reservoirs (155 ML), 70 pumping stations, 125 ML/d delivery capacity into the reticulation, 805 km of trunk mains and 568 km of reticulation. The number of microbiological test samples was 624 and the number of physical/chemical samples was 1,570. There was 100% compliance with microbiological (E.coli) water quality, 91% compliance with total coliform quality, 94% compliance with physical quality and 96% compliance with chemical quality. Non-compliance was mostly due to high iron and manganese levels and insufficient chlorine residual. There were no failures of the chlorination system or treatment system. The current replacement cost of system assets was \$172M (\$6,100/assessment), cash and investments were \$15.4M, debt was \$5M and turnover was \$15.6M (excluding capital works grants).

##### Business Planning

Strategic Business Plan (SBP)	Year Prepared	1999/00	Year Updated:	2003/04	Is Further Development Required?	NO
Financial Sustainability of Business	Demonstrated?	YES	Year Updated:	2003/04	Is Further Development Required?	NO

##### Triple Bottom Line (TBL) Performance Indicators

UTILITY CHARACTERISTICS	Triple Bottom Line (TBL) Performance Indicators						
	Charges/Bills	Health	Levels of Service	LWU Result	Ranking <sup>1</sup> (>10,000 Properties)	Ranking <sup>2</sup> (All LWUs)	Statewide Median <sup>3</sup>
1 Population Served:	58,500	(0.96 connected properties per assessment)					
2 Number of Assessments:	28,300	Number of Connected Properties	27,200	92	1	1	93
3 Residential Assessments (% of total)				2.1		1	1.8
4 New Residential Dwellings Connected to Water Supply (%)				20		4	33
5 Properties Served per km (properties/km of main)				77		2	75
6 Rainfall (% of average annual rainfall)				16,100		1	6,500
7 Total Water Supplied (at Master Meters - ML)				188		4	120
8 Peak Week to Average Consumption (%)				0.6		1	0.0
9 Renewals Expenditure (% of current replacement cost of system assets)				1.8		3	1.3
10 Employees (employees/1000 properties)							
12 Description of Residential <sup>5</sup> Tariff Structure 2004/05:	Two Part ; Independent of Land Value						
13 Residential Water Usage Charge 2004/05 <sup>5</sup> (c/kL)		All Usage	65		3		76
14 Residential Access Charge 2004/05 (\$/assessment)			80		1		185
15 Typical Residential Bill 2004/05 (\$/assessment)			310		1		330
16 Typical Developer Charge 2004/05 (\$/equivalent tenement)			2,700		3		2,500
17 Average Residential Bill 2003/04 (\$/connected property)			349		2		325
18 Bill for Residential Customer using 250kL/a (2003/04) (\$/assessment)			243		1		315
20 Urban Population without Reticulated Water Supply (%)			0.0		1		0.5
21 Physical and Chemical Water Quality Compliance (%)		Water Quality Compliance on basis of	94		5		100
22 Microbiological (E. coli) Water Quality Compliance (%)		1996 NHMRC/ARMCANZ Guidelines	100		1		100
23 Category 1 Public Health Incidents - Minor (per 1000 properties)			0		1		0
24 Category 2 Public Health Incidents - Limited Effects (per 1000 properties)			0.0		1		0.0
25 Category 3 Public Health Incidents - Major (per 1000 properties)			0.00		1		0.00
26 Capital Investment on Improving Public Health Performance (\$ per property)			1		4		3
27 Water Quality Complaints (per 1000 properties)			1		2		5
28 Water Service Complaints (per 1000 properties)			5		2		9
29 Customer Interruption Frequency (per 1000 properties)			90		5		45
29a Average Duration of Interruption (hr)			3		4		2
30 Average customer outage time (min)			18		5		6
31 Number of Main Breaks (per 100km)			12		3		11
32 Drought Water Restrictions (% of time)			0.6		2		43
33 Total Days Lost (%)			3.4		5		2.5
34 Average Annual Residential Consumption (kL/property, potable)			354		5		215
35 Water Losses (including leakage) (%)			12		4		10
36 Energy Consumption (kWh/ML)			1		1		530
38 Renewable Energy Consumption (kWh/property)			0		1		0
40 Category 1 Environmental Incidents - Minor (per 1000 properties)			0		1		0
41 Category 2 Environmental Incidents - Limited Effects (per 1000 properties)			0.0		1		0.0
42 Category 3 Environmental Incidents - Major (per 1000 properties)			0.00		1		0.00
43 Capital Investment on Improving Environmental Performance (\$ per property)			19		1		2
44 Residential Revenue from Usage Charges (% of residential bills)			76		1		55
45 Non-residential Revenue from Usage Charges (% of non-residential bills)			90		1		73
47 Economic Real Rate of Return (%)			3.9		1		2.7
47a Return on Assets (%)			4.0		1		2.9
48 Debt to Equity (%)			5.0		2		1
49 Interest Cover (%)			606		3		1,300
49a Loan Payment (\$/property)			50		2		22
50 Operating Cost (OMA) per 100km of main (\$'000)			419		1		880
51 Operating Cost (OMA) per property <sup>6</sup> (\$/property)			212		2		255
52 Operating Cost (OMA) per kL (c/kL)			36		1		73
53 Management Cost (\$/property)			61		2		100
54 Treatment Cost (\$/property)			17		1		27
55 Pumping Cost (\$/property)			68		5		20
56 Energy Cost (\$/property)			39		5		15
57 Water Main Cost (\$/property)			22		1		43

##### 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 (Tables 1 & 3 of 2003/04 NSW Water Supply and Sewerage Benchmarking Report)

as this is the most appropriate for statewide comparisons.

4 Annual review of the key projections and actions in LWS's SBP are required, together with annual updating of LWU's financial plan. The Business Plan should be updated after 3 years.

5 Non-residential Tariff: Uniform Access Charge (\$120); Declining Block : For usage Up to 36,000 kL = 65 c/kL; for usage >36,000 kL = 56 c/kL.

Water consumption by non-residential customers was 39% of potable water consumption excluding unaccounted-for-water.

2003/04 revenue from non-residential customers was 23% of annual rates and charges. This indicates a large cross-subsidy to non-residential customers and failure to comply with best practice pricing.

6 The operating cost (OMA)/property was \$212. The components of operating cost/property were: management (\$61), operation (\$36), maintenance (\$57), energy (\$39) and chemical (\$17).

7 70% of the supply is a good quality unfiltered groundwater supply and 30% is fully treated river flows.

# APPENDIX B – Example TBL Water Supply Performance Report

## Riverina Water (Page 2)

### Riverina Water County Council

### TBL Water Supply Performance (page 2)

2003/04

(Results shown for 10 years together with 2003/04 Statewide Median and Top 20%)



Notes:

1 Costs are in Jan 2004.

2 Microbiological water quality compliance for 1998/99 to 2003/04 was on the basis of E.coli in the 1996 NHMRC/ARMCANZ Australian Drinking Water Guidelines. Compliance prior to 1998/99 was on the basis of the 1987 NHMRC/AWRC Guidelines.

LEGEND

2003/04 State Median

2003/04 Top 20%

## Appendix C - 2003/04 Best-Practice Management Compliance

WATER UTILITY WATER SUPPLY & SEWERAGE		WATER SUPPLY										SEWERAGE									
		OUTCOMES FOR 6 BPM CRITERIA					OUTCOMES FOR 6 BPM CRITERIA					OUTCOMES FOR 6 BPM CRITERIA					OUTCOMES FOR 6 BPM CRITERIA				
TOURNOVER \$M	WATER UTILITY	(1) Complete Current SPP & FP (Yes/No)	(2) Pricing with full cost-recovery, without cross subsidies (Yes/No)	(2a) Complying Residential Charges (Yearly)	(2b) Complying non-Residential Charges (Yearly)	(3) Complete Performance Reporting Form Implemented by 31 October each year (Yearly)	(4) DSP with Commercial Changes (Yearly)	(5) Sound Drainage Management Implemented (by June 2005) (Yearly)	(6) Integrated Water Cycle Management Strategy (by June 2005) (Yearly)	(1) Complete Cost Recovery without cross subsidies (Yearly)	(2) Complete Residential Charges (Yearly)	(2a) Complying Residential Charges (Yearly)	(2b) Complying non-Residential Charges (Yearly)	(3) Liquidate waste approvals & policy (by June 2005) (Yearly)	(4) Integrated Water Cycle Management Strategy (by 31 October each year (Yearly))	(5) Complete Performance Form (by June 2005) (Yearly)	(6) Integrated Water Cycle Management Strategy (by June 2005) (Yearly)	(1) Proposed Dividend from Surplus \$1000 (Yearly)	(2) Proposed Dividend from Surplus \$1000 (Yearly)		
1 Albury	18.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
2 Armidale Dumaresq	6.8	No	No	Yes*	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3 Ballina (Reticulator)	14.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4 Ballina (Dual Supply)	0.8	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
5 Barakha	0.6	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
6 Bathurst Regional	18.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7 Bega Valley (Unfiltered)	11.4	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
8 Bellingen (Unfiltered)	3.8	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
9 Berrigan (Dual Supply)	3.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
10 Bingara	0.5	Yes	NoWS	NoWS	NoWS	NoWS	NoWS	NoWS	NoWS	No	No	No	No	No	No	No	No	No	No	No	No
11 Bland	0.8	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
12 Blayney	1.0	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
13 Bogang	1.4	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
14 Bombala	0.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
15 Bootowa	0.5	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
16 Bourke (Dual Supply)	1.3	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17 Brewarrina	0.7	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
18 Australian Inland	14.0	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19 Byrom (Reticulator)	14.0	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
20 Cabonne	2.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
21 Carrathool	1.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
22 Central Darling	0.7	No	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23 Central Tablelands	3.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
24 Cobar	1.9	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
25 Coffs Harbour (Unfiltered)	35.7	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
26 Coolah	0.8	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27 Coolamon	0.4	NoWS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
28 Cooma-Monaro	3.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
29 Coonabarabran	1.9	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30 Coonamble (Groundwater)	1.2	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
31 Coolamandra (Reticulator)	1.9	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
32 Coonanhurst (Unfiltered)	0.4	NoWS	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
33 Corowa	2.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
34 Cowra	4.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
35 Crookwell	1.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
36 Culcairn (Groundwater)	0.5	Yes	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
37 Deniliquin	3.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
38 Dubbo	17.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
39 Dungog (Unfiltered)	1.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
40 Eurobodalla (Unfiltered)	22.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
41 Fish River WS (Unfiltered, Bu	5.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No
42 Forbes	3.5	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
43 Gulgandra	1.1	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

