

**REPORT ON PROCEEDINGS BEFORE**

**SELECT COMMITTEE ON THE STATUS OF WATER  
TRADING IN NEW SOUTH WALES**

**STATUS OF WATER TRADING IN NEW SOUTH WALES**

<b>CORRECTED</b>
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**At Griffith Regional Theatre, Griffith on Tuesday, 16 August 2022**

**The Committee met at 10:00 am**

**PRESENT**

The Hon. Robert Borsak (Chair)  
The Hon. Lou Amato  
The Hon. Scott Barrett  
Ms Cate Faehrmann (Deputy Chair)  
The Hon. Rose Jackson  
The Hon. Peter Poulos  
The Hon. Mick Veitch

\* Please note:

[inaudible] is used when audio words cannot be deciphered.

[audio malfunction] is used when words are lost due to a technical malfunction.

[disorder] is used when members or witnesses speak over one another.





**The CHAIR:** Welcome to the first hearing of the Select Committee on the Status of Water Trading in New South Wales. The inquiry is examining the origins, purpose, regulation and abuse of the water trading market. It will also look into evidence of market practices and their effects, including cornering, playing and fixing the market. The Committee will also examine the effectiveness of water registration and disclosure and the effects of water trading on the economy, community and the environment. The Committee will also hold a public forum here this evening, from 6.00 p.m. till 7.00 p.m. This is an opportunity for community members to speak for up to five minutes and have their say about water trading and its effects. Numbers are limited. If you would like to participate in the forum but haven't already registered, please approach a member of the secretariat and provide your contact details to them.

I acknowledge the Wiradjuri people, the traditional custodians on the lands on which we are meeting today. I pay my respects to Elders past, present and emerging, and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of New South Wales. I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us today. Today we'll be hearing from a number of stakeholders, including members of the local community, community groups, irrigation companies and regulators. While we have witnesses with us in person, some will be appearing by videoconference today. I thank everyone for making the time to give evidence to this important inquiry.

Before we commence, I would like to make some brief comments about procedures for today's hearing. Today's hearing is being broadcast live via the Parliament's website. A transcript of today's hearing will be placed on the Committee's website when it becomes available. In accordance with broadcasting guidelines, media representatives are reminded that they must take responsibility for what they publish about the Committee's proceedings. While parliamentary privilege applies to witnesses giving evidence today, it does not apply to what witnesses say outside of their evidence at the hearing. I therefore urge witnesses to be careful about comments you may make to the media or to others after you complete your evidence. Committee hearings are not intended to provide a forum for people to make adverse reflections about others under the protection of parliamentary privilege. In that regard, it is important that witnesses focus on the issues raised by the inquiry terms of reference and avoid naming individuals unnecessarily.

All witnesses have a right to procedural fairness according to the procedural fairness resolution adopted by the House in 2018. If witnesses are unable to answer a question today and want more time to respond, they can take a question on notice. Written answers to questions on notice are to be provided within 21 days. If witnesses wish to hand up documents, they should do so through the Committee's staff. In terms of the audibility of today's hearing, I remind both Committee members and witnesses to speak into the microphone. In this particular case, you must switch it on and off. As we have a number of witnesses in person and via videoconference, it may be helpful to identify who questions are directed to and who is speaking. Finally, could everyone please turn their mobile phones to silence for the duration of the hearing.

**Mr GREG ADAMSON**, Community Member, sworn and examined

**Mr JAMIE PARK**, Farmer, sworn and examined

**Ms JOY BOUCHER**, Retired, before the Committee via teleconference, affirmed and examined

**The CHAIR:** Mr Adamson, would you like to make a short opening statement, no more than a couple of minutes?

**GREG ADAMSON:** That's fine. As the demographics of water ownership have changed, I believe it would be more equitable for the irrigation communities if water delivery charges were paid by the water holders, not the landholders, as is the current situation. My name's Greg Adamson. I've held an interest as a bystander in the water market since my tertiary studies in agriculture during the 1990s, when water trading was relatively new. As a new entrant to the industry, I, like my peers, were trained by many of the now retired industry leaders who developed the water trading principles and ideals with which the industry was established.

It was my understanding water trading was introduced to facilitate the transfer of water from low-productivity to high-productivity crops. The aim was to increase water efficiency by putting a price on water and encouraging increased profitability throughout the Murray-Darling Basin. In my view, the fundamental objectives of the water trading were successful and water trading has achieved the commercial objectives desired 30 or more years ago. In fact, most people within this region would have to agree that more profitable commodities are being produced as a result. We have witnessed water trading allow crops like cotton and grapes to flourish.

However, just like all government policies, in the development of water trading, there are oversights that have become problematic over time and, I believe, need addressing right now. Unfortunately, in the early days, there was little understanding or foresight into how the water market would change. When water trading was introduced, it was assumed that irrigation landholders would remain the water owners. For a long time, this was predominately true. Over the years, this changed. Retired farmers and those exiting the industry sold their land but retained their water ownership. During droughts, bank managers asked farmers to sell water licences to improve cash flow. Water speculators moved into the market. The demographic owning water changed. More people owned water without owning land, in a trend I don't see changing.

What has resulted is a problematic situation for irrigators. During drought, land-owning farmers, who are trying to make an income from their land, are forced to continue paying water delivery entitlements, despite receiving no or reduced water supplies. They must do this at a time that their income drops significantly. Many seek extra water from the water market. Water owners at this time sell their water to the farmers who need temporary water supplies to finish their crops, and they do so at a large profit with no cost. This raises the question of equity in a changing market.

For a climate like Australia, where water prices can increase dramatically because of water shortages, would it not make more sense that water holders, who are making huge profits from water licenses, be liable for the cost of the delivery of water, not the landholders with reduced or no water supplies? I believe it would be more equitable for irrigation communities if water delivery charges were paid by the water holders, not landholders, much in the same way the owner of an investment property or residential investment property pays rates to the community in which they are invested.

**The CHAIR:** Thank you, Mr Adamson. Mr Park or Ms Boucher, which of you would like to make an opening statement?

**JOY BOUCHER:** I'm making the opening statement. Chair, Deputy Chair and Committee members, thank you for holding the inquiry. The Water Management Act informs us water entitlements are our assets and can be independently traded, mortgaged or leased. This is confirmed by MIL we are absolute owners of the water entitlements and delivery entitlements—unless otherwise by a court jurisdiction—water entitlements and delivery entitlements included in purchase contracts. In June '07 delivery entitlements were issued and put to water entitlements at no cost—attached to land, not water entitlements. ACCC recommendations outlawed an exit fee. Despite MIL repeatedly telling us exit fees were illegal, on 7 April and 15 May '08 they changed policies for compulsory termination of delivery entitlements and paying fees. You could not have more DEs than water, as you could not generate income to pay annual fee, contrary to the members who had already sold more. There were 16,552 without water.

At the same time, MIL was discussing selling 50,000 water entitlements at five to six times the value. Then six weeks later, after the forced termination, MIL voted to remove the limits on the delivery entitlements on the landholding. One member was allowed to accumulate 6,500. The relevance to the terms of reference: Because of the historical policies and conduct of MIL, irrigators are still suffering from ongoing effects, struggling with

stress, financial discrimination, denied fair competition and equitable trading. DEs are tradeable and eligible for efficiency water and a huge financial benefit. Mr Parks, as a farmer, wishing to continue farming with his sons, has been denied this. Remove trading from infrastructure operators to prevent abuse and insider trading. There should be an independent regulator needed for transparency, accountability, efficiency, compliance, confidence and regular audits.

To prevent conflict of interest, three directors voted on these policies and their DEs were protected from paying the fees. Directors also voted on the same day to transfer delivery entitlements to a director's partner with no water. There was prior knowledge—a solicitor's letter with the same policy that was brought in six months later. Three water brokers also had knowledge. So an independent regulator can also regulate any abuse of annual carryover water and parking; any abuse of government programs; and any abuse of directors, government and investors re water trading. On 13 June 2009 you could have 1,000 water entitlements mortgaged to the bank, then MIL took 17 per cent on 1 July and you only had 830 delivery entitlements mortgaged to the bank. Where did this water go? Where did the delivery entitlements go? It should also be checked into the continued taking of the voluntary contribution in 2002.

**The Hon. MICK VEITCH:** I might go to Mr Adamson first. Mr Adamson, thank you for your submission and thanks for the opening statement. If there was one thing that you wanted this Committee to recommend, what would it be and why?

**GREG ADAMSON:** The main concern that I have is that we have an increase in people who are not actively engaged within the agriculture industry holding water which, for this region, leads to a draining of profits and a transfer of funds that could be coming to our community and staying within our community into other markets. Ideally that is fine, and I don't want to see that changed. What I would like to see is that they contribute back to the real costs that continue to be paid by this community. While some of that money is leaving our community, as investors—and we are profiting from the sale of the water to them, so the capital price is coming back to our region—the ongoing costs of the delivery and infrastructure upgrades needs to be shared by all, not by those who are living in our community.

**The Hon. ROSE JACKSON:** In relation to some of those changing demographics that you mentioned in your statement and in response to my colleague's question, I wonder if you are able to quantify that at all for us or provide any statistics around that change? Give us a sense of, as much as you can, the amounts of water entitlements or money, if you are able to, that are now held outside the community?

**GREG ADAMSON:** I have looked into this issue as a citizen. I don't have access to information held within government departments without doing freedom of information requests, and that information is difficult to ascertain. Anecdotally, I could give some evidence. In 2002 I went to every single farm in Griffith with plantation surveys. I found out what they were growing, what they were producing and how much water they were using. In 2005 I came back with the Australian Bureau of Agricultural and Resource Economics and went through their books for production details. Of the farmers who I originally interviewed and spoke with, I kept a relationship with quite a number of them over the years. Very few of the farmers who I was speaking with have been in a position where they would like to sell the water. They are more than happy to remove themselves from the ownership of land, but quantifying it would be very difficult for me as a community member.

**The Hon. MICK VEITCH:** Mr Adamson, I'm going to ask Mr Park the same question, but before I do, the non-landholding participants in the water trading—you were talking about the costs that you as a landholder have to make or are required to make, but other participants don't make. Can you detail a bit more of those for the Committee, please?

**GREG ADAMSON:** I own dry holding land. I have little interest in owning irrigation water, so I'm coming at this from a different perspective. With my dry holding land I'll be paying rates and stock fees to the local landlord. Water farmers will also pay a delivery fee for the water that they consume. There is an annual metered fee. If we break it down—and Mr Park may be best to explain it—the water owner has a delivery entitlement to their property, which they must have in order to receive their licensed allocation of water. So they pay a fee for the delivery of the water, but they also own a right for the delivery of the water as well as the licence. Where I am specifically narrowing my focus to is simply the water ownership—so the ownership of the water, not the delivery. But I would like to see a mechanism changed—and that would require your bureaucrats to go back and do some research on how—where those who own the water are paying the costs that the farmer would, and not the farmer.

**The Hon. MICK VEITCH:** Mr Park, do you agree with Mr Adamson that that is how it works?

**JAMIE PARK:** Yes, I do agree with him there with a lot of that. My main issue here today really is that I don't mind the delivery fees, but I do think Mr Adamson is on the go with that because it doesn't matter who he

pays as long as they are paid. But the people who own the water probably should be paying them more than anything. But getting back to the main reason why I am here today, is because about 13 years ago when I decided to sell my water—Ms Boucher would vouch for this as well—we were mistreated when we had to pay an exit fee to terminate these delivery entitlements. What bothers me more than anything is to think that directors and people with prior knowledge, back when I sold my water, put their water into what they call a non-landholder's account.

Most farmers, if you are a landholder—even calling that account a non-landholder's account was really—how would I say it? You just wouldn't think that you could put it in there. It would be more for the outside person like a lawyer or anyone—guys like yourselves, politicians, who had water could put it in a non-landholder's account. But not a farmer because a farmer is a landholder. I think it was wrong the way they did it. Also, for directors of the company to put their water in it and then sell the water off and get to keep the amount of money and the delivery entitlements I think was disgusting, I really do. I think it needs to be looked into, seriously. It has put me through a real battle over the last 13 years, thinking, "How can these people vote for fellow farmers to pay this fee and they didn't pay it themselves?" They hid their water in these non-landholding accounts.

**The CHAIR:** Mr Adamson, you made a point earlier talking about non-agricultural traders in the water market. What do you think the effect of non-agricultural traders—maybe you can answer this as well, Ms Boucher and Mr Park—is on the water market as far as efficiency of allocation is concerned?

**GREG ADAMSON:** From a general perspective, and watching what's happening in the industry, they're actually an important factor within the market. Keeping to the ideals of what water trading is about, they're allowing for the transfer of water from crops that were consuming—initially the idea was that there were rice paddocks being used which weren't suitable for rice production. They were chewing through 20 megalitres a hectare of water. The ideal market at the time was to produce rice using less than 12 megalitres a hectare, going back into the 1990s where a lot of the ideology was developed. Less productive farmers were rewarded to exit the industry, and that took place. Farmers who were having difficulties, or there was structural readjustment in the market, were able to exit the industry. There were some that left and did sell their water. The banks that were putting the pressure on for the sale of the water also led to the water becoming available to people to facilitate the transfer of water into different commodities. Their function is important. Their need is important. But I think where we're having difficulties in this region is that all the profits from this region are leaving to those water holders.

**The CHAIR:** Are leaving to the non-land water holders and leaving the community?

**GREG ADAMSON:** Yes, the profits leave the community to non-land water holders. Again, we've profited in this region. We've seen billions of dollars come into this region in value of water trades—new money that came in to facilitate the exit of farmers from the region who were struggling and who weren't profitable. We've watched investment in this region. I would just simply like to see one key adjustment: that they contribute to our communities in the upkeep of the infrastructure that is necessary for the water.

**The CHAIR:** That's your main point, that non-landholders should be contributing to the delivery system costs?

**GREG ADAMSON:** Yes.

**The CHAIR:** Mr Park, have you got any comments to make? I think Ms Boucher in her opening statement talked about you having a generational need for change?

**JAMIE PARK:** Well, no. For me at the moment, my main thing is I'd like to be put back to where I was 13 years ago. I would like to have my delivery entitlements back, my money back and all costs involved in what's happened to me in all this time to be mistreated. For them to be able to change rules and then, six weeks later, change the rules back again to suit themselves—

**The CHAIR:** And you're talking about MIL?

**JAMIE PARK:** Yes, I am.

**Ms CATE FAEHRMANN:** Can I just ask a follow-up to that? When you're saying they're able to change the rules and then change them back six weeks later, or change them differently, how do they change the rules? How can they change the rules around water trading so easily and, it seems, so undemocratically according to your submission?

**JAMIE PARK:** They've gone into votes and, yes, I believe those that have conflict of—

**JOY BOUCHER:** Is this for me?

**The CHAIR:** We'll come to you in a minute, Ms Boucher.

**JAMIE PARK:** Those that had a conflict of interest in it should not have voted for these changes. We can pass it on to Ms Boucher now. She can probably help you out more with it.

**The CHAIR:** Do you want to comment on that question, Ms Boucher? Do you need to hear it again?

**JOY BOUCHER:** No, I'd like to comment on that, thanks. This is why I've asked that irrigation companies are audited. When the first resolution for the charges policy was made, it was made on the seventh, and then on the eighth the decision was brought in. It wasn't an actual board meeting because I spoke to a few of the directors and they weren't present. The rule was brought in, but then they brought that rule in saying everybody who sold water had to terminate. Figures show everybody did not terminate because there should have been about \$13 million in terminations and I think there was only \$8½ million. Also, after bringing that policy in, which lasted for 15 months, in May they also brought a transfer rule policy in, which was exactly the same resolution as the charge policy resolution.

On that same day in May they brought in that you could have more delivery entitlements on your farm than your total farm water balance. On your total farm water balance you cannot deliver any more water than, say, a thousand, right? But then they pushed the limit so that people could have more. For 15 months they made some members pay the termination fee and give delivery entitlements back, but then they were allowing other people to give those delivery entitlements, which contradicted exactly what they said on the day. As I say, not everybody had to terminate. The figures definitely don't show that everybody terminated because of the actual amount of money that was paid in termination fees. That \$8½ million should go back to the actual people that had to pay it.

As I say, it's affecting everybody now because, for example, June '22 delivery entitlements allow you to get efficiency money, which in June was 6 per cent. But if you haven't got delivery entitlements you can't get it. That's another anomaly, where they say that because of the financial contribution that delivery entitlements are made, you're entitled to that 6 per cent. Some years it's been about 12 per cent; I'm only going by this year. It's a lot of money for the people who haven't been allowed to get it. This is where some people have said there is no equitability in the trading. These things have got to be addressed, with people put back to where they are so that they're exactly the same as their neighbour who didn't have to terminate.

After the ACCC brought their rules in, in September '09, you couldn't compulsorily terminate. But the New South Wales Government was meant to enforce the Murray-Darling Basin Agreement because each contracting party was meant to enforce it. No matter who we got in touch with, everybody just passed the buck and said, "No, it's not ACCC, it's not New South Wales, it's not NRAR, it's not"—Penny Wong was gravely concerned but said, "It's a New South Wales problem, not ours." Basically that's why you need one regulator, and each irrigation company—and I know MIL isn't the only irrigation company that's got a lot of hassles. They just make policies on the run. How can you, six weeks later—and particularly after June '07, when delivery entitlements were handed out, to April '08, 16,552 water entitlements were sold and didn't have to terminate, but then all of a sudden they decided that for the next 15 months everybody had to terminate, which they didn't. But some people had to terminate and pay the fee, but not everybody had to pay it. It's just so selective.

As Jamie has mentioned about the prior knowledge, something's got to be done so these irrigating companies—and there should only be 50 per cent of directors as members and 50 per cent who are non-members so, therefore, it can be regulated properly. I think we should do away with irrigation companies, personally, after the experience we've had with them. But there are other examples I can give of what has happened with the irrigation companies because they just run roughshod over farmers—and it's the farmers companies. The shareholders.

**The CHAIR:** We might move on to another part of your submission, Ms Boucher. You talk about returning water to the land. What do you mean by that?

**JOY BOUCHER:** Originally, in 1995, the New South Wales Government was the first government to separate water from land. That has allowed investors to come in. People purchased the non-landholding water account, which has been discussed. These investors don't need the money for their livelihoods. They do not put it back into the communities that need it. That's why, if it goes back, it should be for the environment and for the land. That way that would eliminate investors pushing the money up, because they don't need it straightaway to sell their water entitlements. And when there's not a lot of water, the more money they make, the better off they are.

**The CHAIR:** Would you characterise the current water trading circumstances as an effective water allocation mechanism?

**JOY BOUCHER:** Pardon? Sorry?



**The CHAIR:** Would you characterise the current trading arrangements as an effective form of water allocation mechanism to farmers, for example? Are they getting it at a price they can afford, for example? Are they getting it when they need it—i.e. during drought?

**JOY BOUCHER:** I would say you're probably best to ask Jamie that. But I, personally, don't think they do because, as I say, they don't have the finances to actually—the investor doesn't have to worry about budgeting and all the costs. They've got their money invested in it and they want to make as much money out of it. But farmers need it, and they have got a lot of costs. I think Jamie is probably best to answer that.

