Australian Government

National Water Commission

Draft National Benchmarking Framework: Performance Reporting Model for Urban Water Utilities

Consultation Paper

February 2006

ACKNOWLEDGEMENTS

This consultation paper was developed by the National Benchmarking Framework Roundtable Group, chaired by the National Water Commission, with representatives from the Department of Environment and Heritage (Commonwealth), Department of Agriculture, Fisheries and Forestry (Commonwealth), Essential Services Commission (VIC), Department of Sustainability and Environment (VIC), Independent Pricing and Regulatory Tribunal (NSW), Department of Energy, Utilities and Sustainability (NSW), Queensland Competition Authority (QLD), Department of Natural Resources and Mines (QLD), Department of Treasury and Finance (SA), Department of Water, Land and Biodiversity Conservation (SA), Department of Treasury and Finance (TAS), Office of Sustainability (ACT), Department of Natural Resources, Environment and the Arts (NT), and Department of Premier and Cabinet (WA). The assistance of the Essential Services Commission (VIC) in the preparation of the paper is particularly acknowledged.

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1 ABOUT THIS PAPER

In June 2004, the National Water Initiative (NWI) was signed by the Prime Minister and the Premiers of New South Wales, Queensland, Victoria and South Australia, and the Chief Ministers of the Australian Capital Territory and the Northern Territory. Tasmania signed up to the NWI in June 2005 and the Premier of Western Australia has recently indicated Western Australia's intention to sign up to the NWI. The NWI sets out objectives, outcomes and actions for the ongoing process of national water reform, and timelines to achieve this reform.

Under the NWI, parties have agreed to report independently, publicly, and on an annual basis, on benchmarking of pricing and service quality for urban and rural water utilities. The national benchmarking reports will provide for a comparison of water utility performance over time and between utilities, but will not report performance against predetermined benchmarks. A nationally consistent performance framework building on reporting already in place in the urban and rural water sectors will form the basis of these reports.

In September 2005, the National Water Commission (the Commission) led the formation of the National Benchmarking Roundtable Group (the Roundtable Group) with the NWI parties. The role of the Roundtable Group is to develop a national benchmarking framework for consideration by the NWI Committee. It is expected the NWI Committee will then make a recommendation on the proposed national benchmarking framework to the Natural Resource Management Ministerial Council for decision in November 2006. The Roundtable Group has met on a number of occasions since its formation, discussing the proposed approach to national performance monitoring and reporting, while also working to develop performance indicators and definitions.

The significant differences in the nature of urban and rural water utilities and the diversity of operating environments faced by these businesses make it impractical to develop a single set of performance indicators across both sectors. The Roundtable Group agreed that reporting the performance of urban water utilities and rural water utilities with separate sets of indicators would result in more meaningful reporting and comparison at a national level.

This consultation paper relates specifically to the development of an urban performance reporting model as part of the national framework[*]. A future consultation paper will focus on the development of rural performance reporting.

Consultation with stakeholders is an important part of developing a relevant and meaningful national framework. Consultation on the development of an urban performance reporting model has already taken place with water industry associations such as the Water Services Association of Australia (WSAA) and Australian Water Association (AWA).

This consultation paper is the next stage in this process. The purpose of this paper is to:

- provide an overview of the proposed model for urban performance reporting on the basis of core performance indicators to be reported on by all urban water utilities in Australia serving more than 10 000 connected properties[†]
- detail the proposed set of urban performance indicators (drawn largely from the WSAA and AWA indicators, the detailed performance indicators and definitions are set out in Appendix 1)
- identify issues for consultation and outline how interested parties can provide their feedback and input.

[*] 'urban' includes 'metropolitan' and 'non-metropolitan' as referred to in the NWI, and 'major' and 'non-major' as referred to in WSAA and AWA reporting.

[†] WSAA and state agencies are encouraged to continue to report performance in greater detail in order to facilitate more detailed performance monitoring and improvement.

Engaging stakeholders with an interest and involvement in urban water sector issues will be a key factor in ensuring the effectiveness of the national benchmarking framework. The Roundtable Group encourages stakeholders to provide feedback on the proposed performance indicators and definitions, and to identify any additional issues which should be addressed.

2 INTRODUCTION

As signatories to the NWI, New South Wales, Queensland, Victoria, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory have agreed to report independently, publicly, and on an annual basis, on benchmarking of pricing and service quality for urban and rural water utilities.

The purpose of establishing a national benchmarking framework covering these sectors is to:

- identify baseline performance of individual businesses and provide incentives for improvement over time
- make comparisons between businesses and jurisdictions by gauging the relative performance of water businesses
- inform customers about the level of service they are receiving
- inform the decision making processes of government, regulatory agencies and water businesses, and
- encourage greater transparency around pricing and price setting processes.

Experience from the urban water and energy sectors suggests that performance reporting can be a strong performance driver. The urban water utilities have reported significantly improved performance since performance reporting commenced, with benefits to customers resulting from improved services and standards.

However, designing a national benchmarking framework poses a number of challenges in terms of designing a framework that delivers the desired outcomes. These include:

- reconciling the different and complex legislative and policy arrangements affecting different businesses within the water sector, and the introduction of a national framework which is occurring at a time of significant policy development and change in the water sector
- reconciling the expectations and obligations being imposed on the water utilities by government, regulators and customers' service delivery needs and preferences
- ensuring that the approach to a national framework strikes an appropriate balance between the needs of water customers, businesses, policy makers and regulators
- ensuring that the national framework reflects the diverse nature of the services provided and the different operating environments faced by urban and rural water utilities
- ensuring that data collection arrangements are manageable and efficient across the different jurisdictions, taking into account current reporting requirements
- ensuring that the costs of compliance for smaller water utilities are not unduly onerous, and
- ensuring that consultation and decision making on key issues occurs within relatively tight timelines.