## Appendix C - 2003/04 Best-Practice Management Compliance

WATER UTILITY	TURNOVER \$M	WATER SUPPLY						SEWERAGE					
		OUTCOMES FOR 8 BPM CRITERIA			OUTCOMES FOR 8 BPM CRITERIA			OUTCOMES FOR 8 BPM CRITERIA			OUTCOMES FOR 8 BPM CRITERIA		
44 Glen Innes	1.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
45 Gloucester	1.5	Yes	No	Yes	Yes*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
46 Goldenfields(Bulk) (Bulk Supply)	6.7												
47 Goldenfields (Reticulator)	6.1												
48 Goldenfields (Combined)	12.8	No	No	No	Yes*	Yes	Yes	No	No	No	No	No	
49 Gosford	46.2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes
50 Goulburn	9.1	Yes	No	No	Yes	No	No	No	No	No	No	No	
51 Grafton	5.5	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
52 Griffith	9.1	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
53 Gundagai	0.7	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
54 Gunnedah (Groundwater)	3.0	Yes	No	No	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes
55 Gunning	0.3	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
56 Guyra	1.0	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
57 Harden (Reticulator)	1.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
58 Hastings (Unfiltered)	38.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
59 Hawkesbury	3.8	NO WS											
59 Hay (Dual Supply)	1.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
60 Holbrook	0.3	NO WS											
61 Hume	1.7												
62 Hunter Water	162.0												
63 Inverell	4.2	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
64 Jerilderie (Dual Supply)	0.6	No	No	No	No	No	No	No	No	No	No	No	No
65 Junee	0.5	NO WS											
66 Kempsey (Groundwater)	16.2	Yes	Yes	Yes*	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
67 Kyogle	1.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
68 Lachlan	2.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
69 Leeton	4.3	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
70 Lismore (Reticulator)	11.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71 Lithgow	5.7	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
72 Lockhart	0.3	NO WS											
73 North Coast Water (Unfiltered)	16.9	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
74 Maclean	5.2	NO WS											
75 Manilla	1.0	No	Yes	No	Yes	Yes	Yes	No	No	No	No	No	No
76 Merriwa	0.5		Yes										
77 MidCoast (Manning - Unfiltered)													
78 MidCoast (Great Lakes - Unfiltered)													
79 MidCoast (Combined - Unfiltered)													
80 Moree Plains	35.0	No	Yes	No	No	Yes	Yes	No	No	Yes	Yes	Yes	No
81 Mudgee (Unfiltered)	5.7	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
82 Mulwaree	0.7	No	No	No	No	No	No	No	No	No	No	No	No
83 Murray (Dual Supply)	2.4	Yes	No	No	Yes	No	No	Yes	No	Yes	Yes	No	No
84 Murrumbidgee	0.6	No	Yes	No	No	Yes	No	No	No	No	No	No	No
85 Murrurundi (Unfiltered)	0.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
86 Muswellbrook	6.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
87 Nambucca	5.7	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No

## Appendix C - 2003/04 Best-Practice Management Compliance

WATER UTILITY	WATER SUPPLY & SEWERAGE	WATER SUPPLY										SEWERAGE									
		OUTCOMES FOR 8 BPM CRITERIA					OUTCOMES FOR 8 BPM CRITERIA					OUTCOMES FOR 8 BPM CRITERIA					OUTCOMES FOR 8 BPM CRITERIA				
		1) Complete Current SPP & FP (Year/No)	2) Pricing with full cost-recovery, without significant cross subsidies (Year/No)	3) DSF with Commercial Developer Charges (Year/No)	4) Complete performance Reporting Form by 31 October each year (Year/No)	5) Sound Water Conservation implemented (Year/No)	6) Integrated Water Cycle Management Strategy (Year/No)	7) Compliance required from Sumitomo \$1000 (Year/No)	8) Compliance with required Callens <sup>a</sup> (Year/No)	9) Proposed Discharge from Sumitomo \$1000 (Year/No)	10) Compliance with Residential Charges (Year/No)	11) Complete SIP 4 FP (Year/No)	12) Pricing with full cost-recovery, without significant cross subsidies (Year/No)	13) Complying Trade Waste fees & charges (Year/No)	14) DSP with commercial developer charges (Year/No)	15) Liquid Trade waste approvals & policy (By June 2005) (Year/No)	16) Integrated Water Cycle Management Strategy (Year/No)	17) Compliance with Callens <sup>a</sup> (Year/No)	18) Liquid Trade waste approvals & policy (By June 2005) (Year/No)	19) Integrated Water Cycle Management Strategy (Year/No)	
38 Narrabri (Groundwater)	3.1	No	Yes	No	No	No	Yes	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes		
39 Narrandera (Groundwater)	2.2	No	Yes	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No		
40 Narromine (Groundwater)	1.9	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
41 Nundle	0.1	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
42 Oberon (Unfiltered, Reticulator)	1.5	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
43 Orange	17.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
44 Parkes	7.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
45 Party	1.5	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
46 Pristine Waters (Unfiltered)	1.9	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No		
47 Queanbeyan (Reticulator)	14.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
48 Quirindi	0.9	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
49 Richmond Valley (Reticulator)	6.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
50 Rivenna (Groundwater)	15.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
51 Reus (Bulli Supplier)	9.8	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
52 Rykstone	1.2																				
53 Secone (Unfiltered)	3.0																				
54 Severn	0.2																				
55 Shoalhaven	44.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
56 Singleton	8.6	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No	No	No	Yes		
57 Snowy River (Unfiltered)	3.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
58 Sydney Water	1,425.0																				
59 Tallowanda	0.5	No	Yes	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	No		
60 Tanworth	16.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
61 Tenora	0.4	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
62 Tenterfield	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
63 Timberumba	1.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
64 Tumut	4.6	No	Yes	No	Yes	Yes	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No		
65 Tweed	35.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
66 Uralla	1.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
67 Wagga Wagga	0.2	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
68 Wakool	10.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
69 Walcha	0.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
70 Walgett (Dual Supply)	1.8																				
71 Warren (Dual Supply)	1.0	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
72 Weddin	0.2	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		
73 Wellington	3.0	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
74 Wentworth (Dual Supply)	2.4	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No		
75 Wingecarribee	18.0	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No		
76 Wyong	51.4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
77 Yallaroi (Unfiltered)	0.6																				
78 Yarrowamba (Unfiltered)	1.4																				
79 Yass Valley	3.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
80 Young (Reticulator)	3.4	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No		

