



RICEGROWERS' ASSOCIATION  
OF AUSTRALIA INC

**SUBMISSION: REVIEW OF THE WATER  
FOR THE ENVIRONMENT SPECIAL  
ACCOUNT**

*December 2019*

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## 1. INTRODUCTION

The Ricegrowers' Association of Australia (RGA) welcomes the opportunity to provide a submission to the Independent Review of the Water for the Environment Special Account. It also thanks the panel for inviting our representatives to the stakeholder session in Canberra on Friday 8 November.

The \$1.775 billion Water for the Environment Special Account (WESA) was legislated to enact a last-minute deal between the Commonwealth and South Australian governments in October 2012. The deal, to acquire additional water entitlements equivalent to an annual average 450 gigalitres (GL), was the price South Australia demanded to sign up to the 2012 Murray-Darling Basin Plan.

The deal was not part of the extensive, difficult community and intergovernmental consultations over two years leading up to the 2012 Basin Plan. It was not subjected to rigorous impact analysis at any level: environmental, socioeconomic, third-party or water market. It was in every sense imposed by distant decision-makers on Basin communities and irrigated agricultural industries.

RGA has consistently called for an adaptive management approach to water reform. Such an approach recognises that much has changed since the 2012. Many assumptions informing environmental water recovery programs are no longer relevant or proving impractical. This was well-documented by the Productivity Commission's in December 2018 report on the Basin Plan.

While the Independent Review panel is not tasked with answering 'whether' the additional 450 GL should be pursued, we trust that the panel's exploration of 'Can the 450 GL be acquired' will provide a serious reality check for our elected representatives. A critical review of this rushed and ill-considered legacy decision is long overdue.

## 2. THE RICEGROWERS' ASSOCIATION OF AUSTRALIA

The RGA is the collective voice of Australian rice growers, representing around 1200 voluntary members. The RGA's main objective is to provide members with strong and effective representation on issues affecting the viability of their businesses, their communities and their industry.

The RGA is made up of eight branches located across the Riverina rice growing regions of NSW and Victoria. Each branch annually elects representatives to form the RGA Central Executive. The Central Executive represents their respective branches in determining RGA policy and projects.

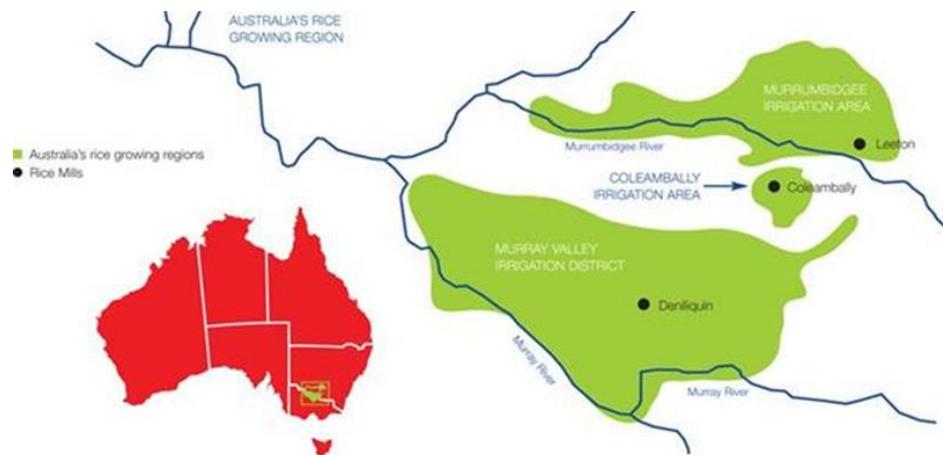
The RGA is a member of the National Farmers' Federation, National Irrigators' Council and NSW Irrigators' Council.

## 3. THE AUSTRALIAN RICE INDUSTRY

The Australian rice industry is located predominantly in the Riverina region of south-west NSW, with two small industries also in the Northern Rivers region of north NSW and in Northern Queensland.

The Australian rice industry relies on irrigation, mainly sourced from the Murray and Murrumbidgee river valleys. Provided water is available, the Australian rice industry is considered one of the world's most successful, delivering significant yields while leading the world in water use efficiency.

In a typical year the Australian rice industry produces around 800,000 tonnes of paddy rice with a farm gate value of around \$350 million. About 80 per cent of this product is exported. With value adding, the total industry worth is well over \$1 billion each year.



It can be further argued that the full economic potential of the Australian rice industry has not yet been realised with rice being excluded from three recent free trade agreements: Japan, China and North Korea. These markets represent significant potential for the Australian rice.

