

Thursday 28 August

Executive Officer  
Environment and Natural Resources Committee  
Parliament House  
Spring Street  
East Melbourne VIC 3002

Dear Executive Officer

**Inquiry into Melbourne's future water supply**

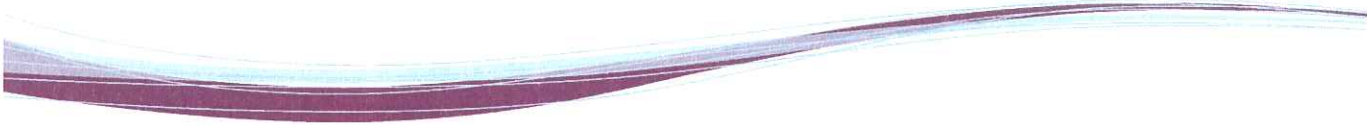
Attached is Bass Coast Shire Council's submission into the terms of reference for the Inquiry into Melbourne's future water supply.

Bass Coast Shire Council hopes the Environment and Natural Resources Committee considers our comments in relation to the terms of reference.

The Council will continue to follow the inquiry with interest.

Yours faithfully,

Danny Luna  
**Acting Chief Executive Officer**



**Submission into the Terms of Reference  
Inquiry into Melbourne's Water Supply  
Environment and Natural Resources Committee**

The Environment and Natural Resources Committee is required to inquire, consider and report no later than 31 December 2008 on the relative merits of supplementing Melbourne's water supply by some or all of the following means:

- Further water savings that can be achieved by increased conservation and efficiency efforts;
- The collection of stormwater;
- The re-use of treated waste water;
- The use of groundwater;
- Small locally based desalination plants;
- Any other optional water source which appears to the committee to be appropriate; and

Bass Coast Shire Council believes that the terms of reference should be extended to include:

**Recycled water**

The use of recycled water for industry and how this would affect Melbourne's potable water supply.

**Rainwater tanks**

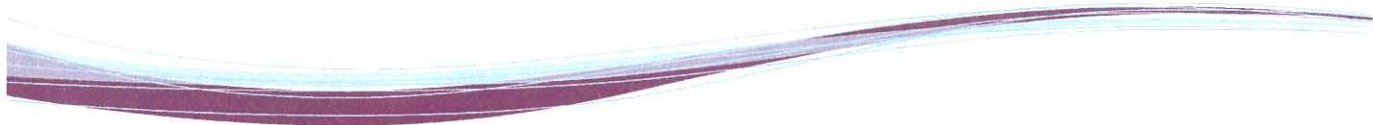
Investigate the impact of the use of additional household rainwater tanks in the Melbourne area. Additionally, investigate how this would reduce household needs on mains water and overall effect the consumption of water in Melbourne.

**Small locally based desalination plants**

Assess the viability and impacts of building small locally based desalination plants versus the impacts of building the proposed Wonthaggi Desalination plant.

**Alternative technologies**

It is also understood that a number of companies have been researching adiabatic recovery processes to reduce the energy required to operate desalination plants. This technology relies on low temperatures and therefore can either be powered by existing waste heat sources or from solar power. It is further understood that



at least one local Victorian company has developed this technology, and therefore the exploration of this avenue could have a direct benefit to the Victorian economy.

If this technology was investigated and adopted, it is considered that there is potential for the following outcomes:

- The desalination plant could be located in an industrialised area. The rationale for the current proposed desalination plant to be located along the Kilcunda coastline is because of the easy access to open, rapid water to disperse the brine effectively. If this alternative adiabatic recovery processes was developed, the desalination plant could be placed in any location, as it would not be reliant on strong currents to disperse the brine;
- A considerable decrease in the total cost of the project because the pipeline route would not be required to extend the 85 kilometres;
- Potential detriment that the disposal of concentrated brine may have on the marine environment would be eliminated because the technology developed does not dispose of concentrated brine back into the ocean;
- The visual impact of the plant on an undeveloped coastline would be eliminated; and
- The plant would not require the construction of a new power supply. If it were located in an already established industrial area, then the plant would potentially have access to a sufficient power source.

If this model was adopted it would minimise the environmental impacts and overall reduce the effect on climate change.

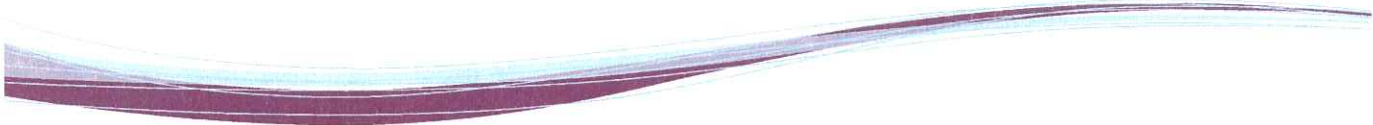
### **Catchments**

The investigation of adaptations to the water supply to enable catchments of water closer to end use point, with particular reference to higher density development. (For example: Office tenancies in CBD)

### **Additional comments**

Bass Coast Shire Council believes the process of seawater desalination has a significant adverse affect on the environment. The current proposed desalination plant will generate at least 80 tonnes of sludge and chemical residue waste each day that will need to be disposed of at landfill. Greenhouse gas emissions from a plant of the size being proposed for Victoria are estimated to be 1,200,000 tonnes per year.

Bass Coast Shire Council believes the water solutions outlined in the next stage of the Government's water plan () are not viable, sustainable solutions to supply additional sources of water. Specifically Council is concerned that the primary focus of the plan relates to infrastructure projects such as the desalination plant not



towards increased water reuse and education. Of further concern is that plan primarily focuses on delivering supply rather than reduction of water use, particularly in the business and industrial sectors where it is understood significant reductions in the use of potable water can be achieved.

It is understood that according to the National Water Commission baseline assessment of water resources (Australian Water Resources 2005) Victoria has the 'lowest average per capita household water consumption (81 kL/capita)'. This means that Victoria's requirements for potable water are considerably lower than other states and the focus of Government intervention should be threefold:

- Continue to educate household users on how they can continue to reduce their water consumption, including the provision of effective subsidy programs for the installation of water saving/harvesting equipment;
- Require Industry to implement effective and proactive water harvesting or recycling systems to reduce usage of potable water; and
- To recycle waster water for use in Industry and Agriculture.

The lead time to implement any of the above solutions is stated to be the reason why these sustainable solutions have not been given more weight in the Our Water Our Future plan. However, it is understood that no detailed studies have been undertaken regarding these alternatives that provides the justification for undertaking a major infrastructure project to increase Victoria's potable water supply.

Bass Coast Shire Council believes that the Environment and Natural Resources committee inquiry into Melbourne's water supply should be required to assess the desalination plant and needs to investigate practical, sustainable solutions before Victoria commits to a project that will massively increase the cost of our water, have a significant adverse effect on our environment and forever change our coastline. The process of seawater desalination is a contributor to climate change, not the solution.