



**Australian Government**  
**Productivity Commission**

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**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 MURRAY BRIDGE GOLF CLUB, RITTER STREET  
ON MONDAY, 15 OCTOBER 2018 AT 10.01 AM**

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**COMMISSIONER DOOLAN:** Good morning and welcome to this public hearing of the Productivity Commission inquiry into the five year assessment of the effectiveness of the implementation of the Murray-Darling Basin Plan. These hearings follow the release of our draft report, which happened in the end of August. My name is Jane Doolan, I'm a Commissioner with the Productivity Commission and my fellow Commissioner is John Madden and we've been leading this inquiry.

I'd like to begin by acknowledging the traditional custodians of the land on which we meet, the Ngarrindjeri people, and I'd like to pay my respects to their elders past and present.

The purpose of these hearings is actually to facilitate public review, comment and concerns of the Commission's work and to get their comments and basically understand people's reactions and suggestions to our draft report and the recommendations in that. We had a hearing first in Mildura last Friday and following this one in Murray Bridge we'll be in Shepparton on Wednesday and we've got scheduled hearings in Goondiwindi, Sydney, Dubbo and Canberra. When they're final we'll be working towards finalising the draft report with a view to providing it to Government by Christmas. It's really important that we do actually have participation, so we do thank you for your attendance. It's important to get feedback from concerned citizens and groups and stakeholders, and we actually take comments made in these hearings, the submissions that we receive and feedback from other stakeholder meetings in actually finalising our recommendations, so the advice is taken seriously and valued. When we do actually hand our report into Government at the end, Government then has something like 25 parliamentary sitting days after completion to table it to make it public and participants, those who have registered their interest, will be advised of when that is available.

In terms of these hearings we do like to conduct them in a reasonably informal manner but we do have a full transcript being taken and that will be publically available and on our website in a few days' time. And for this reason we can't take comments from the floor during participants actually advising us of their concerns or comments. But at the end of the day we'll have a time where we can actually make available for people from the floor to actually present if they want to. Participants are not required to take an oath but we do ask that you are truthful and you're actually welcome to raise matters, not just on your own submission but if you hear concerns or have comments on what other participants are saying feel free to address those.

I don't think we've got any media presence, okay, so we'll not worry about that, but we do have to comply with the requirements of the Commonwealth Occupational Health and Safety legislation so I advise you that in the unlikely event of an emergency, please follow the green signs out to the 18th green or the car park and all will be well.

Now, we do ask participants to open with a few remarks but basically if it's possible to leave some time where there can be some discussion with the Commissioners along the way. So I think that's all the business of the day, so I'd like to invite Mr Vincent Cammell as our first speaker, representing the Murray-Darling Association Region 6, to come to

the table. And Vincent, if you wouldn't mind for the record again introducing yourself and indicating your affiliation.

**MR CAMMELL:** Thank you. So I'm Vincent Cammell. I'm the chief executive officer of Coorong District Council and I'm here today representing Region 6 of Murray-Darling Association. I should put an apology in on behalf of the Association; normally it would be the chair of the Region 6 who would be here to present to you, but with the caretaker period and everything else with the local elections it falls to me today to present on his behalf effectively. I do thank you for the opportunity to talk. I have got a statement that I'd like to make, it's about five minutes only so hopefully it will go through to actually expand on or raise issues from our written submission and follow on submission. So if you're happy with that I'd like to just go through that. Okay.

So as you know the Murray-Darling Association represents the voice of local government and the communities we serve in the management of Basin water resources. Region 6 is uniquely placed at the very end of the river system and I'm here today on behalf of our member councils, being Alexandrina Council, Coorong District Council, The Rural City of Murray Bridge and Tatiara District Council. Our first key message is that our councils and the communities we represent overwhelmingly support the Basin Plan. Our linked experience has shown us all too well the direct link between the ecological health of the Lower Murray Lakes and Coorong and the economic social and cultural wellbeing of our people. If the river suffers, we suffer.

In recent months the national focus has been on the economic and community impacts of water recovery. Our job is to remind the national that we have already felt devastating impacts of not recovering this water. Unsustainable levels of take during the Millennium Drought almost pushed our community to economic and environmental breaking point. When the next big drought comes we need surety that upstream Basin States will play by the rules, and with current activities and where we're at with our weather patterns it's very timely to call that out again. We know that returning the use of Basin water resources to a sustainable footing is no easy task. There is compromise involved for all river communities in pursuit of the greater good, including ours. Against this background we welcome the Commission's frank and clear assessment of what is and isn't working.

As you've identified, the plan isn't perfect but we have been and will continue to be consistent and both supporters of the plan on the basis that it's still the best chance we've got to ensure a healthy working Basin for the benefit of all Australians. Our submission speaks for itself but I do want to add some comments on the supply and efficiency measures, as well as some additional comments about climate change.

So in regard to 650 gegalitres versus 450 gegalitres, our position has been that supporting full and timely delivery of the Basin Plan means supporting both the 605 gegalitre down water and the 450 gegalitre upwater. We agree that one of the biggest risks overall is the potential failure of 605 gegalitre supply projects to meet expectations in terms of delivering equivalent environmental outcomes. As identified in your report, project failure would trigger a further round of environmental water recovery via other means, such as buybacks or further efficiency projects which would in turn likely trigger difficult

reactions from affected irrigation communities. Despite the difficulties associated with this reconciliation process it is critical that the 605 gigalitre supply projects be backed by robust evidence before they are permitted to proceed. Our concern is that come 2024 the political will for this reconciliation process might be lacking, putting the 2007 150 gigalitre target, let alone the 200 gigalitre target in jeopardy of being abandoned. This is why we have emphasised in our submission the importance of political compact for making make-good arrangements, similar to the recent compliance compact. The adoption of a clear and robust reconciliation plan which has been expressly agreed to by Basin States will go some way towards allaying community concern about the extension of supply project implementation deadlines.

