My name is Garner Smith. I own a dairy based rural merchandise business in Cohuna, Victoria. I am also an irrigator in zone seven of the Goulburn-Murray Irrigation District. I am here to offer views on the operation of water markets in the Murray Darling because the water market is not coping. While my comments have a Victorian focus they are a potential insight into future problems for any region.

The argument for water trading was sold to water users as providing flexibility in allocating a resource where they saw greatest need. It was sold to politicians as allowing the market mechanism to move a resource to industries that promised greater efficiency and vote winning growth. This is what was promised but that is not what was ultimately delivered.

The water market has been so severely undermined by government actions that it cannot function correctly. It would be easy to be cynical about the commitment of politicians to solving the urgent issues within the water market given the lengthy time frame allocated for this process. Nevertheless, I intend to address the principles to demonstrate the following:

- Policy changes by a series of governments has changed excess supply of water to excess demand.
- The excess demand for water is so great that the current market system cannot be improved enough to bring a stable equilibrium.
- The unstable nature of the current water market means it cannot operate correctly as a market.
- Urgent control provisions must be enacted to bring order and sustainability to the water market and irrigation in general.

Water is an essential, non-substitutable input with inelastic demand, that is its usage does not respond greatly to a change in price. It is distributed by a natural monopoly with supply that is both limited and unpredictable. I cannot think of another industry with all these qualities. The highly scrutinised sectors of fuel, electricity and the health do not come even close. In fact, the closest thing to water that I can think of, is the air we breathe, and even that does not have unpredictable supply.

One of the current failings of the water market is that it has little to do with efficiency. It simply favours water going to those who are prepared to pay the most. The theory is, those who will pay the most are operating an irrigation enterprise far more profitable than, say, a dairy farmer. The truth can easily be quite different. It could be, they have the most financial backing, they are effective managed investment scheme salesmen, they have the grandest dreams, they cannot change their plans made under different circumstances, or, they are not acting rationally. I suspect the price of water last season was higher than the economic return, regardless of what some industries would have you believe. And, when considering the allocation percentage, the cost of water this season is currently over double for both high reliability and temporary. What is enabling this? I would say a non functional market. The problem is that we do not know, and the time it takes to find out, is the time it takes to destroy industries, regions and people that are proven efficient and successful.

Victoria had a system that provided certainty, was not over allocated and had a theoretical 7 year buffer to drought. Our system now provides half the water it used to, is drained to the maximum leaving its historical users living season to season and unable to plan long term. Chaos reigns where order once ruled.

I provide two specific examples of the ongoing administrative failings in Victoria.

- In Victoria, farmers are subsidising dam storage charges for investors. For no apparent reason, water stored in dams that is not associated with land attracts a lesser fee than water
stored in dams linked to land. The issue has been raised with local politicians, to their bewilderment, yet it remains the case. No justification has ever been offered for this situation. I have evidence that this is still the case with a current account issued by Goulburn Murray Water.

- Next there is an effective subsidy to irrigators on the lower Murray at the expense to those in the GMID. My water industry sources claim that a loss of at least 20% occurs supplying water to Mildura from Torrumbarry. That means that 1.25ML must be released from Torrumbarry to supply 1ML at Mildura. At this stage I do not have details how this loss is accounted for, but I expect it is deemed a general transmission loss which decreases the pool available for general irrigators. The result is the irrigation community at large is expected to pay quarter of a megalitre of water to supply Mildura with one megalitre.

These issues are simple to grasp and distort the market. The next issue is more complex and compromises market function to the point that it is questionable that a true market exists at all.

I am referring to the reckless expansion of the demand base for water.

With the opening up of water markets people realised that lower Murray land was a fraction of the price of developed Goulburn-Murray irrigation land. They bought the land and obtained licences to pump water from the Murray. There was no corresponding allocation or dam storage, it was expected that they would purchase water from existing users in the trade-able irrigation districts. According to conversations I have had with local members of parliament, this process was not only overseen by the Victorian Government but considered a positive outcome. This ill-conceived policy caused an explosion in demand with no corresponding increase in supply. The Victorian Government has now halted issuing of new pumping licences, but the damage has been well and truly done.