**The CHAIR:** Mr Park, what's your experience in relation to that question?

**JAMIE PARK:** At the moment I think that while there's plenty of water around, the water prices have dropped. But probably over the last couple of years—or 18 months, sort of thing—I think things have lightened off a little bit. Even so, when we see a lot of water and there's been a lot of commotion over it all, where dams have got X amount, like a fair bit of water in them and we're watching water running out into the ocean—

**The CHAIR:** But isn't the true test of a water mechanism not now, when there's plenty of surplus water? Isn't the true test how it's allocated when you're in drought, for example? Isn't that really what it's all about?

**JAMIE PARK:** I think when it's in drought, if it's physically not there, it's not there, is it? Even so, with high-security holders and high-security water, that will be the real test, when the water and the rivers dry up once again, which one day they will. I hope they don't, but they will. That's where we'll see it once again. To see water, as we've seen over the years, where it's gone out and been flushed out into the ocean when that water could have been used, I think that's manipulating the water market. Because if the water is there, it's cheaper. If it's not there, it's dearer. The more water that disappears out of the system or out in the forest, or wherever else they want to put it—the environment and all the rest of it—that puts the water price up too. Sometimes I don't think the forests need as much water as what they're getting.

**The Hon. SCOTT BARRETT:** To very much simplify that—and I'm relatively new to this issue—when there is a time when you need more water, either because of drought or because you want to put in a new crop, how easy is the process for you to get that water? What are the main hurdles that would make it almost too hard or not worth putting in the effort?

**JAMIE PARK:** You've got to work out what you're growing, what it's worth, up against the water usage and whatnot to how much you can afford to buy that water. Or, if you own water, some farmers decide to sell their water, but most try to grow something with it. Everyone is chasing different things. It's like these almonds that are around at the moment. There are more and more of those getting grown. Effectively, later on, once a lot of those trees grow and need more water, that's going to manipulate the water market once again. That's going to be a huge worry not just now, but I would say in four or five years' time. When they start to produce the fruit, that's when you're going to see real demands for water. A lot of these other crops, like rice and different things that you're growing, I don't know how they're going to even afford to grow them. Because those trees—they will pay up to \$2,000 a megalitre for water to keep them alive, and they've got to keep them alive. So no-one can really compete with that.

It's hard to say. With the water that goes out of the system, some people think it's wasted. I'm not 100 per cent sure. When it goes out into the forests and all that, we think, "Well, the forest has flooded again. We mop the water." That's putting a demand on the whole system. We want the water to grow our crops, yet why flood the forest again when they actually don't need to be flooded that many times? I don't know. Is it because people have got interests and investments in water, where they're getting all this money because the percentage of water is not in the system to be sold? So that is then like fixing the market price. I think that needs to be addressed and looked at closely too.

**The CHAIR:** Ms Boucher, you made some comments in your submission about the water entitlement register and the delivery entitlement register. Do you want to comment on that? I note that you talk about the attempt in the lower House to get a register up some time ago, which failed.

**JOY BOUCHER:** I think, particularly, they should include delivery entitlements because they're now a tradeable item. They're tradeable because those who haven't got them can transfer them temporarily so that they don't have to pay double the fee, because there's a casual fee on it. There needs to be a register. It failed when it was put forth because some of the irrigation companies said about privacy. But the share register has all the details: the name of the farmer and how many shares they've got. Therefore, there's no reason why there can't be an easily accessible public register for water entitlements and delivery entitlements. That would do away with a lot of transfers and make it transparent. At the moment who knows how many water entitlements MIL has got? MIA, how many have they got? If it's a public register, anybody can access it the same as we can all access the share register.

There's got to be accountability and there's got to be transparency brought into the whole—it's a debacle because—the way it's going, it's so much stress for farmers. One in 10 farmers take their lives<sup>1</sup>. Those statistics are shocking. Marriage breakdowns. Out of the three of us, there's one marriage breakdown. It's farmers' livelihoods. Jamie was talking about costs and everything. You should see the actual price schedule that the irrigators farmers—we're no longer farmers, we're retired—have to pay before they even get to put their crop in. I will send you copies. That's why an investor doesn't have to pay any of that. They don't have to pay delivery entitlements. They don't have to pay any of the costs. There's an outlet cost, there's an inlet cost, there's a size cost. As I was saying, because we're not in it—it is just so complex. I haven't added it up—how much water they've got to pay before they can actually put a crop in and go from there. There definitely needs to be a register to let people know who has got them, whether they're directors, government bodies, investors overseas. There are a lot of rumours—I don't know for sure—but I know there needs to be a register so the transparency and accountability can be there for everybody to see.

**The CHAIR:** Thank you.

**JOY BOUCHER:** And privacy is not an excuse. As I say, the share register, I gather, is the same as the share register for MIA. I don't know if the share register that MIL has details your phone number, your name or company, your—

**The CHAIR:** Ms Boucher, we've got your point. Thank you. We might just move on.

**Ms CATE FAEHRMANN:** Quite a few of the submissions, including the submission prepared by Ms Boucher, Mr Park and Ms Pratt, mentions that the IIO boards have an issue with insider trading and that insider trading occurs. Can you just explain what you mean by this, specifically in terms of the water trading market? What solutions need to be put in place, in your opinion, to address that issue? I might go to Mr Park first.

**JAMIE PARK:** I'll let Ms Boucher do that one.

**The CHAIR:** Ms Boucher?

**JOY BOUCHER:** That's where I said about a conflict of interest with the directors voting. Six months prior to bringing the policy in in April, there was a solicitor's letter. Therefore, for that six months people knew. A water broker, who both of us have spoken to, told us that he put his water in a water entitlement-only account. He'd also spoken to that solicitor, and he didn't have to pay the termination fee. He told his clients to do it—or advised his clients—but he said they didn't get it in in time. The thing is, if there's a regulator that sets all the policies, then this sort of thing can't happen. Directors obviously would have known. If the policy was out there to a solicitor, why should a solicitor know and members don't?

I personally spoke to MIL the day before I was selling mine, before the policy came in. There was no mention of it, so it was only to select members. But that would eliminate—if policies are set by somebody else and the companies are audited regularly, then any abuse can be eliminated. The three directors didn't do anything wrong because they did it before the policy came in on 7 April. But they should not have voted for other members to suffer something that they were eliminated from, because they probably had insider knowledge. If it was out there six months earlier, the figures for the non-member accounts virtually—and I've sent copies of these things to you guys already—went up between 2007 and 2008, which means those people did not have to terminate their delivery entitlements. As Jamie mentioned, member non-landholding accounts—if you're a member and you've got land, why would you put it in that account?

**The CHAIR:** Thank you very much, Ms Boucher. Mr Park, thanks very much for coming. Mr Adamson, thank you. None of you have taken any questions on notice, so at this point we will end this part of the session. Thank you very much for coming.

**JOY BOUCHER:** That's okay. Thank you for having us.

**JAMIE PARK:** Thank you.

**(The witnesses withdrew.)**

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<sup>1</sup> In [correspondence](#) to the committee dated 29 August 2022, Ms Joy Boucher, clarified her evidence.

**Mr LLOYD POLKINGHORNE**, Deputy Chair, Speak Up Campaign Inc, affirmed and examined

**Mr PAUL PIEROTTI**, President, Griffith Business Chamber, affirmed and examined

**The CHAIR:** I'd like to welcome you, Mr Pierotti and Mr Polkinghorne. Thanks very much for coming. Would you like to make a short opening statement, Mr Pierotti?

**PAUL PIEROTTI:** Yes, please. Firstly, thank you all for coming to talk to us today about water trading. It is a very serious issue in this region, which is one of the largest irrigation areas in Australia, with Griffith's gross regional product being over \$2 billion per annum. We are a significant contributor to the Australian economy, and we feel that the current water trading regulations are not entirely suited to being an equitable, free and open market.

I make eight fundamental points. One, we support and recommend all of the ACCC recommendations. Two, we believe there needs to be a drought clause on capped water volumes. Three, we believe there should be a no-trade carryover. Four, user payer's conveyance loss, which means water bought upstream; there should be an on-cost to the buyer downstream to subsidise for the losses that are burdened on the upstream users. Five, more managed water, increase Burrinjuck Dam and establish Lake Coolah for en-route storage. Six, water register transparent, easily accessible and free. Seven, environmental water allocation for Lake Wyangan; that's a local issue with significant motor neurone disease risk and blue-green algae issues. Griffith has eight times the national level of motor neurone disease, directly linked to blue green algae from Lake Wyangan. It is an extremely serious issue locally. Eight, that New South Wales legislate to block any further Federal buyback.

**The CHAIR:** Thank you. Mr Polkinghorne.

**LLOYD POLKINGHORNE:** Good morning everyone. Thank you for coming. Water trading is such a fundamental issue to our regions. I'm here representing Speak Up 4 Water, as the deputy chair. I grew up in a town called Moulamein. I'm a third-generation mixed irrigator. I also currently run a newspaper advocating for our region of northern Victoria and southern New South Wales. Under the Murray-Darling Basin Plan, we had noble intentions of helping the Murray and restoring balance within our regions—social, economic and environmental. Unfortunately, what I've witnessed in the past 15 years has been the destruction of our river—the Murray—the wiping out of family farmers and the destruction of on-farm ecosystems, which were essentially productive wetlands that had an economic and ecological benefit.

Quite frequently in the basin plan we talk about saving the environment, but they only talk about publicly owned environment, not the broader environment. Now we see, with water trading, external competitors—whether they be foreign or domestic corporates or financial institutions—operating in our water market with a resource that is scarce, that has a greater benefit to our land, our community and our people, not just an economic bottom line. In the delivery and moving of water for water trading, we also see horrendous impacts to the river system. We see third-party impacts, as far as undermining reliability. We see the change in characteristics of water by parking high-security water on low-security or general-security licences. We also see the exceeding of the natural constraints of the river in delivering both permanent and temporary water trades further downstream to permanent plantings and other ventures.

**The CHAIR:** Mr Polkinghorne, is there anything good about what's going on at the moment?

**LLOYD POLKINGHORNE:** I suppose those making plenty of money without having to pick up a shovel or strain a fence are probably pretty happy with the current situation. From what I witness, there is a dramatic shift to being less balanced than we were previously. Previously we had a situation in which water was able to be traded within geographical localities, so those who were able to produce a better or had a different crop type could actually capitalise on the season, whether it be a good season or a poor season. But now we've sort of thrown out climate variability and we're trying to grow permanent plantings and trade and deliver consistent volumes down rivers that actually need ebbs and flows, and high flows and low flows.

**The Hon. MICK VEITCH:** Mr Polkinghorne, thank you. In your submission you say that Victoria has made a significant positive step forward in delivering on public expectations and legislative requirements. Can you just talk the Committee through what Victoria has done that you see as the significant step?

**LLOYD POLKINGHORNE:** Victoria have identified that the movement of vast quantities of water is impacting their natural assets. The Goulburn River has seen massive destruction in delivering water further downstream for, essentially, new permanent plantings. There are 65,000 hectares of permanent plantings, almonds and things, that are going in further down the system. Now those crops actually require huge volumes of water. A crop like almonds will use more water than rice or cotton, and they require the same volume of water year in, year out, so you're getting this perpetual demand. You're running the system more inefficiently because you are

delivering water further down the system. Victoria recognised that they're destroying the river system in trying to meet these needs and so they've put restrictions on trade.

So, currently, there is a huge pull of water downstream. That is affecting the natural assets—the river channel—but it's also affecting allocations to farmers because, despite being in the 2004 National Water Initiative, in the 2007 Water Act it talks about conversions in the delivery of water. So if I have a megalitre of water up the top of the system and I buy a megalitre of water down the system, the conversion rate shouldn't be one to one because there's a delivery loss in evaporation and seepage. But as it stands, currently, we ignore those parts of the legislation and we convert one to one, and the extra water required to run the system is picked up by those who get their water allocated last. In New South Wales the general security licence holders that conveyance the water will run the river increases and the people on the bottom pick up the tab for those trading water and shipping it in.

**The Hon. ROSE JACKSON:** Apologies, my microphone isn't working so I'm just awkwardly leaning over my colleague here. I just wanted to firstly pick up on something you said there and then I have another question. In relation to the impact of the current arrangement on the river itself, you sort of mentioned that but I just wanted a little bit more information. Presumably, it's degrading the banks and those sorts of things. What is the impact on the rivers of the current arrangements of water delivery?

**LLOYD POLKINGHORNE:** There's a huge range of impacts. I'm based at Koondrook-Barham and we've witnessed between seven to eight metres of the riverbank being eroded in the last 10 years.

**The Hon. MICK VEITCH:** So, slumping?

**LLOYD POLKINGHORNE:** Yes, well, it's the complete annihilation of the bank. Our banks, traditionally there, were sort of, like, a 45-degree slope and they had generations of organic matter and biodiversity and stuff that grew in the bank and stabilised it. With the high flows, we start to see notching, which is like a line coming in, and then it sort of rips that out and then the top of the bank starts falling in and you start ending up with these vertical banks. That's affecting both public and private assets. People are losing fences and pumps. People are losing parts of their lawn, and there are regular systems in Barham that you can see are sort of two metres out into the river.

The wharf at Barham—the boardwalk that the community actually built themselves and won awards for—they've had to put in, I think it was like, 1,200 tonnes of rock to stabilise it upstream. And then we also have forests getting destroyed—we've got platypus habitats and kingfisher habitats and, you know, all these great old redgum trees that hold cultural significance. They were, essentially, hydraulically land clearing the Murray in delivering these huge volumes. I'm talking, like, hundreds of kilometres. There'd be 400 kilometres between us and the Barmah Choke. They talk about the damage in the Barmah Choke, but we're so far downstream and we're witnessing the same sort of impacts and yet it doesn't seem to rate as any level of importance. But I think it's schedule 3 of the 2007 Water Act that says water trading can be restricted if it's actually damaging the integrity of the river or causing environmental damage. But, yes, for whatever reason, we don't implement the rules and the safeguards that are in place.

**The Hon. MICK VEITCH:** That clause, is that what the Victorians have enacted—they've implemented that or acted on that section?

**LLOYD POLKINGHORNE:** I think they've just gone for a State-based water trading limit down the river to protect it. But there is that sort of legislation at a national level that we could enact—or should enact.

**The Hon. ROSE JACKSON:** The next question that I wanted to ask to either of you is that, Mr Pierotti, you mentioned in your opening statement and in your submission the reference to the ACCC's inquiry and its findings. It found that the current water trading system had serious dysfunctionalities and irregularities and it recommended legislation at the national level to address that—enhanced insider trading provisions et cetera. What do you think are the most important elements of that response? If there were key, top-priority things that we did look to legislate around in order to improve the efficiency of the market, what would they be? And Mr Polkinghorne, of course, if you had any views about top priority legislative or regulatory responses, that would be useful as well.

**PAUL PIEROTTI:** It's a very long response from the ACCC and there are a lot of recommendations there. I think that the issues around transparency in trading and zero-purchase sales, parking rules and, I believe, just the need for the whole trading market to be more transparent and equitable—far more like what a normal share market would be like—is necessary. I think there is significant gaming of the market, particularly by non-irrigator groups, by financial organisations. There is some berserk activity going on between above and below the choke, with over \$100 per megalitre difference at any given time and the gaming of moving water from one region to the other. The whole cap system is being absolutely rorted. The caps on this region, for example—you can talk to any water trader anywhere and they'll tell you a way around the cap at any time. So the caps, virtually,

are non-existent because there are manipulative ways to transfer water from one area to another to avoid having to comply to those regulations on caps et cetera.

Ultimately, I suppose, what I'm saying from the ACCC recommendations is that the actual structural system of trade lacks due diligence. It lacks proper rules and regulations and transparency, and that would come right down to the actual need for a water register as well. That's actually a legislated need that was supposed to be in place. Every time that's been raised, we get a pushback saying, "Yes, well, you can look that up if you know the person's trading number and you pay a fee"—a very difficult process. Being able to access that, I believe that this should be absolutely open and especially to vested interests, people involved in water, politicians and parliamentarians, and anyone in office, actually. Anyone who is involved in the hundreds of different bureaucratic levels of water management should absolutely and fairly show their involvement in the water market. So I'd say that from the ACCC recommendations they're my hot picks.

But I think that where they've missed is what Lloyd was just talking about as well, which is with these transmission losses and the carryover losses which are borne by the upstream general security holders. One megalitre that gets bought in Griffith gets bought to, say, Riverland. It takes three megalitres to deliver, in conveyance. That three megalitres comes out of the allocation of general security in this region, and our allocations have gone from above 90 per cent average to below 30 per cent at start of season. Right now we're in flood and our general security allocation is 41 per cent. So there is no logic. That is a direct consequence of the basin plan and water trading and the rules and systems. So I think there needs to be some significant adjustment in being equitable in the way that these water moves.

**The Hon. MICK VEITCH:** I come from Tumut. A lot of water in Blowering right now—trust me.

**LLOYD POLKINGHORNE:** Yes. I share many of the same as Paul's thoughts on it. Transparency is a big one. The 2004 National Water Initiative and 2007 Water Act actually call for a national water register that is open and transparent. The Federal Government, I believe, said in estimates—mentioned that they spent \$30 million in creating one to try in, I think it was, 2010 or 2011. So there seems to be a real reluctance to actually have open, transparent water ownership details. Because when you're operating in a market with a limited supply, the potential for insider trading or for huge economic gains is endless. People refer to the water market as like a financial market, but money is sort of endless, but water is not. The decisions that policymakers make as far as managing water resources can affect the supply and the volume of water that's available.

I had a dairy farmer near me, and he had to buy temporary water just to grow some feed for his cattle. The seller of the water was the New York police department superannuation fund. I remember going to meetings in Victoria, where the Victorian Government were encouraging farmers to sell their permanent water and rely on the temporary market. But now the floodgates are open. We have international interests who are trading in our water. In a wet year it's not as dramatic, but in a dry year, the ability to park and alter the characteristics of water—so, within our system we had different water licences. A high-security licence was really reliable, but you didn't have the ability to carry over that water into the next season, because you were basically guaranteed that allocation the next year. And so carryover was a product for lower security licences. Because they got the water last, they were able to sort of have some insurance going into the next season.

But, under the current system, high-security water holders can get their entitlement, they can actually take that water, and they can pay someone and park it on a general security licence. So that impacts water as it's stored in the dam, and it also impacts how it appears to bureaucrats and MDBA, because they go, "Oh, there's quite a lot of water in the dam. People don't seem to be using it, so, you know, I don't know what you are complaining about." But they might not be food and fibre producers. They might be the bloke on the other side of the country, sitting on his laptop—or the other side of the world—going, "Hang on, if I hold my water—" So this year water is, in our region, down to \$45 a megalitre, temporary. But if he holds it to a dry time, well, he might get \$300 a megalitre or \$700 a megalitre.

And the communities that rely on irrigation and the input—like, we've lost footy clubs. The school I went to, they're less than 50 per cent of the students. In MDBA's own report we lost 70 per cent of the employment in the Wakool irrigation district. We lost about 50 per cent of the water through buybacks, and now we've got water traders and all the rest of it. So the actual water that gets delivered in our footprint would be much less than 50 per cent. Because we've had a fall in reliability, so our yield on entitlement—we used to have about an 83 per cent average. Through management and the decisions that have been taken—conveyance, all the rest of it—we're down below 50 per cent. So if you take out 50 per cent of our water with buybacks, you take out 50 per cent of our reliability—we're back to one-quarter. You put in these external influences of trading and holding water—what are we left with? Probably 20 per cent.

