

INQUIRY INTO A SUSTAINABLE WATER SUPPLY FOR SYDNEY

Organisation:

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Subject:

Summary

1. Sydney should focus on demand reduction through maintaining permanent water restrictions, increasing stepped water pricing and educating the community about the value of water. This would provide security of supply in a more sustainable and less expensive manner than building a desalination plant.

2. The independent experts report provided by the Institute of Sustainable Futures should be comprehensively reviewed by other water experts, NGO's and the general community before being relied on as a basis for water policy decisions.

Submission to NSW Parliamentary inquiry into a sustainable water supply for Sydney

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

Demand reduction through existing programs and through changing community attitudes to water use should be the focus of Sydney's Metropolitan Water Plan ahead of building a desalination plant. A concerted effort to reduce discretionary use of water, particular outdoor residential use, could provide Sydney with the security of supply that would otherwise be provided by a desalination plant. This could be achieved through changing attitudes to water use through community education supported by permanent water restrictions and further pricing reform.

A significant reduction in discretionary residential water use through behavioral change is achievable. The recent mandatory restrictions have resulted in a reduction in average usage per capita of around 10%, from over 400 L/capita per day prior to restrictions to under 364 L/capita/day at present (Sydney Water ESD Indicators and Environment Plan Report 2005, p11). Were the current restrictions maintained once rainfall in the catchment increases this reduction in demand should be able to be maintained. On top of this, additional reductions should be possible by comparison to other first world countries, many of which have significantly lower per capita residential use than Sydney. For example, Germany and Belgium use less than 130 L/capita per day and France and Denmark use less than 160 L/capita per day.

The recent reduction in usage achieved during mandatory water restrictions has been achieved largely through reduction in discretionary outdoor water use at no significant cost to the community. By comparison, Government estimates suggest a desalination plant could add \$60 to the average annual household water bill to provide an additional 125 ML/day during severe droughts (NSW Government, Metropolitan Water Plan Progress Report, February 2006, page 14). If the desalination plant were run all year round it would supply only around 8% of the estimated sustainable yield from Sydney's dams of 580 GL/year (Institute of Sustainable Futures, Review of the Metropolitan Water Plan, February 2006, page 4). The approximately 10% reduction in demand due to water restrictions would provide more than this in additional water for times of drought, and at minimal cost.

If a desalination plant were to be built, it is likely that it would be used permanently and not just in times of drought. In the absence of ongoing restrictions or further pricing reform, the currently low retail price of water will encourage increased consumption rather than per capita reduction. Combined with population growth this would create the temptation to use an existing desalination plant, for which capital costs are already sunk, as part of the normal water supply and not an emergency source in times of drought.

In order to achieve the change in residential water use behaviors essential for significant demand reduction Sydney needs to embrace permanent water restrictions and pricing reform. This should be supported by investment in community education

to develop sustainable attitudes about the value of water. The community response to mandatory water restrictions during the recent drought indicates that such a cultural shift in attitudes has already begun. If supported by further pricing reforms to introduce even higher prices for high volume users and community education Sydney could move from a water wasting society to one that recognizes the value of water in a country regularly affected by drought.

Other relevant matters

The latest government update on the Metropolitan Water Plan (NSW Government, Metropolitan Water Plan Progress Report, February 2006) relies almost exclusively on an independent expert's report (Institute of Sustainable Futures, Review of the Metropolitan Water Plan, February 2006) for which supporting assumptions and calculations appear not yet to have been finalized. Given the importance of the Metropolitan Water Plan to Sydney the government should ensure this report is subjected to proper scrutiny before being used as basis for policy decisions. This requires:

- Peer review of assumptions and calculations by reputable water experts paid for by the NSW Government
- A review of social and environmental impacts by the Peak Non Government Organisations paid for by the NSW Government
- Public release of the full report and supporting estimates/calculations