REPORT ON PROCEEDINGS BEFORE

LEGISLATIVE ASSEMBLY COMMITTEE ON INVESTMENT, INDUSTRY AND REGIONAL DEVELOPMENT

IMPACTS OF THE WATER AMENDMENT (RESTORING OUR RIVERS) ACT 2023 ON NSW REGIONAL COMMUNITIES

At, Jubilee Room, Parliament House, Sydney, on Monday 24 November 2025

The Committee met at 9:35.

PRESENT

Mr Roy Butler (Chair)

Mr Stephen Bali (Deputy Chair)

PRESENT VIA VIDEOCONFERENCE

Mr Justin Clancy
Ms Charishma Kaliyanda
Mr Warren Kirby

* 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 public hearing of the Committee on Investment, Industry and Regional Development inquiry into the impacts of the Water Amendment (Restoring Our Rivers) Act 2023 on New South Wales regional communities. Before we start the hearing, I would like to acknowledge the Gadigal people, the traditional custodians of this land, pay my respects to Elders past and present, and extend that respect to any other Aboriginal and Torres Strait Islander people who are either present or viewing the proceedings on the internet.

I am Roy Butler, the Chair of the Committee on Investment, Industry and Regional Development, and I'm joined here in the Jubilee Room by my colleague Mr Stephen Bali. Online, I have Mr Warren Kirby, the Member for Riverstone, and Ms Charishma Kaliyanda, the Member for Liverpool. Mr Justin Clancy may be joining us via AVL shortly. Other Committee members, including Maryanne Stuart, the Member for Heathcote, and Richie Williamson, the Member for Clarence, are apologies today. I declare the hearing open.

Ms ELENA GARCIA, Convenor, Clean Water for Rivers, before the committee via videoconference, affirmed and examined

Dr JONATHON HOWARD, National Parks Association of NSW, before the committee via videoconference, affirmed and examined

The CHAIR: I welcome our witnesses. Thank you both very much for appearing before the Committee today to give evidence. Please note that Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social media and public engagement purposes on the Legislative Assembly's social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos and videos taken. Please also note that only Committee staff and other media organisations are allowed to take photos and videos. If you would like a copy of these photos, please contact the Committee staff during a break. Can each of you please confirm that you have been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

ELENA GARCIA: I have.

JONATHON HOWARD: I have too.

The CHAIR: Do either of you have any questions about this information?

ELENA GARCIA: No.

JONATHON HOWARD: None for me.

The CHAIR: Would either of you like to make a short opening statement before we begin the questions? We do try to keep that to 90 seconds; it never really works.

ELENA GARCIA: No.

The CHAIR: In that case, we'll move to the questions. With these questions, I'm happy for either or both of you to respond. My first question is in regard to buybacks or rules-based changes. Other than buybacks or rules-based changes, what approaches would you support to improve environmental outcomes across the Basin?

ELENA GARCIA: If I can start, we really need to regulate what goes into our water. It is the most important issue. There's no point in getting more water to the environment if that water is poisoned. I'm talking specifically about mining residues. We have a salt dump that's been approved just outside of Chinchilla. It is 15 metres uphill from the Rocky Creek, which goes into the Murray-Darling catchment. It has been approved to put in 15 million tonnes of CSG waste salt. The salt is bad enough, but it also contains carcinogens, and it's been put into [audio malfunction] which has been assessed by the New South Wales Government environmental regulator as inadequate to hold it. There is no salt there at the moment, but they have approval to start dumping at any time.

If you put 15 million tonnes of salt into the Murray-Darling catchment, you have a wall of death coming down that will put the toxins that came down and wiped out the South Australian marine environment to shame. It'll kill everything there along the river as it goes. We already have a problem with farm toxins and other toxins that come down the river, where we have cases of farmers who have swum their dogs across the river near Menindee and the dogs died swimming across the river. That's how poisonous the water is. Although water buybacks are very important, we really need to be aware of keeping our rivers clean, which means regulating what goes into them.

The CHAIR: Thanks very much, Ms Garcia. It was an oversight on my part to remind you both that any question can be taken on notice as well. If you wish to take an answer away, work on it and then come back to us within seven business days, that's something you can do too. Dr Howard, is that a question that you wanted to respond to?

JONATHON HOWARD: Yes, I'd like to respond to it. While Elena was talking, I wrote down a few things. I agree that water quality is a big issue that would improve environmental outcomes, as previously stated by the other witness, particularly when you consider I think Wilcannia is having PFAS problems at the moment. A range of pseudo-oestrogens from pesticides and herbicides are influencing the populations of fish across the Murray-Darling Basin. The second thing is probably more community-oriented, and that's for these rural and remote communities that are worried about water supply, such as Louth and areas north of the Basin. We need to consider off-stream storage as a long-term solution to improving our community needs and the needs of humans in those remote arid areas, particularly when you consider that such extraction and the retention of water at the surface often causes those blue-green algal blooms and the decline in water quality that were talked about earlier.

When we talk about off-stream storage, we're talking about underground areas that might be used, whether that be groundwater or some cavities that are constructed.

The third thing which would cause an increase in environmental outcomes would be the imposition of fish screens on irrigation extractions. If you look up the scientific literature on fish screens and the amount of fish deaths that happen as a result of the lack of screens being available on pumps, it's really quite amazing to see the death screens. My final point is about floodplain harvesting. We often think of the river simply as a channel, but we need to think of the flood plain as part of the river as well, because a lot of the fish are cued to stimulate to breed when the water goes down and it reaches the flood plain. They're able to migrate onto the flood plain and take up the opportunities for different habitats in that particular area. One final thing that comes to mind, a sixth point, is connectivity between our rivers. If we had increased connectivity between our rivers, it would vastly improve our fish populations right across the Murray-Darling Basin.

ELENA GARCIA: If I could add one thing. In terms of there being more water in our rivers, landscape rehydration is a very useful tool, and assisting farmers and communities to slow the water down to get it back into the catchment will make a huge difference in the amount of water that ends up in rivers and the amount of clean water. That is another important factor. I agree with all of the other witness's points.

The CHAIR: Just to clarify, when you talk about slowing the water down across the landscape, you're talking about the ponding occurring up around White Cliffs, scraping in the ground to create something that slows the water down but also the trapped seeds? Is that the sort of thing you're talking about?

ELENA GARCIA: Yes, land contouring. Tarwyn Park Institute, along with a couple of other institutes, organises training in how to do it. It's Peter Andrews *Back from the Brink* stuff. It's to slow the water down, catch it naturally, keep ground cover on the ground to aid absorption, and get the water into the watertable. Of course, hand in hand with that goes keeping our groundwater clean. It's increasingly the only water that farmers can reliably access for crops, so it becomes extremely important to make sure that it's not polluted by toxins being pumped back in or by mining CSG, bores connecting artesian layers.

Mr STEPHEN BALI: Further exploring slowing down the water, are you talking about up in the northern end? If you slow the water down, would that impact on the middle and southern end of the farmers? The farmers especially in the middle area don't seem to get enough water in the system, and most of the rivers are fairly dryish. How would slowing down the water in the northern end help people in the south?

ELENA GARCIA: It gets the water into the soil. I'm not talking about building big dams. Big dams do block people down the river from getting water. I'm talking about building contours to slow the rush of water. Particularly now we're getting an increase in [audio malfunction] rain events and flash flooding. This slows it down, gives it a chance to absorb in. It goes into the watertable and then that water proceeds downwards. I don't know if you've had an opportunity to read *Back from the Brink* by Peter Andrews, but he put what he called a leaky dam into his creek. The farmers downhill got more water instead of less. He wasn't stopping the water from going through. He was slowing it down and allowing it to be absorbed. I'm talking about doing it all the way down the catchments, from Queensland through New South Wales and down towards South Australia. What used to happen naturally, but now because of erosion and lack of ground cover, the water just races over the top instead of being absorbed in. It's in the ground. It is accessible to farmers. It will get to them.

Mr WARREN KIRBY: This one is for the National Parks Association. In your submission, you mentioned the difficulty of understanding the impact of water buybacks and that there are multiple drivers of social and economic wellbeing in the Basin communities. What are you referring to there? What are the other factors that may contribute to economic decline in regional communities?

JONATHON HOWARD: I would refer you to look at Ag2050 futures by the CSIRO, which has modelled the four most likely scenarios for agricultural production in Australia in the future. They are about creating regional capitals. Another scenario is about landscape stewardship. The two other scenarios are climate survival and system decline. They're the projections that we're going on, and they're based on what the industry is saying to the CSIRO, which is about increases of technology and the change in water markets which happened in 2007, which created trade. There are some views about unfairness with that trade system in terms of large corporations being able to buy water at significantly underpinned capital that they have with them, so that they can undertake both losses and benefits during droughts and flooding years, but also to weather the storm, so to speak, which is disadvantaging family farms.

There are also a whole range of productivity factors that we could look at. For example, if you look at the Australian Farm Institute's futures, they talk about the change in horticulture since 1971, which has increased by 73 per cent; about meat exports increasing by 25 per cent; and about pulses, which is that category of canola and so forth, increasing by 600 per cent. I really was talking there about—the agricultural situation is quite complex

and changing due to a range of forces, including infrastructure, technology and markets. I don't just mean overseas export markets, but I also mean about the input of tractors, equipment and so forth that these farmers need to survive.

Mr WARREN KIRBY: Just a follow-up to both of you. Do we have an adequate understanding of how much water has returned back into our river systems from previous initiatives, to allow us to have a better understanding of what we should be doing for further potential buybacks?

JONATHON HOWARD: Elena, if I may go with that to start off with, it's hard to unpack to some degree, because there are two types of water. There's planned water and held environmental water. Planned water is the amount that is needed to keep the river functioning, so to speak. I probably said that a bit too simplistically. But then there's held environmental water. If you look at the *Hansard* report by Andrew McConville in the recent environmental Senate review at the Commonwealth level, he states that there's almost 2,100 gigalitres of water that has now been recovered, available to the environment, which is about 20 per cent of all flows.

ELENA GARCIA: I don't believe that previous buybacks have released enough water into the system. I know they certainly haven't released what was suggested by the group of scientists. But I've got to point out here that the question of floodplain harvesting is crucial to this. If the water that runs across the ground isn't getting to the rivers, then it's not factored into equations. Huge water catchment dams like the ones at Cubbie Station are stopping an enormous amount of water from ever getting to the river. I really think any question of buybacks has to factor in what is prevented from getting into the system as well as what is already in the system. I don't believe that that is being factored in at this point in time.

JONATHON HOWARD: Can I just build on what Elena is saying, if I may?

The CHAIR: Certainly, Dr Howard.

JONATHON HOWARD: These measurements that you get from water extractions are generally from a pipe, which are really easy to measure—you just put a meter on a pipe and away you go—whereas floodplain harvesting has to be modelled. Elena is right in talking about how these are estimates. I've heard somebody say, "There's nothing true about a model; only some models are better than the others." You can't possibly get an accurate metering of floodplain harvesting in all areas.

Ms CHARISHMA KALIYANDA: Following on from your responses to the previous question, Dr Howard and Ms Garcia, other than buybacks and rules-based changes, what measures or what actions do you think government could take that would address environmental issues and also the social and economic issues that you've highlighted?

ELENA GARCIA: Would you like to start, Dr Howard?

JONATHON HOWARD: No, I'll let you go, Elena, because I'll just ponder it for a moment, if I may.

ELENA GARCIA: The most crucial thing that governments can do is to—

Ms CHARISHMA KALIYANDA: You're welcome to take it on notice if there are other things that you want to add as well. Don't worry if this is something that you want to have a think about.

ELENA GARCIA: I can start, and if I think of things later, I'll add them. The most crucial thing is making people accountable, particularly corporations, and hand in hand with that is prevention. Prevention is so much cheaper than cure, particularly when it comes to artesian basins—which we don't know how to fix because we don't really know how they work and how far they're interconnected—and rivers, which we have a little bit more of an idea of how they work, but it's not a simple thing to clean a poisoned river. Prevention becomes crucial. If you, as government, are considering permitting something to happen, you have to factor in what could go wrong and how would it be fixed, because it's too late after the disaster has happened. For example, the salt dump should never have gone ahead in that place to start with because the rock is unsuitable.

Studies done by the Queensland Government have said that this works as a short-term solution, but it doesn't work as a medium- or long-term solution. They've stated that they are allowing it to go ahead in the hope that over the next 10 years a better solution will be found, not because they consider it to be safe. Now, in my opinion, that is an incredibly irresponsible attitude by regulators, because if there is a spill and the water gets into our Murray-Darling catchment, that destroys so much of our regional economy and communities because their water is now poisoned—and salt is a toxin that doesn't break down. In my opinion, if there is no safe way of storing the waste of an industry, there should be a moratorium on that industry until there is a safe way of storing it. That is a task for regulators.

It's the same with agricultural chemicals. If the Government feels or has scientific evidence that there is no present alternative to certain chemicals, then at least they could be supporting farmers to transition to regenerative

methods that don't require these chemicals as a way of keeping catchments and rivers clean. Regenerative methods produce more at the end, but the transition is very hard to survive because the first couple of years there's a big drop in production until the soil comes back to life. If regulators can say, "We want to keep our rivers clean," then we need to assist our industries to transition to cleaner methods. That is something that government can do, firstly, by regulation and, secondly, by funding. It is in all our interests to have a clean agricultural industry for clean food and water, because every Australian depends on that, but it is also a huge sustainable export income earner. It's in our national interest to protect it. Quite frankly, clean water is our most important national resource. Without it, we're stuffed.

JONATHON HOWARD: The first thing I would say in response, now that I've come to think about it, is I think it's important that we have a vision really front-up. The reason I'm saying that is because it's not a thing about environment versus communities; it's about how we can have healthy communities and healthy environments. That's really important, that these can work together. I understand you've got Sarah Wheeler coming up later in the afternoon. She and a number of academics have done a pile of good economic research, which I'm not an expert in, that shows that buybacks are quite considerably cheaper than other methods, such as infrastructure, even though I think about $5 billion has been invested in infrastructure efficiencies by the Commonwealth Government. The reason I say that is because there's a pool of money to allow for this transition to a more sustainable Murray-Darling Basin but, if we did the buybacks cheaper, it would have a pool of money, a bucket, that would be available to invest in other things to create a more resilient economy in rural areas, such as through TAFEs, hospitals, teachers or schools—wherever it could be done—to make these communities a bit more resilient.

In the earlier question by the Chair of the inquiry, I mentioned a number of things, so they would come into the mix as well. They were water quality; having off-stream storage for small rural communities; having fish screens; preventing floodplain harvesting, particularly unregulated and unplanned; and the importance of maintaining habitat connectivity between our rivers. The final one, which I didn't mention, is about constraints. Constraints are a problem affecting our ability to deliver environmental water down the Murray-Darling Basin, because we're not getting the volumes required. We're not making the best bang for our bucks because we've got constraints in place.

I'm going to go on with two more points if I may. One would be that departments within the New South Wales Government tend to operate in silos, so we're not getting an integrated approach, and that relates back to constraints. The department of primary industries has support for drought and flood relief. They also have a whole range of programs about carbon farming. In fact, I think there are 12 carbon farming processes available to landholders. They've been going for 10 or so more years. Those carbon farming initiatives can be done either through changing your productive base or investing in stuff that Elena talked about—by watering the area more frequently, which gets more carbon into the soil and so on.

Another measure, which is similar but slightly different, is there are biodiversity credits offered to farmers within the Biodiversity Conservation Trust. When we think about constraints and that there's going to be flooding of rural lands near streams a bit more, we should think of that requiring a change of land use practice of what is currently being done, rather than alienating the land. If we change that perspective, what will end up happening is the farmers will still be getting revenue but they'll simply be using the land for a different purpose. That conceptualisation goes to things like when we think about a corporation coming into the Murray-Darling Basin, buying water and using it for almonds. We're okay with that, so why aren't we working together as a Government and creating synergies for these transformations that have to come within our agricultural communities?

Mr JUSTIN CLANCY: Elena and Jonathon, thank you. Jonathon, it's good to see you again. In your submission on page 4, you talk about unlicensed take. Just for my clarity, please, is that specifically floodplain harvesting that you're referring to? Do you want to explore further what you're referring to when you talk about unlicensed take there?

JONATHON HOWARD: I'm mainly referring to floodplain harvesting, and I think I refer to it being unfair particularly for the people down south, compared to the people up north, because of the geomorphology of the landscape there, Justin. Floodplain harvesting is available, from memory—I might be not correct on this, but I think there are three catchments up north that allow floodplain harvesting in their water sharing plans. All the other catchments in New South Wales do not allow it. That's what I was referring to there, although I did notice that Troy Grant, the inspector-general for water metering at a Commonwealth level, talked about how there is a pile of unmetered waters in the recent Commonwealth Senate estimates, the one for September. He said that he spoke to Andrew McConville about a lack of metering, which is causing us to be less accurate on the amount of take across the Murray-Darling Basin.

Mr JUSTIN CLANCY: In the same submission you talk about market impediments. Would you like to explore further some of those impediments that you see, please, Jonathon?

JONATHON HOWARD: I think I'm referring to the fact that there is that—

Mr JUSTIN CLANCY: For clarity, you speak to the need to reduce market impediments to water trading to help facilitate water going to the most productive and profitable produce.