## Appendix C - 2003/04 Best-Practice Management Compliance

WATER UTILITY	WATER SUPPLY & SEWERAGE	WATER SUPPLY						SEWERAGE					
		OUTCOMES FOR 6 BPM CRITERIA						OUTCOMES FOR 6 BPM CRITERIA					
TOURNER \$M	(1) Complete Current SPP & FP (Year/M)	(2) Pricing with full cost-recovery, without significant cross subsidies (Year/M)	(3) DSP with Commercial Developer Charges (Item 2(e) in Table 1) (Year/M)	(4) Compliance Performance Reporting Form (Year/M)	(5) Sound Water Conservation Implemented (Year/M)	(6) Integrated Water Cycle Management Strategy Implemented (by June 2005) (Year/M)	(1) Complete Current SPP & FP (Year/M)	(2) Pricing with full cost-recovery, without significant cross subsidies (Year/M)	(3) Complying Residential Charges (Year/M)	(4) Complying non-Residential Charges (Year/M)	(5) Liquid trade waste approvals (Year/M)	(6) Integrated Water Cycle Management Strategy (by June 2005) (Year/M)	
131 Albany City	187	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
132 Clarence Valley	29.4	No	Yes	Yes	Yes	Yes	No	No	No	Yes	No	No	Yes
133 Coll's Harbour (Unfiltered)	36.2	No	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No	Yes No
134 Corowa	3.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes No
135 Glen Innes Severn	2.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
136 Goulburn Mulwaree	9.8	No	Yes	No	No	No	No	No	No	Yes	No	No	No
137 Greater Huon	1.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
138 Guydir	1.1	Yes	No	No	No	No	No	No	No	No	No	No	No
139 Liverpool Plains	1.7	No	Yes	No	No	No	No	No	No	No	No	No	No
140 Mid-Western Regional	6.9	Yes	Yes	No	No	Yes	Yes	Yes	No	No	No	Yes	Yes No
141 Pafetang	1.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
142 Tamworth Regional	18.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
143 Upper Hunter	4.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
144 Upper Lachlan	1.6	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
145 Warrumbungle	2.7												Yes
The totals below are calculated for LWUs 1 to 130 (ie. Totals exclude the amalgamated LWUs 131 to 145)													
TOTAL 'YES' for large LWUs (>\$10M turnover) <sup>2</sup>	14	24	26	20	26	17	16	10	10	5	14	18	19
% of Large LWUs (26 WS LWUs and 23 SGE LWUs)	54%	92%	100%	77%	100%	65%	62%	38%	19%	61%	78%	83%	61%
TOTAL 'YES' for remainder of LWUs (<\$10M turnover) <sup>3</sup>	34	55	50	20	30	72	22	23	13	5	31	43	63
% of Remainder (87 WS LWUs and 95 SGE LWUs)	39%	63%	57%	23%	34%	83%	25%	26%	15%	6%	33%	45%	66%
TOTAL 'YES' for all LWUs %	48	79	76	40	56	88	39	39	23	5	45	61	82
	42%	70%	67%	35%	50%	87%	35%	35%	20%	4%	38%	52%	69%

Notes:

- The reported compliances for each LWU are on the basis of Notes 2 or 3 of the Special Purpose Financial Reports of its 2003/04 Annual Financial Statements, supplemented by other data provided to DEUS by the LWU.
- For LWUs with water supply only or sewerage only, the relevant turnover is \$SM.
- The turnover for LWUs responsible for water supply or sewerage only is shown left justified above.
- Where an LWU has not yet reported its turnover for 2003/04, the turnover reported for 2002/03 is shown in italics bold above.
- The required criteria for water supply in 2003/04 are (1), (2), (2a), (2b), (2c), (3) and (4).
- The required criteria for sewerage in 2003/04 are (1), (2), (2a), (2b), (2c), (2d) and (3).
- Seven LWUs have amalgamated with minor parts of other LWUs but their numbers of water supply and sewerage assessments were unaffected. These are: Bathurst Regional, Cooma-Monaro, Queanbeyan, Lithgow, Richmond Valley, Turramurra and Yass Valley.
- Thirty two LWUs have amalgamated with other LWUs resulting in a change in the number of water supply and sewerage assessments. These LWUs have generally also changed their name and are shown at LWU numbers 131 to 145.
- Compliance with Best-Practice Management for amalgamated LWUs (LWU numbers 131 to 145) is based on the compliance outcomes of the major constituent LWU.
- Yes\* in column 1 indicates that the LWU's strategic business plan and financial plan need to be updated.
- 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\* in these columns indicates the LWU is exempt from the requirement to prepare a DSP due to low growth (under 5 lots(a)).

