

**PRODUCTIVITY COMMISSION**

**INQUIRY INTO THE FIVE YEAR ASSESSMENT OF THE EFFECTIVENESS OF THE MURRAY – DARLING BASIN PLAN**

**DR J DOOLAN, Commissioner**

**MR J MADDEN, Commissioner**

**TRANSCRIPT OF PROCEEDINGS**

**AT PARKLAKE, 481 WYNDHAM STREET, SHEPPARTON**

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**INDEX**

**Page**

**GOULBURN VALLEY ENVIRONMENT GROUP 143-149**

MR JOHN PETTIGREW

**TEMBA ORCHARDS PTY LTD 149-161**

MS PETA THORNTON

**LANDCARE VICTORIA 161-166**

MR SANDY MACKENZIE

**ENVIRONMENT VICTORIA 166-175**

MS JULIET LE FEUVRE

**BLUEZONE 175-177**

MR GRAHAM PYLE – CONSULTANT

MR MARK HEGGARTY – GENERAL MANAGER

**CHAIR OF SPEAK UP CAMPAIGN 177-183**

MS SHELLY SCOULLAR

**GOULBURN VALLEY 184-186**

MR DARRYL HOGAN – DAIRY FARMER & IRRIGATOR

**WEST GOULBURN BRANCH OF VICTORIA 186-188**

**FARMERS FEDERATION & UNITED DAIRY FARMERS**

**VICTORIA**

MR WADE NORTHAUSEN

**MS NICOLE McKAY 188-191**

**UPPER GOULBURN RIVER CATCHMENT ASSOCIATION 191-206**

MS JAN BEER

**LODDONG VALLEY GRAVITY IRRIGATION DISTRICT 191-206**

MR KEN PATTERSON

**THE GREATER SHEPPARTON CITY COUNCIL 206-210**

MS GERALDINE CHRISTOU – DIRECTOR

MR PETER HARRIOT – CEO

**MS MARIA RIEDL 210-218**

**YANCO CREEK TRIBUTARIES ADVISORY 218-226**

**COUNCIL**

MR MARK WETTENHALL

**MURRAY VALLEY PRIVATE DIVERTERS 227-233**

MS LOUISE BURGE

**GMID WATER LEADERSHIP GROUP 233-240**

MS SUZANNA SHEED

MR DAVID McKENZIE

**MR NEIL EAGLE 240-242**

**MR KEN PATTISON 242-244**

**COMMISSIONER DOOLAN:** Good morning and welcome to the public hearings of the Productivity Commission inquiry into the Murray‑Darling Basin Plan. These hearings follow the release of our draft report at the end of August. My name is Jane Doolan, Commissioner with the Productivity Commission, and my fellow Commissioner is John Madden.

Before we begin, though, I would like to acknowledge the traditional custodians of the land on which we meet, the Yorta Yorta Nation, and pay our respects to Elders past and present.

The purpose of this round of hearings is to facilitate public scrutiny and input into the Commission's work and to get comments and feedback on the draft findings and the draft recommendations that we've included in our report. We have had already hearings in Mildura last Friday and Murray Bridge on Monday this week and today's hearing in Shepparton will be followed by hearings in Dubbo and Canberra next week.

At that point, after we've received that feedback from the hearings and taking into account submissions that have been made and outcomes of other informal discussions, we will then be finalising our report and aiming to give it to Government by Christmas this year.

Participants and those who have registered their interest in the inquiry will be automatically advised of when the report will be released by Government and Government does have 25 sitting days in which to table the report in Parliament after completion.

In terms of the hearing itself, we like to conduct our hearings in a reasonably informal manner, but I do remind participants that a full transcript is being taken and will be made available on our website. For this reason, we can't take comments from the floor during any of the submissions, but, at the end of the day, we'll have a period of time when people can come and either raise additional issues or further participants can actually have an opportunity to speak. As I said, the transcript is made available to participants and then will be on our website following the hearings. All submissions are also available on our website.

We do have media, so for the Country News, who are here, some general rules apply. There's no broadcasting of proceedings allowed, taping of the hearing is only allowed with permission and our staff have already spoken to the media about those rules.

In line with the Commonwealth Occupational Health and Safety Act, we need to advise you of what to do in the case of an emergency and evacuation. In that case, a staff member will come and lead us down the stairs and out towards Maude Street, which is the meeting point. I think that's all.

Participants are invited to make some opening remarks and then we will move into some questions as well. I'd now like to welcome John Pettigrew as our first participant from the Goulburn Valley Environment Group.

**MR PETTIGREW:** Thank you. John Pettigrew, I'm President of the Goulburn Valley Environment Group. We welcome the draft report from the Productivity Commission and we believe it goes a way, a long way, in answering a lot of questions with the Basin Plan, particularly its implementation, and thanks for the opportunity today to comment.

In saying that, we are in agreeance with the vast majority of recommendations. I've got a few here that I would like to touch on for some clarification and some comments.

Starting with the draft finding 5.1, you say there: "However, addressing these concerns requiring efficiency projects not to have any adverse impacts is impractical, and risks ruling out projects that achieve the outcomes at least cost." We would certainly support that. There's been a lot happening in this region on achieving the 450 GL. At the moment here, with socio-economic guidelines being presented by many different groups and State Governments and, in my view, those guidelines look to be designed to rule out any hope of achieving the 450. I would welcome any suggestions there on how that might be achieved on the sort of work we can do.

In 5.2, you mention there that water recovery should align with the progress in easing or removing constraints. GVEG agree with most of the recommendations in 5.2 but strongly opposes any alignment of water recovery to the easing or removing of constraints. We believe the Victorian and New South Wales Governments have purposely not acted on constraints management strategies in a timely manner in the belief that this will either delay or undermine the need for the additional 450 GL. Alignment would reinforce this strategy, reward the actions that are already delaying the efficient flows of environmental water. The removal of these constraints is required now. We could have achieved much if we hadn't had those constraints with the amount of water we have now, let alone the 450 GL.

Chapter 3 - I'm bouncing around chapters here - stick with me. Finding 3.1, a total of 1995.8 GL of the 2075 GL needed has been delivered. We question your figures there in that you go on to say that you identify 2075 GL as needed to meet the adjusted sustainable diversion limits. We don't believe this includes the 62 GL to be recovered through efficiency measures that's required to meet the Basin Plans limited on SDL adjustments to the 5 per cent overall, and I think it's just - it's not clearly identified there.

Draft recommendation 3.1, the over-recovery of water should be identified in the 2019 when water sharing plans are finalised. GVEG believes that given the uncertainty remaining over the delivery of supply projects and the timing of achieving acceptable constraints management strategies and recovery of the 450 GL, any over-recovery considerations should be postponed until after the Basin Plan's reconciliation 2024. In the Northern Basin, the situation is further obscured by the uncertainty over cap factors and changes to the flood plain harvesting regime. Any consideration of over-recovery should be delayed until those issues have been resolved and again until after the Basin Plan reconciliation 2024.

4.2, "Basin Governments should extend the 30 June 2024 deadline for supply measures to be operational." Again, we've got strong reservations with this recommendation given that the lead time already given to the development of these projects and a deadline of 2024. I wouldn't be adverse if there was a genuine, one or two genuine ones there that needed a bit extra, but, in all fairness, I think, you know, talking over a decade to actually start planning and get these in place should be ample time.

Chapter 13, "Specific milestones are identified and clear responsibility is assigned for the delivery of each milestone. Where milestones are linked to payments, that these payments are disaggregated with a payment per milestone to provide a genuine incentive for implementation." We agree with this. Similar lines were taken in early - early in the water reform process with States and, unfortunately, a lot of those were eased and weren't carried through. You need to carry through with it, make sure that they are actually enforced.

Chapter 10, draft finding 10.1, "Some trade restrictions were inconsistent with the Basin Plan trading rules and have been removed." Any consideration of trading restrictions we're concerned about and we're suggesting they should be delayed until issues highlighted in recommendation 10.2, delivery capacities, have been resolved. I can certainly talk to that further later, if you require, but, in 10.2, you go on to say, "Basin Governments should set and publish a work plan within the next 12 months that describes how delivery capacity and constraint issues associated with changes in water use and trade will be investigated and managed." Look, we've been pushing this for over a decade.

We welcome any interest in it at all, but we certainly believe the issue to be urgent and we'd like to see timeframes on that recommendation there. It's a real issue and the Goulburn River is suffering at the moment because of it. The Barmah Choke's been long recognised as the prime risk in this area, but we're quickly seeing other streams come into it, especially Goulburn River.

I think I'll close there and open to any questions.

**COMMISSIONER DOOLAN:** Thank you for your submission. John, do you want to start or do you want me to go?

**COMMISSIONER MADDEN:** You can start, but I do have some questions, probably on the last issue of deliverability, a couple of comments around the socio-economic neutrality type of projects, just so you know. I think the other things broadly agree, maybe make a comment about the package and delays.

**COMMISSIONER DOOLAN:** I suppose the first question I have is that you are not supportive of extensions to the supply package but very supportive of the need to lift constraints?

**MR PETTIGREW:** Yes.

**COMMISSIONER DOOLAN:** For us, the supply package, notwithstanding there's been ten years, there's still a lot to go, they haven't yet determined and worked through the funding arrangements to actually have commencement. So, for us, the constraint projects in particular and the ones that - hydro-cues, for example, that depends on that, they will take quite a long time to do based on previous experience with Hume to Yarrawonga. From our perspective, if people felt they were important projects, you had to be practical about it and given an extension, but then, having the checks and balances that you refer to in terms of payment by milestones. So, if that was packaged up together, if there was a credible pathway and payments with clear milestones and milestones where, you know, if you hadn't done something by year 3, then the project's a failure.

**MR PETTIGREW:** That's right, yep.

**COMMISSIONER DOOLAN:** And get declared early. If those checks and balances were in place, would you see it then as a sensible thing to have an extension?

**MR PETTIGREW:** Yeah, I think it would. If we were given the - if we were given the confidence that there was going to be genuine assessment of each of these projects at different - at different points of the progress, I would be much more comfortable with it. One of our strong points was the alignment of water recovery with constraints, we would not like to see that happen because I think it sends the wrong message.

**COMMISSIONER DOOLAN:** Partially the Plan basically, the constraint lifting was required to achieve the additional outcomes in Schedule 5 and that's why that alignment of those outcomes can only be worked through with constraint lifting.

**MR PETTIGREW:** I'd contend that there's efficiencies and benefits to be gained there now without the additional 450. Irrespective of that, we could have put environmental flows to much better use in the last 12 months on the Goulburn and achieved genuine connectivity with wetlands with a minimal amount of water.

**COMMISSIONER DOOLAN:** Just following that up, what did get missed out this year?

**MR PETTIGREW:** Sorry?

**COMMISSIONER DOOLAN:** What would have had to have changed? What did get missed out? What was the opportunity that was missed this year?

**MR PETTIGREW:** All we would have needed was allow us to put down a few thousands megs a day extra on top of existing flows. It was - it was a minor flood level that went through and, unfortunately, the restrictions of the Victorian Government don't allow any environmental water to go above minor flood level.

**COMMISSIONER DOOLAN:** I have one more. I'd like to follow up the observations on the Goulburn River.

**MR PETTIGREW:** Yes.

**COMMISSIONER DOOLAN:** And what is happening. We've heard that there has been damage to the Goulburn by continued high flows. Could you elaborate on that?

**MR PETTIGREW:** The problem - the problem is in a couple of areas. From an environmental point of view, we're spending a lot of money, using a lot of environmental water to develop instream vegetation. This is good, this is part of environmental flows. We've advocated that we need to be using those environmental flows to get out of bank streams. We can't achieve that because of constraints, but in the meantime we're building up vegetation and putting a lot of effort into that. Unfortunately, the summer flows just drown out a lot of that vegetation. Now this is flowing way above what it ever would've been in summer flows under natural conditions, it's way above what's been flowing over the last 20 years through here.

The problem with our rivers we identified as turning them upside down. We've made that problem, increasing the problem, entitlements being traded downstream have to be delivered. We're questioning that. We've always supported water reform. This is one area that I think needs tweaking, but the other area of concern, if I was a downstream irrigator, I'd be concerned about my security levels as well as far as delivery in a timely manner because what's happening now is certainly not sustainable and will need to be addressed.

**COMMISSIONER MADDEN:** Just a follow-on on that, I mean, we've got a recommendation there, and you agree, to be more urgent. I guess I'm just a little interested in the recent history around this of where have you gone to have this issue addressed and why is it not being addressed in your perspective from an institutional response point of view?

**MR PETTIGREW:** Look, I'm not sure, John. I can remember presenting in Darwin on this issue over a decade ago and, since then, we've been prodding catchment management authorities, the Victorian Government, but it's only in the last few months that this has got any traction and I think you'll find today that it would probably have universal support now perhaps now that it's seen a way as restricting water flowing out of this area downstream. So, people support these ideas for many different reasons, I don't question that, but from an environmental point of view and a social point of view locally, we have some beautiful sandbars between here and the Murray and in summer now those sandbars are generally flooded, the local communities just can't use them.

**COMMISSIONER DOOLAN:** Just to make it very clear, some of the environmental benefits of increased environmental flows down the Goulburn River are being eroded by the need to deliver high flows in summer for extended periods of time?

**MR PETTIGREW:** That's our belief, yeah, yes.

**COMMISSIONER DOOLAN:** Sorry, I just wanted to clarify that.

**COMMISSIONER MADDEN:** Just a quick clarification then on the response. Again, just from the last few years, who are the people you've asked who have said whose responsibility this is to address the issue?

**MR PETTIGREW:** I seeone of the prime responsibilities, it gets back to the Catchment Management Authority and Goulburn Murray Water, both directly linked to the Victorian Government, so the flaw is there. Politically it hasn't been an attractive area to touch on, I suspect.

**COMMISSIONER MADDEN:** Have they accepted that it is their responsibility in your discussions or have they said it's someone else's?

**MR PETTIGREW:** No, it is difficult to find whose responsibility it is for the Goulburn River, the environmental health of the Goulburn River. We know who's responsible for delivering flows down it, we know who's responsible for approving works on the river, but when it comes to the actual protection of the environment, it can only get back to the Victorian Government.

**COMMISSIONER DOOLAN:** You said the delivery needs tweaking and we've heard that in a number of places and, as you say, it's gathering momentum. Have you got views on the sorts of tweaking required or a process by which that needs to actually be managed or thought through?

**MR PETTIGREW:** The only thing I can think of is I reckon I'd declare a moratorium not on water trading out but the conditions under which water would trade out and those conditions would put a question mark on the deliverability of that water given reviews of the environmental impacts of delivering it. That's the first step I think I would take. Once I've taken that step, I'm not too sure where I'd go because you're virtually leading yourself into different classes of water, whether it was an entitlement pre-2018 or after 2018. I fully endorse water reform, water trade, but this is one of those, not unforeseen now, we've seen it for a long time, but it's an issue that's - it's not sustainable, we need to do something.

**COMMISSIONER DOOLAN:** Thank you.

**COMMISSIONER MADDEN:** Sounds like you'd tag the trades.

**COMMISSIONER DOOLAN:** We don't have to solve it, we just have to recommend a process to solve it.

**COMMISSIONER MADDEN:** Moving onto the socio-economic neutrality tests out there, because there's a number at the moment, I guess moving beyond that, from your perspective in northern Victoria from your experience, are there projects - are we talking about least cost and options, and I know EY looked at this in the broad, but are there projects that you think would have minimal socio-economic impact and actually other efficiencies still to be gained out there? Are there real projects in this space?

**MR PETTIGREW:** John, I think the most straightforward projects are on-farm efficiency. They always were and I think they always will be. I don't accept all of the impacts that are being attributed to those projects and some of the guidelines now for assessing that, I further query. I think you need to look at a broader picture. If you look just in one small area, yes, there might be some impacts there, but on a broader area, they smooth themselves out often. I think the most likely ones, the easiest ones, are on‑farm efficiency. I think there's been some very good examples of the community here winning with that by maintaining production, even exceeding past production, without that water and I think that can go on to the future.

We're seeing - the drought that we're in at the moment with the price of water around the $300, $350, I would have thought that people who were working out water trading in past years and the market, I think they would settle - they'd settle for that because it is reportedly a 100-year drought.

**COMMISSIONER MADDEN:** My only other point is probably more a comment on the over-recovery. We have heard the message about that and I think it's an area we do need to clarify, that the timing that can be done is different in different parts of the system, so we take your point, yes.

**MR PETTIGREW:** I don't see how it could be done earlier.

**COMMISSIONER DOOLAN:** I think, just to clarify, but we'll be clearer, what we said was 2019 was to be clear about what we're going to do and not necessarily do it in 2019.

**MR PETTIGREW:** No.

**COMMISSIONER DOOLAN:** But give some notices to the approach and be clear about - - -

**COMMISSIONER MADDEN:** What's the strategy to address it, yes.

**COMMISSIONER DOOLAN:** - - - what you were going to think about doing.

**MR PETTIGREW:** I accept that.

**COMMISSIONER DOOLAN:** No, and we accept that we didn't make that clear. We've heard that very clearly from a range of people. Okay, I don't have any other questions. John, do you have any other points that you might want to make?

**MR PETTIGREW:** No, I think we've covered most areas that I intended to this morning and thanks for the opportunity and all the best with the review. We look forward to the outcome.

**COMMISSIONER DOOLAN:** Thank you and thank you for your submission. We need to talk up, John.

**UNIDENTIFIED SPEAKER:** Yeah, we're having great difficulty hearing. I know it's going to be a long day, but unless we all move up to the front row, we might still not hear. You're very quietly spoken, which is nice, but I'm having great difficulty hearing you both.

**COMMISSIONER DOOLAN:** Thank you. We will do our best. We keep forgetting, I have to say, that these are recording microphones and not broadcasting microphones, so, please, every so often give us a reminder to speak up. Okay, is Peta Thornton here?

**MS THORNTON:** Yes, I am.

**COMMISSIONER DOOLAN:** Good. Peta, can we ask you to come up to the table and if you wouldn't mind, again, just give your name for the transcript.

**MS THORNTON:** Absolutely. My name is Peta Thornton, I'm here as an individual and a representative of my own company, which is Temba Orchards Pty Ltd, stone fruit growers in the Swan Hill region. I'd like to thank you for the opportunity to speak. I got a late berth here, so I'm unfortunately not as prepared as I'd like to be, but I apologise for that and I hope that I can make some points that are worthwhile.

As I said, I'm from the Swan Hill region. My father's family and my husband's father's family were both soldier settlers in irrigation districts, my father's family in Woorinen, which is where we now farm - sorry, my husband's father's family in Woorinen and my father's family in Robinvale. I grew up at Nyah, which is between Swan Hill and Robinvale. My parents owned a mixed business in Nyah, which is a small irrigation community. That was in the sort of late 70s and through the 80s into the early 90s, so I'm quite familiar with the region between Swan Hill and Robinvale.

What I experienced as a child, I actually grew up living next door to a river red gum forest. The community very much revolved around the wetlands and the forest in that district and also the irrigation industry that was centred around that area as well. It was vibrant, we experienced flooding in those forests most years of my childhood, lakes were often full, not always full but often full, and it was vibrant, it was a wonderful childhood, in fact. As I say, we had a swimming pool over the back of our business and we had the forest down the front, so our childhood was absolutely wonderful. The river red gum forests between Nyah and Robinvale are an absolute treasure, a place of natural beauty that should be protected and the ecological values of flooding which was there early in my childhood - I'm 46 years old - and it's hard to believe that this space is changing so much in my lifetime. There are values there that are absolutely necessary to protect.

What the river system delivered during those times was good water quality. My dad's stories of growing up, they fed the family often on fish from the river. That was one of his jobs as a child, going down after school to fish in the river and bring home the fish, which they did on a regular basis. The river, the water quality was, you know, very clear. It's not so now, we've changed the system very much.

I went away to university, I will say, and studied science and natural resource management before coming home to work in that field and then I married into a farm and now run that farm. We grow over 200 acres of stone fruit, we have 218 ML of high security and some low security water. We are highly dependent on temporary water. We own about half the water we need to produce our crops, so every year, we're out in the market buying that temporary water.

Observations as an irrigator since the Murray-Darling Basin Plan and Millennium Drought in Swan Hill, I just want to quickly talk to that. We, as irrigators, need to have a more honest conversation with our nation about the Murray-Darling Basin Plan. I strongly believe that irrigation communities have everything to gain in terms of the long-term health of the rivers which have nurtured our industry for decades. There has been plenty of water under the bridge since the Plan became law in 2012. The Millennium Drought is well past. Good flows have provided for good allocations and export market access for grapes, citrus and now stone fruit have improved the situation for many of us.

Time might have allowed for gradual adjustment to change, but, unfortunately, in many cases, it has not quietened the agitators or improved the understanding in the community about this issue.

I acknowledge there are still issues in dairy. We have not heard - hang on, sorry, I'll go back to this. "The Murray-Darling Basin is killing communities" is what we so often hear, but the Plan has, in fact, injected billions of dollars of Federal funding into this region for what continues to be a State-managed asset. Top dollar for water buybacks which are voluntary have helped many irrigation businesses with succession planning, exit strategies, superannuation contributions and consolidation of holdings. I know many people who have taken advantage of that, but those good stories don't get out there. All we hear is, "Buybacks have been terrible for our communities", but people have taken them up and they have been able to consolidate and expand their businesses because of it.

"The negatives of water trading should be blamed on the environment." Water trading was initially established to help irrigators consolidate rights in low allocation years and later widened as an efficiency measure. I don't think water traded to the environment should be seen as leaving the district, which is what we so often hear. In fact, Lisa Neville only put out a press release yesterday or so saying, you know, "No more water to leave the districts for the environment", but, to my mind, we should be promoting that. It is not leaving the district, it is, in fact, flowing through the rivers in our district to keep them healthy. Isn't that what the Murray‑Darling Basin Plan is all about? But we don't promote it that way, all we do is fight.

Money has also been injected into upgrading irrigation infrastructure, efficiency measures, et cetera, so irrigators have been quite well looked after along the way and there are many people in the community who are struggling more than irrigators and who do not have their finger in the pie of this irrigation economy. They deserve a healthy river and therefore they deserve efficient rollout of the Murray-Darling Basin Plan which, you know, that's what we're here to discuss is that happening.

That leads on to my discussion points now. That was kind of a brief intro, if I haven't gone over time too much. As I say, that, to me, leads into my discussion point 1, which is lack of leadership and lack of good information in our communities. I would support Productivity Commission recommendations which strengthen the State's dedication to this Plan, which is supposed to be, you know, a landmark plan - took a hundred years to get it - and yet we don't have good leaders out there in the community promoting it and actually broadening the understanding of why we needed it in the first place.

There is a lack of good information in the community about issues like river health, water quality and why we actually needed the Murray-Darling Basin Plan in the first place, how rivers work, why floodplains are important. More effort needs to be made there. That would be money wisely spent if this complex issue was made more palatable or more understandable to the rest of the community because the community are confused, they do not understand what the risks are, what they are potentially losing if we don't deliver on a Murray-Darling Basin Plan.

Lack of trust in institutions managing water is a major concern, obviously, through all things that came out in 2017 re Four Corners, Lateline, et cetera. There is a lack of trust. I had great high hopes for the Murray‑Darling Basin Plan and my trust is waning considerably. In this complex space, communities are confused and they don't know what to believe.

Unless you are involved in irrigation, you look at the river, it looks okay flowing through the towns. They also see a lot of irrigation development going on. Certainly in our region going from Swan Hill across to Mildura, they see huge amounts of development, so it seems like there's plenty of water out there. Confusion reigns.

The community does not have the information it needs to exercise its democratic right around this issue. There are reports that are commissioned which are then promoted. We recently had the Murray River Group of Councils - I found a video on Swan Hill Rural Council's website which was really bad-mouthing the Murray-Darling Basin Plan and saying how it's been terrible for communities, which was a reflection of a McGowan report that was apparently paid for by DELWP, and it made no sense to me. The video seemed to be a group of people stating their opinion and it was being promoted by the Swan Hill Rural City Council. Is it credible information? Is it promoting something that is actually real that is tested? I highly doubt it and I'm really in favour of getting the right information out to our communities so the community can actually make proper decisions about this.

We need institutions we can trust independent from Government on this critical issue. I guess that sort of speaks to the recommendation that you put about Murray-Darling Basin Authority being sort of split. I would support that.

The discussion and the debate is irrigation-focused, as I said, it's quite a selfish debate when we just think that our communities are all about irrigation. It's not all about irrigation. The river delivers good quality water, water we need to be able to drink, water our grandchildren need to be able to drink. We need a community where our cultural sites are protected. The indigenous history and heritage, the cultural heritage of our region is immense. What wealth do the Aboriginal people of our communities gain from irrigation? At this point, none, and, you know, it's embarrassing standing up in public forums that we've held in Swan Hill and all we are squabbling over is irrigation when, in fact, indigenous people have very little out of this and if we don't deliver on a healthy Murray-Darling Basin Plan, they will have absolutely nothing.

Politicians start off a good debate and divide communities. It's not in their interests, I suppose, and that's why Government needs to be at a distance from this debate. For example, when Barnaby Joyce came down and was pitting the Greenies against the irrigators saying he's split water from, you know, the environment portfolio and, you know, we're all living in the same community and we need to be able to get in the room and talk about it together, not be enemies, we won't agree on everything, but at least if we've having open, honest discussions. That was like high treason what Barnaby Joyce did on that day, coming into a community where this issue is so important and we've actually made some ground, to be saying things like that where you're sort of pitting communities against one another, I think is terrible and it takes us back, you know, years and years and years and therefore costs us money.

Going to my next discussion point, socio-economic confusion. I guess the implementation of the Murray-Darling Basin Plan is being won or lost on the grounds of socio-economic issues or the effects of. I think they're very short-sighted, they need to be more long-term, there needs to be more long-term study of if we don't have a healthy Murray-Darling Basin Plan, what will happen. I find it difficult to understand why there's not more irrigators who stand up and say how much we need not just the Murray‑Darling Basin Plan but the full extent of the Plan and enacted in the spirit that it was agreed to initially.

We have had the Ernst & Young report which was commissioned and then almost shelved or hidden which said that we could recover the 450. I believe we can. Too many other reports commissioned by other organisations and promoted in the community. What do we believe? It's difficult to say, but certainly we need better socio-economic study of the ecosystem services, tourism benefits, cultural, health, recreational and spiritual services of a healthy river system and better long-term costing of impacts to the irrigation industry of potential poor water quality if a healthy Basin is not delivered.

Okay, next talking point is the Swiss cheese effect. Governments argue that irrigation communities cannot withstand further water recovery through buybacks as a reason to not deliver the full Plan. However, those same Governments allow unbridled new irrigation development to occur without any permanent water to be secured against that development before it goes ahead. That in itself creates a Swiss cheese effect. Water is moving out of communities. If not for the Basin Plan to water new permanent plantings from Swan Hill to Mildura, from Swan Hill to Hay - they're absolutely everywhere - I called up just to confirm the rumours that I'd heard that you don't actually have to secure any permanent water before you get the go ahead to do a huge development of, say, for example, almonds, and that was absolutely the case. I got that straight from the Department of Ag in Mildura that, no, I can secure water any way I like, the temporary water, fine.

Well, this year, the cost of water is at an unprecedented high when we have not been having water buybacks for the environment, so why? Water brokers, you call them up to see when you should buy your temporary water and they're, "Oh", you know, no one has any idea what influences it or why it's happening, but if you're going to allow 7,000 acres of permanent plantings to be developed without any permanent water attached to them, surely that's going to heavily influence how much temporary water prices are. You need to have some sort of limit or planning restriction that measures development on how much water is actually there, the free market needs to be cushioned or the effects of the free market on existing water users and the environment needs to be cushioned, in my belief, by some - you need more permits to put up a carport on your house than you do to do a new irrigation development between Swan Hill and Mildura. That's not a joke, that's actually true.

I was at a water forum in Mildura on Thursday night and the sitting member, Peter Crisp, he clearly stated that the free market is all that is required and we cannot meddle in the free market, but, on the other hand, we could not possibly deliver the full Murray-Darling Basin Plan because of the effect it would have on the water market. To me, that's a double standard, it's a lie to the community because, on the one hand, you're letting the effects of new irrigation development - you're creating the same effect on the water market and existing users as you would, but at least the Murray-Darling Basin Plan has a public good.

I'm probably getting close to the end of my time. I just add that the water bought for the river system should not be advertised, particularly by the water minister, as being taken away from communities. In fact, it's purchased for the communities and is flying around the rivers and streams and wetlands and keeping them healthy. It is water owned by the nation. Better effort should be made to explain this rather than repetitive use of slogans.

There is also the influence of investors in the water market. We don't seem to mind about that at all, but we do mind about the influence of a healthy river or policies that will create a healthy river, their influence on the water market. It seems like a double standard.

The last discussion point is SDL adjustments. I would support any Productivity Commission recommendations that encourage better testing for the SDL adjustment projects. The adjustment mechanism was premature, in my belief, in that it is unwise to adjust the water recovery target and spends huge amounts of money without understanding first the effects of the recovery that we have had to date.

The SDL projects are costly in implementation and the risks they pose to communities, they are largely untested and community consultation was ineffective. I went to a community consultation - I've been involved in this over a number of years - I went to the community consultation last year in Kerang on the SDL projects and we heard absolutely nothing about the SDL projects that were moved forward to Parliament actually agreeing to projects that there was a lack of information on. Now, whether or not there are some projects in there that are worth doing, we don't know. There are some certainly that aren't worth doing, in my mind, but we don't have the information that we need to make that decision.