JONATHON HOWARD: The market impediments I talked a bit before about, when I was talking about a range of things, Justin, a bit earlier, which is about large corporations being able to weather the storm and it's disadvantaging small family farms. That's one thing. There are a range of things that Robbie Sefton talked about, too, in terms of being able to get rural employment in an area, which is inhibiting the benefits of being able to get the most productive enterprises within rural communities. The other thing I would say is that, because we allow the market as a free for all, we're not having a planned approach. Places that you would be familiar with, such as the Murray irrigation area—they often talk about the Swiss cheese effect of certain buybacks. If a landholder comes in and they're midway between the Murray River and somewhere, an outpost out west, and the person decides to buy the water, what happens there is you get the land at the extreme end of the irrigation channel having to pay for the transport costs across an area, rather than you getting a planned approach, which is just reducing that overall. You are getting these Swiss cheese effects, which are affecting the transmission of water across the network.

The CHAIR: We've got a bit of time. There's a line of questioning Mr Kirby started to go down before about how much water has been recovered to date. You gave an answer, Professor Howard, in regard to Mr McConville's submission or report that he recently made. I look to changes like the Barwon-Darling water sharing plan rule changes in June of 2020, which was IDECs or IDELs; active management and the resumption of flows rules; the floodplain harvesting regulation, including the low-water trigger of 195 gigalitres of active water at Menindee; the valley flow targets—all of those different things that have been put into place over the last six years. What we're trying to work out is if anyone has actually put a number on how much water, between all of those different policy changes or regulations, has that actually returned to the system. That's something that we've struggled with a little bit, and we've asked a number of witnesses, but we haven't really got a very clear answer just yet. I don't know if either of you would like to try to provide an answer or take it on notice.

JONATHON HOWARD: I'd like to take that on notice, largely, but I might respond partially to what you say. It's going to be a bit of a pothole of a response, if you'll forgive me. My understanding is that Menindee has a trigger where it's a Commonwealth responsibility for the water and then it's a State responsibility when it gets down to a certain level[1].

The CHAIR: If I can help you there. That's the 640-480 rule. Basically, as you go up past 640, it transitions to Commonwealth control. As you come back past 480 gigalitres, it switches back to State control. That's a rule about who controls the gates, basically, at Menindee. Over 640 gigalitres of water, it belongs to the Commonwealth, or it's their control. When it crosses 480, it goes back to the State.

JONATHON HOWARD: In response to that, one of the perverse outcomes that I believe happens is, if you look at the water trading ability along the section of the Barwon-Darling but also the Murray, it leads to an increase of allocation—in some cases and some situations—to irrigators' general security licences along the Murray because of the volumes that are coming down the Baaka. That's one aspect. The other thing is—I think it's currently in practice here now as a weird outcome—there are salinity flows or dilution flows that are allowed along the Murray under certain circumstances in certain situations when there are levels at different lakes. It might be Victoria, I think it is, and Menindee. They lead to flows going out to South Australia. But, as I say, it's a bit of a pothole of bits of information that I know, and I'd rather take that on notice and be able to do more thorough research for you and come to a more comprehensive answer.

The CHAIR: That would be great, Dr Howard. We would really appreciate that. Ms Garcia, did you want to respond to that as well or take it on notice?

ELENA GARCIA: If I can simply bring up a contributing factor, I believe Mr Clancy spoke before about almond farming—apologies if I've got the wrong person. We used to have a more flexible system with use of water with, predominantly, dairy farmers. In a drought, dairy farmers can reduce their burden on the water table, whether they're bringing it up from the artesian basin by bores or they're pumping from the rivers to water their cattle. They can dry them off. The worst case scenario is they can sell their cows and reduce their water use. But

[1] The Committee received correspondence from Dr Jonathon Howard, providing corrections to the data, which is published on the Committee's webpage.

when you put in an orchard, it needs the same amount of water whether it's a drought or not. So in bad seasons they become an incredible burden on the environment, and that's a big problem because trees need to be watered. To produce an almond takes a lot more water than producing milk from cattle. I would just put that in as a factor. When you're talking about increasing the water in the environment for everybody, you have to factor in everything, including where the water is being used and how much is being used, because that is a burden in times of drought.

Mr STEPHEN BALI: Can I further explore that because it has been coming up a little bit in this morning's presentations. And thank you very much for your presentations. They are good points that you raised in regards to water usage depending on the crop or cattle et cetera and what has been there—cotton. Each one has different elements but, as a government, we can't tell people what they can or can't farm. We still live in a free market. What are some options we can do that can create an opportunity that the people who use more water—do we just have it so that the more water you use for whatever crop or cattle, there's X amount that you can take out, and beyond that you pay more? I don't know. How do we control what people farm in the area?

JONATHON HOWARD: If I may go to that one, there are probably two things that come to mind. First, I think there's that old concept about buyer beware. That means making sure there's clear communication with the enterprise and making sure that they understand the risks involved. An example of that more specifically—although it's not to do with the particular aspect that you're investigating here—is the Barmah Choke. The Barmah Choke has been reduced because of sedimentation by 20 per cent due to a sand slug that's going through that entire area. Yet downstream of the choke there are a number of large corporate investors that are investing in almond production. I'm not sure that they thoroughly understand the risks involved. Sometimes, even though they might have a permanent licence, they might not be able to get the water, simply because we can't chuck the volume down the Barmah Choke.

The second thing, beyond communication and risk awareness, is about technology and our ability to become much more efficient in water. That's a general trend overall. For example, we're moving away from flood irrigation to drip irrigation. Technology can act as a buffer in those aspects, particularly when thinking about flood irrigation versus drip irrigation for almonds. I hope that partially answers your question. We need to communicate with the enterprises more about the risk, and the second thing is we need to make sure that the technology being applied is the most efficient it can be for these enterprises.

Mr STEPHEN BALI: They are valid reasons but, in the end, if I'm a business in the Sydney CBD or Blacktown where I come from, you're not going to get specialised—

ELENA GARCIA: You're guaranteed a [audio malfunction]. In some years, they don't get any water at all.

The CHAIR: I'm not sure if that was—

Mr STEPHEN BALI: Delayed.

The CHAIR: Yes. Ms Garcia, we just got a response from you, "In some years, they don't get any water at all." I'm not sure when you said that, but it just came through while Mr Bali was speaking.

Mr STEPHEN BALI: Essentially, there are so many communications you can give to people but, in the end, a person decides they want to have an almond farm. We know that they suck out a hell of a lot of water. How do you balance the entire system? If you have cotton and almonds up north, that takes out a lot of water. Then, as you go down the middle to the south, people have less access to water. Conversely, you also have the issue that the Federal Government is going to be buying another 130 gigalitres of water. It's great that it's on a volunteer basis, but if you get the farms in the wrong areas that put their hand up to get the money and sell their water, then those towns die because there are not enough farms operating in that area. Earlier in this inquiry, we've been talking about whether we split the entire river system into segments, where there has to be a minimum amount of water that flows through each area. Beyond that, you can't sell back to the Government or sell your water rights outside your area, unless there's water in that area to keep towns going. Is that potentially a legitimate way of regulating where the water gets sucked out of the system?

JONATHON HOWARD: I would like to respond to that, if I may. First of all, in water sharing plans, there's a hierarchy of water uses involved. It starts off with basic human needs. It then goes to basic river functioning needs, and it then goes to high-security permanent licences and all the way through to low licences. I'm not sure that you could suck the water out of a river to the degree needed for agricultural purposes when you can't supply towns, because human needs come first under the plan.

The second thing is that part of what you're talking about is real to some degree. If we look at your electorate, Mr Butler, we think of the fish kills down the Barka-Darling River. What happened there was that a whole pile of high productive agriculture has gone up north, and when the water went back into the river, it was

of low quality. Back in 1991, there was a 9,000 kilometre blue-green algal bloom. More recently, with the fish kills and the death of the rivers during the recent drought, there were a whole pile of communities, particularly First Nations communities, that saw their country was dying, so to speak. Their concept for care of country meant that they felt their own wellbeing was impacted as well. To go further on that same point, Kate McBride, who works out near Menindee, has been a very strong environmental advocate. You can see her on various YouTube channels and ABC broadcasts, talking passionately about how when the river dies, it affects their local community and themselves, as local people living on farms near the river. I hope that partially answers your question.

Mr WARREN KIRBY: To pick up on the Menindee algal blooms and also to revert back to Ms Garcia's comments about slowing down the water, we heard evidence in one of the other public hearings about the rock weirs that used to be along the Darling that were removed because of the river boats coming up and down. Do you have any comment on whether they, or similar things, should be reintroduced to effectively create pools along the way and slow down that water coming through? Is that a good or a bad thing? Also, does that alleviate the need for buybacks in other areas?

JONATHON HOWARD: I might just go briefly back to the previous question and then answer that particular one because something else that came to mind is one of the things that was mentioned in the previous questions was whether we divide the catchment up into different units. That's certainly part of the sustainable diversion limits that's there. They've divided the Murray-Darling Basin up into several different catchments and each one of those catchments has a sustainable diversion limit. I might just say "catchments" is probably the wrong word now that I've mentioned it. It's about water planning units. They have subdivided the Basin right up and that limits the amount of water that government is going to buy because each of those subcatchments have different buyback limits. It's not like we sit down and say, "Hey, we've got to get 450 gigalitres back and we'll get it all out of the Ovens River or all out of one river." There are different portions across the different water planning units right across the Murray-Darling Basin.

Now to the current question. If you look at Mark Lintermans' work about the Darling and Baaka system, he certainly talks about the needs for lentic and lotic habitats for different fish species right across that particular river because they provide different habitats not only for different species of fish but also at different life stages within the one fish species. That's really important. When you talked about trees falling in the river and creating habitats and so forth, the Commonwealth Environmental Water Office has been involved in that down the Darling/Baaka. It's actually sold some of its environmental water at an appropriate time for an appropriate price in order to get capital in which to invest in these fish habitats. I would certainly endorse what you're saying in terms of a practical outcome. We should be investing in a range of diversity of habitats along our particular rivers and making sure that we get a full range of habitats that can increase the fish species not just in terms of one particular species and catering for their whole lifestyle but because different species occupy different habitats. That's the nature of an ecosystem.

The CHAIR: At this stage I'd like to thank both Ms Garcia and Dr Howard for appearing before the Committee today. You will be provided with a copy of the transcript for today's proceedings for corrections. Committee staff will also email any questions taken on notice from today and any supplementary questions from the Committee. We kindly ask that you return the answers within seven business days of receiving those questions. Thank you both very much.

(The witnesses withdrew.)

Professor LONG NGHIEM, Director, Centre for Technology in Water and Wastewater, University of Technology Sydney, affirmed and examined

Professor SARAH WHEELER, Professor, College of Business, Government and Law, Flinders University, before the Committee via videoconference, affirmed and examined

The CHAIR: I welcome our next witnesses. Thank you both for appearing before the Committee today to give evidence. Please note that Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social media and public engagement purposes on the Legislative Assembly social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos and videos taken. Please also note that only Committee staff and media organisations are allowed to take photos and videos. If you would like a copy of these photos, please contact Committee staff during the break. Can each of you please confirm that you have been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

LONG NGHIEM: I confirm.

SARAH WHEELER: I have.

The CHAIR: Do either of you have any questions about that information?

LONG NGHIEM: No.

SARAH WHEELER: No.

The CHAIR: Would either or both of you like to make a short opening statement before we begin the questions? In the interest of time, I do ask that it is limited to 90 seconds, but it never really works.

LONG NGHIEM: Thank you, Chair and the Committee, for the opportunity to speak today. I'm the director of the Centre for Technology in Water and Wastewater at the University of Technology Sydney, and I'm here as a water technologist. I am also here on behalf of members from my research centre. I want to begin by affirming that the environment, restoration and sustainable river system are essential. We believe that the question before us is how to do it in the best way that protects both the environment and the community. Our submission provides some suggestions and areas where we can provide data and evidence to the Government so the Government can make data-driven decisions that are targeted and that can protect the environment and the community at the same time.

The CHAIR: I think that was less than 90 seconds—that's amazing. Professor Wheeler, would you like to make a short opening statement?

SARAH WHEELER: I appear on behalf of myself, and I'm also appearing on behalf of a number of other economists who helped write my submission. I'll just do a very brief comment to say that our submission focused on three parts of the terms of reference—(a), (e) and (f). There was a lot of detail in our submission and references, so I won't go into more detail now, but happy to take questions on it.

The CHAIR: We will now move to questions from the Committee. Before I begin the questions, I wish to inform you that you may wish to take a question on notice and provide the Committee with an answer in writing, so there's no need to provide a response today. If you'd rather go away and work on it, you can just let us know. I'm happy for either of you to respond to this question. Some stakeholders in the inquiries have suggested that the reconciliation date of SDLAM projects be postponed. What's your position on that?

LONG NGHIEM: Maybe I'll ask Professor Wheeler to go first.

SARAH WHEELER: Sure. I should say this is my position on the SDLAM projects. I personally think, no, I wouldn't extend the deadline of a lot of them. I think many of them are environmentally damaging. I don't think they're going to have the beneficial impacts of water back for the environment, which a lot of them are obviously designed to do. I think (a) there are a lot of problems with their implementation; and (b) there are considerable problems with costs. When we look at per megalitre return through SDLAM projects, it is only increasing over time. In the last figures I saw, it was over 30,000. Some very small projects might be up to 60,000 per megalitre. My view on that is if you extend the deadlines, you're potentially wasting more money, you're allowing for increasing costs overrun, and you should technically stick to the deadline. If it's not met, stop wasting money on potentially environmentally damaging projects and go back to recovering water through buyback.

LONG NGHIEM: Chair, we take the position that SDLAM projects are an essential part of the toolbox. They are inherently very complex because of the nature of infrastructure projects. They are technology projects as well. As new technologies come along, they might be very expensive at the beginning, but as we have more

experience with technology, we can develop economies of scale. History has already told us that everything will get cheaper and cheaper. In a way, we welcome the extension of those SDLAM projects as long as they can meet the preset criteria that we have set out. Members of my centre and I also want to provide a quick note that we have some concerns that the extension should not be to prolong time or effort to restore our river. As long as they can meet the target, an extension will be welcome.

Mr JUSTIN CLANCY: Thank you both for joining us today. Professor Long, you spoke in the submission of the development of a data-driven adaptive water allocation framework. You feel that might assist. Can I ask you to explore further for the Committee what you envisage with that, please?

LONG NGHIEM: We advocate for more data spatially as well as temporally. My centre has done some work for Crown Lands and Water in the past where we provided support to the catchment need assessment framework. We also produced a tool that allowed us to potentially map out the relationship between water allocation and the Basin sustainability development index. We can see that the Basin level is not uniform. The study went out to the local government level, the LGA, but we had to de-identify some of the data when publishing. That highlighted the need for more data and a more targeted approach.

Mr JUSTIN CLANCY: Professor Wheeler, I would like to return to your opening remarks. You felt that SDLAM projects are potentially environmentally damaging. Can I ask you to elaborate further and how you validate that remark, please?

SARAH WHEELER: This is not based on anything of my work. This is based on the review projects that I'm sure you're all aware of that have reviewed the projects over time. A variety of them have considerable problems. I don't believe there are economies of scale in there. I actually believe there are diseconomies of scale with many of those projects. The lowest hanging fruit, in terms of the best projects, have already been chosen, so now we've actually got diseconomies of scale, going downwards.

So the environmental impacts—there's a number of different ways. Review reports have shown different ways some of those projects can be environmentally damaging. One of the ways is, often when you're trying to increase efficiency and you're trying to, for example, reduce run-off into groundwater aquifers and you're reducing return flows, that has, potentially, other impacts in groundwater aquifers and connected systems that are not always accounted for. That's one kind of environmental aspect. And, for all the different projects out there, there are different elements of potential problems that may arise. But I would just direct you to the review reports that have been done on the SDLAM projects.

Mr JUSTIN CLANCY: Thanks for directing us there. Further to that, you talk about that if SDLAM projects don't meet the audit date to finish them, that's—communities that have been through a lot over the last 10, 15 years—if you had a project that was 90 per cent to completion, you're saying you would still call that a sunk cost and scrap that project and go back to buybacks?

SARAH WHEELER: Potentially not. Obviously, there has to be some criteria put in place. My view on it is, if the SDLAM projects are very close to completion, if they are identified as being a beneficial—like I said, some of these projects, it goes from a rating scale of projects, the low-hanging fruit, the good ones down to the ones that are not so good. I think, potentially, you're right: There should be some level of criteria for those who are almost completed and who are rated as good projects, short extension would be good. But for those who are nowhere near being completed or not even started, I think you should, no, enforce the date.

Mr JUSTIN CLANCY: Just finally, in your submission you've got, at 1.3:

> Many socio-economic studies are of low quality and overstate negative impact of buybacks.

I am happy to take that on face value, but how does that reconcile with the feeling in communities that have been impacted? We met the community at Deniliquin as part of this inquiry. They certainly have felt a high degree of hurt. How would you reconcile that statement with the feelings within the communities?

SARAH WHEELER: I totally understand how irrigation and rural communities feel. There is a lot of discontent out there. My main point about that is one of the things that has happened—especially since 2010, when the guide to the Murray-Darling Basin Plan was released—is that water recovery and Murray-Darling Basin Plan has been associated with rural economic decline. So there is very strong belief that water recovery—and I know many believe this is intrinsically linked—has led to socio-economic decline. This is not helped by media articles. We've done studies, for example, looking at all newspaper articles that have been published on water recovery or the Basin Plan, and they're overwhelmingly negative. They always talk about the negative aspects of water recovery, never talking about the positive aspects. So this has entrenched a view that water recovery has harmed rural communities.