With respect to the 450 gigalitre, our initial reaction is that draft recommendation 5.2 seems to propose a common sense approach to the problems identified in draft finding 5.2. We do remain wary, however, about the increasing number of limitations being placed on recovery of 450 gigalitres. These limitations have included a 1,500 gigalitre cap on total water buybacks back in 2015 and now focus on off-farm versus on-farm efficiency projects. A revised test for socioeconomic neutrality plus a warning that the proposed package of supply projects won't sufficiently ease constraints so as to deliver the enhanced environmental outcomes our region has been looking forward to. We would be extremely concerned if Basin States use the findings of the Commission as an excuse to wave the white flag on the 450 gigalitre. Yes, the pathway towards recovering this water comes with significant challenges but our hope is that Basin States will tackle that challenge with genuine good faith and a can-do attitude, rather than an attitude of it's all too hard.

As indicated in our submission, we are particularly concerned that potential for the socioeconomic neutrality test to be used is a political play thing ahead of the forthcoming Victorian, New South Wales and Federal elections. To this end we strongly welcome the Commission's emphasis on Basin States taking joint responsibility for the implementation of the plan.

In regard to climate change. Both of our submissions did express concern about the potential impacts of climate change and Basin Plan implementation. We understand that CSIRO has predicted medium river flows and the Southern Mallee Darling Basin would decline by 13 per cent by 2030 and we also understand that the recovery target of 3,200 gigalitres is the bare minimum needed to restore the river to a more sustainable level of take under current conditions. The key risk then for achieving end of system targets is the fact that current sustainable diversion limits do not account for the projected declines in Basin rainfall and thus river flows. Communities all throughout the Basin will need continued assistance to adjust to a future of less water, not just from water recovery but also from the impacts of climate change. Over the longer term our region is also concerned about the impacts of reduced flows and rising sea levels on the effective operation of the barrages and on the economy and ecology of the Coorong and Lower Lakes.

We have written to the South Australian Government asking them to take the lead in establishing an intergovernmental taskforce which can develop a long term climate

adaption strategy for the Coorong, Lower Lakes and Murray mouth, and to do so in partnership with local government and community. It took many decades for Basin States to agree on and then construct the current barrages and we could expect that developing, implementing and adaptation pathway for this critical infrastructure will play out over a similarly long period.

Given the long lead time required for decision making of this kind it is important that initial steps to gather the evidence base are undertaken sooner rather than later. We would welcome some acknowledgement of the need for this body of work being included in the Commission's final report. That's my formal statement.

**COMMISSIONER DOOLAN:** John, do you want to lead off?

**COMMISSIONER MADDEN:** I guess it would be interesting to get some thought around the reconciliation process and what you mean by, I guess, a transparent - - -

**UNIDENTIFIED SPEAKER:** We can't hear.

**COMMISSIONER MADDEN:** Sorry. We might just call this and see what issues we'd like to cover, so that reconciliation would be made good and what else you want to cover.

**COMMISSIONER DOOLAN:** Well, could I come in with your last point, for a start, and then we'll get, if you like to your views and any suggestion also that you might have around our draft recommendations on supply projects and with suggested extensions where it might be required. I think in your submission you indicated you were not averse to that, providing there were checks and balances. So it would be a good idea to get a sense of what you felt were adequate checks and balances to ensure confidence.

But just following your last point, the climate change issue and the fact that you have asked the South Australian Government to establish that taskforce. Is the sense that that work would actually be done to enable input into the 2026 review of the Basin Plan, is that the aim, if you like?

**MR CAMMELL:** That is certainly the aim, but at this point we don't know if that would actually be picked up or dealt with in that period. At this point in time it is early days in regard to that stakeholder engagement and trying to get this taskforce set up and going and looking for that sort of ownership. We believe ownership at another level might actually assist with that and help push the right buttons in regard to moving that forward.

**COMMISSIONER DOOLAN:** Okay. But an important thing to actually look at, particularly given the challenges of sea level rise, what's happening at the lower end and make sure that that's able to be fed into the review of the 2026 plan. But so far no response from Government on that?

**MR CAMMELL:** Only initial engagement but no formal ownership or direction or focus at this point.

**COMMISSIONER DOOLAN:** Okay, thank you.

**MR CAMMELL:** I should highlight, this has been a project we started about six months ago, seeking that engagement. So it is actually early days in regard to that process. But it is a unified approach from the councils within the region.

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

**COMMISSIONER MADDEN:** Just to follow on, on that, the climate change. We've had a few different submissions talk about accounting for climate change, and I guess it is that note of what do people actually want done with SDLs at the moment, given there is a review in 2026 and SDLs are set there and so on. Funnily it's an easy thing to say but I'm wondering - and I have some sympathy in terms of preparation for 2026 and information, et cetera but the SDLs were set for a period, they're not set in stone forever, there is an ongoing review, you know, every ten years, so.