I will say that the Mallee CMA have made some effort to try and give us more information on that, on those projects that they're proposing. It's a sad situation that those projects are tied to a reduction in the water recovery target. It's difficult to - I cannot agree to a set of projects that are tied to reducing water recovery across the Basin because you don't know if the water recovery done to date is actually working. You know, have we done enough?

It seems as if the SDL, if anything, was just premature and the South Australian Royal Commission seems to be making similar comments in that we needed to - there may be unlawfulness in the way the SDL adjustments have been enacted.

Equivalent environmental outcomes from SDL projects is a bit of a myth and it was actually admitted to us by the Mallee CMA that it's not equivalent environmental outcomes across the whole district, it's for that specific site of that project. So whilst there may have been projects, may or may not have been projects that they were suggesting we should agree to throughout our CMA area, it meant that there would be reduced water in the end and some areas had absolutely no guarantee of water. The idea was that where an SDL project was being enacted, there would be more likelihood of that area getting water than if an SDL project didn't happen there, but we don't understand, under the current water recovery situation, what would happen if - you know, how often that would be flooded if the SDL project didn't go ahead. Do you understand what I mean?

**COMMISSIONER DOOLAN:** I think so, yes.

**MS THORNTON:** So certain areas will have no - certain lakes, certain forests will have no water at all guaranteed for perhaps the future as we know it. They will change considerably, so red gum forests could be red gum forests, could be ephemeral lakes will change because they won't be flooded any more, but we don't know exactly how much or how little they will get under the current scenario, but we're being asked to agree to a different scenario altogether.

So, SDL adjustments, I have advocated we should be pausing, we should be pausing the SDL adjustments until we understand better - pause SDLs until better outcomes with metering and compliance across the whole Basin until we better understand what has happened with the current water recovery situation, and lift the cap on buybacks and keep it as an option because I think it's undervalued and it's a cheap way of getting water back and communities will tolerate it better than you think, in fact, they're tolerating it already because the water's already leaving communities for new irrigation development. I'll leave it at that.

**COMMISSIONER MADDEN:** One thing I did want to talk a little bit about, given your location and experience and the planning around forests, watering and the like, you touched on it right on the end there a little, too, about the SDL projects and some of those are - Menindee's one we've heard recently.

**MS THORNTON:** Absolutely.

**COMMISSIONER MADDEN:** And I think Yanco Creek is another we might hear later. There's obviously changes in the local environment and the benefits are then for the wider environment, and so there is a trade-off and there's trade-offs everywhere.

**MS THORNTON:** Yes.

**COMMISSIONER MADDEN:** I just wonder, your experience then in forest watering, planning for that, and you talk about the trust in institutions, so what do you see as an adequate, a good, a better arrangement? Is that something that actually has worked quite well, because you're obviously a local community.

**MS THORNTON:** Yes.

**COMMISSIONER MADDEN:** Dealing right on the forefront or the interface with environmental watering. You then talk about some of the benefits being explained wider, but even at that local level how is the watering conducted in the forests that you are aware of? Is there involvement, engagement, do you understand the trade-offs and how they are made?

**MS THORNTON:** Absolutely. I would say there's not enough information and there's a lot of misinformation in the community. The people who are working in the environmental watering industry, for want of a better word, are doing a great job and trying their best to - they're trying to do the best with the water that they have and the system that they have to deliver it.

For example, in Swan Hill, after the initial bringing in of the Murray-Darling Basin Plan and all the hoo-ha that went with that, it's like everything went quiet, business as usual, and the Millennium Drought sort of ended. To my mind, business as usual went on. Everything seemed to be fine. The only thing that you would hear was the big issue of blackwater and there was a huge amount of misinformation about what blackwater is because, to my mind or my knowledge, says that there is a huge danger that we'll continue to have blackwater if we don't have enough water to flood these forests and wetlands on a fairly regular basis. However, what the community was saying or hearing and what was being promoted was that, in fact, environmental watering means blackwater. So, there was a lot of misinformation about that.

The people who are trying to manage environmental water are trying to do the right thing. I'm seen as an ally to that, but, at the same time, I'm looking at the whole of Basin approach and I'm not comfortable with the idea of reducing the amount of water recovered through buybacks for projects that I'm not sure - I don't know enough about, and I'm not comfortable with the idea that you trade off a system that was working fairly naturally. Admittedly, it was a regulated system, like through my childhood, it was a regulated system, but there was enough water in it that it had quite a natural flow in the sense that water flowed over the banks, flooded these areas, and that delivered beautiful environments.

We live in a very arid environment and that created a great childhood. There were places where you could go and swim and, you know, Aboriginal people lived in the forest actually in my childhood, they lived in the public forests and quite often there were people like that. So there were multiple benefits, I guess, to the whole community with that. I feel like it's a great risk, you know, even just in terms of water quality, to reduce the amount of waters flowing in our rivers. I don't see the evidence that it works. I'd like to be able to see the evidence. If the evidence is there, we need to see it, that these projects can deliver the same kind of water quality.

2016 there was a huge algal bloom right through the river system. To my mind, you need flows to mitigate algal blooms. There's a potential link between algal blooms and motor neuron disease. You know, all this kind of stuff that doesn't get really talked about is really, really important and I think there's a lack of information.

The people who are trying to do the environmental water are doing the right thing with the resources that they have, to bring it back to your question.

**COMMISSIONER DOOLAN:** Could I follow up because much of what you have talked about is either a lack of information or a lack of credible information or information tied to vested interests.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** Then also about how does the community get together and actually - so two elements of really what is appropriate community engagement and consultation, particularly on the SDL projects I think you have referred to.

**MS THORNTON:** Absolutely.

**COMMISSIONER DOOLAN:** And then how do we get good information out there? So, looking forward, and we're at the start of these SDL projects, still really to set up, I think, the community engagement processes.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** And the processes for generating the information, the detailed business cases that need to go to the next stage.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** What do you want to see in this next 12 months that actually would be much better consultation and perhaps the provision of information that would be more trusted, if you like?

**MS THORNTON:** If I try and bring it back to our region because, I guess the Menindee Lakes project, it would be easy to run to that, which sort of seems to highlight all of the negatives of this whole process so well, but with regards to our region on the SDL projects, for example, in the next 12 months, we've sort of said to the CMA, "We would like information on" - okay, so we've got some information on the specific sites of the SDL projects, but we also want information on the rest of the forests and wetlands throughout our region that we know of and how they sit going forward and how often they would be likely to get water, how often they would be likely to get water under the current situation or under an adjusted Plan.

In honesty, I still don't fully understand, and you sort of have to scramble around in your spare time to try and get a handle on this information, is what - I know what the forests and wetlands looked like in my childhood and going forward sort of through the Millennium Drought, but sort of yet to try and understand exactly how it is going to be with the Murray-Darling Basin Plan, the amount of water recovered, exactly what it's sort of going to look like, and that's exactly what we need to understand before we can agree to it. I think we need to understand that before we adjust the Plan, but we've already adjusted the Plan. That's what we have asked for from the CMA and, to my mind, we also need that to be taken to community and presented without the rush or the threat of, you know, that funding.

When we had a session with our CMA, sort of there was the idea that, "Oh, these projects have been in the pipeline for three or four years and, you know, we're waiting for this - we need this funding, so many million dollars of funding, to go ahead with this. So there was a pressure there, there was definitely a pressure to agree to these projects because, you know, the CMA was waiting for that funding. That's why I think it would be better to sort of pause the situation and let us get this information and make the right decision without having that pressure of - I know that's probably - - -

**COMMISSIONER DOOLAN:** Well, the amendments have been made.

**MS THORNTON:** Yes, that's right.

**COMMISSIONER MADDEN:** We do have to be clear that they're not passed yet, it's a reconciliation process.

**MS THORNTON:** Yes, okay.

**COMMISSIONER MADDEN:** So, just to talk it through, the supply projects have basically gone into a process that hasn't adjusted yet. The adjustment actually happens in 2024 after reconciliation.

**MS THORNTON:** Yes.

**COMMISSIONER MADDEN:** So it's very likely that the number of 605 will change.

**COMMISSIONER DOOLAN:** And it is important to note that we have recommended a gateway process so that when they do go to detailed design, they are assessed to see are they likely to meet the environmental outcomes that people thought.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** And about their price and a range of things as well. So there's still - - -

**MS THORNTON:** Opportunities there for - - -

**COMMISSIONER DOOLAN:** Well, there's gateways.

**MS THORNTON:** Gateways.

**COMMISSIONER DOOLAN:** To be assured that it's either a good project and worth going forward or to cut it out at that point.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** So that's still to happen.

**MS THORNTON:** I support that greatly because - - -

**COMMISSIONER DOOLAN:** The other thing that we recommended was you do look at this as an integrated program of packages and so what is the impact of the whole lot and manage them that way as well.

**MS THORNTON:** Yes.

**COMMISSIONER DOOLAN:** Once again, part of that is good community consultation going forward because we have definitely heard it's been very patchy in a number of those projects.

**MS THORNTON:** Yes, absolutely. I mean consultation - so often consultation is just coming to tell a community what is going to happen rather than actually taking on board local knowledge, local opinion and thrashing it out, you know. We don't have many opportunities where we can all get together and freely talk about it and share information and learn from one another. We've held three, and we're planning another community forum in Swan Hill, where we've had great open debate, you know, we've had a room full of a vast array of opinions but a passionate - I felt like I was trying to do the job of the Murray-Darling Basin - what I thought the job of the Murray-Darling Basin Authority would be, more so in terms of trying to encourage open debate, learn from each other, share ideas and make the policy the best that it could be, rather than, you know, just sort of bits and pieces in the media and vested interests.

Let's not forget I am an irrigator, my whole income comes from irrigation and I just think that, you know, we've got such power in this debate and that we need to be really honest about it and deliver - make sure that there is still a healthy river going ahead.

**COMMISSIONER MADDEN:** Just a quick question, and it may be out of the community discussions you have had as regards new development and the issues of deliverability, et cetera. For the sake of discussion again, it is a little bit different to the Swiss cheese effect because that's relating to generally joint infrastructure schemes and kind of higher costs being left behind, but I do understand the issues of development.

**MS THORNTON:** Yes.

**COMMISSIONER MADDEN:** And then the movement of water. What actually policy responses are there because even a development, they might tweak things, but that's not going to stop new development necessarily if you have a control where you have to buy permanent water. That could enter the market more and drive the price of permanent water up. This is a fine line

**MS THORNTON:** It is. I guess I - - -

**COMMISSIONER MADDEN:** - - - because, you know, any policy could capture you if you don't have enough water to grow your crops.

**MS THORNTON:** That's right.

**COMMISSIONER MADDEN:** Given you're in the temporary market. So there's a lot of unintended consequences that can occur.

**MS THORNTON:** Yes.

**COMMISSIONER MADDEN:** So I can understand why people are moving slowly, but I think the options should be on the table in some process and that has to happen urgently, as we heard earlier. What are some of the options that actually people are talking about?

**MS THORNTON:** I was surprised. I haven't heard anything. In the public forum that I was at in Mildura on Thursday night, there were six candidates up there and they were asked this very question and no one - well, Peter Crisp stated straight out that they couldn't get involved in the water market and the free market needs to just deal with it. I personally just came up with the idea that - I was surprised that there wasn't a need to at least, you know, perhaps have a third of the water that you might need to irrigate a particular development secured against it. I guess, to me, allowing any amount of irrigation development suggests that it's an infinite resource or something and you can just put in as much as you like regardless of how much water is actually there.

I had also heard that many of these huge corporate sort of developments have one-third permanent water, one-third temporary water, one-third lease sort of policy, but that was not a planning process, it was something that they tend to do. I thought it would be, you know, something that you could ask that they've had to secure at least a third. That would just make it a gentler process of water changing from, for example, perhaps this district to that district up there, it would make it more gradual in my mind and give us a better idea of what the needs for water would be, because if you have developments out there that have no water right, how do you understand how much water is actually required?

I realise that that's the risk that the developer takes when they go and plant this stuff, but, at the same time, a corporate agri business may have, and I would argue will more often than not have, a better chance of, or better money behind them and better able to buy temporary at a high price than perhaps we would be.

**COMMISSIONER MADDEN:** Has the local community had the opportunity to actually communicate that issue to the Authority?

**MS THORNTON:** We are setting up a meeting with Swan Hill Rural City Council, so I - no, I don't believe so, but there is a lot of talk. Even the South Australian Royal Commission had a public hearing in Mildura and that was very much the flavour of the whole morning of that public hearing, the concern in that community, I guess, because a lot of it is in that region, but it's not just affecting - it's affecting actual smaller traditional farmers in that region as well, not just farmers here in this region, you know. It's sort of that corporatisation of food production.

**COMMISSIONER DOOLAN:** Thanks, Peta.

**MS THORNTON:** Thank you very much. Again, I apologise for my lack of preparation.

**COMMISSIONER DOOLAN:** I would like to call Sandy MacKenzie from Landcare Victoria as the next participant.

**MR MACKENZIE:** Thank you.

**COMMISSIONER DOOLAN:** Just introduce yourself for the transcript, please.

**MR MACKENZIE:** My name is Sandy MacKenzie and I'm speaking on behalf of myself as well as Landcare Victoria. I must say welcome back, Commissioners Jane and John, to Shepparton and I know how far you've been travelling in a very short period of time. The last time you were here was in March and I think you're doing a fantastic job because it's not often that we get people of such skill and experience coming out from Canberra and going from one end of the Basin to the other, so thank you for that.

Also, I've been preparing a masters of ceremony speech for my niece's wedding, so if I lapse into "Cheers and stand for the bride and groom" - - -

**COMMISSIONER DOOLAN:** We will have the odd toast.

**MR MACKENZIE:** So, yes, I was a small irrigator on the Goulburn River at (indistinct). At one stage it was under-farmed, but today, as I did before in March, I'd like to make reference to the Lower Darling. I do so because I do have a personal connection, but also because I've been a member of the Board of the Goulburn Broken CMA. That CMA, much to the credit of those two gentlemen over there, Chris and Carl, have developed a tristate alliance across three States and one of the members of that alliance is Western LLS in New South Wales, which covers the Lower Darling. I'm also on the Goulburn Broken Water Services Committee at Goulburn Valley Water and I'm on the Members Council both of the National Landcare Network and Landcare Victoria Incorporated and I had some time as the Federal Member for Calare in New South Wales in the Fraser/Anthony Government and Calare covered the upper reaches of both Macquarie and the Lachlan Rivers.

With that personal connection, and the connection is a person who managed huge stations on the Lower Darling in the early 1900s, and I have wonderful photographs and records of those days, which I ought to mention, and one of those leases went from the Darling to the South Australian border, 140 kilometres.

The draft report of the Commission refers to indigenous culture and the need for Aboriginal heritage impact statements. Without belabouring the point, I would like to point out that the Darling is also a national icon in our European settlement history and I am titling my little talk "The Darling River, a National Icon but now a National Disgrace".

Our national heritage and culture, whether it's Burke and Wills or Charles Sturt, but when one looks at the history, and I've got fabulous photographs here of the paddle steamers, a barge with 1,050 bales awaiting steamers, another photograph here of 27 men employed washing wool in the Darling at Netley Station with a paddle steamer and a loaded barge about to depart, I think we have to take into account that there is this wonderful distressed waterway that is very much part of our history. And quite extraordinary stuff, you know, one paddle steamer actually travelled from the Darling up the Barwon to Mungindi, a distance of 2,000 miles from the mouth of the Murray.

In 1991, we probably will all recall there was a huge algal bloom on the Darling. It extended for a thousand kilometres along the Darling and the consequent death of livestock and threat to human health provided a real wake-up call to the Australian community and, together with the condition of the lower lakes, it gave impetus to the Federal Government at the time to, in due course, implement the Water Act of 2007. There was great enthusiasm from the five Basin States, overwhelming in the Federal Parliament of 95 to five and the MDBA was launched with a huge taxpayers' investment of 13 billion, of which five has been spent or committed.

The MDBA website headed "The Plan for the MD Basin" in its very first paragraph states: "The rains, rivers and aquifers of the Basin provide essential drinking water for the more than 2 million population of the Basin as well as water for urban recreational, industrial and agricultural activity."

So, how have we gone, after ten years, towards achieving that very first objective of essential drinking water? Two other photographs show the Darling just six weeks ago in Menindee, which I can pass over. The first is at Tolarno and you can probably even see the blue-green algae on the river from Google Earth. The second is the Darling of just a few weeks ago at Netley Station a little bit further upstream. The last photograph shows New South Wales water technicians surveying the depth profile of the Darling at Netley in order to establish where the temporary block banks are to be installed to provide back-up of the barely flowing river for stock and domestic supply.

These block banks currently being installed are a number of temporary earthen dams with gate valves placed across the river to a height of some 3 to 5 metres, each costing between $350,000 and $450,000 according to the New South Wales Water people that I was talking to, and we had an informal conversation, they didn't know who I was. They are to back up the barely flowing river to provide for stock and domestic supplies, the lowest one being downstream from Pooncarie, the others extending upstream to near Menindee. They are temporary measures and are to be removed when high river or flood is expected, again at a cost of hundreds of thousands of dollars.

The sample taken from the river at the village of Pooncarie and the smaller samples, which I have here, I distributed these to Members of Parliament. I was sitting in the Speakers Gallery on the day that actually turned out to be Prime Minister Turnbull's last Question Time, so, as you can imagine, they did have a few other things on their minds on that particular day, but I did distribute those and I said, "It's a tasting sample from Pooncarie town supply, and that, see morning tea is coming, was the actual Darling River at Pooncarie as of a few weeks ago and it's what most people are washing in and what livestock are drinking on the Lower Darling on 10 August." As I say here, "Have a smell, better still, have a taste."

I don't wish to take up too much time, but I want to congratulate the Commission on its first assessment of the effectiveness of the implementation of the Plan, in particular its recommendations regarding the Authorities' role in ensuring compliance from the Basin States on water take rules. It's very easy, as some Members of Parliament say, "Well, of course there's a drought, that's the result of the drought." The drought has certainly exacerbated it, but it's not really, and we all know that. We all know that, as the Commission states in its draft report, an overwhelming number of participants to the inquiry indicated that stakeholder confidence has been rocked by concerns that some Basin States have been lax - and that's a moderate word - in ensuring compliance with water take rules, and the Commission is sufficiently concerned that it recommends a new independent Commonwealth statutory regulator be established and that the Federal Government enact laws and regulations to achieve compliance.

I do say "Best of luck." I wouldn't hold my breath about it because the States will become very defensive, but it has to happen and I congratulate the Commission for actually taking that stand.

I don't want to run over time. The Commission is well aware of issues such as the proposed Menindee Lakes Water Saving Project, which was mentioned by the previous speaker, and the new pipeline from the Murray to Broken Hill costing $470 million, bringing the total projected cost to near one billion. Now, if you take into account the cost of the Menindee Lakes Project and the infrastructure there, the new pipeline to Broken Hill, the $78 million paid to Websters at Lake Tandou and a few other things, you come to a figure of nearly $1 billion. That compares to NVIRP, the Northern Victoria Irrigation Renewal Project, of $2 billion, and that is projected to save 430 GL.

That billion dollars in the Lower Darling at Menindee is going to save 22 GL and I just think that's an issue - I may be wrong in my figures, but they seem to be the published figures - that seems to be a gross misuse of taxpayers' investment and it has resulted in, from what we can see here, no actual progress towards that original paragraph in the MDBA statement of providing fresh, safe, secure water supplies on what is, I believe, a tragedy of the Darling. Thank you.

**COMMISSIONER DOOLAN:** We were in Mildura last Friday and we did hear significant comments from participants and concerns about the Lower Darling. Our recommendations have said that needs to be sort of sorted out through the relevant water resource or water sharing plan. From your perspective and your connection and your hearing, has there been any discussion within that Plan of minimum flow requirements and what needs to actually be included in that Plan to give some confidence that the condition of the Lower Darling would be dealt with?

**MR MACKENZIE:** I think it comes back to the effectiveness of the legislation, perhaps, of the MDBA. It seems to be, sadly, in this sort of context, an abject failure because it does not have the power - let's face it, we all know that when the New South Wales Minister said that the Menindee Lakes Project to save us 22 GL is going to relieve upstream irrigators mostly of the requirement to secure environmental water. Now, Cotton Australia is in full - they fully agree with that, absolutely, and so you have to ask the question, the Minister for Water at the time - Federal - said that this would provide water for the environment that doesn't have to be otherwise taken from irrigators, but then it's a fair question to say, "Has that in fact enhanced the environment of, anyhow, that particular river?" And it hasn't.

It's a function of the legislative and regulatory powers that you are anticipating hopefully may be changed to ensure, for example, compliance, is the responsibility of the Basin States, is somehow monitored and imposed, and I don't know how that question - you have to framework legislation and you have to have the cooperation of the Basin States, which, if you look at the relationships between Federal and State Governments, it's quite a big call.

**COMMISSIONER DOOLAN:** I suppose from our perspective again, taking on board your comments, but the Menindee Project is still at its concept phase and it will still have to go through its detailed development and gateway before it actually gets funded and water resource plans have to actually be accredited. The Lower Darling is included in the Lower Darling Mid-Murray Plan.

**COMMISSIONER MADDEN:** Murray-Lower Darling, yes.

**COMMISSIONER DOOLAN:** The Murray-Lower Darling Plan, which obviously we have yet to see, but the Menindee Project goes to things that are related and they are under-developed now, so it is really trying to get a sense - we've said that's the place that this needs to be solved, but if there's opportunities to be more specific about what we think the community would want to see coming out of those two processes, it would be good to actually have that.

**MR MACKENZIE:** Yes, I agree, of course, but I think there are so few members of the community, for a start, which is easily ignored politically. Some Members are very outspoken and not necessarily assisting in the process, as you would know, but it is a small area of affected landholders, but I think it gives a real indication of how effective or ineffective the whole structure between the MDBA, the Federal Government and the States are.

In terms of actually providing the data or the records of what is necessary in order to maintain an effective flow and to keep those landholders secure, I can't ever give that data, but New South Wales Water is certainly doing some what would appear to be rigorous investigations as to the profile, but, at the moment, when I met them a few weeks ago up there, it was primarily to work out where these block banks would go rather than the longer term process of what is required.

**COMMISSIONER DOOLAN:** All right. John?

**COMMISSIONER MADDEN:** I guess the only comment is I think I agree with the comment that this is where a lot of issues come together. It's the intersection between plans, it's actually the interface between operating rules and then water sharing plans, so how you manage the storages and the like. It's an example of local environmental benefits versus wider benefits downstream, you know, trading those off and poor communication, stop/start processes because of the constraints around supply projects and how they have been progressed as well.

So there might be a small group but there have now been representations around this issue in three different hearings that we have held to date and we are taking on board our recommendations and potentially examining those and making, I guess, some more detail around processes, because I think it is an example.

I guess, for me, just one comment that you may want to comment on is the lack of information. Is this drought, is it non-compliance in the Barwon-Darling, is it the operation of the lakes and their drawdown, whether it be changed? The fundamental failing that I see is no one can actually answer that question and someone managing a resource should at least have addressed that issue through a process, started investigations, you know, as pre-work for any response.

So, I think, a little bit like the question before on deliverability, like who is responsible? Is it something falling between the cracks? Is it that people are deliberately allowing stuff to fall between the cracks or just that everyone's busy? I'm just wondering from your perspective and your interactions with people again, who actually owns responsibility in your discussions to date, or has everyone pointed the finger?

**MR MACKENZIE:** Good question. That's the point I'm making. In terms of inadequate data, I don't know if any, whether the Authority or your inquiry, can say how much water in Northern New South Wales, for example, is illegally taken, how much and when, how much is taken because of poor metering or lack of metering. It seems extraordinary to me - Carl, I think I'm right in saying that there's barely a litre of water in this Goulburn-Murray irrigation district that is taken that isn't metered - he ignored it - and that's an extraordinary situation that's happening up there, so how on earth can you get that data if (a) certain Basin States might be reluctant to provide it or they don't know and we don't know, so until we get that data as to whether these are the impacts consequential on things like the Lower Darling, I couldn't agree more.

The thing that concerns me more is the effectiveness of the regulatory and legislative structures between the Federal Government, the MDBA and the Basin States, and until such time as we've got some effective level of compliance amongst the Basin States, and certainly two of them, then I think we're not going to progress at all.

**COMMISSIONER DOOLAN:** A last question from me, but obviously we made a recommendation to separate the MDBA, its regulatory functions from its agent of Government functions. In our view, that would enable both to be done to their utmost capability and might start to address the lack of resource manager on the one side. I note that you are not certain that it might be able to be pulled off, but as a concept, as a recommendation, would you be supportive of that?

**MR MACKENZIE:** Absolutely, and I have said so, yes, absolutely, and I think it's quite telling and perhaps courageous, maybe, for the Commission to actually have come out on such a fundamental issue, and I know it's been highlighted on the ABC and media programs and ICAC and all the inquiries, but, to my mind, it has tackled the real nub of the problem, and that is the relationship between the Basin States and the Federal Government and the capacity to actually ensure that the Plan is delivered, not on time, but it's at least delivered, hopefully on time. Thank you.

**COMMISSIONER DOOLAN:** All right, thank you very much. At this point, we'll break for morning tea and we will reconvene at 10.30.

**ADJOURNED [10.08 am]**

**RESUMED [10.32 am]**

**COMMISSIONER DOOLAN:** Our next participant is Juliet Le Feuvre from Environment Victoria. Juliet, if you wouldn't mind just giving your name and organisation for the transcript, please.

**MS LE FEUVRE:** Yes, I'm Juliet Le Feuvre and I'm the Healthy Rivers Campaign Manager with Environment Victoria. For those of you who don't know me or us, Environment Victoria is one of the State's leading conservation organisations. We've been around for almost 50 years and we have been involved in the healthy river space for more years than I personally care to remember.

I would just like to acknowledge the traditional owners on whose land we meet and to pay respects to their Elders, past present and emerging.

I would like to say that Environment Victoria welcomes many of the Commission's draft findings and recommendations, particularly its founding premise that the best way to restore community confidence in water management in the Basin is to go back to the basics of good management. I find it extraordinary that we need to make this recommendation, but I'm really glad you are doing it, and it's particularly relevant to the comments that Sandy was making about the Darling. To my mind, there's been a lot of attention to illegal water take, there's been much less attention to legal water take and the content of the Barwon‑Darling Water Sharing Plan, which was changed in 2012 to allow much greater irrigator access to water, and that is responsible for many of the consequences that we're now seeing on the Lower Darling.

The protection, the prerequisite policy measures, that protect environmental water, particularly in New South Wales, you have expressed some confidence that they will be in place by June 2019. I have really serious concerns about the will and the ability of the New South Wales Government to actually make that happen, so I am actually really bothered about the protection of the environmental water up there because since the new Water Sharing Plan came into effect, we see many more low and no flow events in the Darling, a direct correlation.

But I would really like to talk about Victoria, which is my area of expertise. We strongly support the Commission's critique of the Basin Governments' lack of commitment to the Basin Plan as a whole and we agree with your statement that the Ministerial Council must set a much clearer tone of firm commitment to the Basin itself, not just their own patch, with unmistakable collected direction in delivering on commitment. You made that as a finding and I'd like to see that translate into a really strong recommendation because the behaviour on the part of Governments is continuing.

Publication of the Victorian and New South Wales Governments' Criteria for Socio and Economic Neutrality earlier this week is yet another example of the Governments protecting their particular patch, in this case the GMID, at the expense of Basin-wide benefits for environments and communities.

As I say, we share your concerns about the prerequisite policy measures, water resource plans, supply projects, efficiency and constraints measures being completed in a transparent and accountable manner on time and within budget. There's a serious risk of failure in any or all of these, but the problem should not be used as an excuse for not delivering on water recovery under the Basin Plan. We have always said it's a 3200 GL plan and that's where we need to get to.

We would like the Commission to re-emphasise the importance of implementing the Basin Plan package as a whole and to stay the course. Ultimately, the entire Plan is more than the sum of its constituent parts and will actually deliver for our rivers if we do it properly.

We were intrigued - in previous reports the Commission has been a strong supporter for buyback as an equitable and efficient response to the structural change in water recovery for the environment and that's been in your reports consistently over many years, even up to last year when you reported back on the National Water Initiative - so we are concerned that you are not continuing along that path. We would like to see you recommend lifting the 1500 GL cap on buybacks so that this can be brought back into the mix of means of water recovery, which would help take a lot of the pressure off on both the budget and the time pressure. It's quicker and more cost-effective than infrastructure projects. So, if we reinstate buyback, we are much more likely to get to the full amount of water recovery by 2024.

Similarly, constraints projects, an essential part of the 605 GL offset package, in addition to the vital contribution to the enhanced environments, so that comes to 450 gigs, and flood mitigation benefits, again they are too important to the success of the Plan to be consigned to the "too hard" basket and landholder negotiations should not be regarded as an inseparable value.

There's a view developing that the 450 gigs is unachievable as it will not be able to get down the river system without third party impacts, but that's exactly what constraints management is supposed to do, mitigating those impacts, and water flowing out to sea is not water wasted. It supports some of the richest and most diverse habitat on the planet and estuaries. Just ask any Coorong fisherman what the effects of upstream water extraction has been on their livelihood and you'll soon hear about socio-economic impacts.

We agree that the timeline for accrediting water resource plans should be extended beyond June 2019. However, supply projects are a bit of a different case. We don't think the timeline for them should be extended. If we can't sort them out by 2024 then I don't think they are viable projects. They have already had many years in development, have got quite a few years to go and there's plenty of time to discover whether they are going to deliver the promised benefits or not.