## Appendix D - 2003/04 NSW Water Utility Performance Summary

Water Utility	Water Supply - 2003/04 unless noted												Sewerage - 2003/04 unless noted												Water Supply and Sewerage - 2003/04 unless noted	
	Water Supply Assessments (No.) <sup>3</sup>	Total Water Supplied (ML) <sup>3</sup>	Average Annual Tuarawer Residential Consumption (kL/connected property)	2004/05 Tariff (\$M) <sup>4</sup>	Residential Tariff Pay-for-Use?	Water Quality Compliance (1995 NHRC/RAMC/ANZ Guidelines)	Tarrawer (SM) <sup>3,1</sup>	2004/05 Residential Traffic Independent of Land Value?	DEC Licence Compliance SS4 <sup>2</sup> (%)	2004/05 Residential Traffic Independent of Land Value?	DEC Licence Compliance SS4 <sup>2</sup> (%)	Tarrawer (SM)	2004/05 Residential Bill (\$million)	Total Tarrawer (SM)	2004/05 Residential Bill (\$million)	Total Tarrawer (SM)	2004/05 Typical Disposal Charge (\$/Tonne)	Economic Real Rate of Return (%)	Debt to Equity (%)	OMA cost (\$connected property)	Current Cost of System Assets (\$M)	Payer-Due Water Pricing & Full Cost Recovery?	Strategic Business Plan Prepared?*			
1) Albany AMALGAMATED	20,300	10,500	307	9.5	Yes	✓	100	100	30	✓	35	58	18.5	(570)	(10,000)	570	0.6	6	464	206	426	(Yes)	(2)	YCs <sup>15</sup>		
2) Armidale District	8,010	2,910	239	3.8	Yes	✓	100	100	30	✓	100	100	6.8	633	4,860	633	0.8	1	646	275	165	Yes	Yes	Yes		
3) Ballina (Retailer)	13,180	4,430	234	5.4	Yes	✓	100	100	34	✓	97	90	14.8	600	10,410	600	4.1	0	662	214	138	Yes	Yes	Yes		
4) Balmain (Dual Supply)	850	1,440	301	0.5	Yes	✓	100	100	63	✓	NL	NL	0.8	830	1,590	830	0.9	7	444	112	19	Yes	Yes	Yes		
5) Barossa AMALGAMATED	740	1,700	191	0.4	Yes	✓	96	100	62	✓	100	100	0.6	100	702	100	-0.5	9	702	264	7	Yes*	Yes*	Yes		
6) Bathurst Regional	12,070	6,810	333	9.8	Yes	✓	81	100	51	✓	100	96	18.9	770	3,910	770	3.6	1	545	226	226	Yes	Yes	Yes		
7) Bigga Valley (Unfiltered)	13,180	3,970	158	6.1	Yes	✓	99	99	53	✓	96	96	11.4	766	9,700	766	-0.9	0	720	356	189	Yes	Yes	Yes		
8) Belgrave (Unfiltered)	4,060	1,470	228	2.3	Yes	✓	100	100	15	✓	97	95	3.8	784	9,840	784	0.9	0	595	25	59	Yes	Yes*	Yes		
9) Berriagai (Dual Supply)	2,860	2,260	329	2.0	Yes	✓	100	100	12	✓	100	100	0.5	3.2	842	5,900	842	0.7	4	535	192	48	Yes	Yes	Yes	
10) Bingara AMALGAMATED	730	360	259	0.4	Yes	✓	98	88	0.2	✓	100	82	0.5	100	82	100	0.0	0	0	97	12	12	Yes	Yes	Yes	
11) Blinman (Sewerage Only)	1,620	No W/S	No W/S	No W/S	No W/S	No W/S	0.8	0.8	0.8	✓	100	77.8	373	1,000	373	0.7	0	237	41	8	Yes	Yes	Yes			
12) Blayney (Sewerage Only)	1,360	No W/S	No W/S	No W/S	No W/S	No W/S	1.0	1.0	✓	✓	100	100	1.0	410	1,930	410	3.6	13	312	135	10	Yes	Yes	Yes		
13) Bogang	1,190	920	510	0.3	Yes	✓	NL	NL	0.3	✓	NL	NL	1.2	890	1,900	890	0.0	2	662	328	23	Yes	Yes	Yes		
14) Bomaderry	900	350	392	0.4	Yes	✓	100	100	0.4	✓	100	100	0.8	918	2,920	918	4.4	7	407	115	12	Yes	Yes	Yes		
15) Bourke	620	210	217	0.4	Yes	✓	100	100	0.1	✓	NL	NL	0.5	729	900	729	1.2	9	475	69	9	Yes	Yes	Yes		
16) Bourke (Dual Supply)	1,700	2,930	378	0.8	Yes	✓	93	100	0.5	✓	NL	NL	1.3	1050	1650	1050	-9.7	9	898	235	20	Yes	Yes	Yes		
17) Brewarina (Dual Supply)	550	1,210	519	0.4	Yes	✓	100	100	0.2	✓	100	100	0.7	1062	1,662	1,062	-0.5	1	1,126	93	9	Yes	Yes	Yes		
18) Australian Inland	10,130	6,050	323	11.4	Yes	✓	96	100	2.6	✓	100	96	14.0	623	1,233	623	-0.1	0	1,076	319	95	Yes*	Yes*	Yes		
19) Byrcra (Retailer)	10,500	3,560	200	4.7	Yes	✓	98	98	53	✓	100	100	14.0	863	12,600	863	2.5	4	817	277	140	Yes	Yes*	Yes		
20) Cabonne	1,090	3,660	151	0.8	Yes	✓	50	100	1.3	✓	100	87	2.1	1154	1,154	1,154	2.9	6	466	135	37	Yes	Yes	Yes		
21) Carrington (Groundwater)	1,130	1,700	489	0.9	Yes	✓	75	100	0.1	✓	NL	NL	1.1	515	1,410	515	-0.3	2	741	124	16	Yes	Yes	Yes		
22) Central Darling (Dual Supply)	730	700	153	0.6	Yes	✓	✓	100	0.1	✓	NL	NL	0.7	1295	1,295	1,295	-3.5	0	784	102	16	Yes	Yes	Yes		
23) Central Tablelands (W/S Only)	5,190	2,160	254	3.3	Yes	✓	100	100	0.4	✓	No SCE	No SCE	3.3	408	3,600	408	0.0	21	402	95	70	Yes	Yes	Yes		
24) Chiltern	2,020	1,680	485	1.4	Yes	✓	100	100	0.4	✓	NL	NL	1.9	841	2,180	841	1.3	0	485	172	30	Yes	Yes*	Yes		
25) Coffs Harbour (Unfiltered) AMALGAMATED	23,500	4,250	200	4.7	Yes	✓	100	100	15.4	✓	100	100	35.7	(924)	(10,700)	594	5.0	22	549	203	349	(Yes)	(Yes)	Yes*		
26) Coonabarabran AMALGAMATED	1,160	390	281	0.5	Yes	✓	75	75	0.3	✓	90	90	0.8	(800)	(800)	800	-0.9	0	580	99	9	Yes	Yes	Yes		
27) Coonambla (Sewerage Only)	650	No W/S	No W/S	No W/S	No W/S	No W/S	0.4	0.4	0.4	✓	100	100	3.8	990	4,250	990	3.0	6	692	202	27	Yes	Yes	Yes		
28) Cooma-Murrumbidgee AMALGAMATED	3,650	1,700	314	2.1	Yes	✓	62	100	1.7	✓	100	100	1.9	841	2,180	841	1.3	0	485	172	30	Yes	Yes	Yes		
29) Coombabah AMALGAMATED	1,900	930	328	1.1	Yes	✓	100	100	0.8	✓	100	100	1.2	514	1,154	514	3.5	2	741	124	16	Yes	Yes*	Yes		
30) Coonamble (Groundwater)	1,520	1,810	1,128	0.7	Yes	✓	86	94	0.5	✓	92	25	1.2	568	2,700	568	-4.6	6	528	89	11	Yes	Yes	Yes		
31) Coonamble (Retailer)	2,820	1,000	273	1.3	Yes	✓	100	100	0.6	✓	100	100	1.9	69	59.4	69	0.0	0	392	138	4	Yes	Yes	Yes		
32) Coonawarra (Unfiltered) AMALGAMATED	480	No W/S	No W/S	No W/S	No W/S	No W/S	0.4	0.4	0.4	✓	100	100	2.9	(600)	(3,950)	600	4.250	990	3.0	510	176	52	Yes	Yes	Yes	
33) Coonawarra AMALGAMATED	3,680	3,440	660	1.5	Yes	✓	96	100	1.5	✓	100	100	1.8	640	(810)	640	0.0	2	670	176	52	Yes	Yes	Yes		
34) Cowra	2,730	2,560	273	3.0	Yes	✓	97	100	1.3	✓	75	58	4.3	697	5,150	697	0.6	3	607	374	43	Yes	Yes*	Yes		
35) Crookwell AMALGAMATED	3,110	5,590	183	10.6	Yes	✓	99	100	12.0	✓	100	100	1.3	(1340)	(690)	690	0.0	0	714	337	47	Yes	Yes*	Yes		
36) Culcairn (Groundwater)	540	240	263	0.2	Yes	✓	100	100	0.3	✓	100	100	0.5	(3910)	(1,720)	1,720	-1.1	4	387	110	21	Yes	Yes	Yes		
37) Deniliquin	3,330	9,890	696	2.2	Yes	✓	100	100	1.5	✓	99	77	3.7	1,093	1,093	1,093	-4.1	2	569	223	39	Yes	Yes	Yes		
38) Dubbo	13,440	9,720	186	1.1	Yes	✓	100	100	0.8	✓	100	67	17.2	851	5,980	851	2.2	0	713	226	218	Yes	Yes	Yes		
39) Dubbo (Retailer)	2,050	5,250	273	3.0	Yes	✓	97	100	1.3	✓	100	100	1.8	670	5,520	670	5.1	6	476	176	16	Yes	Yes	Yes		
40) Eurob賓 (Unfiltered)	18,890	5,590	183	10.6	Yes	✓	99	100	22.6	✓	100	100	1.9	873	11,000	873	3.4	6	645	263	273	Yes	Yes	Yes		
41) Fish River W/S (Unfiltered, Bulk Supplier)	23,000	11,700	5.8	Yes	✓	100	100	No SCE	✓	100	100	1.9	610	1,000	610	1.7	9	114	38	57	Yes	Yes	Yes			
42) Forbes	3,450	2,410	410	1.9	Yes	✓	98	100	1.6	✓	93	100	1.0	1,320	863	863	3.6	7	501	72	29	Yes	Yes	Yes		
43) Gulgong (Groundwater)	1,350	1,030	426	0.7	Yes	✓	100	100	0.4	✓	100	100	1.1	722	1,222	722	1.3	2	370	115	22	Yes	Yes	Yes		
44) Glen Innes AMALGAMATED	2,000	700	198	1.1	Yes	✓	92	96	0.8	✓	100	100	1.9	(605)	645	645	1.1	0	404	175	37	(Yes)	(Yes)	Yes		
45) Gloucester	1,470	5,660	671	6.7	Yes	✓	100	100	0.7	✓	100	54	1.5	846	11,000	846	-2.1	0	220	51	20	Yes	Yes	Yes		
46) Goldenfields (Bulk Supplier) W/S Only	18,800	9,560	335	6.1	Yes	✓	100	100	No SCE	✓	100	54	1.5	846	11,000	846	-0.4	-0.4	220	51	108	Yes	Yes	Yes		
47) Goldenfields (Retailer) W/S Only	16,200	5,660	335	6.1	Yes	✓	100	100	No SCE	✓	100	53	2,000	645	645	1.1	0	331	118	135	Yes	Yes	Yes			

