NATURAL RESOURCE MANAGEMENT MINISTERIAL COUNCIL

NATIONAL GUIDELINES FOR **RESIDENTIAL CUSTOMERS' WATER ACCOUNTS**

2006

Natural Resource Management Ministerial Council

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acknowledgements



acknowledgements

The Natural Resource Management Ministerial Council acknowledge the role of Pat McCafferty (Yarra Valley Water) in leading and co-ordinating the development of these Guidelines.

TWO

background

background

2.1 NATIONAL WATER INITIATIVE

In June 2004 the Council of Australian Governments (COAG) agreed to a National Water Initiative (NWI). The NWI is a major policy initiative that builds on the achievements of the 1994 COAG water reform framework and contains a number of actions relating to water management to be implemented by governments over the next decade. The full implementation of the NWI will result in a nationally-compatible, market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use that optimises economic, social and environmental outcomes by achieving the following objectives:

- clear and nationally compatible characteristics for secure *water access entitlements*;
- statutory provision of *environmental and other public benefit outcomes*; and improved management practices;
- progressive removal of barriers to water trading, broadening the water market, with an open trading market in place;
- clarity around the assignment of risk to future changes in the availability of water for the *consumptive pool*;
- recognition of connectivity between surface and groundwater resources and connected systems managed as a single resource;
- water accounting which is able to meet the information needs of different systems with respect to planning, monitoring, trading, environmental management and on-farm management;
- transparent, statutory-based water planning;
- completing the return of all currently over-allocated or overused systems to environmentally sustainable levels of extraction;
- addressing future adjustment issues that may impact on water users and communities and
- policy settings which facilitate water use efficiency and innovation in urban and rural areas.

The development of *National Guidelines for Residential Customers' Water Accounts* (the Guidelines) is part of the Delivery Pricing and Demand Management actions under the NWI. It will contribute to Best Practice Water Pricing and Urban Water Reform outcomes under the NWI. Specifically, these Guidelines address the following NWI pricing action to facilitate efficient water use:

> NWI paragraph 66 (iv): "development of national guidelines for customers' water accounts that provide information on their water use relative to equivalent households in the community by 2006."

2.2 OBJECTIVE OF THE GUIDELINES

Customers' water accounts provide a significant opportunity to further engage customers in relation to water conservation. The objective of these Guidelines is to identify the key elements that would make Australian residential[1] customers' water accounts more informative, particularly through the provision of comparative consumption data. The ultimate objective is for water service providers to provide customers with information that contributes to customers' own water saving efforts, by providing meaningful information on how their water usage compares with other customers - with the goal of triggering a water saving response in terms of water usage behaviour.

In achieving the above objective, it should be noted that utilising the water account as a means of encouraging water savings should be considered within the context of a broader, integrated set of water conservation initiatives.

[1] For the purposes of these Guidelines, Residential Customers are defined as a separately metered dwelling (house, flat or unit) that is billed for water consumption, and does not include customers/properties where the primary purpose of the property is commercial.

2.3 SCOPE OF THE GUIDELINES

These Guidelines apply to Australian water service providers that have a customer base base of greater than 50,000 separately metered water customers. The Guidelines are voluntary in nature, recognising that each state and territory and each water service provider, will progress this issue on different timescales. This is due to the unique circumstances that apply to each water service provider, in particular the sophistication of data available (such as end-use modelling of water use), the state of billing systems technology in place and differing customer expectations. Accordingly the Guidelines provide a means to support improvements as service providers update their business systems. While the Guidelines initially apply to larger water service providers, all water service providers are encouraged to apply the Guidelines to their customer billing practices.

THREE

process for developing the guidelines

process for developing the guidelines

3.1 EXPERT GROUP

The Australian Government, through the Department of the Environment and Heritage (DEH) in consultation with the NWI Committee, convened an Expert Group (EG) to draft these Guidelines.

The EG comprised water industry representatives including relevant associations such as the Water Services Association of Australia (WSAA) and the Australian Water Association (AWA); state government departments and the Australian Government Department of the Environment and Heritage. See Appendix 1 – NWI EG for Customer's Water Accounts.

The EG's role was to provide input into the development of the Guidelines and explore:

- the current information sets on customer water accounts being provided by water service providers across Australia;
- market research, customer feedback and any other relevant studies on the benefits of making water accounts more informative, and best practice in this regard;
- the type of information that might be provided to customers on their water accounts to make them more useful and informative, and to help empower customers in their water saving efforts;
- the issues associated with providing the required information on customer's water accounts;
- areas of future learning relevant to this area;
- options to ensure the Guidelines evolve so that they continue to be effective and relevant; and
- how the Guidelines might be evaluated in terms of effectiveness.

3.2 PROCESS

3.2.1 Development of Draft Guidelines

The EG was formed in December 2005 and held an initial meeting in Canberra on 30 January 2006. At this initial meeting, the EG discussed and gave in-principle support for the project scope, shared knowledge and examples of customer water accounts, and discussed relevant customer research.

Following the initial meeting, the Guidelines were developed by a subgroup of the EG before being collated by the EG chair and distributed for comment to the EG. As part of this process, relevant research that could contribute to the Guidelines was collated.

Comments by the EG were fed back to the Chair who made the suggested amendments and recirculated to the EG for final comment before commencing the consultation process.