**MR CAMMELL:** From my perspective it's more about the actual recognition of climate change affecting the greater system and actually having it in there as part of the process, so when those reviews happen that it's already a given that it's actually part of the requirement or the need. And rather than just looking at the impacts or the outcome of climate change, actually accepting upfront what those changes or those drivers might be and actually having it as part of the overall plan. So it's more about the upfront acceptance, rather than if you're trying to pre-guess or alter what that future review might be. So by just for the recognition of climate change and the - where it's going or what it's likely to do, it might actually assist or allow some pre-work to occur to actually better reflect where we are at in 2026. So from our perspective it's more about the preparation process and don't let it be a surprise to you in eight years' time or whatever.

**COMMISSIONER MADDEN:** Yes, okay.

**MR CAMMELL:** At this point in time, unless it's called out it could still be no better understood than it is now.

**COMMISSIONER DOOLAN:** Thank you. I think that there is an area of our report where I think we do mention that, but I think it's an area that we could actually elaborate a little more on, is the preparation for 2026 and the type of information that's required.

**MR CAMMELL:** Yes. I think that's where we were coming from when we read the report. We wanted to see a bit more strength to it, so.

**COMMISSIONER DOOLAN:** Sure. I suppose we would like to get your views sort of representing the councils at the lower end. I think in reading your submission you were sympathetic to extensions of water resource plans and potentially supply projects, particularly the constraint projects. But it would be good to get a sense of understanding the checks and balances, if you like; what would be required to give your communities confidence that effort was being undertaken. Any comment there that you might like to

make?

**MR CAMMELL:** I've probably got people with me today who could probably better answer that question for you, but from checks and balances it's about ensuring a robust process in regard to the checks and making sure there's actually oversight in regard to what's going on, where at the - it's probably from the perspective of a lot of concern in regard to the fact that things seem to happen, or people say they're doing the right thing but there's actually no demonstration or proof that they're actually - that things are actually assessed or measured or controlled effectively.

**COMMISSIONER DOOLAN:** So transparent governance arrangements.

**MR CAMMELL:** I'd like to see more robust transparent governance.

**COMMISSIONER DOOLAN:** Yes, and frequent reporting on.

**MR CAMMELL:** Yes.

**COMMISSIONER DOOLAN:** And frequent public reporting.

**MR CAMMELL:** And independent review, if you like - - -

**COMMISSIONER DOOLAN:** Independent review.

**MR CAMMELL:** In relation to what people are doing. I think there's a lot of faith at the moment in regard to a lot of the - what's being reported against. This might be a bit of simplification of a very complex matter but that's probably the way I see it.

**COMMISSIONER DOOLAN:** Yes. I mean we did recommend a gateway-like process, but again some of the feedback we're getting suggests exactly as you said; it should be followed up by clear milestones, transparent reporting and independent review so that people have got some confidence about what's happening.

**MR CAMMELL:** I think there's a big issue at the moment where there's not a lot of faith in regard to what is actually occurring in the background so this is about actually building the process or building people's perception in regard to what is happening.

**COMMISSIONER DOOLAN:** John?

**COMMISSIONER MADDEN:** Yes, I guess it's a follow on from that, if there are any attributes around - you mentioned the make-good arrangements in the planning. Are there any kind of attributes, are they similar in terms of that kind of independence, or are you talking about actually outlining your strategy so people know what happens if one of the supply projects does fall over and what the response is, or?

**MR CAMMELL:** Okay. My personal aspect is I'd like to see that strategy developed, to understand the impacts of something not working or not going to plan or even what is



being done being undermined by secondary cuts, if you like. It's failure by introduction of a thousand cuts, basically. Eventually you end up with something that's not workable or functional. So I'd actually like to see that brought out in the open and actually work done to demonstrate to people what the impacts would be of those little minor changes we've seen in their own regard, but when put together with those three other changes suddenly cause major grief.

**COMMISSIONER MADDEN:** So some kind of structured and independent review, that's honestly - - -

**MR CAMMELL:** A lot of this gets back to that, yes, yes.

**COMMISSIONER DOOLAN:** Yes. Are there any other areas of our report where you feel the recommendations perhaps need further work or you'd like to see more detail? Obviously that's a key area, and climate change.

**MR CAMMELL:** No, I think what we're materially saying is with our secondary feedback that we gave to you, that we weren't against the report. It was more to some fine tuning around the terminology of the words or even recognition of the future. So we'd probably certainly like to see more emphasis being placed on the bar for socioeconomic neutrality being set too high in regard to some of the testing. We're certainly aware that some upstream lobby groups are keen to make this test so restrictive that it will effectively come across with the recovered water, and that might be just our assumption of what it means but that's the way we see it, so we'd actually in your report like to see more strength in regard to ensuring the delivery aspect of water is actually put across far more strongly, not necessarily the aspects that might undermine it.

We also probably, and it's not something you can necessarily deal with through your report, but the - we are deeply concerned about the future political will for change or for outcomes, especially with political process, and we do think that some of that could be more clearly recognised through your report, so there's actually in people's thought process more directly, more openly, rather than something just happens in the background. And once again that might get down to just almost the sales pitch behind what your report actually is, to ensure that people - if you've got a politician saying something that they think of gaining votes somewhere, your report could actually stand alone in regard to trying to put that alternative argument in place or try to justify why something needs to actually be, rather than actually just being open conversation.

**COMMISSIONER DOOLAN:** All right. Have you got any further questions?

**COMMISSIONER MADDEN:** No, no, I think you've explained the key points that I just wanted a little bit more on, so thank you.

**COMMISSIONER DOOLAN:** Yes. Okay. That's fine, we haven't got any further questions.

**MR CAMMELL:** No, but just to maybe close, we do - we do welcome the

Commission's frank assessment of what is and isn't working and we do want to see your report maybe strengthened in a few little areas, but overall we like the direction.

