

Moreland City Council Submission - Inquiry into Melbourne's Future Water Supply

Moreland City Council acknowledges that the Victorian Government must secure Melbourne's Future Water Supply. However, Council strongly questions the current methodology and encourages State Government to incorporate the following opportunities.

State Government Focus Area: "Further water savings that can be achieved by increased conservation and efficiency efforts"

1. Adopt planning policies and rating tools that improve environmental outcomes including water conservation and stormwater capture and re-use.

- The Victorian Planning Provisions (VPP) need to endorse sustainable design under a Victoria wide approach. Additionally the Building Code needs to include further sustainability elements that ensure best practice water efficiency and stormwater re-use outcomes.
- The planning system is a key area where water conservation, capture and reuse opportunities can be identified early in development proposals. While the building system addresses minimum standards, assisting developers to meet water targets early in the development process allows the appropriate infrastructure to be planned from the beginning saving costs and meeting enhanced environmental outcomes. Local Governments, working with developers using the Sustainable Tool for Environmental Performance Strategies (STEPS) and the Sustainable Design Scorecard (SDS), are delivering 25% reductions in estimated water use (Hansen & Sustainable Built Environment, 'Investigation Report: Sustainability Assessment in the Planning Process' 2008). This project aligns to and is already achieving State Government targets.
- Council proposes the investigation by the State Government of a market-based instrument similar to the Victorian Energy Efficiency Target (VEET) to drive the uptake of water efficient devices in the community. A 'Water Efficiency Target' (WET) Scheme could provide the mechanism to achieve a 97GL demand side reduction by 2015, and thus provide much of the savings required to secure Melbourne's future water supply (see appendix 1 for further detail on how this Scheme could operate).

2. Develop a fair and equitable pricing regime as well as ensure the health of the overall water catchment system.

- Whilst supporting the premise that high water users should pay more, it is important to ensure that all households have access to sufficient water at an affordable price.
- Food security activities must be exempt from water restrictions and therefore the non-profit growing of food should be an eligible activity under all stages of water restrictions.
- Activities such as logging in the catchments that clearly have an impact on water supply should stop immediately, as should the usage of biocides in the catchments, in order to maintain the integrity of water supply catchments and the health of Victorians.

State Government Focus Area: "The collection of stormwater"

1. Stormwater capture needs to be seen as a priority for both water resource opportunities and water quality issues.

- Approximately 500 billion litres (Gigalitres (GL)) of stormwater passes through Melbourne each year – similar in load to the requirements of Melbourne residents. This represents a significant opportunity whereby Melbourne's future water supply could be secured.

- Securing stormwater within the metropolitan area will also help meet State Environment Protection Policies (SEPP) Waters of Victoria targets for waterways and Port Phillip Bay, and assist in meeting public health policy with regards to allowable limits of toxicants in seafood from Port Phillip Bay, the receiving waters to Melbourne's stormwater. The Victorian Government should allocate the appropriate resources to equip Local Government and agencies to implement stormwater harvesting and treatment storages to secure this valuable resource.

2. Rainwater tank roll out program requires investigation.

- According to the Australian Conservation Foundation (ACF), the same amount of water from the proposed Wonthaggi desalination plant could be saved if 25% of Victorian households had a 2000 – 3000 litre rainwater tank plumbed for use to the toilet, laundry and garden. The Victorian Government should develop, fund and implement a program to install rainwater tanks in Melbourne's households that are judged capable of having a rainwater tank (ACF states that 72% of Melbourne's houses are suitable), over the next 5 years. This initiative would not only secure Melbourne's water but provide significant nitrogen reductions. This approach would achieve multiple policy outcomes.

State Government Focus Area: "Small locally based desalination plants"

1. As per a Council resolution in July 2007 (DCD58 Melbourne's Future Water Supply) Council objects to the proposed Wonthaggi desalination plant.

- If the desalination plant at Wonthaggi proceeds despite concerns, worlds best practice necessitates it be an 'on-demand' not an 'always-on' system. Always-on systems are energy intensive, inflexible and a costly approach. Examples of on-demand technologies have already been proven in Western Australia. Combined with baseload electricity production from wave power these systems provide 100% renewable energy or 100% desalinated water (or 50/50 or 30/70 etc.) according to seasonal, environmental and economic requirements. The proposed Wonthaggi desalination plant, in addition to any future proposed desalination sites, requires a full feasibility study to ascertain if suitable wave resources exist for baseload power and on demand desalination.

Appendix 1: Proposal – Water Efficiency Target (WET) Scheme

Introduction

The current residential water reduction target in Victoria is a 25% per capita reduction by 2015 and 30% per capita by 2020 on 1990s averages (DSE, 2006). The existing scheme in place by the Victorian Government aims to fill the target gap with an average of 45,000 rebates granted per year with these spread over a number of products since its inception in 2003 (DSE 2008b). At this rate, it would take in excess of thirty years to improve the efficiency of Melbourne's existing household stock with one water efficiency product.