Your recommendations on environmental water planning and management should address the Plan requirements and give effect to international agreements and the Ramsar protected list of Wetlands. That's one of the key objectives of the Water Act and the Plan, but you don't address whether or not environmental water management is actually addressing those key points.

You should also be thinking about what is the impact of the adjusted SDL on environmental watering outcomes. It hasn't been taken into account in the Basin-wide Environmental Watering Strategy and we don't know whether we can achieve the objectives of that strategy with a reduced volume of environmental water. Nobody has done the work and that's something we really need to see attention paid to.

We really support your recommendations about splitting the compliance role from the operational role of the MDBA. I think that really, obviously, is a serious conflict of interest between the roles. We have been asking - the Environment Group Collective has been asking for the establishment of a Federal environment protection agency to deal with threat to species legislation, a whole raft of stuff, and the compliance role would well sit with that body if such a body were established. That's our preferred model.

We are a little bit concerned about the independence of the MDBA. The MDBA was set up as an independent authority. There's a lot of argument how well that role has been achieved, but, in your recommendations, giving the Basin's official committee, you know, a prime role, I'm concerned about that because we don't want to see control and controversy handed back to the States, we want to see the MDBA continue in that and strengthen the role of independence.

Just finally, when I was preparing for this, I was looking for an Aboriginal name for the Goulburn River and I stumbled on a list compiled by a surveyor in the 1860s of Aboriginal names and there were hundreds of them. It recorded Mille or Millewa for the Murray, meaning big one water, and then there's a comment saying that every feature on the map has its own name, and it's the same story with the Goulburn, there's different names for the river in different languages and every bend has its own name. That's the quality of the environment we're actually trying to protect that this Plan sets out to look after.

That's what we want to see actually happen, is that that full scope of environmental protection and enhancement and if we lose it, we are all the poorer, including the irrigation communities that Governments are struggling so hard to protect. Thank you.

**COMMISSIONER DOOLAN:** Thank you, Juliet. I've got a number of questions and I'm sure John has too. There's a couple that I'd like to start with and that is taking on board the constraints are very important to achieving particularly the enhanced outcomes in Schedule 5, they are supply projects, though.

**MS LE FEUVRE:** Exactly.

**COMMISSIONER DOOLAN:** And they are yet to commence before Governments have not fully agreed the funding for the initial stage of development and then finally taking it through, and our experience with raising constraints in Hume to Yarrawonga showed that you do have to negotiate with landholders and it does take time. Would you support, as we have suggested, an extension of timelines for those supply projects once they have been determined to be - the detailed design actually establishes that, you know, the cost is okay or they are willing to pay and the environmental benefits are there, if there were checks and balances along the way, so independent assessment of progress against milestones, for example, because it's very early to call it, but certainly based on Hume to Yarrawonga, the current timelines for the constraint projects would seem to be highly ambitious and likely to fail in 2024 and better to set them up properly is our view if you want to do them. If there's checks and balances and proper independent assessment of progress against clearly set milestones, would you be more inclined?

**MS LE FEUVRE:** We have consistently called for really thorough assessment of all the supply projects, all 36 of them, so, yes, we have recommended that the Wentworth Group criteria be adopted and we have actually recommended that they be put into legislation in past discussion of this issue. So, we are really, really keen to see the projects properly assessed, and we need to see what are or are not the benefits of the projects and what are the risks, and obviously that is taking time. I'm a bit down on the State Governments because it's taking such a long time to actually do that. They've already had seven years to develop these projects and it's a real shame that we're in such a poor state of development at this point and we should be much further progressed than we are.

If I had some real comfort that there was going to be really strict, you know, conditions, particularly for the constraints projects, not so much for the ones which are more straightforward, I mean the rules-based stuff, the onground project, there's absolutely no reason why they would need to be delayed if the benefits stack up. For my mind, it's horses for courses, but the key bit for me is the rigour of the assessment. If I was given a cast iron guarantee in 2024 that was actually going to happen, then I would feel more comfortable about it.

**COMMISSIONER DOOLAN:** The sorts of things we have been discussing and imagining for that would be that that gateway process would independently set a credible timeline and milestones along the way that - - -

**MS LE FEUVRE:** Yes, you make some other comments about milestones which I really totally endorse.

**COMMISSIONER DOOLAN:** Yes, and then, if you weigh off and the project fails, you could declare it early.

**MS LE FEUVRE:** I mean a milestone is a milestone and if it's not met then it's not - you know, that's it.

**COMMISSIONER DOOLAN:** So it's something that you would be happy to consider if the rigour of the process was there?

**MS LE FEUVRE:** I would consider it, yes.

**COMMISSIONER DOOLAN:** You mention the Basin Environmental Watering Strategy. It gets updated every five years and it's due next year, I believe, so we have again made some recommendations about what sort of improvements the next version of the Basin Environmental Watering Strategy should take, which would be better inclusion of event management in the Northern Basin, better setting of regional priorities, mostly to really build on better information and adaptive management as they have learnt. Is that the place where - do you feel currently it is not dealing with the international agreement requirements now?

**MS LE FEUVRE:** Yes, absolutely, it doesn't specifically focus on the Ramsar Wetlands, it doesn't specifically focus on the international agreements. The good part about the Basin Environmental Watering Strategy is it's got strong targets of where we want to get to, and that's the bit I'm concerned about with respect to adjusted SDL and whether those targets will be maintained in future iterations with a lower volume of environmental water and I don't want to see any backsliding on that, but I also want to see more of a focus - the foundation of the Plan is on those international agreements and they don't come through either in the Watering Strategy or in your discussion of it.

**COMMISSIONER DOOLAN:** Is it more they don't come through or is it that you do have a real concern that - - -

**MS LE FEUVRE:** I'm really concerned about the Ramsar sites, I'm seriously concerned.

**COMMISSIONER DOOLAN:** That they aren't getting water?

**MS LE FEUVRE:** That their environmental condition is not being maintained.

**COMMISSIONER DOOLAN:** Okay.

**MS LE FEUVRE:** Particularly the Lower Darling system, Coorong, a prime example of that.

**COMMISSIONER DOOLAN:** All right, thank you. You also had some comments about supporting our recommendations about governance and separation and I suppose your comments about BOC then and its enhanced role, we actually do believe Basin Governments need to start owning it, but the separation - so BOC would own, if you like, the Ministerial Council, but BOC on its own would give effect to the agent of Governments for the running of the Basin and the separation, the Authority itself would be the regulator. Under that separation, do you have less concern?

**MS LE FEUVRE:** I think separating the regulatory function from the implementation function, I've got no problem with that.

**COMMISSIONER DOOLAN:** Yes.

**MS LE FEUVRE:** It's more what then would the MDBA's role be in implementation? That's the bit I'm more concerned about.

**COMMISSIONER DOOLAN:** Yes.

**MS LE FEUVRE:** Because the MDBA need to be able to say, "Come you, you guys, you partner Governments, get your act together." They need to be able to crack the whip over the partner Governments and make them do things.

**COMMISSIONER DOOLAN:** Yes.

**MS LE FEUVRE:** That's what I'm worried about.

**COMMISSIONER DOOLAN:** But isn't that the regulator?

**MS LE FEUVRE:** That's not the regulator, no.

**COMMISSIONER DOOLAN:** In our view, that's the regulator.

**MS LE FEUVRE:** The regulator is, "Are the rules being complied with?" The implementer is, "Are you recovering enough water for the environment, are you putting barriers in the way of environmental water recovery, are you not contributing to the Watering Strategy?" you know, all those sorts of things. The regulator is - I guess you maybe need a little bit more discussion on the regulator role. I interpreted that as meaning, "Are external parties complying with the rules?" The implementation function is, "Are the salinity targets being met, are you doing enough to meet those targets?" If you consider that to be part of the regulator role, then that's a different issue.

**COMMISSIONER DOOLAN:** Yes, I think we do see that.

**COMMISSIONER MADDEN:** I think the important thing there is it's a Basin Plan regulator.

**COMMISSIONER DOOLAN:** Yes.

**COMMISSIONER MADDEN:** So the whole of the Basin Plan.

**MS LE FEUVRE:** So would that be a matter of including meeting targets within the Basin Plan? Would that be part of the regulator role?

**COMMISSIONER MADDEN:** Yes, are they implementing stuff that actually is meeting the Basin Plan, which is more than just water compliance rules.

**MS LE FEUVRE:** To me, the regulator role is, you know, is metering right, are people abiding by the rules?

**COMMISSIONER MADDEN:** We see it as things like are they doing monitoring and evaluation right, so there's a whole lot of assessments that feed into a 2026 review that a regulator, as an independent, would actually say, "Have the Governments, including the Commonwealth Government because they're a member of BOC actually played their role to deliver on the Basin Plan as a whole?"

**MS LE FEUVRE:** Then that's a bigger role than I think comes through in your report, so I think there's probably - - -

**COMMISSIONER MADDEN:** No, no.

**COMMISSIONER DOOLAN:** No, the next - - -

**MS LE FEUVRE:** There may be a bit of misunderstanding there about what actually that means.

**COMMISSIONER DOOLAN:** The next iteration needs to actually describe that more accurately in terms of what we're thinking.

**MS LE FEUVRE:** Exactly. If that's what you were intending, that's something else from what I construed from the report.

**COMMISSIONER MADDEN:** Yes. We take the point and it's not just yourself making that point about the functions because there's trading rules in that as well that the regulator would have to see someone managing it, so they do have those dual roles, it's just that notion that people jump to compliance, particularly after Four Corners and the like.

**MS LE FEUVRE:** Yes.

**COMMISSIONER MADDEN:** Being water take.

**MS LE FEUVRE:** That's how many people see compliance.

**COMMISSIONER MADDEN:** So SDL compliance would be number one, but there are many different roles in compliance, and water trading is an obvious one of that that people haven't had a focus on, but that is there.

**MS LE FEUVRE:** That's right.

**COMMISSIONER MADDEN:** I guess my only question is around PPMs. I think this is another thing of what the risks are if PPMs are not included. The confidence we have is the fact that if they're not in place by July 2019, the ramifications for the State may not be very explicit to people but they're actually drastic in terms of make good. This is the same with the 605 if things fall over and the make good and the risk and who is responsible there. We see that it's not clear but the consequence of a make good and whether that is buyback or reduction through plan changes, water sharing plan changes, so, say in the case of New South Wales, that's why we have some of the confidence and the fact that the confidence is that New South Wales and the Authority are both aware of the drastic consequence if they don't get done in time. So, I guess just to comment on that?

**MS LE FEUVRE:** Yes, I'm really concerned about slippage within that, that the MDBA has not really been willing to push the New South Wales Government on it, they've sort of more dangled the carrot, "Oh, yeah, come a little bit closer and we'll approve that." I'm really concerned with, you know, the past history of that. I think probably in the last 12 months, there's been a better chance of it happening, but, you know, the MDBA has, in the past, ticked off on the existing situation as being compliant with the Basin Plan. That's what I'm concerned about, that the MDBA, particularly if we stick to the timeline, the existing timeline for water resource plans, that, in the rush, they will say, "Oh, yeah, that's fine" when it's not fine. That's my real concern about it, that they will want to keep the New South Wales Government at the table, so they'll tick off on something which is not up to standard.

**COMMISSIONER DOOLAN:** You did mention - I mean, we have suggested, not for every water resource plan but for water resource plans with really significant issues that still need to be negotiated to comply with the Basin Plan or provide good environmental outcomes, then you would enable an extension?

**MS LE FEUVRE:** Yes, absolutely.

**COMMISSIONER DOOLAN:** Okay.

**COMMISSIONER MADDEN:** Which is a bit different to the PPMs, though.

**COMMISSIONER DOOLAN:** It is different to the PPMs, yes.

**MS LE FEUVRE:** But the PPMs are part of - - -

**COMMISSIONER MADDEN:** Well, they've coupled now but they're not necessarily.

**MS LE FEUVRE:** But the water resource plan has to give effect to the PPMs.

**COMMISSIONER MADDEN:** You could actually - in New South Wales, you could bring a PPM in through a water sharing plan even without a water resource plan or just legislative change, so you don't actually have to do and have a water resource plan accredited to give effect to a PPM. They put them together, but they're not necessarily - - -

**MS LE FEUVRE:** Yes, obviously there's different ways of doing it, but, as I say, I'm really concerned about the Barwon-Darling Water Sharing Plan as being the root of many of the problems that the Lower Darling is experiencing, independent - the Menindee situation, I'm not saying that's a great situation, but these problems were there before any change in the operation at Menindee.

**COMMISSIONER DOOLAN:** I just have one more question and that is I know there is a focus on the international agreements and the Ramsar Wetlands, but we have been hearing here today about some of the environmental outcomes for the Goulburn are being compromised by high summer flows.

**MS LE FEUVRE:** Yes, absolutely.

**COMMISSIONER DOOLAN:** And obviously we've heard the story of the Lower Darling. So it is actually, I suppose, getting your thoughts on the need - I think you brought it in at the last bit - for the Basin Plan to have good environmental outcomes, effectively at the local scale as well as at the Basin scale. Is that - - -

**MS LE FEUVRE:** Yes, that's right, yes. I mean I think we ought to - we talk a lot about being clever in the management of environmental water and I think we ought to be clever enough to drive both the local outcomes and the broader Basin scale ones, and it's easy to focus on the one. The local outcomes, you know, often watering a particular wetland, is easier to achieve. The Basin scale ones are the much harder ones to achieve, which actually require coordination, and that's always been the most difficult aspect of environmental watering to do that part, but I think we ought to be able to work it out.

We've had great results here in the Goulburn for fish spawning and we're beginning to see migration and now we need to actually see recruitment into the population and make sure that those fish not only have enough food to be babies on but have enough food to supply them when they are adults and that's a different proposition from, you know, a spawning event.

**COMMISSIONER DOOLAN:** Yes, and I think some of the concerns that we're seeing about the impacting factors aren't about the use of environmental water, it's about how water is being managed generally.

**MS LE FEUVRE:** Well, I mean, the whole issue with the Lower Goulburn is not a result of the environmental watering.

**COMMISSIONER DOOLAN:** No, nobody's saying that.

**MS LE FEUVRE:** It's a result of the deliveries downstream, which are actually wiping out the benefits of the environmental watering. That's the problem. You know, on the one hand we're doing this great stuff with the environmental water to encourage vegetation growth and all the rest of it; on the other hand, we're delivering water downstream that's washing the stuff away again. It's a ridiculous situation.

**COMMISSIONER DOOLAN:** Yes, so the Basin Plan management in total needs to deal with both those elements?

**MS LE FEUVRE:** Exactly, exactly.

**COMMISSIONER DOOLAN:** That's it for me.

**COMMISSIONER MADDEN:** Thank you.

**COMMISSIONER DOOLAN:** Thank you very much.

**MS LE FEUVRE:** Thanks very much.

**COMMISSIONER DOOLAN:** Could I call on Graham Pyle from Bluezone as the next participant and Mark Heggarty. Again, if you would just introduce yourselves for the record, please.

**MR PYLE:** I'm Graeme Pyle, a consultant from Berrigan. I've been greatly interested in water for many years, being an irrigation farmer, and I've taken a great interest in measurement of water and telemetry. This is Mark Heggarty, he's General Manager of Oceanic and Hydrographic at Bluezone based in Newcastle and Mark actually lives in Numurka.

First I would love to comment, Commissioners, on your morning tea. That was fabulous, the scones, particularly the cream.

Our previous speaker, Juliet, spoke at length about various volumes of water and we've heard 3200 gigalitres, 2750 gigalitres, 605 gigalitres and 450 gigalitres. Now, the measurements of all those volumes seems to be fairly much plus or minus 25 per cent. When you multiply 2750 by 20 per cent, that's 550,000 megalitres and currently that's worth $192 million to somebody. We don't know exactly who lost it and who gained it because our measurement systems are not accurate enough and that's what has driven me in the pursuit of measurement of water everywhere.

We can measure the floodplains in the Northern Basin and that hasn't been done before but we have the technology to do that. There is technology being developed right now in Griffith by Thompson Aviation to measure aquifers down to 100 metres underground. There's Lidar cameras, the Teledyne Galaxy camera can measure within 3 centimetres from a thousand metres in the sky, and the Teledyne Titan camera can measure five different volumes of vegetation in a forest, and that hasn't been done, to my knowledge, and I did ask a senior person in the Commonwealth Environmental Water Holder and he assured me they did not have that technology.

So, all these things are about measurement. I am talking on 12.2, Commissioners, and that's dealing with, "Basin States should consider the role, costs and benefits of consistent metering policies including the role of metering standards." To that, we have to comply with meters to the patent approval system delivered by the National Water Institute. A meter has to be validated. It can take three years and up to $300,000 to get a meter validated.

At this stage, there is no concept of LaserFlows. That's a meter that Bluezone has access to that runs on lasers. That's not commented on or mentioned anywhere in the whole system. Australia has three LaserFlows in it, but Kuwait, where water is fairly valuable, bought 250 six months ago for their irrigation systems there, but, in Australia, we are way behind. That would indicate we have problems with our validation systems.

In Australia, you're not allowed to sell stuff that doesn't work. The Office of Fair Trading will make life very difficult for you and then the court systems after that will take everything you've got if you sell something that doesn't work and it costs people money.

We are talking about water worth a lot of money. The patent approval system only checks machinery for three years, but most of this machinery would be in place for 10 or 20 years, so the patent approval system by the National Measurement Institute doesn't give recourse to people after three years, so it would appear that that is an impediment to new machinery.

When I was a kid, the only bloke with a mobile phone was Maxwell Smart, now we've all got them. I don't think we thought particularly that that would happen quite as quick as it has, much less how much power our mobile phones have now and all of the myriad of things that they can do. The same is happening in water measurement, in aquifer measurement, in forestry measurement, but we're not keeping up.

If you are going to manage systems, you've got to be able to measure it and we simply can't measure the vast amount of water that flows into the Murray-Darling Basin every year, being 33,800 gigalitres, and we can't account for a vast amount of that water, yet that's very valuable.

I'm looking for questions.

**COMMISSIONER MADDEN:** Well, there's an obvious question.

**MR PYLE:** Pardon?

**COMMISSIONER MADDEN:** There's an obvious question in terms of a policy change or direction other than the recommendation we have.

**MR PYLE:** Yes.

**COMMISSIONER MADDEN:** What would you actually like Governments to do - that's obviously not adopt your product tomorrow - it's about the processes that they have to go through. So, you're talking about the failing and the $300,000. I can understand that that would be a barrier unless you actually get either a Government or a large organisation or the Authority trying to progress something through that process, but can you tell me what the barriers are and what response you would like?

**MR PYLE:** A method by which the rest of the world operates on is of the ISO system, so that you comply with that and you validate yourself with the ISO people. Teledyne works closely with them in America. In fact, they have a very close relationship and they co-develop measurement systems between them. That system works in the rest of the world, but it's not used straight up in water in the Murray-Darling Basin.

The MDBA dreamt up the patent approval system, or, sorry, they complied with the patent approval system in about 2004, I think, and things have moved on a lot faster than I believe those people that worked on that at the time would have ever have thought, particularly in the last five years. So, the ISO system would be preferential to metering at a fair price and across the board rather than the system that we have.

Also we have to have meter installer validation. It's pretty hard to get a validation to ensure a LaserFlow meter. If this room was a channel and that was the bridge, you'd simply install the meter up there and it's only a matter of bolting it on, you don't have to be technically inclined other than to be able to get the meter the right way up and hook the little positive bit on to the positive bit and away it goes and that's it. There's no science, technical things. It's a bit like installing your new toaster in your kitchen; it's about as complicated as that.

**COMMISSIONER MADDEN:** No, you'd need a better base - yes, sorry.

**MR PYLE:** So there's a huge value that you can make - save a hell of a lot and get much more accurate measuring far quicker under the ISO than you can under the patent approval system.

**COMMISSIONER MADDEN:** This is something that is of wider Australia-wide perspective as well, not just the Basin.

**MR PYLE:** Yes.

**COMMISSIONER MADDEN:** So it's something commented on in last year's review as well with the National Water Initiative and how States actually bring in measurement policies over time. It may be that we talk wider about the process and the link with innovation, but it's probably something that we will come back to over time with our role in the National Water Initiative and reviewing States' progress against that every three years.

**MR PYLE:** Right.

**COMMISSIONER DOOLAN:** Okay, I haven't got any comments.

**MR PYLE:** I'm done?

**COMMISSIONER MADDEN:** Thank you.

**MR PYLE:** There's the brochures on all that machinery.

**COMMISSIONER DOOLAN:** Shelly Scullar?

**MS SCOULLAR:** Scoullar, yes, thank you.

**COMMISSIONER DOOLAN:** Scoullar, sorry, Shelly.

**MS SCOULLAR:** No, no, that's all right.

**COMMISSIONER DOOLAN:** Representing Speak Up For Water and again if you would introduce yourself for the record.

**MS SCOULLAR:** Yes. Shelly Scoullar, Chair of the Speak Up Campaign. I just want to start by thanking the Productivity Commission for giving me the opportunity to address you today. I'm here today on behalf of the Speak Up Campaign, a voice for real communities. We have a growing membership base which includes businesses, farmers, councils, landholder associations and concerned individuals and I come today as a representative of the grass roots.

The submission which Speak Up has prepared on the draft recommendations addresses a number of the key points highlighted by the PC's draft report, key recommendations, which were determined by set terms of reference, giving clear purpose for the report. As such, the recommendations address directly to those terms of reference. I would like to point out that whilst there is some reference to consumptive water users and the communities which rely on them, largely the impacts on people in communities are under-represented by the report, which is the purpose of us being here today.

The key areas our submission focused on include support for the majority of the findings and recommendations of the Productivity Commission. We included that New South Wales Murray was not historically poorly managed. Water markets, while now being fluid, lack transparency and have now priced many food producers out of the market, even when dams are now considerably full.

We highlighted the fact that the socio-economic impacts of the Basin Plan have far exceeded those estimated. We address the failure to recognise and address the negative environmental consequences of planned watering events. We highlighted the opportunity to make the stitch-in-time changes which are needed to prevent further damage to communities, people and the environment.

When asked to provide the key issues which I would like to discuss today, I specifically chose three areas of concern, all of which directly impact on people and their communities. These include concerns with the monitoring and evaluation. That includes the lack of a citizen science incorporated into experimental design and failure to adequately assess negative environmental outcomes, which was briefly touched before, concerns with the water market and the lack of affordable and accessible water, the current drought situation and impacts on regional economies, irrigation communities becoming part of the problem instead of part of the solution, and the promised countercyclical nature of environmental water, which hasn't occurred. Solutions and options moving forward, how can the stitch-in-time changes present real opportunity to salvage the Basin Plan?

We are the people who are affected by the Plan and we have lost confidence with all the parties associated with implementing the Plan and are still coming to grips with what our future will look like. We believe the impacts on people and communities should be addressed in a far more comprehensive manner. The success of this Plan is dependent on all parties being treated equally and feeling that they are willing participants in a Plan that treats all Australians fairly. This is not the case and the report has missed an opportunity, we feel, to comprehensively address the underlying issues.

I do not come here today with an overload of technical details. I come here with some common-sense solutions which have been supported across many levels. I come here today to ensure that it is on public record that our communities, our farmers and our businesses are past tipping point and some are on the brink of survival. And these are not the 10 per cent that some people claim to be weeded out. That has already happened.

These are passionate people who want to grow food and fibre, employ locals, either as contractors on farm, accountants, financial consultants, they want to send their kids to the local schools, visit their GP, buy their household needs locally. They are people who just want to live a normal life, grow the best, leave their land in a better way than they found it and participate in their community. Yet, due to poor science, flawed assumptions, unrealistic timelines and political agendas, water is becoming increasingly inaccessible, unreliable and unaffordable for those who are best placed to grow the staples which we all need three times a day. That's my introduction.

**COMMISSIONER DOOLAN:** You did talk about having solutions or actions that you would like to see happen. Can you take us through what you - - -

**MS SCOULLAR:** Absolutely, yep. Okay, so earlier this year, we produced this document which is "Balancing the Impacts of the Basin Plan". We have nine organisations across three States which have endorsed this document and it outlines a number of steps, but the three I want to address today are - sorry, let me just get back to where we are.

The greatest solution comes from the management of the end of system. The Coorong and the Lower Lakes, so far just over 2100 gigalitres or 4.2 Sydney Harbours have been recovered from productive use and the vast majority ending in the Lower Lakes. But, in those Lower Lakes, approximately one-third of the volume evaporated.

The main driving force of the Basin Plan are problems in South Australia being solved by volumes of water from upstream States, yet South Australia has barely lifted a finger to become a part of the solution. It won't even turn on its desal plant beyond maintenance capacity despite the plant being built with the help of significant Federal Government funding to secure Adelaide's supply. So, our recommendation is the construction of Lock 0 or returning the Lower Lakes to an estuarine system which would secure irrigation and human needs in South Australia and, at the same time, preserve water for upstream States whose communities are under increasing pressure and, as already pointed out by Juliet earlier, we are compromising environmental gains in our upstream regions by trying to get these vast amount of volumes of water to the end of system.

Then comes solution 2. As you're well aware, enormous volumes of water from the south-east of South Australia are drained out to sea every year, returning greater volumes of these flows back into the Coorong would be another step in the right direction to securing environmental outcomes and supporting the health of our upstream communities as well as the health of the Coorong.

Following on from Mr Pyle, we believe that Basin-wide standardised metering and compliance is essential. Of the 2117 gigalitres recovered to date, 82 per cent has come from the Southern Basis with the major storages being Hume and Dartmouth and the majority of environmental and South Australian water will need to be delivered via the Murray. Is there any wonder the problems of the Darling are far from resolved? Installing the latest technology for metering and measuring is a crucial step for solving the problems of the Darling.

That's our three main things that we think could have a significant help Basin-wide.

**COMMISSIONER DOOLAN:** We've also been in Murray Bridge on Monday.

**MS SCOULLAR:** Yes.

**COMMISSIONER DOOLAN:** The concerns that we heard in Murray Bridge were about Lower Lakes and Coorong not getting enough water, needing the 450 and the constraints lifted and the need to maintain those systems. Obviously across the Basin, we have - so the solution of the construction of Lock 0 is not one that at this stage would be supported by other Basin communities. You said it's three - - -

**MS SCOULLAR:** Yes, it was supported by - the South Australian Fishing Alliance have supported this documents, yes, because, you know, the fish back before the barrages were put in and before the drains were put in, mulloway was, you know, the main industry down there. I can provide you with a document from - yep.

**COMMISSIONER DOOLAN:** No, that's fine, we've been down there.

**MS SCOULLAR:** Yes.

**COMMISSIONER DOOLAN:** And we have certainly heard about the south-east drainage scheme into the Coorong and partially that work is happening as well.

**MS SCOULLAR:** Yes, it has started, yep.

**COMMISSIONER DOOLAN:** Your solution is a large scale solution which would be highly contested in parts of the Basin.

**MS SCOULLAR:** Yes.

**COMMISSIONER DOOLAN:** Are there things that relate to what we have recommended in our report that you feel, without going to that extreme, we could actually enhance or improve?

**MS SCOULLAR:** You've put me on the spot there.

**COMMISSIONER DOOLAN:** Sorry.

**MS SCOULLAR:** No, that's all right. I've have to take that on notice, please.

**COMMISSIONER DOOLAN:** Of course, sure.

**COMMISSIONER MADDEN:** Probably a couple of comments, and it might come up later in terms of one of the options that might meet some tests, but the desal plant, I'm not sure of the volumes, I was going to look it up here, that it can actually provide. I guess from the Productivity Commission's point of view, we would have to look at the economics of that.

**MS SCOULLAR:** Yes.

**COMMISSIONER MADDEN:** And I understand it is built and that's at some cost, and we've said some things in the past about the value of the desal plants in Melbourne and Perth, Perth less so because there was a plan and they are actually being utilised whereas, obviously, Melbourne and Sydney, to a lesser extent, and Adelaide are not being utilised, so my only comment there is a bad decision being followed by then operating it at a high cost to society. I'm not sure how the Productivity Commission could support one bad decision being followed by another.

I am interested, though, in the countercyclical nature of environmental water that you mentioned and just exploring that a little bit more and then, second, so you've got a bit of time to think it through, on the monitoring and evaluation, what you actually see as - because I know there's been work done and when we went round the Basin, we did hear - I'm sorry - Phil from the Murray-Darling Basin Authority who has done the socio-economics, Phil Townsend.

**MS SCOULLAR:** Yes.

**COMMISSIONER MADDEN:** Many communities, for example, in St George, were on record saying he did a very good job of understanding their communities and the changes. I am just trying to think of how that can be enhanced going forward. Number one, a little bit more about the environmental water and its interaction with irrigation and then second on that - - -

**MS SCOULLAR:** Yes, not a problem at all. So when John Howard addressed the National Press Club on 25 January 2007 to announce the 2007 Water Act, he said: "Water that accrues to the Commonwealth Government through these measures will be managed to restore the health of the rivers and wetlands in the Murray-Darling Basin. The countercyclical nature of the environmental watering will also allow some water to be made available to irrigators during dry periods." That is the countercyclical nature of environmental watering.

This year, when we have starving and dying stock, the Government is providing huge amounts of financial support and funding for drought-declared regions, yet a mere 35 gigalitres has been made available for trade from the environment. Water is the only solution to the current drought situation and, yes, there are a number of different buckets besides the environmental bucket. However, the contribution of 35 gigs is hardly what I would call countercyclical during this time.

The whole premise of the CEWH account was set up so that when we were in these dry times, water could be traded back, the CEWH can cover their costs by trading water back into the market, and I don't feel 35 gigs is a major contribution to countercyclical trading.

