

ALTERNATIVES TO VICTORIA'S PROPOSED DESALINATION PROJECT.

Why spend over 3 billion dollars on a new factory to suck 150 Gigalitres (Gl) of water back from the ocean, when we have the opportunity to stop it running out in the first place?

A few of the responsible / sustainable solutions (refer author / Your Water Your Say for further options);

- Stop the rain water running off Melbourne's roofs; increase installation of rainwater tanks, and plumb these for use in toilets, laundries and on gardens. This can easily deliver 80 Gl at only 20% of the carbon cost (3).
- Stop the rain water running into the bays via Melbourne's drains by regional storm water capture & storage systems including Aquifer Storage Recharge; potential for well over 100 Gl (11).
- Reduce consumption: Despite improvements, Melbournians are still some of the world's greatest water users. Large savings are possible; simple plumbing devices, grey-water reuse systems & broader embracement of a general water saving mentality. Substantial savings in the commercial sector through government (dis)incentives and upgrading of technologies such as that of old and thirsty cooling systems.
- Use recycled water for industry and irrigation, rather than continuing with ocean outfalls. For example, the Eastern Treatment Plant Upgrade and Water Substitution project would recycle 135 Gl of water (2).
- Reduce infrastructure inefficiencies; currently 8% of Melbourne's water is lost through leakage (4).
- Stopping logging in Melbourne's water catchments would eventually yield an extra 30 Gl per year (5).

For an analysis of Government's stated position of Melbourne's water supply options, refer to Supply and Demand Analysis: Melbourne's Water, Neil Rankine.

NEGATIVES OF VICTORIA'S PROPOSED DESALINATION PROJECT.

- Marine environment destruction via biomass loss (300 000 organisms / second) & ocean effluent discharge (7000 litres / second); cumulative effects exacerbated by the poorly mixed receiving waters (6, 9, 10).
- Industrialisation / amenity loss of a wild, magnificent coastline including 4 significant listed parks.
- Water costs to increase up to 5 x (based on interstate experience & projected ETS costs or equivalent).
- **Carbon Emissions to 1.5 million tonnes / year; INCONGRUOUS with Government commitments.**

Government has **avoided Due Diligence** in choosing desalination; they CONTINUE to fail to provide evidence based justification for choosing this over the sustainable alternatives.

All they provide are two irrational and emotive "throwaway lines";

- *"We need a rainfall independent water source."*
- *"The power generation for the plant will be offset through carbon credits / green power."*

The first line is incorrect, the second a hoax argument, abusing the intent of offset schemes. The EES is scoped such that it will not address the key environmental concerns.

To create a CLIMATE SAFE FUTURE, responsible governance demands sustainable water policy; not a first option of expensive & carbon emitting Desalination.

2 Downloadable via www.dpi.vic.gov.au

3 Marsden Jacobs Report http://www.acfonline.org.au/uploads/res/res_rainwater_tanks.pdf

4 Australian Water Resources Assessment 2000, National Land & Water Resources Audit

5 Environment Victoria; <http://www.envict.org.au/inform.php?menu=7&submenu=221&item=506>

6 DSE EES referral documents "Victoria's Desalination Project"

9 Based on MAFRI reports of 25 small organisms / litre; conservative estimate

10 Paul Sandery, Flinders University http://aipcongress2005.anu.edu.au/Sandery_PA_AIP_AMOS_CD1.pdf

11 Developing Aquifer Storage and Recovery (ASR) Opportunities in Melbourne; CSIRO Land and Water

"...nearly 4 million people are still flushing drinking water down the toilet and discarding storm water" - Dr Graeme Dennerstein on Victorian desalination.