**COMMISSIONER DOOLAN:** Well thank you very much, and please pass on our thanks to your councils, even though they are currently in caretaker mode.

I'd like to call on our next participant, Dr Anne Jensen. Again, Anne, if you'd just introduce yourself for the transcript.

**DR JENSEN:** Good morning Commissioners. My name is Dr Anne Jensen, I'm an environmental consultant, a wetland ecologist, and I'm also a Healthy Rivers ambassador, a member of a volunteer group of citizens throughout the Basin who are concerned to see a working Basin Plan and an effective Basin Plan.

Just in starting, first of all I'd like to say congratulations to you and your team. This was an amazing piece of work on a very complex topic and one of the most readable reports I've ever seen come out of the Murray-Darling. Considering what most of the Basin Plan documents look like, this one had one page in front with the summary and it was all there at a glance and backed by very solid technical detail behind it if people were interested, but I thought you did an amazing job to cover such a complex topic. Since I've been a Healthy Rivers ambassador it's taken me about two years to get my head around it because there are so many elements. And the main point I would make is I really strongly support your finding that in order to make the Basin Plan work as it's intended to work there's a lot of catching up to do, I think you called it "A stitch in time". We need all of the elements of the plan to be working and that means the so-called down water, the so-called upwater and the constraints and the complementary measures, and the water resources plans. And all of those things need to be on the table and functioning before we have a plan as it was intended.

I know there were a lot of compromises made to get the plan signed, to have a plan in place. I didn't realise the extent of those compromises until I got involved and I was somewhat stunned at the extent of the bargaining that had gone on, but that bargaining was done in good faith and what I'm seeing at the moment is people who are taking the plus side, the SDL adjustments for example, without working nearly as hard on what was supposed to be the other side of that bargain, which is to deliver the supply projects. If it was negotiated again I'd be strongly recommending not giving away the amount of water before they proved that they can actually deliver the promised equivalent ecological outcomes. As a scientist I have some doubt that that's possible - very serious doubts that that's possible but, as the previous speaker said, we need a process that makes sure that those projects are delivered, and I'd welcome your suggestion that there should be deadlines and that there should be financial penalties for not meeting the deadlines. I think that's what's missing in this current phase of the plan.

In the early days of water reform there was a very strong incentive in that financial payments could be withheld, the productivity tranche payments, and we saw lots of progress. And then that requirement was taken away and suddenly there's a big slowdown on meeting deadlines. So I welcome your suggestion that there should be

financial penalties. It would be better if they were independent financial penalties rather than tied to the projects themselves. It would be more effective, so there would be greater incentive to get on with the projects, and not only the supply projects but the efficiency projects as well. And as someone who's working in the area of environmental watering it's incredibly important that the constraints projects are brought up to speed because those constraints are stopping delivery of environmental water where it's most needed. So all of those elements in a package need to be sped up. So that's my overarching comment.

In supporting your recommendations I have a few comments. In particular, you talk about under-recovery water, which really surprised me, and I note that it's just the Gwydir and the Lachlan catchments that are referred to. I would like to see you have a recommendation that talks about under-recovery because a lot of questions have been raised about whether or not the environmental water on the Commonwealth Environmental Water Holder's books is real and available. I note that you've given it a low risk rating in your report on the basis of the numbers, but there have been questions raised by the Wentworth Group and by the Australia Institute about whether the holdings that the Commonwealth Environmental Water Holder has are in fact readily available. And there's been questions raised about some of them even would flow into the system. So I would hope that you might consider adding a recommendation around that notion, that perhaps the water that's on paper is not real and available water and we need to make sure that it is, because it was already a compromised number, far lower than what science said we needed. So I'm quite concerned that your very first recommendation comes up and talks about over-recovery, in a context where all scientists would be saying that the target is too low. If there's any notion that we're recovering too much it's very marginal, and in fact there's a bigger question about whether we're recovering even enough on the agreed compromised number. So I would like to see that included.

In terms of your other recommendations. Another issue I'm finding is that even having environmental water we need to secure its existence and its use on the same basis of - as irrigation water, it has equal rights, but I'm facing pressure right now in one of my jobs where we're being urged not to use all the available environmental water because some people upstream haven't got as much as we have, because we're in an area with 100 per cent allocation, with high security water, and people with low security water have zero per cent allocation. That's their market choice and I don't see the argument that we should not use the environmental water out of sympathy. An irrigator would use 100 per cent of his allocation. The environment should be able to do the same. Equally, if we're facing a dry year next year the argument's put forward that we should not start watering new sites this year because we wouldn't be able to follow it up next year. I would be arguing we should water them this year to at least give them some resilience if they're going to face dry times next year. So I'm really pleased to see that the new water minister defended the idea that we will take environmental water and give it to irrigators, but even so the pressures are there all the time and we need to make sure that we do have the water that is legally available for the environment.

Another point is in your comments about the salt target, I understand that's within the context of the salinity targets along the system and there's the suggestion it should be

reviewed, and you include the words that it might be abolished. That concerns me. I am happy to see it reviewed but I would prefer that abolishing it be taken off the table because it tends to lead the discussion because not only do the flows to export salt have a benefit in that arena, but there's a lot of environmental benefits attached to that, including removing salt accumulation from flood plains. So that if, for example, it's decided that the targets can be changed and lowered, there's pressure to stop salt salinity in such schemes on the basis of saving money, but that's based on the targets in the river water being met at the moment and it's ignoring the benefits on the floodplains of taking that salt out. So I welcome the idea of a review but please make it broader than just based on the difficulty of exporting the set number of tons of salt.