3.2.2 Consultation

In the first phase of consultation, the draft Guidelines were circulated to relevant Australian, State and Territory government departments through the National Water Initiative Committee. Following incorporation of this feedback, the draft Guidelines underwent a second phase of targeted consultation for a period of six weeks. The draft Guidelines were circulated to a targeted group of stakeholders (chief executive officers of all Australian water service providers currently supplying more than 50,000 separately metered residential customers, WSAA and AWA members, customer consultative committees, the National Water Commission's Urban Water Advisory Group and relevant state government departments. The consultation period closed on 12 October 2006. Formal responses were received from water service providers, industry bodies, industry consultants and State Government departments.

process for developing the guidelines

The main issues raised from consultation were:

- strong support for introducing more comparative data on customers' water accounts;
- some water service providers commented on the potentially high costs associated with introducing more comparative data on customer accounts. Discussions with those organisations that have implemented comparative data on accounts indicates that it has not proven to be cost-prohibitive, and that there are various methods for reducing the costs of implementation. These organisations are available to provide further information to any water service provider wishing to introduce comparative data on customer accounts;
- provision of more comparative data on customers' accounts should be seen as one element of a broad approach to influencing water demand;
- the Guidelines should eventually apply to all water service providers, not just those supplying greater than 50,000 separately metered residential customers; and
- not all water service providers will be in a position to implement the Guidelines on the same timescale (e.g. due to flexibility of billing systems), but all could commence moving in the direction of providing greater comparative data to customers.

3.2.3 Stakeholder Comment Review

The EG reviewed comments independently before meeting to address the comments for the final draft of the Guidelines. The final draft guidelines were submitted to the Natural Resource Management and the Environment Protection and Heritage Standing Committees for consideration before submission to the Natural Resource Management Ministerial Council (NRMMC) for endorsement at its meeting on 24 November 2006.

3.2.4 Endorsement and Release of Guidelines

The Guidelines were endorsed by the 11th meeting of the NRMMC and released on 24 November 2006 by Australian Government, state and territory Water Ministers at the above meeting.

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4.1 THE NEED FOR A SET OF GUIDELINES

The promotion of water conservation is firmly on the national agenda. Securing water supplies for the future while ensuring we look after the environment has become one of our greatest challenges, especially in the context of extended drought, growing population, climate change and degraded river systems.

The challenge is to find smarter ways to use and manage our water supply, so that we are able to do more with less water. Climate change means that a number of actions need to be accelerated, including action on demand management focused on continuing efforts to save water through behaviour change.

Research[2] conducted by the Water Services Association of Australia (WSAA) established that while the existing information on customers' water accounts such as a graph displaying consumption for previous quarters was considered useful. Customers also expressed a preference to see how their water usage compared to other people's usage.

Australians are not very aware of how much water they use, or even how much they pay for it. Water accounts can provide more information to help Australians save water.

4.2 RELEVANT RESEARCH AND PAPERS

Market research relevant to information on water accounts has been conducted across Australia. In addition, several papers have been prepared identifying the opportunity to leverage customers' water accounts to provide more meaningful information that helps customers in their water saving efforts. Extracts of some of these are provided in Appendix 2.

4.3 OBJECTIVE

The Guidelines provide information for water service providers on a broad range of issues that should be considered in providing additional information on residential customers' water accounts. The primary objective, consistent with NWI paragraph 66 (iv), is for customers' water accounts to provide information on their water use relative to equivalent households in the community.

Key areas covered in these Guidelines are:

- Basis for comparison;
- Presentation of information on customers' water accounts;
- Options for comparative water use information; and
- Issues that should be considered in providing comparative information.

4.4 BASIS FOR COMPARISON AND UNIT OF MEASURE

Comparative data should be provided on a "daily" basis as other options do not take into account differing billing period lengths. (i.e., billing periods are never exactly the same length in time, and customers may also have reduced billing periods when they move in or out of a property). Daily consumption is based on the average daily consumption over the billing period and is calculated by dividing the consumption between meter readings by the intervening number of days. This ensures differing billing periods do not compromise the ability to compare.

The preferable unit of measure is Litres per day (L/day). Water industry charging for water is usually based on kilolitres, however research indicates that this is not a widely understood unit of measure in the community. If kilolitres must be used, then it is preferable to explain that 1 kilolitre equals 1000 litres. This should be noted clearly on the account.

[2] "Pricing for Demand Management" August 2004, undertaken in conjunction with Melbourne and Sydney water authorities coordinated by WSAA and prepared by KPMG.

4.5 PRESENTATION OF INFORMATION

- Graphical, showing water use between billing periods
- Numerical, actual litres per day calculated

4.6 OPTIONS FOR COMPARATIVE WATER USE INFORMATION

There are several options for providing comparative information. These range in sophistication and the ability of water service providers to implement these options will be based on a number of considerations such as:

- Billing system capability;
- Printing capability (printing capability is often dictated by external print house capability and billing software);
- Availability of data (e.g. access to data from billing database, end-use data etc.);
- Statistical analysis capability/forecasting expertise;
- Bill design; and
- Regulatory requirements for account content.

