



Secretary: *A. B.*

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30 AUG 2002

HOUSE OF REPRESENTATIVES  
STANDING COMMITTEE ON  
AGRICULTURE, FISHERIES  
AND FORESTRY

## 25 DISTRICT BOARD "TO SERVE & EDUCATE ALL"

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28 August, 2002

Secretary,  
Parliamentary Committee for Ag. Fish. & Forestry  
Parliament House,  
CANBERRA ACT 2600

Dear Sir,

I write on behalf of the R.S.L. Sub-branch members of the 25 District Board, who are hugely concerned with the rapidly coming of the shortage of water not only in the Goulburn Murray Valley regions (known as the fruit bowl of Australia), but the Eastern seaboard of the Commonwealth experiencing serious drought conditions.

I enclose copies of papers well prepared by our members and as I, I am sure you will read the drastic concerns that is hitting the entire region of Australia.

Returned Servicemen of WW1 and WW2 were rewarded by the Commonwealth Government of the day an acreage of land to establish their families and their choice of dairying, fruit and vegetable growing, grapes and vines, citrus and grazing to establish and educate their families and to supply what is now known as the "Fruit Bowl" of the world.

I, on each of their behalf, ask you to read and return your attention of these papers that are attached and return your comment to me at your earliest convenience.

I am clearly available to discuss these matters and papers with you and would be prepared to meet you in your office if that was desirable.

Please return your reply/support at your earliest to the address above

Yours sincerely,

P. McPhee  
Chairman, 25 District Board

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House Of Representatives  
Committee of Agriculture, Fisheries  
And Forestry,

## SUSTAINABLE WATER SUPPLY IN AUSTRALIA

Australia, an island continent the size of Europe (less Russia) is resource rich with one exception, water. It is the driest continent on earth, consisting of an archipelago of urban development surrounding an arid desert. It is the second biggest and second driest desert on earth.

This lack of water is due to the mainland being set centrally on the torrid zone of the southern hemisphere and the continent's principal mountain range being along the Eastern coast. The Northern latitudes extend into the tropical zone while the southern fringe verges on the southern temperate zone. If the annual average rainfall was spread over the continent, it would be 4cm deep – just 76cm less than the same exercise on the North American Continent.

Given these circumstances, **WATER** is absolutely vital to the health and economical well being of Australians. The limited quantity available is rainfall in the North and on the Eastern Coast of the Northern Territory and the Eastern States respectively. The largest river system, the Murray/Darling, has the outfall to the ocean in the central state of South Australia.

It is submitted that several states are involved and the available water has to be adequately managed to conserve and fairly distribute the supply to those states, the responsibility to chair and co-ordinate the management rests constitutionally with the Commonwealth Government.

Each State requires its own authority to manage that portion of water fairly proportioned to it, or which lies entirely in its territory.

Whilst the Murray/Darling Basin Commission (MDBC) has done a sterling job in identifying available water and the required utilization of that water, much, much more, needs to be done.

This continent has large areas of **MARGINAL** land areas with average rainfall between arid (200mm or less per annum) and viable (about 400mm or more per annum). If this land is to be utilized to produce food and support people, it will require water. Australia, therefore requires on-going conservation, planning and building of infrastructure, especially pipe lines, instead of channels. This will be

necessary to save the approximate loss of 80% to soakage and evaporation, which currently occurs in channels in Victoria. The loss would be greater in more arid areas.

Large cities, such as Melbourne, and Geelong especially, experience water shortage.

Only Government can address this vital national resource problem, and be the authority to adequately and appropriately control, co-ordinate, and legislate the necessary management protocols, the budgeting/funding requirements, and the responsibilities of the Water Authorities involved.

Since this is a nationally vital resource, there is the need for **MULTI POLITICAL PARTY** policy and agreement, the same as Defence and Gun Law policies require. To do otherwise will destroy continuity of the on-going programmes, which must proceed during the next 25 to 30 years, steadily and surely.

It will be essential to continue management and budgeting/funding even when Governments change. Only multi-party, or at the very least 'bi'-party Policy Agreement, can ensure this requirement.

Since interstate water trading will have to become the 'normal', if the water from the monsoonal belt in Northern Australia, and a portion of the average annual rainfall of ten feet (approx 3 metres) which falls on Tasmania's west coastal range, is to be traded to the other States on the mainland. It is essential that every Australian State has its own water authority represented on the Commonwealth overseeing authority.

### **SHORTER AND LONGER TERM PLANNING.**

In the shorter term – 5-10 years – the programmes to pipe the major channel and water ways should be set in motion, as is proposed with piping of the Goulburn, Wimmera/Mallee channel. This would save 83GL lost in supplying 27GL to these western Victorian cities and municipalities.

### **BUDGETING AND FUNDING.**

Budgeting and Funding will have to be achieved from various sources, including Commonwealth and State Governments. In some urban programmes, Local Government should contribute and finally, the Water Authority which controls the end reticulation. (This = user pays)

Only a limited taxing of the user can be applied if farm income is to remain viable, and it is absolutely essential that this income does remain viable.

Perhaps a Government Water Bond system, similar to the wartime War Bonds could be introduced to cater for both large, and very small investors, with the surcharge taxed to the user, being utilized to pay interest on the bonds. During the war we bought stamps and when the bond card had 16/- (\$1.60) worth of stamps the Post Master stamped and signed the bond to activate it. It was redeemable for one pound (\$2) four years later, but could be cashed pro-rata in an emergency.

