6 MARCH 2020

SUBMISSION TO

Senate Select Committee Inquiry into the Multi-Jurisdictional Management and Execution of the Murray Darling Basin Plan

This submission relates to terms of reference:

b. the effects, positive or negative or otherwise, of the different approaches of the states and territories to water resource management in the Murray Darling Basin including, but not limited to:
   i. legislation, regulations and rules,

In particular, **Water Trade** outlined in Chapter 4 of the Issues paper.

SUBMISSION BY

Rob McGavin

Co-founder and CEO, **Boundary Bend Limited**

Boundary Bend Limited is Australia's largest olive grower and miller, owning over 6,000 hectares of fully irrigated olive groves in Central and Northern Victoria and producing more than 65% of Australia's olive production, selling mostly though its retail brands Cobram Estate and Red Island <www.boundarybend.com>

The focus of this submission relates to the trading rules of Temporary Allocation water in the Murray Darling Basin.

Regardless of any recommendations that may be forthcoming as a result of this inquiry, it is of utmost importance to our nation's future sustainability and success that:

1. **Temporary Water allocated from Permanent Water Entitlements (excluding water entitlements already owned by Government for environmental purposes) are used solely for productive use i.e. farming and industry for the economic and social benefit of Australia;**
2. **That consumptive users (farmers and industry) are the only parties permitted to purchase Temporary Allocation water (with some relativity to their annual consumptive use).**

In dry years, non-irrigators (speculators and traders) purchasing Temporary Water in the Southern Murray Darling Basin are crippling irrigators and the communities in which they operate. With the number of dry years expected to increase, irrigators can expect an increase in traders and speculators entering the market, thus inherently making water input costs higher at a time when they can least afford it.

I believe the most damaging and costly decision ever levied on irrigators and the communities in the Southern Murray Darling Basin (SMDB) was implemented in 2014 when non-irrigator investors were legally permitted to purchase temporary water (allocation water that is available for use by farmers and industry). This change then allowed non-irrigators such as traders, investors, managed funds, environmental groups, water brokers and even sovereign wealth funds to purchase and hoard unlimited amounts of temporary allocation water with no legal requirement to use the water for productive purposes or on-sell to an irrigator. Quite simply, these non-irrigator investors can sell their temporary water to another trader, let it run out to sea, or in some cases carry it over to the next irrigation season, which has the effect of reducing supply and increasing the price of water for genuine irrigators. This has been crippling, particularly in years of low allocation where every irrigator, regardless if they own permanent water or not, is forced into the temporary water market if they wish to sustain their business.

Irrigators who need to continue irrigating are *forced* buyers. If they are unable to buy water, the effect on animals, trees and crops is disastrous and consequently, rural communities slowly die, a fact hard to ignore. This change, especially in dry years, materially increases the price irrigators have to pay and the negative flow on effect during the current long-standing drought is alarming.

The conduct of non-water users in water markets is harming not only farmers, but also rural communities and, ultimately consumers by artificially inflating prices in a manner that does not reflect the natural forces of supply and demand. I estimate that during the last 3 irrigation seasons, the conduct of non-irrigators has raised the price of temporary water by $100/ML to $500/ML above the price that would otherwise prevail in the current climate, if irrigators were the sole beneficiaries of temporary water. This has resulted in a cost to farmers of between $157 million and $785 million each year over the last 3 years. That cost is unsustainable and is ultimately borne by rural communities; farmers with less money available for discretionary spending, with some struggling to even meet basic needs.

Water is a precious commodity, and one we must manage carefully and respectfully. The current water market is small, inadequate even, and does not have the liquidity, regulation, transparency or normal checks and balances of a properly functioning market to keep participants honest. It is too easy and simple for speculators and traders to increase the price through bidding alone. In California, for example, neither the state nor federal authorities allow for water transfers where the water is not being used. Investment funds should not have the right to fiddle with the lifeblood of our nation's communities and food supply.

To be clear, I am **NOT** trying to impact any of the rights of permanent water entitlement holders (large or small) or their ability to sell allocations to irrigators to generate a return. It is imperative that all irrigators stay in business to provide sustainable long-term demand for water.

It is such a serious issue for irrigators who have no choice but to buy water to keep their business going, and is particularly devastating for family farmers who often don't have the financial resources or options available like larger corporates; many family farmers are already in a desperate and dire situation. The negative flow-on effect to rural communities who rely on irrigators cannot be underestimated.

Included as Appendix A to this submission is a joint letter that all key horticultural industry groups sent to all water ministers (both state and federal) in late 2019.