So that's reflected in our on-farm ecosystems. We had Australasian bitterns and stuff that would come and nest in our rice crops. We used to have bird days on our farms. We've had Murray-Darling pythons. All these

things—like southern bell frogs. No environmental impact study done before water recovery was taken part in our region. And it's insult to injury, because they'll do all this song and dance about putting environmental water in a forest near me—quite a tiny footprint that hasn't seen a bittern in the last—I've spoken to people who have been there 80 years and have never seen a bittern in that forest. They crow about, you know, all these press releases about, "Oh, we're saving the bittern." And I go, "Well, up the road you just removed 100,000 hectares of crops that supported bitterns." And also the environmental and economic benefit that you're celebrating about, you know, is 1 per cent. It's not equal trade. It makes no sense to me.

**The Hon. LOU AMATO:** What I'm taking out of all this, apart from the damage to the ecology and so forth—there seems to be a lot of, may I say, predatory behaviour which is encouraged by the current system, and which is putting farmers at an obviously distinct disadvantage. Is that what I should take from it? That's what I'm hearing from what you guys are saying, and from the previous witnesses.

**LLOYD POLKINGHORNE:** Yes, absolutely. And there's a disparity in the time, the computer technology and all the rest of it to capitalise on Inter-Valley Trades and all these other things. I liken it to a transport company. So, if I had a transport company, and they rely on diesel every month, if you actually allowed someone to come and trade that diesel before they got it, or restrict the supply, there would be an outrage. These farmers actually rely on their water. They've been there multigenerational. And all these impacts—you know, they're carrying stock, they're trying to make their bank repayments, they're trying to put their kids through school, and you've got people who have got no attachment to the land or the communities being able to buy the water, hold the water, who are able to actually—

**The Hon. LOU AMATO:** It's just about money. That's all it is.

**LLOYD POLKINGHORNE:** Yes. And they develop relationships with those in power. There is so many, you know—what do I call it? Anyway, they develop relationships with the water companies, with the MDBA and with State water resources because knowledge is power. As far as allocations of what's coming down the pipeline, or how they are going to use environmental water, or the ability for people to park their allocations in environmental water accounts—like has happened in New South Wales. You know, there's so much that's hidden. And people are just trying to farm and produce and get on with life, and yet there's all these external influences taking away a critical resource that—one, you're battling the weather, but now we're battling people with limitless resources and time who are devoting their lives just to making money out of something we rely on.

**The Hon. SCOTT BARRETT:** We heard from an earlier witness—he wanted to go back 13 years. You also spoke a little bit about, I guess, the promise around the original from the MDBA. It seems like there was a bit of optimism at one time. What were you told that turned out not to be true—or what were you lied to about? Or what has changed that optimism?

**LLOYD POLKINGHORNE:** The basin plan was sold as a balanced plan based on best available science, with a triple bottom line of environmental, economical and community outcomes—and we haven't seen any of that. We have seen a complete disregard for community input. That's been affecting our rivers, our on-farm environments and our communities, and it's wiping out all three. These were quite sustainable industries. We had really tight regulation as far as the crops you could grow, the limits of how much water per hectare you could grow. We had requirements around salinity—you used to have your soils drilled and tested. Now, under the basin plan, we've removed all those safeguards.

Right now, you could go to Boundary Bend and you could see massive almond plantations. I can take you to a road there where a council road is under salt water because the water table is now above the ground. And so we're developing land—the Productivity Commission pushed, during the basin plan, for the highest value return per megalitre. Now, when they said that, they didn't put any caveats of deliverability, soil suitability—you know, what if the highest return per megalitre is trading water?

It doesn't actually have any balance or any science behind it. So we have huge—I actually worked as a diesel mechanic when I left school and they were pushing out, you know, there were all these dryland farming enterprises in the Mallee and they're now permanent plantings, so now new irrigation areas below the constraints and there's a natural huge salt shelf under there. They're watering the almonds on sand and so excess water goes down into the water table that comes up. You can get on Google Earth or SIX Maps and you can actually see the Mallee scrub and the plantations dying in the lower reaches where they're accessing the salt water.

Now, they're four kilometres from the Murray. And if you've ever done salinity at school, salt water actually traverses a set level. So they're four kays from the Murray, and so all that excess salt is going to go into the Murray. So we have a basin plan that is trying to save the Murray from salt and having dilution flows, and yet we are moving production onto unsuitable country that is exacerbating the problem. You know, there is just so many things that have been talked about. People in our community actually wrote a book, I think it was *High and*

*Dry*, in 2006 and actually talked about the risks of the way we were going and the problems that would occur, and we're seeing that. Yeah, it's all coming home to roost.

We find it really frustrating, the division that seems to be pushed at a national level about irrigators versus the environment. Most of the people I grew up with are irrigators who love their environment, they are multi-generational. They actually understood and observed what was happening on their land and their communities. My next-door neighbour was actually breeding the bush stone-curlew. It was endangered in our region. He was a rice farmer and he loved birds and his uncle and father loved birds. So he started breeding birds and he actually had more success than the authorities trying to breed birds, till they got to a point where they stopped him from breeding. They said, "No, you are actually going to overpopulate our region with this bird." Now, these are people who don't get paid to do it. They actually just love their communities and their environment.

I think the basin plan has sort of thrown out a lot of localism. We used to have land and water management Acts and Environmental Champions and Landcare, and you'd actually have local on-ground water delivery specialists working with landholders and the community. And now we've moved all that up further away in Sydney or Canberra and, you know, we are a long far west from Sydney to—there's like seven seats west of the Divide.

**The Hon. SCOTT BARRETT:** You have touched on it a couple of times, then and earlier and also in your statement, about farmers being the ecological stewards of that land. They used to determine where that water would go, and you have touched on on-farm ecosystems. A big part of what we are looking at is environmental water and that sort of stuff. Who is now determining where that water goes, if it's not farmers looking after things like you've talked about on their own riverbanks that they have an interest in themselves?

**LLOYD POLKINGHORNE:** Well, a farmer I was speaking to during the drought said, "It's hard to be green when you're in the red." Once upon a time when water had essentially no value, like, yes, you could farm out, if you had leftover water, you would actually put water into your wetland or you would water your tree plantation. As kids, we used to plant trees with our family during the holidays and things and create wildlife corridors. But now you've actually created a huge, tremendous value around water. And so farmers can't justify to their bank manager that they're watering trees down the back of their farm. So you see a lot of this work that used to happen for free, that was actually just part of the way that they appreciated the land, has dropped off.

So now we focus on the environment, whether it be through The Living Murray Program or the Commonwealth Environmental Water Holder and the works they do at a State level. They traditionally focus on publicly owned assets that they've determined are critical. So if we said conservatively private land is probably 70 per cent of the Murray-Darling Basin, others might be 30, and they might be caring for 5 per cent. So when we talk about the environment, it's a huge, like, much broader part. Where we are, we used to farm a lot of broadacre sort of flood irrigation, which some people consider it isn't very water efficient but it actually has a huge ecological benefit. There's lots of ibis rookeries near us, so Kerang ibis rookeries, and you'd have all these migratory birds that actually come and feed in your crops as you are irrigating, and frogs and spiders and snakes and all these things that we used to just appreciate as part of the land. But we have removed all that, so we are focusing specifically on water.

A classic example is Victoria. They've just done their northern Victoria irrigation upgrade spend. So they've wiped out about 2,000 kilometres of earthen channels. Most of our delivery systems were all gravity fed. So no energy. You know, they were set up 80 years ago with low horsepower tractors, it wasn't a lot, but they had these awesome gravity-fed systems. They weren't a hundred per cent water efficient, they had a bit of seepage and things, but they created wildlife corridors because the seepage grew trees and birds would nest and frogs and snakes. Victoria's just gone and wiped out 2,000 kays and they replaced them with plastic-lined channels or pop-ups. Plastic-lined channel, they actually doze out everything that's living and they rock the top and they put this plastic lining. Anything that goes to get a drink now drowns, because it is black plastic from the top to the bottom. I speak to water bailiffs and stuff and they can see 50 dead animals a week, doesn't matter whether it's a koala or a kangaroo or whatever. So we've got a plan to save the environment and yet we are wiping out some of the best ecosystem functions.

Now you don't see birds nesting on those channels any more because there's no feed, there's no growth on the banks. And the worse-case scenario is you put in a pipeline, you actually go to an energy-dependent system of delivering water, so the costs of water delivery will continue to go up, there will be appreciation. But then nothing can get a drink. So if you are having a drought or whatever, when you're maintaining just critical human needs and stock and domestic water, the channel systems are refuges for animals, right there. It's not just farmers and community that relies on the water; it is the rest of our whole system. Yes, we have totally lost that under the basin plan. We have really taken this "us versus them" mentality and water has to be saved and environment, but it is not the environment in general that I appreciate.

**The Hon. LOU AMATO:** Pretty crook.

**Ms CATE FAEHRMANN:** I wanted a bit of clarification over something in your submission, Mr Polkinghorne, some clarity around the high security entitlements. There is a part in your statement that states:

... seeing a trend of this activity applying to the carrying over of High Security (HS) entitlements—

obviously in relation to carry-over—

whose characteristics do not allow HS entitlements carried over from one season to the next (ie HS water cannot be carried over on a HS licence).

Would you explain that a bit further for the Committee, because you do say that that is what is happening. Is that correct, there is the carry-over of high security entitlements?

**LLOYD POLKINGHORNE:** Yes, that's correct. Pre basin plan and all these changes, high security weren't able to carry over water because they were essentially guaranteed allocation every year. So carry-over was a product for lower security licence holders, and coming into the basin plan we were told that the characteristics of any water licence would not vary coming in. But now with the free, open market in water trading, there is no tagging or identifying of how that water was essentially generated or allocated, what licence it was allocated against. And so we are seeing people being able to take their high security allocation, pay someone a nominal fee or a bit to park it on their water licence. So that has an impact on allocations to other licence holders because our dams actually require throughput to actually allocate more water. So they are able to essentially shift the characteristics of their licence, morph it into something else, pay someone a fee, park it and pick it up when they want to use it.

**Ms CATE FAEHRMANN:** That is also where you use the example saying that farmers are essentially selling allocations rather than growing crops because it is more profitable, of course, to do this, potentially more profitable to be paid to park their allocation as well as opposed to growing crops. That is also playing out on the ground in terms of what farmers choose to grow in any given year now?

**LLOYD POLKINGHORNE:** Yes, absolutely. And it's not just farmers; it's also external investors who hold water entitlements. But there is a generational shift in farmers who are retiring because—the succession planning, all the rest of it, the cost and the value of water has just exploded. When I first came home to the farm, you could buy water \$200 a meg, permanent. That same water is now \$1,800. Victorian high security was about \$1,500, \$1,800. It's now over \$7,000 a megalitre. There's a real—basically, if you're a young farmer, not inheriting, you're basically out of the water market within our region. You can't grow enough to be viable.

We have people who are now retiring out of the industry and also that's a result of the changes, the way water delivery is happening and the impacts on industries in a broader context. They have all this water that they can park or trade or space on their licences where they're able to facilitate these. An example—in the Murrabit district, there were 64 dairy farmers. There's now three. Similar sort of figures around Cohuna and the Wakool district. I think there might be one dairy farmer left. We actually had strength within the variety, the commodities we grew. Because you never know which market is going to be up or down, depending on global markets and seasonal conditions. So there is a real benefit in having diversity and a spread across production types. I think we lose that in highest value per meg return.

**The Hon. MICK VEITCH:** Mr Polkinghorne, what you're essentially saying is if irrigated agriculture is driven by the cost of water as an input and that cost is inflated because of the water trading market, then we risk not producing the food and fibre that is required by our domestic market—let alone export, but for our domestic market. So essentially, as you said, we're reducing the diversity in our irrigated agriculture output. Would that be pretty much what you're trying to say?

**LLOYD POLKINGHORNE:** Yes. The trajectory we're currently going on—you could actually have an irrigation industry that is fully reliant on water trading and sort of select high-value crops. You'll actually lose your core production of the bare essentials that Australians rely on. I think that's why we have to be very careful about how—to me it's been the wild west of water policy in the basin plan as far as trading and water delivery and setting up new irrigation areas. We've actually thrown out a lot of the knowledge and the wisdom that we gleaned from the last eight years of how we set things up. It's become a full capitalistic—and you'll actually lose. You can go through stock numbers and all sorts of things. We're losing genetics. We're losing experience. We're losing knowledge.

We're actually undermining the core critical mass within our irrigation district. So the Victorian—they spent \$2 billion upgrading that. I think it's 52 per cent of those outlets now don't deliver water. You spend all this money, you've wiped out environments, you've wiped out farmers, and now your core business actually is inefficient and they're actually losing money every year. The same will happen to the New South Wales irrigation companies. Water recovery was sort of done in Swiss cheese effect, so they didn't prioritise lower value areas or inefficient areas. They just cherry-picked willing sellers, but that actually creates deliverability inefficiency or



deliverable inefficiencies because you're sending water further past farms that now don't irrigate. I think we're getting to a tipping point. You look at the job losses, you look at the supply of milk and all these other critical things. We're going to get to a stage where we're really going to fall on our faces, and rightly.

**The CHAIR:** You talk in your paper about some steps that Victoria has taken in relation to legislation for regulating and exposure of the market. What are they doing right that we're doing wrong—so far, at least, anyway?

**LLOYD POLKINGHORNE:** They're moving towards a publicly accessible water register. As I say, that is already in legislation. I think it's critically important to give people confidence and also show who is manipulating in our markets. We hear lots of accounts of politicians and bureaucrats acting within the water space while they're actually creating policies around the very product. If that was shares or property or whatever, that would be an absolute no-no, and yet we have none of that regulation. I think we really need an open and transparent water register where people can see who owns what water. If I buy real estate, my wife can get on the computer in a couple of seconds and tell me who owns it, where they live, all the rest of it. We have so many other industries that we have to be transparent in and yet water—it's almost \$2 billion in annual water trade—is completely unregulated. You don't even need an ABN to trade water. And this is a critical resource. This is a limited supply.

**The CHAIR:** It seems that the water in the basin is really—going by your evidence and from what you're saying—heading towards managing water for the traders rather than for the farmers. Is that your point?

**LLOYD POLKINGHORNE:** Yes. I think there is a big influence by those who are doing really well at water trading and those who are able to advocate for their personal interests, but it's coming at the cost of sustainable production, our actual environment—our rivers—and our deliverability. Those managing the river, like the MDBA, don't seem to care. I raised this time and time again with them and it's actually written in legislation, and they don't do anything. I've been doing daily, weekly videos for the last two years on how fast the rate of erosion is on our river. In a high river now, I can measure a 50-centimetre notch. We could lose 50 centimetres into the bank in a week now. Now, if we'd done that for the last 60 years of river regulation, we wouldn't have a river there, so we obviously did things better previously than we are currently doing now. Yet, for whatever reason, we don't act to actually address what's going on.

**The Hon. PETER POULOS:** Mr Polkinghorne, just something I wanted to clarify very quickly—in relation to the Speak Up campaign, the momentum that has driven the campaign and the 12,000 signatures, were they specifically from the seat of Murray or other catchments? Can you take us through that?

**LLOYD POLKINGHORNE:** Yes, essentially from the seat of Murray. They were gathered very quickly. We're a sparsely populated electorate. There has been a real desire from the community to seek change. I mean, they went to Canberra to actually advocate for meaningful change. I've known people who've spent 20 years writing submissions and devoting their spare time to actually just get meaningful change. I was really blessed to grow up around the people I did, because they've been involved in water politics from the very get-go and they had this—while they disagreed on things, they were always able to come together and work for the common good of the nation as well as the State. But, yes, we seem to have lost that, and Speak Up is just a grassroots organisation. We just essentially try to give a voice to community members.

I'm involved in environmental and production groups on both sides of the river and those groups are made up of everything from people who've planted trees for 50 years to former science school teachers and irrigators. It is just community that we grew up with. So we try to give a voice and try to advocate for. We've tried to give solutions and road maps on using infrastructure and our creeks to deliver water within our footprint to have an environmental and community benefit. But quite often we get the door shut on us. They talk about localism or they talk about codesign, but when push comes to shove, if that's out of line with what the political agenda is or what their process is, so many good ideas get thrown away. I think it's really sad to burn so much goodwill, and it's been going on for a good 15 years in my experience.

**The Hon. LOU AMATO:** I really appreciate the insight. We've learned quite a lot off you—the whole system, the way everything has been going. What I would like to know is: Is this contributing to the increased cost of food reaching the markets? Ultimately, is the consumer paying higher and higher costs?

**LLOYD POLKINGHORNE:** Yes, they will be.

**The Hon. LOU AMATO:** That's what I'm looking at. Everything is going up. I just wanted to know whether or not this has some sort of reference to what's going on or part reference to what's going on.

**LLOYD POLKINGHORNE:** You've only got to look at the reduction in dairy farms and the processes—

**The Hon. LOU AMATO:** I was only reading about that the other day. This is a concern.

**LLOYD POLKINGHORNE:** I think Cohuna has lost 40,000 dairy cows in the last, I don't know, six years or something. As I said, 40 but they were—52 per cent of their irrigation outlets don't now deliver water. They were dairy farms and they were food producers, your staple foods—so wheat, barley, dairy and all the things that Australians expect. I think it's really important to highlight that while we can import all these other things, Australia's regulation and control of chemicals and how we manage our environment is really second to none. If I was feeding my family, I'd want clean produce grown close to home with a low carbon footprint that is tightly regulated. We have all that. We had all that. If we don't address these things, we won't have it.

**The Hon. LOU AMATO:** We were a very self-sufficient nation at one point, and I couldn't agree more. Thank you for your time; it's a shame we don't have a lot more of it.

**The CHAIR:** At that point, we'll bring the questioning to a close. Thank you for answering our questions and giving us some insight, Mr Pierotti and Mr Polkinghorne.

**(The witnesses withdrew.)**

**(Short adjournment)**

**Mr DARCY HARE**, Executive Officer, Southern Riverina Irrigators, affirmed and examined

**Mr MICHAEL PISASALE**, Water Policy and Strategy Manager, Murray Irrigation, sworn and examined

**Mr RON McCALMAN**, Chief Executive Officer, Murray Irrigation, sworn and examined

**Ms CLAIRE MILLER**, Chief Executive Officer, NSW Irrigators' Council, before the Committee via videoconference, affirmed and examined

**Mr PETER SHEPPARD**, Director, NSW Irrigators' Council, before the Committee via videoconference, sworn and examined

**The CHAIR:** I welcome our next group of witnesses. Starting with you, Mr McCalman, would you like to make a short opening statement?

**RON McCALMAN:** Thank you. We appreciate the opportunity to appear at the public hearing today and provide comments on the water trade and related matters. I'm recently appointed in the role—less than two months—and I'm joined by our water policy manager, Michael Pisasale. Murray Irrigation was privatised in 1995, is an unlisted public company and is constitutionally not for profit. Our company delivers water to over 2,100 family-owned landholdings across 724,000 hectares in the southern Riverina, centred around the towns of Deniliquin, Finley, Berrigan, Wakool and Moulamein. Our region produces food that feeds Australia and the world. We are close to public storage dams and run an efficient gravity-fed water delivery network. Water trading has benefited farmers by enabling them to either buy or sell water to suit their business needs. This creates incentive for water to be used more efficiently and encourages investment.

