
Tuesday, 11 September 2007

FUTURE DIRECTIONS IN WATER SECURITY

Premier Mike Rann says it is likely that both a desalination plant and a doubling of our water storage capacity in the Mt Lofty ranges will be built to guarantee South Australia's long-term water security.

In a major statement to be made in Parliament today, Mr Rann outlined the Government's plan for water security for the future.

He said the Government's Desalination Working Group had been investigating both a 50 gigalitre desalination plant for Adelaide and an expansion of the Mt Bold Reservoir over the past six months.

"Based on interim reports of the Group, the Government's preference is to build both which could amount to an investment of more than \$2.5 billion.

"We do not intend to make a decision about such a massive investment lightly or without the best available information before us.

"We intend to do this properly – not in some slap-dash, haphazard, political 'quick-fix' way as proposed by the Liberal Opposition. That would be negligent and irresponsible.

"Cabinet hopes to have sign-off in November this year after considering the final report of the Desalination Working Group, due in October.

"Building a desalination plant is an extremely complex and expensive undertaking. It is not as easy as writing a press release.

"Its final cost will depend on where it is located, how the brine that it will produce is dispersed, where the brine is dispersed, and from where the energy to power it is drawn.

"Given the high cost of stainless steel and the high demand for desalination infrastructure across the globe, the cost of building a desalination plant quickly would be at a premium.

"The best estimates before us at present for 50 gigalitre desalination plant and associated engineering works could cost in excess of \$1.4 billion – about five times more than the cost estimated by the Leader of the Opposition. It would supply about 25 per cent of Adelaide's annual water supply.

"Unlike the Perth desalination plant that was built in a restricted site, we would plan to build on a site that allowed it to double in size if necessary in future years.

"And unlike Perth's desalination plant that was built on the coastline of a turbulent Indian Ocean, Adelaide is located along the comparatively protected waters of Gulf St Vincent, which is a commercial fishing ground and an important fish breeding area.

“We intend to conduct comprehensive studies into the movement of currents around the Gulf, so that engineers can know where best to disperse the plant’s large concentrations of brine which, before it is mixed and diffused with sea water, is highly toxic.

“The Desalination Working Group is considering the optimal size of a plant for Adelaide, whether it can be built in modules, what the environmental implications are and where it could be built.

“Wherever the desalination plant is located – whether it is at Pelican Point, near Port Stanvac, or further south along the coast – a pipeline to carry the plant’s waste brine will have to be laid beneath the seabed out into the waters of the gulf where the currents are best suited to quickly disperse it.

“I am told such a pipeline could be many kilometres in length. That engineering work alone would be an enormous and expensive undertaking.

“While the fresh water produced by the plant will connect directly into our mains water supply, at times the desalinated water will also need to flow into our filtered water storage facilities.

“For the first time, the northern and southern parts of our water system will also need to be fully integrated – so pipelines will need to be built between our major metropolitan facilities so water can be fed from one system to another.

“Given that a desalination plant’s membranes are most cost effective if the plant works around the clock, seven days a week, year round, which means it will draw down an enormous amount of power and so have an ongoing impact on the cost of water.

“A desalination plant would take, I am informed, about up to five years to build and connect to the supply grid.

“Cabinet has also been considering the Mt Bold proposal to expand our storage capacity, estimated to cost in excess of \$850 million. Actual costs will depend on the result of geo-technical engineering investigation.

“In years of abundant rain, Adelaide can draw 90 per cent of its water from rain that is captured in our reservoirs in the Mt Lofty Ranges and in an average year, 60 per cent of our water comes from rain in the Mt Lofty catchments.

“Given that water run-off in the Mt Lofty Ranges provides a significant source of Adelaide’s water supply in ordinary years, it makes sense to increase our water storage capacity in the hills from one year to two.

“Water pricing will need to reflect this significant investment in infrastructure. As a result, the Government is reviewing its water pricing options.

“The projects outlined today are the only real choices we have before us now to guarantee our water security for the long term and create the confidence we need to drive our State’s future prosperity,” Mr Rann said.