I don't think there is any doubt that recent changes to water policy (over say the last 10 years) are increasingly disadvantageous to an irrigators ability to negotiate a fair market price for water, and the unintended consequence will be the significant medium term increase to the price of temporary water, and consequently the very survival of low value irrigated crops (rice, cotton and dairy) and the communities they support.

Many irrigators (especially lower value annual crops) play such a critically important role in supplying water to permanent crops in years of low supply, when they can exercise the option of trading their allocation instead of producing a crop.

If water trading policy is not carefully considered, the majority of profits from irrigation activities in the Murray Darling Basin (MDB) will mostly flow to the water entitlement owners and allocation traders. The long-term impact on irrigation communities, particularly in the SMDB is worrying because the many irrigators (particularly those growing lower value but still essential crops) are likely to be priced out of the market. This is a sad situation as we all know that irrigators do all the work to produce crops, have all the expertise, invest in innovation and technology, live in the rural communities, employ local staff, spend their money locally and most importantly - take most of the risk. Lower long-term profitability will also mean less investment by irrigators in research, market development and growth which will have long term negative impacts on our nation.

The core issues are that as lower value annual croppers continue to sell their entitlement to city investors, they lose their ability to have any income in years of drought (no crop and no allocation to lease out for income). Therefore, high allocation water prices will in-fact reduce their long-term ability to survive e.g. in the millennium drought they survived by leasing allocation water out to permanent crops and produced some good income. The entire SMDB needs to understand the very important role they play in keeping permanent crops alive in years of drought.

Furthermore, incremental policy changes are working against creating a fair market playing field for irrigators. In isolation they could be deemed minor however when combined the impact is much more pronounced.

Examples of such policy changes:

1. **Keeping positive balance in water accounts at all times**: We are supportive of this initiative, however it is materially impacting the market price of temporary water. Historically, private irrigators could purchase temp water throughout the irrigation season and go into negative balance on their water account provided they were in positive balance at the end of the irrigation season (nominally set at 30 June each year). This allowed irrigators to buy temp water strategically throughout the year, when the price was most attractive, to manage cashflow and water availability, etc. Most importantly, before carry-over was allowed there was a reasonably even balance of power between buyers and sellers (i.e. it was a real market where both sellers and buyers had something to lose/gain). Recent changes (which we support) forced irrigators to buy the water ahead of using it; however, the unintended consequence is that this has created a huge demand imbalance where the market power has moved in favour of non-irrigator investors.

This is because:

- more irrigators are forced to purchase water earlier in the season and more and more available water is owned by investors who have no obligation to sell the temp water in a timely manner and furthermore, can carry it over at the end of the season.
- Increasingly non-irrigator water investors use a management company to manage their water. These same managers have the ability to earn excessive performance fees through rising allocation and permanent water valuations, which is based on a mark to market price – rather than cash/realised profits. So, in effect, a manager can make significant

performance bonuses in an environment of increasing water prices, without selling a drop. They can value the allocation water at 30 June at market price and carry it over and still collect their performance bonus. Now I understand that if the dams spill or the price goes down the manager might not get a bonus the next year, but it is normal practice in funds management that no-one comes and takes last year's bonus from them.

2. Allocations, more than ever, seem to be drip fed to entitlement holders (even in years of high storage volumes) creating less supply early in the season. While I am supportive of this conservative approach, it must be recognised that this reduces supply and liquidity in the market and gives more negotiating power to entitlement owners and their ability to increase the price.

3. Recent changes now allow anyone to purchase temporary water without having a water use licence (WUL). Again, these non-irrigators are bidding against irrigators and pushing up the price of water - which is particularly prominent in years of tight supply - without having the obligation of promptly selling it to an irrigator.

4. On face value it looks like non-irrigator entitlement holders have a small share of the overall market, but this can be misleading as I believe they have a very high percentage of the allocation water available for trade. This is because, in most years, irrigators who own entitlement don't sell the allocation...they use it.

It must be remembered that water is not like most other markets. In most free markets when the price goes up, the market can react by increasing supply, which then pushes the price down. With water it does not matter how much the price goes up; it does not bring on more rain. The water markets are unique in having a finite supply, yet increasing demand.