With these challenges in mind, the Roundtable Group undertook to:

- establish principles to guide the development of a national framework
- identify the broad areas in which performance should be monitored
- identify the performance indicators that should apply to urban and rural water utilities
- develop definitions and thresholds to guide the collection of performance data, and
- establish processes and timelines for reporting performance data and auditing information to verify its accuracy.

These issues are discussed in the following sections.

3 A NATIONAL BENCHMARKING FRAMEWORK

3.1 The development of a national benchmarking framework

In establishing a national benchmarking framework, the Roundtable Group has noted the commitment of parties under the NWI to build on those performance frameworks already in place in the urban and rural water sectors. In doing so, the Roundtable Group recognised the need to consider aspects of both industry and regulatory reporting, and be mindful of the different services provided by urban and rural water businesses and factors influencing their performance.

In developing a national framework and selecting and defining appropriate indicators, the Roundtable Group is guided by the following principles:

- performance indicators need to be relevant to the services provided by each business and to a national assessment of relative performance
- performance indicators need to be meaningful and relate to key issues affecting both businesses and their customers
- performance indicators need to be defined and collected on a consistent basis across businesses to provide a valid measure of actual performance and to allow reasonable comparisons
- the accuracy and reliability of information provided by businesses must be verifiable
- the costs of collecting information and data need to be balanced against the benefits of collecting the information. The framework should focus on a core set of key performance indicators, so it is not unreasonably onerous or costly to implement, and
- wherever possible, the framework should draw on accepted existing performance indicators and processes to minimise the costs of collecting information and to aid comparisons over time.

3.2 The scope of a national benchmarking framework

The NWI recognises the benefit of developing consistent performance indicators across urban and rural water utilities and the Roundtable Group supports this view. Water businesses already collect and report performance data on a range of indicators for various purposes and bodies. Accordingly, a number of information sources have assisted the Roundtable Group in determining the scope of the national framework and considering appropriate indicators. The Group has given significant consideration to:

- the reporting requirements of government agencies
- performance indicators and definitions used by water businesses for the purposes of commercial reporting to boards and the government, and
- benchmarking activities undertaken by water industry associations such as WSAA, AWA and the Australian National Committee on Irrigation and drainage.

The Roundtable Group has been working with industry associations to ensure that the scope of the national framework and associated performance indicators is meaningful and avoids any unnecessary duplication or inconsistency with current performance reporting.

Existing performance reporting frameworks cover the core issues of public health, quality, network reliability and efficiency and customer service. Information regarding financial performance, expenditure against forecasts and prices is also reported by some businesses. Environmental performance indicators are currently reported, reflecting the importance of sustainability issues in the water sector. Reporting on the design and structure of prices provides a signal to customers about the costs of providing services and ensuring that customers understand the nature of the prices being charged.

Based on these considerations, the Roundtable Group considers that the scope of the national benchmarking framework should provide a high level overview of the following key areas:

- **baseline explanatory data** (for example, general utility and resource management data such as customer numbers and length of mains)
- **social data** (for example, data relating to charges and bills and levels of service)
- **health data** (for example, compliance with water quality guidelines and standards)
- **environmental data** (for example, data relating to residential consumption per property, environmental compliance and re-use and recycling), and
- **financial data** (for example, data relating to pricing, operating cost per property, full cost recovery and financial performance).

3.3 Separate models for urban and rural performance reporting

The significant differences in the nature of urban and rural water utilities and diversity of operating environments faced by these businesses makes it impractical to develop a single set of performance indicators across both sectors. Accordingly, the Roundtable Group proposes that the performance reporting requirements of urban and rural water utilities be detailed in separate models. Conforming to the principles and scope detailed above, the urban and rural models would form a consistent national framework.

A draft performance reporting model for rural water utilities is expected to become available for consultation in April 2006.

4 URBAN PERFORMANCE REPORTING

4.1 Proposed model

After consideration was given to various reporting models, the Roundtable Group agreed to propose accrediting WSAA to report on core performance indicators for urban water utilities selected by the NWI parties. WSAA will continue to collect and report more extensively on the performance of its members. The selection and definition of indicators, data collection and collation, auditing and reporting would be conducted as per the model outlined in the table below[§].

Summary table for the proposed urban water utility performance reporting model

Selection of indicator set	Definition	Collection	Collation	Auditing	Reporting
National indicator set determined by NWI parties in consultation with WSAA.	National performance indicators defined by NWI parties in consultation with WSAA.	National performance information collected by WSAA or states, by arrangement between these parties in each jurisdiction. Rights to national performance information would be held by NWI parties.	NWI parties contract WSAA to collate national performance information in accordance with agreed requirements.	Auditing of national performance information is managed by WSAA or jurisdictions, by arrangement between these parties in each jurisdiction[**]. The standards of auditing will need to at least meet the requirements agreed to by NWI parties and industry bodies.	NWI parties contract WSAA to prepare national performance reports conforming to NWI requirements.