The rice industry is a significant economic contributor to the Riverina region of NSW. The towns of Griffith, Leeton, Coleambally, Finley, Jerilderie, Deniliquin, Wakool and Moulamein are highly dependent on rice production for their social and economic wellbeing.

Additionally, rice growers have individually invested more than \$2.5 billion in land, water, plant and equipment and collectively invested around \$400 million in mill storage and infrastructure through SunRice. They are also mixed farmers, using their land to run livestock and grow winter crops, generating regional economic activity and jobs year-round.

While the Australian rice industry is very small by world standards, it remains a very competitive supplier of premium rice products into world markets.

## 4. INDEPENDENT REVIEW QUESTIONS

### 4.1. How likely is it that the volume outcome can be achieved?

While Ernst & Young<sup>1</sup> found it was possible to acquire another 209 – 450 GL, this ‘headline’ finding is heavily qualified. This volume includes, for example, another 209GL from off-farm modernisation works in the Goulburn Murray Irrigation District in northern Victoria.

This figure is not correct. EY made this estimate despite Goulburn Murray Water advising EY consultants that EY’s estimated 209 GL was not technically or environmentally feasible, or possible only at prohibitively high cost (i.e. \$10,000/ML). EY did not change the report despite GMW’s advice detailing the challenges of achieving further savings in an already modernised system.

As for on-farm programs, EY estimated perhaps another 125-253 GL could be recovered. However, the indicative tables on p30 of the report assume water savings achieved in past projects are an indication of potential savings in future projects. This assumes that all fruit hangs at the same low, cheap and easy level forever when it comes to improving water efficiency on and off-farm. In fact, the low-hanging, cheap water savings have already well and truly been recovered. What potential savings remain are expensive and difficult to obtain.

### 4.2. How likely is it that the volume can be achieved by 30 June 2024?

If the past is any indication, it appears highly unlikely that enough farmers with on-farm projects yielding enough savings will participate to deliver even a fraction of the 450 GL by 2024, or indeed any time after that. As your discussion paper notes, the pilot COFFIE program from 2016-2018 acquired only 1.9 GL from 66 projects.

And the Water Efficiency Program (WEP) has hardly been rushed with takers since it was opened to farmers in all Basin States late last year, subject to the socioeconomic neutrality criteria agreed by Basin ministers in December 2018.

Farmers are economic rationalists: they will weight up the incentives to participate in the WEP against the costs to their business now and in the future of the forgone water entitlements transferred to the Commonwealth. This process led to participation in earlier efficiency programs such as OFIEP and PIIOP dropping off over time, as many farmers decided water entitlements were too valuable to give up, even in return for government funding for works.

### 4.3. How likely is it that \$1.575 billion can pay for projects to achieve 450GL?

The panel will have taken away a very clear message from its 8 November workshop that there is no practical way to recover another 450GL within the \$1.575 billion budget, given substantial increases in entitlement prices since the WESA Act was enacted in 2013.

For example, while the EY report says it is possible to acquire another 450 GL, it assumed a high reliability entitlement market value of \$1880/ML to make budget; these entitlements are currently trading at \$4300-\$9930/ML<sup>2</sup> in the major southern Basin trading zones.

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<sup>1</sup> Analysis of Efficiency Measures in the Murray-Darling Basin’. Ernst and Young, 19 January 2018

<sup>2</sup> Waterflow, [www.waterflow.io](http://www.waterflow.io) accessed 1 December 2019.

EY also claims another 10 GL could be recovered through off-farm efficiency works in the Murray Irrigation Limited district – but at an estimated cost of \$8000/ML. This is much higher the \$1880/ML limit EY says is needed to deliver the 450GL within the \$1.575 billion budget.

#### **4.4. What else affects the likelihood of achieving 450GL on time and budget?**

##### **4.4.1. Constraints**

As the Productivity Commission<sup>3</sup> has highlighted, infrastructure, regulatory and environmental constraints must be eased to deliver the high flows required to give good environmental effect to another 450 GL.

Infrastructure constraints include bridges, roads, fencing, culverts and so forth. The \$200 million WESA budget will not be enough to modify all infrastructure constraints to accommodate the high flows rates envisaged in the MDBA ‘constraints-relaxed’ model run for the 450 GL. Neither have governments budgeted for ongoing repairs to roads, culverts and fencing damaged by more frequent and extensive flooding for environmental purposes.

Regulatory constraints include the need for flood easements on private properties to accommodate the anticipated higher flow rates. This requires voluntary flood easement agreements with 3000 landholders along the Murray River and its tributaries. It is unrealistic to think this many agreements can be negotiated before 2024, or any time soon after.

