

22 January 2021

Daniel Connor  
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Newcastle  
NSW 2300

Dear Dan

**Review of floodplain harvesting modelling submissions – Macquarie modelling**

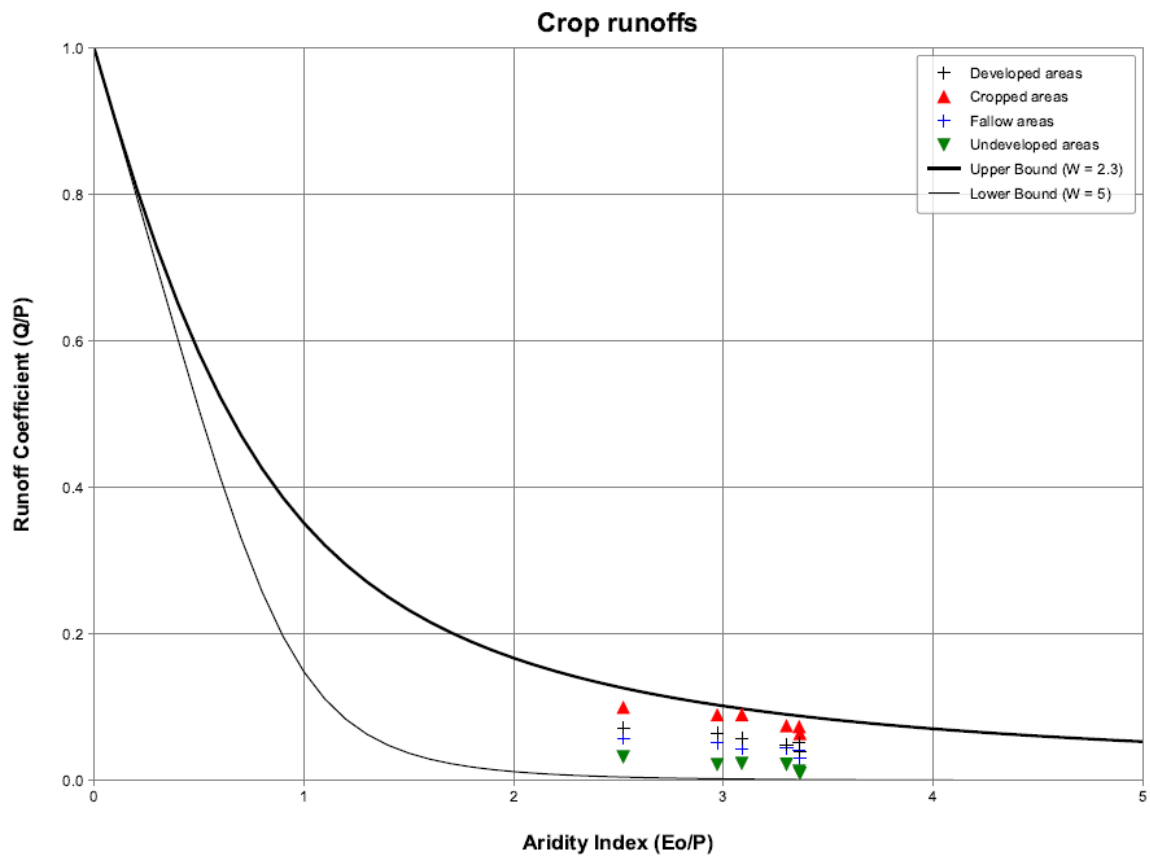
Thank you for the opportunity to review the current submissions for the Macquarie river valley. This note is to highlight the findings of that review for consideration by the Farm Submissions Committee.

As part of this process, I have reviewed documents entitled Recommendations to Review Committee for both valleys, however I will outline my findings separately for each one. Overall however, my findings are that the Department is continuing to review the submissions appropriately, though further care needs to be taken to evaluate whether overarching issues are being identified. This will be elaborated on further below.

**Macquarie modelling submissions**

A total of 27 submissions were received and evaluated by the modellers for this valley. I noted that additional rainfall runoff calibration was undertaken and spoke with Scott Podger, the lead modeller, on this. From these discussions and further information provided by Scott, the revised rainfall runoff calibration is consistent with previous work in the Border Rivers and Gwydir to ensure that the runoff estimates are consistent with the Budyko curves for the conditions of the valley, as shown in Figure 1 below. Further, we also discussed the noted changes to the IQQM model regarding how floodplain harvesting occurred on some properties and am satisfied that these changes are appropriate.

I noted a number of discrepancies in the analyses which I also discussed with Scott and these were attributed to typographic errors which he has since updated. We also discussed the selection of a different flood runner for two properties and how this would influence access. After receipt of further information, I am satisfied that the analysis undertaken is reasonable and the results are consistent with the analysis and the modelling and I recommend that the outcomes of the assessment are adopted by the committee.



**Figure 1.** *Budyko curves and representative results for Macquarie Valley (S. Podger pers comm 23/12/20)*

I am more than happy to discuss and present on these issues at the upcoming committee meeting on 27<sup>th</sup> January should further comment or explanation be required.

Yours sincerely

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