



QUEENSLAND FARMERS' FEDERATION

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Submission

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Committee Secretariat
Standing Committee on Agriculture and Water Resources
PO Box 6021
Parliament House
CANBERRA ACT 2600

Via submissions online: http://www.aph.gov.au/Parliamentary_Business/Committees/OnlineSubmission

Dear Sir/Madam

Re: Committee inquiry into and report on water use efficiency in Australian agriculture

The Queensland Farmers' Federation (QFF) is the united voice of intensive agriculture in Queensland. It is a federation that represents the interests of 15 of Queensland's peak rural industry organisations, which in turn collectively represent more than 13,000 primary producers across the state. QFF engages in a broad range of economic, social, environmental and regional issues of strategic importance to the productivity, sustainability and growth of the agricultural sector. QFF's mission is to secure a strong and sustainable future for Queensland primary producers by representing the common interests of our member organisations:

- CANEGROWERS
- Cotton Australia
- Growcom
- Nursery & Garden Industry Queensland
- Queensland Chicken Growers Association
- Queensland Dairyfarmers' Organisation
- Burdekin River Irrigation Area Irrigators
- Central Downs Irrigators Ltd
- Bundaberg Regional Irrigators Group
- Flower Association
- Pioneer Valley Water Cooperative Ltd
- Pork Queensland Inc.
- Queensland Chicken Meat Council
- Queensland United Egg Producers
- Australian Organic.

On 9 February 2017, the Deputy Prime Minister and Minister for Agriculture and Water Resources, The Hon. Barnaby Joyce MP, requested the Committee inquire into and report on water use efficiency in Australian agriculture. QFF extends its thanks to the Committee for the opportunity to respond to this

The united voice of intensive agriculture





inquiry. QFF provides this submission without prejudice to any additional submission provided by our members or individual farmers.

QFF understands that the 'Terms of Reference' for the inquiry are:

- adequacy and efficacy of current programs in achieving irrigation water use efficiencies
- how existing expenditure provides value for money for the Commonwealth
- possible improvements to programs, their administration and delivery
- other matters, including, but not limited to, maintaining or increasing agriculture production, consideration of environmental flows, and adoption of world's best practice.

Specific Queensland Programs

The Queensland Government currently administers (through the Department of Natural Resources and Mines) the Healthy HeadWaters water use efficiency project (HHWUE) which aims to help irrigators, communities and the environment in the Queensland Murray-Darling Basin by funding irrigation infrastructure and supporting projects. The project funds upgrades to on-farm irrigation infrastructure. Irrigators contribute at least 10 per cent of the cost, with cash, in-kind contributions or additional water.

The HHWUE project is delivered by the Queensland Government with funding from the Australian Government's Sustainable Rural Water Use and Infrastructure Program (SRWUIP), as part of the implementation of the Murray-Darling Basin Plan in Queensland.

To date, 80 Queensland-based projects have been approved for funding, of which 67 are in progress or completed. These 67 projects represent a total of 40.4 GL of water savings and government funding of \$97.3 million to irrigators.

There is also a Rural Water Use Efficiency (RWUE) partnership between the Queensland Government and the major rural industries, which has driven change on farm to make better use of water through efficient irrigation system design and management. Financial support provided by the Queensland Government has been effective in encouraging irrigators to invest to make system and practice changes on farm. The program has provided the following services to irrigators:

- Information on measures to improve water and energy use efficiency.
- Assessments of water and energy savings that can be made on pumping and irrigation systems.
- Incentives for irrigators to invest in system and practice improvements.
- Advice on managing agricultural wastewater and the management of the application of nutrients through irrigation.
- Development of web-based decision-support tools to assist irrigators and irrigation service providers.

The Queensland RWUE program is essential due to:

- Increasing limitations on the availability of land and water resources present major threats and opportunities to increasing productivity in food production to effectively manage rising product demand (domestic and overseas), and population growth.
- There are still significant benefits to be realised in improving water use on farm, to increase productivity and to reduce environmental impacts.
- RWUE project experience has demonstrated that 'one-to-one' officer to grower/farmer guidance is required to drive on-farm change and the uptake of new initiatives.
- Retention of trained extension personnel and critical tacit knowledge across the various agricultural sectors.



- QFF members have effectively utilised/maximised RWUE resources by integrating them into existing industry best management practice (BMP) programs including EcoHort, Hort 360, and SmartcaneBMP.
- The benefits accrue from maintaining a RWUE program within each of the industries and in key irrigation areas.

