



INCREASING THE WATER AVAILABLE for the MURRAY DAR]

This Plan solves the water shortfall caused by drought and/or climate change for South East Australia and allows for a Melbourne population of up to 7 Million. It has a design life of 100 years. It can be built by private enterprise and still maintain viable water prices.

Water can be diverted from NW Tasmania's existing Hydro Electricity dams which currently flows out to sea from two rivers, the Forth & Pieman. These dams are higher than Melbourne & Geelong's water grid.

The volume available from these rivers (5,300GL/year to sea) is in excess of eleven times that used by Melbourne without restrictions and over twice that used by Victoria including irrigation. Records for their flow has been recorded for almost 100 years.

This solution requires no pumping and operates using gravity.

Stage 1:

Construct and install either a 2.5m diameter, 330km, steel pipeline from Lake Cethana/Gairdner; or a 25km steel pipeline from the Paloona dam to Bass Strait then connected to a 285km, 6m diameter plastic pipeline. Both methods connect the Forth River outflow to the Wonthaggi Desalination Plant inlet tunnel. This tunnel has a capacity of 350GL/year. The Forth River catchment is regulated by many existing dams. It is not used for major irrigation.

This will allow the flow of up to 350GL/year/pipe to Melbourne's water grid. No pumping, quality processing or new dams are required. Melbourne currently uses about 400GL/year. The desalination RO plant can be used for recycling at Carrum. Such recycling has been mandated by the Victorian EPA to upgrade sewer & storm water from class C to class A. This class C water currently flows to sea causing pollution.

Stage 2:

Construct a 30km tunnel from the Upper Yarra Reservoir to Big River. Flow is two way. No pumping is required either way. Water can flow from the Upper Yarra to Eildon or from Big River to Melbourne.

Melbourne Water can supply 300-800GL/year (drought to flood) of Melbourne's catchment water from the Upper Yarra & Thomson Reservoirs to Goulburn and Murray River water authorities, councils and irrigators. **The Upper Yarra and Thomson Reservoirs may be held at 70% full for disaster insurance and for fighting bushfires. Input of 300GL to Eildon every year guarantees a flow to the Murray's mouth even during a drought such as 1998 to 2010.**

CONCLUSION: This solution maintains the wealth created by the Snowy Mountains Scheme as it makes irrigation water reliable even in a long drought by keeping Eildon at full capacity. There is no need to buy back water licenses that receive zero allocations during a drought. **This plan is extendable to three pipelines to Victoria. No new dams are required. Additional pipelines will require the joining of the Forth (1,300GL/year) & Pieman (4,000GL/year) catchments via a 30km tunnel. The entire system and extensions work using gravity only.**

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