

Sunday 9<sup>th</sup> August 2020

Dear Independent Panel Members

It was great to have the opportunity to listen to the panel's presentation and to read the draft report. I wish to make the following comments:

- What makes our river systems distinct in Australia, is their highly variable nature. This means our rivers 'first flushes', have a range of significant ecological, socio-economic and cultural values, and provide both the local ecosystem and community with much needed relief during long times of dry. *Maintaining some level of connectivity- even if it is periodic-along our rivers is important* in ensuring our riparian environment and their associated ecosystems are protected. Thus the draft recommendation that is about ensuring water management provides for and promotes connectivity between water sources is supported- it is not only logical but is founded on a range of research on our inland rivers. Indeed when this connectivity has not been maintained in the past, it has led to considerable public outcry over the environmental disasters that it causes (e.g. fish kills and algae blooms). I am therefore also supportive of a review: *"Review and update incident management systems for managing first flush events"* because I think our systems have failed us in the past and there is no need for that to occur. Local conditions can vary and seasonally dry wetlands can need a lot of water to prime them and stimulate fish breeding events. Moreover our increasingly warming and drying climate in the Basin (see Mick Keelty's report) means we should be adaptive where possible.
- We need to be more 'agile' in our management of our rivers- particularly given their nature. The rivers in the northern basin are particularly variable - so having a flexible management tool such as *making any temporary water restrictions required to manage first flush events on a proactive basis (that is, prior to specific forecasts of rain) is common sense*. It will have to be operationalised through good communication. (i.e i there is a need to *improve and resource communication coordination and capability*) The last 'first flush' event caused considerable confusion and concern amongst the public- which in turn led to frustration about the lack of consultation and wondering 'what the hell is going on'- how can we have some water users get access to a first flush event, when we have had fish kills further down river?
- The above point leads me to your fifth recommendation *"ensure the evidence base and methodology for first flush management is quantified, science-based and made publicly available"*. Our rivers are our livelihood. They are critical to us, but we value them for diverse, and sometimes competing purposes. So this means that managing any 'first flush' based on good evidence is a critical step in restoring transparency to the process, re-building community confidence in governance, and between different groups in these communities. I would note a recent "Conversations" article which outlined how disempowered indigenous communities are in terms of realizing their water values in Western NSW.

- Given the weather conditions are predicted to become overall more dry, and more variable I would like to also endorse the recommendation that *first flush events be incorporated into the regulatory and policy framework as part of the ongoing management of drought*. As stated earlier we value water for a range of uses- and these values will become more important as this resource becomes a scarcer commodity. Changes to the WM Act, the Extreme Events Policy, the Water Sharing Plans and incidental response guides will be required, to enable better management of first flush events. In regards Extreme Events Policy, I believe it is vital we expand the scope of this policy to sustainably manage water given the significant impacts that climate change are already having on the ecosystems of the Murray Darling Basin and the availability of water. There have been recent times were remote communities simply had no water.
- And given the above, *Improving flow forecasting modelling and real-time monitoring capability, including measurement of extractions and the hydrometric system for inflows and monitoring end of system flows* is supported. I note a key issue for the MDB IAC is 'unmeasured take' - we have to look at short comings in our existing approach to water accounting in NSW- things like floodplain harvesting, return flows, and accounting protocols all need to be examined because these sorts of things all underpin how we might manage any potential first flush event. There will be what is happening but there are range of salient 'pre-cursor' factors that influence our decisions on how we manage it. I think it was Ken Mathews who raised issues about water metering in NSW. If we could get on with implementing telemetric metering we would have infrastructure in place to rapidly inform flow forecast modelling and improve overall understanding of predicted flow behaviour. I would note this section of your report (p70-71) makes few specific mentions about the areas that need to be 'fixed' or 'addressed' in regard to this and would urge the panel to consider including auditing measured and unmeasured take, and the implementation of online technologies (such as telemetry) to provide rapid feedback as two valuable ways to realise this recommendation- and explicitly state them in the report.

Yours sincerely

J Howard

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