Listed below are current methods employed across Australia in providing comparative data. They range from provision of basic information to a more sophisticated level of detail. The levels listed show a step progression in the type of data provided to customers, broadly consistent with a step increase in the effort and cost for the water service provider in providing such information. It should be noted that progression in the development of customers' water accounts does not necessarily need to follow the order below – for example, depending on the water service provider's circumstances (e.g. data availability, billing system flexibility, customer demand for information), a water service provider might deem it appropriate to move directly from a basic account to a sophisticated account.

BASIC

"Level 1"

- Customers' own water use compared to previous billing period;
- Customers' own water use compared to same time last year.

Most water service providers in Australia provide this type of information.

INTERMEDIATE

"Level 2"

- Customers' own water use compared to metropolitan/urban average;
- Customers' own water use compared to local area average.

A number of water service providers have commenced providing this type of information, for example Western Water (Victoria) and Brisbane Water (Queensland).

ADVANCED

"Level 3"

- Customers' own water use compared to household (indoor) of same size;
- Customers' own water use compared to water efficient household (indoor) of same size.

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A small number of utilities provide this type of information, for example Brisbane Water (Queensland), South East Water and Yarra Valley Water (Victoria), and Sydney Water (New South Wales).

"Level 4"

- Customers' own water use compared to household and garden of same size;
- Customers' own water use compared to water efficient use by same household and garden size.

Yarra Valley Water currently provides this type of information on its customers' water accounts.

Future possibilities

- All of the above plus ability for the customers to request a "tailored" account mirroring their individual circumstances. For example, a customer could provide the water service provider with details of their individual household characteristics (such as number of people in the house, children if any, water appliances installed, type of garden, soil type etc). The water service provider could then provide a more accurate set of comparative data for the household to compare (such as a water efficient target for that household type);
- Inclusion of water saving tips on account, specific to the time of year or customers' individual circumstances as above;
- Ability for customers to nominate their own water use targets and have that information presented on their account. Recent social data studies conducted in Melbourne indicate that customers water use behaviour can be motivated when the customer has set their own target and is "competing" to achieve that target;
- Including government-set water consumption targets on accounts; and
- Technology – more regular consumption signals through smart meters could be effective.

4.7 CONSIDERATIONS

"Average" versus "Typical" (median) versus "Water Efficient" water statistics

- Averages can be misleading as very low users (e.g. vacant houses, holiday homes etc.) and very large users (e.g. residences on acre blocks with swimming pools) may be included in the data. Statistical analysis is required if this effect is to be addressed;
- To address this, median data has been used (e.g. Yarra Valley Water) to provide a "typical" comparison. For the particular customer segment, the mid-point in the consumption range has been used to identify typical water consumption for that segment;
- At the time of producing these Guidelines, it was not clear what effect average or median data has on households that already use less than the average or median. To address this, Sydney Water, South East Water and Yarra Valley Water have used comparisons to water efficient households of similar size.

Indoor versus Outdoor Water Use

Household (Indoor)

- The number of people residing at a property is a critical driver of consumption;
- The age of people residing at a property can influence total indoor water consumption; and
- Water use behaviours e.g. length of showers.

Gardens/Other (outdoor)

- The following characteristics are critical to the extent of garden/outdoor and or seasonal use at a property:
  - The size of the garden;
  - The type of plants (e.g. natives versus other);
  - The size of the lawn area;
  - Climate (e.g. tropical versus temperate);
  - Customer behaviour in relation to watering practices; and
  - Presence of swimming pools or spas.

Participation and Behavioural Change

Most importantly the provision of comparative data is merely a trigger, intended to result in a customer's response to saving water. Its aim is to engage and motivate beyond what the provision of simple usage and charging information would do. It is recommended that additional information accompany the account that provides customers with meaningful information or assistance in saving water. Where provision of comparative data results in a customer identifying that their water usage may be excessive, the customer requires timely guidance on what they can do to save water. Excessive comparative data without providing the tools for customers to save water will reduce the effectiveness of the water account in terms of saving water. Typical information that might accompany the account and comparative data includes:

- Hints and tips on saving water (e.g. mulching, checking for leaks, water efficient appliances etc.);
- Information on available programs that will help customers save water (e.g. government rebates);
- Guidance on where to find water saving ideas (e.g. web sites, affiliated partner organisations – such as garden centres etc.); and
- Seasonal water saving information that applies to the current billing period.

Water service providers will need to continually engage with customers and actively seek feedback on the usefulness of information provided and if it is influencing customers' water usage behaviours.

In summary, water service providers should consider including the following comparative information on water accounts:

- Use litres (L) as unit of measure on a daily comparative basis (i.e. L/day);
- Present information in both graphical and numerical format;
- Provide water comparative consumptive information for the following:
  - Customer's own water use and suburb/local area median;
  - Customer's own water use and household of same size and structure;
  - Customer's own water use and garden of same size; and/or
  - Customer's own water use and 'water efficient' use by same household structure and garden size.

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Other considerations

- One of the ways of encouraging behavioural change and developing customer profiles is to use a customer based billing system, as opposed to billing based on the metered property. This may not suit all systems, but can provide benefits e.g. consumption history, linking consumption with demographic information etc.
- The information on the account must be provided in a format that is easily understood and the layout/presentation attracts customers to read the information and take action. Water service providers are encouraged to market test account layout/content with customers; and
- Water service providers should aim to deliver customer accounts as close as possible to the meter reading date, so that the information provided is timely.