**COMMISSIONER DOOLAN:** However, the Basin Plan itself and the Basin Environmental Watering Strategy, which is the document "Strategy to Govern Environmental Water and Outcomes" developed - - -

**MS SCOULLAR:** Doesn't allow - yep.

**COMMISSIONER DOOLAN:** Well, it's been developed since John Howard's initial speech and basically on the basis of good information, and so it would seem that those comments will have been made before the information had been collected, the strategy had been developed and it's clear under the Act, the water holder has a very clear requirement to meet its environmental requirements before it trades. So is the question really that you're raising being clear and transparent about how they make those decisions because it's okay for John Howard in 2007 to sort of indicate an intent, we have moved well past there.

**MS SCOULLAR:** I think the problem is the 2007 Water Act and that's where the start of the problems - that's obviously not in your terms of reference and I agree, the rules are very clear in how the CEWH is allowed to trade water, but we have - and this is, I guess, what we said that your terms of reference was able to pick up the basis of why the Basin Plan is failing because there's - Phil Townsend, I agree, he's done a very great job of picking up the community things, but my monitoring and evaluation was more on the environmental side, and so internationally, a multiple lines of evidence approach, including citizen science, is widely used to form the basis of monitoring and evaluation.

Without this approach, important data can be missed, not only in baseline collections but also in ongoing monitoring. For example, silver perch do not get picked up through electrofishing, however, they are easily caught be recreational fishers and because the Basin Plan does not incorporate citizen science in experimental design, silver perch numbers are severely distorted. So, if we're not using all the best available science and we're not using a multiple lines evidence approach, can we be sure of our baseline data and our models?

**COMMISSIONER DOOLAN:** Effectively, you are suggesting that the monitoring and evaluation strategy have a role for citizen science in it?

**MS SCOULLAR:** Yes, absolutely.

**COMMISSIONER DOOLAN:** So it's part of it?

**MS SCOULLAR:** Yes.

**COMMISSIONER DOOLAN:** It may not be the whole. We heard that again in Murray Bridge, that there is a place - design a strategy that has a range of hierarchies able to operate at different scales and utilise citizen science in that process.

**MS SCOULLAR:** Yes, absolutely.

**COMMISSIONER DOOLAN:** We heard that there, too.

**MS SCOULLAR:** Yes.

**COMMISSIONER DOOLAN:** All right, thank you. I think that's it.

**COMMISSIONER MADDEN:** That's it, okay.

**COMMISSIONER DOOLAN:** Thank you.

**MS SCOULLAR:** Thank you. Can I just have one parting comment?

**COMMISSIONER MADDEN:** Sure.

**COMMISSIONER DOOLAN:** Of course.

**MS SCOULLAR:** Okay. So, as a mother of three boys, at times I have to make decisions that are not always popular, but, as a mother, I make decisions which are best for my entire family, which may make some unhappy, but that is my job.

Today, if you take only one message from my time, then let it be this: I urge you to recommend that it is time for South Australia to be held to account for the mismanagement of the end of system. I urge you to recommend to the Government that it is time for them to step up and be the parent. Our Government needs to make decisions which won't be popular with one of the family members, but it will be a decision which will be best for the family as a whole. Our region cannot continue to be the collateral damage from South Australia's refusal to be part of the solution. No doubt there will be tantrums, as you pointed out, Jane, but for those brave enough to push through and stand up for what is right, the nation, our communities and our future generations will thank you for the stitch‑in‑time changes which have saved us. Thank you.

**COMMISSIONER DOOLAN:** Thank you. Now we actually do have a little bit of time before scheduled lunch. Our normal process is to wait until the end of the day and ask if there's anybody else in the audience that would like to make comments on the record. Given we have got a little bit of time, we thought we would do that twice, just before lunch - - -

**COMMISSIONER MADDEN:** And the length of the day, sorry.

**COMMISSIONER DOOLAN:** And the length of the day, the fact that it's a long day, we would do that at this point and again. So, if there was somebody who did want to make a comment and wasn't able to stick around until the end of the day, there's an opportunity now, if you want to. Alternatively, we can wait until the end of the day. Again, please state your name and if there's an affiliation for the record.

**MR HOGAN:** Darryl Hogan, dairy farmer and irrigator from the Goulburn Valley. By and large, I pretty much accept all your report and I think most of it is pretty sound and is solid. The part that I'd actually like to take even further and discuss is around the governance and arrangements of the Authority, its roles, and I think before we support, rightfully support, the teasing apart of their two roles of regulatory compliance and implementation, but that will only go so far unless we address the culture, and unless we address the culture within the organisation of properly engaging and listening, separating their responsibilities, we'll not actually deliver the full benefits that can be achieved, and part of the culture and the problems also applies to the Federal department.

It is actually MINCo's responsibility to implement the decisions and the agreements to be put in place, but while the Federal department continually interfere and road-block them, probably push their own agendas, the States don't get that space to fully implement the agreements that come out of each MINCo meeting, and I sometimes wonder actually what is the role of the senior management and the board at MDBA when it appears that the Federal department is actually the ones calling the shots and directing them what they can do. There has to be a significant change in culture first before we can actually get the benefits out of decoupling the roles and responsibilities within the Authority.

**COMMISSIONER MADDEN:** From our recommendations, role clarity was an important part of that and culture, again, we see as an important part, and we have looked particularly with the Murray-Darling Basin Authority, so its role as partner, in some cases, and the culture of "Let's help you" - and a PPM is an example of that - "Let's help you develop and work with you", but we then have to turn, at a certain point, and pass judgment on the work we have done together. So, we use the word "marking" around homework, I think, but often it's marking our progress together as partners not just their own homework.

We have heard a few examples where that culture has engendered trust issues about the process, and PPMs is one of them, but water resource plans, information around Lower Darling, where do the issues come from, kind of gaps in compliance, but we haven't heard a lot about the department and how it has actually interacted, and I guess - have you got any examples, and I don't mean names here, what I mean is just in the process how things can actually not work well?

**MR HOGAN:** I think the most obvious one at the moment is the last MINCo meeting which clearly set the States to develop its socio-economic neutrality test and the department, from my understanding of the press releases, and the contrary was the expressions of interest for the on-farm efficiency programs, but that was supposed to not be implemented until the socio-economic neutrality test had been agreed on at the next MINCo meeting, and yet the department had already started drawing up its expressions of interest and what the terms would be and how it was going to be implemented. So, if there's an agreement at MINCo for the States to go back and do their job, then they should be allowed to get on and do their job, rather than the federal department continuing on their own agenda or their own pathway and not listening to or taking on board the MINCo agreements.

And I think, back on the culture thing with the Authority, this just hasn’t happened overnight. If you go way back to even before the plan was brought into legislation there was continued issues around agreement that certain sections of the Basin Plan weren’t right and they would change it. But further back in the plan hidden somewhere was another clause put it which actually counteracted what was agreed to earlier on. So there's been a continual undermining of the confidence of the communities in the plan because of the lack of transparency and trust within the Authority to say what they - deliver what they said they were going to do.

**COMMISSIONER MADDEN:** So we do have some broad - we've probably floated a few ideas around an independent chair of BOC. We’ve considered those arrangements and maybe some directions and statement of expectations and some of the machinery or the architecture around how BOC works and naturally translates what is decided and communicates what is decided. Is there anything about those recommendations or more specific that you could - - -

**MR HOGAN:** I think enhancing the powers of BOC and how they operate prior to, is the right step forward. Let the Basin officials come to the agreement, let it go to MINCo, let them have their meeting, decide on the course of action and then get on and do it.

**COMMISSIONER DOOLAN:** And certainly the separation, in our view our thinking was if it was separated then that part of the MDBA would then be fully the supportive agent of those governments and not confounded by its regulatory function. So both sides would be able to do their jobs far more effectively.

**MR HOGAN:** As long as the Authority truly acted as an independent agency to do its role and not being seen or instructed or appeared to be following out the wishes of somebody else.

**COMMISSIONER DOOLAN:** Well again, if there were further suggestions as to consolidate the means of BOC and MINCo operating as an entity, we’re very happy to hear them in submissions. Okay, thank you.

**MR HOGAN:** Thank you.

**COMMISSIONER DOOLAN:** Thank you, Darryl. Is there anybody else who would like to - - -

**MR NORTHAUSEN:** My name's Wade Northausen. I'm the president of the West Goulburn Branch of Victorian Farmers Federation and United Dairy Farmers Victoria. We're based in Kyabram, so I represent quite a large area of the Northern Victorian dairy industry and other associated irrigation enterprises in our region.

I think it's - I've always said that when we get to have a very, very dry year we're going to see a lot of destruction throughout the irrigation industry in Northern Victoria and Southern Riverina. Now, we are now having a very dry season and we are seeing the irrigation industry in Northern Victoria coming into a very, very horrible, terrible time. We're going to see quite a lot of the dairy industry collapse in our region because of, specifically, the Murray-Darling Basin Plan. If we look at the changes that have been made we see a pattern, and for those of us who move in political circles we are aware that there are - there is a push to do away with Australian family farmers in favour of corporate agriculture. Now the changes that have been made in terms of the environmental side of the Murray-Darling Basin Plan, the water that’s been bought for that, the open free trade mechanism that was introduced and various other things are absolutely making it impossible for Australian family farmers, who rely on that irrigation water, to survive. They ultimately will not.

All through the Murray-Darling Basin process we've heard of checks and balances and we've heard of opportunities to put submissions to different bodies. The Murray-Darling Basin Authority wanted to hear from a cross-representation of the community, they will talk to anybody who wanted to make a submission or speak to them. Now they have deliberately cherry-picked the people they have and in many cases you have not had the opportunity to put forward the information and many of the bureaucrats in the Murray-Darling Basin Authority they just lie to you.

When we look at the politicians' role in all this, I think that we are dealing with some fairly high level corruption and I think that we need to look at things; that we have a specific plan using the environment to transfer ownership of our water resources and our land to, in particular, multi-national corporates. Now the only way you can do that is to destroy your family farmers and I believe that's the objective of this plan because that is the result. And in politics you don’t worry about what you're told at the start of it because that's garbage, you look at the end result to find out what the initial intention was.

So that's the situation that we are at. We may need to make some very, very dramatic changes to a number of the things that have been done. The State conference of the Victorian Farmers Federation that was held in Ballarat on 19 and 20 July this year passed a motion to support a Federal Royal Commission into the Murray-Darling Basin Plan to investigate corruption, dishonesty and failure to follow due process. So we do intend to push that agenda and we do intend to start holding people accountable because the destruction that our people are going to go through is enormous. We've already lost a huge amount of our farmers. We hear governments talk about, you know, the strain and mental anguish of people in situations. Well they are creating the situations. We don’t need to have reactive policies to help people in those situations. We have to stop causing the problems that are creating them.

We are also told that it's "Oh, very, very dry, you know". We hear the environmentalists talk about weather conditions and commodity prices, "that's why farmers are in trouble". Well, I have absolutely no faith at all in the environmentalists whatsoever, given their role in all this. So at the end of the day we don’t have a shortage of water in the Southern Riverina or in Northern Victoria. We have plenty of water; it's still sitting in the dams. The problem we have is the politicians and bureaucrats have made it so that we can't get it. So the irrigation system was set up to mitigate our region against dry conditions, that's it's whole purpose. And they have systematically destroyed that ability. They have put water out of the reach of our family farmers throughout this entire region. South Australia, as has been said by previous speakers, have a hell of a lot to answer for and I think that any Royal Commission should investigate the South Australian Government first, as well as the Murray-Darling Basin Authority.

So we need changes to be made. We don’t need to continually make submissions to things that are just so blatantly common sense and so blatantly corrupt. So, I could take up a lot more of your time, however there may be other speakers who wish to make a statement or you may also have questions. So I'd like to say thank you for the opportunity to put that to you and if you’ve got any questions now's the time.

**COMMISSIONER MADDEN:** I won't go into any detail of your statement but I guess the addendum I'd like to hear is, well, what are the options in terms of review? I know we'll be talking a little bit later about socioeconomic neutrality and the 450 and the like. Given that there are different forces in terms of market forces, and we’ve been to other areas such as Mildura and Griffith where we don’t hear the same comments; so in the Murrumbidgee there's been positive investments going on and family farms are still operating and moving into cotton and the like, and I'm talking at family farm level. I guess just wondering what is the going forward. I mean it is easy to say we'll stop the plan and things, but what are you actually asking for in terms of policy?

**MR NORTHAUSEN:** So first of all, in terms of the Darling, you could be transferring water through a not very expensive infrastructure project from floodplains in Queensland right through into the Darling and recharge that entire system. How that is not on the table is the most bizarre and ridiculous - it's just unbelievable that that's not on the table. They seem to be intent on taking every drop of water out of this system and not allowing any other water to come into it.

We need changes to South Australia's so-called environmental science garbage. We need it to look at the fact that a lot of the waterways down there were saline. They're trying to recharge them with fresh water. That was only one in a blue moon event. So that's wrong. We need to start looking at the environmental scientists who are putting this garbage up and hold these people to account. There's no accountability. We need to change the water trading rules that have been created here. Now under the Murray-Darling Basin Plan they implemented water trading allowances for the Commonwealth to buy water. Now that then has gone on to anybody. We have this ridiculous open free trade policy where anybody at all can buy water. Now that has to stop. That is not - that's not viable. Water is a very, very scarce essential commodity and it has to be - it has to be maintained in an area for the people who actually use it. You can't have water speculators all over the place, and I know we hear all this garbage about there's only 5 per cent water speculators, et cetera et cetera. Well, you know, when you look at the reality, that's not right.

Government has to start putting in place policies that encourage water to come back to areas where it is - can be best used for Australia's food security. Not put into the hands of multi-national corporates who can be here today, fall over tomorrow, flog off water to whoever. Now we have to get back into the idea that we're trading on a world market where it's very competitive in terms of selling food, the whole lot of it, so we've got to be able to grow the food; we've got to be able to have security of water at affordable prices. Now Government does have the capacity to change whatever rules or laws it wants to, to effect that. But they are choosing to put in place policies that are wiping out our people.

Now Australia's food security is hanging in the balance. It's not a joke and it's not ridiculous. These are the facts. So we need to get some very serious things happening. We need to, as I said, have a Royal Commission and investigate who's the winners and who are the losers, and who has effected that to happen. Those are the three points that we need to check out. So, as I said, I could say a fair bit more and they're some suggestions. If you're interested later on we can talk, I've got a lot more suggestions that could be made, but we need to get that on the record and up and pumping now, especially seeing as how we've got a rolling State election coming up in another couple of months and a Federal election coming up, plus or minus February/May next year. So that's a good opportunity to start pushing this stuff, but we need to start an inquiry to find out what's going on and fix it before there's nothing left here.

**COMMISSIONER DOOLAN:** All right, thank you. We probably have got a few minutes if there's somebody else.

**MS McKAY:** I would like to endorse many factors that you said as well. My name is Nicole. I am a community person. I am not a farmer. I have never held - well maybe I did actually some time ago - I don’t hold a water licence. I come from a community where I sat down at the table with local men older than me, when water trading was introduced to our community.

**COMMISSIONER MADDEN:** Sorry. Could you say the surname as well, sorry?

**MS McKAY:** McKay - McKay.

**COMMISSIONER MADDEN:** Thank you.

**MS McKAY:** So my family were soldier settlers in Robinvale. My great-grandfather worked on a station in Pooncarie and my father had businesses and my mother had businesses as well. And I have family in irrigation communities, so I've been someone who's just interested in community and what's going on in politics and the land and environment in general. I sat down at the table when our region was the first area where water trading was introduced, at Nyah, by the Nyah to the Border Salinity Management Plan or some other such thing, and we were told as a community that this would be good for the environment and also good for flexibility of farming. And I would like to say that I share grave concerns that community agriculture is heading into corporate hands and that this is being manipulated by Government previously aligned with farming communities and I find this a great concern. I have watched with great interest the controversies of the last year.

Things I would like to discuss about the Basin Plan is - and I think - I've been told, and as a community person I've willingly turned up at every consultation and given my piece, which I can tell you that as someone who's interested in the environment I feel incredibly disempowered, and as you’ve said this had no effect whatsoever, being not part of money lobby group at all. Nonetheless we all turn up time after time, so I can sympathise with that feeling.

I think that the worst time ever for our communities was during the drought and during a time of change in agriculture when water was scarce. And I have been saying for the past year publically, whenever I could, that we will see a crisis in water availability when we have dry times again. Unfortunately this is shown to be true, but I think that various things that have occurred in policy have made this worse. And I would like to talk a little about my perspective on the Basin Plan, which is that for any water recovery which has been done for our nation and for the fact that we have entered an area where water trade seems to be the rule of the day, that it's an open market, whether that's right or wrong I will maybe say a sentence about that. You need to have an amount of water that is not in consumptive use, especially in light of the fact there seems to be enormous amounts of development in our region. I live in Swan Hill and there does not seem to be any understanding of how they - is this controlled or not. I was at the Royal Commission in Mildura. There are great concerns about supply and that there would be a scarcity of water. So who is encouraging this development? What is the restriction on it? I'll just put those questions out there. Because, of course, family and successful family farmers who have somehow made it through the last 12 years will not be able to compete against corporates who have - who exist because water is now perceived to be an investment, which I don’t think in the long-term for our nation is a good thing. I think there needs to be some control over that, to protect communities, the environment, but especially indigenous communities who will see themselves entirely ripped off by this situation and are being ripped off now.

So, water trade is the name of the game. It cannot be all in consumptive use. I think anyone who comes from the country realises that if everything is in consumptive use then there will be - it will run out before the end, or it will run out at some point and at the moment it's running out in the middle, which is at the Lower Darling and the Lower Murrumbidgee, which happens to be a region which I live quite close to and I can report that those - not enough people are talking about water quality and flows as an important thing for community health and wellbeing in remote and rural areas where it is hot and everyone recreates in those regions. In Hay there was a huge algal bloom this year and the Murrumbidgee and Balranald looks not good at all and seems to be not flowing at various times when I went up there. The Darling River is in a shocking state and of all things these should be national scandals and they have not reached the national stage for the scandal that they are and the risk to human life and communities continuing. Because if you have poor water quality that people can't touch, for one thing the effect on people's daily lives is huge. We all like to swim in the river. We fish in the river, we recreate there. There's huge tourism effects in our Basin and particularly in the beautiful wilderness areas that existed between Swan Hill and Wentworth, where all the rivers from - the Maribor from Swan Hill but the New South Wales rivers' junction and this is a very, very important area. So the fact that water quality in those areas is potentially going to be at great risk is a very - should be the primary concern, a productivity issue. And then after that I think the continuing of our communities, farming communities, the family farms, is really, really essential as well. These are things that are at great risk.

Another thing to mention is a shocking situation, that the Barkindji people of the Darling River have the largest native title recognised claim in New South Wales and their water is empty and poisonous for much of the time. I don’t think any one of us want to hold our head up and say this is a situation we want to continue.

However, I will go back to our area. I have been in the local forest. I grew up beside red gum forests between Swan Hill and Mildura within families scattered along. In spring they are inundated regularly. This is not something that disappeared 50 to 60, 100 years ago, although the amount of water into those areas was probably there for less time. However, it happened most springs in those forests, that's the reason they exist. They wouldn’t have been so foresty, they would've been more reed beds. I'm not going to go into a dialogue about red gum or other things, but what I would like to say is that water was there and those areas are hugely significant for tourism and recreation and the general community and indigenous, cultural and environmental heritage. We are risking a lot and we are just being the general community the large amount are not irrigators and we are all related, we all matter, we all are the nurses, the shopkeepers, the other people who live in those areas. We need to live near healthy waterways and we also want to live near beautiful wilderness areas that add value to our homes and our towns, especially as we hope to grow with a viable community-based irrigated agriculture.

Now, those areas of wilderness are the site of many proposed SDL projects. It's said that constraints mean the water can't get there. I do not have detailed understanding of the constraints, but all I know is that the water was there in the 80s and in the 90s and the constraints didn't do anything to stop it getting there. So I will just put it there, that that water came down those rivers and no one complained then about effects on their lands because it was part of the natural system.

Now those SDL projects, there are some risks and as far as assessing their - whether they're a good project or not in themselves, they deliver an environmental benefit on a particular site. So, yes, they may deliver an environmental benefit. Is it equal to water flowing into that area in the natural way? And I'd like to add that this is a minute percentage of the water that would've flooded into the floodplain everywhere around here and other places 200 years ago. We're asking or trying to speak up for an area that is - was functioning as wet areas in our region, including lakes where people fished, swam, caught yabbies, fish, et cetera, speed-boating, you know, whatever people want to do when they live in a virtual desert. '

So delivering water to a certain area via an engineering project may be a grand and wonderful scheme that someone thinks up but the areas between will eventually probably die off, give them 50 years. So we're looking at protecting very small spots with these SDL projects and the remainder will have to deteriorate with time because they are going to be watered by pumps and hoses. It's vastly unnatural and I think probably unsustainable. If you're going to do those SDL projects, I say why don’t they have allocated water then that could be in indigenous hands, so that at least you spend the money, they last forever. They've got a right, a water right associated with them? No. They can't have that apparently.

So I just think there are risks. The risks of low flows. What are the risks of low flows to our communities downstream of here? And I feel very much for a lot of the other issues that are brought up. The risk of low flows are blue-green algal events; gastroenteritis just came up as being increased in droughts because there are more bacteria - it was something that came into the media this week in an international journal of water and health, I think. So this is very interesting as well, but also black water events do not occur because of flooding. They occur when all the small floods disappear out of the system. We didn't have them prior to over-extraction and now they will be a risk when flooding is uncontrolled and they can be devastating. So I'm wanting to bring up all of these issues. A whole of the system approach. We shouldn’t be - the Basin Plan was put to us as something that would mitigate the effects of over-extraction or water trade and in fact what we have, I think the environmental benefits have been meagre and isolated and it absolutely seems to be clear that if you look into the media and various investigations Basin Plan funds have been used to enrich - or potentially, allegedly been used to enrich corporates or enrich large water holders, or just to malmanage the situation to the benefit of certain States. And this is a national disgrace and I entirely support the call for a Royal Commission. The Murray-Darling Basin has supported our lives and our communities and we wish that it would be able to do that into the future and not just for the term of some small amount of government and not because of pressure. Thank you. I don’t think I've got anything else to say. I probably could but that will probably do. Thank you. I appreciate it.

**COMMISSIONER DOOLAN:** Okay. Thank you.

**COMMISSIONER MADDEN:** Thank you.

**COMMISSIONER DOOLAN:** We will adjourn for lunch and we'll reconvene at 12.40 with the Upper Goulburn River Catchment Authority. Thank you.

**ADJOURNED**

**RESUMED**

**COMMISSIONER DOOLAN:** We'll reconvene our hearings and we're kicking off with Jan Beer and Ken Pattison from the Upper Goulburn River Catchment Association. So for the record, I understand you're doing the presentation together?

**MS BEER:** We submitted the submission together. Ken is much more knowledgeable on irrigation and metering, the information we put in on that.

**COMMISSIONER DOOLAN:** Sure. Okay, so basically if you'd state your name and association for the record and then please start.

**MS BEER:** Jan Beer, Upper Goulburn River Catchment Association, not Authority as listed on the form.

**MR PATTISON:** Ken Pattison, Loddon Valley Gravity Irrigation District based - centre based in Pyramid Hill.

**MS BEER:** So I'll just make a statement first up, and I'll be talking mainly about the constraint strategy and the 450. So far under the Murray-Darling Basin Plan it appears to have been all about the acquisition of vast volumes of water, with really no idea if that water can actually be delivered. The constraint strategy is not achievable and consequently the delivery of the additional 450 and enhanced environmental water delivery project of Hydro-cues, which are interdependent projects, cannot be realised. We have seen no documents at all that have analysed the risk; whether the strategy is actually viable, practical or economically and technically achievable and able to accomplish the overall project and its stated environmental objectives, while also optimising economic and social outcomes. In other words, there's been no cost benefit analysis which is essential for projects of this magnitude.

The businesses cases have been poor standard, rushed, limited; for example no farm by farm assessment.

Relaxation of constraints in the Goulburn Catchment will not be happening as the Victorian Water Minister has stated many, many times publically and to me personally in letters, that flows at Shepparton will now be 20,000 maximum per day; 17,000 megalitres per day flow, plus a 3,000 megalitre buffer. And this has been reduced from the initial 40,000 megalitres per day which I believe was the initial modelling. We have not seen the revised business case which is still in Canberra. There will be no, and this is again what the Minister has told us, no overbank flows, only in-channel flows. No flooding of private property, no piggybacking Eildon releases on top of high natural tributary flows that would mean any overbank flooding. No compulsory acquisition of easements.

The Victorian Government Ministerial Council meeting in June 2018 secured agreement that no on-farm programs for the recovery of 450 would be delivered in Victoria or in New South Wales. DELWP have also said that of the 62 gigalitres that Victoria has to find before June 2019, they have - Victoria have found their nine gigalitres and stated they had to look in absolutely every nook and cranny to find it and there is simply no more water to be recovered and they will not consider on-farm efficiency measures to recover 450. So I really doubt that the 450 can be recovered, let alone delivered.

The Goulburn and Upper Murray are the main drivers needed to achieve the proposed 80,000 at the South Australian border and the proposed environmental objectives. So if the Goulburn is taken out of the equation, constraint strategy and delivery of the 450 is not achievable. If one of those projects is not going to be able to be delivered then the other constraints projects fall over also.

Just a few points here. Mitigation cost for the five constraints projects, excluding Goulburn, is now 760m, and if you'll remember it was initially to be 200m across the board. 450 gigalitre upwater will depend entirely on socioeconomic criteria and communities will not accept individual participation as the definition of positive or neutral socioeconomic outcomes. Neither will Victoria or New South Wales accept that. Constraint strategies do not have the ongoing approval and acceptance by local communities; therefore, they have no social licence whatsoever.

The Murray-Darling Basin Authority is attempting to move from the business cases immediately to implementation, without any cost benefit analysis, without resolving legal liabilities, without resolving easement issues, without resolving issues between States in equitable fashion.

Another point is proposed flows Hume to Yarrawonga is 40,000 megs per day. So how do you fit these flows through the proposed flow further downstream of Yarrawonga to Wakool, which is 30,000? The simple fact is the proposed flows will not fit through the river channels without massive flooding.

It is time that the MDBA publically acknowledge that the constraint strategy has many insurmountable problems and, accordingly, review the practicality of this strategy, which is strongly opposed by local communities. The constraint strategy and 450 were last minute decisions made without any idea whether these projects could be accomplished. Consequently, we now see MDBA pushing Basin States to retro-engineer these projects, to hopefully achieve impossible environmental outcomes, such as keeping the Murray Mouth open 95 per cent of the time without dredging.

As a solution I would say we now have approximately 2,100 gigalitres. We need to use this to investigate whether proposed ecological targets can be achieved with this amount. Ex-Commonwealth Environmental Water Holder David Papps stated he could achieve all his ecological targets without constraints. I would say that we need to - and people continually say "We can't stop the Basin Plan". Well, if you're in private business you don’t rush headlong to fall over the cliff. You stand back. You look at what's happening. You revise, review and you reassess. But it seems MDBA and the Federal Government do not wish to do this. But we are the ones that are going to suffer if this continues like it is. Now is the time to stop, reassess, review. Thank you. And I must thank the Productivity Commission for bringing up so many points which we have been saying for so long and no one listened to.

**COMMISSIONER DOOLAN:** Thank you. Ken.

**MR PATTISON:** Yes. The Productivity Commission, we've said in our submission, has opened a Pandora's box, and the definition of a Pandora's box is very ugly, awful things. You’ve slammed the lid on the Pandora's box, having found dead and rotting carp, and you’ve tried to pump oxygen through the rest of the hundreds of pages in how you might get round the things that you’ve highlighted. No one's been prepared to go. We've been talking and talking to what you’ve raised for that long we've run out of spit. So I congratulate you on what you’ve put in your draft document.

What you now need to do, because every page, practically every page has got a red flag; there's a red flag practically on every page. The question is now, will you carry through and try and patch it up, or will you red flag what you're hearing across people, across the Basin, that politics is what is driving a lot of this, to the detriment now of the environment and our southern connected basin. And politics, as we know, can make an awful mess of things. We want good environmental outcomes. We want a productive southern connected basin.

If you wish to look at a document, that bears your name, of 2000, it's a pretty candid sort of a document, it's my bible. You could do no better than have your staff and have - go through, albeit with different criteria, different ideas of what the outcome would be. You said earlier on, South Australia don’t like the idea of Lock Zero. The science says the sea level is going to rise. The Southern Ocean continually overtops the barrages. There is photographs, there's evidence where it overtops the barrages and runs around the barrages. What are they going to do to secure Adelaide's water supply if the sea level rises? Which is what the science says is going to happen.

So I wouldn’t worry too much about suggesting, as this says in there, "The ageing barrages of looking at a way of managing the Lower Lakes in the Coorong". To suggest that you take my water and somehow try and fix the Coorong. And it's not South Australia's fault. Government's did this. They've made the southeast of South Australia into a highly productive area, but in doing so took every litre of water out of the southern Coorong. Killed the seagrass out in the sea and all that sort of thing. Well we all mistakes, we're trying to correct mistakes.