Appendix D - 2003/04 NSW Water Utility Performance Summary

Water Utility	Water Supply - 2003/04 unless noted										Sewerage - 2003/04 unless noted														
	Water Supply Assessments (No) <sup>5</sup>	Total Water Supplied (ML) <sup>6</sup>	Average Annual Residential Water Consumption (PdL/connected property)	Turnover (\$M) <sup>7</sup>	Residential Tariff Pay-as-you-go <sup>8</sup>	Residential Tariff Independent of Land Value <sup>9</sup>	Water Quality Compliance (1996 NRBC/ARCANZ Guidelines) <sup>10</sup>	Turnover (\$M)	DEC Licence Residential Compliance (SM) <sup>11</sup>	Tariff Independent of Land Value <sup>12</sup>	Turnover (\$M)	Total Retailer Bill (Assessment) <sup>13</sup>	Typical Retailer Bill Change (%) <sup>14</sup>	Turnover (\$M)	OMA exit Date	Economic Return Rate (%) <sup>15</sup>	OMA exit Equity Return (%) <sup>16</sup>	Management Cost (\$connected property) <sup>17</sup>	Current Reinvestment Cost of System Assets (\$M) <sup>18</sup>	Pay-for-Use Water Price & Full Cost Recovery? <sup>19</sup>	Strategic Business Plan Prepared? <sup>20</sup>				
48 Goldenfields (Combined WS Only)	18,800	9,560	136	12.8	Yes	/	100	100	27.3	/	100	46.2	701	-4.20	701	0.4	0	465	262	730	Yes				
49 Gerteld	67,300	6,900	93	18.9	Yes	/	100	4.6	4.5	/	90	9.1	2.9	16	501	2.76	65	(Yes) Yes*	(Yes) Yes*	Yes					
50 Goulburn AMALGAMATED	8,970	2,590	150	4.6	Yes	□	100	99	100	4.1	100	5.5	29	93	0.0	0	93	70	65	Yes					
51 Grampians (Unlinked) AMALGAMATED	7,450	2,350	192	2.1	Yes	□	100	100	100	1.2	100	9.1	688	4.20	688	0.7	0	723	79	79	Yes				
52 Griffith	9,000	5,96	5.0	Yes	/	92	100	41	100	75	100	0.7	461	-0.4	1	585	123	5	Yes						
53 Gungahlin	660	311	6.4	Yes	/	94	100	0.2	100	1.0	100	92	3.0	515	5.34	515	2.9	2	342	96	45	Yes			
54 Gungahlin (Groundwater)	4,140	2,660	357	2.0	x	100	100	0.1	100	100	100	0.3	100	0.3	630	0.34	0	350	76	5	Yes*				
55 Gungahlin (Groundwater) AMALGAMATED	350	100	186	0.2	Yes	□	100	94	100	0.1	100	92	1.0	886	0.4	11	64	129	21	Yes					
56 Guyra	1,190	310	175	0.5	Yes	/	100	100	100	0.5	100	92	1.0	886	0.4	11	64	129	21	Yes					
57 Henty (Retained)	1,550	1,060	466	1.2	Yes	/	100	90	90	0.3	100	1.5	950	-2.5	4	854	121	19	Yes*						
58 Hastings (Unlinked)	27,700	6,500	178	18.9	Yes	/	100	19.8	19.8	1.0	100	96	38.7	745	8,650	4.6	1	571	175	379	Yes				
58-A Hawkesbury (Sewerage Only)	7,440	NO WS	1,510	200	0.6	Yes	/	100	0.5	100	100	1.8	3.8	100	1.1	5,590	371	-0.2	0	348	154	57	Yes*		
59 Hips (Gas) (Supply Only)	690	NO WS	NO WS	NO WS	NO WS	NO WS	NO WS	0.3	100	100	100	0.3	100	1.0	723	-1.2	0	247	79	5	Yes				
60 Hobart (Gas Only) AMALGAMATED	2,300	1,050	307	1.3	Yes	□	100	100	100	0.4	100	90	100	1.7	2.7	0	237	55	7	Yes					
61 Hume AMALGAMATED	1,130	209,000	212	87	Yes	/	100	75	75	1.3	100	100	4.2	162	557	557	0.1	5	557	1,920	73	Yes			
62 Hunter Water <sup>16</sup>	51,210	2,080	238	2.9	Yes	□	100	100	100	0.3	100	75	0.6	884	4.11	2	704	153	5	Yes					
63 Inverell (Duan Supply)	460	270	171	0.3	x	100	100	0.5	100	100	100	0.5	283	2.83	253	0.2	0	237	55	7	Yes				
64 Jervis Bay (Sewerage Only)	1,570	NO WS	NO WS	NO WS	NO WS	NO WS	NO WS	0.3	100	100	100	0.3	100	1.0	928	7,470	928	6.2	12	534	162	186	Yes*		
65 Kemps (Groundwater)	11,210	4,300	197	6.4	Yes	/	100	100	100	9.8	100	100	92	16.2	936	83.6	-1.4	2	995	189	27	Yes			
66 Kyogle	1,850	460	187	1.1	Yes	/	100	87	87	0.7	100	100	1.0	2.4	958	958	-0.4	0	521	141	49	Yes			
68 Lachlan	2,610	1,980	548	1.6	Yes	/	100	80	80	1.0	100	100	1.0	4.1	2,900	586	586	4.1	2	619	52	52	Yes		
69 Leeton	3,240	3,250	378	2.4	Yes	□	100	100	100	0.9	100	100	100	4.3	2,900	676	2.3	1	529	109	136	Yes			
70 Lismore (Retailer)	12,410	3,660	186	4.9	Yes	/	100	99	99	100	100	100	87	11.5	676	9,440	676	2.3	0	650	70	75	Yes		
71 Lithgow	7,380	21,460	214	3.4	Yes	□	100	100	100	2.3	100	80	75	5.7	682	1.4	0	650	120	12	Yes				
72 Lockhart (Sewerage Only)	810	NO WS	NO WS	NO WS	NO WS	NO WS	NO WS	0.3	100	100	100	0.3	100	1.0	125	1.25	0.2	0	189	92	128	Yes			
73 North Coast (WS Only) AMALGAMATED	11,040	4,660	211	16.9	Yes	□	100	95	95	16.9	100	100	100	1.0	886	8,9	5	238	128	62	Yes				
74 Maclean (Sewerage Only) AMALGAMATED	5,070	NO WS	NO WS	NO WS	NO WS	NO WS	NO WS	5.2	100	100	100	0.5	100	1.0	437	12.8	4	281	105	32	Yes				
75 Mallacoota AMALGAMATED	1,150	540	179	0.5	Yes	□	100	91	91	100	100	100	2.3	100	5.5	991	6,270	991	2.8	17	762	326	454	Yes*	
76 Merriwa AMALGAMATED	610	330	299	0.3	Yes	□	100	100	100	0.2	100	100	25	100	5.7	500	20,000	4.9	0	671	235	8	Yes		
77 MidCoast (Manning - Unlinked)	35,800	11,100	219	1.93	Yes	/	100	92	92	1.57	100	100	100	0.0	0	35.0	858	858	1.9	22	387	111	454	Yes*	
78 MidCoast (Great Lakes - Unlinked)	5,160	2,350	261	2.9	Yes	/	100	98	98	83	100	100	100	2.6	100	5.5	991	6,270	991	2.8	17	762	326	454	Yes*
79 MidCoast (Cathedral - Unlinked)	4,900	2,070	281	3.4	Yes	□	100	100	100	2.3	100	100	100	0.0	0	500	500	2.7	13	389	78	78	Yes		
80 Moree Plains (Groundwater)	5,160	1,70	176	0.4	Yes	□	100	98	98	100	100	100	100	0.0	0	500	500	2.7	13	389	78	78	Yes		
81 Mudgee (Unlinked) AMALGAMATED	5,190	2,630	343	3.5	Yes	/	100	96	96	100	100	100	100	2.5	100	6.0	889	6,666	889	4.9	12	635	150	58	Yes
82 Mulwala AMALGAMATED	510	120	98	0.4	Yes	□	100	100	100	0.3	100	100	100	0.7	0.7	6,700	6,700	2.7	16	693	45	9	Yes		
83 Murray (Duan Supply)	2,930	1,550	232	1.3	Yes	/	100	97	97	1.57	100	100	100	0.0	0	1,400	691	691	4.6	25	325	186	186	Yes*	
84 Narrabri (Groundwater)	750	690	581	0.3	Yes	/	100	100	100	0.3	100	100	100	0.6	0.6	642	2,000	642	3.1	159	8	Yes			
85 Narrabri - AMALGAMATED	663	1,540	176	0.4	Yes	/	100	100	100	0.3	100	100	100	0.7	0.7	13,000	2,8	0	354	52	6	Yes*			
86 NowraWellbrook	90	331	343	0.1	Yes	□	100	96	96	100	100	100	100	2.5	100	1.0	100	100	1.0	100	100	100	Yes*		
87 Narrabeen (Groundwater)	1,240	760	202	1.0	Yes	/	100	100	100	0.5	100	100	100	1.5	1.5	565	2,370	614	3.4	649	189	78	Yes		
88 Narrabeen (Groundwater)	4,250	3,740	561	1.9	Yes	/	100	97	97	1.2	100	100	100	3.1	1.2	654	4,080	654	1.1	8	380	151	65	Yes	
89 Narrabeen (Groundwater)	2,200	1,630	556	1.2	Yes	/	100	100	100	0.3	100	100	100	2.2	2.2	870	2,200	870	0	345	145	34	Yes*		
90 Narrabeen (Groundwater)	2,110	1,540	663	1.0	Yes	/	100	96	96	1.0	100	100	100	1.9	1.9	972	1,440	972	0	371	270	25	Yes		
91 Nundle (WS Only) AMALGAMATED	230	90	331	0.1	Yes	□	100	96	96	100	100	100	100	0.0	0.1	1.4	2,000	120	0	37	2	10	10	Yes*	
92 Oberon (Retailer)	1,240	760	202	1.0	Yes	/	100	100	100	0.5	100	100	100	1.5	1.5	565	0.9	550	107	95	10	Yes			
93 Orange	14,640	4,930	206	10.5	Yes	/	100	100	100	7.2	100	100	100	1.5	1.5	570	8,910	654	1.6	489	191	204	Yes		
94 Lakes	5,860	4,720	378	5.9	Yes	/	100	95	95	1.5	100	100	100	1.5	1.5	665	7,840	665	3.6	0	578	89	102	Yes	
95 Lakes (Groundwater) AMALGAMATED	1,920	650	215	1.0	Yes	□	100	94	94	1.0	100	100	100	1.5	1.5	1,020	12,200	1,020	0	441	105	33	Yes		
96 Lakes (Groundwater) AMALGAMATED	1,920	650	215	1.0	Yes	□	100	94	94	1.0	100	100	100	1.5	1.5	1,020	12,200	1,020	0	441	105	33	Yes		