As an agricultural resource economist, one of the things we look at is long-term trends. The long-term trend of community decline in rural communities—it's continued.

Terms of trade generally have declined. Yes, we've seen in the last few years a little bit of an uptick but, generally, the prices received by farmers have fallen. The import prices they pay have increased. Farm exit has increased. We've got an increasing move away from smaller farmers to larger farmers, greater economies of scale and corporate farming. There are all of these trends going on. Smaller irrigation communities and smaller rural communities' population—socio-economic—are declining, whereas, for larger rural areas, their population is actually increasing. These are all trends that have been in place for decades, and we're not seeing a change in the rate of those negative trends over time.

But what we have seen since 2010, especially within irrigation communities, is the direct belief that water recovery is causing those trends. One of my jobs is trying to disentangle what the actual causality is. What harms rural communities? One of the arguments I make is that focusing specifically on water recovery—be it buyback or sometimes it's irrigation infrastructure subsidies—as the main reason for that decline doesn't help rural communities. They're facing climate change. They're facing extended drought. They're facing flood and huge variability. We have to think about better ways that we can manage and help rural communities, and the problem is focusing on water recovery as the main harm and seeking to stop that ignores some of the bigger picture. It ignores climate change, and we don't therefore focus on policies that can really try and help rural communities. That would be my response. Yes, I completely understand that rural communities are doing it tough, and I understand they believe it's related to water recovery. But I disagree on the causality there. It's not to say that buyback has not impacted rural communities; it has. But our argument is that it's been overstated as an influence.

LONG NGHIEM: Mr Clancy, I would like to also look at some studies from my centre. We did some social hydrology studies to look at the relationship between water allocation and demographic behaviour in rural and regional communities in general. We also saw a weak correlation between water allocation and population change, and there are other factors that have driven the demographic shift. But, very importantly, we saw that, where communities have diverse economic activity, they are more resilient. When we zoom in at the local level, we also see that different local communities respond to water allocation very differently. Some communities are at higher risk and would have much higher impact. The data that we have would advocate for a more targeted and high-resolution approach—not at a high level but at a local level—when we assess the impact of buybacks on the community.

Mr STEPHEN BALI: To further explore what you guys are talking about, arguably, even if we didn't have water buybacks, hypothetically, the efficiency of farms, a lot of other factors are contributing in certain areas across regional New South Wales where the population is shrinking. There is obviously a lot of media that says, in certain areas across regional Australia, the populations are growing. I suppose it's also in remote areas, as the population of a town shrinks, there's less opportunity for young people, whether for employment or even to meet somebody. Therefore, they move to better opportunities. From your perspective along the Murray-Darling system, what would be the top two or three reasons that the population is decreasing or that there are impacts on towns?

LONG NGHIEM: One of my colleagues has done a historical study looking at data over the last 100 years, and we can very much dissect the last 100 years into four different stages. There was a period of time when we built a lot of infrastructure for irrigation, and agricultural activity was booming. That was when we had an increase in population in regional areas. But, more recently, we recognise the need to restore the environment and our river. He called it the pendulum swing impact, which is like swinging from having a lot of water for irrigation to the other end, where a community might have to experience some shock. Going more directly to your question, Mr Bali, there are other economic activities and opportunities, both in the city as well as in the regions. Manufacturing is also now important. We do our primary production in a much cleverer way, so we don't need that many people to produce the same amount of crop and output. There are many other factors that influence the demographic shift that we are seeing now, not just water availability.

Mr WARREN KIRBY: My first question is for you, Professor Wheeler, and picks up on what you were talking about with the negative effects being a bit overstated. In your submission, you've gone so far as to say that there are positive impacts for local communities. Could you elaborate on that a little bit, please?

SARAH WHEELER: When we have water recovery, we have lots of different impacts. Obviously, there's the impacts on the agricultural sector, on the tourism sector and on businesses that rely on recreation. There are wellbeing, health and ecological benefits et cetera. When we talk about positive effects, there is potentially a huge range of effects. If we focus specifically on agriculture, there are positive and negative impacts on agriculture. Some of the positive impacts for farmers are irrigators who have the opportunity to sell their water. If we are talking about selling water through the buyback program versus transferring water through irrigation

infrastructure subsidy programs, for example, one of the arguments I often make is that many farmers prefer to sell their water directly through the buyback program.

The reason for that is, firstly, it's completely voluntary. It is only the farmers who are willing and need to sell their water who do it in the first place. Secondly, they can choose to do whatever they want with the proceeds. The irrigation infrastructure subsidy programs were designed to be spent on specific things. Farmers only had a certain range of activities that they could fund on their farms. Yes, we know that that had positive economic impacts. But, because the buyback program allowed farmers to choose to do whatever they wanted—they could reduce debt, they could invest off farm or they could invest on farm in things that are not covered through irrigation infrastructure subsidies et cetera—it has a range of different positive impacts in that sense. I know many farmers who, because of the buyback program, had the opportunity to sell part of their entitlement—not all of their entitlement. That stopped them from going bankrupt at a particular point in time. When we talk about the positive impact of some of these programs on farms, they are some examples.

As we've discussed, the negative impacts are if there is a causality. If farmers are selling all their water and leaving irrigation, they're potentially leaving fewer people in particular areas and reducing viability et cetera. When you are looking at different programs, there's always positive and negative impacts. It's not just within one sector. It's across numerous different sectors of the community.

Mr WARREN KIRBY: Have you seen, particularly over this period of 100 years that we were talking about a little bit earlier, a shift in the impacts of farming going from smaller farms and individual owners into the corporatisation of a lot of the irrigators?

SARAH WHEELER: Yes, we have. We still overwhelmingly have mainly family small farmers making up the majority of Australian farmers. But there's definitely an increasing trend that, as I said, has been going on for decades. It's been going on since really the 1940s, I would say, that we have data on. Economies of scale dictate that farmers have to get bigger; they have to get more efficient because they're not necessarily getting the same prices that they used to for their produce. There's economic incentives for smaller family farms who are not doing as well to be bought up by other farmers. We're seeing increased foreign investment and increased corporatisation.

Within the water market, the irrigation community is a little bit different in the sense there's the water entitlements and there's also the land. What we're also seeing with water entitlements is that, once we actually allowed separation of water from land, from reforms in the National Water Initiative, you increasingly have non-agricultural stakeholders coming into the water market and buying up entitlements to trade or hold water entitlements on the market. Some of those corporates in the water space include superannuation companies, they include environmental NGOs and they include a range of other different companies who have been buying up water.

It's hard to actually get figures on how much this happens because this data is not available publicly. State governments do have information on ownership of water entitlements and obviously ownership of land and they do collect information on what sort of owner the person is. If there was more openness and transparency in public data, we would be able to map the trends of both foreign ownership and non-landholder ownership a lot better. But it's also worth bearing in mind that, for example, Victoria has completely different terminology to New South Wales.

If I was looking at New South Wales and looking at different types of owners in New South Wales, I can't directly compare it to Victoria and I can't directly compare it to South Australia. If I was trying to do something across the Murray-Darling Basin, it's actually very difficult because every state is different. You can really only do it on a state basis and then it's specific to the information that is collected. I should also add that the latest trends that I know of for Victoria, for example, was that non-stakeholders not tied to land owned about 16 to 18 per cent of water entitlements.

LONG NGHIEM: Mr Kirby, I have some anecdotal experience about my observation regarding foreign ownership of farmland and how they tend to aggregate smaller farms into a bigger one, very similar to what Professor Wheeler said. I don't actually have direct data to answer the question in a direct way. Maybe if you allowed me, I would approach it in a slightly different angle to elaborate on my answer. That is, when we look at a regional community not everyone in the regional community has a say about water entitlement.

When we are talking about sharing water entitlement, we are talking about selling and buying. I have to say up-front that buyback is an important instrument for us to restore our water health, but we need to use that instrument with precaution and with the right approach, because when someone sells their entitlement to the Government and the Government is not selling back the entitlement, then it's not a market. It is taken out of the consumptive pool forever—permanently. I think that is the concern that we would have. That's why in our

submission we advocate for a range of options, including conditional buyback, including leasing and including rotational sharing of the water entitlement.

Mr WARREN KIRBY: I just want to pick up on one point that Professor Wheeler made about the difference in terminology or classification between the different States. By implication, does that mean it would be an advantage for a common set of language—at least across the entire Basin, north to south—so you can compare apples to apples?

SARAH WHEELER: As a researcher, I would love that. We're currently writing a paper on looking at the different impacts of ownership in New South Wales and Victoria on the water market, and it's really hard to make comparisons between the two, because the definitions of what constitutes a non-landowning stakeholder in the water market are quite different. But getting States to change their terminology in the way that they've done things is incredibly difficult, so I would say good luck.

Ms CHARISHMA KALIYANDA: I have one question, and it is directed to either of you. One of the previous witnesses mentioned that a couple of areas of deficiency in government policy or approach towards the situation is around lack of accountability, particularly in relation to corporations, as well as the tendency for governments to be siloed or have very different approaches between areas of government. What are your initial thoughts in relation to those two areas or those two deficiencies being highlighted? Can you point to an approach or a program that you think has worked well?

SARAH WHEELER: It's a great question, and it's a difficult question. It kind of leads on from what I was discussing before in terms of water which is managed over the whole Murray-Darling Basin across all the different States, and then you have the Federal Government, and then you have MDBA. To some extent, each organisation is quite siloed. Better integration would be fantastic. You often don't have departments talking to one another. For example, I know even within New South Wales there's quite a difference between the NRAR—the Natural Resources Access Regulator—and the department. Better integration of systems of sharing of information would be highly useful. I'm not saying that they don't do it; they do. Institutions do tend to become siloed and sharing information et cetera is difficult. Is there a good example? I'm not sure. I'd probably have to take that question on notice. I can only ever think of programs and a lot of the problems that are associated with them. I'm not sure if I can think of a very good example at this stage.

LONG NGHIEM: I can only speak about New South Wales; I'm not familiar with other States. But I feel that, in New South Wales, Government efficiency is probably close to gold standard, based on the investigations and checking that NRAR has provided. Regarding the intergovernmental relationship, I think we live in the real world and there's no perfect coordination between different governments, but I also think that there's enough good evidence. The key here is more data and the flow of data between the different levels of Government and the community so that the Government can make good decisions.

Ms CHARISHMA KALIYANDA: In relation to the issue of data, I'd love to understand how we could achieve a good balance between having the data that is required to make high-quality decisions versus the challenge in having too much data or that it's presented in a way that can overwhelm.

LONG NGHIEM: In talking about data, I think there are a few different things we need to focus on. First is the accuracy of data. One of our research works that was done for Murrumbidgee Irrigation—funded by Innovation Connections, which is a Commonwealth scheme—was to look at the accuracy of the flume gate metering. My team found that flume gate metering in some cases produced errors of up to 20 per cent under highly submergent conditions. Highly submergent conditions are when the flume gate operates, the downstream water level is high and therefore partly submerges the flume gate. The average is about 6 per cent, which is quite high in error terms. We obviously want to reduce that to 1 or 2 per cent. We'd never be able to get an absolutely accurate measurement, given the way that we measure large volumes of water flow. That accuracy is important.

The availability of data both temporally and spatially is also important. You also highlight a very important point about too much data. I think it's probably on the research community and the scientists to work out a way to inform the Government that gives you the data that you need, not noise. We have tools such as data analytics, which we have applied in our work to simplify the way that the Government can look at data. We have tools such as soft computing, a portfolio of different computing tools, that can tolerate imprecision and uncertainty. That also complements the way we process data. The bottom line is we need to invest in infrastructure but, at the same time, we also need to make sure that we invest in the capability to produce quality data that can inform the Government for decision-making.

SARAH WHEELER: As a researcher, I'm always advocating for more open, available data. There's never too much data. As an example, it would be highly useful to have more information on exactly where buybacks and irrigation infrastructure—down to postcode level—has been recovered from. It's really, really hard,

if you're not in government, to get that level of information. That would help—a lot more modelling. A lot more detail on all the Strengthening Basin Communities Program. Much more information put up about where and when proposals have been made, where has the money been spent. A lot more detailed and open information for the Murray-Darling Basin and for all the programs that have been spent would be a lot more useful for research in trying to disentangle what has been the actual impact of recovery, of all these different programs on rural communities.

The CHAIR: This is something that you touched on, Professor Nghiem, and it's a particular interest to me because, when the buyback discussion was happening, this was something that was at the front of my mind. When we look to events like 2022, where we had more water than we could manage, would leasing water have been a better option, as opposed to buybacks, so that the amount of assistance that comes into a community is directly relevant to the amount of water that's being pulled out for that season based on the environmental needs of the river? If we have a year where, say, the allocation is cut by half, if it was leased water then there'd be more water coming into that community during that period when production would be cut. Could you comment on the merits of leasing over a straight-out buyback, which is a permanent reduction in the ability to grow produce in that area?

LONG NGHIEM: Chair, it is certainly a very good option and a very good tool in our toolbox, but it's perhaps not possible to make a direct comparison between leasing and buyback. They have different functions and different downsides as well. But in our submission we also advocate for leasing, which is a way of sharing the supply, or the burden in some cases. It also allows time for technology to develop. One thing that we may not give enough consideration is that any good technology needs time to be tested, to be developed and to be rolled out, and leasing or temporary buyback, meaning for five years—something like I rent my house to someone for five years and then I go back to the house—that would give the scientists enough time to develop new technologies that potentially can be very cost effective. Buybacks have done a fair share of supporting the river health, and I think technology should also be utilised to support the river health, and leasing is certainly a step in that direction.

The CHAIR: Professor Wheeler, did you have anything you want to say to that one?

SARAH WHEELER: Yes, I would just like to say that we have spent billions on technology to try and improve environmental health within the Basin. There's only so much money you can throw at technology before you realise, actually, we just need water. That's my first point. My second point is that I'm also supportive of leasing and forward contracts being used a lot more than they currently are within the Murray-Darling Basin Plan. We did a study on this. I can't remember the exact date. I think it was published in 2014, but it's a good 10-or-so years ago now. We surveyed irrigators to try and understand their preferences for different forms of buyback options, and they were highly more supportive of short-term leases rather than the permanent sale of water entitlements. Those sorts of programs—I would hesitate to say because, obviously, this is 10 years ago. I would suggest that irrigators do tend to be a lot more supportive of those programs than the permanent sale of water.

The CHAIR: Thank you both for those responses. I would like to thank you both for appearing before the Committee today. You will be provided with a copy of the transcript of today's proceedings for corrections. Committee staff will email any questions taken on notice and any supplementary questions from the Committee. We kindly ask that you return the answers within seven business days of receiving those questions. Again, I thank you both for your time, expertise and knowledge.

(The witnesses withdrew.)

(Short adjournment)

Mr RICHARD BOOTLE, Chair, Water Taskforce, NSW Farmers, affirmed and examined

Ms CONNIE MORT, Senior Policy Adviser, NSW Farmers, affirmed and examined

Ms SUSANNAH TYMMS, General Manager, Sustainable Dairy, Dairy Australia, before the Committee via videoconference, affirmed and examined

The CHAIR: I welcome our next witnesses. Thank you all for appearing before the Committee today to give evidence. Please note that Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social media and public engagement purposes on the Legislative Assembly's social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos and videos taken. Please also note that only Committee staff and media organisations are allowed to take photos and videos. If you would like a copy of these photos, please contact Committee staff during the break. Can each of you please confirm that you've been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

RICHARD BOOTLE: Yes.

CONNIE MORT: Yes.

SUSANNAH TYMMS: Yes.

The CHAIR: Do any of you have any questions about this information?

RICHARD BOOTLE: No.

CONNIE MORT: No.

SUSANNAH TYMMS: No.

The CHAIR: I'd be happy to receive an opening statement from both NSW Farmers and Dairy Australia. Would both of your groups like to make a short opening statement, which we try to keep to 90 seconds, but which never works?

RICHARD BOOTLE: Chair and members of the Committee, thank you for the opportunity to speak today on behalf of NSW Farmers. We welcome this inquiry into the impacts on New South Wales from the major Australian Government reform. Our members have long felt that the impacts from decades of water policy reform were not being addressed, and the long-term productivity of agriculture in New South Wales was under threat. In contrast, reporting by the Murray-Darling Basin Authority from the middle of this year has shown that the Basin Plan is achieving what it set out to do. The environmental health of the Basin has improved, sustainable diversion limits are in place and water diversions are compliant with those limits, with over 70 per cent of inflows remaining in system for the environment. But the message was also clear that just adding more water taken from agricultural use was not going to help meet further environmental outcomes.

In the months since the inquiry was established and submissions closed, the foot has not come off the pedal in regard to the rollout of policy reform and on-ground actions from both the New South Wales and Australian governments. This includes the start of flow corridor negotiations for some landholders along the Murrumbidgee River under the Reconnecting River Country Program and, most recently, an announcement from Minister Watt that the Australian Government will initiate another round of water buybacks to contribute towards the 450-gigalitre target. Our farmers, and the rural communities that they contribute to and rely on, are battling change fatigue and experiencing challenges on all fronts in remaining viable and sustainable. All they ask is for the appropriate policy settings to help them look after the environment that they rely on to produce the best food and fibre for us all.