This cavalier approach to water has created such an imbalance between supply and demand that if the Victorian government were time share operators they would be in gaol.

I wish I could say the gate has been shut after the horse has bolted. The reality is far darker. The gate is still open and the rest of the herd is pouring through. New South Wales are still approving developments that by all accounts dwarf what has already been done. The problem is that they can access Victorian water freely because of free trading rules. Politicians are either oblivious to this disaster or are deliberately ignoring it. Because the balance between supply and demand in the water system is out of control, the notion of a market in water as most people would understand it does not exist.

It seems that American economist Thomas Sowell couldn't have got it more correct when he said: "The first lesson of economics is scarcity: there is never enough of anything to satisfy all those who want it. The first lesson of politics is to disregard the first lesson of economics."

Water is not a purely economic commodity but also a social commodity. The solution to the water market will require and warrants a combination of two approaches. Increase supply and water market controls.

An obvious approach is to increase supply – John Forrest, the former member of Mallee who is a trained engineer has devised a 12 point plan which I have and present. I commend John for his input. However the problem is that we had a reliable, well supplied system 30 years ago. I do not accept that inflows have changed sufficiently to go from consistently 100% water right plus 100% sales plus off quota, to barely manage 50% in total, only three years after all reserves were overflowing. The engineering hasn't changed, management has.
Put simply, if demand for water is not controlled then no amount of engineering will suffice. In any event, engineering solutions take time, water management changes can occur much faster.

Another worthy measure I have got from external sources is the one trade rule. Under the current system it is possible to buy water and create scarcity to increase the price. There are allegations that this is happening. If these allegations are true then an effective solution would be the one trade rule. Under the one trade rule water cannot be resold once it has been bought, it can only be used for irrigation. This change has minimal negatives. The passive trading of water provides very little, if any, benefit to the productiveness of agriculture. The one trade rule will impact those playing purely speculative games with virtually no effect on those who do not.

Unfortunately I am of the opinion that none of these measures will be nearly strong enough to make a long term improvement. My solution to bring order to a stressed market is to establish irrigation communities. A loose version of Irrigation communities has been in place when water trading first started, even now with inter-valley restrictions being implemented the impacts of such changes can be observed. What I propose is a formalising and strengthening if those past systems. Irrigation communities are distinct areas defined by a commonality in irrigation operation and economic/social interests. A formula will set maximum and minimum limits of water resources for each community. Water may be traded out of or into a community as long as it keeps the community within these limits. This will guarantee the long term viability of each community, bring stability to the market within each community and still maintain a practical level of water flexibility.

What the current water system is doing is undermining the credibility of markets at a time when belief in the effectiveness, equability and efficiency of markets is being increasingly questioned. I implore the ACCC to acknowledge the urgency of the issue. I hope the perspective and issues I bring improves your insight into the systematic challenges faced by the irrigation industry. I encourage the ACCC to take an open minded view of the issues facing the irrigation industry and the solutions required to save it.

Thankyou for your consideration.
A Synopsis of John Forrest’s Bold Plan for the Murray Darling Basin Plan

1. The current basin plan is a sensible start document but more symbolic than realistic in regard to the overall expectations of the basin communities and the correct balance between the important demands of the environment and the needs of food and fibre producers. What is needed is the development of a bold and substantial Nation building capital plan to meet the challenge with better outcomes for all stakeholders. This was the type of approach that saw the final completion of the Wimmera Mallee Stock and Domestic water supply system now acknowledged by saying “why hadn’t we done this earlier?” Major players need to stop saying it’s complicated, or that it is fraught with difficult interstate politics, or that community concerns will evaporate when the alleged drought breaks. These are just excuses in order to just tinker around the edges and not tackle the challenge comprehensively whilst the productivity of the food bowl is being stifled.