4.8 EXAMPLE ACCOUNTS

A number of examples of existing water accounts containing comparative data are shown in Appendix 3.

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applying the guidelines

applying the guidelines

IMPLEMENTATION CONSIDERATIONS

Each water service provider will face different circumstances in relation to transitioning from their current format of water bills/accounts to include the type of information contained in the Guidelines.

5.1 BILLING SYSTEMS

A scan of billing systems in place across the country indicates significant differences in the technology used, and this will limit the ability for certain water providers to make the water accounts more informative without incurring significant cost. For instance, some billing systems have capacity limitations impacting the ability of water service providers to store and hold water consumption data over extended periods of time. As a consequence, it may be appropriate for some water service providers to transition to a more informative account after they upgrade their billing system or migrate to a more flexible billing platform.

5.2 BILL PRINTING

The ability to provide information on the account is also impacted by bill print software capabilities and, where applicable, the technical capabilities of third party bill printing houses. In addition, bill "real estate" is also a consideration, i.e. the amount of space available to include additional information on the account after meeting all statutory and regulatory requirements.

5.3 DATA

Level 3 and 4 comparative data (referred to in the Guidelines) requires water service providers to hold sophisticated end-use consumption data, to enable household size comparisons and comparisons with "efficient" households. Few water service providers in Australia currently hold such data relating to their customer base (particularly in terms of statistically reliable data). This takes considerable effort and time to put in place.

Below is an outline of the data Yarra Valley Water required in order to provide typical and efficient water usage data (by household size) in its customers' accounts.

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COLLECTING WATER USE DATA FOR RESIDENTIAL CUSTOMERS AT YARRA VALLEY WATER

Residential end uses typically include showering, clothes washing, toilet use, dishwashing, miscellaneous tap use, garden irrigation and other outdoor use.

In order to determine the volume of water required for each size household it is necessary to understand both the ***usage behaviour*** for each end use and in most cases the typical ***appliance stock*** profile.

For example, the end use of showering requires typical behavioural data such as the average frequency and duration of showering. Additionally the relative share of standard and efficient showerheads and their respective average flow rates is also required. Similarly for the end use of clothes washing some behavioural data is required (e.g. average loads per week for each household size) and some appliance data is required (e.g. relative stock share of front-loading and top-loading washers and the average volume per load for each type of washer).

In the case of toilets, it is necessary to collect data on the stock of various toilets in use and also the average flush volumes for each type of toilet as well as the average usage data.

For garden use, there is a substantially lower correlation between the appliance in use and the volume of water used, hence seasonal differences in quarterly billing data are the best source of data for this end use.

The majority of the non-garden data required can be collected either by customer survey or measurement, and the various parameters generally lend themselves to either one or the other approach. Customer surveys can provide a lot of the appliance stock data, e.g. front-loading versus top-loading washing machines, presence of dishwashers, swimming pools, evaporative air conditioners etc.

If the survey methodology is a household visit (as opposed to telephone or mail surveys) the customer survey can also provide relatively good data on the type of showerheads and toilets in use and the toilet half and full flush volumes. In some cases a survey is the only source of data because there is no measurement technique suited to that end use. An example of this is car washing which cannot easily be measured because the appliance (in this case a tap) is not solely used for the purpose of car washing.

For end-use parameters that cannot be reliably collected by survey, it is necessary to collect the data by direct measurement. One way to do this is to utilise a high resolution meter and data logger to collect a continuous record of water use that can subsequently be disaggregated into the various end uses with water use analysis software. Parameters such as the average volume per load of front-loading and top-loading clothes washers, average frequency and duration of showers, average flow rates for efficient and standard showers and toilet usage patterns are best collected by measurement.

In providing "efficient" comparative data, water service providers should take steps to ensure that the data presented on customers' accounts represents the period in which the account applies, in order to reflect the seasonality of water use. Yarra Valley Water currently updates its efficient use information on a monthly basis.

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5.4 COST AND BENEFITS

Water service providers should take into account the cost and benefits associated with providing more comparative data on accounts. The scale (size of customer base) will influence this assessment. During the consultation phase, some water service providers commented on the potentially high costs associated with introducing more comparative data on customer accounts. Discussions with those organisations that have implemented comparative data on accounts indicates that it has not proven to be cost prohibitive, and that there are various methods for reducing the costs of implementation. These organisations are available to provide further information to any water service provider wishing to introduce comparative data on customer accounts.

The costs can be assessed on the following basis:

Start – up (once-off)

- Billing system changes to store customer consumption data (if necessary);
- Bill printing software changes to enable presentation of comparative data;
- Staff time (demand analysis, marketing and communications etc.) spent on design and content; and
- Collection of customer end-use data in relation to water use (this is being done by many water service providers for demand forecasting purposes, so only a proportion would be allocated to a cost benefit assessment of providing comparative data).

Ongoing

- Bill paper stock (if extra paper is used);
- Bill printing (if printing is more complicated); and
- Ongoing labour (to oversee the integrity of the process, the appropriateness of comparative data being provided, and where implemented, the tailored water saving messages accompanying the data).