SUSANNAH TYMMS: As I said previously, I am the general manager of sustainable dairy at Dairy Australia. As you well know, Dairy Australia's role is in research, development and extension on behalf of dairy farmers and processors. With a combination of statutory levies and matched government funding, and other sources of funding as occurs in our large research projects, we're focused on farm business performance and farm productivity. We have a range of investments in the R&D pipeline supporting dairy farmers. We're really here today to highlight some work that we have commissioned to draw your attention to what we believe will be the impacts of further buybacks in the Basin.

The Murray-Darling Basin is home to approximately 950 dairy farms, 36 processing sites and directly employs over 7,000 people. Nearly 23 per cent of our national milk is produced in the Basin and its location as a supply chain hub means a significant proportion of national milk is also processed and throughput there. The economic contribution of dairy in the southern Murray-Darling Basin is over $2 billion. In New South Wales

specifically, there are 150 dairy farms and three processors in the Murray-Darling Basin in towns like Finley, Blighty, Deniliquin and Corowa, and in 2024 those farms produced 427 million litres of milk.

As the industry is closely interlinked with Northern Victoria, it's hard to separate them when looking at the impacts and contribution. These statistics highlight the scale and significance of irrigated dairying in the Basin and the State's dairy industry. Water availability is fundamental to irrigated dairy production in these regions. Even small changes in water reliability or price can have significant effects on farm businesses and milk processing capacity, which then cascades to local employment and regional economies. As I said, we have commissioned some modelling work on this topic, and we hope that that will be useful for the Committee today.

The CHAIR: I wish to inform you that you may wish to take a question on notice and provide the Committee with an answer in writing. If you have a question where you think you might be able to go away and gather some more granular or detailed information, it's quite okay to take it on notice. I will put the first question to you, and I will make it a really easy one. Other than buybacks or rules-based changes, what other approaches would you support to improve environmental outcomes across the Basin?

RICHARD BOOTLE: NSW Farmers has consistently said that buybacks are the bluntest of tools. There are a whole series of other tools that will both deliver better environmental outcomes but not reduce the productive pool. Examples of those are complementary measures and delivery infrastructure, particularly where physical constraints continue to impede waterflows. There's a whole series of projects that have been put forward and obviously there are some delays in those. NSW Farmers believes that there should be more time given for those projects. There's a whole range of investment that could go in that better target environmental outcomes. For instance, one of the clear measures from the MDBA's latest report is that notwithstanding adding more and more water, we actually haven't had an effect or impact on native fish numbers. Some of the passageways, fish screenings, cold water pollution measures, riparian land management—there's a whole series of things that we could be investing in that doesn't just add more water to a system where it's clear that adding more water to the system isn't delivering any further environmental impacts.

The CHAIR: Thank you, Mr Bootle. Ms Mort or Ms Tymms, would either of you like to respond to the same question?

CONNIE MORT: One point, really quickly, is that NSW Farmers supports projects that deliver the environmental water savings without reducing or removing water from production—that includes the constraints programs throughout southern New South Wales—on the condition that they're community supported. If there are new projects that can be initiated—I know that the New South Wales Government has been successful in getting a couple of projects over the line with the rest of the Basin States and the Federal Government—that's what we need to see. We need to work at that community level on projects that can then deliver community and valley-level or river-level outcomes that we know—as Richard said, the flows aren't everything. There are other projects that can deliver savings. The accounting for that is where people seem to have the problem, but we maybe need to move past that at the moment.

SUSANNAH TYMMS: If I could add to that, in the dairy industry, for a long time dairy farmers have recognised the need to balance environmental outcomes with food security and sought measures within their own farm systems to improve water use efficiency and water productivity—in other words, getting more from less. Theres's a real commitment to that, backed up, we hope, by good investments by my organisation, Dairy Australia, to support on-farm productivity and new irrigation technologies, new feed base and new herd genetics that actually play into that environment.

The CHAIR: Thank you all very much for your responses.

Mr JUSTIN CLANCY: Thanks for your presentation. Ms Tymms, I'd be very interested in the modelling for what the future looks like for dairy farming if we're seeing more buybacks. You speak of 950 farms in the Basin now, but I'd be interested in what that picture looked like 15 years ago. I know there have been a few years, but has the water reform so far done to the dairy industry within the Basin over the last 15 years, and what does the next 15 years look like?

SUSANNAH TYMMS: It is true to say that there have been farm exits over the course of the years of the Basin Plan since 2012. I think it's also important to understand that the volume of milk hasn't decreased to the same extent as farm exits. Dairy has a future in the Basin. Dairy has been incredibly adaptive in the Basin. Dairy farming systems look different now than they did 20 years ago. If you visited any of the dairy farms in the Basin, you will see a range of adaptation measures—a more intensive feeding system in some places, a completely new feed base beyond irrigated pasture into other feeds, and a cut and carry system, for example. There are lots of different farming systems in the Basin now. But there is no doubt that even small changes to the consumptive pool will elevate the price in the Basin, which makes the operating costs of dairy farms much more challenging.

The modelling exercise that we had Ricardo do looked at two different buyback scenarios, 302 gigalitres and a higher scenario of 683. Under all of the pathways modelled for dairy farms, farms were worse off under those two buyback scenarios. If you'd like me to go into a bit of detail about that, the exercise looked at the extent of reductions in the consumptive pool under each of those two scenarios, and then the consequential increase in water prices. It then had a look at what kind of choices farmers would make in the face of those price increases. There were three choices that farmers face and that were modelled. The first was they can either purchase additional entitlements to maintain their milk production at the same level, at the higher prices. The second option would be to substitute water with purchased feed, so buy feed from somewhere else and not use homegrown feed. Again, same level of milk production.

The third option was to reduce herd size, which obviously would lead to a reduced milk output. There is a fourth option, the nuclear option, which is to exit farming. That wasn't part of the modelling exercise but would be there on the table. The impacts of that were quite a surprise to us, particularly under the high scenario, a decrease in consumptive water availability of 16 per cent and a 40 per cent increase in water allocation price. That really drops farm earnings under this modelling and we also see a reduction in the milk pool. Of course, that continues on to a cascading effect on the processing industry and subsequent effects on rural economies.

Mr JUSTIN CLANCY: Does the modelling go on? What does that mean for the consumer purchasing a bottle of milk at the supermarket? Do we know what that would look like? If we're decreasing potential production, what does that mean for our domestic market and our ability to export milk solids overseas?

SUSANNAH TYMMS: There would be an impact on industry competitiveness from a reduced milk pool associated with this. The report modelled a 270,000-million-litre drop in milk pool. That would then put pressure on the processing industry. There could be consolidation in the processing industry. There could also be a drop in the dairy farm spending in local regions and local economies. I can't speak to the milk price, that's not within my remit, but the drop in milk pool would make the industry less competitive overall.

Mr JUSTIN CLANCY: Of course you can't comment, but one would suggest a 270-million litre decrease in the milk pool would have to have a flow-on effect on pricing at the end of the day.

SUSANNAH TYMMS: Yes. Again, I can't comment on the pricing, because a range of things go into the farmgate milk price, but it certainly puts pressure on the processing sector.

Mr WARREN KIRBY: I just want to take up the milk pricing. What does the average farmer get per litre on the farm?

SUSANNAH TYMMS: That varies across the country and it varies by farming system. To give you the full range of milk prices, I'd like to take that question on notice and come back to you with accurate figures.

Mr WARREN KIRBY: I ask that question because, admittedly a number of years ago now, the farmer was talking about the farm price that he got versus the price being sold per litre in the supermarket. It was a very significant difference between what he was getting versus what was on the shelf. I'm just curious as to how far that variation is. If you're talking about a few cents a litre increase at the farm gate because of water buybacks, is that a significant impost or are there so many other people in the supply chain between the farm gate and the consumer that it could either be absorbed or negligible in terms of the price differential?

SUSANNAH TYMMS: I'm not quite sure I understand your question, Mr Kirby. There is variation in the milk price across the country. There is a fairly solid milk price in Australia at the moment. In the northern part of Australia, there's a higher milk price than in the southern lower-cost systems. I really can't comment on the choices that retailers make in the dairy cabinet in supermarkets.

Mr WARREN KIRBY: No, of course, but that also means you can't comment on how much of an effect water buybacks are going to have to the price to the consumer.

SUSANNAH TYMMS: I don't have those figures in front of me. I'm happy to take that on notice and come back to you with further information on that.

Mr WARREN KIRBY: This is a question to everybody. Could you comment on the extent of unlicensed water take in your respective industries and how has improved compliance and monitoring saved water?

CONNIE MORT: Mr Kirby, NSW Farmers don't believe that there is a problem with unlicensed water take or excessive amounts of unlicensed water take in New South Wales. NRAR, which was established several years ago, runs a very tight compliance system. They've just been granted some extended and new powers by this Parliament to continue that work. But we also don't think that was necessary. There is a high level of compliance with some really complex rules and laws within New South Wales, and NRAR's own reporting shows that there is that high level of compliance already. So by adding in a whole lot more rules or thresholds to meet—we have

evidence to show that our water users can already adhere to that. I'm not saying we want more rules, but there's precedence there that they do do the right thing. Of course, that's not saying that there is illegal water use and take. That will be the case always, but the high levels of compliance in New South Wales are a critical point to get across, and we don't believe it should be something that is a focus at the moment.

Mr STEPHEN BALI: Just further exploring from a Farmers' Federation point of view, how do you see the land? There's been a fair bit of change across the Basin. As we just heard, there's a potential for less dairy. But, if there's less dairy, does that farm then get converted into other crops? Obviously it's on the market; it gets sold. How do you see the overall farm output in the Basin over the past 10, 15 years? What do you see potentially into the future?

RICHARD BOOTLE: What we saw after the first round of buybacks—and one of the points that we'd like to make to the Committee is that there's continuously been a lot of research and money put onto environmental compliance and how the extra water has impacted on the environment. But there's very little money being spent on research on the socio-economic impacts. It's been a big hole throughout this process, since 2010.

Mr STEPHEN BALI: What do you mean by "little research in the socio-economic"—as a result of the buybacks?

RICHARD BOOTLE: Yes, as a result of the buyback. Part of the original purpose under the legislation was that there was going to be a lot of monitoring of both environmental and socio-economic. What we've consistently seen is that there's been very little research done into that, but there has been research done over the time. All that research pointed towards that, as you take water out of a community, the net production from that community and then all the multiplier effects of that in those communities reduces. So while there is still a farm being carried out, for instance, where a dairy farm used to be, that might be on a much lower impact. It might be wheat growing then occurs there. But the amount of money made per acre from that farm and the amount of money that then went into the broader community—wheat requires harvesting and then put into grain handling. But that's the end of it. We don't process very much in most of New South Wales; there's some mills, but most of it is exported. Whereas with dairy, for instance, you're going to have a lot of that going into the local community, into milk manufacturing and production.

The basic economics, the Productivity Commission and the various reports that have been done are really clear about this. If you take a megalitre away from a community, you're taking a degree—and it's not exactly how much. It's not dollar for dollar. It's not one meg is $10,000 per year, but there is a cost for that. There's been various results that—Office of Impact Analysis estimated $112 million per year in lost production just from the initial buybacks. It's clear that there is an impact and that it will impact on those communities. Our members are consistently telling us—and we're the largest farmer representative group in Australia, so we get lots of feedback. The feedback is very clear: water disappears from community, jobs disappear from communities, those communities decline. It is independent of the other factors that are impacting on farms, for instance, such as drought or long-term issues.

Mr STEPHEN BALI: Just before you came in, we had two universities here that said that they've undertaken a fair bit of research, and they found very little correlation between reduction in water and impact on the economic and social factors of the community, because there are a whole range of other factors. Regardless, if we didn't have the water buybacks, we'd still have a situation that farms are improving in the way they undertake their production. The amount of farm workers today is a hell of a lot less than we had in the 1800s, 1950s or even just 10 years ago. I'm just trying to reconcile that. They also showed that it's almost a self-fulfilling prophecy. If you look at the arguments or the press releases, they're all about the negativity of it, and therefore people talk themselves into water buybacks being bad. We just heard from the dairy farmers that there are less farms, but the output is not that much different. The question to the dairy farmers is, how much milk is actually imported into this country versus produced? But, overall, we're just trying to work out what's the best and most efficient way and getting the right facts before us, as far as the economic impacts of the water buybacks.

RICHARD BOOTLE: Thanks for the follow-up question on that. I did listen to some of the evidence this morning and, with respect to the researcher this morning, it's one piece of research and it's not peer-reviewed. It's effectively an educated opinion, but it's one educated opinion, and what we have is the bulk of a nearly 20-year understanding of what these impacts are—an understanding from the people in the communities, the farmers in those communities, and the feedback that we get regularly. My law firm ran the water buyback in the first water purchase program, and I was on the phone to every single farmer that sold water to the Commonwealth in that. At the time there was a lot of talk of the research that we were going to do and the amount of analysis that we were going to do so we could answer these questions properly before you.

I would love to be able to give the research and to be able to answer that, but the fact is none of us can, because that research just wasn't done. That's the best that we can do, aside from the Productivity Commission,

Aither and MDBA, which we've said in our submission. Anecdotally, this has a massive impact. If you think logically in terms of what it takes to milk a cow versus what it takes to run a header through a wheat crop, there is a massive multiplier impact here. That's my honestly held belief that I'm coming here this morning to present.

Mr STEPHEN BALI: The question to the dairy representatives is, what percentage of the industry is actually done through the Murray-Darling Basin—in milk production?

SUSANNAH TYMMS: Some 23 per cent of the national milk pool comes from the Murray-Darling Basin. That's not just New South Wales. That includes the northern Victoria region—23 per cent. If I could briefly come back to the previous point, there is a tipping point, and one of the reasons Dairy Australia did this research was because we want to know what the horizon looks like for dairy as well. What our research has shown us is the urgency of needing to keep improving farm productivity.

We are very keen to continue partnering with investors and governments to support on-farm productivity. That really is a climate and food security response these days. This is the nexus of food security—this water discussion. Continuing to invest in on-farm productivity, in the end, constitutes a public good where we have less water in the system and drier seasonal conditions. I think that a key message that Dairy Australia would like to get across to the Committee today is that there is a way forward here. There is a way forward for dairy. We've had a fantastic partnership with the New South Wales Government to date, and we'd really love that to continue. We think that there are clear public good outcomes from farm productivity research under these difficult conditions.

CONNIE MORT: Could I add one point to the discussion here and comments from previous witnesses and the question. On face value, when you look at the numbers and the billion-dollar output from the ag industry across Australia and within New South Wales over the last decade or so, it has gone up, for sure. The numbers are clear. But costs have also gone up, and farmers are price takers. It's very hard for them to pass on the cost of doing business. Thinking back to buybacks, a lot of evidence has proven—and we've seen it in the market—that removing water from that tradeable pool will increase water prices for people to purchase temporary water or allocations. They can't just factor that in to their milk, wheat or beef. It just doesn't work like that in ag. That is a direct impact that is already appearing and will continue to appear.

It comes down to this key point: The lived experience of people in the Basin is telling everyone that there are impacts. What we don't have is that backup through the monitoring and reporting of those impacts, whether it's the Murray-Darling Basin Authority or the Productivity Commission. Even the regulatory impact statement that came with the Restoring Our Rivers Act identified impacts. It was really hard for them to put a value on what that would be or how much, noting that there's a difference between smaller towns or communities and bigger towns. But everyone acknowledged there is an impact. It was about how you manage that impact and that what is an acceptable impact is different, depending on who you talk to. Again, nothing happens in isolation, so it's really hard to single out buybacks as a root cause. But it's a cause nonetheless.

Mr STEPHEN BALI: To continue exploring the dairy farms, 23 per cent of our total milk base comes from the river system, and I get that it's from the different States. From my quick Google research, only about 3 per cent of milk is imported into Australia, which is probably good. With the population growing, we need more milk. How do you see the Basin having the opportunity to grow, even with the constraints of the water buybacks? I'm the member for Blacktown, so I'm from Sydney. I'm trying to get my head around this. The more I learn about it, the less I know. Essentially the buyback is up to the farmers. I know they are price takers but, if the farmers see the merits of the industry, then there's no reason for them to sell back the water, is there? What are the impediments for the dairy industry to grow in the Murray-Darling River system?

SUSANNAH TYMMS: In the integrated water system, it might not be dairy farmers who are selling the entitlements. They might choose to retain their entitlements, yes. But anybody purchasing the water will see an increase in the water price across the whole consumptive pool. Any buybacks undertaken and purchased by, for example, the permanent plantings will end up with a lower volume in the consumptive pool and an increase in water price. Dairy farmers would still be faced with those behavioural choices that I spoke to earlier, which were about buying purchased feed, paying higher prices for water or reducing herd size. From our perspective as Dairy Australia, it goes back to the kind of programs that we are investing in to support farmers to uplift their productivity. It is also very important that we have a supportive policy environment for food production in this country. As you've pointed out, Australians love their milk and dairy products. Our national consumption of dairy products is slightly on the rise—in fact, we've just seen significant rises in Greek yoghurt this year—so we do want to continue to produce a milk pool locally that services Australian demand. At the moment, we export 32 per cent of dairy production, so we're quite secure in dairy and the export market is really important to us. I think I'll leave it at that.