The next point I'd like to make is that we really do need effective monitoring. I've been very concerned that in the area of environmental monitoring a lot of money has been spent on Basin scale work, a lot of teams of researchers have been out there doing Basin scale monitoring. My concern is that when I read the report the conclusion is just that environmental watering is likely to have enhanced biodiversity. That seems to me to be a lot of money spent for no real conclusion. At the same time I'm struggling to find any money to monitor at a site scale or a reach scale because I've said - I'm told it has to fit into the umbrella of the Basin monitoring, and then I find there's no vegetation monitoring being done in South Australia so - and I'm working in an area where we have black box seedlings that came up in 2011, and these are the first black box seedlings that have any chance of survival since 1956. So we've been targeting in my group, we've been doing environmental watering to try and get them through the dry times, and succeeding quite well, but we can't even get the money to monitor what we're doing. And nobody else is either targeting black box or monitoring it in South Australia. So I think we need a review of what we're monitoring, how we're doing it, and then we need a clear report card coming out, as the sustainable rivers audit used to do, that we can come back and not just at catchment scale but more localised, smaller scales that communities can relate to.

One of my overall comments to you is I would really like to see a scorecard reporting system, something like the Healthy Waterways in Moreton Bay, where communities get involved. I know the Moreton Bay model includes local government, and we could get local communities and local government on side and understanding what we're trying to do all along the river. I think there needs to be much greater community involvement as part of the transparency so that people understand the decisions that are being made and the impact, potential impact on all of them.

And then my final key point is also that we need to include climate change, earlier rather than later. We're looking at very frightening predictions of how much less water we might be dealing with. We're already struggling with the amount we've got to try and return water to - enough water to the system to keep it healthy. We're facing a significant reduction in that. My understanding is the arrangements currently have the environment bear all of that reduction, but we need to be looking at how do we deal with that. If we come to reconciliation in 2024 and not only have we got a shortfall because the SDL projects haven't delivered or the efficiency projects haven't delivered, we may well have a major shortfall in our forecast for water availability to bring into the mix, and that's before we get to the 2026 review. So I would like to see this thing sped up with

deadlines, with penalties and with transparent reporting because I don't want this plan to fail. I think it's really important that we have a plan and I want to see it work, as it was intended. Thank you.

**COMMISSIONER DOOLAN:** I've got a range of follow up questions so are you happy for me to start, or do you want to dive in first?

**COMMISSIONER MADDEN:** No, you start. I think I have questions in each but you can.

**COMMISSIONER DOOLAN:** There's a couple of key things for me. Firstly, the issue that you raised about the capacity to use environmental water and the fact that you're concerned that there's an argument about not watering sites this year because you may not have it next year. So there is a framework and criteria for prioritisation. So is the concern that the criteria are insufficient or that they're actually not being applied appropriately?

**DR JENSEN:** The difficulty I'm facing and the small NGO, with relatively small sites is we're trying to follow the criteria; we're not sure that we're actually being told what they are, we thought we had developed a framework in partnership with the Commonwealth Environmental Water Holder and this year we put in our proposition based on what we'd agreed in previous years and suddenly we had this, to us, new criteria. And they may well have been there all the time but they were not communicated to us. And we're reading in the Environmental Watering Strategy that one of the priorities is to build resilience. We're saying, well if we're looking at dricons we should water now. If we have the water available we should water now. But we're being pushed back on new sites.

**COMMISSIONER DOOLAN:** So one of the criteria in the framework is about capacity to maintain those sites into the longer term, and not being - I know the criteria quite well and the framework. Not at all involved in its application. So for me it is actually trying to work through, is there a failure in the policy framework, or is there not very good communication of that, or is there a failure in its application.

**DR JENSEN:** Well I'd suggest that if you have a criteria that says you shouldn't water a site this year because you can't water it next year, and we might be facing who knows, we might be going into a four or five year period of dry times, failure to water this year when the water was available means a missed opportunity to me, from an environmental standpoint.

**COMMISSIONER DOOLAN:** It does depend on water though, competing priorities, but yes.

**DR JENSEN:** I guess. But essentially this is within an allocation, well we've been told we can have up to a certain volume and it's within that volume that we're being told not to water. So I'm just concerned about what I can see in the longer term from the policy that I'm experiencing this year, is that South Australia could end up only watering the icon site and two large sites where there's been investment in infrastructure by the State

Government, and our NGO not watering anything. So none of the rest of our floodplain getting watered in dry times. That's my concern. If you follow the policy through. I understand that the Commonwealth Environmental Water Holder has limited amounts of water available, has limited funding to deliver it, and it's expensive to deliver water onto the floodplain in South Australia because you have to lift water out of the channel, and therefore there's pumping costs. Okay, if we go for the best value for dollars invested, those small sites will drop off and the end result will be large sections of the floodplain in South Australia lost if we're in dry times.

**COMMISSIONER DOOLAN:** But nevertheless there is criteria for application of water in dry times and prioritisation. So your concern is that there's either not enough water, or some of those sites are still valuable but in dry times they're not the highest priority.

**DR JENSEN:** My concern is for the first time this year it seems to be that there's priorities being given for dollars for delivery cost. Like the lowest delivery cost possible. And if you go down that path, without looking at what your environmental benefits are, the whole of the South Australian floodplain gets ruled out, except for where there's large infrastructure projects that can - that where the costs will be borne by others other than the Commonwealth Environmental Water Holder.