I therefore hope the ACCC inquiry addresses some of the questions below so that policy makers can better understand the facts about the market and the possible impact on the future of irrigators, especially in relation to:

1. The likely financial impact on the allocation market by non-irrigators:
    a. being able to purchase allocation water
    b. entitlement holders' withholding water and not selling it for consumptive use in a timely manner
    c. ability to “carry over water" from year to year rather than sell it for productive use in each irrigation season
    d. Fund managers being able to generate performance fees without selling the water for productive use in each year.
2. Verify the net financial impact to irrigators (negative or positive) that non-irrigator investors claim to be having with regards to:
    a. Offering irrigators financial solutions with regards to water
    b. Offering forward contracts and pricing to irrigators
3. Verify the net financial benefit to irrigation districts (irrigators, towns, businesses etc) under different scenarios (wet, dry and average rainfall years):
    a. If entitlement water is owned by irrigators or non-irrigator investment funds
    b. If the price of temp water is low or high.

In summary, I believe that policy makers should unapologetically support a policy in the best interests of the majority of irrigators and the communities and consumers who rely on them, regardless of the impact it might have on non-irrigator investors. Knowing the answers to these questions (and I am sure many others) should be of great benefit in forming policies to ensure we better understand the unintended consequences of an open market and largely an unregulated market has on irrigators and their communities.

It must be remembered that irrigators in Australia's southern Murray Darling Basin are effectively being used as guinea pigs (world first initiative) when it comes to water trading, by allowing non-Irrigators to enter the entitlement and allocation market. This in itself reinforces the need to exercise caution and keep reviewing policy.

For those reading this submission I thought it appropriate to include a section to explain water terminology and trading, in layman's terms.

Understanding water markets and terminology

Water rights usually exist in two different forms:

1. **Permanent Entitlement Water (Permanent Water)** - which can be thought of as a "right" to an ongoing share of water in the Murray Darling Basin (MBD). This right is held in perpetuity and is officially called "**Entitlement Water**". Over the last 20 years, **Permanent Water** has been separated from land ownership and therefore can be bought or sold and held independently of any requirement for owning irrigatable land. Over the last 12 years the Federal Government environmental fund has purchased about 25% of the Permanent Water in the Murray Darling Basin. Permanent Water cannot be used for irrigation, only the Temporary Water that has been allocated from Permanent Water is available for irrigating crops. Due to capital restraints and/or a focus on investment in farm development, Boundary Bend and many irrigators in the SMDB do not own Permanent Water.

2. **Temporary Allocation Water (Temp Water)** - is the allowable volume of water that may be used by irrigators in a particular irrigation season; this is determined by authorities based on how much water is available in storage dams. Temp Water is officially called **Allocation Water** and expires each year. It is simply a temporary allocation from a permanent entitlement for that year (irrigation season 1 July to 30 June) and has historically been based on a "use it or lose it" concept. The amount of temporary allocation against a permanent entitlement will change due to rainfall, the amount of water in storages, and weather outlook. These temporary allocations can increase during the year in response to improvements in the outlook of available water in the catchment. Boundary Bend purchases Temp Water on the open market to irrigate its olive groves.

Both types of water can be traded, subject to rules that may limit the movement of water within different parts of the river system. There are different types of entitlements that have different levels of allocation security. For example, high security entitlements are more likely to receive an allocation than low or general security water, which typically only receive an allocation in average to wet years when there is sufficient storage.

Southern Murray Darling Basin

The Southern Murray Darling Basin (SMDB) relies mostly on government storages (e.g. Hume, Dartmouth and Lake Eildon) and grows the majority of the higher value permanent type crops e.g. (olives, almonds, citrus, wine grapes, table grapes, stone fruit). Other annual crops like dairy, rice and cotton, and cereals play a very important role to the fabric of the SMDB and the supply/demand balance.

Northern Murray Darling Basin

In general, the Northern Murray Darling Basin (NMDB) operates quite differently to the SMDB, as most irrigators in the northern basin have their own on-farm storages that are filled under license during high-flow river events. Cotton dominates the crop type and water trade is much less common due to the complexities of transporting water from one farm storage dam to another and/or the interconnectivity of the northern river systems. This is certainly not to say that trade does not occur.

Unbundling – Water from Land

The ownership and development of irrigation land is highly capital intensive and likewise, owning Permanent Water is also very capital intensive. Increasingly non-irrigator investors have purchased Permanent Water in the SMDB. This has worked well for many irrigators as an important source of capital and flexibility. These Permanent Water holders need an irrigator to purchase their Temp Water each year to make any financial return on that water and likewise, irrigators need Permanent Water holders to sell their Temporary Water to water their crops.

To be clear, both Permanent Water and Temporary Water is not tied to land. Subject to delivery rules, Irrigators can and do purchase Temp Water from other holders located across the SMDB for use at their properties.

