

**Submission
No 84**

**INQUIRY INTO ADEQUACY OF WATER STORAGES IN
NSW**

Name: Mr Robert Caldwell

Date received: 1/08/2012

To NSW LEGISLATIVE COUNCIL

Standing Committee on State Development.

Inquiry into Water Storages.

- (a) Agricultural Water Storages should be treated with financial sympathy. Full cost recovery is inappropriate and will lead to reduced production and stranded assets.
Irrigation water now costs \$50/ML and it is now unprofitable to grow many crops.

The recently constructed Earth bank in Lake Brewster has only one Rock face. The other side of this bank needs urgent Rock Facing to prevent erosion. Estimated cost \$2.5 Million .

Storages for Sydney Water Supply should be built in preference to Wasting money on Desalination Plants.

- (b) I do not have much faith in Models. The Outcomes and system constraints are set before the Model is built.
The Outcomes should be questioned because the Environmental demands are so subjective.
How long is a Piece of String ?

- (c) I don't think Environmental Flows should be given priority over Irrigation.

The Opportunity Cost of Environmental Flows should be published in \$ and ML for all to see.

It is silly reserving 40% of Wyangala Dam for town water supplies 3 years into the future.

The dam capacity is 1,220,000 ML., 40% = 500,000 ML of this 50 % will be lost in Evaporation for a Yield of 25,000 ML /Year for 3 years. Result, 15% yield.

Over conservative estimation of Dam Inflows leads to underutilization of the storage and reduced production.

Minimum Wyangala Inflow estimates of 25,000 ML/year are unrealistically low and should be raised to 90 % exceedance (175,000 ML/Year) See Uni of Melbourne and NSW studies.

- (d) Safety, the erection of a concrete Wall (1.5 Meters high) on top of the Earth core may lead to erosion of the core and dam failure.
The present spillway has a capacity of 1,000,000 ML/ day. This would be a Disaster for Cowra. The highest spill has been 250,000 ML/day.
Should increased capacity be required then there is a Natural Spillway (100 Meters wide) located 700 Meters north of the dam wall. This would require removing the Gate entrance to Wyangala Waters and excavating for Radial Gates.

- (e) International Jurisdictions, The Governments , Federal and State, should not sign any International agreements eg. RAMSAR.

The Environmentalists are just using these agreements to advance their agenda.
Productivity will be reduced.

Yours faithfully

Robert Caldwell 1-8-2012



WATER ALLOCATION STRATEGIES FOR THE LACHLAN RIVER VALLEY

**K. Panta, T.A. McMahon, H.N. Turral, H.M. Malano,
W. Malcolm and C. Lightfoot**

November 1999



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EFFICIENT ALLOCATION OF IRRIGATION WATER IN THE MACQUARIE VALLEY

Award: Bachelor of Environmental Engineering

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