Mr STEPHEN BALI: From a dairy perspective, if almond farming and cotton is sucking in so much extra water than a dairy farm, wouldn't market conditions entice almond farmers to sell their farms and dairy people would move in? What are the impediments for the expansion of the dairy industry?

RICHARD BOOTLE: I don't think anyone's doubting the market's ability to put water towards its highest and best use—that's been the case since we took water from land and decoupled—but what we have in this instance is Government stepping in, and there's no competitor against those prices. We don't know what prices they're paying. We know that traditionally they're paying massively above market to secure large volumes of water, to try and make purchase programs quicker and get in before some rule changes that are occurring next year. That's how it seems to us. There's no economic return in that instance. All of the remaining players in the now reduced consumptive pool are bearing the burden of this increased cost. At the price they're paying, it's not productive for anyone to be buying that water. When they leave the market in two years, or whenever this finishes, we're all left with this very much restricted productive water pool. That's what we're all facing going forward, and that's the crisis that we see coming already.

Mr STEPHEN BALI: For the farmers federation, with the change of economics in water et cetera, are we seeing more and more commercialisation or the—probably the wrong word—corporatisation of farms and the multigenerational farmers start to leave the land? Is that one of the factors really playing on the social impact of different towns, that a corporate operator can move their staff around and their reason to sustain a local town is less than if they were attached for five generations?

CONNIE MORT: There is commentary and analysis on this idea of increased corporatisation of farms. Speaking for New South Wales, small and medium enterprises—mainly family-driven farms, who may employ outside of the family—make up the bulk of production within the State. From my own experience of corporate entities that run farms, those people still need to live in those local communities. They're still contributing. They're still living with impacts. They're also getting the benefits of living in those local communities. There's investment coming in, for sure, but also massive amounts of investment at that small and medium farm enterprise level. I think a whole lot of factors go into choosing what production system farmers do, whether they've done it for five generations or because of the price of water.

The price of water and access to water is a major component in some systems, but a whole lot of choice goes into whether you're choosing to be a permanent plantation farmer—nuts, citrus or wine grapes—or something like dairy, fodder production or beef cattle. There's a whole lot of choices. The market is so influenced and impacted by decisions and big purchases, and once that water leaves the productive pool, it's never coming back. The intent and mission of NSW Farmers in appearing before this Committee is that we need to ensure that as much water as possible remains within that productive pool. The water is used to grow food and fibre and contribute to food security not just for New South Wales but the rest of the country and those export markets, which has driven some of this perceived massive increase in agricultural output over the last decade. A lot of that is market driven, in terms of the prices that the food sellers are actually getting, not so much what the food producers are getting.

The CHAIR: We'll park that there. In the five minutes left in this session, I have two quick questions for you. One should be really easy to answer, because it should be really fast. First, how much water have we saved between policy initiatives like floodplain harvesting regulation, including the valley flow targets, the low-water trigger at Menindee of 195 gigalitres of active water, SDLAM projects, the June 2020 Barwon-Darling water sharing plan rule changes and other such policy initiatives? How much water have we returned to the system from these rule changes?

CONNIE MORT: That's a really good question. I'd like to know the answer. We can't work out what the answer is. There are figures supplied from everywhere. A lot of those are New South Wales led initiatives. It's maybe more appropriate for the New South Wales department to give us those numbers.

RICHARD BOOTLE: We'd love to take that as a question on notice to throw to the department, so we could all know the answer.

The CHAIR: We'd all like to know the answer, Mr Bootle. We'll put that as a question on notice and you can see what you can work out. Good luck. I'll come back to you as well, Ms Tymms, because I didn't give you a chance to respond to that one. The second one is around IGAs. Do any of your organisations have concerns with the New South Wales Government's current approach to negotiating IGAs, or intergovernmental agreements? The second part of the question is how would having access to draft versions of intergovernmental agreements support your industry to participate in the development of water management in New South Wales? That's two parts: Do you have concerns about the IGAs, and would having access to the drafts help you?

CONNIE MORT: It's a very timely question. We're currently seeking to get a look at the draft national water agreement that is supposedly with every state water Minister at the moment. The last draft we have is nearly 12 months old, and that was provided by the Australian government department. It's a simple thing where if you're signing up for something on behalf of the state, we should get some exposure to what is being signed up to. The amount of edits that maybe have occurred to that draft over the past 12 months—who knows, is the question, really. Any more clarity provided to engagement when there are significant intergovernmental agreements that are signed—and that extends to funding agreements as well—is really important because it backs up business cases that are given for major projects that are funded by the Australian Government. If there's any money coming to the state that New South Wales is then responsible to implement, it's only fair that the communities that are living through that project delivery get the full scope of information that's before them.

The CHAIR: Ms Tymms, would you like to respond to either of those? The first question was around how much water we've saved with policy initiatives that have already been implemented to date. The second one is around intergovernmental agreements and any concerns you have about the IGA process and if having access to the IGA drafts would be helpful.

SUSANNAH TYMMS: I would have to defer to NSW Farmers for response on that, Chair, except to say that it's an integrated system and it needs integrated solutions. I'll leave it at that.

The CHAIR: No problems at all. Don't worry, no-one has been able to answer the first question, so you're not alone there. That being the case, and looking at the time, thank you all for appearing before the Committee today. You will be provided with a copy of the transcript of today's proceedings for corrections. Committee staff will also email any questions taken on notice from today—and there were a couple taken on notice—and any supplementary questions from the Committee. I've got a feeling there may be a supplementary as well. We ask that you kindly return those answers within seven business days of receiving those questions. Thank you very much for all of your time and for sharing your knowledge with us.

(The witnesses withdrew.)

Mr TOM GREEN, Chair, New South Wales Irrigators' Council, affirmed and examined

Dr MADELEINE HARTLEY, Chief Executive Officer, New South Wales Irrigators' Council, affirmed and examined

Mr IAN COLE, Executive Officer, Barwon-Darling Water, before the committee via videoconference, affirmed and examined

The CHAIR: I'd like to welcome our next witnesses. Thank you all for appearing before the Committee today to give evidence. Please note that Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social media and public engagement purposes on the Legislative Assembly's social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos and videos taken. Please also note that only Committee staff and media organisations are allowed to take photos and videos during the session. If you would like a copy of these photos, please contact Committee staff during a break. Can each of you please confirm that you've been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

MADELEINE HARTLEY: I have.

TOM GREEN: Yes.

IAN COLE: Yes.

The CHAIR: Do any of you have any questions about this information?

TOM GREEN: No.

MADELEINE HARTLEY: No.

IAN COLE: No.

The CHAIR: Would any of you like to make a short opening statement before we begin the questions? We normally ask for it to be 90 seconds. People can't normally keep it to 90 seconds, but we can see how we go.

TOM GREEN: I've got one and we'll give it a red-hot crack. Thank you for the opportunity to appear today in Sydney before the Committee. I am chair of New South Wales Irrigators' Council, a membership-based organisation formed in 1983 representing more than 12,000 rural water licence holders across inland and coastal New South Wales. I'm a sixth-generation farmer on a property near Forbes, in the Lachlan Valley, using irrigation to support annual cropping, hay and sheep production. Most of the water users we represent are small and medium family farms in the Murray-Darling Basin who are struggling to adapt to the pace and scale of water recovery for the environment under the Basin Plan and earlier reforms over the last quarter-century. The socio-economic impacts of water recovery are well known. Statistics for job losses and foregone farm income fail to capture the real pain of watching our towns hollow out and lose their schools, shops, sporting clubs and services, all the people who make a vibrant community.

The New South Wales Government has repeatedly said it does not support Commonwealth water buybacks but cannot stop them. What the New South Wales Government can certainly do is stop making a bad situation worse through its own actions. That is what we really want to highlight today at this hearing. Those New South Wales actions include rules changes in water sharing plans to reduce farmers' water access and free up more water beyond Basin Plan targets, compounding Commonwealth water recovery impacts, and using the risk assignment framework under the National Water Initiative, embedded in Federal and State water legislation, to avoid paying compensation for reduced access. If the New South Wales Government is serious about improved river health, it would be investing in measures like invasive species control, riparian management and fishways to boost the environmental gains of the Federal Basin Plan water recovery. Instead, we are facing the prospect of more rules-based changes in water sharing plans that are not only undermining water allocations but also putting a serious strain on state resources. We would like to table this statement into evidence and welcome your questions.

IAN COLE: Thanks for allowing me time today to address the Committee on behalf of Barwon-Darling Water. Unfortunately, I was away, having medical treatment, when you visited my home town of Bourke, and I was unable to attend that hearing. But I understand that several of our members addressed the inquiry on the day, including Tony Thompson, Frank Old and Leonie Brown. I've worked for Barwon-Darling in water reform issues since 1996, almost 30 years, and I'm aware of the issues surrounding government purchase of water and government confiscation of water and its impacts on outback communities. Barwon-Darling Water is the peak representative body of water users along the Barwon-Darling River. Our membership includes local water user groups in each river section, local government bodies along the river, local businesses with an interest in the

irrigation industry, and riparian users along the river. That river extends from the Queensland border right down to the lakes. River kilometres are about 1,300 kilometres.

We lodged the submission, back in April this year, which appears as No. 63 on your website. This covers most of the terms of reference, and today I wanted to focus on term of reference (g), especially other New South Wales water reforms impacting water allocations and how this has interacted with buybacks on the Barwon-Darling. I would have thought that, surely, successive and various governments have taken away enough water from our river. Over the past 25 years, communities on the Barwon-Darling have had a 10 per cent reduction in water access due to environmental flows, a massive cut of 67 per cent to all licences along the Murray-Darling Basin in 2007, social and economic hits with the purchase of Toorale Station at Bourke and Twynam Water at Collarenebri in 2008 and 2009, the effective loss of various favourable parts of our water sharing plan, further recent buybacks to bring the Barwon-Darling to sustainable diversion limit, and a further 10 per cent cut in our model to allow for pumping embargoes during the 2002-2007 drought.

That was in our cap model. So much for the '93-94 cap benchmark. And, in recent times, there's been a raising of all A class thresholds under the new water sharing plan of 2021 and introducing other mechanisms that have reduced our access, things like individual daily extraction components, resumption of flow rules, and active management. So, with the buybacks of 32-plus GL, we're now back to an effective productive water in the Barwon-Darling of about 150 GL, whereas our original licensed volume was 523 GL. So you can see there's quite a big difference. With the water being distributed under cap to all licensees, not just the active licensees, we will always be significantly under cap and under our sustainable diversion limit, whatever that might be in the future, because we've got a grossly imperfect trading system. So the water can never, ever be used.

I often ask myself the question "How do you wreck a viable outback industry that once stood as a beacon for innovation, employment and industry?" I'd say the best way to do that is what's happened, is to take away water rights at the height of record droughts.

That's what happened here on the Barwon-Darling. Then the Government's broken their promise on signed agreements we've had with them, taken away beneficial components of a previously signed agreement, assisted the Commonwealth to buy back further water, removed crucial parts of a beneficial licensing regime and weakened the industry to the point that it can be easily ignored. That's what's happened here on the Barwon-Darling. Mr Chairman, I believe I've probably used up 90 seconds, but I could go on.

The CHAIR: Thank you to both groups for your opening statements. We will now move to questions from the Committee. Before we begin questions, I wish to inform witnesses that you may wish to take a question on notice and provide the Committee with an answer in writing. If there is something you think you can provide a bit more granular data or a bit of a richer answer on by taking it away and working on it, or if you don't have a voice today, all of those are good reasons for taking a question on notice.

I will ask the first question, and I am going to ask my standard question because I want to get it on *Hansard* each time. Can anyone who is a witness at the moment tell me about how much water has been recovered through existing policy measures, including floodplain harvesting? That would include valley flow targets, a low-water trigger of 1.95 gigalitres active at Menindee, and the June 2020 Barwon-Darling water sharing plan rule changes that Mr Cole just referred to. What's the total quantum of water that has been recovered through existing measures prior to buying anything back?

TOM GREEN: I think, Mr Chair, as you've heard from other witnesses, no-one has a specific number. But our understanding is that New South Wales, under the National Water Initiative, signed up to keep a check of that. That work has never been completed by the department—that is our understanding—but it would be a fantastic number to know. I know some of our member organisations do have contractors, if you like—consultants—trying to look into it, but it's a huge challenge.

IAN COLE: Mr Butler, I can give you a gross number on the Barwon-Darling. As I said, we started with 523 GL as the licensed volume. After the cap, the SDL reforms and the buybacks, we're back to about 150 GL, which makes the cutbacks 373 GL on the Barwon-Darling. You mentioned the changes that were made in the most recent Barwon-Darling water sharing plan. They are minimal compared to 373 GL, but they add to that 373 GL and make things harder for us.

Mr STEPHEN BALI: Just going back to your initial presentation, you were talking about the State Government actions and that we're going beyond the Basin targets. Can you explore that a bit further? How much more are we taking out, and why do you feel we're doing that?

TOM GREEN: If we step back and have a look, and we say the Basin plan was implemented to reduce extraction so that we get down to the SDL limits, we've achieved that. All valleys are compliant to the SDL or are under the SDL limits. What we see now is this policy creep on top of that erosion of reliability within licences

and other forms of work that the department has ongoing—which are concerning—around the rules changes. That may be minimum inflow sequences. I know it isn't Government policy, but it may be some of the work that the department is doing around connectivity.

As Mr Cole said, there are these incremental steps in various water sharing plans that keep taking little bits of water away. For what achievement we're not sure, because we've met the SDL requirements. Governments are still stuck in the mindset of "just add more water and we'll get more outcomes". However, we now see that the Murray-Darling Basin Authority and the Sustainable River Audit that came out recently have acknowledged that just adding more water isn't going to achieve the environmental outcomes on the ground that we want. We need to move beyond water to those complementary measures such as fish passage and invasive species management if we want to get those specific outcomes.

Mr STEPHEN BALI: I'm trying to understand how the system works. Right now, every person who extracts water has whatever this year's water allocation is. How does that change from year to year? I know it depends on how much water is flowing through and whether it's a drought. Being an economist and assuming away reality to work on one variable at a time, we have farm X. This year, it has Y amount of water allocated to it. How does that change from year to year? In the big years, do I get Y plus two and, in the bad years, Y minus one? Is Y the constant? Do we at least know that, technically? Then you just move subject to constraints? Or are you saying that Y can change all the time on a year-to-year basis? It's sounding to me that we're taking extra water out to do, as you say, the inflows and connectivity and all that stuff. Why would that impact me as a farmer if I'm not selling that water right? I still have access to what's required.

TOM GREEN: I will go to the basics. If I own a 1,000-megalitre licence, that has a reliability number underneath it, depending on the valley, since they all vary. If I use the Lachlan for instance, the last number we saw was around 40 per cent to 42 per cent reliable on the long-term average. In 42 per cent of years, I get 100 per cent or, on average, I get 42 per cent a year. It is that number that gets worked down. All of a sudden, that number becomes 40 or 39. It's the long-term average model number. It's the yield of the licence that we're referencing. The farmer still owns the licence, but it's yield and value on its ability to allocate water to you is decreased.

Mr STEPHEN BALI: When they're doing the buyback, they're going off the higher level and reducing it.

TOM GREEN: In terms of buybacks, that doesn't affect the reliability, because it is just buying shares at whatever the current reliability number is. But when you start changing the rules within the water sharing plans, you erode that reliability number or have the potential to.

MADELEINE HARTLEY: If I can pick up on that, the Chair's opening question is really important to that point because compensation frameworks in New South Wales are really reliant on percentages of water that have been taken out of the system and the impact on reliability that has had. Without the information transparently available, it's very difficult to calculate, as a water user or an advocacy body, how much water is coming out of any individual water resource and the impact that is having on reliability and, therefore, the compensation that water users may be entitled to. Understanding the reliability impact is quite critical to understanding what compensation may be open. Nothing can be separated.

Mr WARREN KIRBY: We're probably just going down a similar line, but how could environmental incomes be more holistically managed without relying on water regulatory reform?

MADELEINE HARTLEY: I think the MDBA's own work this year really answers that question quite well. It shows there are clear gaps in fish passage and other ways to enable the holistic environmental health of the river. We're dealing with a really different Basin now than we were 15 years ago when the original Basin Plan was implemented. The way that that's been achieved in the last 15 years has shown that we've achieved a key goal, which was the sustainable diversion limits. The Sustainable Rivers Audit that Tom referred to earlier shows that the key issues now with the health of the Basin are really about connectivity in terms of fish passage and other complementary measures, so it's really achieving not just an adding water outcome but a more holistic goal.

IAN COLE: If I might just jump in, there are a number of things that have been tried that have helped with environmental improvement on the Barwon-Darling and other rivers. Maybe a lot of the money that's being put into buybacks could be put into things like that, like improvements to the riparian zone of the river so that you do away with degradation of that fragile area that floods out when you get a good flow down the river so you're protecting the riparian zone. There are also things in the various regulated rivers like cold water pollution that can be worked on—and has been, but not sufficiently enough. As Dr Hartley said, fish habitat improvements, fish passage improvements—and certainly the big issue that the public is concerned about in communities that live on the river is the eradication of carp. That's a massive issue that would also impact on our water quality programs

because the carp have stirred up the mud of the river, they've destroyed fish habitat, they've taken away the weeds on the side of the river by undermining them and eating them.