Today we'd like to outline three topics from our submission: firstly, the work done by the ACCC; secondly, mitigating some of the impacts of the water trade; and I'm going to pass across for the third point to Michael to share with you MIL's solution to avoiding further water recovery requirements. In relation to the work done by the ACCC, we note that the ACCC has done a lot of work recently in the area. The road map for reform panel, led by principal adviser Daryl Quinlivan, has engaged with us—most notably in the work done in implementing a mandatory intermediary code of practice.

Secondly, around the mitigation of impacts of the water trade, water trading has facilitated the expansion of permanent plantings downstream of the traditional irrigation areas in New South Wales and northern Victoria. Our concern is this net increase in permanent plantings will exacerbate delivery shortfalls and create significant issues through a lack of available water should there be a return to a millennium drought scenario. In considering these risks, Government should consider the adoption of the flow share concept on the extraction of rivers below the Choke. This is similar to how irrigation infrastructure operators such as MIL manage peak demand periods and channels, and it would protect long-term water users and send better market signals regarding managing overdevelopment. If there are additional conveyance losses through the trade of this water then, in addition to current rules, exchange rates should be used between different zones of the river. Thank you. I'll pass across to Michael.

**MICHAEL PISASALE:** Hi, everyone. Thank you for today. One of the things we'd like to talk about as a topic of interest is a solution to avoid water recovery, and one of our worries is further water recovery from our region and its associated negative impacts on communities that rely on water for agriculture to survive. As a solution to this, we are proposing to partner with governments and environmental stakeholders to implement Australia's largest targeted environmental watering initiative using our supply system. This project focuses on achieving environmental outcomes on a very large scale, and we welcome the opportunity to discuss this in more detail at this hearing. I've got some submission material to show as well. Thank you.

**The CHAIR:** Thank you. Mr Hare.

**DARCY HARE:** Southern Riverina Irrigators represent about 1,800 landholders across the Murray Valley footprint, chiefly Murray Irrigation shareholders. But we also work in conjunction with the Murray Valley Private Diverters and MRSG, which is Murray Regional Strategy Group. Basically, we just advocate for protecting the reliability of the New South Wales Murray general security irrigator, and try and advocate for the betterment of regional communities in that zone.

Today I wanted to focus on the fact that although it's been legislated and agreed to by the New South Wales Government, we do not, to date, have an accessible and free publicly available water register. We actually aren't able to drill down into where the water is owned within any of the 19 valleys of the basin in a way that we can look at whether this water is being accrued or owned by foreign interests that don't have the best interests of New South Wales regional communities at heart.

The second one that is going to be touched on by Murray Irrigation is the exchange rates and trading zones. Again, if you look at schedule 3, the Basin water market and trading objectives—which is Federal legislation, but the New South Wales Government has obligations to deliver against those objectives—it clearly states that if we're going to be trading water from one zone to another, whether it's below choke or above choke, we need to put in exchange rates if this water is being delivered in a way that is inefficient, which is if it goes out of bank or if there are deliverability concerns or supply constraints or it breaches channel capacity to get delivered from the dams to where it's used.

We can see that's happened increasingly since water trade really ramped up post-2007, when water and land titles were separated, and this is confirmed by the MDBA. Talking about the 11-year period from 2008 to 2019, the river channel capacity was reduced by 21.4 per cent in the Murray at the Barmah Choke. If we're losing one-fifth of our deliverability within the main river from here to Dartmouth then we are going to have increased losses because we are having more demand downstream, and we've got all this water to deliver and it does not fit in the system anymore.

The Federal Government has facilitated this increase in trade, the State Government is delivering water to these water users and the local governments are approving these greenfield developments and the increase in use downstream. None of them are talking about all of the risk associated with not actually having a guided and connected approach to this because—well, for no reason, actually. They should be working collaboratively for the betterment of the three pillars. What this water reform is meant to do is to increase the social, economic and environmental outcomes on behalf of Australians.

**The CHAIR:** Thank you. Mr Sheppard and Ms Claire Miller, you are welcome to make an opening statement.

**CLAIRE MILLER:** Thank you very much. My name is Claire Miller. I am the chief executive officer of the NSW Irrigators' Council. I'm appearing here today with Peter Sheppard. Peter Sheppard is a director on the board of the NSW Irrigators' Council.

**The CHAIR:** Would you like to make a short opening statement?

**CLAIRE MILLER:** Yes, I will. I would like to thank you for the invitation to appear before the Committee today. This inquiry largely duplicates the ACCC inquiry into Southern Basin water markets that was conducted through 2019 and 2020. The final report was released in March last year. With reference to this inquiry's terms of reference (a) and (b), the ACCC has already investigated claims of abuse of the water trading market and participants cornering or fixing the market. The ACCC obtained detailed trade information from the Australian and basin State governments and their agencies, irrigation corporations, water exchange platforms, water brokers institutional investors and agribusinesses. That resulting database, detailing water trading activity in basins since 2012, is the most comprehensive record of basin water trading information to be yet compiled.

The ACCC, in analysing this database, found no evidence that investors exercised market power or manipulated markets. However, the ACCC rightly raised concerns about too few rules governing the conduct of market participants, leaving open potential for market manipulation and insider tradings. The ACCC made many recommendations to reform the operation of the water market and to close regulatory gaps and, therefore, the potential for market abuse to occur undetected. The Commonwealth Government has engaged an independent principal adviser to work with the Basin States, industry, communities and other stakeholders to develop a phased, practical and cost-effective plan for water market reform, reflecting the ACCC recommendations. A practical and cost-effective road map, supported by the Basin States, is now due out next month. We support this process, and we believe in a consistent approach to reform across all States rather than New South Wales going it alone.

In relation to terms of reference (c) for this inquiry, "the effectiveness of water registration and disclosure in New South Wales", it was already possible to find out who owns which water access licence from the NSW Land Registry Services, provided you have the WAL number and pay a fee—no different to when you search for and obtain property titles. The WaterNSW water trade register records traded WAL numbers, so it's a good place to start to obtain those WAL numbers, but I would have to say the LRS search is not an especially straightforward process, and it could be streamlined and improved. It is actually quite a palaver of a process to go through to be able to even submit an application to get a WAL and find out who owns it. So there is certainly room for improvement there.

As for greater transparency on individuals' water account balances and their allocation trading activity, we do not support this as it is akin to making a person's bank account details public to any and all. Our members have consistently and firmly rejected any such proposals. The ACCC has already examined the matters covered in terms of reference (d) for this inquiry, "the effects of water trading on the economy, communities and the environment". We agree with the ACCC that the rules, policies and arrangements that enable and support trade

do not always adequately reflect scarce storage and delivery capacity, and this has led to river channel congestion and negative third-party and environmental impacts. Again, these matters are being worked through by the principal adviser and his team.

Finally, we are much more concerned about the impacts on communities, economies and the environment should the Federal Government ever enter the market. We know that the Government's massive market intervention a decade ago distorted the market, artificially inflated prices and compounded environmental degradation through too many entitlements in upstream trading zones being purchased for the water that is intended for downstream purposes. Given the volume of major entitlements traded annually in the Southern Basin has more than halved over the last decade from around 230 gigalitres a year down to around 100 gigalitres a year, the Government would effectively have cornered the market, should it enter, to try to buy, say, 450 gigalitres—even if that was phased over 10 years. Thank you, and we would welcome your questions.

**The Hon. MICK VEITCH:** I think this will be for Southern Riverina Irrigators. It has to do with the assertions, allegations and statements being made around trade that in its current format it is actually a breach of the Water Act 2007 and the Basin Plan 2012. It has to do with the rapid drawdown of water, et cetera, and the capacity of channels causing environmental damage. This is probably to Mr Hare. Can you talk through a bit more around why you believe that is the case?

**DARCY HARE:** Yes, I sort of touched on it in the opening address, Mick. Basically, it's around the fact that we've got these trading zones, and that's a part of your licence and where you can draw your water from. But then what's happening at the moment is you've actually got water being delivered above channel capacity. If you talk to Brian Graham from DPI, he will say that they apply a 20 per cent loss factor when the environment orders water and they know that it's going to breach channel capacities—so they've got to breach channel capacity to deliver it to whichever site or sites that are called upon that need ordering. He will do that to the benefit of the irrigators so that there's not this increased conveyance weighting on their licence. Yet when the productive sector is doing exactly the same thing, ordering water that's going to breach that channel capacity, the licences are socialised back onto everybody.

If I am an irrigator in the New South Wales Murray and I don't order water—and I can't order water that breaches channel capacity—then I am effectively underwriting somebody else's use downstream that wants to order that water, even though there's no capacity in the river to do so. I'm not talking about, like, tributary in-flows and all that sort of stuff. Like, I'm talking about a column of water from a dam that is meeting a restriction in the channel, in the river, and then it needs to go over the bank and into the forest and then back into another tributary river like Wakool, Edward and Niemur and flow downstream to where it's being delivered. If Brian Graham from DPI is offsetting those losses or debiting the environmental account when the channel capacity is breached and not doing it on the productive side, then we are wearing the cost of this increased development and demand and supply downstream.

**The Hon. MICK VEITCH:** What's the impact on the quality of the water and its salinity from this type of activity?

**DARCY HARE:** I guess all the salinity impacts are happening in the sandier soils. If you've got 12 to 15 megs a hectare going out onto sandy soils that are being irrigated and you've got all the fertilisers and stuff like that, then you're going to have your salinity issues in your low-lying areas, wherever that water will disperse to. My focus would be on the water quality decreasing within the River Murray. If you've got this static demand—and this is where it contravenes the basin plan—if you've got this static demand and this river bank notching, you start to increase the suspended sediment that is dropped into the river system. If you're decreasing the visibility within the river channel and decreasing water quality, then all of your organisms and stuff that require visibility to feed and to mate and reproduce, their capacity to do that is limited. The basin plan actually states that things to avoid when you are dealing with water quality is riverbank notching and an increase in suspended sediment. They say that this can be avoided by not having this static demand and static supply of water.

**The Hon. MICK VEITCH:** So that's the issue. What's the solution? Should this Committee make a recommendation around this, in your view?

**DARCY HARE:** Yes, I think there should be some trial and error. We're not going to be able to get it right because you've got antecedent conditions that are going to wet or dry the system, and it's going to be different from one year to the next. I think you need to be engaging with—because there are similar conversion factors that were implemented in water sharing plans in the Northern Basin and in the Northern Rivers, and I think a similar thing needs to happen. Maybe start with 20 per cent if somebody—like, it's no-one's—well, there are various reasons as to why the channel capacity has reduced over that time and will continue to reduce. But if we continue to deliver the water in the same way that we are now, then we're going to have a further decrease in that capacity to the detriment of that triple bottom line that's meant to be improved. So I think we've got to implement some

sort of conversion factor, going forward, on the people that are getting this water delivered above the channel capacity of the river.

**The Hon. MICK VEITCH:** Do the other panel members have a view about this issue?

**MICHAEL PISASALE:** We haven't studied that specific matter. I guess we could only comment about how we manage water delivery in our own channel systems in terms of the flow share and how we manage those flows equitably, because in some ways we're similar. We can only put so much flow down the supply channel; any more than that, it will spill over the bank. Hence, we have some policies and rules in place about how to manage that equitably and fairly.

**The Hon. MICK VEITCH:** Ms Miller, does NSW Irrigators' Council have a view about the comments of Mr Hare and trade breaching the MDBA plan?

**CLAIRE MILLER:** I don't have any comment on whether or not it breaches the new plan. We haven't done specific research into it. We do have general concerns, though, about how losses are accounted for as water moves through the system and how efficiently the river system is operated. Peter, do you wish to add anything?

**PETER SHEPPARD:** No, you've covered it. Thanks, Claire.

**Ms CATE FAEHRMANN:** I might just jump in, particularly in relation to the growth in nut plantations or almond plantations below the Choke. I think all of your submissions talked about this. If a farmer wants to put in below the Barmah Choke, say, 65 hectares of almonds in addition to what's already there right now, what's the requirement to demonstrate that there is and will be water available into the future and that agreeing to or establishing that 65 hectares of new almond plantations isn't going to be even more detrimental to irrigators and farmers upstream? I think what you're saying is that there isn't any oversight whatsoever. Is that correct?

**DARCY HARE:** Yes, that's correct.

**Ms CATE FAEHRMANN:** I've heard of and seen enormous growth. In other words, the continued growth of almonds and other nuts, but largely almonds, is essentially driving a lot of farmers out of their ability to grow other crops or other forms of agriculture. Is that what's happening? I'm just thinking of in terms of if it's bad now, what's it going to be like in five years or 10 years when the new crops are starting to mature? Where does it end? Mr Hare, do you want to comment on that? Then I'll go to Murray Irrigation.

**DARCY HARE:** Yes, I totally agree. As of now, there is no regulation in place by local, State or Federal governments to look at whether we are at capacity for downstream demand, whether that be through horticulture or other avenues. But obviously you've got that bottleneck effect with all your horticultural planting. It gets hot, it gets windy, and it's all at the same time of year. It's 12 to 15 megs a hectare when they are at full maturity. The problem is that you've got these greenfield developments that are being approved by local government, and the New South Wales Government's approach is, "Well, you can do it, but it's at your own risk."

But, at the end of the day, if they're buying water and getting it delivered, then it's at our risk. It's not actually their risk. If their margin is here and our margin is here, and we're growing staple foods and we've been here a lot longer—you look back at the legislation at these protective parameters that are meant to be put in place now and that would have already been communicated and flowed through to market dynamics, and they're not implemented. You sort of think, "Well, where is this going to be leading?" That's why we put in that submission of that contravention. It's pretty clear that they need to be in there. And for no reason that I can see, other than that it's too hard, they aren't.

**Ms CATE FAEHRMANN:** Mr McCalman, I think it was Murray Irrigation's submission that specifically talked about this. Do you have any comment?

**MICHAEL PISASALE:** Yes. I guess we can reflect on our previous experience. We understand with New South Wales, for example—high security. There was a reason where high-security water went. At the time, you grew your grapes or your permanent planting to match those high-security water entitlements, and that water was pretty reliable. Back in the millennium drought, I think for the first time ever, some of those guys were on 50 per cent, which was half the water that they normally got. We recall from experience that that was an extremely stressful period for people who were used to being able to use that water to grow a permanent planting. As you know, a permanent planting must have water every year. You can't just put it on hiatus and hold it there for a year or two until the drought is over. It can actually be quite devastating economically, especially when you spend a large amount of money per hectare establishing it.

One of our worries was what we observed in the millennium drought. Since then, there's been further water recovery, so there's theoretically less water, if you look at the total consumptive pool. Then there has probably been a net increase and that net increase could mean—we think, "Should another sequence of events

occur again, it could be a really stressful time." But ultimately, it could fall back at a number of levels. I guess that was our worry and why we tried to flag some potential policy considerations was just to work through that, to cover that risk.

**The CHAIR:** Mr McCalman—or maybe you, Mr Pisasale—you've only recently joined the board as the CEO, so maybe you don't have the answer to these questions. We heard evidence this morning around governance and the problems with governance from previous people talking to the issues around the MIL questions of propriety, insider trading et cetera. I'd like to make some inquiries about the MIL internal market and safeguards that ensure the probity of directors. Between 2016 and 2017, a former director of Murray Irrigation breached his responsibilities as a director 28 times by leaking commercial or other sensitive company records in order to pursue personal vendettas or in attempts to profit from insider information. What steps has Murray Irrigation taken to ensure that directors who own water entitlements cannot use internal information for personal profit?

**RON McCALMAN:** I'm going to take that question on notice, if that's alright.

**The CHAIR:** Okay. I've got another one for you, then. In a report to Murray Irrigation, Deloitte flagged with Murray Irrigation on 29 August 2016 that Chris Brooks sent an email to Graeme Pyle saying, "I really think we can screw this market to our advantage and take all the profits while bringing heaps of cheap water to the region." Are directors still in a position to crash the Murray Irrigation internal trading market? Can you answer that one? Can you manipulate the market?

**RON McCALMAN:** I'm going to say no.

**MICHAEL PISASALE:** No.

**The CHAIR:** So what has changed?

**RON McCALMAN:** Given I'm new, as a starting point I have to accept what you—

**The CHAIR:** It's documented. That's a quote from a Deloitte report that was specifically called for by the board because of the problems caused at the time.

**RON McCALMAN:** Okay. From what I've observed in my time in terms of the governance structures we have in place around the flow of information from the board, I don't have that concern that you've identified.

**The CHAIR:** You don't have concerns? So what active steps have been taken to improve safeguards in governance around the internal trading market?

**RON McCALMAN:** As I said, if I'm looking at the board governance structure that's in place, not specific to any one part of that governance structure—

**The CHAIR:** Do you have governance guidelines?

**RON McCALMAN:** Yes.

**The CHAIR:** Do you have a director's handbook that says that these are the things you can do and these are the things you can't do?

**RON McCALMAN:** Yes, we do.

**The CHAIR:** Can you table that for us, please?

**RON McCALMAN:** Yes.

**The CHAIR:** What steps has Murray Irrigation taken to ensure that directors cannot profit from internal information, such as the internal trading market? What steps have you actively taken?

**RON McCALMAN:** To validate that, I'd need to take the question on notice.

**The CHAIR:** Okay, thank you. At a 2017 board meeting of Murray Irrigation, a paper entitled "Snowy Hydro: Carryover product" was tabled for discussion. This paper stated that Chris Brooks and another director were attempting to personally profit from the use of commercially sensitive internal board information. This was done by falsely presenting these requests as coming from the board. Has Murray Irrigation done anything to ensure directors cannot generate arbitrage from external water markets alongside internal, sensitive board information?

**RON McCALMAN:** As I said, I'm going to need to take that on notice as well.

**The CHAIR:** Thank you. Has Murray Irrigation fully implemented the recommendations of the Deloitte report? Have you been there long enough, Mr Pisasale, to answer that question?

**MICHAEL PISASALE:** I haven't been involved in that report or what the matter was related to, sorry, so I can't comment.

**DARCY HARE:** Robert, these sound like questions that would be better answered on notice, because we don't have any directors here. But we can't have the CEO that's been there for six weeks talking about—

**The CHAIR:** Are you talking on behalf of Murray Irrigation, or Southern—

**DARCY HARE:** Yes, I am talking on behalf of Murray Irrigation as a shareholder, and a representative of Southern Riverina Irrigators.

**The CHAIR:** Can you answer those questions?

**DARCY HARE:** No. I'm saying that you would need a director or the chairman of the board to answer those questions.

**The CHAIR:** I know that. I'm getting those answers from Mr McCalman. He is the CEO. I'm asking him questions about this particular exercise. It's of great concern to us that we are still getting, even after—these investigations by Deloitte were instituted in 2016-17, and yet we are still getting questions and complaints from irrigators here this morning in relation to the behaviour and patterns of Murray Irrigation Ltd. Does that worry you in any way—five years later, people are still complaining? Has anything changed?

**RON McCALMAN:** If I could validate that, I would be concerned. But, as I said, the reason being new in the role, yet you're mentioning a number of circumstances I wasn't privy to and in terms of reports that I haven't fully read. So that's why I meant I would need to take it on notice before I can comment.