It was agreed that the accreditation of WSAA to report the NWI urban indicators would need to be conditional on their agreement to the proposed model, and specific conditions, including:

- NWI urban indicators are made available to the public on the internet free of charge
- NWI parties retain ownership of performance data
- WSAA agrees to prepare and report league tables and graphs for NWI indicators[††], and
- WSAA agrees to recognise data audited by third parties in accordance with requirements agreed to by NWI parties.

With the broad agreement of the WSAA Board to the proposed model and the above conditions at their meeting on 14 February 2006[‡‡], the Roundtable Group recommend formalising WSAA's role in national performance reporting.

[§] A similar model is proposed to report the performance of rural water utilities.

[**] In almost all cases, collection of data and management of audits of information from non-WSAA member utilities will be carried out by the relevant state or territory, recognising the statutory responsibility of some states to undertake data collection and auditing and the need to avoid duplication.

[††] For 2006/07 financial year information onwards.

[‡‡] The support of the WSAA Board for league table and graph reporting is conditional on contextual information being provided in the National Benchmarking Report to facilitate meaningful comparisons between jurisdictions.

4.2 Performance indicators

The Roundtable Group's proposed performance indicators for urban water utilities are outlined in Appendix 1, in line with the desired coverage of a national framework summarised above.

The bulk of the businesses in the urban water sector have both wholesale and retail functions. The Roundtable Group has agreed to treat water utilities as a single entity for reporting on all indicators. Where businesses in the urban water sector are providing both water supply and sewerage services, the Roundtable Group consider it appropriate to report on the performance of these operations separately as far as possible.

The Roundtable Group considers that performance indicators should be stable over time to facilitate the collection of time-series data and allow trends in performance to be monitored. However, it will be necessary to review the performance indicators to ensure that they remain relevant and meaningful, address any inconsistencies in information collection across businesses and to take into account future developments. It has been suggested that reviewing indicators at five year intervals could provide the appropriate balance.

4.3 Determining definitions

The Roundtable Group formed a Technical Sub Group to provide advice and assist in establishing appropriate definitions and realistic thresholds where relevant. The Technical Sub Group consulted closely with WSAA to ensure a high level of consistency between the definition of the proposed national performance indicators and WSAA key performance indicators. The draft definitions are listed with the proposed indicators in Appendix 1. It is recognised that a more detailed definition document will be required to put the proposed indicator set into operation.

Clear and common definitions for each performance indicator in the national benchmarking framework will help to ensure that the information reported by each business is consistent. This consistency will allow performance to be compared across businesses with similar functions on a fair and reasonable basis.

The Roundtable Group is keen to consult with stakeholders on the appropriateness of the proposed indicators and definitions.

4.4 Determining thresholds

The Roundtable Group has agreed that urban water utilities with greater than or equal to 10 000 connected properties will be required to report as part of the national benchmarking framework. This threshold was chosen to maintain consistency with previous AWA reporting.

4.5 Data collection and reporting

The Roundtable Group recognises that many urban water businesses already gather much of the performance information that is being proposed as part of the national benchmarking framework. Given the high degree of consistency between current reporting obligations and the proposed performance indicators, the Roundtable Group considers that 2005–06 financial year information could be collected in the third quarter of 2006 to produce the first national urban performance report in the first quarter of 2007.

The Roundtable Group propose that the NWI parties contract WSAA to prepare the first national benchmarking report for urban water utilities based on information for 2005-06 in the first quarter of 2007. The national benchmarking report will then be made publicly available on the web.

The Roundtable Group is aware that urban water utilities will not be in a position to report on all national performance indicators in the first year, but will look to water utilities to report on all indicators for which they currently collect information. Urban water utilities that are not members of WSAA are not obliged to report performance for 2005-06, but may choose to do so.

It has been suggested that where urban water utilities have information which is sought as part of the national benchmarking framework that has not been published as part of WSAA*facts* over the past five years (i.e. from 2000–01 onwards), and this information is readily available and accurate, then providing this information may be of value. The Roundtable Group is interested in stakeholders' views on this suggestion. There would be no obligation on water utilities to provide this information as part of the national benchmarking framework.

The Roundtable Group believes that most parties should be in a position to begin collecting information for the 2006-07 financial year from July 2006[§§]. It is recognised that there may be some transitional issues for individual water utilities (particularly for smaller businesses). Nevertheless, it will be necessary for utilities to report national performance information for the 2006-07 financial year to ensure that states and territories meet their commitments under the NWI.

Where businesses are unlikely to be able to begin collecting information for the 2006-07 financial year from July 2006, they are encouraged to discuss transitional arrangements with the party responsible for collecting this information in their jurisdiction and in particular, the earliest possible timeline from which they will be able to collect and report the information.

The timeline for the collection and reporting of national performance information for the 2006-07 financial year onwards is expected to be:

- third quarter of the calendar year – collect previous financial year data and commence audit[***]
- fourth quarter of the calendar year – finish audit and draft report
- first quarter of the following calendar year – finalise and release national report

4.6 Auditing arrangements

Independent auditing is required to ensure the national benchmarking framework is underpinned by accurate and verifiable information and a transparent and consistent approach to the process of collecting and reporting data across water utilities. The Roundtable Group is developing auditing principles to ensure a consistent approach to key issues such as independence, the absence of conflict of interest, necessary level of experience and expertise, adherence to relevant standards, the need for joint briefings of auditors, etc. The development of these principles will help to ensure a consistent approach to auditing and identify opportunities to reduce duplication of effort and minimise cost.