The RWUE program also provides broader benefits including:

- Alignment of program strategies with environmental, economic and social risks for Great Barrier Reef catchment region, and alignment to Queensland Climate Adaptation Strategy (Q-CAS).
- Improved integration of water and energy use efficiency on farm. For example, conducting water audits to complement energy audits (QFF Energy Savers program) to better address the water/energy nexus.
- Linkages to rural debt management, improved insurance outcomes and other factors impacting Queensland's agricultural community to build resilience.
- Greater leverage of state and federally funded water and energy programs. Facilitate greater access to discounted finance to provide businesses with clear and cost effective opportunities to take advantage of clean energy technologies, to reduce energy costs and their environmental impact.

Other Matters Impacting Agricultural Productivity

The irrigation sector is a cornered demographic; constrained in its access to and reliability of electricity supply through its rural location.

For regional Queensland customers (those outside South East Queensland – SEQ), the Queensland Competition Authority (QCA) reviews the regulated electricity tariffs each year and determines new prices based on several factors. These regulated tariffs or prices are sometimes referred to as 'notified prices'.

Through payments to Ergon Energy and the subsequent provision of the Community Service Obligation (CSO), the Queensland Government supports regional and rural Queenslanders by subsidising them for the additional costs involved in supplying electricity outside SEQ. However, this results in no retail competition within the network area so most regional customers are on a standard retail contract with Ergon Energy. As such, irrigators have no opportunity to seek another electricity provider if they are dissatisfied with their current service provider or transfer to a cheaper electricity rate/tariff.

In relation to energy requirements, many irrigators are simply unable to 'choose or adjust' the seasons and/or daily timing associated with pumping water due to their water licencing requirements, which may include flood harvesting scenarios through to climatic factors which influence immediate or constant crop watering requirements. Furthermore, the irrigation sector has become highly reliant on energy to maintain its productivity and remain financially viable. Benchmarking costs for cotton for example, indicated that energy was the second highest cost of production, with electricity representing the most substantial movement in costs – outstripping the consumer price index by many times.

Assessment of electricity bills amongst irrigators has revealed price increases of 300 per cent over the last NSW network determination period (2009–2014). Similar increases have been experienced in Queensland over the same period. The electricity costs cannot be offset as irrigators are price takers in international commodity markets with no ability to dictate returns achieved for their products. Irrigators and the irrigation industry are, however, a vital part of rural communities and responsible for a significant proportion of economic activity and employment in many irrigated agriculture dominant communities.



There is ongoing and widespread concern about potential bill impacts amongst customers, and industry groups report their members cannot absorb further price increases.

The vulnerability of irrigators is driven by two main issues:

1. *The water-energy nexus*: irrigators have been subjected to wide scale federal water reform since 2007, which has caused significant structural adjustments in the irrigation sector. To adjust to these water reforms and ensure the ongoing financial viability of the sector, irrigators have made significant capital investments; including the adoption of water saving infrastructure which can be highly energy use intense. The associated higher energy costs have become a major constraining factor for irrigators to utilise their water efficient irrigation equipment and have caused individual irrigators to be exposed to electricity price volatility and continuous price increases.
2. *Operating constraints*: irrigators do not rely on a constant or in many cases, a predictable demand for electricity across the course of a day. This irregular demand for electricity arises from variation in weather and different crop water requirements. In addition, irrigators often do not have a choice when to use electricity, as their electricity use is highly correlated with the rules and regulations around water availability and access. For example, river-flood irrigators may only be licenced to draw water in a short window of time, while irrigators on supplemented irrigation schemes may only pump their water entitlement when permitted to do so. Pumping or water access opportunities may not align with to off-peak electricity opportunities.

The cost increases for electricity (associated with rising network charges) as well as the current network tariff reforms in Queensland have severely impacted irrigators' profitability and caused perverse operational outcomes. The level of prices and the structure of tariffs is leading irrigators towards alternative energy sources – moving them away from the grid – or forcing them to shut down their high energy reliant irrigation equipment.

In broad, the resulting cost pressure for all irrigators is significant and illustrates the vulnerability of the irrigation sector to the current regulatory framework governing electricity prices.

At this point in time, and despite a regulatory system that has the objective to regulate against monopolistic behavior, Queensland irrigators see little evidence that the rules are delivering a long term, sustainable outcome for rural electricity consumers.

QFF also asks the Committee to consider the role and impact that energy efficiency contributes in both bulk water schemes and also irrigation schemes.

All future water efficiency programs and initiatives must also take into account the energy efficiency of the equipment or process measures in context of any applicable regulatory provisions. It is not acceptable to 'silo' water efficiency programs and this approach does not realise the best outcomes.

If you have any further questions regarding this submission, please contact Dr Georgina Davis at

Yours sincerely

Travis Tobin
Chief Executive Officer