To put this in perspective, in the early 2000s, negotiations with 103 landholders between Hume and Yarrowonga for easements to release 25,000 ML/day from Hume Dam took almost eight years and are not yet fully bedded down. These agreements would need to be renegotiated to allow for the 40,000 ML/day from Hume envisaged under the MDBA’s ‘constraints-relaxed’ model for the 450GL.

Environmental constraints are also apparent in river operating rules designed to minimize water losses and to protect the integrity of river banks and the health of wetlands, riparian zones and floodplains. As it is, the location and timing of demand for irrigation water is changing and is different to what was expected in 2012. Demand for water to be supplied further down a constrained river system is completely the opposite of what was originally envisaged, which was that demand for supply would move closer to its source because supply delivery would be more efficient.

The Basin Plan has further complicated the challenge for river operators by creating a large environmental reserve that must also be delivered to improve environmental health in rivers, wetlands, riparian zones and floodplains from the top in the mountains to the Murray mouth.

Another 450 GL to be delivered over the SA border will compound the environmental damage already being recorded in the Barmah Choke and lower Goulburn River. Banks are slumping and collapsing, and riparian vegetation is drowning as river operators push the Murray and tributaries beyond their limits to meet the increased consumptive and environmental demand downstream.

The only way to avoid compounding the problem with the 450 GL is to recover the entitlements solely from trading zones from below the Choke. This limits the potential pool of entitlements and WEP participants, making it unlikely the full volume could be recovered.

##### **4.4.2. The Murray-Darling Basin Plan**

While some officials in the federal Department of Agriculture and Water Resources and in the Murray-Darling Basin Authority present the 450GL as a legislated absolute number and therefore its

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<sup>3</sup> Murray-Darling Basin Plan: Five-year assessment, Productivity Commission Inquiry Report, No. 90, 19 December 2018

recovery as mandatory, this interpretation does not stand scrutiny. The 450GL target also must be understood in the context of the Sustainable Diversion Limit Adjustment Mechanism (SDLAM) set out in Part 2 of the Murray-Darling Basin Plan. The SDLAM in practice means 'up to 450GL' can be recovered. The reasons include:

- Program participation is voluntary; governments cannot compulsorily acquire water to make up shortfalls.
- Projects are conditional on the socioeconomic neutrality test agreed by Basin ministers.
- Buybacks towards the 450GL target are only possible if proposed by the Basin States; NSW and Victoria have unequivocally stated their opposition to this option.
- The Basin Plan's recovery target is entitlements equal to an annual average 2750 GL. The SDLAM allows the target to be adjusted up or down by 543 GL. So, it can be as low as 2207GL, provided supply measures deliver environmental outcomes equivalent to 2750GL in entitlements. Governments estimate only 62GL of the 450GL is required to meet this objective.

#### 4.4.3. Socio-economic and productivity impacts

While the socioeconomic impacts of environmental water recovery programs are outside the WESA review remit, the socioeconomic neutrality test is nonetheless relevant in considering whether the 450 GL can be recovered.

EY, for example, resorted to some heroic assumptions to calculate an estimated \$70 – \$302 million positive Net Present Value financial benefit to irrigation industries<sup>4</sup>. Assumptions included a sustained 16 per cent productivity increase on participating farms. The benefits were also short-lived: while farms might expect productivity to increase in the first 10 years, the gains would be progressively lost in the following decade because the farmer had transferred entitlements they would otherwise have used more efficiently to increase production.

The report further warned that if farmers did not maintain the savings or increase productivity, then industry faced a NPV \$330 million cost. The costs could be far higher: the NPV benefit/cost analysis was based on 2014-15 values for rice and fruit/nuts, so there is a high risk the numbers are no longer relevant given changes in water entitlement prices and capital works costs, etc.

## 5. CONCLUSION

It is highly unlikely entitlements equivalent to an annual average 450GL can be recovered on budget and by 2024. Further reducing the consumptive pool through WEP projects or more buybacks will also inevitably have serious, additional detrimental socio-economic and water market impacts. We trust the time has come for a critical review on whether it is worth continuing to pursue this water – indeed, whether it is even needed to deliver the environmental outcomes agreed in the Basin Plan.

## 6. CONTACTS

**Rob Massina**  
**President**  
Telephone: 0448 999 288  
Email: rmassina@rga.org.au

**Claire Miller**  
**Acting Policy Manager**  
Telephone: 0409 509 677  
Email: cmiller@rga.org.au

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<sup>4</sup> Analysis of Efficiency Measures in the Murray-Darling Basin'. Ernst and Young, 19 January 2018, p26