So I would like you to think about seriously of red flagging what you find doesn’t work. Might be legislated, everyone might have ticked a box, everyone might have been in agreement in the hallowed bowels of Parliament House and the environment and everything else, but we are suggesting there is a whole raft of things that won't work. And one of the classic examples is 80,000 megalitres at the South Australian border. Jan has just mentioned the constrictions that you would’ve heard about; the Barmah-Millewa Choke, the Molesworth Choke, (indistinct), and there are many, all the way through. Now I don’t know what bank the Government wants to dip into to cover what this means. Piggybacking, buffer flows, Hydro-cues, they're fancy bureaucratic names, "But we're going to flood yah", that's bad English. Anyway, that's what it is. Now this is highly productive land, highly valuable land. Why should they take one for the road, one for the team, over the basis of this water. And 2016 proved we got the flows through, down to the bottom end, and Deverman said, "Didn't quite work, didn't quite happen, six to eight million cubic metres of sand have accumulated at the Murray Mouth". Well sorry, I can't fix that and we can't fix that, but we're damn sure we don’t want to see our southern connected Basin communities destroyed on the basis of legislated outcomes that can't be achieved. So I would implore you to red flag what you discover can't be achieved.

Now when you said the Murray-Darling Basin hasn’t done any model, they haven't released any more modelling. They've modelled that many damn computers into the scrap heap it's not funny. Go to them and say, "You haven't released it but let's have a little bit of a look at what you’ve tried to do", because I'm advised that they've been trying to model. How the hell they're going to do this ever since it became apparent. So they're some questions for you.

So I'll go on to the gravity irrigation and DELWP have released a paper understanding the delivery shortfall risks in the Murray - Lower Murray. I've put in a little attachment here that I'll show to somebody after. Four hundred gigalitres are estimated to be required to satisfy the need of what is already existing down there. Now we've had an incredibly good working relationship with Minister Neville; she's understood, but no one will go near the trading market. No, the market is the market is the market. All politicians. Because we don’t pick winners. And I said, "Well I can guarantee you will lose her because it's all coming out of the gravity irrigation district of Goulburn- Murray water. We are losing 5,000 megalitres on average every month out of Goulburn-Murray Water. Every property that is sold, is transferred, an estate settlement or everything else, the water is going off the property because no one on our communities can afford to buy permanently the water. So we're spending in excess of $2 billion on a gravity irrigation system, so-called modernising it, and the water is leaving faster than you can say "It's down the river". And what are we getting with the river? We've heard Environmental Victoria, we've heard others, we're getting the worst of environmental outcomes because the Environment is watering early in the spring and now we're multiplying their water that's required in the summer. And there appears to be no one prepared to stand up and say, "This is not working. We're getting bad environmental outcomes", and we are; bank slumping, black water, carp. Haven't heard the word "carp" mentioned all morning. Millions and millions and millions of carp. My fisherman friend says, "Great to catch, lousy to eat". They're everywhere, and they are destroying the environmental habitat that they are trying to attract with environmental flows. Why do I say that? I've lived on the Loddon River all my adult life and I've seen what carp have done to the Loddon River. And we've got flushes going down the river and we're going to grow stuff up the banks. They destroy every vestige of growth of things that our native fish would want to live and survive on. The cod at a certain stage, yep, they eat the carp, but until you resolve the way they feed, which is stirring up phosphates and nitrates of an accumulation over all our Murray-Darling Basin rivers, we won't have any improvement in the environment and we're transferring water down the system to hotter, drier climates, transmission losses and we're spending massive amounts of taxpayer's funds.

So we then get back to savings. What a wonderful thing, metering. We've got wonderful meters in Goulburn-Murray Water. They measure blue sky. Now there's been a lot of blue sky bought by the Commonwealth and the taxpayers. Taralee Station was mentioned this morning. Wonderful. I don’t know how - 87 million or 85 million, they can go straight back in to Murrumbidgee and the Murray and Goulburn and buy high security water entitlement. They've bought blue sky, because when they had water there was water everywhere, plenty of water in the Darling, and that's happened up and down the whole system. So, savings. We're not far off where Goulburn-Murray Water will not have sufficient water to be over and above what their claiming to be saving through modernisation projects - and I've got a little graph here I can add into. So that doesn’t add up.

The metering. Well - and the savings of total channel controls. It comes as no surprise I suppose, they cooked the books. They had to get the project up, they had to get it done. If you want to know, to see the documentation, anything I say I can back up with documentation. You'd know the rotunda in Tatura, just near the railway line. Yes. I met a fellow there one day, it's a daily newspaper, brown envelope in there, not many words spoken, and we took that envelope home, and interesting reading of what we found out in how they established that the Dethridge wheel was non-compliant and Hydro Environmental did a report and a properly maintained Dethridge wheel, run within desired parameters, meets national metering standards. Now if someone wants a high flow, if someone wants a new scheme, put a new meter in. Over 40 per cent of the metering fleet in Goulburn-Murray Water don’t deliver a litre or less than ten megalitres. By the end of this - when the money runs out over 50 per cent of the metering fleet will not deliver any water. So hundreds of millions of dollars of taxpayer's funds, and savings claimed, is going out of our system. So instead of having a system that was   
97 per cent return frequency under a long-term cap equivalent, we'll be back about 88 per cent on high security water, because the books have been cooked.

Return flows into the river. Return flows from one channel to the other is counted as savings. Shepparton did a modernisation project. They saved the water, they didn't put it into the Broken Creek. The next thing we've got a black water event and algae blooms in the Broken Creek. Environmental water had to be put in. Where was the savings? Yet savings were claimed to come off our bulk entitlement, which is reducing the security of our water.

The Commonwealth buyback. The Commonwealth did not pay the ongoing costs to gravity irrigators in the Goulburn-Murray Water district. The water went; most of it went to the banks, most of it went to survive the drought, et cetera. Those people today have a delivery access share and they are paying the levies and fees attributable to if they had water, and that is devaluing and crucifying our customers in Goulburn-Murray Water. Now the Minister's got a review on delivery access shares at the moment, there's plenty of documents on that, but the facts of the matter is if you relieve them you've got to put it on to somebody else. Goulburn-Murray Water hasn’t reduced its staff, 700 people. We've just had the debacle of yet again the CEO with his nose in the trough, bar fridge, expenses, everything else. We've had a run of this since I don’t know how far back and people are getting very demoralised as to what their futures are. We're losing our water out of our district.

And as for on-farm efficiencies which is talked about as being the way to go forward, I can see plenty of on-farm efficiency projects but they will not be able to buy the water to run them. And what do they do then? Have a fantastic travelling irrigator centre, pivot pipes and rises. Sixty percent of our customer base was the dairy industry and they cannot afford to enter the water market temporarily because it's too dear. Now when Phillip Glyde writes in the paper, which we've got this churn of media releases of "This is the plan, we can't go back, we've got to see it through, the trading market's working". Too right it's working, it's cruelling our communities and the people that we're trying to represent and the people - the people that put kids in the school, doctors, the whole thing down to the corporates. And we've seen the corporates before. Some, they'll lose a lot of money but that - it's not their money. But our communities, they are - it is their money, it is their lives.

And the unbundling of water off the land was an absolute disaster. And you go to Canberra and the pollies will say, "Do you think unbundling was a good idea?" We'll say, "No. We didn't ask for unbundling". If we had training it should never have been going out of our business. We've got ample land, ample infrastructure and ample people to run all these things within our business. And what are we seeing? Going down the river. There's a song "Cry me a river". I'm saying "Drown me a river" because that's - we've got the worst of all outcomes now, already. You worried a lot about setting the framework up for the next evaluation. I wouldn't worry about the next evaluation; we've gone far enough down the track. We've seen enough of what's gone on, and it's in your document to well work out where the end game's going to be. And as for Pandora's Box is, it's there for everyone to see.

Now someone smart just recently said, "You can pluck a chicken one feather at a time and nobody notices". Well, the southern connected Murray-Darling Basin is down to the last few feathers because the chicken's about naked. And you have an opportunity to red flag and highlight, because you’ve done it here. You need to carry it through now and make sure that what's not going to work, ask the questions, "How are you going to make this work?" Jan worked and worked and worked with Janet Pritchard on a Goulburn Broken committee. She told them and told them. They're not interested, they don’t listen. They've got on-time and on-budget and this is the way it is, this is the legislation. I said to them, "What are you doing this for when the sea is going to rise and it's going to go over the top?" "Oh that's not in our criteria." We said to EY, "Who wrote the terms of reference for EY?" We met them twice - I met them twice in the Shepparton office down here, and we said - they said, "How we can deliver it, it's not in our terms of reference. We don’t get paid for that". So they put a little box, and it's in our submission, consultants always cover their backside, a little box that says, "Need to have a bit of a look at that". Why go down to all the excruciating stuff, where the 450 was a political deal done with Tony Burke, and Peter Walsh mentioned twice in his second reading speech and mentioned again in his speech just last time. Fancy Littleproud giving a blank sheet of page to Tony Burke and Penny Wong, fixed it all up up north, they're all happy, but 80,000 at the border. And when they put that last paragraph in it was evident of just how polluted and how prostituted this whole process is and how poorly an outcome we're going to get for our communities and for the environment. Thank you.

**COMMISSIONER DOOLAN:** Okay. Well thank you. I think as you mentioned, Jan, there is a need to revisit, review and reassess, and this inquiry is part of that review process. So it's a regular five year review under the Water Act and it does provide part of that opportunity.

Now a number of the issues you’ve raised, I think we have also raised and we've made recommendations about dealing with some of the issues that I think you're concerned about. So some of it was about revisiting the modelling and modelling the constraint proposals that are under consideration and actually seeing if the 80,000 megs a day could be met with those new constraints projects and actually getting that information done and made available. So, from our perspective, noting your broader comments, the key elements for us is in what you have before you. Are the recommendations we've made, where we've actually asked for some of that to be done and made publically available, are there other elements that we have not covered as well as we could, or do those recommendations start to deal with the lack of information around some of the concerns that you have?

**MS BEER:** I think you’ve done very well bringing to the fore that constraints aren’t going to be finished by 2024. I think it probably needs to be brought up that - the Federal Government aren’t going to give the money for constraints, I don’t believe, if they can't recover the 450. Why would they do that? And if you can't get the 450, what is the point of the constraints? But there's - look I haven't seen, maybe you have, I haven't seen the rewritten Goulburn business case which sits in Canberra. Have you seen that?

**COMMISSIONER DOOLAN:** Yes, we've had a copy of that, we believe. Haven't we?

**MS BEER:** I've asked for it many times but I haven't received it.

**COMMISSIONER DOOLAN:** But it's not part of the supply projects either.

**COMMISSIONER MADDEN:** Sorry, I was about to say, we've got to clarify that we've seen the constraints - - -

**COMMISSIONER DOOLAN:** We've seen the original.

**COMMISSIONER MADDEN:** That are under the supply package. I'm not sure about the Goulburn because it's outside - - -

**COMMISSIONER DOOLAN:** So you're right, we've seen the original Goulburn but not the revised because it is not part of the constraints - sorry, the supply projects, so it doesn’t contribute to the 605.

**MS BEER:** It's a standalone constraints project.

**COMMISSIONER MADDEN:** Yes.

**COMMISSIONER DOOLAN:** Yes.

**MS BEER:** I think what you do need to be really pushing is it needs to be remodelled because the modelling they have done previously is now no longer relevant because they were initially talking about a 40,000 flow, now they're talking about a 20,000 flow.

**COMMISSIONER MADDEN:** Yes. So just so you know, we have discussed the differences that you talked about, going down to 20,017 within the free board or whatever, the buffer. So we have our discussions on that when we're talking about the modelling. So it's recognised that modelling - well we were informed that that hasn’t been done and so - - -

**COMMISSIONER DOOLAN:** And that's why we've - - -

**COMMISSIONER MADDEN:** That's what our recommendation is actually aiming at. Given the supply package and Goulburn Broken - sorry, the Goulburn constraints project are not what they were originally envisaged, as a package, we've said that modelling should be done to see what is possible against then Schedule 5 outcomes.

**COMMISSIONER DOOLAN:** Outcomes.

**MS BEER:** And I can't remember, forgive me, but in your document whether you then said that because the Goulburn constraints case has now changed so much, the interaction with the other projects of course comes into play then. The whole thing, the whole projects then need remodelling. And because they're so interdependent then they need to be looking at the Hydro-cues are enhanced, environmental water delivery and the 450. So those things are all so intertwined that the whole thing must be remodelled, revised, reviewed, whatever. And I think that, along with the constraints - sorry, cost benefit analysis will probably pretty clearly show you're not going to get your enhanced environmental objective for some of those at the border.

**COMMISSIONER MADDEN:** So we haven't made any call on that and it's not within - well, for one, we don’t have the information because it hasn’t actually been analysed, given that the new package has been recently developed. We agree that that work should be done but we can't pre-empt, as a Commission, what that might find. So what we are saying though is that a program and its original objectives, good public policy, we'd say that you - once you design that program you recheck that it can meet its objectives and you look at also budgetary changes and go through an evaluation, a re-evaluation. Now, we're not trying to say what that might mean and what that might find but it should be based on not only solid and the best available information, but also that information should be transparent.

**MS BEER:** Have you also made the recommendation that in their structure they're trying to leap from business case directly to implementation, but there's no integrated policy between States or work plan worked out with - - -

**COMMISSIONER MADDEN:** Yes. So this is the gateway process that Jane's mentioned a number of times.

**MS BEER:** Yes. Is that what it’s called, gateway process.

**COMMISSIONER MADDEN:** That's bureaucratic speak which is - - -

**COMMISSIONER DOOLAN:** We're calling that.

**COMMISSIONER MADDEN:** It's named basically for its series of gateways, so you progress from business case through to full feasibility and, you know, assessing risk along the way. So it's actually a process where various assessments have to take place and are very formal and potentially an independent way.

**MS BEER:** Are we talking about the same thing there though, that this needs to be integrated between the Basin States, not just - - -

**COMMISSIONER DOOLAN:** So we've made two recommendations in that area. Firstly, that each of those supply projects, which includes the constraints projects, not Goulburn because it's not part of it, but the others, actually when they're at detailed design phase, and the Federal Government is funding that next phase, at that point they go through what we're calling a gateway process to have the environmental benefits changed, what is - has the cost changed and has the timelines changed. So that provides a wherewithal to sit back and look at those projects and decide whether they're going to go on with them or not.

**COMMISSIONER MADDEN:** So - sorry.

**COMMISSIONER DOOLAN:** The second part - sorry - is we've also recommended that you look at the supply projects as an integrated package and that there are processes for consistent policies between States on key elements of them. And some of that is how landholders would be dealt with in constraints, but it’s also about how community consultation would be undertaken in a consistent manner and how consultation with traditional owners would be undertaken in a consistent and respectful manner as well. So those things are already in our draft recommendations and that's really what we're consulting on now, as to whether they're adequate or they need further review.

**COMMISSIONER MADDEN:** So I'll just add that, for me, that process in terms of assessing benefits would have to take into account what the revised Goulburn project is and how that interacts and enables you to deliver.

**COMMISSIONER DOOLAN:** Or the modelling would.

**COMMISSIONER MADDEN:** Yes, no the modelling would, so you'd have to take that into account when you're assessing the revised constraints under the supply package. You can't just ignore one of the sources of high flows down to the border. So it wouldn’t be within, in a sense, but it would have to be taken into account.

**MS BEER:** Yes, so one of your recommendations would be that the Goulburn - what do they call it now, they keep changing names - Goulburn key focus area, which is what the constraints was, you would be recommending that it must be looked at in conjunction with the other constraints strategy when they're redoing the modelling, or whatever. Because as the MDBA have said themselves, and they keep repeating that Goulburn and Upper Murray are the two drivers of this whole strategy, so if one falls over.

**COMMISSIONER DOOLAN:** However, we - yes, but we also do note, so we've recommended that modelling to occur and be then transparently available. We've recommended the gateway process look at all the projects, but we do note that if they fall over they contribute to the supply package and that would mean water would have to be made good.

**MS BEER:** So you mean it's then got to be bought in.

**COMMISSIONER DOOLAN:** If there is a failure of those projects and the 605 gigalitres offset is not able to be met, then Governments do have to make good the difference.

**MR PATTISON:** So what do you do if you can't deliver this without socioeconomic ramifications? Which is the log dam which is what was put in that 450 upwater to make sure it wasn’t going to happen.

**COMMISSIONER DOOLAN:** This isn’t the 450, this is actually about the supply package which buys the 605. And constraints are a significant part of that.

**MR PATTISON:** That's right.

**COMMISSIONER DOOLAN:** So, we have recommended that if they go ahead, people think it's a good deal, then they do extend the timeframes because they're important projects, subject to milestones and credible checks and balances.

**MS BEER:** I thought under the three stage phased assessment that if they didn't make it to be deliverable and operational by 2024 that was it.

**COMMISSIONER DOOLAN:** That is the current settings.

**MS BEER:** That they're thrown out, is my understanding.

**COMMISSIONER DOOLAN:** That's the current settings and that's - - -

**MS BEER:** So do you mean they can then reset it?

**COMMISSIONER DOOLAN:** No, our recommendation is if some of those supply projects are important and effective, good outcomes and people want to go along with them, then if they need it their timeframes should be able to be extended to deliver that. Okay? But if they are not extended then they fail early and the supply projects have to be made good.

**COMMISSIONER MADDEN:** So we've got to be clear that made good essentially means entering the market or changing rules.

**COMMISSIONER DOOLAN:** Well recovering water.

**COMMISSIONER MADDEN:** Recovering water.

**COMMISSIONER DOOLAN:** And that recovery of water, because it's part of the bridging the gap, does not have to be socioeconomically neutral.

**MS BEER:** I didn't bring it in this time but I did in the previous submission I think, I could never understand how the Goulburn constraints case failed initially and still got put back in for reassessment, where it clearly says under that phased assessment it should not be reassessed if it's failed the criteria.

**COMMISSIONER DOOLAN:** Well currently it's not part of the supply. So it's registered but it is not part of the supply. It's not part of that package of 605. It's not.

**MS BEER:** But I didn't think that mattered. I thought the phased assessment was the phased assessment of each of those projects, whether they were supply, efficiency or anything else, constraints.

**COMMISSIONER MADDEN:** No, not efficiency.

**COMMISSIONER DOOLAN:** No, not efficiency.

**COMMISSIONER MADDEN:** It's very much on the supply.

**MS BEER:** It's now a constraint. Well it was thrown out because it was - didn't deliver the supply. So now it's been put back in under another name. That doesn’t quite ring as though it should happen.

**COMMISSIONER MADDEN:** No, it's still being assessed but outside the 605 supply package.

**COMMISSIONER DOOLAN:** The supply package, yes.

**COMMISSIONER MADDEN:** I know it's technical and this is obviously part of the problem with this whole discussion.

**MS BEER:** I was just concerned that you - you sort of didn't mention that, that it was a supply measure, it couldn’t supply more than three or four gigs. It wasn’t economical, viable. It disappeared and then suddenly it's gone back in to be reassessed under a slightly different name.

**COMMISSIONER DOOLAN:** Well that definitely is not part of the supply package.

**MS BEER:** But you don’t think that's worth mentioning?

**COMMISSIONER MADDEN:** We'll have to have a look at it - - -

**COMMISSIONER DOOLAN:** I think we do mention it actually.

**MS BEER:** Do you?

**COMMISSIONER MADDEN:** We'll have to look at it within the report.

**COMMISSIONER DOOLAN:** No, we do mention it.

**COMMISSIONER MADDEN:** Yes, but I'm just saying what does it mean.

**MS BEER:** Recommend that it should be thrown out.

**COMMISSIONER MADDEN:** The gateway process for us is actually looking at the supply. The process then for the Goulburn, I think we've been - - -

**COMMISSIONER DOOLAN:** Is a different process.

**COMMISSIONER MADDEN:** Yes. So we can have a look at that.

**MS BEER:** Our main thing is with constraints, and you probably will say well it has to be remodelled to show us that, but you simply cannot deliver the water. You cannot get it down the system because of the myriad of chokes without massive socioeconomic damage.

**COMMISSIONER DOOLAN:** But, as you say, that actually has to be modelled and shown transparently, and that's what we have asked to have happen.

**MR PATTISON:** Could I just make one comment. In regards to your comment on Victoria being recalcitrant in actively pursuing these issues, I would completely disagree with that. We've been working with the - - -

**COMMISSIONER MADDEN:** I don’t think we've made any comments about States in particular.

**MR PATTISON:** Anyway, well it's there somewhere. Victoria kept asking, which is you're now asking the Murray-Darling Basin, "Show us how this can be done", because the water managers, and we've got an excellent one that I highly regard in Goulburn-Murray Water, just said, "It cannot be done within the laws of Victoria". Now it's all very well for New South Wales to change their Water Act that says, "If we put environmental water down and oops we make a mistake, we're not liable". That's not what the Victorian water law says. And I've sought much legal advice and it comes right back on to the customers, which won't have the money. It will go back on to the Government. And this minister and this Government, and we've got an election in five weeks, and I believe the opposition have said that they will not take away the liability of a flow of water onto private land. And as Jan said, 10,000 megalitres at the Molesworth Choke, after that you flood private freehold land.

**COMMISSIONER DOOLAN:** So again - - -

**MR PATTISON:** Good.

**COMMISSIONER DOOLAN:** We need the modelling - - -

**MR PATTISON:** Yep.

**COMMISSIONER DOOLAN:** To be publicly available to show the outcomes.

**MR PATTISON:** When do you think you might get that?

**COMMISSIONER DOOLAN:** Well we've recommended it. We need to see Government's response - well sorry - it's recommended in our draft report. We will need to make our final report to Government and then they'll have to respond.

**MR PATTISON:** Do you think you'll get it before you make your final report?

**COMMISSIONER MADDEN:** Well we'll have a look at some submissions. So that will be an important point. The Department has put a submission in. The Authority is likely to put a submission in, but it's not yet arrived, so we'll see their response to those things. I guess just to comment on this. We may approach it with different language but I think we are agreeing on some things about information and transparency. So issues like can the constraints be done? We hear both sides. We hear "Just get it done". We hear people saying "Change laws overnight". You know, so I guess what we're trying to bring here is a process that actually resolves - starts resolving these issues one way or the other, and then getting a response from that point.

The thing that we've had a lot of the time is actually issues being kicked down the road, another year, another - et cetera and we've still got a deadline looming. That doesn’t move at this stage. If, with constraints lifting, only a certain amount can be done and it all depends on processes in different parts of the system and there will be different outcomes, depending on negotiations and the like, it's a matter of, "Well, what does that mean once a package, a revised package", whatever you want to call it, "along that pathway is actually - well what is it in the end, and then what does that mean?" I think what we're trying to do in our recommendations is actually get a structured process that actually has information available to all, so you can actually interact with that; you know, talking realities, bluntly. And I'm not saying people are unreal, it's just that we actually don’t have information to coalesce around and discuss at the moment. That's been stop-start with different negotiations. We think it's an opportunity for all and not just the Authority but the Victorian Government, the NSW Government as well, to actually say well what's the information we need going forward.

**MR PATTISON:** So in your draft report, if you find something that doesn’t work will you red flag it?

**COMMISSIONER MADDEN:** The issue is that without modelling and without information - - -

**MR PATTISON:** No, just generally. If you find - - -

**COMMISSIONER MADDEN:** No. No, I'm just saying - you can say what "red flag" means but red flag to us is actually there's a danger. It's not a stop. So we do not have the information to say "Stop" something at the moment because we don’t have the modelling, we don’t have the detailed business case. It is actually the next year or so. People haven't gone out - going on Menindee but also in New South Wales that we went and saw landholders along the river, they haven't seen anyone for a year or two.

**MR PATTISON:** Neither has Jan.

**MS BEER:** Three. Three years.

**COMMISSIONER MADDEN:** Yes. I'm talking Menindee particularly but, yes. But things started and then stopped. So they don’t even know what the actual detailed proposal is, so - - -

**MR PATTISON:** Did they explain to you why they stopped?

**COMMISSIONER MADDEN:** No, so I'm talking about the landholders saying they haven't seen anyone.

**MR PATTISON:** Yes, but - - -

**COMMISSIONER MADDEN:** We know why it stopped, because they basically went into a whole negotiation phase and putting them into the supply projects. So they do have to restart. Our red flag is that when they restart they have to very quickly coalesce into real plans and a prudent and sound judgment has to be made on their likelihood of success within that certain time frame. Then when that information is actually made transparent to all, what are the ramifications for the effectiveness of the plan? So, bluntly, the work needs to be done in the next year or so, and it needs to be put out and then people - by that I mean the Authority and Governments - have to be then honest about what does it mean for their original objectives of the plan.

**MS BEER:** And I think already the Basin States, Victoria and New South Wales, they know it's not doable and they're reluctant to spend more time or more money on it knowing that. I mean that's what you hear from them.

**COMMISSIONER MADDEN:** Yes. Bluntly, they're about to spend, after agreements are struck, they're going to spend Commonwealth money for the first phase.

**MS BEER:** Yeah, they like spending Commonwealth money.

**COMMISSIONER MADDEN:** Yes, so that's why there's a bit of a hiatus at the moment.

**MR PATTISON:** Don't worry about pork on your fork. Just follow the money trail to the trough.

**COMMISSIONER MADDEN:** So we don’t want to be talking too much because we do want to listen. But it's important that I think we get what the basis of our recommendations are, quite clearly. So we've got a little about the process of assessment. Are there any other questions that you have, or areas?

**COMMISSIONER DOOLAN:** No. I think that's covered my key areas. Yours?

**COMMISSIONER MADDEN:** No, no. I mean accountability to me is an important point that was raised and I think that transparency is an important point in that as well. So, thank you.

**COMMISSIONER DOOLAN:** All right, well thank you very much.

**MR PATTISON:** Thank you.

**MS BEER:** Thank you very much. We do thank you for your report. It's the best report we've read for some time.

**COMMISSIONER DOOLAN:** We consulted widely across the Basin and have tried to reflect what we heard.

**MS BEER:** Great. Thank you.

**COMMISSIONER DOOLAN:** The Greater Shepparton City Council. Do we have Peter Harriot and Geraldine Christou. Thank you. When you're ready, would you mind state your name and affiliation, for the record please.

**MS CHRISTOU:** Geraldine Christou, Director, Sustainable Development at Greater Shepparton City Council.

**MR HARRIOT:** And Peter Harriot, CEO, Greater Shepparton City Council. Well thank you, thank you for allowing us to present today. We're general practitioners in the area of water. You'll no doubt hear from a range of experts. We don’t have the detail in relation to the water debate but we're here to represent our community, 65,000 population in the Greater Shepparton area, and water, it's fair to say, is their number one issue and it underpins our whole economy.

So I'll start by saying gulpa gucha, or welcome in the Yorta Yorta language. The Goulburn Valley has had 60,000 years of history of managing the valley, managing water, using water in agricultural practices over those 60,000 years. It was used in perfect balance for 60,000 years. However, 200 years ago we saw some change in that regard. Settlement occurred and unfortunately Aboriginal knowledge was lost, and we saw vegetation removal and water practices that needed to be improved. Now it's fair to say that by 2012 when the Basin Plan was put in place the Goulburn Valley and the State of Victoria had looked at the past 200 years and seriously recognised that things needed to be done differently and had put in place major modernisation efforts in the irrigated agricultural space. There was the start of the $2 billion of investment into the channels and the systems and I think we heard about our water authority in the previous speakers, so Goulburn Murray Water in partnership with the likes of the Goulburn Broken Catchment Management Authority and the whole community in general worked together to say water is our number one resource, underpins our economy like nothing else, therefore we're going to be leaders in relation to management of that water system. We're going to have smart meters and we're going to have smart irrigation practices and we want to regulate appropriately and we want to make people responsible for appropriate water use.

So by 2012 I think we had some really good practices in place but there was a need for the Basin Plan, no doubt about that. And the Greater Shepparton City Council supports the Basin Plan at the 2750 gigalitres. We must have healthy river systems if we're to utilise that water for everything you see in this basket of goodies. The industry associated with not only food production but manufacturing in the Goulburn Valley is as big as anywhere you'll see in the State of Victoria or even the nation. So it, as I say, is critical to us.

Our main point is the additional 450 gigalitres of water being potentially taken out of the system and what impact that will have. We've already seen from reports that have been done by the GMID or the leadership group, who you're hearing from later, but Council is a member of that group. We've seen from the work that we’ve done in that group that the impact of the plan as it stands over the first five years of its implementation has seen $550m worth of economic activity lost to the region and 1,000 jobs lost from the region just in the water being returned. Now to put that into some sort of scale, the Hazelwood Power Plant was closed down; that was a loss of 750 jobs and that had every available helicopter fly into it with every available Government cheque book available to restructure that place on the basis of 750 jobs being lost. This is a much bigger impact. The five years of the implementation of the plan is a much bigger impact than that and it's got ongoing impacts. As I said before, we're committed to the plan, we need the plan, but we've got to recognise that it's having impact on regions such as ours.

In summary, our issues are the risk of losing more water; the neutrality test surrounding the 450; the accuracy of water savings and recording and whether that - you know if we don’t really - we're not really confident in this calculation exercise, it underpins the whole credibility of the plan. The level of compliance from the other States, as we've seen in recent times, has got to be questioned. I guess I want to finish, before Geraldine might make some comments, is just to reinforce the importance of these businesses to our region and the investment that is being made over the last hundred years supporting the irrigated agricultural systems we've got here in place. It's not just the $2 billion that has been invested in the modernisation, it's not just the investment that's being put into the farms, it's not just the billions of dollars that has been invested in the food manufacturing areas, but it's the investment in the schools and the communities and the hospitals and everything that surrounds these key cities that sit beside this magnificent GMID irrigation district. It's sunk investment, I guess. It's certainly investment that's there and shouldn’t be wasted, it should be utilised, it should be leveraged upon and, therefore, if we're going to have irrigated agriculture into the future this is the area for it. We should be maximising the use of this magnificent asset and that means retaining as much water as possible. It certainly means using it as efficiently and with the most modern practices we can imagine, but it certainly means retaining as much as possible in this area without further loss. So I might pull up there as my opening comments. Thank you.