In terms of benefits, while the development of more informative water accounts is still in its formative stages and it is too early to assess the effect this is having on customers' water use behaviour, the following benefits are expected:

- Customers develop a greater understanding of how their water use compares to others, resulting in a response to learn more about their own water use drivers;
- On understanding their individual water use drivers, customers take steps to save water, by learning more about water saving practices and installing water efficient appliances; and
- Customers see their water service provider as providing value added information, helping build confidence and trust in the water service provider – this can complement broader community engagement strategies on water conservation.

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future development of the guidelines



future development of the guidelines

The development of these Guidelines is seen as a starting point. Water accounts across Australia are in various stages of development, and there is much to be learned in terms of the effectiveness of the differing approaches being implemented in relation to comparative data on water accounts.

It is planned that the Expert Group (under the auspices of WSAA), will proceed with a watching brief and reconvene on a regular basis (annually) to review the progress being made across Australia and the results being achieved, and to feed these back to water service providers on a state/territory basis.

An annual circular on the current status of water accounts could be prepared and circulated to all water service providers, and when appropriate, the EG can reconvene in order to update the Guidelines.

appendix one

appendix one

NWI EXPERT GROUP FOR WATER CUSTOMER ACCOUNTS

Name	Organisation	Position	State/ Representation
Pat McCafferty	Yarra Valley Water	(Chair) General Manager, Strategy & Communications	VIC
Pauline Wilson	ACTEW Corporation	Residential Water Efficiency Program Manager	ACT
Natasha McDonald	QLD Department of Natural Resources, Mines & Water	Principal Project Officer	QLD
Colin Ridley	Sydney Water	General Manager, Customer Services	NSW
Kelly Westell	SA Water Corporation	Manager, Stakeholder Relations	SA
Peter Guttmann	Victorian Department of Sustainability and Environment	Senior Policy Analyst	VIC
Barry Cash	Esk Water	Chief Executive Officer	TAS
Paul Hamilton	Water Corporation	Water Efficiency Project Manager	WA
Mark Macklin	Brisbane Water	Marketing & Communications Manager	QLD
Lynne Watson	Power and Water Corporation	Customer Service Manager	NT
Corinne Cheeseman	Australian Water Association	Education Manager	National
Annie Josline	Department of Environment and Heritage	Assistant Director, Coasts and Water Branch	National
Chris Schweizer	Department of Environment and Heritage	Assistant Secretary, Coasts and Water Branch	National

appendix two

appendix two

Market research relevant to this issue has been conducted across Australia. In addition, several papers have been prepared identifying the opportunity to leverage customers' water accounts to provide more meaningful information that helps customers in their water saving efforts. These are shown below:

Title	**Pricing for Demand Management**
Date	March 2004
Client	Water Services Association of Australia (WSAA) - KPMG
Major Insights	This research was undertaken jointly by City West Water, South East Water and Yarra Valley Water, and coordinated by WSAA. • During focus group discussions two billing issues were raised by customers. Customers' lack of knowledge on "average" consumption. While customers were able to compare their historical water use they were unable to measure their performance against the "average". • Two of the focus groups unbeknown to them were specifically recruited as they were high water users. These participants were unaware that their consumption was high compared to the average as they had no mechanism of comparing. • Change the unit of measure on the water account (kilolitres). Customers did not have an understanding of how much a kilolitre was and therefore suggested using litres or some other form of description (i.e. x buckets of water) when billing for water use.

Title	**Quantitative Research – High Water Users**
Date	March 2004
Client	Sydney Water
Major Insights	A telephone survey of 1,861 Sydney Water's high water using customers was selected for this survey. A high water user was defined as a household that consumed more than 400 kilolitres for three consecutive years. • The key finding of the research was that high water using customers did not have an understanding of how much water they consumed, compared to the average consumption. - 15% of the high water users thought their consumption was low - 68% of the high water users thought their consumption was average - 15% of the high water users thought their consumption was high

appendix two

Title	Water Awareness
Date	June 2004
Client	Brisbane Water
Major Insights	Brisbane Water conducted a number of focus groups and found: • The impact of receiving comparative consumption information was well accepted for two main reasons: - The fact Brisbane Water was sending additional information conveyed a message that they cared about reducing consumption and were trying to be innovative about reducing consumption. - The most appealing reason was the fact that people would be able to easily compare their consumption performance with that of people in the local area. • Currently people are unable to scrutinise their consumption for two reasons: - They are not motivated enough - The level of information currently provided is not detailed enough • In terms of the format of the comparison the following points were highlighted: - Legibility is of high importance - Keeping the volume of information minimal is important - Use techniques such as graphs and tables to increase readership - It is important to keep the water advice appealing to attract readership

Title	Victoria White Paper – Our Water Our Future
Date	July 2004
Client	Victorian Government
Major Insights	Our Water Our Future sets out a number of objectives to ensure that Victoria can continue to have healthy water resources to support growing communities. • Action 5.6 in the white paper states: "The Government will require Water Authorities to make water bills more informative. This will enable households to better monitor their water use over time, and compare their consumption with households in their local area."