### **GEOGRAPHICAL STUDY**

A Geographical Study of areas requiring environmental water flows is needed. MDBC recommends environmental flood flows of 550GL reducing to 450GL per month in the Murray every 5 to 6 years for a period of 4 months, ideally piggy-backing on a natural flood, or in conjunction with bulk entitlements of down stream users. Careful geographical studies of river flood plains that require this periodic

flooding, may allow for substantial areas of some of these flood plains to be levee banked and water held or taken from irrigation sources. In such cases, the river flows need **NOT** be held high for four months, but only for the initial flooding. Considerable saving of several hundred giganlitres could be achieved, while still providing the environmental needs.

### **CLOUD SEEDING**

The last four years have had well below average rainfall in Eastern Australia. We are now in drought. Although cloud seeding was tried in the 1982-1983 drought with **NO** real success, seeding should be implemented again in low rainfall areas. It should now be tried on suitable cloud that is **ENTERING** the catchment areas and preferably already commencing to lightly rain. If this had been tried, the 25 to 40% of average rainfall during the last 4 years may well have been 40 to 50% **WITH CONSEQUENT HIGHER RESERVOIR LEVELS**. In 1982/83, the seeding was tried on cloud to the west of the state which was **NOT** showing signs of raining, and only 3 or 4 mm subsequently fell, to merely settle the dust.

### **DESALINATION OF SEA OR OTHER SALINE WATER**

Saudi Arabia currently desalinates 18% of its domestic water supply from the sea. We understand that Australian engineers perform the desalination. We are told it is expensive, but are unable to find out how expensive. An assessment/feasibility study should be mounted on desalination. In drought periods, when our large cities have low reservoir levels, an injection of a small amount of desalinated water, (5 or 10%) even if it doubled the cost, should be considered. The extra cost would be an additional incentive to conserve the water ration.

### **SECONDARY WATER USE**

More utilization of treated sewerage/sullage water should be planned, and used in irrigation schemes, the watering of parks, and industrial uses such as cooling or concrete mixing. Phosphate from urban sullage would **NOT** enter the river system to cause algae blooms. At a time when farms are lasering and building dams to prevent drainage water entering the river system, it is important to also address these sources of phosphate contamination.

### **LONG TERM PLANNING PROGRAMME (10 to 25 years)**

Feasibility studies and, where appropriate, implementation for the following potential water conservation, should be undertaken.

1. Impounding and diversion of the fresh water which floods down the Cooper and Warburton River systems, to the Lake Eyre Basin, several times per century. It is ridiculous that huge quantities of rainwater are lost to an 8400 square kilometre lake which is more salty than the ocean.
2. The conservation and subsequent use of the water of those rivers which flow from the monsoon rains to disappear into the desert (Eyre, McIntyre & Diamantina).
3. The harnessing of some of the 84000GL of water which runs to the sea in short rivers from the mountain range in Queensland, in an average monsoon. Surely some of this water can be suitably harnessed for inland use. Ord River dam is a start to using some of the 77000GL which runs off the northwest coast. All major water projects of the future should be by pipeline and **NOT** channel with the average 80% wastage by soakage and evaporation. Evaporation in Australia averages 2.5 metres per annum from surface water.

4. **BASS STRAIT PIPELINE.** A feasibility study to be undertaken, after negotiating to trade water from Tasmania, into building a pipeline across Bass Strait to the mainland. This water, to be available after passing through the H.E.C. generators, could eliminate the water problems of Melbourne, and especially Geelong. It would augment the water supply in south-western Victoria and South Eastern South Australia. Approximately 3 metres of water falls on Western Coastal range in Tasmania in an average rain fall year.

### **ARTESIAN WATER**


This very dry continent has many large artesian water sources of high quality. The planned utilization and proper monitoring both of quantities to be drawn, and the ongoing quality of the water, are vital both environmentally and in regard to human health. Management and audit of the Water Authorities charged with controlling these sources, is essential if these vital needs are to be ensured. The biggest high quality water aquifer in the world is under Queensland. It is to be noted that after 20 years of safe use of Artesian supplies in India and Bangladesh, the excessive use caused leaching of volcanic sourced arsenic into the aquifer. 60 million people are dying of poisoning, due to lack of quantity and quality monitoring of the supply.

### **IN CONCLUSION, WE EMPHASIZE –**

- Water is an absolutely vital but lacking resource that must have Governmental control and overview of management in all facets involving planning, building of infrastructure, and regulating and monitoring regarding-
  - a. Conservation and diversion
  - b. Trading and supplying (especially interstate)
  - c. Quantity and quality monitoring (including environmental allocation)
  - d. Planning and feasibility study for major development
  - e. Budgeting and funding control to make it happen
  - f. Augmentation by cloud seeding or desalination and secondary source development
- To achieve the above results requires **MULTI-POLITICAL PARTY** policy and agreement to ensure the long term continuity to the complete and appropriate development and reticulation of this vital resource.
- Commonwealth Government oversight in all aspects is necessary.

I commend the concepts and ideas of this submission to the Parliamentary Committee for evaluation and assessment.

Yours sincerely,



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