2. Allocate another $10 Billion to the National Water Initiative in addition to the $10 billion already spent to serve as an economic carrot for the States to better perform on the issue and overcome the constraints of the Constitutional problem created by clause 100 of the Australian Constitution. This funding should be defined as capital and not used for the purchase of water. Continue with the improvements to on farm water use efficiency and the piping of irrigation water supply systems to reduce waste by seepage and evaporation. Engage in additional capital expenditure as follows below.

3. When that all gets spent, allocate another $10 Billion. This would eventually mean $30 billion dollars will have been on the table as Federal funds to meet Australia’s most challenging need. Water. This is Nation building thinking. This approach is a bold plan and difficult to achieve, yes, but within the capability of a wealthy Nation and a big vision approach similar to the historical Romans, the Dutch, the Chinese, and the Americans that have seen them historically develop into major food producers.

4. Clean up the water market so that it has integrity by preventing profiteering in the market. This would be better managed by the Australian Stock Exchange which has severe rules and punitive measures for rogue traders. A requirement needs to be immediately introduced that requires water owners to have a genuine link to agricultural productivity, environmental use, power production, critical human use, and domestic stock and water consumption. Certainly, if water is offered to the market by sellers, they should not be permitted to buy it back themselves or as an associated entity just to prop up the price of water.

5. All discharges to the Murray from power production and the unregulated Victorian rivers should be formally taken into account in meeting the South Australian Tri State water supply agreement which is currently, so far in 2019, being well met and surplus to the agreement.
6. Minimise discharges to the sea which thus far to the end of October, in 2019, has amounted 577,800 ML to the 25 October, 2019. This is enough water to service the needs of 500 rice farms or 1000 dairy farms by example. Continue with the dredging of the outflow although removing the barrages, as listed in point 10, would allow the high tide to minimise dredging.

7. Restrict the irrigation of many riverine water environments and forests along the Murray and Darling rivers to reflect their historical flooding circumstances and cease watering them every year and thus converting them into swamps with a plethora of weeds and resultant fish kills when the eventual big flood flushes dangerous black water out of these unnaturally flooded riverine environments. Install engineering supply systems to ensure this pattern of refreshment can be done efficiently and not as often. This could mean that excess environmental water could be temporarily traded reducing water price pressure.

8. Build additional dams in the system. Another Murray River Dam at Murray Gates in NSW is one example and Great Buffalo in Victoria is another which offers additional flood mitigation advantages for townships along the Ovens River. Dams in the upper highlands ensures that reserve can be captured from the snow melt and act as an upstream supplement to Hume Dam.

9. Construct the Wellington Weir (or Tailem Bend whichever offers the most favourable geotechnical foundation conditions) to serve as a fresh water pool supply and continue to pipe the supply demands of the agricultural and critical human needs surrounding the lower lakes. This also prevents salt water ingression further up the lower Murray when the barrages are removed as suggested in point 10.

10. Completely remove the lower lakes barrages and allow the estuarine lakes to develop their natural historical estuarine environment thus ensuring the restoration of the saline fishing environment that historically existed in the lakes.

11. All of this investment would reduce the challenges created by the restriction of the Barmah choke by reducing the demand that needs to be created to satisfy the equitable flow demands of South Australia, who, of all the States, relies so heavily on Murray River water for critical human use needs right across the State.

12. Finally instigate the engineering improvements to the whole of the Minindee Lakes and Lake Victoria mid river water reserve system including reconsideration of other deeper and smaller Lakes like Cawndulla to minimise evaporation that sees so much water wasted.

13. Initiate comprehensive cloud seeding projects in the Victorian Alps as has been implemented successfully by Snowy Hydro and Tasmanian Hydro so that rainfall and snowmelt in the highlands is more sustainable.

John Forrest, Consulting Civil Engineer

Master of Science, Chartered Practicing Engineer (Ret), Fellow Institution of Engineers Australia.
Member American Society of Civil Engineer