The other thing we've got to do is accept, in unregulated streams especially, which I live on, the nature of the river. We basically have really good times and really bad times—feast and famine, drought and flood, high flows and lows—and we shouldn't interfere with that any further than we already have. Those things are good for the river. We know from the science of the river that the river likes to have a big drink during a flood, but it also has adapted to the dry times. The scientists will tell you that. We shouldn't be afraid of the fact that we sometimes do have droughts that stop the river from flowing. If you look at the Barwon-Darling, for example, there are many times before any development on the river took place when the river stopped flowing at Bourke, Wilcannia, Brewarrina, Louth and Tilpa. We need to understand the nature of the river and not try to change it into a European-style river or something else.

Mr WARREN KIRBY: By your own logic, that would remove irrigation from the river altogether.

IAN COLE: Sorry?

Mr WARREN KIRBY: I'm just saying, if we shouldn't be messing with the natural flow of river then, surely, we should just take away irrigation altogether?

IAN COLE: I said any further than what we already have. At the moment we've got big dams on the river that support cities and towns. We've got water being taken out for riparian purposes and for irrigation as well. These things are necessary things for our communities and our prosperity and our economy, and I don't think we're going to stop doing those things. What I'm saying is that we shouldn't interfere any further. What we need to do is get back to looking at what improvements we can make without spending these multimillion dollars on further buybacks that aren't really going to make much difference at all.

Mr WARREN KIRBY: Thank you for the clarification. This is a bit of a double-pronged one. We've heard a lot about the economic impacts that buybacks have and things like that. What is your opinion on how the Government should measure the economic impacts? Do you have any suggestions on better ways to make communities more resilient? That's for anyone who wants to answer that.

IAN COLE: It's very difficult without spending a lot of money. What I'd like to see is that the resources that are being put into buybacks, which are quite substantial, be put into having a look at where we are now. We should stop, pause right now and have a look at where we are and assess what the last 25 years of reform has done, how effective that has been and how we might use complementary measures—these measures that I've just spoken about—rather than buybacks to improve the river. As far as the economic situation is concerned, maybe we could then put some of that money into some sort of study. They're not expensive. We commissioned an economic report by a company called Hassall and Co back in 2001, just to have a look at where we were at that time on the Barwon-Darling. That was at a time before the major cuts and the big millennium drought of 2001 through to 2009.

What that report found was that the irrigation industry on the Darling River was responsible for $70 million of average annual agricultural output in the Berkshire—which was quite a lot for the Berkshire at that time—and also over 700 equivalent full-time jobs in a very small population. It was a very important part of our community. It made up 45 per cent of total employment in the shire, 70 per cent of total on-farm employment and 64 per cent of the value of the shire's agricultural output. It was very substantial. That's no longer the case because we've had the combined effect of drought and water cuts, and that has forced big change. It has forced significant losses in the local cotton industry and the horticultural production in our area.

The horticultural industry was basically decimated by both those drivers, with farmers abandoning about 200 hectares of table grapes and about 320 hectares of citrus. They've all gone, as has the only commercially run plant nursery in the shire. That has been closed as well. At that time, there were severe reductions in farm valuations and business equity. Some irrigation farmers were bankrupted, placed into receivership and had to walk off their farms. Irrigation-related businesses left or experienced significant business downturns. I know that Tony Thompson spoke about this when you were in Bourke. It led to massive job losses in he local irrigation-dependent community, and the population of Bourke since that time has dropped by about 40 per cent. I know where they came from as well—they came out of the irrigation industry and irrigation businesses.

We do have some benchmarks out there. It'd be good for the Government to look at those benchmarks that have already been established in each valley. The MDBA has also done these sort of studies. Then, going forward, we should build on those studies and look at where are we now? We've done all this stuff. We've bought all this water back. We've confiscated a whole lot more, and we've got it in the environmental side of the equation. What changes and improvements have happened?

We know those improvements are substantial. How can we add to that by these complementary measures, which make a whole lot of sense at the moment?

MADELEINE HARTLEY: Something to highlight in Ian's response is that, in a lot of cases, the granular data is missing. The local impacts of a lot of these can be masked. If we have that baseline data from 20 years ago, it's really time that we re-establish it, see what's happening at that local level and do those really localised socio-economic impact studies.

Mr JUSTIN CLANCY: Mr Green, I just want to go back to your opening statement. What caught me was that you mentioned that you're a generational farmer. Something we haven't really probed too much is the change in the nature of farming and the growth or movement away from smaller holdings to generally large corporate properties. It would be hard to have data on this, but has water reform contributed to a move away from family properties? Does that have an impact on our communities? From a policy perspective, should we be encouraging family farms as opposed to large properties? Coming off the land myself, your opening comments had me interested. Is it harder for family farms or smaller holdings to cope with the changes in water reform, rather than being a large property, a large holding, and having capacity to absorb some of those reforms? I'm interested in your thoughts.

TOM GREEN: There are two points I'd make. I think it's a long-held Government policy that we operate in a free market. Australian farmers and society have said you've got to drive to efficiency. In a lot of cases, that has meant to increase size, scale and productivity. Potentially in terms of water reform, it has certainly—I know previous New South Wales farmers that appeared were asked questions around has that reduced intensity in production systems on those small farms in some cases. Water reform definitely, I think, has done that, because they don't have the scale to do it. As a broad statement, especially water reform, the regulation and the cost surrounding it is a burden on the smaller producers, because they don't have the efficiencies of scale and the staff to deal with it. That's across the breadth of all governments in the regulatory space that all businesses, but also irrigators and water users have to operate within.

IAN COLE: It's absolutely true what Tom says. One of the things I put in my written submission that I didn't get to was that 20 years ago Barwon-Darling Water was warning that if all these reforms and buybacks went ahead, you'd impact the smaller users so much that that they'd all disappear and be gobbled up by the major players on the Barwon-Darling. Basically that is exactly what has happened in the last 20 years. There are very few small farmers still operating, and where they are, they're under a lot of pressure.

MADELEINE HARTLEY: I would also just add to that, if I may. When we talk about water reform, we're really talking about nearly 30 or more years of water reform in New South Wales alone. So it's a really longwinded process. We've been talking about reform fatigue for 20 of those years. I think that's something that we really need to take seriously now. In the New South Wales Irrigators Council's submission to this inquiry, we noted that there were 37 unfinished programs at a New South Wales state level. Since the Restoring Our Rivers Act, there have been 14 of those. In the last six months since our April submission this year, there have been another seven in New South Wales. We are at a point of continued reform, often without effective implementation. That must have a burden on the smaller farms but really on all farms in New South Wales. It is really difficult for all farming families and corporates to really survive the constant reform and to continue to comply with the increased regulatory burden that these reforms place upon them. It's not something that is ever really thoroughly examined as a cause of a lot of stress in these family farms but also the communities that depend on them.

Mr JUSTIN CLANCY: Can I just lean into that and ask a little bit further about that water reform fatigue that you spoke of. Anecdotally, I suppose, communities like Deniliquin and Griffith and Leeton have been through so much that you wouldn't blame them for throwing their arms up in the air, I suppose. You must literally see that playing out in the community, in terms of just that sense of "Here we go again."

MADELEINE HARTLEY: Without a doubt. This is not something that is isolated to water either, which is something we need to remember. The farming families, corporates and communities are dealing with a lot of land use changes throughout a lot of different frameworks. Water is one of them. These 37 unfinished programs in New South Wales relating to water—New South Wales Irrigators' Council doesn't have that data on the other land work frameworks that are affecting them. But there are others. So it's a snowballing effect.

Mr JUSTIN CLANCY: You touched on those incomplete projects. A previous witness had raised the comment that, with regards to the SDLAM projects, if they weren't completed by, say, the audit date, just cut them off at that point. What do you think the response, I suppose, in terms of—what is, firstly, your thoughts in that regard? And then, secondly, how would you think community would respond if these SDLAM projects were not carried through at this point in time?

MADELEINE HARTLEY: Just to correct potential misunderstanding, the programs I'm referring to are mostly not SDLAM projects, which, I think, is actually really important to point out. We have often two different streams running at the same time. We've got the Federal race and the state race. Not all of the state reform projects relate to the Basin, but they are all affecting the same areas. I might rest my voice and ask Tom to answer.

TOM GREEN: I'll respond in terms of the SDLAM. There is a high level of concern that a lot of those projects aren't going to be completed, obviously. We would think that we need to be practical in this space and that that deadline will need to be extended and put into a manageable time frame. It's not the people out on the ground that have not done the work and got these projects up; it's governments. I think Mr Cole said that New South Wales, especially, needs to take a pause. Let's take a breath, see where we're at and get practical working solutions in place so that we're not having these detrimental impacts, whether we're buying hundreds of gigalitres in particular Basins or changing rules ad hoc. We need to work out what we want to achieve, I think, because we've achieved SDL compliance. That was the original intent. Now we need a clear picture of what are we trying to achieve in environmental outcomes, and let's achieve it in a holistic, managed way that's actually going to get there, not the easy ticks of just buying water.

Mr STEPHEN BALI: Because sometimes irrigators are the ones who are blamed for all of the problems, in hindsight, what do you think are probably one or two of the key problems that irrigation has caused over the years? On those top one or top two reasons, what have you done to combat them so they don't become a problem in the future, if that makes sense?

MADELEINE HARTLEY: From my perspective, I'd say that certainly there was an overallocation problem in the '80s and '90s across New South Wales and the Basin. I think that's a fact. But, through a lot of hard work, a lot of reductions in entitlements and a lot of impacts to reliability that were not compensated a lot of the time, irrigators have given back a lot of that water. I think one in three litres have now gone back to the environment, and the environment is by far now one of the greater users of water in the Basin. We have done the hard yards over 30-plus years across the Basin. I think it's something that is not widely acknowledged—how efficient irrigation in New South Wales and Australia really is and that we are leading the world in efficiency practices in cotton, rice and other irrigated products.

So it is actually good that these products are grown and irrigated in New South Wales and in the Basin. We are the right place to grow them. We feed and clothe a lot of the world on our irrigated output, and our agricultural output provides quite a lot of GDP into the nation. So I think, to answer your question, we've done a lot of hard work over many years, and we're at a point now where it's reassuring to have the MDBA at a Federal level recognise that just adding water isn't going to solve the problems we're now up against and that it's really a focus on complementary measures that will shift the health of the environment.

TOM GREEN: The only comment I would make is what haven't we done? Hindsight would say we thought government agencies probably should do it, but I don't think industry has explained itself well in terms of the water sharing plan limits. If we look at it statewide or Basin-wide, it is 28 per cent diversions of average annual flows, and 72 per cent is environment. Industry is only a small part, and that varies on valleys. In Barwon-Darling, it would be well over 90 per cent of the average annual flow of water that goes to the environment. Lachlan takes about 18 per cent or 19 per cent of average flow. From industry, we probably haven't combatted the misconception. Yes, water is complex. It has been made very complex by many governments and tiers of government, but we probably haven't cut through on that. We're actually only a small portion of the flow. We're not taking the whole river.

IAN COLE: In answer to that question, I'd say exactly the same things as Mr Green and Dr Hartley. I'd also add that many people believe that much of the water is taken by irrigators. They even say that for the Barwon-Darling, where we use, if we're lucky, an average of 4 per cent of total flows. When you look at the years that we've got the really big flows, you can't measure the difference in the river between the river without any irrigation and then without all of our irrigation. It just doesn't compute. There's so much water flowing down the river. We're talking about several Sydney Harbours coming down in major floods. We've had some of those recently, notably in 2022. We've got a good story to tell in that our impact on the river is a lot less than it has ever been, since the major developments in the '70s, '80s and '90s. But we haven't done enough to promote that in the mind of the public. Also, the agencies have a role to play in this as well, in getting information out there about the fact that this amount of water is being bought back and this is the environmental benefit.

The CHAIR: That's right on time. Well done. Were you watching the clock, Mr Cole? I thank you all for appearing before the Committee today. You will be provided with a copy of the transcript of today's proceedings for corrections. Committee staff will also email any questions that you have taken on notice from today and any supplementary questions from the Committee. We kindly ask that you return the answers within seven business

days of receiving those questions. I thank you all very much again for your time and for the information you've shared with the Committee.

(The witnesses withdrew.)

(Luncheon adjournment)

Ms KAREN HUTCHINSON, Chief Executive Officer, Watertrust Australia, before the Committee via videoconference, affirmed and examined

The CHAIR: I welcome our next witness. Thank you for appearing before the Committee today to give evidence. Please note that the Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social and public engagement purposes on the Legislative Assembly's social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos and videos taken. Please also note that only Committee staff and media organisations are allowed to take photos and videos. If you would like a copy of these photos, please contact the Committee staff during the break. Ms Hutchinson, can you please confirm that you've been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

KAREN HUTCHINSON: Yes, I can confirm that I have.

The CHAIR: Do you have any questions about any of that information?

KAREN HUTCHINSON: No, I don't, thank you.

The CHAIR: Would you like to make a short opening statement before we begin the questions? In the interests of time, we usually ask that we keep it to 90 seconds. We'll see how we go. It never really works, but sometimes you get lucky.

KAREN HUTCHINSON: A very short one to let you know that the reason that Watertrust is interested in this inquiry is because it's so in line with our mission. Watertrust is created by philanthropy to actually help make good policy. I'm not here today to tell you what's right or wrong with the restoring our rivers bill. I'm here today to talk with you about how policymaking could be better.

The CHAIR: Excellent. Thank you very much for that opening statement. Before we begin the questions, I wish to inform you that you may wish to take a question on notice and provide the Committee with an answer in writing. That's totally up to you, Ms Hutchinson. If you see something you think you might be able to take away and come up with some more detail or granular information about that would help the Committee, you can just let us know you want to take it on notice. As the Chair, I'll get started on the questions with a pretty easy one. How could the New South Wales Government improve its consultation with stakeholders when it comes to water policy? That's part of your submission at page 2.

KAREN HUTCHINSON: Very much that's around the process that the New South Wales Government takes. What we've learned in the work that we've done and through others is that deliberation is a really key component to any policy process. What we've heard in the research that we've done and the work is that communities particularly—and I include industry—feel really frustrated about not being part of the policy process. Fairness is used by all stakeholders as, effectively, I'll call it a weapon. But I don't mean that in the sense of a weapon—as a way of undermining good policy because process hasn't been followed well.

In the work that we've done, we've found that if you can involve communities and stakeholders that have an interest in the outcomes of policy early, if you can enable them to put fairness on the table so that trade-offs are understood and discussed, and if you can make evidence available to them in a way that's both accessible and that they can interrogate and add to it and bring knowledge to the table, then good policy is more likely to be made. Outcomes are created that even the policymakers haven't thought of, and you will get something that's fairer, better and more enduring.

Mr WARREN KIRBY: I want to continue with that line, especially given your opening statement. What programs do you think have been most effective in supporting impacted communities and why?

KAREN HUTCHINSON: Mr Kirby, I probably don't want to go to the programs that have been most supportive of impacted communities, because to me that is getting down to what has been successful and why. I'd rather speak to where policy has been implemented well, it has been because communities have been part of—I hesitate to use the word "co-design" because it's become such a buzzword, but they have been actively involved and feel respected by the process. Where they've failed is where something has come in from top down or where the communities haven't quite understood the trade-offs they're making when they ask for something.

Mr WARREN KIRBY: Is it okay if you just unpack that a little bit further? We've heard that stakeholders from all sides are not particularly happy with elements. Some are saying this hasn't gone far enough. Some are saying it's going way too far. It is of great concern to government about how to better engage. We've asked many, many stakeholders about that question, and you seem to be quite keen on opening that up. I'd really like to hear a bit more about that.

KAREN HUTCHINSON: I hope that this answers the question. It's actually about enabling all of the stakeholders together to understand the trade-offs that are being made for a good outcome. The experience that we've had shows that everybody at the table wants a good outcome. They just have different views about what good is. They don't necessarily understand the perspectives of each other. The work that we've seen in deliberative processes shows that if you enable people that are impacted by change to understand the impacts of the change on others, not just themselves, they will shift their perspective to something that they can live with. They can move to a place that's not just about what I want or what I'm giving up, because all of these things come with benefits and burdens, but they can land in a place where they can accept that this is the right outcome, based on the trade-offs that need to be made across the stakeholders. That process hasn't been run in this restoring our rivers debate.

Mr JUSTIN CLANCY: I'd love for you to continue this conversation, out of what you've just been saying there, Karen, as to what good is and how we find that common ground. There's obviously conjecture. At a fundamental level, we all want to see healthy river systems and we all want to see healthy communities. For some, the proxy for a healthy river is water returned to environment. But even with that, we've seen varying testimony as to whether or not water recovery is actually good, which is difficult when there's not even perhaps necessarily peer-based or scientific evidence to demonstrate that. There's an assumption that water recovery has been important to driving some positive outcomes and restoring connectivity in the river system. I think one of the previous witnesses put it quite well, saying more of the same doesn't necessarily drive further positive outcomes. It's about how do we all agree what that good part is before we start talking about the trade-offs.

KAREN HUTCHINSON: Perhaps I can give you an example that might help. I'll choose an international example, actually, but it relates to water, and I'm doing that simply because we are doing some work across Australia at the moment. Rather than going to those projects, I'd much rather speak of the evidence base overseas, and this one relates specifically to British Columbia, where they had some very similar challenges to us, maybe not as extreme as our Basin Plan but, certainly, contested stakeholders and a need to redo a series of water allocation plans—so, familiar to us—First Nations' rights, recreational users, upstream, downstream, hydro, the whole gambit of that.