**MS CHRISTOU:** Look I'd just like to say, to really hone in on the point about the 450 gigalitre recovery. It's holding this region back. There is uncertainty around the 450 gigalitre recovery. Part of my portfolio is investment attraction and economic development. The investment that we have had in this region, that we've been fortunate to have, an example is the $100m that's being invested in Freedom Food around UHT milk production and infant formula and those sorts of things which are prime export product for us, they are relying on, particularly the dairy industry, to keep that processing factory going. And the 450 gigalitres is stifling the region. It's had such an impact; the implementation of the plan has had such a significant impact on the dairy industry already and I think Peter's prop here of the balancing of the 450 gigalitres holding up, you know, the production that's happening in our facility is a real visual - a visual example of just how paramount - how much of a tipping point we are with the 450 gigalitres.

**COMMISSIONER DOOLAN:** Do you want to start off?

**COMMISSIONER MADDEN:** Yes. I guess, given your background and experience, we won't go into all of the detail on the - you know, the ins and outs of the plan. But I was interested in hearing the kind of proactive steps in terms of maximising the use of the assets. Obviously these commodity prices have driven a lot of - or is the background to a lot of the trade movement and the like, but it is a new system, or the $2 billion of investment I assume have increased reliability or standards of service level and flow rates and the like. I'm just wondering then, do Council - and I'm probably not speaking on behalf of Goulburn-Murray Irrigation, but what are some of the things in terms of proactive projects that have actually been done to actually attract business to this area, and by that I mean irrigation type business?

**MR HARRIOT:** Yes, so from Council's point of view we've - or one issue, we've adopted an international engagement strategy to, well initially to lobby for the fruit protocols to be put in place as part of the free trade agreement. You know, we're only a small player in that but we'd like to think that we influence that a little bit. And now that we've got the protocols in place for stone fruit, the work now is with the apple and pear protocols and if we can get those in place that will provide greater export opportunities and that's significant for our area, and is another means of providing some independence from, you know, the Coles and the supermarket - Coles and the Woolworths side of things. And we were in China just this September, we attended the Fruit Logistica Conference at Hong Kong; that's where a lot of our growers go, there would have been a dozen or so of our growers there trying to sell their product at one of the major food fairs in Asia. So, yes, I was just - - -

**MS CHRISTOU:** The other project that we have undertaken from Council's perspective is the Great Things Happen Here campaign.

**MR HARRIOT:** Sorry, just before you go to that, I just want to finish on the international.

**MS CHRISTOU:** Sorry.

**MR HARRIOT:** Yes, I just lost my train of thought there a bit. So with that access to the markets in China, or greater access to markets and the greater potential for export, that will in itself lead to major restructure of our horticultural industry here in the Goulburn Valley. So further modernisation. So it's probably less on the water side this time, but more in the storage and logistics and packaging and sorting and that sort of thing, and probably some consolidation of that. There's around about 80 pack houses at the moment and they could probably be consolidated into larger facilities with modern freight logistics access. So there's potential for major investment in that area which will be good for the region. Sorry, I cut you off.

**MS CHRISTOU:** No, you're right. So the other project that we have is the Great Things Happen Here campaign, we have an ambassador attached to that, Charles Wooley, and that is about recognising the great things that are happening in Greater Shepparton. The reason that campaign was born was because there was a lack of confidence, both by our community and from people wanting to invest here. It came about at the time where SPC was undertaking a strategic review of their operations, so the sentiment in the media and amongst some of the community was, "Well, SPC's going to be exiting the Goulburn Valley", so no one in Greater Shepparton was expanding, no one - you know, there was a lot of trepidation from people wanting to invest here. So that campaign was about recognising the great things that are happening here; about, you know, the amount of exports that are happening from this region, the volume that's occurring, and that in itself has had some impact on instilling confidence back into the region. The message that we get back though all the time from, you know, people wanting to invest and from our own community is, "That's all very well, there are some great things happening here, we've got some great construction going in, we've got some good Government funding that's come through with the hospital and the courthouse, but that 450 gigalitres that - the confidence around water going - water security going forward is still holding us back".

**COMMISSIONER MADDEN:** Do you work closely then with Goulburn- Murray in terms of that water futures type kind of planning?

**MR HARRIOT:** Yeah look, as I said from the start, we're general practitioners but we tend to sit on most committees and discussions that are going in this regard. Our major impact in the water discussion is through the GMID Water Leadership Group and other senior leadership groups, some of them coordinated by the CMA.

**COMMISSIONER DOOLAN:** I mean we will be hearing from the Water Leadership Group later on today and we're aware that that Leadership Group released their criteria for socioeconomically neutral, and then two Governments released theirs. Your take on criteria, and also are there projects in this area that would meet those criteria, from your perspective?

**MR HARRIOT:** Well look we participated in the - I think it was a day long workshop to put these together, so we definitely support them. We believe that it's going to be difficult to meet this test, if not impossible, because we've already done the analysis on the implementation of the plan to date, let alone this additional 450. And what the RMCG report clearly says is that there's significant impact already. So it just follows that any additional water is going to have impact and, therefore, won't pass the test. So I think it's great that we've got additional clarity being provided by the GMID Leadership Group with this further neutrality test criteria, but it's hardly necessary.

**COMMISSIONER DOOLAN:** It was more about are there proactive projects that actually people would want to do to assist in the Great Things Happen Here and attracting more investment to this area, which would meet the criteria but would also bring investments. So it's just a question of just generally, because I suppose in some of the other places in the Basin, and we understand they're different, we are hearing that it would be possible to meet the criteria and that there would be investment and there'd be some good projects. So it's really just - - -

**MR HARRIOT:** Yeah. I guess that goes to the difference in the regions and the fact that we've been a heavy lifter in this regard and have provided a large volume of the water back to the environment; a large proportion of the 2750 has already been recovered from this area. I'm sure there are still good projects and you'll hear from those, from the likes of Chris sitting over there and GMW. Yeah, that's about all I can say.

**COMMISSIONER DOOLAN:** Okay.

**COMMISSIONER MADDEN:** Okay. Thank you.

**COMMISSIONER DOOLAN:** Thank you.

**MR HARRIOT:** Very good. So we'll leave you our box of goodies to represent the great production, and if you don’t mind we'll keep our 450 gigalitres.

**COMMISSIONER MADDEN:** We may have to donate that to someone.

**COMMISSIONER DOOLAN:** We're really sorry but we can't accept it.

**MR HARRIOT:** Oh okay.

**COMMISSIONER DOOLAN:** So if it is possible to donate it that would be lovely, but we're sorry we can't.

**COMMISSIONER MADDEN:** Anyone involved in St Vincent's de Paul or someone?

**COMMISSIONER DOOLAN:** Homeless shelter.

**MR HARRIOT:** We could organise that for you. Okay.

**COMMISSIONER DOOLAN:** Thank you. Thank you very much.

**COMMISSIONER MADDEN:** I will have a look at it after, so we know what we're missing.

**MR HARRIOT:** Yeah okay. Yeah, all right, I'll leave it there and we'll sort that out.

**COMMISSIONER DOOLAN:** Our next participant is Maria Riedl. Hi, if you wouldn’t mind again introducing yourself for the record, please.

**MS RIEDL:** My name is Maria Riedl, I'm here actually from Buronga, New South Wales. I've lived in Mildura Victoria since 1981 directly, and now directly adjacent to the Murray River across from Lock 11, Lock Island since 2000. I couldn’t submit last week in Mildura because I was in(indistinct) . I've come to do so in Shepparton. My interest is the Water Act 2007 and the Murray-Darling Basin Plan, and I've actually attended a lot of the consultations for the draft plan in Mildura and I actually made the effort to go Renmark to see how South Australia was doing, to Adelaide further downstream, and to Melbourne to see what was happening there, as well as Coorang.

The case I think is quite clear, that it's really difficult to readjust something that you’ve given, you know, if you’ve given - the Government actually said, you know, expand, grow, et cetera et cetera using as much water as you - it didn't how much water you used or lost. And this presented a problem, you have to grab back some because the whole system was degraded. The Millennium Drought just highlighted this because that was a very long drought, nearly 14 years, it was ten plus years, and the problem is that you're upstream from us. So, like I said, I'm from Buronga and I go to Wentworth a bit. I've been to Broken Hill, I've been to Pooncarie a couple of months ago to see what their situation is. You're lucky down here because the Darling is going to - they're going to stop all flows from the Menindee on December 1st. There will be no flows from Menindee, and that's because New South Wales has done deals and is doing deals, et cetera. Now the problem there is that it's not - Tandou - well I'll probably go through this - so I've come to the conclusion that the rivers are over-allocated, the whole Basin has been over-allocated and it must be re-done so it actually can survive the next drought and the next drought. Now climate change obviously has set in, so it's not just a drought, we've gone a step down. The amount of water that is available if - and Lindsay Leake would have told you with a graph, it is a lot less than it was a few years ago, and it's becoming less and less as rainfall sort of doesn’t happen.

So basically we're still ignoring the idea that we have to make do with less water, and the environment has to make do with less water. So basically climate change has exacerbated the extent and severity of drought, intensified by historically high temperatures at the same time. So we've got real issues. The rivalry between State Governments and Government bureaucracy over allocation of water licences to appease farmers and industries for a political gain meant a 65 per cent increase in water from 95 to 96/97 and irrigation grew by 76 per cent. This is over-commitment, over-extraction and it led to river and ecosystem degradation. And this is why the plan was important and brought in by a Liberal Government of all things.

Now the key feature for achieving major water reforms is the implementation of SDLs, to regulate environmental water requirements within the Basin catchment. And the whole thing happened because of bad management and unsustainable use.

The successes that you’ve highlighted - and I congratulate you on your report, I think it's excellent, it's the best thing about that Darling Basin Plan, and I've seen a fair bit of it - you acknowledge that there has been significant progress. There has been significant progress and we forget that. Over 750 environmental water events have occurred in the last five years. Water recovery is largely complete. 1,995.8 gigalitres of adjusted target, 2,075 gigalitres has been delivered to the environmental water holders; 60 per cent of this was bought from willing sellers and during the drought obviously there would've been willing sellers, but they were willing, unlike - I went to a meeting in Gol Gol where Mr Joyce stood up and he said, "They're going to steal your water". Well that was incorrect. Those people wanted to sell it. Fine, they were in dire straits but it gave them an out.

The remainder through programs that modernise water infrastructure. New rules for the provision of critical human water needs in the River Murray have been established, as you’ve pointed out. Integration of salinity targets into salinity management frameworks. Now people forget, downstream is where the salt goes. So if you don’t get it out of the mouth a river dies from the bottom up. So, therefore, the idea that you can put locks or weirs or something like that and keep the water further upstream is not a good plan and it does not achieve what we want to do, which is a certain amount of water up the mouth regularly. And this has to be done, otherwise it starts dying from the mouth up and it will reach as far as who knows.

Okay, so Basin States have an opportunity to demonstrate commitment to jointly implement the plan. Now we've got problems with Victoria and New South Wales; they don’t like certain things and they think they're getting hard done by. Anyway. So the other thing is water resource plans are behind - these are the failures, there's a lot more positive, these are the failures. They're behind time, there's major implementation problems and risks in terms of implementing them by 2027, unrealistic timeframes, lacks transparency. There's a whole bunch of stuff that you’ve pointed out that is quite correct. That there are real issues. Another issue is perhaps, as you said, divide the Murray-Darling Basin into two bodies; one is, you know, puts the plan in place and the other has got a regulatory role. And that's a very good suggestion because the Murray-Darling Basin is not publishing information of compliance, there's lack of meaningful consultation, community consultation and how environmental outcomes will be monitored, et cetera, et cetera.

Now the other thing, the recommendations that you give are really good. Clear objectives to maximise environmental outcomes. Clear guidance, et cetera, et cetera. And so I've gone through a whole bunch of stuff and - okay, milestones, strategic leadership, take joint responsibility. That's the role facing governments and they're not actually achieving that; they're sort of buddying up with whoever, you know, gets them - so they can keep more water.

Okay, compliance should be brought into an office of the Basin Plan regulator and include compliance and evaluation. That's fine and I'll go through that. The climate change is a new normal. It is not just drought, and Peter Mailler, this was - he was on I think one of the programs last week, third generation farmer says, - and this is a farmer talking, and there's a lot of farmers out there that actually agree with the Murray-Darling Basin Plan and implementing it in full because they realise that if you don’t have a healthy river system you don't - and also if you don’t support ecological targets, et cetera, et cetera, then the whole system collapses and nobody will benefit. You know, you won't be able to grow this stuff, or go overseas and sort of try and sell your food over there. So he said, "You can't keep arguing, this is just a cycle". He doesn’t expect to be farming his 6,000 acre property near Goondiwindi. "There are dry periods, yes. Wet periods, yes. There are warm periods, yes. Cool periods, but we've shifted averages. We're running out of tricks", and that's what it is, we're running out of tricks. We're not going to get a coherent policy around drought if we don’t deal with climate. If we don’t have people who won't admit something here needs to be done. And this is still the case. You know, I've got a whole list of articles where every day in the paper, "Oh, they're taking our water. Oh, we won't be able to grow this. Oh, you know, we need more water". The Windsor inquiry in 2011 recorded that Aboriginal people themselves have not been consulted, et cetera. In terms of the Menindee Lakes business case they failed to consult with the Aboriginal communities, which you’ve pointed out and I've given you documentation regarding that. That's in risk assessment associated with the Aboriginal heritage risk, technical elements, et cetera, et cetera. That's up in the north, I'm not sure about down here, but I know that along the Menindee system, the Darling River system there's been real issues, et cetera.

There's clear uncertainty in actual water savings and actual project costs, et cetera. There's 160 water licences going back to the Lower Darling, along the Lower Darling. They have concerns. Have they been addressed? No. What's happened is that a large corporate farmer, Webster's, bought out Tandou, and so what's happened there is they - they somehow got $78m from the Federal Government in two bundles, because they split it up so they could justify it, and the other thing is then they got to use the environmental water that was acquired by the Commonwealth Water Holder for another year, to grow another crop of cotton. And they made a $35m profit. Now, they were compensated. They were also compensated partly in that 78m on what their loss was going to be into the future, their business losses. So they were compensated, but the 160 other people that live along the river are not compensated and they deserve compensation. So the additional 40m for the loss of future business and surrender of works approvals, and the first and only compensation payment under the Murray-Darling Basin Plan. And that sets a precedent and it should set a precedent because it was badly done.

Then there's another project, the Menindee project, which obviously is going to decommission some of those lakes because they - there's a lot of evaporation. Now in decommissioning they're also forgetting that there's high security and general security water along the river, not just Tandou and Webster, but along the river. These people have had no chance to meet and discuss with the New South Wales Government in an equal turn basis, whereas Webster did, had meetings, closed doors et cetera, they have not been able to meet and so that water has just been basically taken off them, which is not the plan. That is not part of the plan. The plan says you can't be worse off, et cetera.

So let's see, Tandou got privileged treatment and there's serious issues. There's a breach of the Commonwealth Procurement Rules due to discrimination between suppliers of different sizes, a corporation or a family corporate farm versus the little farmer down the hill. So, plan also requires that water saving projects must ensure no detrimental impact on the reliability of supply to water holders. And so the Menindee project actually is a serious concern. SDLs create a statutory basis for water licences. So they're a financial asset. They must be based on robust, credible and defensible numbers to avoid risks to irrigation businesses, the environment and to the financial sector, because the financial sectors lends, because now water is a property right, basically a property even though it's there and not there, depending on how much water there is. Banks lend money if you’ve got water. I know because we've got, I think, 400 megalitres of water and we sell it and whatever and we can borrow money on it and all sorts of stuff. The amended SDLs, because they were amending them, undermine the financial security of all water licences and increase risk to the financial sector exposed to water.

I'll just skip through. Transferring SDLs between valleys undermines the scientific justification for SDLs and moving SDLs between valleys has implications for downstream flows, environmental targets and socioeconomic impacts. So this is to do again with the Barwon-Darling et cetera. And basically in that case the Federal Government has bought ghost water because basically Tandou didn't grow a crop for five of the 14 years that - due to lack of water. So in actual fact, is the water there that the Commonwealth has bought? And how often is it there? I'm not sure if it's high security water actually. Now Barnaby Joyce said, "Oh there's going to be no more straight buybacks" and then all of a sudden there were three since June. There have been three buybacks after people approached them, huge buybacks. And so there's been no assessment of actual availability of water under licences because security water has been reduced because of increased extractions upstream in the Barwon-Darling and its tributaries. And that was a comment by Bill Johnson, who was the MDBA Environmental Water Planning Director.

And the other thing is, let's see - I'm just going to flick through because I'm holding you up - here's where a government steps in, or you know some people have access through back doors or front doors. New South Wales Former Minister for Primary Industries, Katrina Hodgkinson, set altered water sharing plans for the Barwon-Darling, even though the public consultation on the draft plan had finished. So Ian Cole went to her and whispered in her ear and so he got what he wanted. And he's since sold to Webster's upstream for 45m. Water sharing plans disadvantage people downstream. So the impacts of the changes made to suit Ian Cole and others were that diversion of water for irrigation grew by 32 per cent or 51.4 GL.

So anyway that's New South Wales. David Papps, who was mentioned before, retired five years ago as the man responsible for the Commonwealth's portfolio of environmental water, said the biggest problem was the lack of commitment from New South Wales and Victoria. The accusation is that they're failing to do their part on enforcement and being overly influenced by irrigators. There is a functioning water market and there is now available - water available on the market for purchase. And so that's what the market has done.

The other thing is Victorian, Lisa Neville, has formed a political alliance with Blair and their lack of commitment to a full, proper implementation of the plan is seriously compromising its environmental outcomes. There was something yesterday, I even heard it in Hobart, there was something - that they weren’t going to do something. So New South Wales is going to fail to meet the deadline for developing a crucial water resource plan. That will underpin the Murray-Darling Basin Plan, and Bill Johnson basically said that. Basically he sort of said that the Murray-Darling Basin Authority, and I'm not sure if it's true or not, is more interested in meeting its schedule, correct accreditation schedule by 30 June 2019.

Now of the 33 water resource plans, one has been approved. They're due next year. One has been approved, one is in the process of accreditation, 11 are something else. I've got it in here but I can't remember. So we've got real problems about getting to that deadline, so perhaps you're right, that the deadline needs to be extended so we don’t make a mess of what we recommend and the water savings aren’t there. So it has to be a proper process.

There's been farmers, you know, in terms of - not long ago up here Walsh said, "Money reached from the extra" - this one I have to say - "In Victoria one solution the farmers - some farmers suggested, is to stop this season's environmental water flows to the Gunbower Forest and sell extra tens of thousands of megalitres to the local farmers". And he said that the extra money should be invested in environmental infrastructure, and he said that the 45 to 50 megalitres pumped into the forest means that probably 50 dairy farmers could have that water. Well he doesn’t - I'm not sure - I know Peter Walsh, but I think he knows the plan but the environmental water has legal rights, so you can't just do that, but Jaala Pulford is also sort of commenting on that.

Then on top of that we've got cotton farmers doing the wrong thing. They've been accused of fraud over at the Murray-Darling Basin water funding earmarked for the Murray-Darling Basin water savings, and that's two senior cotton farmers, huge farms. And the other one is, charges are being laid against two members of the Harris family, accusing them of stealing water, accused of taking when the shore conditions didn't permit it, and breaching their licence and approval conditions. And then the three other people of the Barlow family had been pumping during an embargo and pumping while their metering equipment wasn’t working. So all these things are being looked out.

Now in conclusion, the Murray-Darling Basin system, I know where I come from, and I know that the Lower Murray - I went to a Lower Murray talk and they lost a lot of water because the farms were dried out because of the drought and because of other things. So those farms were no longer producing, the water was sold. So basically what Lower Murray Water is trying to do is shepherd water from here down to there. And so their idea is Sunraysia Modernisation Project No.2 which is get back that water from wherever it went. But the area is under further strain as orchard planting has increased by 41 per cent. Huge expansion of irrigated crops in the Mildura region of the Lower Murray is threatening to overtake water availability and sets the scene for disaster if drought continues. In the 20 years from 97 to 2015 - mind you, you know, there was a little bit of a die back - there was some reversal and an additional 4,500 hectares, mainly of almonds, was planted last winter and another 15,500 hectares is due in the next five years, and those are probably old figures. And they're permanent plantings, which means in a drought when there's no water or, you know, there's a stepdown of climate everybody gets less water. How are those farms going to survive and should they be allowed? The last few years has seen a huge corporatisation and a huge usage of large chunks of land to grow things. The risk would be to the remaining small farmers. So, you know, you’ve got big farms, huge corporate farms, foreign-owned, large family concerns that have grown bigger because they want to leave something for the next generation, and so small farmers are going to face skyrocketing water prices in the dry seasons, which is what is happening up north. I'm not so sure down here because I drove up from Melbourne and I saw this huge - huge canals basically of open water, you know. And we've closed a lot of ours through the Sunraysia Irrigation Project 1. So uncontrolled development does pose a huge risk. So perhaps it's time that governments looked at development and where they're placed.

Anyway, the Victorian Government is working against the Murray-Darling Basin Plan under pressure from the dairy lobby, because the dairy lobby says, you know, "It's all due to the Murray-Darling Basin Plan". Well in actual fact China has put in place - well you can't tip your milk there because of all these - I know Tasmania had the same issue because, you know, you have to meet certain regulations, et cetera. You’ve got the downturn in market, too much milk, not enough milk, too much milk in one area. So it's not just the Murray-Darling Basin Plan; everybody has to re-adjust. Confusing messages really when nut plantations are springing up along the river. So here you’ve got the dairy farmers thinking, you know, "We're suffering", and then you’ve got more almond plantations and more growth in whatever you're planting.

Developments are being allowed to go ahead without water attached to them. They're big players on a temporary market, and I know that a lot of the almond farms in Mildura have been set up with temporary water, so that's going to distort the market when they come back in.

Now David Paton who is from South Australia and who's an ecologist - the Coorong isn’t just a pretty place with nice birds. It can tell us what is going on with the health of the Basin. Rivers die from the mouth up, and if the end is struggling, the rest will struggle.

So, in sort of conclusion, I think that there needs to be an assurance that the water that is being paid for - and the State Governments are getting paid every year even though they're not delivering necessarily - so if - we have to make sure that the water savings are there for the environment, the metering has to be done, and protection of environment water must be upheld. You can't just sort of always ask for the environment's water just because the environment is silent. Why not ask it from an irrigator who's not using their water? You know, they're allowed to sell it, or they're allowed to keep it, but the environment must give it over because of social and economic impacts. Well the fact is that if you don’t have a healthy environment you don’t have a healthy society and the economic impacts are going to be huge.

So SDLs are the core element of the plan. Supply measures are important. They're physical environmental works operation rule changes. Efficiency measures are projects to improve efficiency on-farm. And I just want to give you this document, this is "The Basin files. Maladministration of the Murray-Darling Basin Plan, Volume 1". Now that was June 2018 and I've got a few other things that I've forgotten I think, they're not with me. And basically on p.33 it says, and this is an interesting one - and this will be my last comment - is that, "The Commonwealth makes annual payments totally $174m over seven years to the States for meeting milestones described in the funding agreement. At the request of Shadow Minister, Tony Burke, the Australian National Audit Office undertook an audit of the Commonwealth payments under the funding agreement in relation to the protection of the environmental water in New South Wales" - this is New South Wales - "and the ANAO found that there was little evidence to support Commonwealth's positive assessment of New South Wales' progress towards protection of environmental water and therefore little evidence to support the payment to New South Wales". Perhaps that type of thing needs to be done. "The Murray-Darling Basin Authority has a statutory requirement to ensure that States have policies in place to protect environmental water, before they estimate the savings on the 36 projects." So, protect the environment first before you start estimating the savings.

**COMMISSIONER DOOLAN:** We have not got that much time but I would like to just - a few of the issues that you raised about water purchases, the Tandou purchase, we note that in our report; the Australian National Audit Office will be doing - is doing an investigation of those purchases and that will become available. On your last point about the need for milestones of national partnership agreements is again something that from that ANAO report we picked up on and agree and have made recommendations about that for the future. John?

**COMMISSIONER MADDEN:** I think it might be public record that the Commonwealth has actually withheld the payments for this year for   
New South Wales.

**COMMISSIONER DOOLAN:** That's right.

**COMMISSIONER MADDEN:** Under those agreements.

**COMMISSIONER DOOLAN:** Yes. So again, just for information. Any questions, John?

**COMMISSIONER MADDEN:** Yes. I guess the one thing that comes to me is the reliability to landholders in the Darling and the like of changes, and it reinforces to me some of the comments earlier about information and - not just information but analysis of that information. It should be made available. I think there is a big step from, yes, put data out and all those kind of things, but it's actually analysis, answering questions and assessing principles about some of this stuff that we need to be maybe more explicit about, about what we think is a good process to land, a water resource plan, for example.

**MS RIEDL:** Can I just ask one question. Can the New South Wales Government and Victoria step out of the plan?

**COMMISSIONER DOOLAN:** That's a decision you'd have to ask those two Governments.

**MS RIEDL:** Okay, yeah. Can they legally do that?

**COMMISSIONER MADDEN:** We're not lawyers.

**MS RIEDL:** Okay.

**COMMISSIONER MADDEN:** You have discussions around it and, you know, you can look at the various agreements that underpin various elements of the plan, so it's a very complex question to ask. I guess more broadly you talk about what the benefits of the plan are. The Commonwealth Environmental Water Holder is established. It does give a voice to the environment. For example, when you said there is no voice, there is, and that's - it was David Papps and now - - -

**COMMISSIONER DOOLAN:** Jody Swirepik.

**COMMISSIONER MADDEN:** Swirepik.

**COMMISSIONER DOOLAN:** And currently hold 2,000 gigalitres of water.

**COMMISSIONER MADDEN:** Yes, and could enter the market into the future if other things don’t happen. That's total conjecture, but in a sense the property rights that underpin irrigator's rights, underpin the rights of the Environmental Water Holder, so - and there are various agreements which underpin the sharing of the waters which remain as well. So when people say that, they've actually got to articulate what bits of it they mean because it's a lot more complex than "in or out".

**MS RIEDL:** Because the water Basin Plans, they're actually carried through by the State Governments themselves.

**COMMISSIONER MADDEN:** They are?

**COMMISSIONER DOOLAN:** They are, but they still have commitments under the Murray-Darling Basin Agreement, the normal water sharing arrangements, and all of that underpins the entitlement frameworks that we have, where the CEWH holds those entitlements. In Victoria they hold the Victorian environmental entitlements and New South Wales. So those entitlement frameworks are robust.

All right, so we might break now for afternoon tea and we'll come back at five to three with Yanco Creek.

**ADJOURNED 2.44 pm]**

**RESUMED**

**COMMISSIONER DOOLAN:** So actually, we'd like to call on Mark Wettenhall from the Yanco Creek Tributaries Advisory Council. Thanks Mark. If you wouldn't mind again, just introduce yourself for the record.

**MR WETTENHALL:** Yes.

**COMMISSIONER DOOLAN:** Okay. Thank you.

**MR WETTENHALL**: My name's Mark Wettenhall and I am part of the Yanco Creek Tributaries Council, and I would like to thank you for the opportunity to speak. I would like to start firstly with a simple question which I don't expect to be obviously answered, but just a simple question and that is, is the Murray-Darling Basin Plan truly about water recovery for environments in need? Now, who we are? We're a little creek between Narrandera and Moulamein which is 800 kilometres long. It is up to 3000 kilometres counting all billabongs and unregulated streams.

We have 150 registered wetlands. We have such animals as endangered animals as the Southern Bell Frog and the Trout Cod, and may I say that the Trout Cod has only one other place of natural nursery and the place in our stream is at the upper end of the Yanco which is in danger of being cut off. We have at the bottom end, a swamp called the Wanganella Swamp which in recent times has been in scientific papers as more diverse in bird life than Kakadu itself. We are an irrigation community and also we are home and the centre of what was once the densest population of Aboriginal people in Australia as we are between The Murray and the Murrumbidgee River.

I would like to, after reading the draft, I found that 6.1 probably was the clearest problem we had and that was inadvertently the impact on the entitlements of water users and the environment, although we had many problems with other pieces too. We are in jeopardy of losing our environment and also our community to survive. Firstly, we have lost half of our water, more than half of our water. We are only very small but 70 gigalitres has been sold to water efficiencies, private sales and water buy backs. Thirty-six gigalitres was taken for the Forest Creek Environmental Plan. Ten gigalitres for the CARM metering plan, and now a further 30 gigalitres for the SDL Projects that lie on top of us which is about 450 megalitres a day which would have come into our creek, out of a creek that on average only runs 800 megalitres. We feel that we've already given up far more than any other irrigation community or environment in Australia for this plan.

To speak about the three SDL Projects which are upon us to take more water from us. The SDL Project first is the CARM metering. This is fantastic. It is about real time metering down our creek and the savings are totally under-estimated. We believe that with this in place the creek will be able to be monitored far closely for irrigators and environment and kept flowing. The second is the Yanco Creek regulator. Two years ago George Warne and David Harris came to speak to us. That is the only State agency ever spoken to us again. They will not come to the table. For two years they came to us with about ten different plans to the creek. We realise why there is so many SDL plans for the creek because we are small-fry and easily stood down upon.

The main reason for the Yanco regulator was that we are an inefficient creek in their view. This is because what that flows out of our creek into the Murray River is seen as a loss to our system, so at times we can have 2000 megs of unregulated water coming in at the top end from Holbrook and 2000 or nearly 2000 at the bottom end, but because we don't use it, we are seen as inefficient and it is a loss.

