

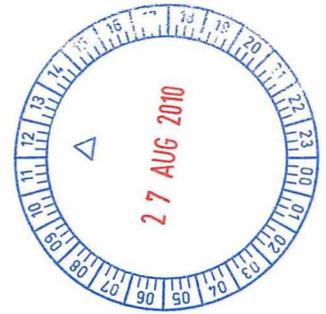


PUBLIC

Minister for Water; Mental Health

Our ref: 37-08322

Hon Brian Ellis MLC
Chair
Standing Committee on Environment and Public Affairs
Parliament House
PERTH WA 6000



Brian

Dear Mr Ellis

PETITION NO 65 – WATER QUALITY IN ESPERANCE

Thank you for your letter of 30 June 2010 requesting comments on the terms of the above submission petition and the submissions from the principal petitioner and tabling Member.

I have contacted the Chief Executive Officer of the Water Corporation on the petition and the following comments are provided.

The water supply for the town of Esperance is sourced from a borefield located within and to the west of the residential area. The water abstracted from these bores typically has a hardness of around 340 mg/L. Water with a hardness of greater than 200 mg/L has the potential to cause scaling.

All water supplied by the Water Corporation across the State must comply with the same health-related water quality criteria as set out in the Australian Drinking Water Guidelines produced by the National Health and Medical Research Council. In this regard, the water supplied in Esperance meets the same health parameters as other parts of the State, including Perth.

To reduce the impact of the hardness, (dissolved calcium and magnesium salts), the Water Corporation doses water in Esperance with Calgon® as part of the water treatment process. This chemical reduces the potential for scale to build up in electrical and gas appliances, but does not reduce the calcium and magnesium salts in the water.

A feasibility study identified the preferred treatment technology to reduce the hardness in the water supply recommended membrane softening treatment. This technology would cost up to \$20 million to construct and integrate and is provisionally planned for 2018/2019. However, this will be reviewed periodically pending capital funding constraints on the aesthetics of water program.

Desalination

The impacts of growth of all the towns in the Goldfields-Esperance region that have a bulk water supply have been investigated. Potential alternative schemes, the expansion of existing sources and water efficiency measures to reduce consumption and, therefore, capital growth have been considered in this evaluation. One option for the region that has been considered is the construction of a desalination plant to supply Esperance, Kalgoorlie/ Boulder and several towns and services between.

United Utilities put forward a proposal for the construction and operation of a desalination plant in Esperance in conjunction with a pipeline to Kalgoorlie-Boulder. In January 2005, the State Government referred this proposal to the Economic Regulation Authority (ERA) for an inquiry into the cost of supplying bulk potable water to Kalgoorlie.

In this inquiry, the ERA compared the cost of transporting water from Perth to Kalgoorlie against the cost of the proposal by United Utilities to transport desalinated seawater by pipeline from Esperance to Kalgoorlie Boulder.

The cost-benefit analysis of each option undertaken by the ERA was detailed and included the impacts on consumers; the impacts on the State Government's finances; the potential to enhance regional economic development and the potential to defer capital expenditure on water source development for Perth.

The inquiry found at that time that there were currently not enough customers to make the Esperance desalination plant a viable option. To make the option viable, a significant increase in demand would need to occur, such as new customers, and for those mines using hypersaline water to switch to desalinated water.

The final report on the 'Inquiry into the cost of supplying bulk potable water to Kalgoorlie Boulder - 2005' may be found at the ERA's website www.era.wa.gov.au and essentially concluded that costs outweighed the benefit.

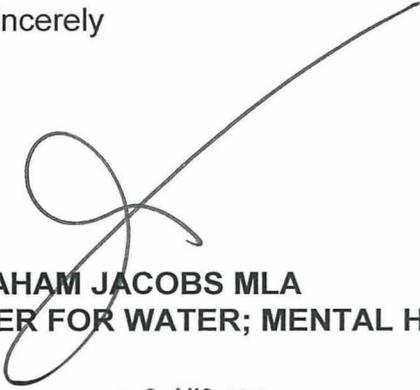
The Government is positive to the concept of a private water provider supplying bulk potable water to the integrated water supply if feasible and economically viable.

If United Utilities could provide bulk desalinated water that meets the Australian Drinking Water Guidelines criteria at an equivalent cost to the current operational costs of the Esperance water source, the Water Corporation would be keen to see their involvement in the provision of water to Esperance.

In relation to the suggestion that a desalination plant could be easily constructed in the Esperance area, the land availability and social acceptance of a proposal of such a magnitude are significant issues, but being a resident in Esperance I would not see this as a major impediment.

It should also be noted the concept of the Esperance desalination plant would still require the utilisation of the current Goldfields agricultural water supply scheme to provide domestic, agricultural and mining customers including those customers serviced from over 8,000 kilometres of pipeline in the Wheatbelt area, which accounts for approximately one third of the current consumption.

Yours sincerely



**DR GRAHAM JACOBS MLA
MINISTER FOR WATER; MENTAL HEALTH**

26 AUG 2010