## Appendix D - 2003/04 NSW Water Utility Performance Summary

Water Utility	Water Supply - 2003/04 unless noted										Water Supply and Sewerage - 2003/04 unless noted											
	Water Supply Assessments (No.) <sup>3</sup>	Total Water Supplied (ML) <sup>3</sup>	Average Annual Turnover (\$M) <sup>4</sup>	Residential Water Consumption (kL/connected property)	Tariff Pay-for-Use? <sup>5</sup>	Residential Tariff Independent of Land Value? <sup>6</sup>	Water Quality Compliance (1996 NHARC/AMC/NZ Guidelines)	Turnover (\$M) <sup>1,3</sup>	DBE Licence Compliance Turnover (\$M) <sup>1,3</sup>	Residential Tariff Independent of Land Value? <sup>2</sup>	BOD <sup>8</sup> (%) <sup>9</sup>	SS <sup>10</sup> (%) <sup>9</sup>	Total Turnover (\$M)	Typical Residential Bill (\$Assessment)	Typical Residential Bill (\$Assessment)	2004/05 Management Cost (\$connected property)	Current Cost of System Assets (\$M)	Pay-for-Use Water Pricing & Full Cost Recovery?	Strategic Business Plans Prepared? <sup>11</sup>			
97 Queanbeyan (Reticulated)	15,390	580	1,55	7.4	Yes	x	0.0	100	0.4	100	15	0.9	1,360	671	1,360	1,62	111	Yes	Yes			
98 Quirindi (Groundwater) AMALGAMATED	1,380	290	275	3.2	Yes	x	0.0	100	0.4	100	91	6.9	803	7,150	803	0.0	0	366	22	Yes		
99 Richmond Valley	6,720	16,100	354	15.6	Yes	x	96	100	No SGE	100	91	14.00	310	3,9	5	212	61	645	290	Yes		
100 Riverina (Groundwater) (NSW Only)	28,300	11,500	9.8	Yes	x	x	100	100	No SGE	100	98	3,90	1,4	2	1,51	76	196	119	Yes			
101 Rose (Bulk Supplied) (NSW Only)	37,300	550	261	0.7	x	x	100	100	0.5	100	79	1.2	3,4	0	771	370	21	Yes				
102 Ryde, AMALGAMATED	1,310	2,610	1,740	291	1.7	Yes	x	92	100	100	100	100	(990)	3,8	0	542	235	35	Yes			
103 Scare (Unfilled) AMALGAMATED	200	30	133	0.1	Yes	x	100	87	0.1	100	93	44.2	778	2,9	5	394	185	2	Yes			
104 Shoalhaven	46,800	18,900	230	19.8	Yes	x	100	234	x	100	93	4,320	778	42	6	515	229	513	Yes			
105 Singleton	5,860	2,800	301	5.6	Yes	x	100	100	2,40	100	8.6	732	7,6	0	485	141	84	Yes				
106 Snowy River (Unfilled)	2,370	2,210	591	1.4	Yes	x	99	100	1.6	100	100	1035	5,000	2,4	1	401	133	42	Yes			
107 Sydney Water <sup>12</sup>	1,661,000	1,661,000	224	677	Yes	x	100	748	x	1,425	636	636	410	11,660	11,660	0	0	0	Yes			
108 Taree (Unfilled) AMALGAMATED	650	180	223	0.3	Yes	x	100	0.2	x	92	75	0.5	(656)	0.2	0	0	0	78	6	Yes		
109 Tamworth AMALGAMATED	15,040	8,620	305	8.9	Yes	x	100	96	72	x	100	79	16.1	(748)	(4990)	748	2,2	2	566	164	Yes	
110 Tenterfield (Sewerage Only)	1,890	No W/S	0	0	Yes	x	100	0.4	x	100	95	0.4	170	-0.2	0	165	26	0	265	0	Yes	
111 Tenterfield	2,810	690	204	0.9	Yes	x	100	100	0.7	100	90	1.6	748	3,000	748	1.7	695	2,077	28	Yes		
112 Tumbarumba	1,070	430	261	0.7	Yes	x	100	97	0.4	100	100	1.1	807	830	807	2,2	2	431	133	18	Yes	
113 Tumut	4,260	4,010	306	2.1	Yes	x	97	100	2.3	x	88	95	4.6	965	6,480	965	1.8	1	588	175	Yes	
114 Tweed	29,300	9,540	219	16.4	Yes	x	99	100	18.9	x	97	96	35.3	690	690	4.4	2	513	211	71	Yes	
115 Tweed	1,290	320	192	0.6	Yes	x	100	100	0.4	x	100	100	1.0	1,20	1,20	-0.3	1	521	233	15	Yes	
116 Uluru (Uranium Sewerage Only)	300	No W/S	0	0	Yes	x	100	0.2	x	100	90	0.2	189	4,010	189	0.0	15	84	4	Yes		
117 Wagga Wagga (Sewerage Only)	21,200	No W/S	0	0	Yes	x	100	107	x	100	90	10.7	279	1,450	279	6.3	0	151	30	166	Yes*	
118 Wakool	1,350	1,610	532	1.1	Yes	x	97	100	0.5	x	NL	NL	1.7	1,105	1,105	2.1	17	684	198	Yes		
119 Wallis	320	230	1.6	0.4	Yes	x	100	100	0.2	x	100	83	0.7	759	759	-1.2	547	131	16	Yes		
120 Walgett (Dual Supply)	1,660	1,640	146	1.2	Yes	x	100	86	0.6	x	100	1.8	839	835	-2.2	3	766	249	27	Yes		
121 Warren (Dual Supply)	1,070	800	199	0.4	Yes	x	100	100	0.5	x	100	100	1.0	830	830	2.2	3	492	114	12	Yes	
122 Weddin (Sewerage Only)	1,010	No W/S	0	0	Yes	x	100	0.2	x	100	100	0.2	157	-12.5	0	111	27	7	Yes			
123 Wellington	2,930	1,190	298	1.8	Yes	x	100	100	1.2	x	100	50	3.0	1,024	1,024	2.1	15	618	193	23	Yes	
124 Wingham	1,690	2,760	224	1.6	Yes	x	100	89	0.8	x	100	100	2.4	894	894	0.7	10	794	171	35	Yes	
125 Winghambarra	18,420	51,70	214	9.7	Yes	x	100	83	x	100	98	18.9	835	835	3.4	11	434	187	232	Yes		
126 Young	57,900	15,000	188	28.2	Yes	x	100	100	22	x	100	51.4	584	4,500	584	2.5	7	430	147	658	Yes	
127 Sutton (Groundwater) AMALGAMATED	560	409	0.4	Yes	x	x	100	86	0.2	100	100	0.6	20	1,400	1,400	-1.4	675	120	13	Yes*		
128 Yarrowmulla AMALGAMATED	970	390	250	0.7	Yes	x	98	100	0.7	x	100	100	1.4	0.0	0.0	0.0	0	113	12	Yes*		
129 Yass Valley	2,240	850	204	1.3	Yes	x	100	95	1.3	x	100	100	3.3	766	766	-4.2	0	546	190	44	Yes	
130 Young (Reticulated)	3,760	1,590	264	2.2	Yes	x	98	100	1.2	x	100	83	3.4	755	2,700	755	5.3	4	503	68	12	Yes
131 Albury City	20,768	10,700	307	9.7	Yes	x	99	100	9.0	x	95	58	18.7	574	10,000	574	0.6	6	471	205	428	Yes
132 Clarence Valley	20,410	7,560	216	20.2	Yes	x	95	92	x	94	89	29.4	754	12,100	754	4.6	3	204	284	353	Yes	
133 Coffs Harbour	23,400	6,030	189	16.3	Yes	x	100	199	x	100	100	36.2	994	10,700	994	5.0	22	551	203	353	Yes	
134 Croxton	4,669	3,890	581	2.1	Yes	x	97	100	0.8	x	92	53	3.8	657	1,710	657	0.2	1	578	182	61	Yes
135 Glen Innes Severn	3,000	730	193	1.1	Yes	x	91	95	0.9	x	95	95	2.1	605	1,605	605	1.2	403	176	39	Yes	
136 Goulburn Mulwaree	9,480	2,710	147	5.1	Yes	x	99	100	4.8	x	98	783	9,700	783	2.9	16	598	266	405	Yes		
137 Greater Hume	1,483	670	290	0.7	No	x	100	100	0.8	x	100	100	1.5	527	4,230	527	0.1	2	629	143	21	Yes
138 Guyra	1,450	870	345	0.8	No	x	99	97	0.4	x	100	52	1.1	809	809	-0.7	10	600	142	26	Yes	
139 Liverpool Plains	2,257	830	247	0.9	No	x	98	98	0.7	x	100	100	1.7	473	4,000	473	0.6	6	389	100	38	Yes
140 Mid West Coast Regional	6,210	2,630	277	4.1	Yes	x	100	25	x	100	96	6.9	929	4,650	929	1.5	11	624	262	99	Yes	
141 Paterson	1,620	570	240	1.0	Yes	x	99	99	0.9	x	97	92	1.9	938	4,810	938	0.1	0	552	163	18	Yes
142 Tamworth Regional	18,311	9,580	254	10.4	Yes	x	98	96	96	x	92	18.7	742	4,990	742	1.6	4	586	183	305	Yes	
143 Upper Hunter	3,732	2,210	277	2.4	Yes	x	94	100	1.7	x	100	90	4.1	931	4,010	931	2.3	0	538	226	48	Yes
144 Upper Lachlan	1,450	410	187	1.0	No	x	99	96	0.6	x	100	100	1.6	2,500	(19)	2,500	2.1	15	552	95	21	Yes
145 Warrumbungle	3,060	1,340	3111	1.7	Yes	x	91	1.1	x	100	87	2.7	895	1,630	895	-0.4	0	232	56	Yes		

