

INQUIRY INTO A SUSTAINABLE WATER SUPPLY FOR SYDNEY

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Date Received: 16/02/2006

Subject:

Summary

The public doesn't want desalination, won't accept "yucky" sewage recycling, and all the best dam sites have been used. Fortunately, Sydney's water supply is adequate for 4.5 million people, and water restrictions can be applied in times of extended drought. A sustainable water supply depends ultimately on keeping the city's population below 4.5 million.



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Inquiry into a sustainable water supply for Sydney

SUBMISSION by Sustainable Population Australia Inc. NSW Branch

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This submission is directed to the following item in the terms of reference:

c. Methods for reducing the use of potable water for domestic, industrial, commercial and agricultural purposes, including sustainable water consumption practices.

Summary

The public doesn't want desalination, won't accept "yucky" sewage recycling, and all the best dam sites have been used. Fortunately, Sydney's water supply is adequate for 4.5 million people, and water restrictions can be applied in times of extended drought. A *sustainable* water supply depends ultimately on keeping the city's population below 4.5 million.

Submission

Sustainable Population Australia Inc. NSW Branch submits that *sustainable water consumption practices* rely upon having an accurate understanding of the available long-term safe extraction yield of the available water sources, and ensuring that consumption remains below that safe level.

In Sydney's case, Sydney Water has determined that its supply capacity can safely service 4.5 million residents.¹ This assessment, made 12 years ago, has withstood the test of time remarkably well, although we do not consider that the energy used in securing that supply level is, of itself, sustainable (particularly inter-basin transfers from the Shoalhaven River). It is understood that Sydney's water supply capacity is determined allowing for a mix of raw water, recycled water, leakage prevention, demand management price signals, environmental flows and water restrictions when required. Desalination was not considered. Recycling was to accompany all new residential development zones.

It's important to note here that any form of recycling is also energy-intensive, but that capturing the nutrients in Sydney's sewage stream is imperative in sustainability terms. At the core of ecological sustainability lies the notion of 'closed loops'. Discharging the nutrients contained in sewage (especially phosphorus) into the ocean is clearly not a sustainable practice.

Implicit in the request for submissions directed towards reducing the use of potable water, is a weird and fairly recently fashionable notion that we should, somehow, feel guilty for consuming potable water; that polluted water will do. We do not share this guilt-trip, and

would prefer all of our water to be unpolluted. It makes sense, however, to collect rain water (at point of use) to reduce the need for expensive treated and transported water. But there are ecological costs involved in manufacture and supply of rainwater tanks, and energy costs in pumping the collected water. Further, the State Government's most recent 25-year plan for Sydney provides for an increase in population from 4.2 million in 2004 to 5.3 million in 2031, "with 60-70 per cent of new housing to be provided in existing urban areas". Such urban consolidation leaves no backyard space for a reasonably useful rainwater tank (1.5 metre diameter, 3,000 litre).

No doubt many submissions will point out that the proposed (though now moth-balled) desalination plant should be struck out because it is energy-hungry; it could increase Sydney's energy consumption by around 2 per cent. This is, indeed, a major hurdle. But, the relentless annual arrival of 44,000 new consumers into Sydney means that within two years Sydney's energy consumption will increase by around 2 per cent anyway.

A sustainable water supply requires *sustainable* energy inputs. It makes no difference what strategy is used to augment Sydney's water supply it will use more energy (and thus more greenhouse gas emissions).

Sydney has overwhelmed its water supply many times in the past: from The Tank Stream to Busby's Bore, to the Botany Swamps, to the Upper Nepean system, then the Cordeaux, Nepean, Avon and Woronora, then the mighty Warragamba which dwarfed the storage capacity of all the previous reservoirs. Finally even water from the Shoalhaven has been diverted to Sydney after the building of the Tallowa dam. Must Sydney's population yet again outgrow its water supply? Many other developed nations do not have population growth policies that overwhelm their water supply and preclude greenhouse gas reductions.

United Nations projections show that by 2050, Europe's population will fall by 75 million (or 10 per cent), Japan's population will decline from 128.1 million to 112.2 million (or 12 per cent) and Australia's population will increase from 20.2 million to 27.9 million (or 38 per cent).² Europe and Japan are committed to reducing greenhouse gas emissions. Australia rejected Kyoto — it is not possible to grow population and reduce greenhouse gas emissions.

And it is not possible to have a sustainable water supply for an unsustainable expanding Sydney population.

Conclusion

Sydney's present population *does not have a water supply problem*. The problem is that government policies and programs at both state and federal levels are deliberately designed to create a water supply problem by fostering population growth.

¹ Correspondence from Sydney Water, dated 20 January 1994.

² *State of World Population 2005*, United Nations Population Fund NY