



**Murrumbidgee
Irrigation**

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House of Representatives
Standing Committee on Agriculture and Water Resources
Via email: agriculture.reps@aph.gov.au

Murrumbidgee Irrigation Submission to the Inquiry into water use efficiency

Murrumbidgee Irrigation is one of the largest private irrigation companies in Australia servicing over 3,000 landholdings owned by over 2,500 customers, the majority of whom are shareholders in the Company. Our core business is water distribution. We provide irrigation water and drainage services to the Murrumbidgee Irrigation Area (660,000 Ha). We welcome the opportunity to make a submission to the House of Representatives Inquiry into Water Use Efficiency in Australian Agriculture.

Murrumbidgee Irrigation is a member of National Irrigators' Council (NIC) and actively supports the submission lodged by that Council. We note that the NIC submission is substantial and covers in detail areas of concern to irrigators nationally. We will not be reiterating all of those concerns in this submission. However, we would like to emphasise the following points that are of particular relevance to us as an Irrigation Corporation and our customer members.

1. Adequacy and efficacy of current programs in achieving irrigation water use efficiencies

There is no doubt that the current programs achieve real irrigation water use efficiencies. Murrumbidgee Irrigation has been an active participant in the Commonwealth's Private Irrigation Infrastructure Operators Program (PIIOP) being awarded \$310M in funding under its various tranches. This funding includes \$50M for related on-farm works for our customers. We have already delivered several components of the program which have been subject to stringent audit requirements. In all cases the findings were that our expected water efficiencies were met or exceeded by the funded works. Once complete we will have achieved in excess of 55GL of water savings the majority of which will be transferred to the Commonwealth for the environment.

2. How existing expenditure provides value for money for the Commonwealth

The PIIOP and on-farm programs provide social and economic benefits to agriculture and irrigation dependent communities as well as direct irrigation efficiencies. These programs support rural communities and agricultural production. Unlike straight water investment through buy-back – these programs support communities through change and do not limit future productivity by directly reducing the productive pool of water.

Irrigation Network savings (like those achieved through PIIOP) create savings an order of magnitude above on-farm savings (GL not ML) simply because of the volumes of water being delivered. Modernising network infrastructure supports productivity and regional growth by delivering water more efficiently and more cheaply. Specifically the PIIOP programs:

- create water efficiency in the system and provide environmental benefit (water returns)
- increases opportunity for farmers by improving capacity and flowrate in the network
- enable farmers to work smarter on their farms (for example by supporting different irrigation practices, and through automation)

The logical extension in terms of value is a government investment focus on system wide water efficiencies. Savings at the river operations level (eg through specific works and measures) protect production and enhance the productive pool that underpins regional development and irrigated agriculture.

With respect to regional production both PIIOP and on-farm programs enable a step change in how water is delivered and used. Locally, there is evidence of an increase in regional production as technological advances improve the economic return for farmers by enabling more crop per ML of water used. The archaic efficiency measure of ML/ha no longer tells the true story. Water use efficiency is now measured by increasing economic return per ML which in some cases may increase water use per Ha. This increased productivity has a potential perverse outcome in that it increases pressure on the (reduced) productive pool of water as farmers seek to increase their water holdings or enter the temporary annual water market to support their expanded operations.

3. Possible improvements to programs, their administration and delivery

Overall Murrumbidgee Irrigation has had a positive experience with the program delivery for PIIOP. Of particular value to us is the continuity of Agency staff which has facilitated open and proactive communication. One of the biggest challenges we encountered was in being able to define project scope well in advance of program delivery. Flexibility during delivery to adjust scope to achieve equal or better water and infrastructure efficiencies was critical and added value to our programmed works. The more involved and engaged our staff and customers became in the project delivery the more the projects were improved, achieving better on the ground solutions and better outcomes all round.

The policy constrained timeframes of the current PIIOP program are however, a concern for us. Our current program of works is complex and integrated requiring significant effort and construction hours. Being driven by a political deadline (June 2019) adds cost risk and increases customer impacts. For example, this year we have extended our usual winter maintenance period from 6 to 11 weeks in order to upgrade all the regulating structures on our Main Canal. The works cannot be done "in-season" because dry site access is required. Additionally the works cannot be staged over several winter maintenance periods because of the significant program of works that must be completed by June 2019. The extended shut-down has the potential to impact town supply and some horticultural crops (particularly citrus). Significant operational and logistic efforts, outside of the funded program of works, are being undertaken to limit these risks.

4. Other matters, including, but not limited to, maintaining or increasing agriculture production, consideration of environmental flows, and adoption of world's best practice.

One of the recurring comments from our operators and our farmer customers is that efficiency funding enables a step change in operations that drives more change and efficiency. In the early days of our involvement with PIIOP our primary incentive was to replace assets that we would otherwise not be able to afford to replace. As the program progressed the value of the saved water (in addition to the value of refurbished asset) became clear, especially as confidence and production increased. As we entered PIIOP Round 3 we recognised the opportunity to transform our business. Essentially, what we understand by water use efficiency had matured. How we operate our network and integrate with changing on farm infrastructure are driving the next round of infrastructure changes. For example in some parts of our network we are now increasing our system capacity to enable high, fast flows at the subsystem level resulting in greater delivery efficiency at the farm gate and also integrating with on farm delivery works.

Summary

In summary, our experience over several years working with infrastructure programs is that investment in network infrastructure (such as PIIOF) has multiple benefits and pays the highest community dividend. Similarly, improved water efficiency means less water is used per \$return of produce NOT that less water is used overall. Future programs should enable all savings to remain within the productive pool as efficiency drives increased production. Programs that integrate network and on farm infrastructure have achieved innovative “step changing” results from irrigation operators and farmers working together. The logical extension of this integration is to include river operations.

Finally, we would like to acknowledge the Committee members for taking the time to inform themselves about irrigation efficiency by touring our area of operations. We were pleased to be able to host the Committee and to demonstrate firsthand how our district has been buoyed by the significant investment in both network and on farm infrastructure.

Yours sincerely

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