The price should fluctuate based on normal supply and demand market drivers such as storage levels, rainfall outlook, and Temp Water allocation percentages against Permanent Water entitlements.

Owning Permanent water does not guarantee water supply

Case study – Boundary Bend Olives

Until 2008, Boundary Bend owned Permanent Water covering 100% of its average expected water use. The problem struck the company in the 2007 millennial drought when the Temp Water allocations from its Permanent Water entitlements were only 35% for the whole year. This meant Boundary Bend only had 35% of the water needed to irrigate our groves and had to purchase two-thirds of its yearly requirements on the open market at great expense. Even in that drought there was plenty of Temp Water available for purchase, but the price was high. It worked like a true market.

As a result, there was a double financial hit; Boundary Bend had the holding cost of its Permanent Water entitlements and also had to purchase two-thirds of its water needs on the Temp Water market.

From that day forward, Boundary Bend decided that owning Permanent Water entitlements did not give enough available water or financial security in a severe drought and like many other irrigators decided to secure water as needed in the Temp Water market.

This is still the Company's view, provided the Temp Water market operates like a true market where irrigators are bidding for water against other irrigators for the available Temp Water, and not speculators who have no consumptive use for Temp Water.

IT MUST BE REMEMBERED THAT ALL IRRIGATORS OR PERMANENT CROPS, REGARDLESS IF THEY OWN PERMANANET ENTITLEMENT WATER, NEED THE TEMPORARY WATER MARKETS TO WORK EFFECTIVELY IN TIMES OF LOW WATER ALLOCATIONS (I.E. DROUGHT PERIODS).

Thank you for reading this submission.

Kindest regards

Rob McGavin

APPENDIX A

Please refer to the next page for the letter from horticultural industry groups to water ministers (both state and federal).

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11 November 2019

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Dear Ministers,

Urgent intervention needed to free up water markets

This letter is written on behalf of the following industry commodity representative bodies: Australian **Almond** board; **Citrus** Australia, Australian **Olive** Association, Australian **Table** Grape Association, Australian **Grape** and **Wine, Pistachio** Growers Association, Australian **Walnut** Industry Association, **Summerfruit** Australia, **Hazelnuts** Growers of Australia and **Chestnuts** Australia.

Much has been made of the drought impact on the dryland farming community and rightly so, but our irrigated industries are also facing an existential threat.

You will be well aware the drought is driving up temporary water prices. While we recognize this is in part the result of supply and demand under extremely dry conditions, speculative trade is amplifying the drought impact on the southern Murray-Darling Basin (sMDB) water market. For many family and larger enterprises, this additional price pressure will be the difference between surviving the drought or going bankrupt.

The Murray-Darling Basin Plan aims to sustainably apportion limited and valuable water resources between environmental and consumptive use, without negatively impacting on river communities. That goal is **not** being realized, as the water market is not working in the best interests of irrigators. Without immediate intervention, agricultural businesses across the southern MDB will soon suffer irreparable damage, and the associated industries and river communities will likewise suffer.

While temporary water can be expected to be more expensive during drought, we have two key concerns:

- The presence of water speculators is increasing the temporary water price beyond what would be expected under the current supply and demand conditions. It is evident during the last irrigation season that speculative buying of temporary water resulted in material upward pressure on the market. This is dramatically affecting farm viability.
- Recent changes to trading rules combined with increasing compliance demands on irrigators to maintain positive water accounts at all times has meant that they must buy earlier in the season. This has materially distorted normal market supply and demand balance to our detriment. In times of low water availability, it also leads to greater early season market volatility, which can affect water prices for the remainder of the season. At the same time, speculators and traders are taking advantage of carryover rules (originally designed to help irrigators manage risk) to short irrigators of water.

In the 2018-19 season, we understand one water investor purchased an estimated 140 GL (140,000 ML) of temporary water. To our knowledge, this company does not own land and has no direct consumptive use, so it can only be assumed the water was intended for speculative trade. To put this volume in context:

- In **Victoria**, the estimated Lower Murray Water districts total combined water use in 2017-18 was **104,000 ML**[1]. Total annual irrigation use for the Mildura and Red Cliffs districts was approximately 94,000 ML in 2017-18[2].
- In **New South Wales**, according to the ABS the total estimated water use in NSW Murray and Riverina districts for "Fruit trees, nuts or plantation berry fruits" in 2017-18 was **111,900 ML**[3].
- In **South Australia**, the estimated total irrigation applied to almonds in 2019 was **122,930 ML**[4].
- Total Water use in **Murray Irrigation district** in 2018-19 was **296,149 ML**[5]

While this trading activity may be permissible under current laws, it is clearly not delivering on Murray-Darling Basin Plan objectives and is adding to the hardship of drought-affected businesses. It is highly likely the temporary water price in 2018-19 was materially higher due to the behavior of speculators and some brokers. Many irrigators used all available cash reserves when water prices should have been much lower. They are now not in a financial position to buy water again at even higher prices now. This has been particularly devastating for the dairy, rice and cotton sectors who wore the brunt of water scarcity and high prices last year.