**The CHAIR:** Okay.

**The Hon. ROSE JACKSON:** Just to be clear, though, you are aware of the Deloitte report that Mr Borsak is referring to?

**RON McCALMAN:** Yes, I am.

**The Hon. ROSE JACKSON:** Have you read that?

**RON McCALMAN:** I've read parts of it. But I couldn't answer questions on it. I mean, it's not something I specifically studied before attending today.

**The CHAIR:** One of my questions was, have the recommendations and the findings from that report been implemented? You say you have read it. You must have some inkling of where it is going.

**RON McCALMAN:** Sorry, I said I have read parts of it. I'll take your question on notice in terms of whether they've been implemented.

**The Hon. ROSE JACKSON:** Obviously the Federal Government has done some work in relation to efforts to develop better regulatory systems for the water trading market, principally led by the principal adviser. As Ms Miller noted in her opening statement, and in the submission from the NSW Irrigators' Council, they have been involved in discussions with the principal adviser about their work. Is that something that your organisations have been involved with as well? If so, are you confident that that work by the Federal Government is going to resolve some of the issues you have identified, or is it still your view that the New South Wales Government should be taking action at a State level in a way to complement, augment or build on the role that the Federal Government is playing?

**RON McCALMAN:** We have had interaction with the ACCC in relation to this matter. My view is we just want to be careful we don't duplicate, when you're having two concurrent reviews. So that would be my position. Michael could detail more around what that engagement looks like.

**MICHAEL PISASALE:** Yes, we have been in touch with the—what is it called—road to reform water markets panel, led by Darryl Quinlivan. We have certainly engaged with that panel. I think it is two or three times now. I guess one of the key focus areas was fine-tuning and developing that mandatory code of conduct. I think my understanding today is it's been voluntary, but they are looking and taking steps to actually make that as an enforceable code of conduct. We've been working with that panel, providing—you know, to work on that. It's something that we've been supportive of. As a general rule of thumb, the better informed a buyer or seller, for example, of water can be—yes, we think that's a good principle.

**The Hon. ROSE JACKSON:** Mr Hare, I just wonder, has Southern Riverina Irrigators been involved in that process at all?



**DARCY HARE:** Yes, we have. We've flagged the issues that we're flagging today previously. But I haven't really seen that much that shows a lot of promise, yet, in that road to reform, to be honest. If it's not going to be done in conjunction with the New South Wales Government, who is running our neck of the woods, then I think that's a failure, as far as I'm concerned. We need to be at the forefront of making sure that—because 80 per cent of the developments are on the Vic side and New South Wales are delivering this water, so I think we just need to be cognisant of that.

**The Hon. ROSE JACKSON:** One of the other things that's been raised with us this morning, and in a way is addressed, partially, by the ACCC's recommendation around—I just want to get the language right—what they call the water markets agency, some kind of independent regulator or independent oversight of the market. Is that something that you would be supportive of? People are nodding, for the purposes of Hansard.

**The Hon. MICK VEITCH:** Yes. Nodding doesn't get reflected in the Hansard transcript.

**The Hon. ROSE JACKSON:** Ms Miller, feel free as well—I want to draw out any feedback or reflections you had on the role of an independent oversight agency or independent regulator of some sort.

**CLAIRE MILLER:** We certainly want to see a single portal where all information is brought together, where trading information is transparent and timely. Currently we have three different registers in three different States, which all work slightly differently. Trades can occur and not, be read properly—put to the register for sometimes weeks at a time. So it's not really real-time. That certainly puts anyone other than a broker who has all day, every day, to watch the markets—it puts your ordinary irrigators at a great disadvantage.

Do we need, though, a specific water markets agency created in that ASX model/style? We're not supportive of that, not least because it's another layer of bureaucracy. It will be expensive and the way it works in New South Wales is that irrigators carry the cost of that kind of agency. They will be hit directly in their bottom line. It will increase the costs of engaging in the water market. We feel that there are other agencies that already exist that ought to be able to do that oversight work. One of them would be the ACCC.

**The Hon. ROSE JACKSON:** Peter, do you have anything to add?

**The CHAIR:** Sorry, I missed that.

**The Hon. ROSE JACKSON:** I was asking if Peter had anything to add.

**PETER SHEPPARD:** No [audio malfunction] covered it fairly well, Claire. It needs to be digitised so we have access to it, easier. But I don't want it to go down to the level that was mentioned before, you see. I could sit down on a Saturday afternoon and see what I've got in my account, or what my neighbours have in their account. It's like opening up a bank account. That's too far.

**Ms CATE FAEHRMANN:** Mr Hare, could you explain further something in your submission to this inquiry: One of the recommendations that SRI is making to the Committee is that New South Wales no longer permit any water transfers/deliveries that the ACCC has advised are in breach of the basin plan water trading rules. That's one of your key recommendations. There are two parts to the question. Summarise, if you are able to, what the ACCC has found in relation to that, and why you're recommending this to the inquiry today?

**DARCY HARE:** I think the ACCC did flag that the water that was being moved downstream was inconsistent with the supply constraints on the system. If you look at things we have touched on earlier, if you don't have the capacity to deliver the water downstream at that point in time that it is called upon, then you are going to be breaching channel capacity and you're going to be having environmental impacts of that Ramsar-listed site, which is the River Murray channel.

**Ms CATE FAEHRMANN:** That is the breaching of the water trading rules specifically, the basin plan water trading rules that you just referred to?

**DARCY HARE:** Well, that would be the exchange rates, trading zones, water quality objectives.

**Ms CATE FAEHRMANN:** The ACCC has clearly found that it is in breach of the basin plan water trading rules. Has the ACCC recommended banning that particular transfer of water if that is the case, or you are suggesting this is a recommendation now?

**DARCY HARE:** No. My suggestion was that we could look at applying a loss factor to the water that was still above the channel capacity. I think the ACCC recommended a review of why the physical constraints of the system didn't line up with the water that's being delivered downstream, off the top of my head. I'd have to read their exact recommendation on that point.

**Ms CATE FAEHRMANN:** Further then, just for you to expand on a little because I think we have time, another recommendation that SRI has made is around the inflows to Menindee Lakes in years when inflows do not reach the original model volumes for the basin plan. Can you expand upon that further?

**DARCY HARE:** I think it is Dan Connor who does the modelling for New South Wales. He talked about an annual transfer of about 1,700 gigalitres from the Northern Basin to the Southern Basin. Basically before licences were granted we wanted to look at keeping obviously all of the valley licence categories to within cap. And then we were sort of, I guess, pushing for the floodplain harvesting to also remain under that cap to ensure that we did get river connectivity. If you talk to Shagufta Ali from DPI, she also, I guess a little bit humorous to be quite honest, in that there is no definition by the New South Wales Government on what river connectivity means.

To me it is quite straightforward. We want to have the rivers connected as often as possible and regulate the take within each valley to ensure that connectivity. We have had connectivity in the Southern Basin since the twenties, yet in the Northern Basin we are only just looking at licensing this year and we sort of flagged that, or the whole premise of the basin plan was to look at it decreasing the expansion of water take in 1993, 1994 up to 2007 when the Water Act came in, yet it has taken us that 28-year period to actually get that under wraps. We have got the 2012 modelling from the basin plan that put that sort of rough figure of 46 gigs to be taken from floodplain harvesting. Yet the licensing that has come out has pushed that up to, I think it is 350 gigs times 500 per cent.

**The Hon. SCOTT BARRETT:** Point of order: Not meaning to be obstructive, I just think—

**Ms CATE FAEHRMANN:** I was just about to get to how does it impact on water trading as a question.

**The Hon. SCOTT BARRETT:** No. It is not about your question. There have been a couple of times where bureaucrats have been named, almost implying that it's their decision that has led to this. I just don't know whether that's appropriate.

**Ms CATE FAEHRMANN:** It's probably accurate. It's pretty accurate in the water space.

**The CHAIR:** If it is not mentioned in a detrimental way I think it is okay. I just caution those who are giving evidence not to adversely mention people but in what Mr Hare is saying I think it is fine with regard to that sort of quote.

**Ms CATE FAEHRMANN:** The final follow up to that is the impact that has on water trading within the Southern Basin. Mr Hare, could you explain that then?

**DARCY HARE:** Water is delivered all along the lakes of the Murray-Darling Basin and if you are ordering water or delivering water on behalf of Hume, Burrinjuck, Blowering, Dartmouth and do it in the lakes in Menindee and deliver it into South Australia, for example, then if you are not getting any trib inflows or any flows at all from the Darling, you are going to have to deliver more from the storages in the Bidgee and the Murray to meet those demands, whether they be environmental, trade, because of that Murray-Darling Basin agreement back in 1915 that said we have to deliver 1,850 gigs to the South Australian border and then any trade that sort of follows on from that, if that water has been allocated. But if you've got those commitments, and one of the main delivery points is offline, then you are going to have this increased supply issue. Then if you've got more water going down the system and the same or less capacity, that's going to exacerbate that.

**The Hon. ROSE JACKSON:** Mr Hare, I think you alluded to this but I wanted to invite you to elaborate if you wanted to on the impact of the current arrangements both on the availability and the affordability of core food, in particular, but also fibre for the domestic market. I think we are already seeing some of that, but what does the future look like if we don't resolve some of these problems—people when they go to the supermarket, when they go to the shops, looking to purchase products in the domestic market because the water trading market is operating in such a way that it is making that stuff impossible in a way to produce?

**DARCY HARE:** Yes. So there are probably a hundred ways to answer that broad question.

**The Hon. ROSE JACKSON:** Give it a crack, one or two.

**DARCY HARE:** You would probably have to look at how much—and I will focus on just the New South Wales Murray—if we look at 1980 to 2000 and then compare that with 2000 to 2020. We've got about 33 per cent of the available water in the New South Wales Murray and part of that is probably reliability reductions. There are about 30 different reasons, water trading is one of them, as to why that reliability has been reduced. Then about 22 per cent has been bought back for the environment in that region. That's why you get that sort of two-thirds, comparing the 20-year on 20-year. If you're producing wheat, barley, oats, canola, all these staples that we live on, as opposed to the non-staples, obviously you can sustain yourself on those horticultural, and we

do. But if you are going to look for a viable New South Wales Murray going forward, having two-thirds of your water cut off in a 20-year period when you know that the main production that comes out of the New South Wales Murray is staple foods, interlinking with all those other 99 factors, I think you've got a real problem. How that all plays through to the supermarket, and I guess the standard of living is the broad question you are asking. I think you've got a reduction in it.

**The CHAIR:** Mr Hare, I have a question relating to the SRI itself. You are down here today as Executive Officer, Southern Riverina Irrigators. Are you aware of the fact that SRI is a tier two organisation under the Associations Incorporation Act?

**DARCY HARE:** Yes. I'm here representing SRI but I'm the vice chair, not the CEO.

**The CHAIR:** You are the vice chair? Sorry, we had you down as executive officer. Are you aware that SRI is required to lodge annual reports and financials for public viewing?

**DARCY HARE:** Yes, I am and we have.

**The CHAIR:** You are aware? Okay. So how can SRI be taken seriously when it does appear that you haven't lodged an annual return since 2018? Are you a representative body?

**DARCY HARE:** I can provide the evidence that we have lodged it since 2018.

**The CHAIR:** Well, it's not on the public register.

**DARCY HARE:** Yes, well, it's been lodged.

**The CHAIR:** Could you table those for us please?

**DARCY HARE:** Yes, I will.

**The CHAIR:** In due course? Thank you.

**The Hon. SCOTT BARRETT:** There are obviously a lot of divergent and quite opposing views on this. I wonder if anyone would have a stab at a recommendation maybe that you could make to us that we could take forward that would receive broader support from all players in this. Maybe Ms Miller, starting with you?

**CLAIRE MILLER:** Sorry, I was distracted by looking up some facts and figures. Would you mind repeating that question?

**The Hon. SCOTT BARRETT:** Is there a recommendation you could suggest that we could take forward that you think would receive quite broad support across this sector?

**CLAIRE MILLER:** Could it be a recommendation to improve ways that the market could work—the kinds of rates, regulations and so forth that we would want to see?

**The Hon. SCOTT BARRETT:** Yes, how we can make this whole system better and more workable for everyone involved?

**CLAIRE MILLER:** Sure. We can provide you with that. We've done some detailed tables and so forth in our responses to the ACCC inquiry and recommendations, so we're more than happy to send those through to you. While I've got your attention—there's a couple of things that were brought up and raised in relation to water use in the northern basin. I just feel that a few things need to be corrected there. I'm not going to go through the whole floodplain harvesting thing again. I think we've all thoroughly aired that one inside and out. But water use in the northern basin is licensed as general security and for supplementary. They do have licences for that. They don't have licences for floodplain harvesting, but that's what those regulations that keep being disallowed are intended to do—is to bring that last form of water take inside of [audio malfunction] licensing, the modern licensing framework, to ensure that it is metered and to ensure that the volume taken is cut back, so the total water take across all types is within the cap and within the basin plan sustainable diversion limits.

Again, I'm happy to provide information to show that it isn't in fact the way that the MDBA [audio malfunction] for SDLs, what the SDL should be and how they're calculated. We can provide that information to you. You would've been also able to get it from [audio malfunction] as well. The other one to do with Menindee inflows—I'm also happy to provide you with graphics that we've done with the data from MDBA and from WaterNSW that shows how much water in Menindee is very, very closely correlated to very wet years. It's an ephemeral river system. Sometimes it does run dry or parts of it dry up. Other times it's in flood, as it is now and has been for the last 2½ years. We're ensuring it with connectivity measures that have already been put in place and it has swung into action every time in the last 20 or 30 years to preserve connectivity and shut off access to water upstream whenever Menindee starts dropping below an operational level that was there when it was part of Broken Hill's water supply and that has continued even though Broken Hill no longer relies on Menindee Lakes.

As I say, we can also provide you with inflows through the northern basin using WaterNSW data and how that correlates to the water that is in Menindee. Menindee does need to hold more than 640 gigalitres before it switches to MDBA control and the water is shared half and half between New South Wales and Victoria, and it does become a very important part underpinning allocations at that point. It's certainly underpinning the capacity to deliver that 1,850 gigalitres to South Australia. Obviously, whether Menindee falls below that, that is a big concern, because the weight then will fall back onto just the Murray system to support that.

**The Hon. MICK VEITCH:** Mr Hare, earlier in response to other questions, you were talking about the change in the—it might've been my colleague Ms Jackson's question, but it was to do with the 20-year comparator. The change in the make-up of the landholdings and the owners of those landholdings and the people leaving irrigated agriculture—are they predominantly the family-run farming operations? Would that be fair to say? And those downstream involved in the nuts and fruits and so on are more the larger corporate farmers? I guess my question is: Are we losing family-run irrigated agriculture operations from the sector because of the way things are currently operating?

**DARCY HARE:** Yes, definitely. Absolutely. Just from where I'm from, Wakool—from 2006 to 2016, as a part of that Murray-Darling Basin community profiling that they did, we lost about 40 per cent of the population of Wakool when that water started to get bought back. If you look at the AITHER reports, there's an ever-increasing demand for water downstream for whatever purpose that might be. It does seem to fall towards horticulture. I don't know if Murray Irrigation wants to add to that.

**RON McCALMAN:** I don't have a comment, sorry.

**The Hon. SCOTT BARRETT:** Can I ask what the actual impacts of that then are? You're talking 40 per cent. But what does that mean to towns like yours?

**DARCY HARE:** It means that you don't have as good a sense of community. You have businesses shut down. You have football clubs shut down. You have bus runs shut down. When I started going in year 7—I think it was 2004—there were about 45 people going to town to high school and to primary school. Now I think they run a car that's got about four people in it. Those sorts of impacts—we have families leaving the area, jobs leaving the area. If you're going to strip the productive capacity of the region in the form of water entitlements, then that loss in productivity means you're going to lose community and lose people. It's just a domino effect.

**The Hon. MICK VEITCH:** Is that picked up anywhere, that information? Are there associated economic impact statements? How is that captured and measured and reflected?

**MICHAEL PISASALE:** I recall there was a Sefton report to look into some of those impacts and I understand that report outlines some of the concerns and the observations that Mr Hare has made as well. Just a comment really—in terms of the farms in our region, we had quite a lot of the family farm make-up. Yes, so it's predominantly family farming businesses in our region.

**CLAIRE MILLER:** Can I just turn to that as well? Darcy and Michael touched on a really important thing here, which is the impact for the core water available for growing food and fibre, if that further shrank through further purchases and transfers. Ms Jackson, you brought up a very good point about what's the impact on the capacity to grow food and fibre and the affordability and availability of staples such as rice. It has a direct impact on that, if you're looking at market impacts on how the market distortion, market manipulation, capturing the market can affect communities and regional economies and also the environment.

The Sefton report, the Productivity Commission report, several reports do already touch on this. There is also the 2016 community profiles that were done by the Murray-Darling Basin Authority. Not a hell of a lot more water has been recovered since then, making the pool smaller, so they are still relevant in the way that they highlight the impacts on various communities of water recovery to that point throughout the basin. There is quite a large literature, quite a large pile of reports there [inaudible]. I'm happy to provide some details. Again, I love a graph [audio malfunction]. So you can see very starkly what the impacts are. Thank you.

**The CHAIR:** Thank you very much for coming. I note that a number of questions have been taken on notice from Mr McCalman and Mr Hare. The secretariat will be in contact with you soon and you'll have 21 days to respond.

**(The witnesses withdrew.)**

**(Luncheon adjournment)**

**Mr MICK KEOGH**, Deputy Chair, Australian Competition and Consumer Commission, before the Committee via videoconference, sworn and examined

**The CHAIR:** Would you like to make a short opening statement?

**MICK KEOGH:** Thank you, I would. The Murray-Darling Basin water markets are critical to the efficiency and productivity of Australian agriculture. Water trading in the basin had its origins in informal arrangements between neighbouring farmers where one farmer's surplus water could be transferred to a neighbour. Over the past two decades it has evolved into a complex, basin-wide set of markets with an annual average value of more than \$1.8 billion per year. Water trading has brought substantial benefits to many water users across the basin. Water markets allow irrigators to increase their available water at critical times in a crop or production cycle, to earn income by selling their water rights when they are more valuable to someone else, to expand production or to release capital for investment in their business.

In turn, water trading promotes efficiency of dependent industries and delivers broader benefits to the economy. The benefit of water markets is demonstrated by the fact that, despite tough and volatile climatic conditions, the value of production from irrigated agriculture in the southern Basin has trended upwards in real terms since 2010-11. The benefits derived from water trading rely on fair and efficient water markets, underpinned by an environmentally healthy river system. This depends on, first, a governance framework that ensures trading rules and regulations are developed and implemented with a basin-wide perspective, acknowledging the river system's physical characteristics and appropriately managing the impacts of that trade; secondly, a clear and consistent framework for trading across the basin; and thirdly, regulation that promotes open, fair and transparent trading which is robustly and consistently enforced across the basin.

In its 2021 report on the findings of the Murray-Darling Basin water markets inquiry, the ACCC found that basin water markets lack many features that make markets work effectively. In particular, there are scant rules governing the conduct of market participants and no particular body to oversee water trading activities, undermining confidence in fair and efficient markets. Under current arrangements, trading behaviours that can undermine the integrity of markets such as market manipulation are not prohibited, insider trading prohibitions are insufficient and information gaps make these types of detrimental conduct difficult to detect. There is a lack of quality, timely and accessible information for water market participants. Differences in trade processes and water registries between the basin States prevent participants from gaining a full, timely and accurate picture of water trade, including price, supply and demand.