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## Appendix D - 2003/04 NSW Water Utility Performance Summary

Water Utility	Water Supply - 2003/04 unless noted					Sewerage - 2003/04 unless noted					Water Supply and Sewerage - 2003/04 unless noted				
	Water Supply Assessments (No.) <sup>1</sup>	Total Water Supplied + Non-potable (ML) <sup>2</sup>	Average Annual Residential Water Consumption (ML) <sup>3</sup>	Total Residential Residential Traffic Pay-for-Use? <sup>4</sup>	Water Quality Compliance (1996 NHMRC/ARMCANZ Guidelines)	Turnover (SM) <sup>5</sup>	Residential Residential Turnover? <sup>6</sup>	Debt in Residential Residential Bill (\$/ET) <sup>7</sup>	Turnover Residential Residential Bill (\$/Assessment) <sup>8</sup>	Total Residential Residential Turnover? <sup>9</sup>	Typical Developer Charge (\$/ET) <sup>10</sup>	Economic Debt in Residential Residential Bill (\$/Assessment) <sup>11</sup>	Current Replacement Cost of System Assets (\$M) <sup>12</sup>	Payer-for-life Water Price? <sup>13</sup>	Strategic Business Plan Prepared? <sup>14</sup>
<b>Totals<sup>6</sup></b>	756,000	357,500 M.L.	215Km <sup>2</sup> connected property	\$439M	79.95 Yes	\$9,113	77/113 Complicated	\$368M	\$705 per 100% Connected Compliant	\$4,126 (yes)	\$4126 (yes)	\$10,800M	\$10,800M	10/176 (note 10)	39 Yrs* <sup>15</sup>

**Notes:**

1. This table shows the key 2003/04 performance indicators/characteristics for NSW water utilities. A more detailed breakdown is provided in Tables 6 to 18 and Figures 1 to 81 of the *2003/04 NSW Water Supply and Sewerage Benchmarking Report* ([www.dews.nsw.gov.au/water](http://www.dews.nsw.gov.au/water)).

This table enables L.WUs to carry out an overall comparison of their performance with that of other NSW L.WUs. However, it is important to ensure that any such comparisons are made with L.WUs with similar businesses. (Refer to pages 14, 17 and 18 of the report).

2. No WS means not responsible for water supply; No SGE means not responsible for sewerage.

3. In NSW in 2003/04, there were 129 water utilities comprising:

- 3 metropolitan water utilities (Sydney and Hunter Water Corporations and Hawkesbury Council), and
- 126 non-metropolitan Local Water Utilities (L.WUs).

The 126 L.WUs comprised:

- 121 local government councils (under *Local Government Act 1993*),
- 5 L.WUs (Gosford Council, Wyong Council, Cobar WB, Fish River WS, Australian Inland) under the *Water Management Act 2000*.

Of the 126 L.WUs,

- 113 were responsible for water supply (including 3 for bulk supply [Cobar WB, Fish River WS, Rous Water]),
  - 118 were responsible for sewerage.
  - 105 were responsible for both water supply and sewerage, 8 for water supply only and 13 for sewerage only.
- Following recent council amalgamations, the number of L.WUs was 107 in June 2004. The results for the new amalgamated L.WUs are shown as Nos. 131 to 145 in the table. In addition, Bathurst Regional, Cooma-Monaro Lithgow, Queanbeyan, Richmond Valley, Tumut and Yass Valley Councils were involved in amalgamations but these did not affect their water supply and sewerage responsibilities.

4. Where an L.WU has not reported an item for 2003/04, the value previously reported has been used where available.

Such values are shown in this table in italics bold.

5. The number of sewerage assessments for L.WUs responsible for sewerage only (column 11) is shown left justified.

6. The totals shown above are for non-metropolitan NSW and therefore exclude Sydney & Hunter Water Corporations and Hawkesbury Council. The totals for the Water Supply Assessments (column 11), Annual Water Consumption (column 2) and Turnover (column 4) exclude double-counting where bulk water suppliers are involved.

7. Total number of water supply assessments in non-metropolitan NSW was 758,000 (column 1).

8. Total annual water consumption was 325,000 ML (column 2).

9. Total turnover for water supply and sewerage was \$806M (column 13) and the current replacement cost of assets was \$10,600M (column 19).

10. Columns (3), (13), (15), (16), (17) and (18) show that the Statewide medians (non-metropolitan) were:

- Average annual residential water consumption - 215KL/connected property (column 3).

- Typical residential bill for water and sewerage - \$705/assessment column (13a). The 2004/05 typical residential bill for water supply has been calculated on the basis of each L.WU's 2004/05 tariff using the 2003/04 average annual residential water consumption (column 3). The typical residential bill for sewerage is based on the L.WU's access charge (column 1) of Appendix F except for 5 L.WUs where account was also taken of the L.WU's usage charges.

- Typical developer charge for water and sewerage - \$5,400/ET (column 14). For L.WUs with water supply only or sewerage only, this is shown left justified in column (14) while the result for amalgamated L.WUs are shown in brackets. Refer also to Appendices E and F.

- Economic real rate of return (ERRR) for water and sewerage - 2.5% (column 15). 94 of the 126 non-metropolitan L.WUs had a positive real rate of return. Refer also to Appendices E and F.

- Debt/equity for water and sewerage - 2.7% (column 16).

- Operation, maintenance and administration (OMA) cost for water and sewerage - \$520/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 Appendices E and F.
- Management cost for water supply and sewerage - \$195/connected property (column 18). For water supply only or sewerage only L.WUs, the management cost is shown left justified in column (18).

- 8. **Category 1 Businesses** - Category 1 businesses are defined as having an annual turnover of over \$2M (NSW Government's Policy Statement on Application of National Competition Policy to Local Government, June 1996 ).
- 51 L.WUs are Category 1 businesses (shown in bold). 31 of these are Category 1 for both water supply and sewerage, 18 are Category 1 for water supply only, and 2 are Category 2 for sewerage only.
- Column (4) shows there were 49 L.WUs responsible for water supply with a turnover of over \$2M, and 33 such utilities responsible for sewerage (column 9).
- 9. Pay-for-use water supply tariff - 79 of the 95 water supply L.WUs have a pay-for-use water supply tariff in 2004/05 (ie, a two-part tariff or an inclining block tariff) (column 5). In addition, 89 of these water supply L.WUs (column 6) and 74 of the 101 L.WUs responsible for sewerage (column 10) have residential tariffs independent of land value. Refer also to Appendix E. Such tariffs comply with IPART recommendations and COAG Water Reforms.

- 10. Pay-for-User Pricing & Full Cost Recovery - 45 of the 95 L.WUs have pay-for-use water supply pricing in for each of water supply and sewerage. Such L.WUs comply with a positive ERRR (Appendices E and F)
- 11. Physical and chemical water quality - 25% of the 25,500 physical samples and 97% of the 31,600 chemical samples tested for NSW L.WUs achieved 100% compliance with the 1996 NHMRC/ARMCANZ Guidelines. Column (7) shows that 92 L.WUs complied with chemical water quality (health related).

- 12. Microbiological water quality - E. coli contamination is the primary health-related indicator. E. coli - 98% of the 25,000 samples tested for NSW L.WUs achieved 100% compliance with the 1996 NHMRC/ARMCANZ Guidelines. 77 out of 113 L.WUs complied with these guidelines (column 8).
- 13. BOD - 96% of the 4,500 sampling days for NSW L.WUs achieved 100% compliance with the 90-percentile limit of their DEC BOD (Biodechemical Oxygen Demand). 63 out of 108 L.WUs licenced by the DEC achieved 100% BOD compliance (column 11) (10 L.WUs had no DEC discharge licence (NL)).
- 14. SS - 92% of the 4,600 sampling days for NSW L.WUs achieved 100% compliance with the 90-percentile limit of their DEC licence for SS (Suspended Solids). 36 out of 108 L.WUs licenced by the DEC achieved 100% SS compliance (column 12) (10 L.WUs had no DEC discharge licence (NL)).

- 15. Strategic Business Plans - 69 L.WUs have completed their water supply and sewerage Strategic Business Plans (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. A further 39 L.WUs have prepared draft Strategic Business Plans for their businesses, but further development of these draft business plans is required (shown as "Yes" in column 21).
- 16. The performance indicators for Sydney and Hunter Water Corporations are from *NSWAD facts 2004*.