The audit process would assess the collection of data (i.e. whether the data is based on sound records and whether the systems and processes that are used are satisfactory) and the quality of data (i.e. whether the data matches previously reported data and whether there is missing or unusual data that may suggest errors in data entry or the manipulation of data).

It is proposed that for the purposes of national performance reporting, a comprehensive audit of urban water utilities be undertaken at a minimum of three-yearly intervals. Responsibility

[§§] Tasmania has advised that as Tasmanian councils do not currently have equivalent reporting systems, it is not expected that its councils will be in a position to begin collecting information for the 2006-07 financial year from July 2006.

[***] In audit years – see '4.6 Auditing arrangements' for more detail.

for management of the auditing of data would be shared between WSAA and the states and territories in accordance with requirements developed by the NWI parties, recognising the statutory responsibility of some states to undertake data collection and auditing and the need to avoid duplication.

Compliance with the audit would be assessed based on achievement by the utility of a result +/- a percentage value of the audit value for each indicator. As part of the development of auditing principles, the Roundtable Group is working to define the appropriate level of data accuracy for each indicator and seeks stakeholders' views on this issue.

It is proposed that data failing to meet the appropriate standard would not be published in the national benchmarking report. Where there is failure to comply, the reasons for failure would need to be reported by the auditor. Suggestions for improvement of reporting methods and systems may also be provided by the auditor.

With all urban water utilities expected to collect national benchmarking information for the financial year 2006-07, it is proposed that the first audit be undertaken in the second half of the 2007 calendar year. The Roundtable Group is keen to consult with stakeholders on the proposed auditing arrangements and key issues to be considered in developing auditing principles for urban performance reporting.

4.7 Minimising costs

The Roundtable Group has been conscious of the need to minimise the costs associated with any additional national performance reporting information requirements, noting that many urban water utilities already have a statutory responsibility to report information to a range of agencies and other commitments to report to industry associations. The proposed framework seeks to minimise the costs associated with the introduction of a national framework by, wherever possible:

- reducing duplication and inconsistencies between existing reporting arrangements
- improving consistency in the nature of indicators and definitions to be applied, and
- drawing on the existing information collected, and where possible exchanging the information directly rather than requiring multiple reporting by businesses of the same information to various agencies.

WSAA's costs for the collation and reporting of the national performance information have yet to be determined.

Where the introduction of performance monitoring and reporting arrangements is likely to impose significantly increased costs on urban water businesses, it would be useful for the businesses to clearly identify the nature and extent of these costs as part of the consultation process.

5 NEXT STEPS – HOW TO MAKE A SUBMISSION

5.1 The consultation process

There are a number of issues on which the Roundtable Group is keen to consult with urban water stakeholders on the development of the national benchmarking framework. As highlighted throughout the paper, the Roundtable Group would welcome stakeholders' views on:

- the proposed urban performance reporting model
- performance indicators and definitions
- data collection and reporting
- auditing arrangements, and
- costs.

The Roundtable Group encourages urban water stakeholders to respond to these issues and to identify any further issues that they consider should be addressed. Parties with an interest and involvement in urban water utilities are invited to provide feedback on the framework that will apply to urban water utilities by **31 March 2006**. Feedback on the framework can be provided by either:

- **Attending a briefing with Roundtable Group representatives**

Roundtable Group representatives will schedule briefings with key stakeholders in March 2006. The purpose of these briefings will be to provide an overview of the national framework and answer any questions. In addition, the Roundtable Groups also encourages interested parties to raise any additional issues at these briefings. These briefings are intended to reduce the need for interested parties to provide written submissions.

- **Making a formal submission to the Roundtable Group**

Parties with an interest and involvement in urban water utilities are invited to make a submission to the Roundtable Group. There is no specified format for a submission. Submissions may range from a short letter outlining your views on a particular issue to a longer document covering a range of issues. The Commission will receive submissions on behalf of the Roundtable Group. The Commission would prefer if submissions were sent via email, but submissions may also be sent by post or fax to:

Email	submissions@nwc.gov.au
Post	NWC Submissions, 95 Northbourne Avenue, Canberra ACT 2600
Fax	02 6102 6031

An electronic copy, if not already provided, would be appreciated either by email or on 3.5 inch diskette. The electronic version should be a Microsoft Word document (.doc) or similar.

Submissions will become publicly available documents once placed on the Commission's website at the end of the consultation period, unless marked confidential. Under certain circumstances the Commission can receive material in confidence. You are encouraged to contact the Commission before submitting such material. Such material should then be clearly marked 'IN CONFIDENCE'.

To help the Commission comply with privacy laws, each submission should be accompanied by a submission cover sheet on which submitting individuals and organisations can provide personal and organisational details.

5.2 Finalising the national benchmarking framework

It is proposed to quickly finalise the NWI performance indicators and definitions after the consultation process to enable applicable utilities to report their 2005–06 performance in the third quarter of the 2006 calendar year. As the data required for the bulk of the performance indicators is broadly aligned with the WSAA and AWA frameworks, it is expected that most utilities that already participate in these frameworks will be able to report for the majority of the indicators at this time, with reporting on all indicators expected for the 2006-07 financial year[†††].

The comments received at the briefings and any written comments received in response to this paper will be considered by the Roundtable Group before seeking final approval for a national framework from the Natural Resources Management Ministerial Council in November 2006.