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[1] https://waterregister.vic.gov.au/images/documents/Water-Market-Trends-Update-2018_web.pdf, p2.

[2] Lower Murray Water Annual Report 2017-18; https://www.lmw.vic.gov.au/wp-content/uploads/2018/09/LMW-2017_18-Annual-Report-Full.pdf

[3] Australian Bureau of Statistics 46180DO001 201718 "Water use on Australian Farms 2017-18"

[4] PIRSA, Pers Comm

[5] https://www.murrayirrigation.com.au/wp-content/uploads/resource/2019/10/Interactive-Annual-Report_online-version.pdf

We would also like to make ministers aware that we have many reports that banks funding irrigators and businesses in the southern MDB are getting very nervous due to the high demand for increased debt facilities to purchase water. Lending criteria is becoming very stringent and loans for many are unattainable.

Water speculation during a drought may be legal but enforces hardship on others. Would it be acceptable, for example, for an investment company to accumulate supplies of fodder during the current drought and withhold that from livestock farmers in order to sell it later at an increased price?

It is such a serious issue for irrigators who have no choice but to buy water to keep their business going and is particularly devastating for family farmers who often don't have the financial resources or options available like corporates. Many family farmers are already in a desperate and dire situation. The flow-on effect to rural communities who rely on irrigators cannot be overstated.

To quote former Harvard Business School professor Jonathan West *"I think the behaviour of some water traders during this drought could be compared to speculators hoarding food during a famine, to drive prices up. Its immoral, and it's got to stop."*

Water market reviews underway

We support the two initiatives currently underway, with final reports due by the end November 2020:

- ACCC Inquiry into Water Markets in the Murray Darling Basin (**Inquiry**); and
- Senate Select Committee on the Multi-jurisdictional Management and Execution of the Murray-Darling Basin Plan (**Select Committee**).

URGENT – Proposed interim solutions

Noting the Inquiry and the Select Committee will not report for more than a year, we request the Australian and Basin State Governments urgently implement the interim solutions below:

1. **Only water users can purchase temporary water allocations** – anyone who is not an irrigator with direct consumptive use or does not have a pre-existing bona fide supply contract to an irrigator cannot purchase any temporary water allocations in the Southern MDB.

2. **Only water users holding permanent entitlement with a carryover facility can carryover water from one season to the next, subject to the following limitation** – this carryover volume cannot be higher than their direct annual consumptive use and cannot be sold or loaned to another party for their use.
   To protect against unintended consequences, hardship or pre-existing contractual arrangements, a threshold could be considered. For example, non-water users (including related parties) with cumulative allocation account balances lower than 2GL or $2m (whichever is triggered first) may be still be able to carryover.

Immediate action is urgently needed in line with the serious challenge imposed by the drought. It's not just the potential for economic damage, but the human cost with many accounts emerging of suicidal irrigators.

Time is of concern as we approach a period of increasing water use for most irrigated crops over summer. Without some form of immediate relief, it may will be too late for many farmers, business and regional communities.

We respectfully call on you and your Government to collaborate with other Basin State Governments and the Commonwealth to explore measures to free up more water for trade. There is no time to lose. The seriousness of this issue warrants an emergency response, and bipartisan, cross-border commitment.

The proposed interim solutions are sensible and benign and should be implemented urgently.

We would appreciate the opportunity to meet with you to discuss these issues in more depth.

Yours sincerely

Tony Battaglene
Chief Executive

On behalf of the following industry bodies:

australian almonds
ALMOND BOARD OF AUSTRALIA

ATGA
Australian Table Grape Association Inc.

Citrus Australia

AUSTRALIAN OLIVE ASSOCIATION

AUSTRALIAN Grape & Wine

Summerfruit AUSTRALIA

Australian Walnut Industry Association

CHESTNUTS AUSTRALIA Inc.

HAZELNUT GROWERS OF AUSTRALIA INC

Pistachio Growers' Association