**COMMISSIONER MADDEN:** Could I just follow up a little bit on the nature of the arrangement between you and the Commonwealth Environmental Water Holder. Is it a standing arrangement, does it have a five, ten year period? Is it then renegotiated on a - annual within an umbrella? I'm just wondering what the kind of, for want of a better word, contractual kind of relationship is.

**DR JENSEN:** Okay. I'm working as an advisor to an NGO. They had a contract with the Commonwealth Environmental Water Holder for five years. They were granted an extension because the Commonwealth Environmental Water Holder was reviewing arrangements and possibly going to procurement, but that hasn't happened yet. So we're in the second year of extension without knowing what the arrangements are, and now being hit by a criteria we weren't aware of. So it's in a state of flux at this point, and it may be that the NGO will not be able to meet the criteria in the future.

**COMMISSIONER MADDEN:** And so how does that integrate then with the South Australian priorities and how do you kind of - and I don't mean you, I mean the NGO, actually relate then with the South Australian Government and what priorities and how they fit within those priorities?

**DR JENSEN:** We have a member of the Department on our steering committee and what we're doing essentially is complementing what the State Government does and we're going in on the sort of lower priority. But they have a cut-off line, and we go in under that cut-off line and we do some more of the smaller projects on private land, with private landholders and community groups. So complementing what the State Government is able to do, but at a much smaller scale.

**COMMISSIONER DOOLAN:** Could I move on. The salt export objective. So I am keen, we've got a lot of comments about actually its utility, or lack thereof, and in particular what wasn't clear, at least to potentially a lot of upstream communities at least, is what is the ecological significance of that salt export objective? Now you clearly feel there is one, but I suppose if you could just expand a little more talk about - we understood the flow targets, which are targets under the plan, and they're concentration targets and understood, you know, what that means for people and ecology, but the salt export objective, the ecological significance of it was slightly obscure. So you found it - you thought it was a surrogate for floodplains?

**DR JENSEN:** Certainly the watering projects that we have, have all been sited within Salinity Interception Schemes because there wasn't much point in watering seedlings growing next to dead eucalypts that died because of the salt accumulated in their root signs, so we concentrated on areas where we know that the saline groundwater has been lowered under those floodplains, and there's been a significant benefit noted and some of my monitoring has gone to demonstrate that. And there's been concern expressed that if the SIS schemes are turned off for budgetary reasons we lose those environmental benefits.

I guess my concern about how the recommendation around the salt target was phrased, I understand it's in the water quality section of the plan but it seemed to me that we should be aware that there are some environmental benefits tied to exporting the salt and preventing it from accumulating in the floodplains and that - my concern is coupled with the fact that we're also looking at a flow regime which is not going to water the outer floodplains at all, where salt does accumulate, so we're getting a compounding effect. So it may be that that particular target is not the right one in terms of the salt export target, but I was just concerned that your recommendation said abolish it, and it specifically was one of the options. Maybe review it and change it but not necessarily abolish it, as long as you took into account the fact that there are some other benefits.

**COMMISSIONER DOOLAN:** So I think it's a matter of - in terms of identifying what those are in that review process and then working out if that's the right vehicle.

**DR JENSEN:** Yes. I had a bit of a concern because it was a bit of a silo effect, um, in that the water quality target sits in one part of the plan and flows, and environmental benefits sit in another part of the plan. But they should, I think, work together.

**COMMISSIONER DOOLAN:** Okay. I'd like to move on to your comments about monitoring as well. And you would have seen that we don't think there's, particularly at the moment, effective monitoring evaluation strategy. But probably like you, my own personal view and experience has been in matching up those two scales, regional and local, and Basin scale. And if you move too much of the Basin scale the results tend to get very generalised and to be as you said.

**DR JENSEN:** Yes. Yes, I was very concerned, considering that we keep being told that they spent \$30m on monitoring. When we look up the report, first of all it's dated 15/16, so it's quite old, and then the conclusions, when I - and I had to hunt for them, were so

generalised that you really could - you couldn't use them to justify using environmental water to someone who was opposed to it. Whereas I can produce photographs of before and after and demonstrate here's the change in growth.

**COMMISSIONER DOOLAN:** Then in terms of designing the monitoring evaluation strategy do you feel that focusing at the local regional scale, with the capacity to aggregate to the Basin scale, is a better approach for communities than concentrating on the Basin scale and hoping that there's something that sort of filters down? I mean this is a design issue, isn't it?

**DR JENSEN:** Yes. I think it has to be at least down to catchment scale, and if you can tell the story at a reach scale, then you can better communicate with the local people and have them understand what environmental water is doing for them in their community. I'm operating at the extreme local end of it, and I'm not saying that's the best way to do it, but perhaps some - a few examples might that help and if they can be aggregated, even better. But when I was starting out on my monitoring I tried to fit into whatever this Basin scale was, and it took me ages to even find out from anybody how it was being done, what parameters were being measured. And when I finally got there it was so expensive and so academic that there was no way an NGO could afford to do it. So there's a case, I think, for some - maybe some localised case studies. And I know even - in the monitoring they talk about case studies and there's a dot in the Riverland but when I tried to find out what that means they said, "Oh, that's just representing South Australia". And they've done fish and flows and I think salinities, but they haven't done - there's no vegetation monitoring in South Australia because apparently it was by a tender process.

And the other criticism that I have heard from other scientists is that there was an intent that there should be standardised methodologies imposed, and that they don't work very well in the Lower Murray, and the best data that has come out of the Lower Murray has been where the scientists have been allowed to design their own monitoring strategies, and that's the fish information coming out of (indistinct). So there's something in the design that's precluding getting detailed conclusions and I think the scale as well.