Key policy decisions and changes to river operations that can significantly affect the market are often poorly communicated to market participants, with the potential to further undermine market confidence and result in poor business decisions. The complex nature of the basin's market settings means the market's trading systems and opportunities are best understood and leveraged by professional traders and large agribusinesses with the time and knowledge to analyse and navigate the complexity. Current trading rules and processes do not always reflect the constraints associated with the hydrological characteristics of storages and river systems. These market architecture deficiencies can result in adverse impacts on stakeholders. Finally, changing conditions such as reduced inflows, shifts in water use, declining channel capacity and increasingly binding trade restrictions are challenging key assumptions that underpin current trade arrangements and the design of tradeable water rights markets. These assumptions need to be reassessed so that water markets operate more efficiently, in close connection with the river system's physical characteristics, into the future.

A serious additional consequence of these problems is that many water users reported they do not trust the markets and the key institutions in them to be fair or to work to the benefit of water users, in particular irrigation farmers. These problems are impeding informed and confident trading and investment to support efficient agricultural production. The ACCC recommended 29 reforms to restore confidence in water markets across the basin and to improve their operation and efficiency, so they work better for market participants and deliver more benefits for the Australian economy. The ACCC recommended reforms which can be summarised under four main headings. These are governance of the basin water markets, market integrity and conduct, trade processing and water market information, and market architecture.

In relation to market governance, the ACCC recommended the establishment of a single agency with the power and the resources to oversee the market, to enforce market rules and to provide advice to government on future market development. In relation to market integrity and conduct, the ACCC identified a need for basin-wide market conduct and integrity legislation coupled with a mandatory code for market intermediaries such as brokers. This needs to be enforced and supported by the availability of comprehensive and detailed market information. In relation to trade processing and market information, the ACCC recommended the establishment of a common digital protocol on a basin-wide basis, to enable the exchange of water market information, in conjunction with

the development of a digital platform as a single repository of water trade information and the establishment of a public-facing water market information system, to make accurate and timely water market information publicly available. This would operate in conjunction with standard rules and processes for water market announcements.

Finally, on market architecture, the ACCC recognised that existing inquiries and reform processes offered the opportunity to improve the basin's market architecture to better integrate water markets and water management and to address the impacts of trade. The ACCC made recommendations regarding commitments to metering and monitoring water use, better system modelling, increased transparency of water allocation decisions, clearer communication of plans for responses to delivery shortfalls, improvements to inter-valley trade mechanisms and clearer processes for the delivery of environmental water. The ACCC also recommended that a body such as the proposed water markets agency be given oversight of the development of a long-term reform agenda for market architecture. This suite of reforms proposed by the ACCC is now the subject of careful consideration by the Department of Climate Change, Energy, Environment and Water, working with its basin State counterparts. The principal adviser, Mr Daryl Quinlivan, is currently preparing advice for the Commonwealth Minister on the priorities and sequencing of agreed reforms. Since the release of the report, Commonwealth and basin State agencies have directly or indirectly taken steps to address a number of the issues identified.

These include making improvements to the information available in the New South Wales and Victorian State water registers, including reasons for trade and struck date information; in-principle support for relevant governments to amend the basin plan to remove the grandfathered tags exemption at the next available opportunity; consultation with stakeholders on improving the operation of inter-valley transfer arrangements, including WaterNSW considering options for the administration of the Murrumbidgee IVT arrangements, the Victorian Government adopting permanent rules governing Goulburn-to-Murray trade and the schedule D review to consider improvements to arrangements in effect under the Murray-Darling Basin Agreement; increased information being published on a variety of issues relevant to trade and its impacts, including the risks of shortfalls and conveyance losses, and better understanding of the drivers of changing water use and delivery patterns; and, finally, the inspector general of water compliance has identified enforcement of trade-related basin plan water trading rules as a priority, stating that it will focus on actions to improve understanding of and compliance with these rules.

Reforms will critically depend upon more timely, accurate and comprehensive data but have the potential to deliver increased benefits from the utilisation of the basin's scarce water resources. I am happy to take questions, noting that, due to the technical nature of many issues regarding water markets and trading, some of these may have to be taken on notice.

**The Hon. ROSE JACKSON:** Mr Keogh, thank you so much. I just wondered if you were able to provide us any more information on the timetable, both for the advice to the Commonwealth Minister from the principal adviser and also any sense of the time lines for the sequencing of reforms that he might be recommending. I guess the context of this question is that there is an obvious benefit to the Federal Government leading reform in this area, in that it will apply nationally to all the basin States. But in the absence of any short-term action, there is perhaps more pressure on States to go it alone, as it were. I just thought any information you could provide us as to timetables for Federal reform initiatives would be useful.

**MICK KEOGH:** As I mentioned, Daryl Quinlivan has been appointed as chair of the expert advisory group providing advice to the Minister at a Federal level, including on a time line of implementation of reforms. He has been spending quite a lot of time consulting with the States. They are currently in the process of developing a draft road map, and we understand that will shortly be provided to the Federal Minister. But it's our understanding, in saying that, that the States have indicated a range of initiatives that they believe can be adopted in the short term and will improve a lot of the issues we identified. In particular, things like the market architecture issues will need much more considered and longer term time frames involved.

For example, WaterNSW has already been implementing its new WAVE program to enhance the information available about water trades and the scope of that information. A similar thing is available in Victoria. The South Australian Government has also committed to upgrade and digitise its trading information and make that more readily available. There are initiatives happening, as you indicated, at a State level independently, but they are subject to a degree of coordination. I think there has been good general agreement between the States about the steps they can take and the sort of timetable that will be available but until that road map, if we were to call it that, from Daryl Quinlivan is released, that hasn't been finalised.

**The Hon. ROSE JACKSON:** I wondered what consideration you had given to compliance mechanisms within either the rules-based framework, the model code of conduct or the oversight. Presumably, you primarily had financial penalties in mind for breaches of the framework once it is put in place. I just wondered if that was

right, if you had given any sense to what some of those penalties might look like or whether there were other compliance mechanisms that you had envisaged for people who might potentially breach elements of the framework once it was in place.

**MICK KEOGH:** I think it is important to differentiate some of the compliance issues. There are existing compliance issues within States—for example, the interim inspector-general—the inspector-general, as it is now known, is working on a range of issues with the States around metering, around reporting of trades and those sorts of things. That compliance is already underway and you are seeing some of those outcomes already. In relation to a code of conduct for trade intermediaries and some broad legislative regulation around market behaviour, that would presumably come within existing legislative frameworks that the ACCC administers. For example, we already administer a number of industry codes. While it's not certain we would have that responsibility, by way of an example, existing industry codes in the horticulture, franchising and dairy industry have a range of different compliance and enforcement measures associated with them.

So we can address issues of a minor nature administratively, either through corrective action being taken or through legally binding undertakings. We can issue what we refer to as infringement notices. They typically amount to perhaps a penalty of the order of \$10,000 to \$15,000 where the party receiving it concedes they've made a mistake and agrees to address it, or it can result in litigated outcomes where there are significant penalties in the orders of millions of dollars for breaches of the legislation. That's really just giving an example of the legislation we currently administer. If it were to be of a similar nature in relation to the proposed conduct and code, that's an indication of the approach that might be taken.

**The Hon. MICK VEITCH:** We've heard evidence today, and I have no doubt that in your exercise you would have heard very similar information, but there appears to be an inherent imbalance in the market operation where the professional traders and the large agribusinesses seem to have the time and resources to analyse and navigate the basin water markets, whereas the family-based or small operations don't. My concern is that this puts at risk those smaller operations. They provide food and fibre for our domestic markets, and if they can't get the water to do that it has an impact on our domestic markets. In your recommendations and findings, have you structured a way where we can provide a bit of assurance and limit the impact on the family-based or smaller irrigation farmers?

**MICK KEOGH:** That was certainly a key point we made in our inquiry findings. The complexities of these markets are such that it requires a full-time, dedicated and skilled staff resource to adequately navigate them and take advantage of them. That's well beyond the resources of individual family farming businesses. That certainly serves to undermine their confidence that those markets are working appropriately. When we drilled down to further investigate those issues, two things came out. One is the complexities of the rules but, secondly, is the inadequacy of the information made available about the market and the outcome of trading. When we started to try to look at market behaviour, for example, we selected the 2018-19 water market year and had to go through a very comprehensive data mining and matching exercise to give ourselves any confidence we could clearly understand what was happening in the market and identify whether, in fact, market manipulation or insider trading or a range of those sort of activities were occurring. We had multiple staff resources on that, specialised analysis, and had to look at something in the order of six million records overall and then match them all to try and come together with a clear picture of what was happening in one trading year. That all stemmed from the inadequacy of the recording of information and the reporting of information about the trades.

So we feel that improving the rules, particularly for intermediaries, so that it's clear who they're operating for, when they're trading on their own account, giving them a requirement to operate in the best interests of their customers—that is important, but also really focusing on much better provision of information so that that information is transparently available in a timely fashion. We even went as far as suggesting it should be through a single digital portal so that it's readily accessible, including information, for example, on market announcements by government authorities and those sorts of things, because all of those have an impact on the market. We feel that an awful lot could be done and is starting to be done to dramatically improve that market information and make it much more transparent so that the disadvantage that individual and sole traders have in the market is minimised and they can be a bit more confident about their ability to actively trade when they need to.

**The Hon. MICK VEITCH:** Mr Keogh, basically what you're saying but also from the submissions—do you think the fundamentals of this particular trading market are being challenged?

**MICK KEOGH:** There are some significant challenges. I think they relate to some of the market architecture issues—in other words, the situations where the ability to trade water isn't matched by the ability to physically transfer that water and the fact that the time of trade is separate from the time of delivery. There are some really challenging issues there. I think the other challenging issues—you probably had them put before you—are issues like conveyance loss. In other words, if I sell 100 megalitres of water out of the Hume dam, by

the time it gets to South Australia, how many megalitres of water should the buyer get? There are losses on the way through. That is a problem. We've got constraints around places like the Barmah choke et cetera. Only so much water can be transferred on a regular basis through that particular constraint. The rules don't always adequately cover that.

There's a range of those sorts of issues that we think need to be addressed and need to be addressed on a basin-wide basis, not just by individual States acting in isolation or sometimes in contrary interest to some of the other States. But I don't think it means that the fundamental model is flawed or the notion that the best way to manage the scarce resources between irrigators is via a market. But you're right. There are some fundamental challenges that really do need to be addressed. Some of them arise from this wonderful thing called a federation. But, being that's what it is, that's what we have to deal with.

**The Hon. MICK VEITCH:** We might try and sort that out as part of this inquiry.

**The CHAIR:** I wish. Mr Keogh, in your preamble, you talked about you'd seen or the ACCC had seen increasing productivity and a trend upwards since 2010. Do you have a view on the quality or the mix of that growth? I'm particularly thinking in terms of the mix changing from family-based farming to more industrial farming.

**MICK KEOGH:** There are a range of socio-economic issues that emerge from this market and from any market. It's always difficult to create a balance there. I think one of the lessons from other markets is that, if you try and fix all those issues by rigging the market, so to speak, or adjusting the market, you sometimes create more problems than you solve. Sometimes those problems that emerge through the adjustments to the market are better addressed separately—in other words, directly. I think that's important to keep in mind. I think the second thing to keep in mind is that, whilst those adjustments are occurring, there is another adjustment occurring in the sense that holders of water are making decisions about whether they want to retain that water, whether they want to trade it to someone else, whether they want to pass it on to other members of their family.

A whole range of factors come into play in those changes that are occurring in communities in the basin. Not all of those are determined or as a result of the water market. There are quite a few other economic factors at play as well. So I think, yes, we recognise that not all market outcomes are good outcomes in a sense of the local community or the local economy, but you are probably better off addressing those through other mechanisms rather than rigging the market to try and adjust for those things.

**The CHAIR:** I'm listening to the evidence this morning. Very largely, the unfettered market is very much driving the shape of these communities down here—and investment decisions. You raised that in your answer just now. What other mechanisms, then, would you address? You're talking about something else, other than the market—the theory being that, if we have a proper, regulated and informed market, which we don't have now, people could make informed decisions in terms of investment and understand what they're putting their money into and understand what the likely returns may be, knowing that they had some confidence that the market won't dud them. Very much the evidence today was that people were very unhappy with a market that seems to enjoy insider trading and all sorts of other abuses—

**MICK KEOGH:** No question about that. As indicated by our 29 recommendations, we think the market needs very substantial reform so that it actually operates in an efficient manner and that participants can engage with confidence, knowing they're getting the right signals and there's certain rules and requirements in place to keep the market fair. There's no question about that. Certainly, we heard that loud and clear in a lot of our engagement with stakeholders throughout the basin.

**The CHAIR:** [Disorder] the next part of it—

**MICK KEOGH:** That doesn't mean there won't be subsequent adjustments. For example, the move out of dairying into horticulture is driven in part by changes in dairy pricing, not necessarily the fact that there is a water market. I guess that was what my answer was getting at.

**The CHAIR:** I understand that. There'll always be other economic factors that drive the mix. But, in the end of the day, this whole region dwells, lives, survives, grows, dies on the basis of affordable and accessible water. It is the largest driver. To what degree have you engaged stakeholders so far? I'm not just talking about primarily, to my mind, the most important stakeholders, being farmer stakeholders.

**MICK KEOGH:** As part of our inquiry process, we travelled right through the basin. We convened, I think, around about 14 or 15 workshops, including, I think, probably in that very room that you're sitting in at the moment. We had quite a large rollout of those. We then, obviously, received a lot of submissions and a lot of input from various stakeholders. We put out a draft report and sought submissions in response to that, which we received. Then we revisited quite a number—about five, I think—regional centres when we'd completed our report



and went through that with the audiences and discussed it as well. In association with our inquiry, there was quite a deal of community engagement, both through submissions but also through town hall meetings in centres right throughout the basin.

**The CHAIR:** How do you see the ultimate legislative framework coming together? Do you see that being a cooperative framework where the States work within the Federal framework, much as the MDBA is structured at the moment, or is the Federal looking to take control of the constitutional rights of the States to control water?

**MICK KEOGH:** No, I don't think the Feds—well, you would need to ask the Federal Government that. But I think the model that exists in a number of areas at the moment, which is that cooperative federalism whereby there is, for example, Federal legislation which is mirrored in the provisions of State legislation—for example, Australian Consumer Law and in quite a few other markets—there's that sort of model in place. I think that's the model that, it would be anticipated, would be utilised in this case.

**The Hon. SCOTT BARRETT:** Mr Keogh, I don't know whether I've got this formulated as a question. But it seems from what you said earlier and also from some other witnesses earlier that when this was first set up, a decade or so ago, it was set up with the best intention and looked like it would work to deliver some really good outcomes. You mentioned that in a lean year someone could trade off their water and get it back when they needed it. First of all, is that correct? Are there are examples where that does still work for positive outcomes for our family farmers—irrigating farmers?

**MICK KEOGH:** Very much so. I think it does work, and we were given numerous examples where that worked—for example, the case of a farmer moving to more intensive irrigation systems, which are more efficient, and being able to sell some of their existing water, which they would no longer need, to fund the capital investment required to undertake that upgrade of their irrigation system. That's a very simple model. We've seen others where, for example, a farmer wanted to expand and buy the property next door. They may not have had access to sufficient credit or capital to do that but, by trading some of their water, they were able to do that and then buy some of that water back as needed on the allocation market. There's a whole range of those sorts of examples given to us as we engage with the community that apply to this very day.

In fact, I think the thing that really struck me quite strongly is that when you look at the asset base of the average irrigation farmer in the basin, about 40 per cent of that asset base is taken up in the value of their water entitlement. That's quite a significant component of the business of irrigation farmers, and that applies whether they're big farmers or little farmers. I think it's very important to keep that in mind in terms of the benefits and the ability or the flexibility that water markets give irrigation farmers in the basin.

**The Hon. SCOTT BARRETT:** Why is it working in those examples and then very much not working in lots of other examples we're hearing?

**MICK KEOGH:** I'm not sure, when you say that it's not working—I think there's certainly criticism of corporate investors participating in the market, and we had a detailed analysis in our inquiry of the four major corporate investors. When it was all boiled down, our finding was that, at most, they held around 10 per cent of the water in any of the trading areas. In looking in detail at their activities—and we had them in and interviewed them and were able to obtain all their trading records over quite a few years—we didn't find any adverse outcomes. Sure, they were able to do things in the market that perhaps others weren't because of their better information or resourcing, but there was nothing aberrant in what they were doing. In fact, in a lot of cases, they were accumulating smaller parcels that were available in the market and then making them available to buyers as a consolidated package.

For quite a lot of the things they were doing, even though individuals raised criticisms of them in relation to particular instances, when we looked in detail at them, we weren't able to identify what you would call bad behaviour or aberrant market behaviour by those large investors. They do play quite an important role in the market in giving it liquidity when at different times there's not great demand in the market. You'll certainly hear from a lot of individuals who are critical of their operations. But on the other hand, when you look at it in detail, as I said, we didn't find strong evidence of that.

**The Hon. SCOTT BARRETT:** We have heard criticisms today. We've heard about a lack of trust and an imbalance between family farmers and the bigger traders. We've even heard about an adverse impact on productivity and then a flow-on effect on the shrinking of towns and communities. Acknowledging that there are some criticisms—and I guess, with that, possibly a couple of flaws in the system—do you think the recommendations you've put forward will go a long way towards addressing those criticisms?

**MICK KEOGH:** We believe so, and certainly that's the basis of our recommendations. We feel the market needs considerable reform. I think one of the things that you encounter when you look at this in detail is

that the water management systems in the various States were set up to manage the water and then the market grew on the back of that, and there wasn't always much focus on how the market operated. The market was, in a sense, tacked onto the water management system. I think it's grown to the stage now where it needs a much more dedicated focus to manage that market, just the same as the Australian Stock Exchange manages the share market in Australia. That was the basis of our recommendation—to really bring some focused attention to and focused management of those markets and the way they operate to improve the confidence of market participants, including, in particular, the smaller scale farmers.

**The CHAIR:** Where are you up to with finalising the road map for implementation?

**MICK KEOGH:** I understand that Daryl Quinlivan's draft report is shortly to be provided to the Minister, although obviously the change in government at a Federal level and the resulting change in the Minister may have slowed that process down slightly. But you'd perhaps need to ask him directly where that's up to.

**The Hon. ROSE JACKSON:** Perhaps I might ask a couple of slightly more technical questions. Particularly following on from my colleague Mr Barrett's questions, I thought that was an interesting interchange between him and you around the current operation of the markets and some of those bigger players, as well as your views on some of the potential benefits that they may bring. One of the things that has been brought to our attention today is the way that under the current market rules people can, for example, park their high-security allocation on a general security carryover licence, and the market rules incentivise that. That's not illegal, and it is financially beneficial for them to do that, but it's not necessarily great for our water resources. The expectation of high-security licences is that they are constructed on the basis that that water will be used, and we need flowthrough in our dams and our rivers, and so those kinds of things are quite problematic. I just wondered if you had a reflection on that. It's not that any particular individual group is doing that, but it is happening; we've received evidence on that today. It does potentially have quite negative consequences, so is that something that you have identified and are concerned about?

