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Mr Andrew McConville
Chief Executive Officer
Murray-Darling Basin Authority
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Dam Operation and Governance

Dear Mr McConville,

On behalf of the Murray Darling Association (MDA), I am writing to commend that the Murray-Darling Basin Authority (MDBA) negotiate with the Commonwealth Environmental Water Holder (CEWH) to underwrite any airspace not recovered after pre-releasing during flood operations, predict inflows on the basis of flows that can be reasonably expected and not use the current serially correlated flow regime which uses historic lows from a given point in time, as well as that the MDBA give heavy weighting to short term Bureau of Meteorology (Bureau) forecasts.

At our 79th National Conference earlier this year, our membership reviewed the current management of the Hume Dam and raised concerns with its three pillars of governance, in particular the management and utilisation of the last 386GL of airspace.

The Hume Dam is currently operated under three pillars of governance:

1. Protect the structure at all costs.
2. Store as much water as possible.
3. Provide flood mitigation where possible.

Members have expressed concern that the MDBA treat pillars 2 and 3 above as being mutually exclusive. Under current rules the last 386GL (12.8%) of airspace at Hume Dam can be used for flood mitigation, however this volume is not being used.

For example, in 2016 where the Murray Valley experienced catastrophic flooding Hume dam was allowed to fill to 98% and went from minimum releases of 600ML/day to releases of 45,000ML/day 10 days later, and it kept getting worse from there. This was despite BoM short term forecasts predicting huge rainfall totals over the catchment. The Hume Dam was essentially allowed to fill and spill, and catastrophic flooding occurred.



Last year when the Hume Dam was 97% full in July the same thing happened, yet MDBA officials indicated that Hume Dam was not guaranteed of filling despite every climate model in existence forecasting extremely wet La Nina conditions.

Over the next four months over two times the total volume of Hume dam was passed as floodwater resulting in extreme damage to property in the Murray Valley through to South Australia. Serially correlated flow calculations by their very nature will always underestimate inflows i.e. inflows will always be greater than what is allowed for.

It raises the question, that if there is not a realistic expectation of what is coming in, how can one manage what needs to be let out?

Our Members are concerned that in wet years the MDBA has discounted Bureau of Meteorology (Bureau) forecasts on issue that 'they might be wrong,' but in dry years follow the Bureau forecasts to the letter. It begs the question as to who within the MDBA thinks they have a better ability than the Bureau to forecast weather events.

It is imperative that much as in dry years, the MDBA give heavy weighting to the Bureau's forecasts in wet years too.

Members have noted that, when the MDBA does consider that the Hume Dam will fill and pre-release water in advance of inflows, this pre-releasing is always conservative because they always want to guarantee filling after an event. Pre-releasing is generally considered good for the environment and this water does not come off any environmental water account. If the CEWH was prepared to underwrite say 5% of airspace, then if Hume did not fill after releasing mitigating flows before demand exceeded inflows then that % shortfall could come off the CEWH's water account. This would give river operators significant wriggle room to provide some meaningful flood mitigation to downstream communities whilst also providing significant environmental outcomes through the pre-releasing process. CEWH has in the past has shown some appetite for this concept.

As the Chief Executive Officer of the Murray-Darling Basin Authority, could you please advise what intentions the MDBA has negotiate with the Commonwealth Environmental Water Holder to underwrite any airspace not recovered after pre-releasing during flood operations?

Additionally, could you please advise what intentions the MDBA has to predict inflows on the basis of flows that can be reasonably expected and not use the current serially correlated flow regime which uses historic lows from a given point in time, as well as give heavy weighting to short term Bureau of Meteorology forecasts?

Please don't hesitate to contact myself or our National President, Cr David Thurley should you wish to discuss Dam operation and governance along the Murray River system, or require further information.

Yours faithfully,



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