**COMMISSIONER DOOLAN:** Okay. And the design should, even if they maintain it as academic, it should be flexible enough to bring in local case studies as key parts.

**DR JENSEN:** Yes, or have plug-in points where someone can use the same methodologies and feed that up. But I couldn't find anywhere to put my data.

**COMMISSIONER DOOLAN:** Okay. Following on you also mentioned something like a report card, sustainable rivers. So harking back to the Sustainable Rivers Audit, it was not designed to detect, you know, the effectiveness of a new and different flow regime. So it wouldn't probably show a great deal.

**DR JENSEN:** No.

**COMMISSIONER DOOLAN:** So, what's your thoughts on what a new report card would have to do?



**DR JENSEN:** Well, I can't remember all the details from the Healthy Waterways typed report cards, but I do know they were able to give an annual report card to a local catchment, to the local government to tell them how effective the programs have been, and what the progress had been and my understanding is that it's a really good model to engage local communities. So without having a specific idea in mind, I would like to see something that had that effect. That communities that we're working with up and down the river can understand how environmental water is being delivered, what the results are and why we need it, and certainly from downstream communities we need the upstream communities to understand that water coming down to us isn't wasted. That it has its benefits all the way down to all the communities, and including keeping the rivers healthy enough to support us all.

We still need to get that message out and I think telling local stories is a really key way to do it. One of the programs that I've been working – just contributing to, is BioBlitz, which is about citizen science, trying to get people out in the field monitoring key parameters out in their local ecosystems, getting to know them. Those sorts of programs, perhaps, could be plugged in as well, but it's a real concern when I hear people from various communities who are not – obviously don't understand - there's a lot to understand, they don't understand the benefits to themselves. They don't understand why the rivers need to flow all the way to the end of the system, and what the benefits of those things are.

So, I see there's got to be a bigger role for the citizens of the Basin to be involved going forward, and that hopefully would feed into political will for when we get to the reconciliation process because as it stands now it's going to be really difficult. We're going to be looking at probably significant under recovery and probably in drier times.

**COMMISSIONER MADDEN:** I guess just two things on the monitoring. One is just from knowledge for me almost, but in terms of that local scale that we talk about, that means a lot of different things to different people. If you think about South Australia, how many kind of local scales – I mean are you talking about reaches, you know, is it kind of lower, middle, upper, I'm just wondering.

**DR JENSEN:** I mean you perhaps might, just as a guess and this is without any scientific basis, but we might pick say six communities along the length of the river and have reports of condition around them, or go for local champions, local individuals who are working on projects.

**COMMISSIONER MADDEN:** Yes, I meant just from your knowledge of working along the river.

**DR JENSEN:** Yes.

**COMMISSIONER MADDEN:** In kind of a social catchment, where do people identify what they're kind of interested in from a local perspective in terms of that reach?

**DR JENSEN:** Yes. For example, one of the sites we've been watering is Loxton Riverfront Reserve, in conjunction with the local council, using their stormwater system to help us deliver the water to the sites we need to get to, and it's a place where everyone goes walking and boating and swimming and there is a caravan park, so it's a very public space. So somewhere like that if you were able to then publish the story of what has happened there and tell that story, I believe you'd get the whole catchment of that community. So it would be about picking where the most effective stories could be told.

**COMMISSIONER MADDEN:** Yes, so that's a case study or maybe asset level.

**DR JENSEN:** Yes.

**COMMISSIONER MADDEN:** I'm just wondering then going up to the state, you'd mentioned the veg mapping, again what kind of reporting or is that the whole – I'm just trying to get - - -

**DR JENSEN:** Yes.

**COMMISSIONER MADDEN:** The issue we have, obviously, is the authority having roles that we see.

**DR JENSEN:** Yes.

**COMMISSIONER MADDEN:** The state then having roles which vary between different states, then obviously there's a whole asset scale - - -

**DR JENSEN:** Okay.

**COMMISSIONER MADDEN:** - - - long term watering plan, where there's another level again. So it really is that integration.

**DR JENSEN:** It is.

**COMMISSIONER MADDEN:** So just wondering what role the state in South Australia plays if native veg mapping is – for example, you said is missing.

**DR JENSEN:** No what it is, is there's no monitoring in the Basin evaluation of vegetation condition in South Australia. So that's the Basin scale monitoring. There are some individual sites that the state government has done work on and there has been some limited monitoring done at those, but it's not at a scale that could be broadened out to the rest of the river in South Australia. The Commonwealth Environment Water Holder has a black box management framework they've set up, where they've say these are the sorts of methodologies and the different areas we want to use, but so far what I've been doing on vegetation condition doesn't fit in that, and it's a long way off delivering the stories back from that.

They've used a case study at Calperum in South Australia, but my concern is that reading what was available did not tell the story, is not giving us any material to take back to communities. It's very small scale but what I can do is say to people I've monitored these ten sites for three years and here's the pictures, here's the stories about it, and those sorts of stories need to be out to the Basin communities. So I'm sure you could find someone like me everywhere through the Basin, but there's not a role for us at this point. I don't know that we're necessarily the best ones but there's kind of nothing between us and the Basin scale at the moment.

**COMMISSIONER MADDEN:** Yes.

**COMMISSIONER DOOLAN:** Yes, okay.

**COMMISSIONER MADDEN:** I'm not trying to ask you to design the whole thing for us.

**DR JENSEN:** No.

**COMMISSIONER MADDEN:** But it would be good to get that perspective, and I guess importantly to see whether you know, because you've just mentioned the (indistinct), you've mentioned the state, you've mentioned the authority.