It took two years, and it took a process and a consistent process of building respect and relationship amongst those that were impacted. It used evidence. It enabled the people that were involved to be able to ask for information and interrogate the technical knowledge, as well as ask for new science and new information. It brought in the wisdom of the First Nations Elders. Importantly, those that were making the decision—the hydro in this case, because that's who owned the allocation plans—were at the table to hear. The delivery process went for a period of time, and I think they were doing something like 30 different allocation plans across British Columbia. In all but one of those cases, they reached consensus on an outcome to go forward. And, in all of the cases, it was not what they expected at the start. The solution was novel.

To your point about what's common ground—it's probably not what I think or what you think. It's probably what we can come to together when we've understood what's actually at stake and what the trade-offs need to be. We've been doing some work at Watertrust in a much smaller version of that but equally as important. Even in a pilot process, what we've seen is that, when you bring contested stakeholders together, give them the information and allow them to ask questions of each other and the information, they go straight to trying to solve solutions for each other and not just hold their own corners in the ground. So the common ground is what you get to together. It's not necessarily the one who shouts the loudest.

Mr JUSTIN CLANCY: I'm looking at the submission. With Watertrust, your organisation, firstly, tell us a little bit of the backstory, how long Watertrust has been. At any point, has a government or an agency actually gone, "Actually, could we catch up with you guys and have a bit of a conversation about how we can drive this forward"?

KAREN HUTCHINSON: Let me tell you a little bit about how long we've been going and how we were formed. We were formed when some philanthropists—the Potter foundation, the Myer Foundation—got together in around 2017 and said, "This is not good enough for Australia. Surely, there's a role for philanthropy in this", the water mess that was happening. I suspect there was a Minister's effigy being burnt and thrown down the river at the time. They put a lot of work into some research to decide whether or not we needed another think tank for the country, or something else.

They came back with something else, and they came back and said, "We don't need a think tank. What we need is a centre for water policy that is about process, that is about how you do this better, that can bring trust back into the water policy process for our decision-makers and our knowledge holders and empower communities to be part of the solution." So those two philanthropists got together and got a coalition of philanthropy, up to 16 philanthropists, to fund Watertrust for up to 10 years. We're at year 4½ of that. That gives us the opportunity to

have untied funding from government and industry and community and so to be able to be impartial and independent in a process.

Watertrust has been set up to have people that are based in place, that understand water and understand good process and that can build and leverage off relationships. To your question about has government actually invited us in, yes is the short answer to that. As a systems change organisation, year four is very early for us. But we've been actively working with members of the South Australian department, I'll say, rather than government. But we have also been working with the Commonwealth Government on issues that go across state governments at the moment, and we would love to be more involved in New South Wales and some of the challenges of the New South Wales Government as it relates to water and catchment issues.

Mr STEPHEN BALI: This is probably more towards the consultation process because, if I picked up what you were talking about before, you were saying the consultation was good. What we've heard is that, obviously, this has been going for many years and many inquiries, yet there's just another level, and people are probably inquiry fatigued. Once we do our findings, there are other inquiries that the Feds are still doing. This will be ongoing in nature for many years to come. How do you see a structure heading forward? How do we report back to the community? Should there be feedback sessions from time to time or annually to give people feedback? How do you see good community engagement moving forward once the inquiry comes down with its results and all the challenges we have in the Basin?

KAREN HUTCHINSON: I'm glad you asked. I was at a forum recently which was talking about inquiry fatigue, and the response that came back was that it's actually not inquiry fatigue; it's "not being listened to" fatigue. People who are part of a process are actively interested in being part of that process and seeing it through. People who don't feel they're being heard or listened to, or who can't see how they're making a difference get very frustrated with the process. To answer your question, it's not about more feedback. Potentially, it's actually about more connection. I think there are potentially two parts to that, and the area of interest to Watertrust is what I would call community governance and community governance structures.

It's how do you have strong communities that are knowledgeable, that have good access to credible information, that know what's what and that are connected to decision-makers at their local catchment or community scale so that they're ready before the inquiry comes? What we've learned from research and experience is that the knowledge rests in the community. The community is the one that stays and endures beyond this plan, beyond this process and into the next process, and it wants a good outcome. Decision-makers, government agencies and staff will come and go. If you can build that strength at the community level where you've got good governance and good structures that enable people to build on information, be part of things, have the go-tos at their decision-maker level—the person they can call and understand the latest hydrograph, what it means, what's happening here and what's happening there—and keep that going beyond an inquiry, then we'll have success because the power of communities to look after their patch but connect to others is huge.

It was described to me recently as the idea of making "fizzy" communities. You want the community to be empowered and have the knowledge that they need to be able to actively and constructively engage with a deliberative process, which is not what we would think about as a loud community being an advocate because it's gone so far that they're upset. It's actually a community that's engaging all the way through and understanding and able to translate why certain trade-offs have been made and what opportunities there are for their community to move forward.

The CHAIR: Ms Hutchinson, I know that you've provided an international example from British Columbia where things have gone well. I'm going to take a couple of earlier questions and make them into one that might tie you in a bit more to domestic examples. Can you identify specific community adjustment programs that represent the type of community consultation that you outlined in your submission? Obviously, I'm talking about preferably within New South Wales.

KAREN HUTCHINSON: I'm not aware of a community adjustment program that has done that. I would struggle with that. Having said that, I would just reiterate that the role of Watertrust is not to assess the adjustment programs or their value; it's actually in looking at what good might look like from a process.

The CHAIR: That's what I thought. I asked you because it was about consultation. It wasn't actually about the community adjustment program. It was about the consultation for the community adjustment program.

KAREN HUTCHINSON: I understand but, having looked at some of the submissions that you've received, I can see that there is a range of people who do not view whatever has happened as good. That says to me that the positions are still very contested, and people feel that, potentially, they're not being heard.

The CHAIR: I have a standard question that I've been putting to everyone, and I expect your answer will be that it's not something that you guys look into, but I want to get it on record. In terms of the adjustment programs

that have occurred to date with policy changes and rules-based change—I point to the floodplain harvesting regulation, the low-water trigger at Menindee, the valley flow targets, the Barwon-Darling water sharing plan rule changes of active management, the resumption of flows rule and IDECs or IDELs—how much water do you think that the policy changes that have occurred over the past 10 years or so have actually returned to the river?

What's the impact? What's the quantum of water that has actually been returned to the system?

KAREN HUTCHINSON: I don't have an answer for you, as I'm sure you'd expect.

The CHAIR: I didn't expect you did. I just wanted to get it in *Hansard* that no-one has an answer to that.

Mr JUSTIN CLANCY: You mentioned the effigy burning before. To that point, once it's at that stage—and the reality is that, for some communities, it has been through that stage—what steps do you take from there, Karen?

KAREN HUTCHINSON: You have to start with rebuilding trust, Justin. You have to go right back. We always talk about bringing everybody to the table. What we don't talk about is that it's not always everybody at the same table at the same time. But you certainly need people to be connected and respected. When things get to that level, it's because the community feels aggrieved, and there are certain processes that you can use to deal with people when they feel aggrieved. But you've got to start by re-establishing trust, enabling them to feel heard and just rebalancing. Empowering is a big word; everyone is using that as well. But I come back to the idea that if you can build good community governance structures and connect the community with the decision-makers at the beginning, you can make a difference. It doesn't take a lot for a community to understand the trade-offs that are being made, and nobody's going to ask for everything they want, at all costs. They're all going to want to have a good outcome and move on.

It's a complex question. It's not as easy as just getting it right or getting the right person there. What we've found is it always starts with building relationships on the ground with the people who need to meet each other and share knowledge. It then starts with a process of decision-makers coming in. You can then start to build understanding and knowledge. When they feel heard, and they're part of the process all the way through, you'll get to a workable solution that can be implemented. Sometimes the challenge is around the agency staff having the strength and support to continue to come back, listen, engage and respond, as opposed to moving to a deadline for a political or other outcome.

The CHAIR: Ms Hutchinson, I may be a bit self-indulgent in asking this, but in this term I moved a bill about community consultation guidelines, which involved the Premier's Department developing a consultation guide articulating the minimum standards for what a government agency, for example, would need to do to say that they had consulted with the community. Do you see that assisting in improving the standard of consultation and engagement, and therefore the levels of trust that we see?

KAREN HUTCHINSON: I absolutely think that it's a top-down and a bottom-up approach, if that's an answer to your question, Mr Butler. If governments can require a minimum level of—it has to go beyond consultation to be effective. Consultation is a very broad word. It's actually around ensuring deliberative process and good process that gets trade-offs and opportunities on the table. But, yes, that would be helpful, as would building confidence, knowledge and opportunities at community level.

The CHAIR: Ms Hutchinson, I thank you for appearing before the Committee today. You will be provided with a copy of the transcript of today's proceedings for corrections. Committee staff will also email any questions taken on notice from today and any supplementary questions from the Committee. We kindly ask that you return the answers within seven business days of receiving those questions. Thank you for your time and for sharing your knowledge with us, Ms Hutchinson. It has been very helpful.

(The witness withdrew.)

Ms BOBBIE PANNOWITZ, President, Leeton Business Chamber, before the Committee via videoconference, affirmed and examined

Mr MICHAEL DRUM, Executive Officer, Macquarie River Food and Fibre, before the Committee via videoconference, sworn and examined

The CHAIR: I welcome our next witnesses. Thank you both for appearing before the Committee today to give evidence. Please note that the Committee staff will be taking photos and videos during the hearing. The photos and videos may be used for social media and public engagement purposes on the Legislative Assembly social media pages, websites and public communication materials. Please inform the Committee staff if you object to having photos or videos taken. Please also note that only the Committee staff and media organisations are permitted to take photos and videos. If you would like a copy of these photos, please contact the Committee staff during a break. Can you both please confirm you've been issued with the Committee's terms of reference and information about the standing orders that relate to the examination of witnesses?

BOBBIE PANNOWITZ: Yes, I have.

MICHAEL DRUM: Yes.

The CHAIR: Do either of you have any questions about any of that information?

BOBBIE PANNOWITZ: No.

MICHAEL DRUM: No.

The CHAIR: Would either or both of you like to make a short opening statement before we begin the questions? We normally try to keep that to 90 seconds. It rarely works, but we can see how we go. As the spirit moves you, whoever would like to go first.

MICHAEL DRUM: Mine will be very short. Since the separation of land and water, the politics of water policy has become more complex. As we move forward, those policy changes and the competition on where water should be used becomes ever so much more complex. In amongst that changing policy environment, I think we need to better acknowledge the existing use of water that supports not only the environment but towns and communities and the existing level of investment that has been made by the Commonwealth, the State and, yes, private commercial users. If we continue to make policy changes, we need to start to better recognise those property rights as we move forward. I'll leave it at that, Roy.

BOBBIE PANNOWITZ: I am the newly elected president of the Leeton Business Chamber. I'm also a lawyer working in the Riverina. I work in property law and have a particular interest in water law. Located in Leeton, we have a population of around 11,000 people. In 2023-24 manufacturing was our largest employer, with approximately 835 jobs. This was followed by education and training, and our third employer was agriculture. These three industries make up 18 per cent of our employees across our LGA. That's one in five people working in areas that directly relate to or rely on farming and water. Closely followed behind is retail trade. Retailers rely on those industries and those jobs for those people to come and spend money in their stores. Whilst these figures sound good, they used to be better.

When we compare these figures back to the introduction of the Basin Plan, we see a huge loss in jobs and the flow-on impact that has had. In 13 years, we've lost 274 manufacturing jobs and 140 jobs in retail. For every two jobs lost in manufacturing, we lose one to retail. Those people are no longer earning an income and spending money in those retail stores and so on. The biggest issue for us is the flow-on impact that we see at our local level.

This, however, has been death by a thousand cuts. It's not just a buyback issue for our community. There's no denying that buybacks hurt our community, but it is compounded by New South Wales Government rules-based changes in program after program which reduce water allocations and place uncertainty on farming, value-added manufacturing and eventually retailers. Further programs seek to impact on landholder rights. Today, the Murrumbidgee general security allocation sits at 32 per cent. We're seeing a report of a third of rice that's going to go in, which means less jobs and less money spent in our stores in town.

Initially when I started preparing for this inquiry, I focused on the social and economic impacts of water recovery both broadly and on Leeton, including the effectiveness of programs of past reform and options to improve further programs. The Restoring Our Rivers Act and the Basin Ministers' agreement have significantly altered the socio-economic neutrality test, undermining its ability to measure local impact transparently. Initially, this test, outlined in the intergovernmental agreement, was meant to ensure that water recovery did not harm communities. However, recent changes eroded these protections. Previously, neutrality was achieved by direct participation of water users, assuming their reinvestment into local economies. Whilst this wasn't perfect, it at

least had a requirement to achieve neutrality. But today we see major investment firms dominate water sales and none of those proceeds go to our communities. The Commonwealth's new approach prioritises only the consideration of socio-economic impact and minimising—rather than ensuring—neutrality.

This policy shift has had a tangible impact. Less water in the consumptive pool means fewer farming families, lost jobs, shrinking businesses and reduced local spending. Between '23 and '24, from the time that this Act came into play, we saw 20 businesses close down in Leeton in one year. We also saw a reported $95 million loss in gross regional product. Our local businesses have found it really hard to pivot and keep up with the change. They're not supported, they don't have the information, and they don't know how they're going to keep going. We've seen businesses who have said they haven't drawn wages for years on end, and some businesses who used to employ five staff no longer can afford to employ any. Attempts to offset these losses have come from programs, like the ones that are included in the terms of reference. We've intended to support communities facing water reduction, but they have failed to hit their target.

Leeton did not receive any funding under the $200 million allocated to assist these communities, and we only saw two local projects in the second lot of funding. None of these funds go to the places they need to. We see that ineligibility time and time again for the places that are hurting, from water buybacks and loss allocation, and what we see is really upset people. The idea that these adjustment programs can offset these losses is deeply flawed. Water leaving a community has irreversible consequences at more than an economic and social level. We must stop blindly pursuing a number, a target, and critically assess and strategically plan for the future. I would also like to add that I was excited to see the expanded terms of reference, which included the impact of New South Wales water reforms impacting allocations and landholder rights. Whilst I haven't prepared a detailed introduction in relation to this, I can definitely speak to it in relation to third-party impacts on bores, declarations of wetland and the Reconnecting River Country Program, the acquisition of inundation easements and the further uncertainty that this is having in our community.

The CHAIR: We'll move to questions, and I've just got to go back to the page I'm meant to be on. The questions that we've got, the suggested questions the Committee has, were actually designed for Leeton Business Chamber. Keeping in mind that Mr Drum is EO of an irrigation group, Macquarie River Food and Fibre, you can probably throw some stuff in there that's more towards the technical end of water users and, I suppose, the impact on water users, as well. How could the New South Wales Government improve the design and focus of funding that is designed to address the negative impacts of buybacks? I suppose you can reference previous examples there of adjustment programs and what would need to happen into the future to make adjustment programs more useful.

BOBBIE PANNOWITZ: I think, if you look at some of the terms, some of the guidelines that have been developed and what they were aiming to achieve, if we go back—they say future economic development through development of non-technical skills, business development, risk management, strategic planning, planning, helping people to pivot and change and keep up with a changing climate, an economic climate as well, skills building, capability development, making sure that the money is designed to help. We've seen that the Sustainable Communities fund—those guidelines have fairly clear ineligibility criteria, including that businesses whose primary operation is excluded from applying for funding is retail, localised trade, professional services. That's where our community hurts. And they are expressly excluded from being able to apply for funding.

The CHAIR: Mr Drum, would you like to make a contribution to the same question?

MICHAEL DRUM: No. I agree with all of that. I think it's a difficult situation because, to be honest with you, there's a dichotomy that exists between the northern and southern Basin, and I agree with everything that was just said in terms of those issues that exist in the southern Basin, for sure.

Mr JUSTIN CLANCY: Bobbie, you mentioned, I think, a $95 million reduction in the GRP for the Leeton region. I'm just thinking through how that looks compared to other like communities, perhaps outside of the Basin. I'm thinking our conditions down here—obviously, we've had dry conditions. That might have impacted a little bit. But that's certainly a significant change for your community in the space of 12 months. How much of that can we attribute to, actually, the uncertainty that is returning around water, in regards to buybacks?

BOBBIE PANNOWITZ: I don't have a comparison to what's happening in other communities around me. I saw that number, and it was terrifying to me and leads to—that underlying fear of uncertainty is that that number's going the wrong way, certainly, for our community. How can we get some help to come out and turn that around? What can we do in those guidelines, those availabilities for funding to really helping where it needs to go? If we go into a downturn, we're going into a dry time. Our local manufacturing can go from two shifts to one shift, from 12-hour shifts to eight-hour shifts. Those people now—where do they go for jobs? How do we get them being productive members of the community and keeping them interested and staying here so they don't move away?

When those families move away, we lose teachers and we lose nurses. It's just the flow-on effect. Our shops close down. I don't have the numbers for the comparison, but I can certainly see, locally, that impact.

