## JOINT SUBMISSION

## DRAFT GWYDIR REGIONAL WATER STRATEGY

- Thank you for the opportunity to provide feedback in relation to the Draft Gwydir Regional Water Strategy.
- 2. From the outset we confirm that we are generally supportive of the listed objectives. The Gwydir Valley is an important agricultural and economic contributor to NSW and therefore it is crucial that Government does everything possible to improve drought resilience and enhance water security for all water users within the valley. The strategy needs to be approached calmly and methodically to ensure that Government is able to provide and better manage water for all communities within the valley and to ensure continued water security for all water uses.
- We have reviewed the options that are contained at part 3.4 of the draft Regional Water Strategy and we are generally supportive except for option 2 being the new lower Gravesend Dam on the lower Gwydir River downstream of Warialda Creek.
- 4. The purpose of this submission is to confirm our opposition to this option on the basis that it is unrealistic, it is not consistent with the objectives of the draft strategy, it is not feasible nor is it cost efficient.

# PROPOSED OPTION 2: NEW LOWER GRAVESEND DAM ON GWYDIR RIVER DOWNSTREAM OF WARIALDA CREEK

- 5. At part 2 of table 4 the strategy refers to the construction of a new dam. The location of the new dam is said to be on the Gwydir River downstream of Warialda Creek near the town of Gravesend. It is proposed that the new dam will have a capacity of 175GL. It is further suggested that the dam would ultimately provide more efficient storage than existing on farm dams and would result in estimated savings from reduced evaporative losses on farm of around 29GL per year.
- 6. There appear to be a number of clearly identifiable problems with this proposal. Firstly, it is suggested that this new dam would assist in evaporation rates. Noting that the dam is only envisaged to have a total capacity of 175GL it goes without saying that it will be a relatively shallow dam. Copeton Dam is said to hold 1,364GL and suffers on average from NET evaporation of anywhere up to 20GL per year. A relatively shallow and small storage like the one envisaged at option 2 will result in significant evaporation which is ultimately contrary to the objective of saving around 29GL per year by way of reduced evaporative losses.
- 7. The construction of the new lower Gravesend Dam is also contrary to the objective of cost efficiency which is referenced at part 3.3 of the draft strategy. It goes without saying that the construction of a new dam, even a small, shallow dam like the one proposed at Gravesend will come at significant cost to the tax payer.

<sup>&</sup>lt;sup>1</sup> Water NSW Water Balance Report – Gwydir River (Copeton Dam 2019-2019)

- 8. For the sake of what appears to be a relatively modest saving of not more than 29GL per year, it is unlikely that the costs of acquisition, environmental studies, planning, construction and commissioning would pass any cost / benefit analysis.
- 9. The feasibility of such an option is also questionable having regard to the time that a construction of a new shallow and small dam will take. The impact on the natural environment is also worth considering. It goes without saying that the construction of a new shallow dam will result in the loss of native vegetation in an area that has been described by DPIE as an over cleared environment.<sup>2</sup>
- 10. The construction would also result in compulsory acquisitions which is at odds with the objective of beneficial outcomes for the community. Given that the objective of the proposed dam is to only provide more efficient storage than existing on farm dams, the benefit of such a newly constructed dam would be limited.
- 11. The construction of a new dam as envisaged at option 2 will fail to achieve the objective of delivering and managing water for local communities. The Moree Township is wholly dependent upon ground water and takes no water from the river system for the purposes of town water, parks and gardens and industry. Similarly, the construction of the Moree SAP will also be dependent upon ground water and is not expected to take or use any river water.<sup>3</sup>
- 12. Furthermore, the construction of a new lower Gravesend Dam fails to take into account the improvements in water management and water efficiency that have been achieved by the cotton industry over many years. Cotton as a crop has an average irrigation requirement of 6-7ML per hectare<sup>4</sup>. Long term monitoring has shown that the cotton industry has achieved significant improvements in water efficiency over time. Water use productivity by Australian cotton growers has improved by approximately 50% since 1992.<sup>5</sup>
- 13. Cotton producers can now grow up to two 227kg bales of cotton per ML of water which is approximately double the industry average from ten years ago. The cotton industry is clearly aware of its obligations in relation to water use and the industries whole farm irrigation efficiency has significantly improved. Farm water efficiency is now 81% compared to 57% in the late 1990s which indicates more water than ever is being used by the crop as opposed to being lost on farm through evaporation.<sup>6</sup>
- 14. It seems to us that the draft Regional Water Strategy fails to take into account the continued advancement made by the cotton industry in relation to water use efficiency. The industry is continuing to evolve and is continuing to become ever more water efficient.
- 15. It is likely that this trend will continue which may ultimately result in further decreases in on farm evaporation rates which in turn would add to the unfeasibility of the envisaged construction of a new lower Gravesend Dam.

<sup>&</sup>lt;sup>2</sup> Office of Environment and Heritage Report on native vegetation 2014-2016

<sup>&</sup>lt;sup>3</sup> Moree Champion October 27 October 2020

<sup>&</sup>lt;sup>4</sup> Crop and Pasture Science 2013 ABARE's

<sup>&</sup>lt;sup>5</sup> Cotton Australia - Cottons water use 2020.

<sup>6</sup> IBID

#### LACK OF COMMUNITY CONSULTATION

- 16. Whilst we acknowledge that the draft Regional Water Strategy is still in its infancy there has been a failure by the Department to properly consult with the communities that are situated within the Gwydir Valley.
- 17. There were no public announcements (at least that we observed) advising of the dates and times for the community consultation meeting. Indeed, the only way that we were notified about the community consultation meeting in Moree was via a mutual neighbour. Furthermore, we are aware that Councillors who sit on the Gwydir Shire Council and also Councillors who sit on the Moree Plains Shire Council were unaware of both the community consultation meetings and indeed of the draft Regional Water Strategy entirely.
- 18. The public information sessions (as much as we are able to ascertain) were only advertised on the Department's own website<sup>7</sup> and it appears that there were only three meetings that were held in Moree. With respect, the Department need to do a far better job of advising the community of this draft water strategy and the Department also needs to do a much better job liaising with Local Government organisations and community groups generally.

## CONCLUSION

- 19. In conclusion we agree with the objectives of the draft Regional Water Strategy however in our opinion option 2 is an inferior option and does not achieve the principles of cost efficiency, feasibility, distribution of benefit or intended results. There are numerous other options which will result in better outcomes and will be more cost efficient and feasible compared to the construction of a new lower, shallow Gravesend Dam.
- 20. We also urge the Department to better consult with community members, farming groups and Local Government organisations in the finalisation and implementation of the water strategy.
- 21. Thank you for taking the time to consider our submission.

<sup>&</sup>lt;sup>7</sup> NSW Department of Planning Industry and Environment website <a href="https://www.dpie.nsw.gov.au/">https://www.dpie.nsw.gov.au/</a>

Yours faithfully,