This water could simply be seen as intravalley transfer and not as a loss to our environment and the Murray System could use it, as they do now, for water entitlements or for reducing salinity or water they chose to use it to, but it should not be seen as a loss to our system, just an intravalley transfer. So with this in mind, the major SDL project is a Yanco Creek regulator. It was designed to be shut - as you all know, the regulator - well, the Yanco Creek regulator is Narrandera and is to shut the water coming down the Yanco Creek when there's a man-made flush to flush the lower Bidgee floodplain. And the idea of it is, it will be shut for ten days so they can peak a flood and get a better flood down the bottom of the Bidgee floodplain.

The problem with this is though, that we don't get water for ten days and that's fine for ten days, but is it really that feasible that they spend $55m for a 15 gigalitre saving, and then the plan is to use it only one in four years or one in five years to flush the floodplain, so that works out at about $20,000 a megalitre for this plan. That is a reasonable problem for us. The other problem is for us, is when this regulator goes in, we feel that we are at the mercy of an ever-changing government.

As we are only small-fry, they can shut the door and close us down at any time they like. We have no confidence in the State or Federal governments. The Forest Creek Plan, they took 36.5 gigalitres and they promised a watering out to the Wanganella Swamp of one gigalitre every year and up to four gigalitres in odd-years. The last ten years we have had one controlled flooding of that swamp. So that means - and there's been one other flooding when it was an unregulated high creek, but we just don't have any confidence.

Also recently, we've received a letter from the State Minister's office saying that they want to place the creek back into a pre-1850s wetting and drying phase. What do you think this will do to our native flora and fauna? What do you think this will do to our farming community down our creek? We've already lost 60 per cent of our water but then when we have a drying and wetting phase it will be absolutely devastating on us. Are they going to have this wetting and drying phase in The Murray River we ask ourselves? Are they going to have this drying phase at Melbourne's water supply and they're going to go down and collect their water in a bucket like we will have to. I guess not.

The second project is the modernisation of our effluent creek. We don't like the word effluent because it just makes us sound like you know what, but anyhow that's minor I guess. On this, is six weirs? These are very small weirs at the top end and they each hold 150 megalitres. Are basically about one day's supply down our creek. We are told that with these six weirs we'll be able to reduce our water ordering by half. How can this happen when we're, on average, on a 21 day ordering and these weirs only hold one day? We find it an absolute furphy that they can even put that in print. The other is that they're going to bring water in from CIA and MIA to help run the Billabong Creek and Yanco Creek. They've been doing this for 20 years and there is only one new system where they're bringing it from and to my knowledge, the farms are up in arms there because they don't have enough channel flow themselves to look after their corn crops and don't want it to go ahead. So unless they're going to increase the infrastructure in Murray irrigation this perhaps will not happen in a higher use year.

The cost of this modernisation scheme is to be paid by the State government or the Federal government, but then after that cost, farmers along the river system will have to pay for maintenance. We have not been told what this might even closely resemble and why should we have to pay when the 14.5 gigs actually goes back to the Commonwealth water holders' basket for environmental watering when we don't get any benefit at all? We feel that this should be rationalised perhaps over the while Murray-Darling Basin if the water's going back to the Murray-Darling Basin.

Finally, we must get State agencies to the table. To date they will not come. And we know why they won't come, because they have the biggest project on their Murrumbidgee River being stopped by a small community which we are. They're not about to have us stop their $55m irrigation project stopped just so we can have our irrigation and environmental river occur. We need Murray-Darling Basin people to come to the table with us, because there is no way anything we say will stop this project.

So please, please come and make sure our river, our 800 kilometre river keeps flowing and that the flora and fauna survive through this period and that our community survives too. We have lost over half our water and we feel we've given up more than almost any other river system there is. So I ask that question again. Is the Murray-Darling Basin Plan about water for environments or is it basically about water for political environments? Thank you.

**COMMISSIONER MADDEN:** A couple of more minor questions. Technical but not minor.

**MR WETTENHALL**: That's all right.

**COMMISSIONER DOOLAN:** So I suppose the question I have is that Yanco Creek is part of the supply measures, and it is one of those in a relatively early stage of development, so we have recommended a gateway process so that a detailed design including the environment assessments, the cultural assessments and the approvals that go with that, have to be undertaken and at that point, the project gets re-evaluated and decisions are made as to whether it is a worthwhile assessment or not, and we have also heard from, not just your community, but many others, about the degree of or lack of consultation on these projects.

So I suppose the first question I have for you is really I understand the concerns that your community has. What do you want to see as an appropriate process for the next 12 to 18 months as they do the detailed design in this project? What sort of assessments do you want to see done? What sort of consultation do you want to see done? What would you consider to be adequate?

**MR WETTENHALL**: We would like for starts to actually learn about the project, firstly and foremost. I mean, I've read the 450 page document and most of it, to me, is figures pulled out of the air. Like on the modernisation plan one, they take our average year as 2014 which is a very wet year so of course we had flood (indistinct). Of course we were inefficient in that year, and if you use my figures that we've lost half our water, our creek is actually going to sit right on the bottom of the creek now for ever and a day. So we aren't going to be inefficient. There is not going to be the savings. So we must have real figures. Not figures that State government who want these big projects to go ahead, require. We must have transparency that someone else sits at the table than just State government overpowering Yanco Creek. Because obviously they won't listen to us. They won't even come to the table.

Two years ago before all these SDL Projects, they would come to our general meetings. We had a great working relationship with them. Nowadays, it has totally gone. They're staff are told they are not to talk to us and so we are really, really in an appalling point of communications. And we just can't understand. We thought actually that the Murray-Darling Plan would be a good thing for our creek, and we are a great channel supply water from the Murrumbidgee to The Murray and yet it doesn't seem to be the case. And we are not asking for more water.

**COMMISSIONER DOOLAN:** No. No.

**MR WETTENHALL**: We're not asking for irrigation water or anything like that. We take the process with everybody else.

**COMMISSIONER DOOLAN:** So again, I'm just wanting to understand all the concerns so I understand from a community perspective, you are starting behind the eight ball.

**MR WETTENHALL**: Yes.

**COMMISSIONER DOOLAN:** In terms of trust.

**MR WETTENHALL:** We think there's savings that could be made.

**COMMISSIONER DOOLAN:** Okay.

**MR WETTENHALL:** But not the way they're making them but shutting us down like the Minister said.

**COMMISSIONER DOOLAN:** Yes.

**MR WETTENHALL**: To pre-1850s. We can't go back to pre-1850s.

**COMMISSIONER DOOLAN:** So firstly an agreed technical basis which is the first piece.

**MR WETTENHALL**: Yes.

**COMMISSIONER DOOLAN:** Some independent chair or something of a steering committee.

**MR WETTENHALL**: Yes.

**COMMISSIONER DOOLAN:** And regular and ongoing meetings with community to assist in the design or define the design.

**MR WETTENHALL**: Or maybe not even going ahead with it.

**COMMISSIONER DOOLAN:** Okay. But it's actually getting - from our perspective the next 18 months is critical in terms of really the development of the project.

**MR WETTENHALL**: And if the project was to go ahead, is there any real chance that we can have a fishway that works, and I don't know if everybody in the room knows this, but there's not a fishway in Australia that's the same as the last because all fishways generally don't work because every native fish has a different characteristic and so if we get a 400 or 500 meg fishway which we're sort of hoping for if they do put the weir in as a permanent flow, it will have to be built with three or four different fishways because the native fish don't go up like trout, you know, to a bears mouth in America. So it's a real problem. And then when they do bring it in and they do have a low creek, we all need more regulation in our creek, they'll be periods of mud banks and things like that - that just no costing has been taken into account, and it just seems to me, and I hope I'm not rude, but the State government seems to be grabbing at money, worse than the cotton farmers in northern New South Wales stealing water, these blokes are just taking this great opportunity to get this $55m project for a ten day use in four years. You know, it makes the cotton farmers look minor, I can tell you.

**COMMISSIONER MADDEN:** Just as a discussion point and you might not know the technical - and that's why I said it was a technical ‑ ‑ ‑

**MR WETTENHALL**: No, no, I'm not technically a water person.

**COMMISSIONER MADDEN**: To me this comes down to the local versus the wider environmental benefits and that kind of trade-off.

**MR WETTENHALL**: Yes.

**COMMISSIONER MADDEN:** So we have a role at the moment for the authority in supply projects which is to come and verify savings. Are there ecological targets that you're aware of that actually relate to the Billabong/Yanco system that the Basin Plan actually should take into account first?

**MR WETTENHALL**: We, as a community have fund raised $2m through a private levy. So the irrigators pay a private levy. We've cleared willows. We have fish studies. We've done lots of things like that, so we do have a base where we know we are. So I guess moving forward, you know, we'd like to see that base like everybody in this room to improve on our river and to improve the logistics of irrigation water, and we have a 50 gigalitre and may up to 100 megalitre at Darlo which is our last gauging station, so there's always an end of stream flow. But that's very hard to control when you've got an 800 kilometre - and even with these six new 160 megalitre dams, that's going to be a drop in the ocean to try and control it. That's why it is so important that that water that leaves our end of system is seen not as a loss, but as The Murray system - I don't mind what The Murray system uses it for. It's all good water for them. It's just not our loss, and once that's cleared off the table in accounting figures, that's not a loss, we all look as good as any other irrigation channel because our river runs in the bottom of a clay pan, not like an irrigation channel on the top of a limey ridge where it leaks water.

**COMMISSIONER MADDEN:** So I will have to look at the business case, but my question relates to, how does the Authority and what role do they have to take into account a part of the Basin plan that sits within the Basin and environmental issues within that, and this is the same with Medindie Lakes.

**MR WETTENHALL**: Yes.

**COMMISSIONER MADDEN**: Similar kind of concept.

**MR WETTENHALL**: Yes, yes.

**COMMISSIONER MADDEN:**  What assessment do they take to be able to enable a trade-off as opposed to the higher level ecological flow type targets, because obviously if you look at one side of the equation that's one thing. I guess it is how do you have sublevel goals or take that into account? Now, it is one thing to say the State has to go away and look at the environmental approvals, but that doesn't actually consider the state of the Basin and the health of the Basin, so ‑ ‑ ‑

**MR WETTENHALL**: I understand. I take on board ‑ ‑ ‑

**COMMISSIONER DOOLAN:** And this is ‑ ‑ ‑

**COMMISSIONER MADDEN**: It might be something - I realise you might not be aware of it - but it is a line of questioning that I'd like to actually ask the Basin, the Murray-Darling Basin Authority, sorry, not asking the Basin, it might not be able to respond. But asking the Authority well, how do they weigh that up, other than yes, it is a saving that will go towards ‑ ‑ ‑

**MR WETTENHALL**: But communication could go a long way and there is absolutely none.

**COMMISSIONER DOOLAN:** I think the answer is we'll check the Basin environmental watering strategy which does have more general flow targets in it, but we will check it at least and ask that question of the Authority.

**MR WETTENHALL**: Yes.

**COMMISSIONER DOOLAN:** Okay. Did you have others?

**COMMISSIONER MADDEN**: I guess the question for me is - I know it is early days - but is there a restart or a reset in terms of the State government communicating with you on where to go from here?

**MR WETTENHALL**: Tracey McDonald who is recently the head of SDLs in New South Wales is new to the job and I spoke to her two weeks ago and she said that she has to get her head around the situation and will not be able to come for three to four weeks, otherwise any consultation will be meaningless and so we start again. And no doubt she's a very great person or whatever, but you know. It's very, very difficult and I'm at the sort of forefront of my community and people in the community keep asking me, "Well, what have you found out?" And do you know what I have to tell them, "Nothing". And we're edging closer to this SDL project happening and we all feel that the concrete trucks have already been ordered and there'll be no communication. And I don't know, it's just a project for State government and they're using it as a disguise as an SDL project for a 15 gigalitre saving to be used once every four years.

**COMMISSIONER MADDEN:** Just on Forest Creek.

**MR WETTENHALL**: Yes.

**COMMISSIONER MADDEN**: I know you've talked about the lack of water into the swamp.

**MR WETTENHALL:** Yes.

**COMMISSIONER MADDEN**: Has there been any evaluation on that?

**MRWETTENHALL**: Yes, last year they came and did bird counts and things like that. I can't give you the results. I'm not a Forest Creek expert, but they did do studies on it last year.

**COMMISSIONER MADDEN:** So that's just not the creek, but then also the impact on the system and any other, in terms of the flows through the system?

**MR WETTENHALL**: No, no, they only did studies on the bird life of a watering event last year.

**COMMISSIONER MADDEN**: Okay. So that's not the evaluation I'm talking about. I'm talking about have they looked back and said, right, what are the actual impacts from that project?

**MR WETTENHALL**: No. And what you have to realise too is that 14.5 gigalitres ran through our whole system to get to the Wanganella Swamp. Now, we don't have that and nor does the Wanganella Swamp even get their one gigalitre each year. And that all went to water for rivers, so we sort of feel that we've given up a lot and if these SDL projects have to come forward, we have to - you know, we can't just let our creek just totally go. It's a fantastic environment and it's a great irrigation channel too.

**COMMISSIONER MADDEN**: So it seemed to me one of the key bits of information to go into a feasibility study to a gateway process would be what are the other projects that have happened and what's happened under those projects over the last ten years, is it, since Forest Creek?

**MR WETTENHALL**: That's right. That's right. Well, farmers they say it's a disaster who are out there. It has just dried up - and you know, and I know there was licences bought back and things happened like that, and people went to the Edwards and their licences were moved to the Edwards, but the Forest Creek and the Wanganella Swamp didn't get what they were promised, and that's what makes us very, very nervous that when this regulator goes in, we won't get what we're promised, and I know you can't promise that either. But you can imagine us as a community with a letter from the Minister saying that we are heading towards a pre-1850s drying and wetting phase on our creek, how that makes us feel. And I'm sure if you put that letter to Tocumwal people and said, "The Murray was going to dry in Tocumwal like pre-1850s", there'd be panic amongst the pigeons.

**COMMISSIONER DOOLAN:** Okay. So one of the things I suppose I would encourage you to actually think about, what sort of consultation you'd like to see. What sort of things you would like considered in the next 18 months as they do the development and perhaps, you know, shoot us an email with that because that would give us - we're recommending adequate community consultation, credible community consultation.

**MR WETTENHALL**: That would be fantastic.

**COMMISSIONER DOOLAN:** We need to understand what that means.

**MR WETTENHALL**: I will do that.

**COMMISSIONER MADDEN**: I will add to that and we'll put it in our report. Community consultation is not an end to itself. So that's why I guess I'm asking about what are the impacts of Forest Creek and what are the concerns, because it is actually proper assessment and analysis of what that's likely to be, because funnily whatever pre-1850 drying and wetting - it is easy to say, but the obvious question is well, what does it actually mean for the hydrograph.

**MR WETTENHALL**: I don't know.

**COMMISSIONER MADDEN**: No, I know you don't know but for someone to say that in a letter from an office ‑ ‑ ‑

**MR WETTENHALL**: Well, it has come from Neil Blair in response to a letter of mine.

**COMMISSIONER MADDEN**: Well, that actually needs then underpinning of what that actually means before you then can progress and discuss it.

**COMMISSIONER DOOLAN:** All right.

**MR WETTENHALL**: Thank you.

**COMMISSIONER DOOLAN:** Thank you. Thank you very much. Our next participant is Louise Burge from the Murray Valley Private Diverters. Louise, if you wouldn't mind introducing yourself for the record.

**MS BURGE**: Yes. Louise Burge, representing Murray Valley Private Diverters and I've also put in a private submission as well, a personal submission. Firstly, I'd like to thank you very much for the opportunity to speak today. I can only describe it for our members and our community as being an emotional rollercoaster for the last seven years, and that process is continuing. Just in brief, the Basin Plan is a political plan and it's a political plan about numbers and that is what's guiding the decisions and while ever that process is about numbers, it is clouding good decisions for the social, economic and environmental interests.

The failure of the Basin Plan dwarfs many other government failures including the pink batts scheme. I believe there are opportunities to improve and to make some sensible decisions going forward even within this implementation phase, but there's no sign or evidence that that is occurring to date. You would have heard today about the devastation for the north-east Victoria and New South Wales Murray and I think that's very, very evident and it's not just the risk today, it is going forward.

In regard to the Productivity Commission's draft report, and I welcome many comments in there, but I would like to draw attention to a few issues. One is that I don't think we can avoid the need, not just to look at what are the implementation impediments as we see them today, but this is a real opportunity to create the necessary changes, that are both absolutely critical for the environment as well as the people because we are not getting the decisions right. Also the lack of decisive - you made mention about the lack of decisive decisions. I think we don't need decisive decisions to implement what we already know is failing. So we need decisive decisions to improve, and the mention before about the Yanco Creek is a classic, and I could name a number of other things like that. We are sacrificing one environment and one community - a whole range of communities in the interests of protecting other environments and other communities, and I even question the term "environment".

The question needs to be asked in its decision, has the MDBA adhered to its charter and truly acted as an independent organisation? And I think when you look through the submissions that I have done over the years and I will present more to you, I think I can provide sufficient evidence that they have not acted according to their charter. The standard of information underpinning the Basin Plan decisions is very - I would not describe it as robust science and I certainly would describe it as very much in line with the political campaigns of South Australia.

If there are a number of major - if you look at where is the evidence to date that this is not working? We've seen it in the social and economic fallouts in these regions, northern Victorian and New South Wales Murray. We've also seen it in the 2016 catastrophic flood where the warnings that we had been given for seven years came into fruition. For our own business we were wiped out and I'll get to that later.

But what that catastrophic flood showed was how this Basin Plan is based on theory and as we go forward the risks are going to be further exacerbated. The MDBA's proposing flows of 77,000 megs in Yarrawonga to Wakool Junction region. That's exactly what happened in September 2016. Following that, we got a catastrophic flood in October. Why? Because the risks and warnings that we had been providing for seven years were ignored.

Mark made mention about promises from government. We know when we document these risks and governments promise consultation, they promise change et cetera, none of this is occurring. So as we go forward in this implementation phase, there is absolutely no sign of improvements. I do think, and I won't go into detail on it, but I do think it is critical that the Productive Commission actually does review the science or initiate somebody to review the science that is underpinning decisions and the example was given before. How can you sacrifice one set of environments simply to provide a political outcome for another set of environments which that in itself is not based on transparent science of which we could have confidence in.

The issue about - we've heard before too about end of mouth flows et cetera. This Basin Plan has to revisit the Coorong, Lower Lakes and Murray mouth. That catastrophic flood in 2016, 204,000 megalitres went under the Tocumwal bridge. It wiped our business out and it wiped many other businesses out. Now, what that flow did in October, in the first week of October, by the time it got to the South Australian border it was around about 94,000 megs, and by the time it got to the Murray mouth and barrages, it was 75,000 megs. Three weeks after, that water hit there, dredging of the Murray mouth was required to be resumed.

I've got photographic evidence and I've provided this in numerous, numerous - if you want to go through all the details, this is what I wrote in 2010. Everything that I am saying and have said in submissions is fully referenced and can be found in that document. The connectivity. This was meant to be an environmental plan across the Basin. It is not. Of the 2750 gigalitres being recovered under the Basin Plan, 2,000 gigs is directly to flow out the Murray mouth. We know that in the absence of localised solutions in South Australia, this will not work. It will not work for the Coorong. It will not work for the Murray mouth. It certainly will work for housing development in South Australia's Hindmarsh Island, and that was evidenced by the 58,000 property price per house increase in the CSIRO's ecological and environmental benefit report of which they weren't too happy about releasing at the time. But in terms of growth of corporate agriculture downstream at the Barmah Choke, I think the Basin Plan will work also.

If you look at, going back to the base science, and I think it's really important to differentiate between the Northern Basin and the Southern Basin. I've got a document here that talked about in 1992 and I will quote. "The time for unfettered access to water is over". In 2017 the extraction data on the Northern Basin is still not known. And in 2017, New South Wales is only beginning the licensing process for flood plain harvesting now. Now, how can the MDBA say that they got their baseline models right and said that only six per cent of the Darling flows impact the Murray when New South Wales itself didn't know, and still doesn't know, what is exactly being extracted.,

One of the other major features of the Basin Plan is that everybody's to make this flow contribution to the South Australian border to meet a target of 80,000 megs a day at the South Australian border. 100,000 megs, for example, puts our property under water. At Tocumwal 204,000 megs under the Tocumwal bridge just wipes us out completely. And I can just name heaps of people in this situation.

If you look at the social and economic impacts and the regulatory impact statement the MDBA was required to do in 2012, in their simplistic approach they only looked at two things; one was the water for future program which was how government was going to acquire the water, and they also looked at the SDL adjustment mechanism. For Murray Valley Private Diverters the impact on a number of the SDL adjustment projects is significant, not only in terms of potential property access or flooding risks, but in terms of reliability changes to their irrigation entitlements because of the changes to river operations. The way regulated rivers were run before is going to change. None of this is included in the regulatory impact statement. None of the flooding risk or property impacts or impacts to tourism is included in or the price of water, what the water recovery strategy has done to the price of tradeable water, is included in this.

In regards to the Productivity Commission report you do acknowledge that the extra 450 gigalitres will be more than anticipated. I can only reinforce that statement, but also concur with you that it is a real worry that there is no requirement to consider what the cost is, and I think that is critical that the Productivity Commission identifies that risk. And in regards to the 450, the neutrality test is fundamentally flawed and there is no capacity to recover another 450 under the guise that it will be socially and economically neutral.

I have to say that the SDL adjustment mechanisms need an urgent and complete review. I acknowledge your gateway comment previously, but what worries me is that I think there needs to be a step before that, and that is to actually re-look at what is realistic, what is the total objective of the Basin Plan and then determine whether the SDL is consistent with what we are told originally was meant to be broader environmental objectives because clearly the targeted flows are only for one parts of the Basin giving protection to many other parts of the Basin.

And I tried to mention before that, you know, when I've asked the question about end of valley flow targets, which rivers will deliver this 80,000 flow target? Darling, none. Meant to be 143 gigs. Not likely to occur. Murrumbidgee, meant to be. Not likely to occur. Nothing coming from south-east of South Australia. In fact, it's not even in the catchment maps, and that's because of historical maps and yet we have an MDBA which is trying to replicate the flows to south-east of South Australia but simply from the wrong catchment and catchments.

In regards to consultation on the SDLs, I can only describe it as emotionally draining, appalling, dishonest, and leaving people with a very bitter taste. I've been involved in catchment management, natural heritage, trust programs. I've worked for an environmental group, Greening Australia. I've worked in a range of places, and number one, I work on farm, and I have spent 20 years of voluntary time also in the field of natural resource management, and I have held elected positions as well.

I cannot agree with any component with the MDBA in its current form because it has so many flaws in it. It is easy to talk about you know, relaxed constraints and consultation and all these things. But we are spending $13b and what are we going to get for our money because the Murray mouth is still going to sediment up. The Darling River is not going to improve. I was standing out on the Darling less than four weeks ago. I went to two block banks, so great big earthenware walls over the Darling. So you imagine the Murray or the Goulburn having earthenware walls - sorry, I need to describe that. Think of a wall of China and plop that in the middle of the river and block it, and basically that's the same sort of thing as happened in South Australia with the building of the barrages. Now, they are what they are but there is no question that something is wrong in both areas, both in the Darling and in South Australia and we, in New South Wales Murray and Northern Victoria are going to pay the price.

In terms of compliance, and I note that the Productivity Commission has suggested splitting the MDBA, I possibly need to clarify with you a few things before I, sort of, have a firm position on that. And just nearly to conclude, you made mention of a stitch in time. I think that is a very valid statement. What worries me immensely is that a stitch in time if it's just sort of not comprehensive enough, it's not going to work, and if we look at say the 18 environmental indicator sites across the Basin, only six of those relate to Murray River flows. So why then - and there's one on the Goulburn. So if seven out of those 18 environmental targets are on the Murray and one on the - six on the Murray and one on the Goulburn, why is 2289 gigalitres of the 2750 being recovered from the Southern Basin? Something is seriously wrong.

And just to conclude with - and I am putting in a - or I have put in a personal submission too which was a copy of my one to the South Australian Royal Commission. In 2010 we had environmental flows put down the Murray system without warning. Our property was cut in half. That was the first crops we grew after the ten years of millennium drought. We lost the lot because we could not get access to the other side of our property. We got five days of rain and lost everything.

In 2016, despite seven years of documented warning, personal warnings and documented warnings, we experienced a catastrophic flood, exactly what is going to happen to us on a more regular basis. We've gone now into this current drought with no grass on the areas that were flooded, with an economic devastation to our business and what was the response of the MDBA? We were blamed for being irresponsible with our infrastructure. That was every farmer along the New South Wales Murray. That was in the December minutes of the MDBA.

The productivity loss and business loss to our business is indescribable. I do get upset when you've put so much effort as I have. To date we've lost over three-quarters of a million dollars, to be blamed for something which was not our mistake, to be lied to. I spent 18 months on a constraints advisory committee and I should actually say the whole constraints management strategy came about because of what happened to our property in 2010, but we weren't the only one.

I hold a table out of a constraints management strategy report 2013/14, so after spending 18 months advising the MDBA with other - a range of us, the very flow regimes that we had rejected then appeared in the report as feasible with community acceptance for further investigation. We've been called recalcitrant. We've been called difficult, and I recall a statement that Mike Taylor did after I wrote that, and everything is documented in that about the Coorong et cetera. Mike Taylor said to me that he was the first chair of the MDBA. Actually he didn't just say it to me, he said it in front of hundreds of people in Shepparton, and in Deniliquin also, that the problems of the Coorong are a South Australian problem and they need to address it. I believe Mike Taylor was an honourable man and he resigned from his position as the MDBA chair. We've hosted ten tours. In the whole Wakool and on our property et cetera, nothing is making a difference.

Now, in closing I appeal to the Productivity Commission as I did with the South Australian Royal Commission. The solution does not lie with taking lots of water and ruining northern Victoria and New South Wales Murray. There is political interests that are dwarfing our needs and that needs to change, but as a responsible agency, which I believe you are, and if I can appeal to you, your duty to send a very clear message to government, implementing the Basin Plan as it is today is wrong for everybody. Taxpayers, environment and our communities. Thank you.

**COMMISSIONER DOOLAN:** Thank you.

**MS BURGE**: I should also say and John, you probably may have heard me and Jane too. I have put forward many, many solutions over the years and I continue to put those forward. One good example is a suggestion that within the 650 SDL adjustment mechanism, if governments have got the decision making wrong around the SDL projects because this was all about numbers. This wasn't about science, it wasn't about good process, it wasn't about due diligence. Why not have an adaptive component within the SDL adjustment mechanism? If for example, we have a number of projects - if we've got to get to the figure of 650, I think we're at 605 now, if we are aiming to get - because I agree and Murray Valley Private Diverters has been very, very specific. We agree with the principle of the SDL adjustment mechanism. But what we can't agree with is the process for decision making around those projects. The Menindee Projects may have huge consequences for Murray resources, let alone the people on the Darling, and I sympathise immensely with those people on the Darling.

There may be many, many smarter and more innovative projects than closing the Yanco Creek down. Flooding people out. Destroying communities. Let's have the due diligent properly prepared scenarios. My concern is that if we go simply into saying "let's have improved consultation", without actually doing a complete review first, we will get to the point exactly what Mark Wettenhall said. It will be done deal and the concrete will already be delivered. Thank you.

**COMMISSIONER DOOLAN:** So thank you for that. I suppose on that line then, we have recommended a process for review of those projects; a process whereby if they're good projects but they need extra time, that's discovered in that process and they can be held to milestones. But if we were to take further your suggestion of an adaptive process - I mean, we have already been meeting concerns that by extending the timelines your putting off the inevitable. So the adaptive component, how would it work? How would it work within a reasonable timeframe?

**MS BURGE**: My experience in natural resource management is that there is no one answer from day one and it evolves and we should be taking a lessons learnt process. So if you can imagine the 2750 with the 650 underneath. The independent audit in - I think it was August 2014 said that there was a 580 gigalitre plausible SDL project number. I don't think a lot's changed from that timeframe, even though we're talking now about 605. But let's pretend that of those 605 projects that are on the table, they don't actually end up adding up to the 605.

**COMMISSIONER DOOLAN:** We have to face that possibility.

**MS BURGE**: Yes. So let's go back to the August 2014 audit where they said there's plausible 508 gigalitres. So at that time I said, "Well, okay, if there's only plausible 508 gigalitres, let's have 150 gigalitres option that still will go into the SDL adjustment mechanism, it's just simply that the project names aren't on the table at 30 June 2017.

To me it allows proper due diligence in taxpayers' expenditure. It's about due diligence in designing environmental outcomes. The way we're it at the moment is all this scramble for a number. We've got to meet a number by a certain time so what can we busy think about putting in a number. I know of one project that was dreamed up in two weeks. I know of another project that affects our irrigation infrastructure. We were not allowed to see the business case and we had to struggle and kick and scream to try and even actually get a glimpse of it. Let alone have input into it which we couldn't do. And the bizarre thing, even now you've got two business cases for changing the flow rates on the Murray River, you've got the Hume to Yarrawonga and the Yarrawonga to Wakool. They both claim two different flow regimes for the same stretch of river below Yarrawonga.

You then have a process with that, you've got Hume to Yarrawonga going to be managed by Victoria and Yarrawonga to Wakool Junction being managed by New South Wales. It's the same river and all the risks primarily will lie in New South Wales Murray. We have not - Hume to Yarrawonga have not been consulted at all. Yarrawonga to Wakool Junction - I would encourage you to suggest you read my South Australian Royal Commission because that's got some points in there that I won't take your time up today, but it hasn't been a wonderful process, put it that way.