**MICK KEOGH:** Yes, we looked in very close detail at issues like carryover parking. Those issues arise in some respects because of the variation in rules between the different securities associated with different water entitlements and the different rules in different States and the ability of individual traders to move water onto different accounts to take advantage of those. They're not without risk, as is evident when, for example, storages get close to full and different situations arise. I think there is an argument that better coordination of the rules between States, which would effectively remove or reduce some of those incentives, may be needed to deal with the adverse consequences that can sometimes be associated with those activities.

But the ability to carryover can be quite important. For example, if you're a grapegrower in Griffith on high security and you've got extra vines you want to irrigate, you don't want to run out of water. So the ability to save some of your water in a wet year and have it available the following year when it's a bit drier is quite important to the efficiency of your business. It is a complex question, though. I think we devoted a couple of chapters to that in our report because it has quite a number of aspects to it. But certainly it comes out of the Federation again and the fact that there are different rules in different jurisdictions, and certainly it is worth considering whether they might need to be rationalised a bit.

**The Hon. ROSE JACKSON:** We received evidence this morning in relation to the way that—I'll sort of just broadly describe them as sort of—delivery costs are borne by landowners, not water entitlement holders, and the sort of suggestion that that was potentially unfair. The comparison that we were given in evidence this morning was local government rates are paid by property owners not renters. In the example of people who own investment properties, they pay local government rates as the property owner in an area; the renter doesn't pay. Ultimately it's unfair to charge the landowner the delivery cost and not the water entitlement holder. I wondered if you had a view on that.

**MICK KEOGH:** I think that issue relates to the way in which irrigation corporations operate and the way in which their costs are allocated amongst members of that corporation and the fact that those members have both irrigation rights and delivery rights associated with their water. Certainly a lot of those issues arise from the internal rules of those irrigation infrastructure operators. We've certainly looked at some of those from the point of view of whether they're properly communicated to members and whether they're fairly applied, but often they come down to the particular rules of operation of that irrigation corporation and how it's administered. They can be quite complex issues and they are often internal to that corporation, as you would no doubt have heard this morning.

**The Hon. ROSE JACKSON:** And it wouldn't be your view that the operation of those rules would be an appropriate thing for regulation, say, by the independent oversight body in terms of dictating to them more specifically how those internal rules should operate?

**MICK KEOGH:** There are some general rules under the Water Act which relate to how those irrigation infrastructure operators can behave in terms of, for example, transfers out and those sorts of things. We certainly canvassed a lot of those issues in chapter 14 of our inquiry report. So there are some broad general rules under which they operate but then they obviously have the ability to set their own internal rules as well, and we didn't go into great detail in those because it really is between the members how they operate in some circumstances.

**The Hon. ROSE JACKSON:** In response to my earlier question about compliance mechanisms—and at various times there have been comparisons between the way that, for example, the financial markets operate and the way that the water market operates. They obviously operate at present quite differently. There's a bit of a sense that perhaps some of the regulation of the financial markets might be beneficial in the water trading market. I think the obvious one, and you've identified it and it comes up a lot, is the rules around insider trading and it being quite different and probably insufficient in the water trading market.

But then of course I just wanted to draw out any reflections you had on the comparison between the financial market—it's obviously quite sort of an ethereal thing in a way—and the water trading market, which has genuine physical constraints, water being a genuine at times very limited and scarce resource. It's not as though it's sort of shares or money that's moving around. It's a very physical thing. It's often a very physically limited thing, and so how far can we take that comparison between, say, the financial markets and the water trading markets considering those differences?

**MICK KEOGH:** I think there are certainly elements of the regulation of financial markets that, broadly speaking, we recommend as should be adopted in relation to water markets. For example, the clarity around the responsibility of water market intermediaries or brokers—who they're operating on behalf of. We saw examples where a broker was operating on behalf of both the buyer and seller and taking a commission from both, and neither the buyer nor seller were aware of that and that's not uncommon. That sort of clarity of responsibility and framework for good practice is not there in the water market as it is in the financial markets. I don't think anyone would say the financial market's perfect, but I think it's a lot more transparent and it's a lot clearer who's doing what for whom in that market. Similarly, there are rules around market manipulation. There are rules around insider trading. There are rules about market behaviour, and they are enforced. That's not the case to a large degree in the water market. That's why we've recommended, for example, the code of practice for water market intermediaries and legislative provisions around market manipulation and misbehaviour.

Interestingly enough, it's probably the only time I can ever remember an industry actually agreeing to a recommendation like that. The water brokers have expressed their support for a mandatory code of conduct because they understand, as I understand it, that the confidence of participants depends on everyone adopting a reasonable level of behaviour rather than a few individuals perhaps undermining the confidence of the whole market. This is the only time I can ever remember where an industry group said, "Yes, we want a mandatory code." It really does highlight the importance of that. The further issue you touched on there is the relationship between what you can trade or the trading rules and the physical movements of water and certainly that issue which we sort of broadly labelled as market architecture—in other words, ensuring that the trading rules reflect what is physically possible in the market. That's a major area we think needs reform and you've certainly touched on some of those issues in your discussions this morning.

**The Hon. ROSE JACKSON:** And presumably, even within that market architecture, once it was established or better established, there would need to be flexibility because what is physically possible at one time, for example, right now when water is in abundance, is not necessarily physically possible at other times when we're in the midst of serious drought and water is incredibly scarce. So presumably it's very important that the water trading market is flexible enough to operate effectively for participants but also for our environment, our rivers, at both those extremes.

**MICK KEOGH:** Yes. No, we'd agree with that. Slightly extending on from that, part of the issue we identified amongst water users was the lack of clarity of government decision-making and regulatory change to reflect some of those issues that you're talking about—in other words, the difference between an extremely dry period and an extremely wet period. Informing the market adequately of those changes is part of the problem we identified as well. Yes, you have to be able to make those decisions and make them based on good, robust modelling and good, robust measuring and monitoring information. But then you also need to make sure that they're available to the market in a way that doesn't undermine confidence, just the same as the continuous disclosure rules operate in the share market. That is part and parcel of that same issue.

**Ms CATE FAEHRMANN:** Thinking about market architecture and the recommendations that you have made, what has the ACCC recommended? Did you explore the issue in relation to the fact that all of the nut plantations, for example—the way in which water is being sold in periods of low water availability. Things are going to get worse with the increasing plantings of nuts, particularly, as we heard this morning, south of the

Barmah Choke. What is your recommendation around the way in which that can be managed so that there is water still available for other uses? Is that a government regulation issue or is it a market architecture issue? What are your thoughts on that?

**MICK KEOGH:** Well, it is a market architecture issue in the sense that the rules around flows through the Choke and inter-valley trades out of different river systems, et cetera, all need to reflect the reality of the capacity to move water up and down the river. They also need to reflect the potential, for example, for conveyance loss at different times and those sorts of things. We didn't make any firm recommendations on those because they are quite technical and detailed issues that need to be looked at. But, in a broad sense, our encouragement was that they should be addressed and worked on, that they shouldn't be just, if you like, kicked down the road and left until they become a really serious problem in a really critical time.

I think that's, unfortunately—speaking in a very general sense—what might be considered to have happened to some of those issues up until now. So hopefully our report and a lot of the other initiatives might provide an impetus to address those issues in a way that's technically sound and which means the rivers operate in a better manner longer term. That then may change the nature of pricing and demand for water—for example, below the Choke—in those horticultural developments, compared to upstream users. We weren't trying to predict that, but we really recognise that the rules and the way the river is operated have to be better reflected in terms of the constraints and the limitations that are available there.

**Ms CATE FAEHRMANN:** It is one of the most serious or key negative consequences of the water trading market, isn't it? It's not just the physical constraints of the Barmah Choke that I'm referring to or the environmental degradation of moving so much water down the river at a particular time to reach a certain crop. It's the fact that certain crops are being priced out of the market, particularly because of water trading and the fact that now those plantations—permanent plantings—will pay almost anything, if you like. It's because you can trade between valleys, because those growers can afford more and they've made the investment, that it's having these very negative consequences throughout other valleys. Did the ACCC look at that in particular? I'm not talking about the way in which the water moves through the system. But what has been communicated to us today and in other forums is the negative consequences of enabling water trading between valleys and unbundling the water from the land in the first place.

**MICK KEOGH:** Look, there is a range of consequences associated with water traders we canvassed very early on. I think there is a tendency to think that some directional change is inevitable. I guess it needs to be recalled that those investors in, for example, those horticulture developments have an element of risk associated with those investments and have to face those, just the same as anyone else in the Basin does. The assumption that that water will inevitably flow to them and the assumption that they will be able to inevitably pay more for water than anyone else will doesn't necessarily always hold.

Changes in the almond market in California and changes in other markets in Asia and South America can have a very big impact on that, and we've seen that in a range of other industries as well. We've seen a change in the rice industry. We've seen the expansion of the cotton industry. We've seen a reduction in dairying and a reduction in annual crops. But they all wax and wane depending on a range of market factors, not just the water market. I think you have to make sure that the water market accurately reflects the physical characteristics of the river and the ability to move water around. But, beyond that, you start to run into possible perverse outcomes if you start to try to dictate what the market might determine is the price of water or the value of water into the future.

**The CHAIR:** Your time for questions and answers has come to an end, Mr Keogh, unfortunately. We're enjoying it so much. It has gone too fast. I wish we had another hour of questions for you. On that note, thanks very much for coming today and thank you for being so informative. I don't think he has heard anything I said. I forgot to press the little red button.

**MICK KEOGH:** I thought I had put everyone to sleep.

**The CHAIR:** No, you haven't. We really appreciate your contribution and we'd like to do it for another hour. In a very sincere way, thanks very much for coming and giving us the answers to our questions.

**MICK KEOGH:** Thank you very much. Good luck with your inquiry.

**(The witness withdrew.)**

**Mr NICK COOK**, Manager, Property and Water, Yancoal Australia Ltd, before the Committee via videoconference, affirmed and examined

**Mr DAVID FRITH**, Director, Policy, NSW Minerals Council, before the Committee via videoconference, affirmed and examined

**The CHAIR:** Welcome, Mr Cook and Mr Frith. Thank you very much for attending, even though you are a long way away. Starting with you, Mr Cook, would you like to make a short opening statement?

**NICK COOK:** No, I'll hand over to Dave. He was going to do it.

**The CHAIR:** Mr Frith.

**DAVID FRITH:** Thank you, Mr Borsak. Thank you for the opportunity to appear before the inquiry today. As you may be aware, the NSW Minerals Council is the peak industry association that represents the minerals industry in New South Wales. Yancoal, who Nick represents, is one of our member companies. We come to this inquiry probably from a slightly different angle to some of the previous witnesses that you have had today. The issues that we highlighted in our submission are more statewide issues and associated with New South Wales policy and administrative factors that are impacting on the efficiency of water markets and the ability of our members to access the water entitlements they need to comply with their regulatory requirements. These issues have concerned our members for quite some time so we thought we would take the opportunity to put them on the record once again through this inquiry.

In terms of some broad context, despite being a large industry, the mining industry is a relatively small user of water across the State. Much of the water that mines use is unsuitable for other water users. For example, they can use water from saline groundwater aquifers, water that's recycled on site, or effluent waste water produced by other industrial premises. But they do require entitlements to account for any water they take from surface water and groundwater resources and so they have experience trading in the market and also reassigning water within companies as well. Our submission highlighted the industry's concerns with the accuracy of information in the water market, inefficiencies in the administration of water licensing and approvals, and some of the policy settings that we believe are unnecessarily holding water back from the market. We are happy to take any questions that the Committee might have. Thank you.

**The Hon. MICK VEITCH:** In the NSW Minerals Council's submission on the last page, you talk about a lack of a return flows policy. Can you just expand on what you mean by a return flows policy? I understand what it is, but for the sake of the transcript could you just expand on that. Also, what are the policy settings that you would like to have in place for that?

**DAVID FRITH:** A return flows policy would essentially allow for net accounting of water take at any kind of mining facility or other types of facilities as well. At the moment, there is no opportunity for a licence holder to obtain any credit for high-quality water that they might discharge back into the environment. There are several cases—and Nick might be able to provide an example or two—of where that occurs. Once that water is discharged back into the environment, even though it provides a potential resource for downstream water users, there is no ability at the moment for that discharge or that new water that's become available to be accounted for in the water market. There are provisions within the Water Management Act to provide for a return flows policy and there have been several attempts previously to develop a return flows policy, but they haven't ever eventuated in one place. That's something that we would like to see progress.

**NICK COOK:** I can give a bit of an example, if you want.

**The Hon. ROSE JACKSON:** That would be great, thank you.

**NICK COOK:** In the top part of the Hunter Valley is the Goulburn River catchment. In the Goulburn River catchment there are two reverse osmosis plants. As you know, reverse osmosis takes salty water and turns it into, essentially, drinking water. Yancoal has an operation that has a reverse osmosis plant in upper Goulburn that is discharging, at full capacity, between 10 and 15 megalitres per day of drinking water into a river and catchment. Where it's being discharged is just above the Goulburn River National Park. From an ecological and hydrological perspective, it's maintaining the hydrological connections within the Goulburn River National Park. But also, because it's being discharged upstream, there are a lot of dissolved goodies and ecological benefits that that water provides into the system. We are treating that water on site because with excess water on site we have an environmental protection licence that allows us to discharge that water. It is discharged at drinking water standard from the RO plant.

As Dave pointed out, a return flows policy would allow us to get credit for that water that we are discharging down the river at the moment. It is effectively a free kick for water users downstream of us.

Admittedly, any return flows policy in the framework is going to have to be established. There is an IPART component of it. Obviously your IPART charges are built in to the water that you extract. This is almost a credit to that. It could be a credit to that. IPART are smart people. With regulatory requirements you could come up with a way of implementing it. That has been one hurdle that has been put in front a return flows policy in the past.

**The Hon. ROSE JACKSON:** We have heard some evidence already that participation in the water trading market is pretty difficult and complicated. In terms of the organisations you represent, what kind of resources do you have to put into your participation? Do you have a team that manages staff? How much energy and effort, as organisations, do you have to put into being on top of your participation in the water trading market?

**DAVID FRITH:** At a broad level, our members range in size from relatively large companies, like Yancoal, to smaller companies so the resources that they have available for these types of activities will vary across the industry. In some cases, they do use water brokers to help identify potential trades. Other times, they will have internal teams looking at this. I am aware of one company that tried to use a water broker in one particular circumstance and that was unsuccessful. They had to go through the process of searching the Water Register, identifying the licence holders within the water source and tracking down their contact details—probably evidence along the lines of what you have heard previously.

**The Hon. ROSE JACKSON:** Sounds pretty intensive.

**DAVID FRITH:** It can be quite intensive. Obviously some companies have the resources to be able to undertake that type of work. Smaller companies would be in a different position. Nick, I'm not sure if you want to provide any perspectives from a Yancoal view?

**NICK COOK:** Yes. We are a large company and there's one resource who does it and that's me. I don't really have the time to chase up individual water users. If I could go to a single point or database and say, "Hey, I have some water that we do not want. We'd love to trade." Then I would happily go and hassle water brokers or interrogate the information myself. That would be wonderful. I think there are way more opportunities to create a water trading Facebook Marketplace style thing, where you put something up and say, "Hey, we want to trade water." In the Hunter Valley, supplementary flow is a very good example of that. Supplementary flows outside of that which occurs within the downriver plan. We don't need it; we have licences for it. We would love to trade with someone who would need that. For me to find out who that is, is really hard.

**The Hon. ROSE JACKSON:** Mr Cook, you may not be able to assist with this because I think you said you do it yourself, but can either of you give me any sense of the costs of engaging a broker? For companies that are using a water broker, what are the typical or ballpark fees that you might be paying to someone or an organisation of that nature? Nobody knows?

**NICK COOK:** It's hard to say. Contacting a broker to just have a conversation with them and see if there's anyone out there, yearly—as in a fee. And then the fees that I've had to deal with are associated with the volume of water and the type of water—in the Hunter Valley high-security water is worth more than anything else, typically. You know, the surface water system. So, yes, trading high-security water is more expensive. Typically the broker fee depends on how much water you are trading. It's not a flat fee. It's just typically water traded: 100 megalitres, that's a percentage of that. I think it's a 10 per cent fee, or something along those lines. Or, if it's 10 megalitres. It's hard to put it. Again, the fees associated in the water broking space I can't see where it's regulated, like in a banking context, for example, or any other trading platform. It doesn't seem to have any regulation around it or oversight.

**The Hon. ROSE JACKSON:** Yes, absolutely. That's useful, though. Even that ballpark sense that it is linked to the size of the volume of water, and potentially around 10 per cent with high-security, is useful. Also useful feedback on the lack of regulation of that market. Speaking of which, one of the recommendations that has been mentioned a couple of times by other witnesses, and came out of the ACCC inquiry, was the need for some kind of independent regulator to oversight the water trading market. What are your views on that? Do you support that and, if so, why do you think something like that would be useful?

**NICK COOK:** I do think it needs to occur. I would support it. Transparency around decision-making is always welcome. I think, in water markets, the markets themselves would function better if there's more transparency around them. People might not necessarily like decisions, but if they can see how the decision was made, or see how a code was made, they might be able to get into that space next time around. At the moment, without regulation, I do feel the market isn't operating in an optimal way.

**The Hon. ROSE JACKSON:** You mentioned transparency a couple of times. Again, one of the things that has been mentioned previously is the idea of a public register. You have mentioned how that would be beneficial to you as well. The pushback that we have had on that idea is that that information is already available if you pay a small fee. You can get information like that through, I think, Local Land Services. How would you

respond to that? How would you respond to the idea that we don't need a new, fully transparent, fully accessible public register, because that information is, by and large, available, if you know where to look?

**NICK COOK:** I think you hit the nail on the head with the last part of your question—"if you know where to look". That, to me, isn't transparent, because if you've got to know where to look then it is not clear and obvious to people on how the water market would operate—if everyone could go and contact. In our business today it seems like we're busy, and being a one-person team who sort of looks after a lot of the water stuff—and water as part of a much broader property aspect is the other part of it. I don't really have the time to contact Local Land Services and say, "Hey, can you find me someone?" Or can I please pick up the phone to Local Land Services and hope I get through to someone.

I would rather just jump onto a website, a spatial-enabled platform where I can click on a particular part of the valley and see what—I don't need to see every single water user's details. I think it would be like if you have an expression of interest: "I'm a substantial trader. I'm potentially wanting to get some water". A system that actually connected those two together would be ideal. I don't believe that all water users' information should be made 100 per cent public, because there is some information around that, particularly in the iWAS accounts, that should not be made public. I think that both our statement and the NSW Minerals Council statement reiterated that. But I do think that there is components of that information that would make water trading a hell of a lot easier.

**The Hon. SCOTT BARRETT:** Do you face much fluctuation in the price you are paying for water?

**NICK COOK:** No.

**The CHAIR:** Mr Frith, in your submission you talk about poor administration of water licensing processes. Why do you think there's a problem with the responsibility delineation between DPE Water, NRAR and WaterNSW? What is going on there? Can you throw some light on that?