Mr JUSTIN CLANCY: For both of you I suppose, I have two further questions to touch on. One, previous witnesses today touched on reform fatigue and the impact. I'd be interested to get an understanding of how you see that from your community. Earlier witnesses were saying that perhaps the negative economic impact is overstated in economic reports. My sense is that there's a different feel to that when you're actually within your community, but I'd welcome your thoughts on that as well.

BOBBIE PANNOWITZ: Absolutely. I think that all the time we see gross varied agricultural irrigated numbers rather than regional product numbers. What that means—not just in relation to irrigated agriculture but for our community as a whole—is that we tend to feel like it's reported that there's not a big change for us and that there isn't a big impact on our community but, in some of those figures that I've given you, you can see that we're definitely feeling it out here. The fatigue, I think, isn't so much about consultation. I think, previously, Karen said that it's the not being heard. It's continually talking and raising the issues, and those "What we heard" reports don't reflect what's actually being said.

MICHAEL DRUM: Justin, there are a couple of things I'd say to the commentary that you just made there. Water reform impacts investment. When I say investment, it impacts the balance sheets of farmers that largely support some of these communities. At the moment, we exist in a world where, at any given time, under rule changes, 3 per cent could be wiped off a balance sheet under a rule change without compensation. I don't know of a business in Australia that would cop the Government turning up and saying, "I'm going to take 3 per cent off you without compensating you." Similarly, I can't come and take 3 per cent off your land or your house without compensating you, yet that's the rule for water.

The other issue is that buybacks affect the market whether we like it or not. Buybacks and rule changes affect the water market. The water market is billions big. Unfortunately, it's grown to be that strong, so whenever the Government decides to become involved in terms of introducing water buybacks—and we're seeing down in the southern Basin, for example, people are exercising their property rights to sell because the Government's going to pay overs for the water. They're not going to sell it back into the consumptive pool that keeps it in those communities and keeps those communities in a productive sense. There's a real distortion when government policy starts to say, "We're going to buy water back," or "We're going to make rule changes that will recover water for the environment"—as we see in the northern Basin. It stifles the market because it scares it.

The communities that suffer are those, like in the southern Basin, where people exercise their property right to sell the water to the Government, and it doesn't come back in or there's not appropriate compensation to those communities for the water that is lost or the production that's lost or, like in the northern Basin, where we see that the water market is so strong that the Government can't afford to buy it back. They try to achieve it via rule changes. Then, all of a sudden, we've got a bigger issue because the trading of water that should be on the free and open market that was established and designed, doesn't take place the way it should. I can speak to the lived example in Warren, for example, which is in the northern Basin. There were three banks in Warren three years ago. There is no bank in Warren now. I'm not saying that's as a result wholly and solely of water policy, but I would say a large chunk of it is.

Reform fatigue is fatigue. Jobs like mine wouldn't exist if the Government wasn't continually changing the rules. Farmers—or small businesses and communities, for that matter—don't have the ability to keep up with the reform that is coming time and time again. They have to employ people like me to keep track of it. Once we've got to that point where communities have to employ people like me, then we've gone past the point of reasonableness in terms of fatigue about how much reform the Government is trying to push and how quickly it is trying to push it.

Reform is okay if it comes in pieces. It's not okay when it comes out like a fire hydrant because we know we've only got four years in politics to jam this through, so we're going to get as much through as we possibly can. In some instances, we're talking about large corporates. But those large corporates employ people who live on farm, who have families on farm, who go to school in towns and who rely on doctors. When those things start to get jeopardised, that's when towns and communities start to suffer. We cannot forget that, at the end of the day, whatever reform might be the flavour of the political day is impacting people and their families day in, day out.

Mr STEPHEN BALI: Thank you for your presentation. It's good getting a localised response and understanding how these reforms take place. I'd like to explore Leeton further, if you don't mind. I'm looking through some data. I'm not from Leeton; I'm from Western Sydney. Numbers say one thing, but your lived experience is important. When I look through, from the early 2000s to about 2007, the economy was about $800 million and started falling down to about $731 million. Then I noticed there's a fair bit of a dip from 2008 to 2017, where it was below $700 million each year—not too far below. It was between $680 million and

$700 million. It's a fairly flat—don't forget there's inflation in the meantime, and you're just flatlining. Between 2018 to 2024, it has increased to $734 million. In 2024 there was a slight drop.

Looking elsewhere, they describe your area of Leeton as a rich suburb compared to my poor little town, with a higher score indicating a wealthier, high-income, financially free population. I'm wondering how to reconcile what you're saying. There are obviously lots of towns that have been very much affected, but I'm still trying to work out your evidence. You were saying something about a $90 million drop. That doesn't seem to be coming through in the data that's available. Leeton is not financially booming or anything, but you're holding your own. There are changes and some differences in employment but, when I look at the council reports, there are new industrial parks opening up. What is the real picture in Leeton?

BOBBIE PANNOWITZ: We're constantly being asked to do better with less. We're innovators—we've got to change, we've got to pivot, we've got to keep up. New industry, like aquaculture, has increased around here. We have seen varying things happen to go away from those areas. Whilst I can give you numbers about those huge job losses, we've picked up in other areas in terms of some construction projects and building and areas like that. Steady is probably a good thing. Should we have increased?

Uncertainty, I think, is the biggest thing for us. Our retailers and our businesses tell us that they're so concerned about what's happening. We've had a lot of people come in from out of town—I think that's a good thing as well—which means that we can change and grow. But those numbers—I mean, they're not my numbers. I've got numbers from our local council as well. It's just a concern for our community, the reliance on water. It's a fear for us. This is why we're here.

Mr STEPHEN BALI: If I walk through my main street at Blacktown, there are now 16 shops that have closed up, and our economy in Blacktown is a $28 billion economy. As I usually joke, if my home town, as a local government area, were the Democratic People's Republic of Blacktown, we'd be larger than 70 nations. Everyone is being challenged. Retail is changing; there's a whole range. When I'm looking at the data, the population growth has been fairly stable. It's not a growth. It's around 11,480, and that was in 2021. In 2008 it was 11,457. It's pretty stable. You want a bit of population growth. For a government, every dollar is precious. We inherited $187 billion of debt. If we are going to help different communities, how do you see a balance of good programs to help Leeton, and what would that be?

MICHAEL DRUM: Can I just jump in there for a second. In a previous life I worked with a property developer, Stockland, and had quite a bit to do with Blacktown in the purchase and development of Marsden Park, which is now Leura. At the end of the day, Blacktown has gentrified quite significantly over the last 20 years, wouldn't you say? The level of investment in infrastructure that has gone into that suburb or into that community via upgrades of roads, access to public transport, access to the city, the property growth alone—

Mr STEPHEN BALI: I'd probably be happy to argue about that. I don't want to personalise it to Blacktown.

Mr WARREN KIRBY: This is really not a conversation you want to have with the person who's representing this area.

MICHAEL DRUM: I guess my point is that when we say that places like Leeton are rich compared to Blacktown, I'm not sure you're comparing—

Mr STEPHEN BALI: I'm just reading from the data.

MICHAEL DRUM: Yes, but I'm not sure you're comparing apples and oranges. You're certainly not comparing apples and oranges with the level of investment that goes into, say, a place like Blacktown versus Leeton. The zeroes that have gone into Blacktown—

Mr STEPHEN BALI: Sorry that I used Blacktown as an example, but I'm just trying to personalise it. I'll bring it back to the Murray-Darling. Every group and every council that we went to up and down the Murray-Darling, and if I look at it, probably Bourke and couple of the others I've seen as well, where there's more of the desperation that we need to invest and support communities where there has been a one-third drop in the population—I'm just trying to work out how we support Leeton in a way that other suburbs and other areas across the Murray-Darling probably need a little bit more support.

MICHAEL DRUM: Herein, I think, lies the issue. Sorry, Bobbie, I'm going to jump in on this. This is the dichotomy that exists in New South Wales, where there is a strong emphasis on the metropolitan area. Bobbie, correct me if I'm wrong, but in the regional communities, we see a divestment. Whether we like it or not, water and property and farming is a backbone. It has been that way for 200 years. Whether we like it or not, it still exists. Now, those places will gentrify eventually and they will change their use, like Bobbie said. They will have different employment opportunities. But that is not going to happen at the rapid pace that, say, happens in

Blacktown or Camden or other places. That's why when you take something away that is an employment generator, like water, that's where the support needs to come. We don't have, say, the Sydney regional airport, and we don't have the massive investment and the massive employment opportunities that come along with that. That is why Bobbie is saying that when you take away an employment generator like water, it needs to be supported with other Government programs.

Mr STEPHEN BALI: But the regions have been challenged over the years, where in certain areas their populations are either growing or going backwards. We've had academic studies earlier showing that water is only a small factor, almost insignificant, in the scheme of things, because of a whole range of other factors. With farm productivity increasing, less labour is required in that area so people need to change jobs. Small towns don't provide enough opportunity for the younger generations, so that's probably a bigger factor than water.

MICHAEL DRUM: It is, and I won't say that mechanisation hasn't changed some of that. It has, for sure. But where you limit the ability for those agricultural industries that use water to grow and divest, it doesn't matter whether they're using the water for almonds, fruit, cotton or whatever the case may be. If I limit power supply to your house, so you can only power two more rooms out of a four-bedroom house, you're going to say, "Well, my house is only worth, really, two-thirds of what it was." It's the same issue here. If you start to limit the ability of people to invest and grow in agriculture, which they should—Australia is a growing agricultural market, whether we like it or not, and the world is a growing taker of Australian agricultural products.

If you start to limit the ability of people to diversify using that amount of water, obviously things are going to shrink. I get that you say that communities will diversify and have other opportunities that come in, but realistically, in practice, they don't. That's not what happens. In some places, instead of a farm having 1,000 acres of irrigated agriculture, now it might only have 500. That's two less people. I think we need to be really careful in water policy that we don't start to try and compare metropolitan places to regional places. We certainly shouldn't be trying to compare them socio-economically, because that would be a real mistake. There are just not the same employment-generating opportunities. Let's take a look at Western Sydney. How big is that metropolitan airport that's going to support the whole of the Western Sydney corridor?

Mr STEPHEN BALI: We don't want to open up that debate because I don't think it will. Right now, no-one actually wants to land there. I want to keep it to the regions.

MICHAEL DRUM: If you don't think it will, we shouldn't have built it. The point is, that level of investment you're seeing in Western Sydney that is supporting a $5 million or $6 million population—which is great; nobody has an issue with that—

Mr STEPHEN BALI: Don't forget, a third of Australia's GDP is actually in Western Sydney, dare I say. We're paying enough taxes. As you know, working for Stockland, we pay our section 7.11 contributions, which you don't have to in the regional areas.

Mr WARREN KIRBY: I might add that my electorate of Riverstone is growing at the total population of Leeton annually.

Mr STEPHEN BALI: I don't want to compare. Sorry I mentioned the thing, but I just wanted to have a background.

MICHAEL DRUM: Yes, it was a bad comparison.

Mr STEPHEN BALI: Every regional area is asking for more and more money. I'm just simply saying, how do we prioritise and support Leeton versus Bourke or other areas?

MICHAEL DRUM: I'll put it to you as simply as this: Why is a job in Western Sydney worth more than a job in Leeton?

Mr STEPHEN BALI: No-one's saying that. I think you're misrepresenting what I'm saying. What you're saying, to put words into your mouth and to correct what I'm thinking, is that at the moment you want additional funding to go into Leeton. Every time something closes down, instead of people choosing to move, you're saying, "How do we keep people there?" In the end, it's up to people where they want to live, where they see opportunities, and towns grow or wither on the vine based on whatever employment and changes happen there. It's one thing asking for handouts, but what are the structural support mechanisms that we can give to Leeton that will actually build the future of the town?

MICHAEL DRUM: I don't think Leeton's asking for a handout. I think what Leeton's asking for is reasonable compensation where the Government steps in to change water policy that impacts the economic ability of the region. They're not asking for a handout.

The CHAIR: I might just jump in there. We are getting towards the end of time as well. If I distil it down, I think the question Mr Bali was going for is how do we prioritise regional communities that have been impacted by water policy? How do we say, "Well, this town is more in need than this town or more in pain than this town?" That's a discussion we can have. I think the bigger issue around talking about areas that are on the eastern side of the great divide—and I'm not trying to be contentious—is about the resilience of those economies and the diversification of those economies: massive industrial parks that employ thousands of people; a whole lot more people who earn money; and higher property prices, which is a double-edged sword. Depending if you bought recently or a long time ago, you might be wealthy or in a lot of debt. There are a lot of moving parts we could look at in terms of the difference between somewhere like Leeton and Western Sydney.

For the purpose of this inquiry, the question I distilled out of what Mr Bali was saying is we've got all these towns with need in regional New South Wales. Water policy changes that need based on what you pull out of that community. What I'm hearing from you, Michael, is it's not a handout. If you're pulling something out of a community that provides jobs and economic activity, what are you going to do to try and balance it up? If we pulled industry out of Western Sydney, which we're not going to do, what compensation package would we provide to make up for the jobs that are lost? I think that's where we're at with it, and there's no easy answer to that. That's why we're having an inquiry into water policy and the restoring our rivers Act to try and work out how we go forward from here. I suppose the discussion or the discourse is reflective of the complex and problematic nature of these kind of questions. I've got one more very quick question, but are there any questions from Mr Kirby, Mr Clancy or Mr Bali before we wrap up?

Mr WARREN KIRBY: Just a quick one, Chair, and I suspect it will have to be taken on notice. I'd be interested to know the amount of job losses that Leeton has experienced through technological advancements and productivity gains on farms versus those for any water initiatives.

BOBBIE PANNOWITZ: You're right. I will have to take that on notice.

The CHAIR: Mr Drum, I'm guessing you are happy to let Ms Pannowitz take that one, from Leeton.

MICHAEL DRUM: Yes.

The CHAIR: My question is really easy, and I imagine the answer will be really quick. There have been a number of changes in State and Federal water policy over the last six to 10 years. How much water has been recovered through existing rule changes? I'm talking about things like floodplain harvesting, where we've got valley flow targets; a low-water trigger at Menindee, which was meant to be 195 active—I've heard some other things more recently, but 195 active is the last I heard—the Barwon-Darling Water Sharing Plan rule changes, like IDECs, IDELs, active management and the resumption of flow rules, or the first flush rules; the purchase, even, of national parks, either with water entitlements or with watercourses running through them. How much water have we returned through existing decisions or initiatives of the State and Federal governments in the last six to 10 years do you think?

BOBBIE PANNOWITZ: I don't have that answer. But I think it'd be difficult.

MICHAEL DRUM: We're up around 2,870 or 2,850, I think, Roy, with the balance not recovered being under the 450 to be returned for environmental stuff. I think we've returned about 70 gigalitres there. A lot of that has just been over-recovered water along the way. I think the question that most industry would say is that we've reached the targets that the Murray-Darling Basin set. I think what is more questionable now is how the environmental managers are using that water and how they are being held to account for the asset they now have. I think that we're seeing some flaws in that system, particularly, for example, where the Commonwealth Environmental Water Holder has suspended the take of environmental water because they can't measure it properly. Our concern would be that, even though we've recovered all that water and it's great, are we using it to the extent that it should be and for the purpose that it should be?

The CHAIR: Fair question. Mr Drum, where I was going with that was more in regard to things like the Barwon-Darling water sharing plan rule changes and the floodplain harvesting regulation, which we know will substantially reduce the amount of water that is taken through floodplain harvesting—and when it is taken, as well, because obviously smaller events won't be declared flood events. What I'm concerned about is that the amount of water that is returned is not considered in that 2,850 that has been counted, because we don't have—

MICHAEL DRUM: No, it's not. This is where I go back to property rights, Roy. I think everybody can accept that if there's recovered water, it's recovered. But if we start changing rules that start to reduce access for people to their allocation—for the existing rights that they have—then we have to start to have a serious conversation about compensation. Nobody wants to see the water leave. By no means do we want to see these rule changes take place. But the New South Wales Government hasn't been able to accurately assess the cumulative impact of policy change volumetrically. While they can't try to get a volumetric estimate on that, then

it becomes really hard to understand what the compensation regime needs to be surrounding that—or go back and say, "Maybe this is a bad policy and we shouldn't be doing it because the impact is so big."

Mr WARREN KIRBY: Don't confuse the billions of dollars being made by developers in Western Sydney for the billions of dollars being invested into it to support those developments.

The CHAIR: You had to drag us back there, Warren. I thought we were past it.

Mr STEPHEN BALI: I'm trying to get away from it. Stockland is a good developer, by the way.

The CHAIR: I don't think there was a question.

Mr WARREN KIRBY: Yes, it was just a statement. As I say, I'm in an electorate that is growing more than the population of Leeton annually, and we are not getting the billions of dollars of government investment that you may think we are.

The CHAIR: I thank Ms Pannowitz and Mr Drum for appearing before the Committee today. You will be provided with a copy of the transcript of today's proceedings for corrections. Committee staff will also email any questions taken on notice from today and any supplementary questions from the Committee. We ask that you kindly return your answers within seven business days of receiving those questions. That concludes our public hearing. I place on record my thanks to all the witnesses who appeared. In addition, I thank Committee members. Most of all, I thank Committee, Hansard and Department of Parliamentary Services staff for their assistance in the conduct of the hearing. These hearings would not happen without the secretariat, Hansard and parliamentary staff. I thank the witnesses very much for their time and for sharing their knowledge and experience with the Committee.

(The witnesses withdrew.)

The Committee adjourned at 15:25.