appendix two

Title	Improved Demand Management Through Smart Billing & Communications
Date	August 2005
Paper	10th Annual National Water Forum, Sydney. Pat McCafferty, GM Strategy & Communications, Yarra Valley Water
Major Insights	This presentation outlines the way water utilities can use "Strategic Communications" and "Smart Accounts" to reduce water consumption. • Yarra Valley Water recognised there was a need to engage the public in relation to water, not just during drought, but over the long term. • One of the key enablers to achieve this engagement was via the water account. This initiative would complement changes in water pricing policy, in particular the introduction of inclining block tariffs for water usage. • Traditionally, water utility accounts only display the amount owing, due date of account and methods of payment. The Yarra Valley Water "Smart Account" concept includes all of these things and promotes information on water conservation to achieve behavioural change. • Earlier research relating to the type of information customers want on their accounts was conducted by Yarra Valley Water in 2003. The results showed: - Information must be simple, clear and easy to locate - Water consumption graphs must show the same period of consumption for the previous year - Colour is a good tool to identify key information - Water usage charges must be clear and easy to follow • Ongoing market research has shown that the number of customers that rated the graphs as being "very good" or "excellent" has increased from 59% to 70%.

Title	Qualitative Research – Motivations and Barriers to Retrofit Program Participation
Date	August 2005
Client	Sydney Water
Major Insights	A mix of focus groups and individual in depth discussions were conducted. The research found: • Most customers check the graph on their water bill, rather than the actual cost of the water. • Some customers see it as a personal challenge to monitor and reduce their consumption, using the graph.

appendix two

Title	Smart Account Research - Qualitative research
Date	October 2005
Client	Yarra Valley Water
Author	IPSOS
Major Insights	Confirmation that people do compare their usage to other households to work out where they sit in relation to water usage, and monitoring their usage over time via the graph. However, more needs to be done to ensure people will use the water conservation information with hints and tips to explore ways of reducing and better understanding their water usage. This resulted in enhancements to Yarra Valley Water's Smart Account, with stronger links to water saving information and "calls to action", including the addition of the "water efficient household" data in the comparative section of the bill.

Title	Qualitative Research – Communications Research, 2006 Pricing Brochure
Date	November 2005
Client	Sydney Water
Major Insights	A mix of 2 focus groups and 8 individual in depth discussions were conducted. The research found: • Despite all respondents being responsible for paying their Sydney Water bill, few customers were aware of the charges that made up the bill. This reflects the fact that all they are interested in is the amount to pay, rather than the makeup of the bill. • Customers were also aware of the graph that compares water use.

Title	Quantitative Research – Separate Water Advice Research
Date	August 2006
Author	Colmar Brunton
Client	Brisbane Water
Major Insights	• Awareness of Brisbane Water's Separate Water Advice (SWA) is high (89%). • One third of residents indicate they always read the SWA. • 71% of those that read it discuss the information with fellow household members, and 58% discuss it with family, friends or work colleagues. Six in ten keep the SWA for future reference. • Two thirds of residents (68%) believe the inclusion of the SWA in their rates bill has helped them to decrease their household's water usage, with 38% believing it has helped them decrease water usage a lot. • Possible improvements identified included more relevant comparisons taking into account the number of people who live in the household and including tips and hints on how to save water.

appendix two

Title	Inquiry into Sustainable Communities (Victoria)
Date	June 2005
Client	Victorian Parliament
Author	Environment and Natural Resources Committee
Major Insights	The Inquiry and Government response are below:

Recommendation 8.7

The State Government, in partnership with water authorities, follow Yarra Valley Water's lead and introduce customer accounts that provide a comparison of the customer's average daily usage with that of a water efficient household of similar size and location by mid 2006.

Supports

The government will review Yarra Valley Water's approach in order to assess whether this approach should be more widely adopted by other water authorities; and identify other ways to make water bills more informative.

The Victorian Government supports the view that water bills should provide information to customers that assist in understanding their consumption and how their behaviour may impact on water conservation. While this proposal is consistent with a key action (5.6) under the government's water strategy *Securing Our Water Future Together* which states that water authorities will be "required to make water bills more informative", some further investigations may be warranted. The Department of Sustainability and Environment is currently progressing this initiative in consultation with water authorities.

appendix two

Title	Yarra Valley Water's Customer Feedback
Date	Ongoing
Client	nil
Author	Sample of verbatim comments received by Yarra Valley Water call centre
Major Insights	It is not common for customers to be moved to comment positively on aspects of service they receive. When Yarra Valley Water first launched its "Smart Account", a number of comments were immediately received by our Call Centre either over the phone or via email. Below are some examples: *"In the last Yarra Valley Water bill there was an indicator that showed if you used "X" litres of water per day this equated to "Y" household members. I have had 2 people in my street talk to me about how much water are you using etc. This type of benchmarking information is very useful."* *"Mrs B called simply to say how impressed she was with the water smart attachment on her bill. She has torn it off and stuck it to her fridge, She has told all her friends about it. She thinks it's a really good resource and would like her feedback passed on."* *Mrs M rang in regards to the average usage per person on the flap on her account. She doesn't like the flap as it makes it look like she is using too much water."* It is clear that some customers have welcomed the additional information provided, while some customers are unhappy that the comparative data shows their water usage to be higher than average. This is a positive outcome in terms of raising customers' awareness on how much water they use.