**DAVID FRITH:** I do have a lot of sympathy for the people that work in those agencies because they have been subject to continual changes over the last decade in their structure and in the responsibilities that they hold. Even as recently as April, the water licensing and approvals functions for State significant development was transferred from NRAR back to DPE Water—so another recent change. I think, in that kind of circumstance, it's not really conducive to embedding systemic improvements in the efficiency of the way that you deal with the regulatory framework and administer the regulatory framework. I think what we'd really like to see is that ongoing stability and the resources that these agencies need to undertake their functions effectively.

**The CHAIR:** That raises the question: Where does responsibility for New South Wales water reside then? Where would it best be put?

**DAVID FRITH:** That's a good question. Potentially, the current framework—as it was recently changed—could be appropriate.

**The CHAIR:** Which is?

**DAVID FRITH:** NRAR as an independent regulator, DPE Water holding the policy, licensing and approvals-type functions and then WaterNSW as the operator of the water system. It's probably as good as any over the last five or 10 years. But I think if we can get some stability, then they'll have the opportunity to really focus on improving the way that they're undertaking those functions.

**The CHAIR:** You mentioned in your submission that one company had to report noncompliance due to delays of around five years approving a valid water licence application. Is that sort of delay normal?

**DAVID FRITH:** Yes, unfortunately. That particular issue has been resolved, but certainly in that water source it wasn't uncommon. There were quite a few—four or five years—and still some issues remain unresolved from when that water sharing plan came into effect in 2016. Unfortunately, yes, those types of delays are common and still occurring. A more recent example is a member who was trying to assign sufficient entitlements to one of their mines to account for take that is modelled in their approved groundwater model—which has been approved by the agencies. That model is designed to help them comply with their regulatory approvals.

That application was made in May 2021. It should be pretty straightforward, because the application has been made to comply with their regulatory requirements. But it took DPE Water 12 months to get back to them to ask for more information about the application, and that application is still outstanding 15 months later. Unfortunately, these problems are still occurring. Pleasingly, the agencies and the New South Wales Government have responded to these issues. In the recent budget there was \$14.8 million, I believe, allocated to a project to improve water licensing and approvals across the agencies. So we are hopeful that that project will deliver some longer-lasting improvements in this space.

**The CHAIR:** Thank you very much for coming. That concludes the public hearing but we will be holding a public forum.

**(The witnesses withdrew.)**



**The CHAIR:** Welcome to the public forum for the Select Committee on the Status of Water Trading in New South Wales. This session is an opportunity to hear directly from people who have an interest in the water trading market. Before we commence, I will make some brief comments about the procedure for tonight's public forum. Speakers were asked to register in advance for the forum. Those of you who have registered to speak will be called to come to the table in turn. You have approximately five minutes to speak to the Committee. We will sound a warning bell at 3½ minutes so you are aware that you will need to conclude your comments. What you say today is being transcribed and streamed live to the Parliament's website and will be included as evidence to the inquiry. It's also important to note that while participants are covered by parliamentary privilege, committee hearings and public forums are not intended to provide a forum for people to make adverse reflections upon others under parliamentary privilege. In that regard, it is important that participants focus on the issues raised by the inquiry terms of reference and avoid naming individuals unnecessarily. Finally, I sincerely thank those who have come along tonight to share their story.

**Mr STEPHEN McGRATH**, before the Committee: My name's Steve McGrath. I'm a fifth generation commercial beekeeper. I live up the road just 100 kilometres away from Griffith. I'm the largest leaseholder of river red gum forest and blackbutt forest in national parks and State forests in New South Wales, if not Australia. My concerns are that basically, since water trading came in, it's open slather. Basically the environment was supposed to get a certain amount of water, farmers were supposed to get others, but big corporates have come in and basically it's starving the environment. The river is in flood now. This is what's supposed to happen and this is the way it's supposed to go. A lot of people are worried about floodplains and stuff.

Our whole system is linked, from when the first cyclones started up in Queensland about three years ago when Lake Eyre filled—as I said, it's a system—the water came down the Darling, the Darling filled Menindee and so forth so that these rivers are now in flood. Taking the water from the southern irrigators to supplement the north is not going to work. Everyone has to put their share in. You can't keep robbing Peter to pay Paul all the time. As I said, I run 3,500 hives of bees. I've got bee sites on the Murray River, the Edwards, the Wakool, the 'Bidgee, the Lachlan and I've got private sites up on the Darling. I see what's happened every time I go there. I see it. I've got bee sites at the lower end of the Lachlan. That dam is full now but three years ago it was full and then three years later it was empty. How in the hell do you empty a dam in three years?

As I've said, I've leased land by the Lachlan River for bee sites. The forests were dead. No doubt they were dead. They were dying and they were starved of water. We give national parks this land to look after and so forth. As I say, if you've got the land, where's the water? Where's the water that was supposed to go down there to help save the river? I don't know how you empty two big main dams in that system in three years, but the dams are there for the dry years. That's what they're meant to do. So for the blokes who've got the vines, the citrus and so forth, when they need that water, that's what it's supposed to come down for. I've seen that many oranges pulled out around the Griffith area over the past few years because they can't afford to buy the water ever since we put it out on the open market.

These freeholders have been here for years, for decades. They built the area. As I was saying, you've got a system where if I've got a billion dollars I can go out and buy what I want. I'm competing against the farmer down there who has worked his whole life. He's come in, he's cleared the land, he's planted the trees and those corporations—I mean, these people can't compete against that unless the system is fairer. I've worked in this area for 45 years. I've seen how all the local farms that I used to put bees on are now owned by corporations. You go from here to Harden, you go from here to Young, you go from here out along to West Wyalong, you go all around this district, you go out towards Hay and, as I'm saying, there's no chance for young farmers in this game. Until you solve the water trading part, there are going to be even worse outcomes for bees. If you want to talk about the environment and what stuff is, give me a call any time. But the environment and farming can work together. There is no reason why it can't, as I've said.

This water that comes down the river should be classed as environmental water because it's doing what it's supposed to do. It's flooding the forest, filling up the lakes and going downstream. The dams that the Government has for these companies to fill up, they're getting filled up down towards the end of the Darling or Menindee. The pumps will start as soon as the water gets down there, and that's what it was designed to do. But in the long run you've got to try to work out how a bloke who is a normal, average person has a fair go because at the moment they are not; they are just packing up and leaving. Like I said, I live in a country town that's got 30 people. I'm the biggest employer because the people who aren't corporates come, go and are gone. That's the way I look at it. These other blokes, who are probably irrigators, they probably have a better understanding of what they need and what they don't. But anyway, I think I've reached my time limit.

**Ms CATE FAEHRMANN:** Yes.

**The CHAIR:** That's it. Thank you very much, Mr McGrath, for your comments.

**Mr CHRIS HARDY**, before the Committee: Thank you, everybody, for coming and joining our lovely area. I'm here representing probably four generations of irrigation farmers. I suppose that gives me a bit of background on water and irrigation, and you guys have been around water enough to know that it's very complicated. You've probably also been around enough to know that there's a lot of misinformation around. The reason I put my hand up to speak today is to try to make a little bit of common sense out of all of this. We get a lot of stories about how water trading has destroyed our environments, destroyed our rivers and is destroying farmers. I am here to say that none of it's very accurate. As an irrigator, as an annual cropper, we—my mates and I and I suspect a lot of people who I am speaking for—are more than happy for the permanent plantings of nuts, citrus and high-value crops that are going in that weren't in a number of years ago.

It's probably safe to say that our irrigation industry has grown significantly since the basin plan, which is a little bit unexpected, but that's all due to water trading. The high-value users are working a treat. We're more than happy to sell to them on dry years. We don't have to grow crops. If they need our water more than we do on

dry years, we'll sell to them. We'll be happy to do that. There are some dis-benefits for our local communities, but there is nothing valuable about a broke irrigator. If we can make money, we are there next year to buy our machinery, to spend our money in our local towns. I'm not saying the water-trading system's perfect. We've got some issues. We desperately need some regulation. The ACCC recognised that. I suppose we have got a degree of confidence that that will happen. But, as far as the principle of the trading goes, we're more than happy with it. It's working well for us. If it wasn't for water trading, we wouldn't have a nut industry. Our communities are thriving because of that. I don't know whether you guys have had a look around Griffith, but it's a pretty wealthy place. Industries are doing well, really well. It's all based on water. Since water was separated from land, which was actually done at irrigators' request, the water trading has become an integral part of our risk management. Every irrigator, I venture to say, that uses water trading to buy or sell for strictly risk management purposes—it's a huge part of our risk management program. Hopefully, you guys can see through the misinformation that's been spread around. Thank you.

**Mr CHRIS MORSHEAD**, before the Committee: Apologies for my attire, Committee. I've been in the process of delivering children to various sporting commitments.

**The CHAIR:** You've got the right one. You've got the waratahs on. That's what I like to see.

**CHRIS MORSHEAD:** Hope they have a better year next year. I'm horribly underprepared. However, I'll start at the beginning. My name's Chris Morshead. Local irrigator, broadacre irrigator, owner of general and high-security permanent entitlements across various valleys in the southern connected basin, fourth-generation farmer with a fifth generation on the go as well, hopefully, and long-time participant in water trading, water markets, both permanent and temporary entitlements.

It's an incredibly complex situation. It is a very emotional market. I think the best way to start off with the macros is, when you're talking about water—it's not a discretionary expenditure item. Water is a need. It's not a want. When you enter a market or when you enter a season—this can be any irrigator; we found ourselves short with a temporary entitlement—and you have made a commitment to produce and you do not have the water to produce, you get very, very antsy. Markets can move very, very quickly. Without the security of knowing that you can water and finish your crop, you are very, very much exposed.

I think, if we go right back to the very beginning—I came back to the farm in 2003. Obviously, the Water Act itself and this whole basin plan was very much in its infancy. We came back to the farm in 2003, my wife and I, from Adelaide, into howling drought for seven or eight years, which is the best seven or eight years—I was only 23—of my productive life, I thought. We faced several seasons of zero allocation, very tough going. At the end of that, we sat down as a family and said, "How do we insulate this business from this happening again?" There was a very simple answer. We needed to buy a diverse portfolio of water products that allow us to meet our commitments on a yearly basis. That meant varying degrees of high-security, general-security, low-security carryover products, anything that we needed to secure our production system, or trade the water that we owned to make more—we're growing with it—to make sure that we met our requirements around the town, could pay our staff and ensure our business survived.

That has been a very successful strategy for us. We opened only two, three, four years ago. We'll grow around about 20,000 tonnes of rice over the last three seasons and one more, using water portfolio assets that we have in different areas. In the last rice season which, I think, was probably 2020, 2021—it might be 2019, 2020—we actually grew 5 per cent of the nation's rice crop. If you add the bloke across the road, who owns a similar portfolio of water, it was 10 per cent between us we grew, and about 4,000 tonnes of seed rice for SunRice, all of which was planted the next wet season.

My experience in the water market has been a very, very evolving one. I'm very engaged. It's certainly not a perfect market, but it's one that we rely on. Very simply, I'll run a rough number. Four hundred dollars a bed, about, I reckon we can make, year in, year out, growing produce, if we're faced with a season that temp water prices are trading at 350 to 400. It's a very difficult decision for us. However, at the time, we'll continue to produce to keep my staff going and to keep the guys in town, our producers going. We might decide to sell a proportion of it. But because we bought water in differing valleys, we're able to buy and sell and continue to produce here when we can. That's really important. The suppliers around town are really happy with that. They know that we will be producing, even if it's only a little bit, every year. So they've got some certainty as well. The guys that sell tractor parts have got certainty. The guys that sell fuel have got certainty. The guys that sell fertiliser and chemical have got certainty.

I heard some really interesting things today. I think the most important thing that this Committee can take home with them is that the additional 450 GL that is being touted as being recovered for the environment is a far bigger threat to the industry, the region, the economy than water trading, without a doubt. If I was afraid of the market now, Chris Minns is at shorter odds. The Labor senators are in the room, and the Liberal senators are

in the room. That is our biggest threat, a few guys—there are dodgy water brokers. We know who they are. We just don't deal with them. It's very simple. I deal with somewhere between nine and 12 different platforms during the week. But, like I said, I'm reasonably well engaged. But that 450 GL is a far bigger threat. Should that be recovered—I did some quick sums here—it's basically 675,000 tonnes of rice, 450,000 eggs. That's what the entire industry grew this season.

**The CHAIR:** Thank you very much for your contribution.

**Mr ANTHONY McCLOSKEY**, before the Committee: I am a water broker. I run my own business here, called Key Water. I have clients across a number of valleys, who are also outside of the basin. I have dealt with clients along the east coast of Australia and up into Queensland. I guess one of the interesting things was—I wasn't here during the day, but I read some of the submissions. A lot of those submissions seem to—my understanding is that the focus of this is on water markets and the status of water trading in New South Wales. A lot of those submissions seem to be more focused on what was wrong with the Murray-Darling Basin association or the plan or something like that. Markets are a part of that, yes. But, if that's what you're focusing on, then there seems to be a lot of other white noise around the place, that isn't necessarily relevant. It didn't seem all that relevant to what you were trying to discover, as far as I can understand. I am a member of the Australian Water Brokers Association. We have a voluntary code of conduct that we put forward to our members.

We worked very closely with the ACCC and many other government bodies, not only during the ACCC inquiry. I don't know if you guys are overly familiar with it, or have read it or have read the recommendations that have been forwarded on to the Committee that is then developing this road map to reform. When I hear that urgent reform is needed or anything like that, that's actually underway, and that is something that the AWBA has been advocating for for quite some time. We want regulation; we want this thing to be something that people are confident in using, are able to use confidently and know that they are protected when they do use it. Regulation would provide water brokers with similar things to real estate agents, where you're able to develop trust accounts for managing clients' water. At the moment, because we don't have the regulation, we're not able to do that. We have client-only funds; it's one of the prerequisites of being a member of the association. But what we want is a legislative backing to be able to do that, and that would be better for everyone involved.

The AWBA had a general meeting in Canberra last Monday. We were addressed by Senator Perin Davey and Minister Plibersek, and the people who are developing the road map to reform for the water markets based on the recommendations of the ACCC inquiry were there. That information or the road map, the initial draft, will be delivered to the Minister between September and December this year. We are well down the road to trying to get this reform done. As has been said, up until now it has been unregulated. The only thing really covering it was consumer and criminal law, obviously, if there's fraud or anything like that. ACCC looked at 8 million data points gathered from a huge number of contributors in terms of the status of the water markets. Basically what they said, to paraphrase them, was that water is a market that isn't broken, but it needs improvement. I wholeheartedly agree; it certainly does need improvement. There are many ways it could be improved. A lot of those things are found in things like my submission to the ACCC, the water brokers' submission to the ACCC.

In terms of a couple of other things I wanted to address, when I hear people saying that corporates are taking away the opportunity for people to be involved in agriculture, I take it from a different point of view. When you look at young farmers who want to get into primary industries, and when you look at the cost of land and water these days, stumping up the capital for a deposit or something like that is hugely prohibitive. That these companies that own land and water and can lease them out to people for an annual cost—it is much more affordable to get people into agriculture. It's actually a really good way of helping them get a foothold into agriculture—lease the land and water for five years, maybe roll it over. And then when you've got some money to do it yourself, you can do it, because when you speak to your bank manager you're looking at an annual cost, not this huge lump of capital that you've got to find to buy all this stuff in the first place.

There are real opportunities with this model of ownership outside of your standard farmers. I deal with irrigators from small hobby farms right up to, yes, the large corporates and those investment people, and they all want the same thing: They want agriculture in Australia to be strong. Regardless of who owns the water, that water is still used in Australia on Australian farms—on New South Wales farms, if that's where we're focusing here—providing jobs for New South Wales people. Is that 3½ minutes, or the time?

**The CHAIR:** No, that's five minutes.

**ANTHONY McCLOSKEY:** Alright, thank you very much.

**The CHAIR:** Thank you very much, Mr McCloskey, for coming. Mr Darren De Bortoli?

**Mr DARREN DE BORTOLI**, before the Committee: I've been involved in the water debate for quite a long time, looking at the science behind it, and I think everyone realises now that the assumptions were wrong. The

assumptions that we were talking about before, the 450 gigalitres and everything else, were based on the fact—going back to the 2007 Water Act, so that's the time frame—that the Lower Lakes and the Coorong were dying because of the Murray-Darling system, which is not right. Particularly, what people may not realise is the Coorong continues to die. Irrespective of what you're told about the South East Flows Restoration Project, the Coorong continues to die because there's no flash floods.

In terms of the science behind the Lower Lakes, the Lower Lakes were being compromised by the south-east drainage system before the 1902 royal commission. Back then, the royal commission showed that for basically five to six months of the year, the water levels in the Murray River were less than 1.2 metres. You don't have to be a rocket scientist to know what that means during summer. Once you understand that the flows were over the top of the more elevated wetlands—and the south-east used to be 44 per cent wetlands pre-European. All the science that we're talking about—environmental flows, everything else—was predicated on us supplying water to sustain the Coorong and Lower Lakes, which is wrong.

That's just the background. In terms of the water trading, I think water traders have delivered a fantastic outcome—both socio-economic and environmental—because unlike the US system, you're not encouraged to use it or lose it, so it goes to productive use. But one thing I am highly critical of, which the farmers in the south-east have got right, is they have to show that they've got the productive capacity to use that water to have a water licence. I would say the same thing should be applied in the Murray-Darling Basin. What's going to happen over time is all the water's going to slowly migrate to Martin Place or Collins Street in Melbourne, and you're going to develop a franchisor-franchisee relationship. We know how that works: They'll charge the maximum amount for water that the buyer can bear. I just think it's going to, over time, hollow out the Murray communities, the small irrigated communities on the Murray-Darling Basin. Those communities don't just service irrigated communities; they also service very large dry area communities. Griffith is a prime example of that; Mildura would be a prime example of that. Most of those communities are very much the case.

My argument is one thing that needs to be looked at is hopefully New South Wales understands that the science was corrupted. We need to fix the science. South Australians are slowly coming on board after being at this for over 10 years. They've copped a lot of flak over it, but the science is showing what I was saying is right. What I was saying was supported by what people like Professor Peter Gell were showing: The diatom record in the Coorong—there were no Murray-Darling River diatoms in the Coorong, because the flows never came from the Murray-Darling system. They came from a completely opposite direction. Being an aquifer-driven system, it was far more reliable than the Murray-Darling system.

**The CHAIR:** You have another 1½ minutes.

**DARREN DE BORTOLI:** I think if we're talking about the environment, let's get the cards on the table and recognise the Coorong is dying and it has nothing to do with the Murray-Darling system. It's dying at the rate of 6.5 millilitres of organic matter that falls out in the southern lagoon, five millilitres a year that falls out in the northern lagoon. As that organic material breaks down, it strips oxygen out of the water column—and you wonder why all the waterbirds are disappearing. You would think so, from an environmental point of view. The problem with the 2007 Water Act—it states the Lower Lakes and Coorong are off the table, and yet that's the reason why we're talking all these large environmental flows. A well-managed system can achieve socio-economic and environmental outcomes, but we're not there yet. We're far from it, and New South Wales has to stand up. Lisa Neville in Victoria has been doing a sensational job, and she's probably the only water Minister in the country that had a good grasp of what was happening. It's time for New South Wales to stand up as well.

**The CHAIR:** Thank you very much. Is there anybody else who hasn't put their name forward that would like to have a say tonight? On that basis, we'll bring these proceedings to an end. Thank you very much for coming.

**The Committee adjourned at 18:30.**