

May 15, 2009

Ms. Sue Murphy
Chief Executive Officer
Water Corporation
Locked Bag 2
Osborne Park Delivery Centre, WA 6916

Re: Comment on *Water Forever – Directions for our Water Future*

Dear Ms. Murphy,

I am writing to you to provide our comments on the proposed draft "Water Forever – Directions for our Water Future." As a key industry stakeholder, Caroma Dorf is particularly interested in the area of water conservation and hence our wish to provide comments on the draft. Our company is Australia's market leader in water-saving bathroom fixtures with a long-standing commitment to water conservation and the development of water efficient technologies. Caroma Dorf is Australia's only manufacturer of vitreous china toilet suites and also produces plastic cisterns, seats and components, with state-of-the-art facilities located in Wetherill Park (NSW) and Norwood (SA). We have read the draft plan with great interest and are fully supportive of the combined approach to water saving detailed in the document.

Based on our experience and current Australian and international directions, we believe demand management strategies should be a prominent part of the plan. Our experience has involved participation in important toilet retrofit programs nationally including the Sydney Water Pilot Toilet Replacement Program and a Melbourne-wide toilet retrofit campaign in collaboration with plumbing industry partners. Currently, Caroma Dorf is part of programs running in the ACT and regional areas of NSW and is also participating in toilet retrofit tenders in Melbourne and Adelaide. While not new, toilet retrofit programs have been recently adapted into more successful models with high customer uptake and improved water saving outcomes. In all trials to date, government/utilities have been satisfied with the results. Toilet replacement strategies have also been successfully conducted in North America on a large scale with involvement from our company. Further information on these programs is briefly included in the enclosed appendix.

There is significant potential for Perth to further reduce household water consumption with the retrofit of old 11L single flush toilets as shown in a 2006 study conducted by the Institute for Sustainable Futures, "The Water Conservation Potential of an Australia Wide Toilet Retrofit Program." The study showed there are approximately 205,965 single flush toilets in the Perth area and the replacement of all of these inefficient toilets with 4.5/3L dual flush models could save up to 4,623 mega litres of water per annum. Therefore, we wish to propose that a detailed demand management strategy is incorporated into the draft plan. This strategy should include a household fixture retrofit program including toilet suites.

We look forward to your favourable consideration of our proposal and would be pleased to provide further information and support to enhance the draft as required.

Yours sincerely,



Dr. Steve Cummings
Research & Design Manager
Caroma Dorf

Appendix

Examples of National and International Demand Management Programs

New York City Demand Management Solution

- In 1992, New York City faced a multi-billion dollar issue on maintaining a supply of clear water and waste water infrastructure.
- Two options were considered - spending billions of dollars on water supply and waste treatment expansion programs, or several million dollars on effective demand management.
- NYC chose a demand management approach.
- Over 1.3 million or 36% of all toilet suites were retrofitted.
- 29% reduction in water usage per apartment.
- Per capita reduction of 195 gallons per day in 1992 to 164 gallons per day in 1997.
- Based on the success of this approach, a second phase was introduced in 2006.

City of San Antonio Giveaway Retrofit Program

- As part of the San Antonio Water System's (SAWS) "Season to Save" program over 20,000 Caroma High Efficiency Toilets (HET) were given away to residents.
- Savings of up to 284 million litres of water annually are expected.
- According to Karen Guz, Conservation Director at SAWS, "Conservation lets us use our water more wisely. A study five years ago showed that for every dollar we put into conservation, it saved us \$7 long-term. And we avoid the high infrastructure costs of building a new water supply project and purifying and pumping that water into our system." (Source: US Environmental Protection Agency website, www.epa.gov/WaterSense/water/profiles/saws.htm)

ACT Government Residential and Commercial Retrofit Programs

- In 2008, the ACT Government launched a pilot ToiletSmart Retrofit program which has seen over 2300 single flush and inefficient dual-flush toilets in the ACT replaced with Caroma Smartflush® 4.5/3L suites. Given the success of the pilot, stage two of this program was launched in February 2009.
- Recognising the amount of water that businesses use, the ACT Government also introduced a Commercial Bathrooms Retrofit Program in February 2009. The program targets corporate offices, pubs/clubs and hotels/motels, providing funding of up to \$20,000 per property to replace inefficient bathroom fixtures with more efficient products from Caroma Dorf.

Sydney Water Residential Toilet Replacement Program

- In 2006, Sydney Water conducted a pilot Toilet Replacement Program using Caroma Smartflush® 4.5 /3 L toilet suites.
- Sydney Water is now running a full Toilet Replacement Program.

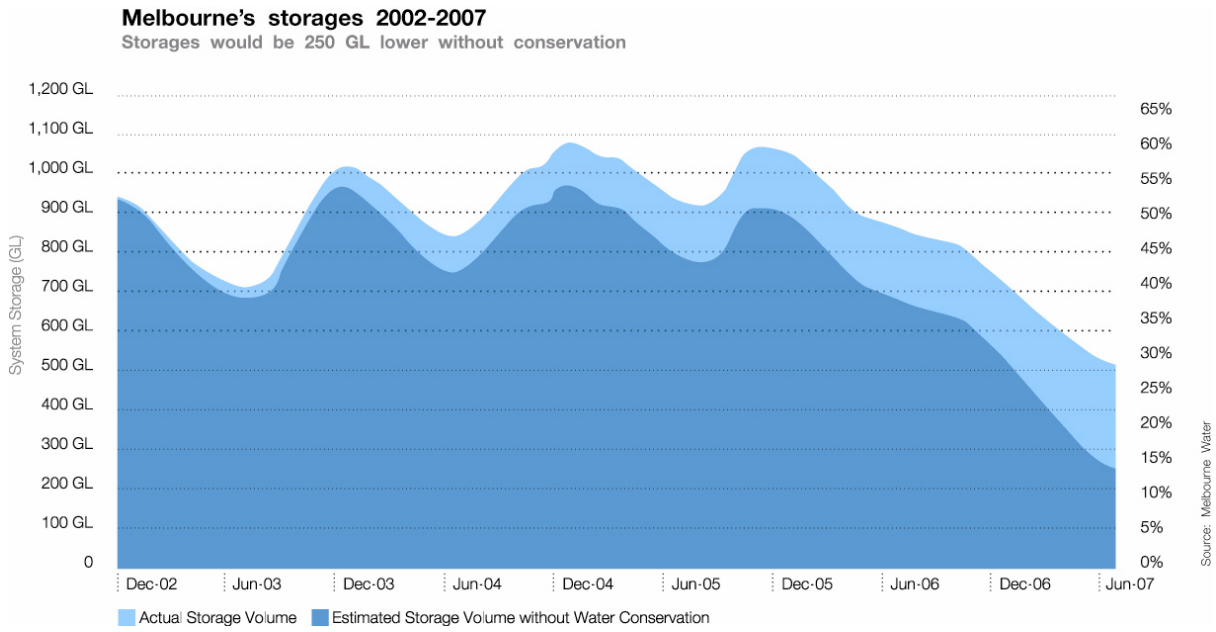
Melbourne Water Authorities Toilet Retrofit Program

- The combined water authorities in Melbourne – South East, Yarra Valley and City West – are currently completing a tender process for a Melbourne-wide residential toilet retrofit program.

SA Water Household Water Efficiency Program

- SA Water has recently issued a tender for a delivery program to increase household water efficiency in SA. The program is focused on showerhead replacements, toilet retrofits, and repair of minor leaks, among other activities.

Melbourne Storages



Source: Melbourne Water