Title	"Moments of Truth" - Qualitative Research
Date	April 2006
Client	Yarra Valley Water
Author	BDA
Major Insights	This research found that where customers are convinced of the need to save water, they welcomed the inclusion of comparative consumption data provided on Yarra Valley Water's Smart Account. However, where customers remained uncommitted to water conservation, the provision of comparative data was not as effective a tool for saving water. The key insight is that provision of comparative data should be seen as one element of an integrated set of demand management initiatives designed to raise awareness of the need to save water and to provide meaningful information and assistance to customers to save water.

appendix three

appendix three

YARRA VALLEY WATER ACCOUNT

Fold-out, tear-off Flap
Front of Flap
Panel with comparative data

Yarra Valley Water | a fresh approach

MR & MRS AB SAMPLE
64 SAMPLE AVENUE
SAMPLE SUBURB VIC 3150

Quarterly Account

Enquiries		13 1721
Faults	(24 hrs)	13 2762

Customer Number	a401 032
Invoice Number	825 1086 2982
Total Due	**$229.80**
Due Date	**26 April 2006**

Tax Invoice

Issued 06 Apr 2006

Account Summary

64 SAMPLE AVENUE, SAMPLE SUBURB
Property Number 1710 3938, LOT 44 PLAN 54157

Product/Service	Description		Amount
Water Usage	04 Jan 06 to 05 Apr 06		
	Block 1 @$0.7822 per kilolitre	$31.32	
	Block 2 @$0.9177 per kilolitre	$36.74	
	Block 3 @$1.3558 per kilolitre	$2.60	$70.66
Sewage Disposal	04 Jan 06 to 05 Apr 06		$43.69
Service Charges	01 Apr 06 to 30 Jun 06		$49.89
Drainage Charge	On behalf of Melbourne Water		$13.03
Annual Parks Charge	On behalf of Parks Victoria 13 1963		$52.53
TOTAL (GST does not apply)			**$229.80**

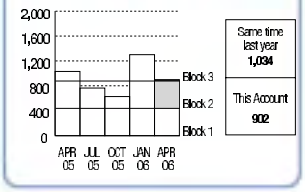
See reverse for details

Payment Summary

Last Account	$219.45
Paid/Adjusted	-$219.45
Balance	$0.00
Total this Account	+$229.80
Amount Due	**$229.80**

Compare your usage

Your average usage in litres per day



Yarra Valley Water

*874 33 825 1086 2982

64 SAMPLE AVENUE, SAMPLE SUBURB

Payment Slip

Customer Number	a401 032
Invoice Number	825 1086 2982
Total Due	**$229.80**
Due Date	**26 April 2006**

How does your household water use compare?

Your average daily water use for this account is: **902 litres**

Compare your average daily water use with the table below to see if you are a water efficient household.

Number of occupants	Garden size	Typical water use (litres per day)	Efficient water use (litres per day)
1	None	198	135
	Small	285	207
	Medium	406	306
	Large	548	423
2	None	354	239
	Small	442	311
	Medium	563	410
	Large	704	527
3	None	458	341
	Small	546	413
	Medium	667	513
	Large	808	630
4	None	552	443
	Small	639	515
	Medium	760	615
	Large	902	732
5	None	656	545
	Small	743	617
	Medium	864	716
	Large	1006	833
6	None	781	646
	Small	868	718
	Medium	989	817
	Large	1131	934

For ways to make your home more water efficient visit www.yvw.com.au

Did you know...

...that the usage figures above are actually based on live data from real customers and these figures are updated each season.

Yarra Valley Water

appendix three

YARRA VALLEY WATER ACCOUNT

Back of Flap

Water Saving tips and ideas relevant to time of year

appendix three

BRISBANE WATER ACCOUNT

Water Advice

Helping Brisbane residents save water

BRISBANE WATER

Dedicated to a better Brisbane

ADVICE ONLY
NO PAYMENT REQUIRED

PROPERTY LOCATION:

YOUR WATER CONSUMPTION

Current Meter Reading	1616
Previous Meter Reading	1604
Water Consumption (kilolitres)	12
Price (kilolitres)	$0.89
Days Charged	88

COMPARISON WITH LAST YEAR

Average daily water consumption (litres)	
Current period	136
Same period last year	215

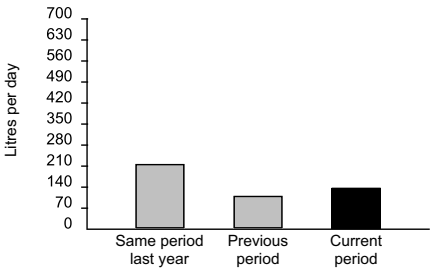
(1 kilolitre = 1,000 litres)

CURRENT WATER CHARGES

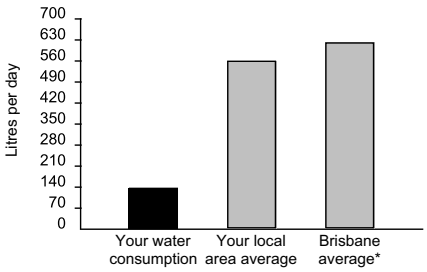
PRODUCT/SERVICE	PERIOD	TOTAL
Water Access Charge	01 Jul 2006 to 30 Sep 2006	$28.25
Water Consumption Charges	21 Mar 2006 to 17 Jun 2006	$10.68
	(Included in your current rate account)	$38.93

CONSUMPTION COMPARISON

Your average daily water consumption



Water consumption comparison



Well done! Your property is using less water than the Brisbane average.
The average household in Brisbane uses 220 litres of water per person per day. How does yours compare? Households in your suburb and across Brisbane have taken up the cause by activity reducing their water use. Watch every drop!