[†††] See '4.5 Data collection and reporting' for more detail.

APPENDIX 1 DRAFT URBAN PERFORMANCE INDICATORS AND DEFINITIONS[‡‡‡]

Indicator			Recommended definition
UTILITY			
GENERAL			
Water supply	**1**	Number of connected properties	**A connected water/wastewater property is:** • Connected to the licensee's water/wastewater system • The subject of billing for water supply/wastewater collection - fixed and/or consumption • Any property which, at the end of the reporting period, is connected to the water/wastewater system and is separately billed for water/wastewater services - fixed and/or consumption This includes: • A connected non-rateable property, and • A connected but non-metered property It does NOT include: • A body corporate, or • A rated but unconnected property Notes • The owner and tenant of a rented property are NOT counted as separate properties. • A wastewater property which is also a trade wastewater property counts as one property.

[‡‡‡] All definitions are to be reported as at 30 June of the relevant financial year.

Indicator			Recommended definition
	2	Length of Mains	Total length of mains delivering potable or non-potable water. Includes transmission mains and reticulation. Excludes channels and service connections. Excludes recycled water mains.
	3	Properties served (per km of main)	The properties served per km of main are the total number of connected properties (residential plus non-residential) divided by the total length of mains.
	4	Volume from dams	The volume of potable and non-potable water extracted from dams (both on-stream and off-stream). Measurement is at the point of extraction not delivery.
	5	Volume from rivers	The volume of potable and non-potable water extracted from rivers. Measurement is at the point of extraction not delivery.
	6	Volume from desalination	The volume of potable and non-potable water treated using desalination plants. Measurement is at the point of discharge from the plant.
	7	Volume from groundwater	The volume extracted from groundwater is the sum of potable and non-potable water extracted from all reported sources. Measurement is at the point of extraction not delivery.
	8	Volume from recycling	Volume of potable and non-potable water supply from recycled water, i.e. treated wastewater effluent.
	9	Total from utility's sources of supply	Sum of 4, 5, 6, 7 and 8.

Indicator			Recommended definition
	10	Volume received from bulk supplier	The volume received from a bulk supplier.
	11	Number of water treatment works providing full treatment (i.e. excluding chlorination/aeration plants)	The number of water treatment works is the number of such works providing comprehensive water treatment. Generally, the treatment would include processes such as pre-treatment, filtration, disinfection and pH correction. Other specific treatment processes such as oxidation, activated carbon adsorption, softening, desalination, re-mineralisation may also be provided as needed for each water supply source to produce drinking water meeting Australian Drinking Water Guidelines 2004. Exclude facilities that do not provide filtration. There may be more than one water treatment works at any one location.
Sewerage	**12**	Number of Connected Properties	See 1
	13	Length of wastewater mains and channels	The total length of mains and channels, including all trunk, pressure and reticulation mains. It does not include lengths associated with property connection sewers or conduits carrying treated effluent. Notes: 1. Combined wastewater and stormwater mains are included. 2. Conduits and pipelines, e.g. feeding paddocks for grass and land filtration, downstream from the treatment plant are excluded.
	14	Properties served (per km of main)	See 3

Indicator			Recommended definition
WORKFORCE			
Water Supply	**15**	Not used	**Comment:** Consideration to be given to developing appropriate indicator in future.
Sewerage	**16**	Not used	**Comment:** Consideration to be given to developing appropriate indicator in future.
RESOURCE MANAGEMENT			
Water Supply	**17**	Total water supplied (ML)	The total metered volume of water (potable plus non-potable) supplied to customers over the reporting period plus estimated non-metered consumption. This comprises the sum of bulk water sales, residential water supplied, commercial and industrial water supplied and other water supplied (includes estimated non-metered consumption).
	18	Recycled water - town water substitution (% potable town water)	The volume of recycled water supplied to customers for non-potable town water use, as a percentage of the total town water supplied. Excludes effluent released to evaporation ponds.
	19	Recycled water - town water substitution (ML)	As for 18, reported in ML.

Indicator			Recommended definition
SOCIAL			
CHARGES AND BILLS			
Water Supply	**20**	Residential tariff	Provide full details of your current residential water supply tariff (i.e. 2006–07 tariff), including any environmental levies. Also include a website disclosing your non residential water supply tariff and water supply developer charges for new release areas.
	21	Typical residential bill ($/assessment)	The typical residential bill is the annual bill paid by a residential customer using the utility's average annual residential potable water consumption. Any environmental levy paid by customers should also be included. The typical residential bill is the principal indicator of the overall cost of a water supply or sewerage system. For utilities with multiple tariffs, report the bill on the basis of the tariff for the main the town. Report to also show the utility's average residential consumption per property.
	22	% residential revenue for usage charges	The revenue from residential usage charges as a percentage of the residential revenue from usage and access charges.
	23	% of customers to which restrictions or legal action applied for non-payment of bill	The total number of restrictions or legal actions applied for non-payment of water bills in the reporting period.

