



Working together to protect & enjoy the Yarra

29 August 2008

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

Dear Sir/Madam,

**Submission to The Environment and Natural Resources Committee's
Inquiry into Melbourne's Future Water Supply**

Thank you for inviting us to make a submission to this important inquiry.
Our submission is enclosed and we would welcome the opportunity to
discuss any aspect of it with you.

Yours faithfully,

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**The Yarra Riverkeeper Association Inc's
Submission to
The Environment and Natural Resources Committee's Inquiry
into
Melbourne's Future Water Supply**

In an average year, 70% of Melbourne's water supply is sourced from the catchment of the Yarra River, and as a consequence river flows are reduced by about 50%. However in recent years of less-than-average rainfall, flows to the Yarra have been very much lower. According to figures from Melbourne Water, the total flow in the past year (to 24 August 2008) was just 12% of the Yarra's average natural flow¹.

The river is suffering severely from low flows, and this situation is attributable not just to the low rainfall but also to the ongoing and large amount of water extracted to supply Melbourne. **So any consideration of Melbourne's future water supply must take proper account of the Yarra's needs.**

Melbourne Water commissioned a comprehensive, scientific investigation of water flows in the Yarra River in a study completed in 2005. It concluded that the health of the river was suffering from low flows, and recommended the **minimum** pattern of flows needed to restore/maintain a healthy waterway. In response the State Government agreed in 2006 to deliver some of these so-called "environmental flows" which amounted to 17 GL/year or only about 2% of the average natural flow.

The environmental flows have never been delivered, and the river has continued to suffer as a result. Then in most recent months the government decided to take an extra 10 GL/year of water from the river, over and above the previous water extraction arrangements.

The Yarra River is Melbourne's most valuable natural asset. It plays an important role in the social and economic wellbeing of the city. It is the centrepiece and life blood of the largest Green Wedge area, the lungs of the city. But the river is being sacrificed in our current approach to water supply. That is contrary to the principle of sustainability and contrary to our responsibility to future Melburnians. The manner in which Melbourne is supplied with water in the future is critical to the health of the Yarra River.

¹ This percentage is based on mean daily flows figures at Warrandyte. In the 52 weeks to 24/8/08, the flow was 260 ML/day according to Melbourne Water's Website. The long term average (assuming no water extraction) was estimated to be 2203 ML/day according to the 2005 study by SKM (commissioned by Melbourne Water) *Determination of the Minimum Environmental Water Requirement for the Yarra River*.

How then should Melbourne be supplied with water in the future?

The goal should be that Melbourne becomes self-sufficient in water. This means utilising only the water resources at hand (ie. not taking water from elsewhere) whilst ensuring that enough water is left in our rivers to sustain them. Here are some components of such a water supply system.

- Stronger demand management

A more potent mix of education, regulation and market measures is possible and warranted to reduce water demand. Consider, for example, current water prices. They fall well short of full cost, which includes the significant environmental cost, and that actually encourages unsustainable water use². Necessity is the mother of invention, and more potent demand management will stimulate new and wider adoption of water efficiency and conservation measures.

- Stormwater harvesting

One characteristic of the urban landscape is the huge area of unnatural, impervious surfaces; roofs, pavements and roadways. They are a major potential source of water supply, which today is barely tapped³. Rainwater tanks are the most obvious and well-proven measure. Recent reports suggest that if installed on all suitable roofs across the city, tanks would supply about 100 GL/y of water. That should be the goal, using substantial incentives and new building regulations. Until every roof in Melbourne has a tank capturing its rainwater run-off, we have not done all we can to save water.

- Water recycling

The current practice whereby pristine river water is used to water gardens, flush toilets is incredibly wasteful. And single-pipe systems and the use-water-only-once concept are no longer appropriate in a future in which water is precious. "Used" water is a vital resource not a waste to be disposed of. Melbourne's major sewage treatment plants are/have been upgraded to produce clean output water⁴. The next step (currently resisted) should be to reticulate the output water and thereby lessen demand for river water.

At the household level, some people are reusing their grey water. But much more can be done at this level, whereby "used" water is segregated, and reused in a manner suited to its quality. Recycling has become

² The "capacity to pay" issue must be addressed for poor households, but that should not be managed, as at present, by subsidising the cost of water for all consumers.

³ In addition, the way in which run-off from these surfaces is currently piped directly into our waterways is the worst cause of water pollution.

⁴ We do not support a current proposal to pipe treated water from the Eastern Treatment Plant into the Yarra River, and thereby increase water extraction from the river. This presents unacceptable risk to river health. The best use for ETP water is indirect potable reuse, and effort should be made to overcome public concerns about it.

commonplace for newspaper, bottles and cans. It needs to become the norm for "used" water.

- Cease logging in the catchment

It is evident that logging reducing run-off into our reservoirs and waterways. The current crisis facing our rivers and water supply demands that such logging must be stopped as a matter of urgency.

- Avoid taking water from elsewhere

The government's current approach to securing Melbourne's future water is focused on building a large desalination plant and a pipeline from the Goulburn River. Whilst such projects would, in theory, reduce pressure on the Yarra by lessening the need to take water from the river, we do not support either project because of their broader environmental implications. Their energy intensity and impacts on the local landscape are unacceptable.