LEVEL 3 WATER RESTRICTION NOW APPLY

Our dam levels have now reached 30%, triggering the need to introduce Level 3 Water Restrictions. This means a total ban on outdoor sprinkling and hosing.

Watering and outdoor washing is permitted at any time using a hand-held bucket or watering can, filled directly from a tap.

For more information call 1300 789 906 or visit www.brisbane.qld.gov.au/brisbanewater

Let's watch every drop

Page 4 of 4

* please refer to your rate account for a breakdown of your water consumption charges.

appendix three

BRISBANE WATER ACCOUNT

watersense

WATER WITHOUT WASTE

C rrently, we are in the worst dro ght in more than 100 years. We're all faced with the challenge of tilising water more effectively.

Brisbane Water is one of A stralia's largest water tilities and an ind stry leader in water s pply management. We're working hard to ens re the reliability of o r network, the q ality of water s pply and ens ring a s stainable approach to water cycle management.

C nserving water is ur business – s let's w rk t gether t watch every dr p.

Be a water mate

D ring the c rrent water restrictions, some members of yo r local comm nity who are elderly or have a disability may need help with watering their gardens and plants. Why not ask them if yo can lend a hand or see if yo r local vol nteer gro ps are offering assistance.

Te ting for water leak at home

Checking aro nd yo r home for leaks means yo can make s re that yo don't pay for water that yo 're not sing and it helps s watch every drop. There are fo r steps yo can do to check if yo have leaking water pipes in yo r home.

Step 1 T rn off all taps and appliances in yo r home.

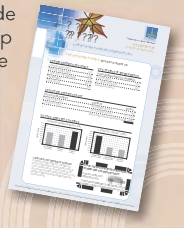
Step 2 Wait for five min tes, then locate yo r water meter and take a reading. To take a meter reading, write down the black and red digits. The black digits are kilolitres sed and red digits are parts of kilolitres of water passing thro gh the meter. Take notice of the dial to make s re it's not spinning.

Step 3 Don't se any water in yo r home for at least 30 min tes and then take another water meter reading.

Step 4 If the meter reading has changed there may be a leak on yo r property. This leak co ld be from an ndergro nd water pipe. To fix this leak, contact a pl mber as soon as possible to locate and repair the leak.

Handy hint: Some leaks, s ch as a leaking toilet or tap might not be detected by yo r water meter. To check for a leaking toilet, place food colo ring in the cistern. If there is a leak, colo red water will appear in yo r toilet pan. To check for a leaky tap place a c p nder the tap and wait for 30 min tes to see if any water is capt red in the c p.

Interpreting y ur Water Advice



We've improved the Water Advice to incl de an average target cons mption table to help yo compare yo r act al cons mption to the average target cons mption per person.

This table gives yo a target for water cons mption in litres per person, per day. There are different targets for ho ses and nits or townho ses. For example, if yo have two people living at yo r ho se yo r target cons mption per day is 430 litres.

The new chart will also compare yo r cons mption to the s b rb and Brisbane average. The average target is based on the Brisbane average and Co ncil's dro ght management targets.

Average target c nsumpti n per day

eople per ho sehold	ho se	nit/townho se
1	260L	220L
2	430L	390L
3	530L	490L
4	640L	600L
5	750L	710L
6	850L	810L

Let's watch every dr p

Thank you for your efforts to date.

F r m re inf rmati n, visit www.brisbane.qld.g v.au/dr ught r c ntact the dr ught h tline n 1300 789 906.

appendix three

SOUTH EAST WATER ACCOUNT

SOUTH EAST WATER

Card Payments & Account Balances 1300 659 658
Account Enquiries (Mon-Fri 8.00am to 5.30pm) 131 851
Water & Sewerage Faults **Dial 13water:** 139 2837
Hearing Impaired Customers (with TTY Facility) (03) 9552 3322
www.southeastwater.com.au **info@sewl.com.au**

2701420.001/R10/E000002/P000019/S4 of 6

The Sample Company
1 Sample Street
SAMPLETOWN VIC 0000

Your Account Summary

Customer Number	**0000005**
Due Date	**29 October 2006**
Total Due	**$351.35**

Issue Date **12 October 2006**

Property **123 SAMPLE STREET**
SAMPLETOWN VIC 0000

Property Reference **99A//99999/99**

Last Account	$243.10
Pa ment Received	$0.00
Balance Brought Forward	$243.10
Current Charges	$108.25
Total Due	**$351.35**

For details, please refer over page.

The charges on this account are GST free.

If pa ing in person, please keep this account intact

Handy tip! From now on, your water account will be shaded in one of four seasonal colours, helping you to distinguish between your quarterly accounts at a glance.

Property Ref: 99A//99999/99
123 Sample Street Sampletown Vic 0000

2 000000/000000/0000000.000 TN53C

Customer Number	**0000005**
Due Date	**29 October 2006**
Total Due	**$351.35**

POST billpay

*361 000000000000001

South East Water Limited ABN 89 066 902 547
Locked Bag 1 Heatherton 3202
20 Corporate Drive, Heatherton 3202

35 + 10 + 000000000052 + 0000014795 + 0000013995 + 000000000052