Indicator			Recommended definition
Sewerage	**24**	Residential tariff	Provide full details of your current residential sewerage tariff (i.e. 2006/07 tariff), including any environmental levies. Also include a website disclosing your non-residential sewerage tariff, liquid trade waste fees and charges and sewerage developer charges for new release areas.
	25	Typical residential bill ($/assessment)	The typical residential bill is the annual bill paid by a residential customer using the utility's average annual residential potable water consumption. This would normally consist of an access or minimum charge. Any usage component and any environmental levy paid by customers should also be included. The typical residential bill is the principal indicator of the overall cost of a water supply or sewerage system. For utilities with multiple tariffs, report the bill on the basis of the tariff for the main the town.
Water and Sewerage	**26**	Billing and account complaints (per 1000 properties)	Number of water supply or sewerage billing or account complaints received by the utility by person, mail, fax, phone or email. Complaints from separate customers arising from the same cause count as separate complaints. Complaint: A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water business. Includes: Any complaint about the bill received. Excludes: Inquiry on how bills are determined or customer concern their (correctly calculated) bill is too high.

Indicator			Recommended definition
HEALTH			
Water Supply	**27**	Urban properties without reticulated water supply service (%)	The number of properties in urban zoned land in cities, towns or villages in the utility's area of operations that are not served by a reticulated water supply, expressed as a percentage of the total number of connected properties plus the unserved properties. Includes properties in land zoned residential. Excludes properties in land zoned farming, rural, or rural-residential.
	28	Water quality guidelines	The basis used for water quality compliance (e.g. 2004 NHMRC/NRMMC Australian Drinking Water Guidelines).
	29	Risk Based Drinking Water Quality Management Plan?	Yes/No 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 more rigorous statutory requirements are also satisfactory.
	30	Has your Risk Based Drinking Water Quality Management Plan been 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

Indicator			Recommended definition
	31	Public disclosure of your drinking water quality performance in 2005/06?	Yes/No If yes, state the website where your water quality performance is publicly disclosed, including your detailed results for each of at least microbiological, physical and chemical criteria. Reported test results should be on the basis of tests carried by a NATA accredited laboratory or approved equivalent.
	32	Number of zones where microbiological compliance was achieved	Eg. 9/11 Compliance with the 2004 Australian Drinking Water Quality Guidelines requires that for each zone, at least 98% of scheduled samples contain no E.coli per 100mL of water over the 12 month period.
	33	% of population served where microbiological compliance was achieved	Similar criterion to 32 above, but based on the percentage of the total population served being within the complying zones - eg. 95%.

Indicator			Recommended definition
	34	Number of zones where chemical compliance was achieved	Eg. 7/11 Compliance with the 2004 Australian Drinking Water Quality Guidelines requires that for each zone, the 95th percentile reading of each health related monitored chemical parameter is used for assessments against ADWG 2004 Guideline levels over the 12 month period. • For contaminants sampled 30 or greater times during the year, the 95th percentile reading of each health related monitored chemical parameter should be used. • For contaminants sampled less than 30 times during the year, the maximum reading should be used for assessment of each health related monitored chemical parameter against ADWG 2004 Guideline levels. These should be assessed across each zone in a system and reported as the fraction of zones meeting requirements (eg. 7/11).

Indicator			Recommended definition
LEVELS OF SERVICE			
Water Supply	**35**	Water quality complaints (per 1000 properties)	Numbers of water quality complaints received by the utility by person, mail, fax, phone or email that are attributed to the utility's assets. Complaints from separate customers arising from the same cause count as separate complaints. Complaint: A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the water business. Includes: discolouration, taste, odour, stained washing, illness etc. Excludes: service interruption, supply adequacy, pressure restriction etc. Complaints from separate customers arising from the same cause count as separate complaints.
	36	Total complaints (per 1000 properties)	Total complaints includes complaints about water quality, reliability, affordability, billings, pressure and other complaints including the behaviour of staff or agents.
	37	Customer interruption frequency	The total number of properties affected by unplanned interruptions to service for the reporting period divided by the number of connected properties. Includes: each occurrence of unplanned interruptions to supply. Excludes: some reduction to the level of service but where normal activities (shower, washing machine, toilet flushing etc.) are still possible, breaks in house connection branches or planned interruptions.Interruption: Where the property is without a service due to any cause.Unplanned Interruption: An interruption caused by a fault in the utility's system. Planned Interruption: An interruption for which the utility has provided at least 24 hours' advanced notification (or as otherwise prescribed by regulatory requirements).

Indicator			Recommended definition
	38	Average duration of unplanned interruptions (hr)	The average duration for which a customer is without supply due to an unplanned interruption. [total minutes of interruption x number of customers affected/ total number of customers]
	39	Average time taken to restore an interrupted supply (hr)	The average time taken to restore an interrupted water supply is the time to restore it to the condition it was in prior to the interruption. The time is measured from the time of first notification to the time the interruption is repaired and full normal service is restored.
	40	Main breaks (per 100 km of main)	The total number of main breaks, bursts and leaks in all diameter mains for the reporting period. Breaks exclude those in the service connection to internal plumbing (i.e. mains to meter connection) and weeps or seepages associated with above ground mains that can be fixed without shutting down the main. Note: The "property service" includes any water infrastructure between the water main and the internal plumbing of the property. It may be owned by the utility, and is often referred to as the "mains to meter" service or connection. All water plumbing downstream of the meter is usually the property owner's asset.
Sewerage	**41**	Odour complaints (per 1000 properties)	This includes all odour complaints received, even where the business believes the odour was attributable to another non-business source. Odour complaints are often related to overflows, main breaks and other emissions. The number of odour complaints is thus representative of the impact of these occurrences on the population.