But there is tremendous opportunity to improve this and get the environmental expenditure right. But we cannot while it is clouded by politics and somebody has to break through that mould and say "This is wrong".

**COMMISSIONER MADDEN**: Thanks for running through some of the issues, Louise. One of the things you mentioned liability changes which you see in a number of the projects is potentially quite important, I mean, at the local level which we heard before, but at the whole system level as well, with Menindee changes and Hydro-cues and the like. Have you, given your history, heard any consultation or work program how that actually is going to occur across the package, because again, it is one thing to look at each ‑ ‑ ‑

**MS BURGE**: Well, I do sit on the State Advisory Panel for water resource plans as well, and for our research plan, New South Wales Murray, Murray Lower Darling. We have got nothing more than a diagrammatic explanation, but in terms of risk assessments and understanding the modelling of changes that the Medindie Lakes project would - how it could or would impact on Victoria or New South Wales Murray supplies, we can't get that information. The pipes were already on the truck before, in terms of building the Broken Hill pipeline, so that's another classic case where the decisions are taken well in advance.

We have to get solutions more broadly. Can I draw your attention back to the Living Murray. The Living Murray process was about designing and achieving environmental outcomes with infrastructure to deliver a healthy working river and the scientific reference panel said at that stage, 1500 gigs would deliver a healthy working river with infrastructure. Now, we've reversed that thinking, we've reversed all catchment management thinking which is a whole of catchment thinking. We now simply measure environmental success with the volume of water flowing out of the Murray mouth, and we now are perhaps abandoning - well, no we are, seemingly to abandon the infrastructure built under the Living Murray by saying well, we're now going to have flows above the banks of the river.

For those people who don't know what this scenario means, for example, the MDBA in all its modelling for below Yarrawonga, the river runs at 10,600 megs through the Mulwala region and then 8,000 megs in the Barmah Choke. The modelling of the MDBA that underpins the Basin Plan is saying 77,000 megs. So we're not talking just about a little overbank flow as described, and going into this next phase of achieving environmental outcomes, let's be smarter than using a crude methodology of somebody wants to take the river from there up to there.

**COMMISSIONER DOOLAN:** Thank you very much, Louise.

**MS BURGE**: Thank you very much for your time.

**COMMISSIONER DOOLAN:** Thank you. Our last participant for the day is Suzanna Sheed and David McKenzie from the GMID Water Leadership Group. If we could invite you to the table. And just for the record, if you'd just introduce yourself for the transcript, please.

**MS SHEED**: Thank you. Thank you for having us here today. My name is Suzanna Sheed. I'm the independent member for Shepparton District in the Victorian State Parliament.

**MR McKENZIE**: And I'm David McKenzie, co-chair of the Water Leadership Forum.

**MS SHEED**: I thought I'd just start briefly by reminding everyone about the GMID Water Leadership Group. So in 2015 we held a water summit in Tatura and out of that one of the recommendations was that we needed an advocacy group with strong representation from people across the water industry in the region, including environment, farmers, water authorities and the like, and we were able to put together that group and they have worked hard on a number of issues over the ensuing years.

Part of the reason for doing it was just the dearth of leadership in the space, the lack of any government really taking the space to hear what our communities were concerned about, and I think it would be fair to say that one of the first things we did was commission the RMCG Report which the Productivity Commission will have a copy of. I think it was tendered earlier on. That report went to the damage that has been caused as a result of the plan so far, but to be clear, we were always prepared to wear the 2,750 and part of our concern was around the 450 gigalitres and how that would be achieved and what impact that would have given the damage that we had already identified in the 2016 RMCG Report.

So that report has been backed in by numerous other reports since then, and I think it's fair to say that when it was first done, MDBA were quite critical of it and in some ways white-anted it and it was a really disappointing time for us and it was probably the strongest view we had at the time of how they were operating and how we would have to deal with them, and we moved to a position where we decided after a period of time that consultation with the MDBA would get us nowhere because their role seemed to be to roll out the plan at any cost. We're here to follow the Act, follow the Plan, roll it out and everyone get out of the way. That was really how we saw it.

So probably around two years ago, we decided that we would engage on a political level rather than on that level, and so that is really what we've done since then. So we've made many submissions to many people where we've been consulted with a lot, and we have attended numerous meetings and engaged with many people from across the region and in other places in the Murray Region as well. We've kept a link with Speak Up just so that we understand each other's issues along the way. I think it would be fair to say that as a regional community, like so many other regional communities, we're feeling so disaffected, so disengaged in a lot of ways from what is happening in this process, and I think I can probably speak a bit politically about it, and I've been recently reading Gabrielle Chan's book called Rusted Off, and while she's talking about different regional communities to ours, the resignation of a lot of the things she says about how regional communities feel in relation to the bureaucrats in Canberra, the politicians in Canberra, the lack of understanding of what's happening in our own communities, and what seems to be an incredible unwillingness to engage in a way that takes into account the overall situation, and so policies are made and they are just driven home. It seems to be that that is what has to happen.

And in relation to the Murray-Darling Basin Plan it's that lack of any adaptation along the way that we are feeling the most. So there seems to be - you know, there's been two amendments to it, but of not much significance to us in the southern connected basin, I will say for the SDLs of course, that was a critical piece, so it's this rigidity around it that is a real concern. So I just wanted to set the ground work. David will speak to some of the recommendations because you've got our submission, you've heard from us before. We're keen to actually talk to you about some of your draft recommendations and how we see them.

**MR McKENZIE**: Thank you, Suzanna. So Commissioners, congratulations on your report because I think it is a really clear on capture of some of the issues that a lot of the communities have been trying to articulate for a long time, and struggling to get any real traction on. There are some elements that I want to focus on, in particular in Chapter 5 of your findings and recommendations around the efficiency measures which are probably the most pressing for northern Victoria and southern New South Wales at the moment, I think.

I think it probably can be summed up in terms of concerns about the death of a thousand cuts that the irrigation communities are suffering. Every report that has looked at the socio-economic impact and the implementation of the plan to date, starting with your RMCG Report that Suzanna mentioned early on, confirmed by the Tim Cummins & Associates Report commissioned by the Victorian State Government and finally by the MDBA and their own community profiles, has found genuine evidence of real socio-economic negative impact, and despite all that, because there was no trigger to sort of pull it up, the plan, we see, our communities feel has been ruthlessly implemented so far. There's been no real allowance for adverse outcomes or pockets of disadvantage or unanticipated impacts, and they're real and they're happening, but there was no opportunity to sort of - apart from community advocacy which largely has fallen on deaf ears particularly in Canberra, to really do anything about it except try and shine a light on it.

We see that the trajectory and the implementation of the plan in the southern connected basin is almost unchanged from its original design, and as a few earlier witnesses have called out, emanating out of Canberra is really what seems like a blind worship of deadlines and volumes, rather than a focus on outcomes, and you picked that up in your draft report as well.

But now at this critical point of time when it's actually getting really hard, you know, all the low hanging fruit has been picked, and all the early wins have been had, it is getting harder and harder month by month and year by year now. The question is who is going to bear the pain of the final recovery? And it is really obvious where that is heading. So despite all the obvious hardship, despite all the quantification of the negative impact, it is really clear to us that the only ideas coming out of the MDBA, out of Canberra for efficiency measures are to recover the 450, are to go back to the consumptive pool.

We think that is an intellectually lazy approach just going back to the low hanging fruit there, because the pressure of the deadlines and the focus on the volumes that you have identified, is driving a lack of thoughtfulness from the key policy decision-makers. Part of that, I think, is a subtle shift in the language around the commitment to the neutral or positive socio-economic outcomes that is really starting to become quite persuasive and it is causing more anxiety in our communities amongst the people who follow these things, and part of that language has found its way into your report, and they are the things that I want to focus on.

The past 2750 gigalitres our communities have been promised from day one that there would be no more pain, that the 450 would only be recovered or one pursued on the basis of neutral or indeed positive socio-economic outcomes. On farm efficiency programs, to go to those for a minute, that involve permanent transfer of entitlement, do cause negative socio-economic outcomes at a range of scales across the basin. It has been very hard to get anyone to understand or to acknowledge the reality of consequential impact, but as a property valuer in my day job where I value agricultural holdings from one end of the Murray River to the other, and into New South Wales, I see enterprises further downstream all the time whose production is sustained by Victorian high reliability water, Murray or Goulburn high reliability water. They enter into on farm efficiency projects further downstream. They trade their entitlement for the works. That's fine. And then they go back and they either buy permanent entitlement from this part of the world or they enter the allocation market in this part of the world, putting up with price pressure.

So it is mining the productive resource, productive capacity of this region in a very real way, and trying to get anyone to take any attention to that market reality that is actually playing out all the time, it is real and it is not hard to pick up. That is something that the consequential impact is something that is just not detected at this point and it doesn't look as though it's proposed to be detected if the rhetoric from Canberra is what we're taking notice of.

So in terms of your draft findings and you're seeking feedback specifically on your report, and to call out the change in the language and the drift and the decline in the language around the commitment to positive or neutral socio-economic outcomes, draft finding 5.1 where you rightly call out that addressing concerns by requiring efficiency projects to have no adverse impact, you say is impractical and it is probably quite right. Then that risks ruling out projects that achieve least cost outcomes. The commitment to regional communities is that if it is a socio-economic cost, it won't be pursued.

Over the page on draft finding 5.2 where you say, second dot point, "Basin governments have not yet agreed on an efficiency measures work plan to recover 450 gigalitres by 2024, including how major socio-economic impacts will be addressed". Again, this is the drift in the language. If there are major socio-economic impacts the commitment to these communities from day one has been that they can't be pursued. Trying to address them or fix then up later on, is not what the commitment was, and under recommendation 5.2, fifth dot point, "Program design and implementation should explicitly consider potential socio-economic impacts and include mitigation strategies".

We shouldn't need mitigation strategies if a commitment to positive or neutral socio-economic outcomes is fulfilled. This is the language that is infiltrating all the commentary on the Basin Plan now. So I suppose if it is known in government circles that no impact is impossible and practical then it is pretty obvious a new level of honesty is going to be needed with communities pretty urgently. If least cost projects are really the only option, how is the extent in the severity of the impact of those projects really going to be measured and how is it going to be dealt with? It seems to us the principle, the concept and the commitment to positive or neutral socio-economic outcomes around the efficiency measures is under real attack, and the language that is in some of your draft findings and recommendations seems to be laying out a pathway for some decision-makers to start stepping away from that commitment. That's what I really wanted to shine a light on today.

**COMMISSIONER DOOLAN:** Okay.

**MS SHEED**: I just wanted to add some comments on one of the other recommendations and in Chapter 14 the Commission speaks to the government's institutional and governance arrangements in relation to the Murray-Darling Basin Authority and I have to say for some time we've discussed, you know, the fact that it's there to do everything and that that doesn't seem to be working so we would welcome the recommendation you have made about separating those roles into the trusted advisor and reliable regulator, and I think it was very much brought home to me the conflict that must exist within the MDBA when I first saw the Four Corners Report about the Northern Basin and then later the Lateline Program because during all the years that the issues were arising from 2012 to 15 or 16, the Murray-Darling Basin Authority were in the Northern Basin conducting the northern review, not a whisper about those issues, the alleged water theft, the lack of monitoring, the taking of environmental water, the banks going up in all sorts of places, and as it turns out in southern Queensland, now allegations of fraud and indeed charges being laid around the Norman properties.

So it really does show that there needs to be a regulator and the other, because I think that combination of both is what has led to such a loss of trust by many of us in the Authority. It is trying to be everything to everyone and it certainly hasn't shown itself as being effective in terms of regulation or oversight, and while it might have come up with a sort of a tool kit for the Northern Basin, it didn't shine a light on what was happening. It should have shone a light, it should have insisted on compliance. It didn't do it and now we have people in this room and everywhere still calling for a Royal Commission into the whole of the plan. That lack of trust and those things that have gone on over the years are what have been percolating to lead to the demands around that.

So I think getting the governance right and those institutional arrangements right, is an absolute must and we welcome that recommendation.

**COMMISSIONER DOOLAN:** Thank you for that. I might just deal with that and we move to the socio-economic. I think the governance recommendation, obviously we feel strongly that that separation is an important element for two reasons looking forward. From what we see, successful implementation of the SDL Projects moving forward, taking on a real resource manager role in the MDBA, it's extremely important into the future and that's in the trust advisor camp, and obviously the regulatory function also, and we just believe combining them means neither function is done to their best capacity. Separation enables both to be - totally to the best capacity and the community needs both those functions done really well to capitalise on some of the issues around the Basin Plan.

So that was our thinking about that separation. In some cases people have asked us to explain those benefits and those risks in greater detail which we will do in our final report. But coming back to the socio-economic issues. John?

**COMMISSIONER MADDEN**: Yes, I think it's - you mentioned honesty and the like and maybe this is a part of the development at the early stages of the plan and the 450 being a late development, and a sentiment being put in, but you've got to them read the test and I don't want to get into legalities because we hear this on both sides. As we've gone through, we've heard people say, "Well, this was the principle, if you read that bit". Then you hear others, including South Australia, saying "Yes, but if you read the rest, what we wanted was, you know, the 450 and on farmers' participation and that's the test".

So we could talk and people have talked about that for a long time. I guess the question I have in trying to step back and maybe it is a question to you and it is difficult to get an easy answer, but after 2024, if the 450 has been obtained or recovered, what do you actually want to see? Because the application of the criteria and we heard it just before, could actually mean that no project could ever be done because as an economist, I read any transfer of water out of the consumptive pool and handing it over to the environmental water holder, to not have an impact on price over the long term. I mean, I could only imagine one project which would be running the SDL - sorry, the desal plant. I can't think of other projects that would actually meet that test.

So the question for me is number one, we're going to get into what project would meet the test, and we could talk a long time about that and the criteria, or what are the attributes of a program. Not just the assessment criteria, but what's the program and ‑ ‑ ‑

**MR McKENZIE**: Commissioner, with respect, I'd reject the premise of the question. This is the drift in the conversation. The commitment has been that the up water would not be pursued if it couldn't be proven to have neutral or indeed positive socio-economic outcomes. I don't want to be drawn into a conversation about how do we mitigate bad outcomes or how do we make them not as bad as other outcomes. That is the drift in the conversation and taking the whole community down a path where the commitment - contrary to all the rhetoric from all the decision-makers from day one. That is exactly the sort of conversation which is the death of a thousand cuts which will see. Who is going to bear the pain of this transition again? It is the people who are trying - the irrigation dependent communities taking water out of the consumptive pool.

Just because it can't be done without causing damage, that's where it starts and ends. It's not how do we do it with causing less damage. It is a matter of fundamental principle, and engaging in conversations past that first principle are just taking us down a path to again, to that death of a thousand cuts.

**COMMISSIONER MADDEN**: Okay. We will move on then. We did have a discussion around the cost benefit of the 450 and the review of the account and the amount of money available for the Department to pursue the 450, so we have some recommendations in the report on that. Do you have any comment on that assessment of costs and benefits and then linked through to lifting constraints?

**MR McKENZIE**: I would suggest the constraint issues have probably been well-covered here. In terms of genuine costs benefit analysis for the taxpayer which is probably something that the PC has, you know, front of mind for your thinking, there's massive questions to be asked there, and I think our group, as a principle at the start of the socio-economic work, not just taking a self-interested view of this, but a view for the Australian taxpayer, this thing absolutely echo your concerns about the lack of rigour cost benefit analysis on that, and it really needs to be done to demonstrate that this is actually worth pursuing, and combined with a focus on outcomes rather than, you know, a blind adherence to deadlines and volumes, will actually end up making the whole plan and balanced out, comes better for all. So very comfortable with the broader recommendations that you've made in respect to PCA.

**COMMISSIONER MADDEN:** Yes. Do you have any comments on the neutrality and the like?

**COMMISSIONER DOOLAN:** Not really. I mean, we have actually noted that your group put out your criteria yesterday and two governments came out as well. I suppose a question that we did have was from your perspective and understanding, and not just in this region, what sorts of projects would meet those criteria?

**MR McKENZIE**: I understand there's buildings full of people in Canberra who are working on those sorts of issues rather than time poor volunteers trying to advocate for their community.

**COMMISSIONER DOOLAN:** Okay. All right.

**MR McKENZIE**: Wouldn't that be in their domain to put it up to be tested?

**COMMISSIONER DOOLAN:** Well, elsewhere in the Basin, some communities have indicated they have got some projects that they, you know, feel might be worthwhile. So it was actually to see if there's anything here.

**MR McKENZIE**: Yes. Look, I think that's admirable but I don't think the onus should be on the communities to offer up ideas, is my sense of it.

**MS SHEED**: I think there's a strong sense in which we would like to see how the SDLs go. Like there's a whole lot of projects that haven't even started yet, and before we talk about the 450, ought they not to be rolled out, see how they go, assessed, evaluated and all of that before you'd even talk about doing the 450. That would seem a logical step and it was probably - the understanding for us was always that you'd roll out everything and then you'd have a look at how things have gone and is it possible to get more without any negative socio-economic impacts, neutrality, hopefully even positive benefits. So I would have thought - I think it was in our minds initially that this discussion around the 450, it would have just come much later when everything else had been done and you'd probably evaluate all of that and say, "Well, do we need it and can we get it without anything negative happening?"

But it has been thrust upon us by effectively political issues in Canberra around getting, you know, getting some amendments through.

**COMMISSIONER MADDEN**: Okay. So I guess we do make that point, the cost benefit and no regrets and waiting for the SDL information.

**COMMISSIONER DOOLAN:** And aligning to the benefits of the additional water. So those points have been made. We understand your bigger picture, but rolling out and trying to get a logical sequence is something we've tried to do.

**COMMISSIONER MADDEN**: And recommended.

**COMMISSIONER DOOLAN:**  Yes.

**MR McKENZIE**:I suppose the only thing - just even the tone of the conversation we've had suggests that we have to win 450. Like that is the mindset that the region has been confronted with all the time. If this is really hard, that's bad but how else we going to do it? If it can't be done without any negative impact this way, how else are we going to get there? The sense is that that is not a target, it is a locked in part of the whole project and it's not how can it be done with no damage, it's how do we do it with the least damage? How do we actually nurse this through and just get to 450? You know, again that sort of blind fixation on a number as a lock as part of the plan, rather than something that should be pursued with full intent and endeavour at the end of the plan, on the basis that no damage would be done to communities. It is a really different style of conversation.

**COMMISSIONER DOOLAN:** Okay. Thank you.

**MR McKENZIE**: Thank you.

**COMMISSIONER DOOLAN:** So that is our last scheduled participant. There is an opportunity now for anybody in the audience who would like to make a statement to do so, and so I think we have - so again for the record, your name and affiliation.

**MR EAGLE**: Yes. It is Neil Eagle from the other side of the river. I've been previously the Chairman of the Murray Valley Water Diverters and also Chairman of the New South Wales Murray Lower Darling River Management Board for ten years, so I've been involved with water matters for a long time. The thing that I want to - I didn't put a submission in. I've put a whole heap of submissions over 20 years and most of them have been ignored. I am not saying to you.

What I'd like to say is that this Basin Plan is predicated on a lie. It's an environment plan. It's got nothing to do with a balanced appraisal of socio-economic environmental needs. It contravenes the National Water Initiative. It is indicated under COAG that that was supposed to be the case. If you read Briscoe's report, Professor John Briscoe, the late Professor Briscoe, he does outline exactly what is the problem and that Australia previous to the 2007 Act was considered the world leader in arid zone water management. He considers it has now lost its way and unless that Act is redrafted, it will never reclaim that position again.

So I heard a lady talking about over allocation, and the river declining. Obviously the river was, at the time when Howard brought this forward, when you've got a drought and you haven't got any water in the river system, that's obviously - it could be considered a decline in the system. So far as over-allocation is concerned, there's no such animal as over allocation. You could argue in some rivers that there might have been too many entitlements given out, but you've got to realise the understanding seems to be zero of knowledge between the difference between allocations and entitlements. The entitlements are what's granted, and the allocation depends on the basis that the first water goes to conveyance losses. The second water goes to critical human needs. If there's any environmental needs, the next water goes to that, and if there's any water left over, it goes to productive use.

In the Murray during the drought, the New South Wales Murray, was two years of zero allocation; one year of nine per cent and one year of ten per cent because they were the last cab off the rank, and so you can't have over-allocation when you've got no allocation and that seems to be missing in an understanding of the real issues in relation to this. As far as the solution to the problem goes, I consider we're looking at a train wreck in relation to the irrigation industry of this country. It has been sacrificed on the basis of buying a few votes. It's really a political animal, it's not really dealing with the real issue of river health. I was engaged in the 90s with three scientists on our river board in determining how you deal with river health issues.

The first thing you'd do is you identify whether there's a problem anywhere. The second thing, you identify what's the best most cost effective way of dealing with it and then you put in a monitoring program to see if you've achieved anything. What we've done here, both in the Living Murray which they were promoting first and it started off at 500,000 megs and then ended up as Louise said, to 1500, but it was reviewed in the House of Reps interim report into the Living Murray where they came to the conclusion, ten out of the 11 cross-party politicians came to the conclusion when they were address by both the Wentworth group and other scientists, that there shouldn't be any water taken from production at that time in 2004 because there wasn't the science there to justify it.

Now, that was the finding of those people and as I've said to one of the politicians that was involved in that, I said, "If that report had been waved from the rooftops, we wouldn't be dealing with this Basin Plan now". We're looking at really squandering equivalent to Hume Dam every year down to the bottom end and out to sea. A million megalitres of evaporation in the lower lakes and two million megalitres as Louise said, over the barrages, out to sea to try to scour out the opening between the Coorong and the sea. It is an absolute nonsense and what I'm saying is here, we're looking at the irrigation industry of this country, both on New South Wales side and Victoria because primarily 80 per cent of the irrigation industry is in the southern connected Basin. We've got MIL operating now with about half its historic water use, the same with Goulburn Murray Water.

I believe that they are on the brink of tipping over and if that happens, all hell with break loose. We're threatening the actual food security of this country for no purpose. We are not gaining any environmental benefit because that's where the water's going. I've got no problem. I was involved with the River Board in trying to identify how you deal with the environmental issues, and you should deal with them, and the people that are in the valley want to see a healthier environment all the time. But they don't want to see water squandered and choofed out to sea for no purpose and that's what we're talking about.

We're talking about squandering Hume Dam every year for nothing, and I just cannot believe - if you talk about the 450 which is a nonsense, a thought bubble in the first - the last five minutes to get South Australia to once again agree to extortion, it's unbelievable. It was just a pure thought bubble, and if that happened, that would be the final nail in the coffin. I am really concerned about the future of the irrigation industry of this country, and I'm very concerned that we've got young irrigators who are now weighing up the options, "is there a future in this industry in irrigation or not". And I know there are ones in our area that are talking in this way. That really concerns me and they're thinking of buggering off. They'll just say, "It's too hard". I mean, it's been going on for 20-odd years. It doesn't look - we're looking at a situation and I've talked to a great friend of mine, that's the previous Director-General of Water in New South Wales, Peter Millington, who I consider the top water policy person in this country. He said, and I talked to him the other day, and he said, "Really there's got to be something wrong" - he's out of it now, he's retired - he said, "When you think that Dartmouth's sitting at about 90 per cent, Hume's 50, you've got zero allocation in New South Wales, you've got sales water in Victoria no longer ever going to be available to them, you'd have to really come to the conclusion that something's bloody wrong". And it's time people stopped and realised there's something wrong and people have been dudded politically. It's a political decision that's driving this. It's got nothing to do with dealing with the real issues, the environment issues and productive issues of this country, and it's bloody time it did change and those things became the top of the things that are being considered, and I'm hoping that really, the Productivity Commission, I didn't put a submission in, I just came, I was going to listen, but I was hoping that the Productivity Commission will actually highlight how serious this issue is to the politicians.

They'll have to wear it in the end. If they don't wake up very quickly, I'm concerned that we're on the brink of a real disaster in this country, and it is time that people stopped and realised how serious this issue is.

**COMMISSIONER DOOLAN:** Thank you for that. Thank you.

**MR EAGLE**: Thanks for your time.

**COMMISSIONER DOOLAN:** No, thank you. Is there anybody else who would like to? Ken? Again, for the record.

**MR PATTISON**: Ken Pattison. The review and the conclusion that relaxed constraints were going to be beneficial, was based on the Northern Basin. They did no work in the southern connected basin, and it is correct that the channel country and a lot of that country up there, to be flooded, is beneficial. So to them extrapolate that down to the southern connected basin and say, "It's good and everyone will be happy about it", is fundamentally flawed. Thank you.

**COMMISSIONER DOOLAN:** Thank you. Are there any others?

**MR EAGLE**: Could I just one last comment?

**COMMISSIONER DOOLAN:** Yes.

**MR EAGLE:** About the Darling ‑ ‑ ‑

**COMMISSIONER DOOLAN:** Again, sorry, it's for the transcript. So we need you there.

**MR EAGLE:** I am sorry. I was just about the Darling. There's been some comments made and I've got friends in the Darling and it is very concerning. And the other thing is that if there's something being done wrong up in the Barwon or northern, that should be dealt with. The problem is that the southern irrigators have been tarred with the same brush. They are very closely monitored. The metering is very tightly controlled in the southern rivers, and to have South Australia come out talking about they want a Royal Commission into it, it is absolutely nonsense. It is really offensive, because South Australia, after Dartmouth, gets its water before the upper states get any. So they are never going to be short of water. If it doesn't come down the Darling, it comes from the Hume, and so they are not short.

The only people that had a concern around any water that was taken out of the Darling, in the upper end of it, would be the lower end of the Darling who had real reasons to be concerned, and New South Wales and Victorian Murray irrigators because they're the only people impacted by that operation if people did take water that they shouldn't have taken up north, and if that happens it should be addressed. But to have South Australia having a Royal Commission into it thinking that they've been disadvantaged in some way, that is offensive to the upper states' people because that is not possible. They get their water before the other states get any.

**COMMISSIONER DOOLAN:** Thank you. Under the agreement. Yes. Louise.

**MS BURGE**: Just in terms of ways forward and solutions. If we could broaden our thinking on infrastructure solutions at the bottom end of the system, I do believe the Northern Basin issue does need to addressed, but if we look within South Australia - I will give you an example of the salinity target. We have to meet 1000 EC target 95 per cent of years in Lake Alexandrina now. The official measuring point obviously is Morgan, and I believe that that should still be retained.

But if, over time, we are going to have to meet this target, it is sometimes referred to as an aspirational target, I don't see it that way because it is a target within the Basin Plan. If the construct of the barrages and the operations of the barrages actually still allow sea water to permeate under the barrages and also re-enter into the Lake Alexandrina when the barrage gates are open and during periods of southerly swells, they can't effectively close, for example, the Goola barrage, why should we be held accountable for an EC level in Lake Alexandrina when South Australia can't actually keep the sea out?

That's an example where an infrastructure investment, you know, makes sense. It avoids flooding people. It avoids decimating irrigation communities et cetera. We also, up to this point, have had a rule in place when the Federal Government funded the upper south-east drains, the upper ones that no more than 40,000 megs on average over a ten year average of the upper south-east drainage and flood mitigation scheme, so no more than 40,000 megs of that water can go into the Coorong.

Now, we've got the absurd situation of saying, "We can't have local water go into the Coorong, but we can take it from Victoria and New South Wales Murray and travel it 2,225 Ks down there and then miraculously once it does get to the barrages, it's got to do a left hand turn and travel 150 kilometres left when the prevailing wind is in the opposite direction and the tide is a 12 hour tidal wind. So it just cannot work. And if you look at - you know, there is discussion on returning additional water. I think it is only 29 gigs or 26 gigs from the upper south-east drainage and flood mitigation scheme.

There is a lot more that could be done there. And in relation to the main south-east drains of which there's, I describe as a deathly silence about, South Australia does talk about the upper south-east drains, but does not talk about the main south-east drains and I've done a tour right through that area, I know exactly where bits are and what it is. In the year 2000, for example, 450,000 megalitres was put out to sea in that one year. Now, it might have been a wet year, 2000, there have been many other wet years. I think it is incumbent upon governments to know exactly how much water is going out to sea from the drainage schemes and look at measures to return some of the historical flow pathways from south-east South Australia back into the Coorong, and that under the MDBA's approach is a missing link. They will not enable any focus to go back into South Australia to meet their own objectives of which we have to provide the solution which can't physically and geographically work. You know, it's just like a brick wall.

**COMMISSIONER DOOLAN:**  I suppose one of our recommendations which is about the 2021 review of the water for the environment special account, actually does raise that question of looking at other options to achieve some of those environmental outcomes of Schedule 5. So we have tried to, if you like, utilise a scheduled review to actually look seriously at a range of some of these issues.

**MS BURGE**: We will, under a cost benefit analysis, surely some of these are outputs, you know, can be more effectively met. Thank you.

**COMMISSIONER DOOLAN:** Okay. Any final comments? All right. Ladies and gentlemen, that does conclude today's scheduled proceedings and we would like to thank everybody who has appeared and people who have spoken. We would like to thank people for their submissions and again encourage, if there's anything further, that you would like us to be aware of, to actually provide it to us in the process.

We will be taking account of what we hear in these hearings, what we receive in submissions, what further information people provide to us, to finalise our draft report and to actually provide that to government, as I said earlier, by Christmas. So at this point, I adjourn the proceedings. This concludes the Commission's public hearings for today and we will resume our public hearings next week in Dubbo. Thank you.

**MATTER ADJOURNED AT 4.23 PM UNTIL**

**THURSDAY, 25 OCTOBER 2018**