## Appendix E - Water Supply - Residential Charges, Bills, Cost Recovery

WATER UTILITY	Type of Tariff	RESIDENTIAL CHARGES(OMA)						RESIDENTIAL BILLS						COST RECOVERY						
		(1) 204/05	(2) 200/04	(3) 200/03	(4) 200/04	(5) 200/04	(6) 200/04	Usage Charge for >50kL/a (c.kL)	Operating Cost (OMA) (c.kL)	Typical Residential Charge (SEI)	Typical Residential Bill (Assessment)	Average Residential Bill (Property)	Bill for Customer using 250kL/a (Assessment)	OMA + Depreciation (Property)	(11) (10)	Economic Real Rate of Return (%)	Residential Non-residential Charges (% of residential bills)	Revenue from Usage Charges (% of non- residential bills)	Connected Properties (15)	
1 Albany	AMALGAMATED	153	153	76	✓	NIL	NIL	15*	44*	36	36	41	40	1,500	1,500	4,665	247	247	225	
2 Armidale Duneseq	Inclining Block	180	180	180	✓	✓	NIL	NIL	70*	75*	76	85	91	90	3,620	3,620	3,620	378	369	355
3 Ballina (Reticulator)	Inclining Block	90	90	90	✓	✓	NIL	NIL	72*	65	67	106	94	4,510	4,510	4,510	31	231	270	
4 Barnamald (Dual Supply)	Two Part	462	456	340	x	✓	NIL	NIL	55*	14	16	12	16	910	910	462	456	505	513	
5 Barriaba	AMALGAMATED	455	485	250	✓	✓	300	65	82	72	137	128	485	485	485	485	485	485		
6 Bathurst Regional	45kL Allowance	250	250	250	✓	✓	45	45	50*	44	55	64	58	1,960	2,060	21,56	375	375	420	
7 Bega Valley (Unfiltered)	Two Part	146	146	146	✓	✓	NIL	NIL	82	88	79	88	75	94	2,290	2,290	4,500	289	289	324
8 Bellinger (Unfiltered)	Two Part	200	207	207	✓	✓	NIL	NIL	61	62	38	44	50	62	5,500	4,310	6,136	340	340	348
9 Bergman (Dual Supply)	250kL Allowance	465	574	489	✓	✓	240	250	58*	43	37	35	44	475	475	520	533	532	545	
10 Bungara	AMALGAMATED	333	344	No WS	✓	✓	320	170	29	50	32	333	344	346	413	333	333	400	301	
11 Bland	No WS																			
12 Bayneay	Inclining Block	518	549	195	x	✓	700	78	60*	59	60	66	62	518	549	520	588	619	632	
13 Begian	Inclining Block	350	360	373	✓	✓	NIL	NIL	41*	53	55	78	59	1,190	1,190	1,280	468	468	561	
14 Bombala	Two Part	390	390	300	✓	✓	NIL	NIL	70	100	78	62	85	400	400	400	454	576	521	
15 Borovora	Two Part	420	434	450	✓	✓	NIL	NIL	37	37	68	31	41	22	400	400	400	579	603	590
16 Bourke (Dual Supply)	Unmetered	555	600	648	x	x														
17 Buxcarina	Inclining Block	226	233	185	✓	✓	200	NIL	65*	93	88	152	148	288	288	373	365	408	318	
18 Australian Island	Two Part (Reticulator)	95	95	95	✓	✓	NIL	NIL	92	96	81	74	118	32	6,460	6,460	6,360	258	264	291
19 Byron (Reticulator)	Inclining Block	544	520	470	x	✓	300	NIL	175*	71*	69	78	90	88	400	400	400	520	576	521
20 Cabonne	500kL Allowance	315	315	315	✓	✓	500	500	28*	43	32	27	34	818	843	863	326	315	315	
21 Carrathool (Groundwater)	Inclining Block	504	515	500	✓	✓	100	NIL	280*	46	45	85	68	622	700	945	659	615	776	
22 Central Darling (Dual Supply)	Two Part	120	124	124	✓	✓	NIL	NIL	105*	64	61	70	92	3,000	3,000	3,000	419	419	408	
23 Central Tablelands (WS Only)	Inclining Block	527	517	300	x	✓	550	NIL	135*	53	67	40	31	1,400	1,400	1,408	600	600	616	
24 Cobar	AMALGAMATED	175	184	193	✓	✓	NIL	NIL	125	131	63	74	75	79	2,500	5,550	5,447	392	412	441
25 Coffs Harbour (Unfiltered)	AMALGAMATED	175	184	No WS	✓	✓	NIL	NIL	58*	74	97	112	108	400	359	393	359	358	378	
26 Coolah	Inclining Block																			
27 Coonham	Two Part	328	335	342	✓	✓	NIL	NIL	50	52	61	62	69	2,150	2,300	2,343	476	500	505	
28 Cooma-Monaro	AMALGAMATED	465	465	345	x	✓	683	683	68*	68	68	70	66	105	73	996	996	996	465	
29 Coonabarabran	800kL Allowance	186	194	194	x	✓	809	808	24*	12	11	15	11	452	453	1,780	169	169	168	
30 Coonamble (Groundwater)	Coonamble (Reticulator)	289	298	298	x	✓	219	219	113*	113	59	58	86	101	2,000	2,000	2,000	393	393	359
31 Copmanhurst (Unfiltered)	No WS																			
32 Copmanhurst (Unfiltered)	AMALGAMATED	280	212	140	✓	✓	<50	NIL	50*	20	21	22	26	234	396	350	395	345	246	
33 Cowra	Inclining Block	310	320	330	✓	✓	NIL	NIL	27*	85	68	54	83	2,500	2,500	2,500	422	422	407	
34 Crookwell	AMALGAMATED	582	375	152	x	✓	NIL	NIL	82*	80	72	96	127	760	780	810	592	592	580	
35 Culcairn (Groundwater)	Inclining Block	152	152	152	✓	✓	238	238	64	64	35	36	34	54	1,780	1,780	1,780	169	169	168
36 Deniliquin	Two Part	494	519	460	✓	✓	100	NIL	56*	15*	23	25	24	28	479	479	450	519	519	564
37 Dubbo	Two Part	210	210	210	✓	✓	NIL	NIL	52	51	46	54	52	3,250	2,430	2,510	472	472	448	
38 Dungog (Reticulator)	Inclining Block	258	180	189	✓	✓	NIL	NIL	124*	32	34	43	56	2,650	2,650	319	319	310	355	
39 Eurobodalla (Unfiltered)	Two Part	230	220	220	✓	✓	NIL	NIL	80	100	73	85	99	95	1,670	5,000	5,000	364	385	393
40 Fish River WS (Unfiltered)	MAQ MAQ																			
41 Fish River WS (Unfiltered), Bulk Salt	Inclining Block	279	289	288	✓	✓	NIL	NIL	26*	30*	20	18	25	37	450	650	670	418	418	391
42 Forbes	Two Part	265	275	255	✓	✓	NIL	NIL	30	45*	31	33	29	29	421	421	327	321	366	348
43 Gilgandra (Groundwater)																				

Note: \* Inclining block or multiple tariffs apply as shown in Table 6A. Bills and charges are in Dollars of the Year.

## Appendix E - Water Supply - Residential Charges, Bills, Cost Recovery

WATER UTILITY	Type of Tariff	RESIDENTIAL CHARGES/OMA										RESIDENTIAL BILLS										COST RECOVERY										
		(1)	Access Charge (or Minimum) (S)	Allowance (kL)	Independent of Land (kL)	Usage Charge for 250kL/a (c/kL)	Operating Cost (OMA) (c/kL)	Typical Developer Charge (S/E/T)	Typical Residential Bill (\$/assessment)	Average Residential Bill (\$/property)	Bill for Customer using 250kL/a (Assessment)	OMA + Depreciation (\$/property)	Economic Real Rate of Return (%)	Revenue from Usage Charges Residential Non-residential (% of residential bills)	Revenue from Usage Charges Residential Non-residential (% of non- residential bills)	Connected Properties																
		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)																	
44 Glen Innes		200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200	200/200/200/200/200
45 Gloucester																																
46 Goldenfields (Bulk Supplier)																																
47 Goldenfields (Retailer)																																
48 Goldenfields (Combined)																																
49 Gosford																																
50 Goulburn																																
51 Grafton (Unfiltered)																																
52 Griffith																																
53 Gundagai																																
54 Gunnedah (Groundwater)																																
55 Gunnedung (Groundwater)																																
56 Guyra																																
57 Harden (Retailer)																																
58 Hastings (Unfiltered)																																
58-A Hawkesbury																																
59 Hay (Dual Supply)																																
60 Holbrook																																
61 Hueme																																
62 Hunter Water																																
63 Inverell																																
64 Jerilderie (Dual Supply)																																
65 Jume																																
66 Kempsey (Groundwater)																																
67 Kogeele																																
68 Lachlan																																
69 Leton																																
70 Lismore (Retailer)																																
71 Lithgow																																
72 Lockhart																																
73 North Coast Water (Unfiltered)																																
74 Maclean																																
75 Manilla																																
76 Merriwa																																
77 MidCoast (Manning - Unfiltered)																																
78 MidCoast (Great Lakes - Unfiltered)																																
79 MidCoast (Combined - Unfiltered)																																
80 Moree Plains (Groundwater)																																
81 Mudge (Unfiltered)																																
82 Murrabree																																
83 Murray (Dual Supply)																																
84 Murramidge (Groundwater)																																
85 Murramundi																																
86 Muswellbrook																																
87 Nambucca (Groundwater)																																