Indicator			Recommended definition
	42	Service complaints (per 1000 properties)	The total number of service complaints received relating to service quality and reliability. Does not include odour complaints. Complaint: A complaint is a written or verbal expression of dissatisfaction about an action, proposed action or failure to act by the utility. Includes: complaints concerning sewer blockages and spills (this is not counted as a complaint unless the customer expresses dissatisfaction about the interruption). Excludes: complaints about trade waste services, affordability, billings, and odours.
	43	Total complaints (per 1000 properties)	Total complaints includes complaints about quality of service, reliability, affordability, billings and other complaints including trade waste and the behaviour of staff or agents.
	44	Average wastewater break / choke repair time	The average time taken to repair a wastewater main, from the time of arrival on site to restoration of a sewerage service to customers. This may include bypassing of the broken main. Note: This does not include repair times relating to breaks, chokes and leaks in the property connection sewers or site restoration.

Indicator			Recommended definition
	45	Proportion of sewage treated to a primary level (%)	Percent of wastewater treated to a primary level = (Total volume of wastewater collected receiving primary treatment x 100%) / Total volume of wastewater collected Primary treatment is the first major treatment process in a wastewater treatment facility, principally designed to remove a substantial amount of suspended matter, but little or no colloidal or dissolved matter.
	46	Proportion of sewage treated to a secondary level (%)	Percent of wastewater treated to a secondary level = (Total volume of wastewater collected receiving secondary treatment x 100%) / Total volume of wastewater collected Secondary treatment is typically, a biological treatment process that is designed to remove approximately 85% of the BOD and influent suspended solids. Some nutrients may incidentally be removed, and ammonia may be converted to nitrate.
	47	Proportion of sewage treated to a tertiary level (%)	Percent of wastewater treated to a tertiary level = (Total volume of wastewater collected receiving tertiary treatment x 100%) / Total volume of wastewater collected Tertiary treatment is principally designed to remove nutrients, such as phosphorus (typically <2 mg/L) and/or nitrogen (typically <15 mg/L). A high percentage of effluent suspended solids (typically >95%) are also removed. Tertiary treatment may additionally target other contaminants of concern, e.g. toxicants and salt.
Water and Sewerage	**48**	Average connect time to a telephone operator (seconds)	The average time for a caller to be connected to an operator should they elect to, or be required to do so. It does not include calls that are resolved by an automated system, or hang-ups. Average time spent in getting through to an operator on the account / fault line. Measured from time the call is answered by "auto attendant" (IVR). Utilities with one contact point should report the figure against the account line. Average connect time to operator = Sum of individual wait time of all callers/Total number of calls

Indicator			Recommended definition
ENVIRONMENTAL			
GENERAL			
Water Supply	**49**	Average annual residential water consumption (kL/property)	Metered or estimated residential water consumption divided by the number of connected residential properties.
	50	Infrastructure leakage index	Infrastructure leakage index is the ratio of Current Annual Real Loss to Unavoidable Annual Real Loss. **Current annual real loss (CARL)**: The current annual real loss is the water leakage. **Unavoidable annual real loss (UARL)**: The unavoidable annual real loss is calculated from the equation UARL=(A x Lm/Nc + B + C x Lp/Nc) x P where A, B and C are constants, Lm is the length of main in km, Nc is the number of connections (as distinct from the number of connected properties), Lp is the total length in km of service connections from the property line to the customer meter and P is the average pressure in metres when pressurised. The UARL can also be calculated using the WSAA bench-loss software.
	51	Net greenhouse gas emissions	This is the net tonnes of CO2 equivalent emissions for the whole business and their activities. Conversion factors should be based on those provided by the Australian Greenhouse Office (www.greenhouse.gov.au/challenge/tools/workbook/factorsmethod_section2-2html#5.2") specific to the utility's location.

Indicator			Recommended definition
Sewerage	**52**	No. of sewage treatment works compliant at all times	Eg. 4/7 The total number of sewage treatment works that were compliant with licence conditionsrelated to sewage treatment works effluent at all times during the reporting period.
	53	% of wastewater volume treated that was compliant	(Volume of wastewater treated that was compliant x 100%) / Total volume of wastewater treated
	54	Compliance with environmental regulator - Wastewater	This indicator reports whether the compliance requirements of the environmental regulator were met for all wastewater systems, including reticulation networks. 'Non-compliance' is defined as where the business: • Does not meet any quantitative standards prescribed by the environmental regulator (or equivalent) in the business' licence (or equivalent instrument), or • Has received any financial or other penalty, or had any successful litigation against it by the environmental regulator (or equivalent) or its representative.
	55	Public disclosure of your sewage treatment works performance in 2005–06?	Yes/No If yes, state the website where your sewage treatment works performance is publicly disclosed, including your detailed results for each of at least Biochemical Oxygen Demand (BOD) and Suspended Solids (SS). Reported test results should be on the basis of tests carried by a NATA accredited laboratory or approved equivalent.