Therefore Moreland City Council proposes that a 'Water Efficiency Target' (WET) Victoria Scheme be investigated and developed to fill this policy / target gap far sooner in order to achieve far greater savings. There are significant and untapped savings that need to be harnessed and market based scheme is a potential vehicle to realise these savings.

Water efficiency measures including restrictions have already delivered a 22% reduction in residential water use compared to the 1990s average (DSE 2006). It is estimated that an additional 50% reduction on current usage is achievable using existing technologies, even if restrictions are lifted (GHD, 2006). This could save a further 96 kl per household per year, 134 GL per year at today's population or 192 GL per year with the expected increase to 2 million households by 2020. This compares well with the planned 150 GL capacity of the desalination plant and 75 GL Sugarloaf pipeline (DSE, 2007a). As such, water conservation measures appear to be the most cost effective options and should be accelerated by the Government with increases to funding to suit (DSE 2007a).

'WET' Victoria Scheme

The proposed WET Scheme could be based on the VEET scheme but with necessary changes due to differences in existing initiatives, differences in retail businesses and other targets that have been set for demand reduction. The scheme is proposed to include Water Efficiency Certificates (WECs) equal to one (1) kilolitre of water per certificate that will be created in line with the amount of water use avoided by 'eligible activities' undertaken.

Eligible Activities

Eligible activities could include:

- installing more efficient showers and other fixtures;
- water pressure reduction to reduce water use at fixtures and to reduce the risk and severity of leaks;
- replacing single flush toilets with dual flush;
- fixing of leaks;
- installation of water reuse systems; and
- changing to more water efficient appliances including washing machines and dishwashers;

The guidelines would allow flexibility in the prescribed activities through a mechanism for proof of water savings in order to promote innovation and ensure that lock-out of new technologies does not occur.

Issues such as those associated with additionally, where a water efficiency measure would have occurred anyway (e.g. because of regulations or rebates), must be dealt with in the development of the scheme in consultation with the Essential Services Commission (ESC), Water Authorities, various agencies, industry and the community.

Actions and Costs

As with the VEET scheme, the WET Victoria scheme could be developed and administered by the ESC due to their responsibilities as regulator of water in Victoria (ESC, 2008b). While administration of this scheme lies with the ESC, the rollout will be undertaken by the water authorities with a water reduction quota allocated to each authority. This quota would be determined in line with the proportion of Melbourne's total residential water consumption that is being supplied by each authority in their region.

In developing the scheme, consultation with the community and interested parties could be entered into at an early stage. This will provide a number of benefits including;

- better decision making through mobilising under-utilised resources;
 - use of community experience and knowledge;
 - a means of reaffirming democracy; and
 - ensuring that those likely to be involved in the scheme during its operation are committed
- (Thomas 2005).

The total costs associated with the WET Victoria scheme could include initial development, ongoing administration and the costs associated with purchasing WECs from private industry. These costs will be shared between the ESC and the water authorities but ultimately would / could be passed on to consumers.

- development – \$1 million over two years (as per VEET scheme (DPI 2007b));
- administration – costs to be determined during development; and
- allowing for a penalty rate of \$1 per kilolitre which will allow for inclusion of a broad range of water efficiency measures, the WET Victoria scheme would cost \$97 million per year to meet the 97Gl/year target (GHD2006).

The maximum cost for each water authority in meeting the WET Victoria target could be set by the penalty rate that is put in place. This penalty rate should be set high enough to encourage water authorities to meet their quotas through the WET Victoria market rather than incurring the penalty associated with shortfalls in WECs.

Unlike the electricity industry, the water industry is not a full contestability system. As the water distribution authority and the retail authority are the same organisation, the responsibilities for the overall supply to a region lie with one entity. This provides for a very different market where opportunities for water supply competition are non-existent and therefore water prices and profit margins are heavily regulated and actions scrutinised (ESC 2008c). As such, it will be necessary for the government to allow for a small increase in the cost of water as is proposed for the major infrastructure works to pay for the rollout of the WET Victoria scheme (DSE 2007a).

Conclusion

To meet the immediate and long-term challenges facing Melbourne's water supply, a range of complementary measures need to be put in place. The Victorian Government acknowledges that water conservation measures are extremely important but is focusing on major infrastructure projects aimed at securing water supply over the next 5 years.

Water efficiency measures offered through the WET Victoria scheme could greatly increase the security of supply in Melbourne and reduce the stress being placed on water infrastructure. Significant social, environmental and economic benefits would result if the scheme was successfully implemented.

Victoria's recent water conservation measures have achieved significant savings but have achieved much less than the current potential and are generally short-term solutions. The WET Victoria scheme can create short-term savings while providing a market-based mechanism able to reduce residential water use in the long-term.

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