**SUBMISSION TO MURRAY DARLING BASIN PLAN INTERIM REPORT ON IMPLEMENTATION REVIEW 2023**

FROM: Jan Beer

The Constraints Management Strategy devised by the MDBA IN 2013 was flawed from the beginning.

The MDBA charged the basin states with implementation of “relaxation of constraints”.

The myriad of natural obstacles, chokes, configuration of the winding, low gradient rivers as the 4 major river systems wind their way to the sea make it a sheer impossibility to deliver the proposed environmental flows down the Murray, to the South Australian border and out the Murray Mouth.

The only way to achieve the “enhanced environmental outcomes” is to create man-made manipulated environmental floods of the calibre of the 2016 floods.

This flood replicated exactly the proposed environmental flow to the SA border of 60,000-80,000ML/day for 5 weeks. But the economic and environmental impacts were felt al the way down the river systems; 204,000ML/day flowed past Tocumwal with less than half that flow arriving at the SA border due to attenuation and evaporation

**“Constraints-easing** is critical to the success of the Basin Plan – governments should implement these projects through a **dedicated, standalone program**.”

This statement above in the Interim Report is absolute rubbish. The constraints “relaxation” theory was an aspirational assumption that was never feasible and in fact the decision to proceed with a Constraint Management Strategy in order to deliver greater volumes of environmental water downstream was based on no evidence whatsoever that the channel restrictions in the 4 major river systems or the multitude of other constraints throughout the basin could, in actual fact, be ‘relaxed’ and the proposed flows actually delivered.

The Hydrologic Modelling of Relaxation of Operational Constraints in the Southern Connected System P. xiii states:

*“ Undertaking detailed assessments an analysis to identify whether any of the constraints tested in this study could actually be relaxed was not within the scope of this report*”

The Interim Report states-

“While there are legitimate concerns, in some cases, landholder objections can resemble a ‘holdout problem’, where the need for all affected parties to agree gives a small number of people an outsized ability to slow delivery of a project with community‑wide benefits.”

This statement completely undermines the enormous impacts that the increased volumes, duration, frequency and timing of proposed environmental overbank flows will have 7 years out of every 10 on the landowners along the upper Goulburn River and its tributaries.

The Productivity Commission Interim Report ,for whatever reason, totally under-estimates the impacts on the upstream environment, people’s livelihoods, businesses and devaluation of property, which based on latest real estate sales is valued at $50,000 per hectare.

How can mitigation of one-off, up-front payments possibly compensate people for their lifetime work on business and farms?

Once again the Interim Report fails to acknowledge the fact that flows which are proposed to achieve ’enhanced environmental outcomes’ **CANNOT BE DELIVERED**

**The latest hydrological modelling by the MDBA shows ‘relaxed’ constraints in the Goulburn River-**

* have no influence on flows below Torrumbarry;
* cannot achieve 80,000ML/day at SA border;
* cannot keep the Murray Mouth open 95% of time without dredging .
* beneficial impact of  all relaxed constraints  scenarios decreases as flow moves downstream,
* cannot ‘enhance environmental outcomes’ as proposed, for example inundate an extra 35,000ha of high level floodplain

**OTHER REASONS WHY 450GL OR PROPOSED FLOWS TO SA CANNOT BE  DELIVERED**

MDA CONSTRAINTS MODELLING <https://www.water.vic.gov.au/__data/assets/pdf_file/0027/670464/murray-darling-basin-contraints-modelling-independent-expert-panel.pdf>

Report by the NSW and Victorian Ministers’ Independent Expert Panel Report prepared for the Victorian and New South Wales Governments 16 December 2019 ( WILSON REPORT)

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The Panel has been advised that given these uncertainties, flows of 80,000ML/d at the South Australian border will occur when there is a coincidence of large rainfall and ‘natural’ flow events in the Murray or its key tributaries, but river operators will not be creating ‘managed’ 80,000 ML/d flows at the South Australian border.

The **Murray–Darling Basin Authority Review of the Environmental Watering Plan March 2021** <https://www.mdba.gov.au/sites/default/files/pubs/review-of-environmental-watering-plan-march-2021_0.PDF> PAGE 17 states-

 (2)(d) *condition of the Coorong and Lower Lakes ecosystems and Murray Mouth opening regime. Murray Mouth and Coorong targets being met through Basin Plan mechanisms alone was flagged as potentially unachievable under a changing climate.*

**AUSTRALIA’S NATURAL PHYSICAL LANDSCAPE PREVENTS DELIVERABILITY OF PROPOSED ENVIRONMENTAL FLOWS**

We are the flattest, driest inhabited continent on earth, meaning there are massive attenuation and evaporation losses as flows so slowly wend their way towards the Murray Mouth and Southern Ocean.  There is no manner of mitigating these losses in our hot, arid, flat land.

 All tributaries worthy of naming, are in the upper reaches of our main rivers.

The Darling once it leaves Queensland has virtually no tributaries.

The Murray from the point of confluence of the Darling has no tributaries.

The Goulburn below Shepparton has virtually no tributaries.

The Murray at the confluence with the Goulburn River is 1992 kms. from the Murray Mouth and a mere 124.9 metres above sea level.

Mildura is still 878kms from the Murray Mouth but only 34.5 metres above sea level.

The Darling River at the Queensland border is about 3,218 river kilometres from the sea and only 500 metres above sea level.

Once the Murray and Darling Rivers leave the Great Dividing Range their stream bed gradients are so low that their waters flow at a phenomenally low rate.

After wandering 1350 river miles to Wentworth, the Darling River flows into the Murray at 100 feet above sea level. Throughout that distance it falls only 3 and ½ inches (90mm) to the mile.

Wentworth, which is a mere 33 metres above sea level  and for the last 100 kms. in South Australia, the stream gradient is only 12mm./km (1/2in.) *- (Rivers of History)*

The failure of politicians, the MDBA and Productivity Commission to acknowledge that the proposed ‘enhanced environmental outcomes’ cannot be achieved as envisaged with the buyback of 450GL and ‘relaxed constraints’ will prove to be very costly to the Australian tax-payer.

END OF SUBMISSION

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