Indicator			Recommended definition
	56	Sewer main breaks and chokes (per 1000 properties)	The number of sewer chokes, breaks or leaks that occur during the reporting period. **Choke:** A choke is a partial or total blockage in a trunk or reticulation main (not a house connection branch) which may or may not result in a spill to the external environment from the sewer system.
	57	Sewer overflows to the environment (per 100 km of main)	The total number of wastewater overflows in wet AND dry weather during the financial year, of which the business is aware and can attribute to its infrastructure. It should include both contained and uncontained spills. **Overflow** When untreated wastewater spills or discharges and escapes from the wastewater system (i.e. pumping stations, pipes, maintenance holes or designed overflow structures) to the external environment. Overflows are those caused by system faults originating in the system under the utility's responsibility. This does NOT include: • Overflows caused by a blockage in the property connection sewer, or • Spills, discharges or overflows contained within emergency storages where no pollution of the environment occurs e.g. an emergency storage tunnel.
	58	Volume of sewage treated per property (kL/a)	The volume of sewage treated, measured at the inlet to the utility's sewage treatment works. Utilities whose sewage is treated by others should not report for this indicator.
	59	Recycled water (% of effluent recycled)	Recycled water is the volume of treated sewage effluent reused. Includes internal recycling within treatment works but excludes evaporation. The percentage of recycling is calculated as the volume recycled divided by the total volume of effluent produced.

Indicator			Recommended definition
	60	Recycled water (ML)	Volume of recycled water reused.
	61	Biosolids reuse (%)	Biosolids (tonnes of dry solids) that is beneficially used as an input for some other process (eg. production of energy, or as a plant nutrient supplement or soil amendment) expressed as % of total biosolids produced (may exceed 100%, eg. where biosolids produced in previous years are reused in the current financial year).
ECONOMIC			
FINANCIAL			
Water Supply	**62**	Total revenue	Total revenue is the revenue from operations. Includes revenue from pay for use and base rate charges for provision of water and wastewater services, special levies, revenue from asset sales, receipts from governments for specific agreed services (e.g. CSOs), all developer cash contributions and assets and other revenue from operations which would otherwise be included. Excludes all non-core business revenues, funds received for specific capital works from governments, equity contributions from governments and any abnormal revenue. **Note:** The above definition for total revenue includes developer charges and developer provided assets, which are not included in the WSAA definition.
	63	Capital works grants	Funds received from governments for specific capital works.
	64	Total revenue	See 62
	65	Capital works grants	Funds received from governments for specific capital works.

Indicator			Recommended definition
	66	Economic Real Rate of Return (%)	Revenue from operations less operating expenses (OMA + current cost depreciation) divided by written down replacement value of operational assets. Revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets. **Written down replacement cost of fixed assets** The current cost of replacing the service potential of fixed assets based on current technology at the end of the relevant financial year. The WDRC may not be the same value that is reported in financial statements. Depreciation expense should also be based on WDRC.
Sewerage	**67**	Economic Real Rate of Return (%)	Revenue from operations less operating expenses (OMA + current cost depreciation) divided by written down replacement value of operational assets. Revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets. **Written down replacement cost of fixed assets** The current cost of replacing the service potential of fixed assets based on current technology at the end of the relevant financial year. The WDRC may not be the same value that is reported in financial statements. Depreciation expense should also be based on WDRC.
Water and Sewerage	**68**	Economic real rate of return (%)	Revenue from operations less operating expenses (OMA + current cost depreciation) divided by written down replacement value of operational assets. Revenue from operations excludes interest income, grants for acquisition of assets and gain/loss on disposal of assets. **Written down replacement cost of fixed assets** The current cost of replacing the service potential of fixed assets based on current technology at the end of the relevant financial year. The WDRC may not be the same value that is reported in financial statements. Depreciation expense should also be based on WDRC.

Indicator			Recommended definition
	69	Debt to equity (%)	**Debt:** Repayable borrowings (interest and non-interest bearing); interest bearing non-repayable borrowings; redeemable preference shares; and financial leases. Exclude creditors or provisions, but offsetting assets, such as contributions to sinking funds should not be deducted. **Equity:** Total assets less total liabilities for water supply and sewerage businesses. Exclude stormwater business. The classification of non-repayable, non-interest bearing borrowings from governments is the same as the treatment of them in the audited accounts.
	70	Interest cover	**EBIT** (total revenue less total expenses plus gross interest expenses less grants for acquisition of assets) divided by gross interest expense. **Interest**: The net cost of short, medium or long term loans for the whole utility.
	71	Accounting profit	Total revenue less total expenses plus gross interest expenses less grants for acquisition of assets less taxes or tax equivalents.
	72	Dividends	The amount provided for normal and special dividends including statutory levies on profits and revenues but excludes returns of capital.
	73	CSOs	Revenue from governments for specific agreed services to the community. **Comment:** A more detailed definition is being developed
	74	% of revenue from CSOs	Revenue from CSOs/total revenue

Indicator			Recommended definition
COST			
Water Supply	**75**	Operating cost (OMA) ($/property)	**Operating Cost:** Total operations, maintenance and administration costs. **Includes**: wages, overheads on wages, materials, plant, chemical, power, external bulk treatment/transfer costs, purchase of water, contracts and other operating costs that would normally be reported. **Excludes**: write downs of assets, write offs of retired or scrapped assets and the written down value of assets sold.
	76	Total cost	Total cost = Operating cost + Current cost depreciation **Comment**: Excludes 4% of written down cost of assets included in the WSAA definition
Sewerage	**77**	Operating cost (OMA) ($/property)	**Operating Cost:** Total operations, maintenance and administration costs. **Includes**: Wages, overheads on wages, materials, plant, chemical, power, external bulk treatment/transfer costs, purchase of water, contracts and other operating costs that would normally be reported. **Excludes**: Write downs of assets, write offs of retired or scrapped assets and the written down value of assets sold.
	78	Total cost	Total cost = Operating cost + Current cost depreciation **Comment**: Excludes 4% of written down cost of assets included in the WSAA definition