**DR JENSEN:** Yes.

**COMMISSIONER MADDEN:** I was just wondering where it actually comes together.

**DR JENSEN:** I would hope that you could have a multilayered process that allowed people to plug in. Someone like me could plug in my data and it could go to higher use. At the moment it's just sitting in our reports.

**COMMISSIONER DOOLAN:** Look, I have one more question which relates to climate change and the previous speaker raised it as well, and the concept of actually making sure that we're prepared and we have information to assess it. The key question is - we agree we should - information to assess it, the question though is when is it actually dealt with, because when it becomes necessary to deal with it it will be one where we - we, not us, but the Basin communities actually have to think about environmental management objectives and ones that can no longer be met. I mean if inflows drop by a third then it's a very different Basin and the existing management objectives for the environment, regardless, would not be able to be met and would have to be reviewed.

So it's really from our perspective a little bit of - absolutely necessary to keep an eye on it, make sure the information is being collected but when do you think that call should be made to actually say well it's going to be a different Basin? Is that 2026 or is it 2036, because I think we have to acknowledge that in a whole range of places the current environmental objectives that are in the Basin environmental watering strategy, in the plan, if some of those scenarios play out as current predictions suggest, it wouldn't matter what level of water recovery came back, they could not be met.

**DR JENSEN:** I think this goes to the idea of transparency and one of my comments is that we actually need to spell out what we're losing. In a lot of the debates that are going on at the moment, there's no discussion about what is being lost. So inherent in our current arrangements we're going to lose the outer areas of the flood plain, which could be up to a third of the flood plains. In dry times we may have almost all the flood plain in South Australia not being watered, and I'm not sure how that translates further up in the Basin as to what areas would not be watered but we're already seeing that the Darling is running dry again for the second time in three years.

And we have new fish ecology coming out saying that the Lower Darling is critical to all native Basin fish species. They all spend at least part of their life cycle in that part of the Basin. So if the Lower Darling runs dry there's a cost for everybody. It's not just an argument within New South Wales. So I think we have to have a report card on the costs out there, and I would like to see some new scenarios introduced for at least discussion where someone does the modelling of what does the Basin look like if we do go down by a third in flows, and start preparing people for it.

**COMMISSIONER DOOLAN:** I mean people do, you know, say - - -

**DR JENSEN:** Yes.

**COMMISSIONER DOOLAN:** - - - take climate change into account, but as you know when you think about well what does that really, really mean, there's some quite difficult discussions to be had at that point.

**DR JENSEN:** Yes.

**COMMISSIONER DOOLAN:** And it's when do you actually need to have them.

**DR JENSEN:** Yes, and equally discussions to be had when we reconcile on the 605 gigalitres.

**COMMISSIONER DOOLAN:** Absolutely. Yes.

**DR JENSEN:** I'm assuming where we stand at the moment that we're going to find we haven't recovered enough water, and if we're already starting to feel a decline towards the one third less flows that will make it even harder. So we need actually better information as to what are the potential losses, as well as the potential benefits. I don't think it's been spelt out clearly enough what is the impact of going with a compromised 2750 gigalitres. What does that really mean for the environment and the way the river will look for the long term health of the trees, fish cycles, if the – if the Lower Darling runs dry again, what have we done to the fish cycles? What happened to all those cod that bred up when there were environmental flows in 2016, if it has gone dry again?

So that's where I would like to see the report card kicking in. So I guess the report card and – plus the idea of timetables and penalties for not meeting the deadlines, I think are really key elements of what - - -

**COMMISSIONER DOOLAN:** Yes.

**DR JENSEN:** Where we might go to make sure this plan can work.

**COMMISSIONER DOOLAN:** And we've talked about the transparency with the previous speaker as well.

**DR JENSEN:** Yes.

**COMMISSIONER DOOLAN:** Well, that's it for me. What about you?

**COMMISSIONER MADDEN:** I just wanted to mention over recovery. I mean we've got some comments from various people and may need to clarify a little in our report that it is after a period where the portfolio is assessed in terms of its long term take and matching SDL, and then where it's demonstrated there is over recovery addressing that issue.

**COMMISSIONER DOOLAN:** And where the capacity to use that, as well.

**COMMISSIONER MADDEN:** Yes.

**COMMISSIONER DOOLAN:** Yes.

**COMMISSIONER MADDEN:** So I take your point on portfolio. I guess the question from our perspective and those communities is, well, where do you draw the line? And what is - you know, is an SDL and SDL or not? And I guess there's other governance issues where if you can trade water and buy water and, you know, so that anything can be used for the environment, again where do you draw the line?

**DR JENSEN:** Well - - -

**COMMISSIONER MADDEN:** With the (indistinct) and others and their holdings. So we've thought about this and thought well maybe it's in a couple of per cent, you allow some leeway and things, but then I guess good governance brought us to the point, well, if you set a target, for the sake of integrity on both sides of the equation, you meet the target.

**DR JENSEN:** Okay, I guess I would like to see the idea of under recovery and over recovery put together, because they're both part of that same equation and as I said while it looks like on paper we've recovered the amount that's in the target, there's questions raised about whether that is real available water, which it needs to be, in order to make all the other concessions like giving away the 605 gigalitres. So I think they're both, if you make the point about governance, then both of those issues should appear.

**COMMISSIONER DOOLAN:** Okay. All right. Okay, well thank you, Anne. We'll take a short break now, 15 minutes, for morning tea and we'll reconvene at – what time are we reconvening?

**COMMISSIONER MADDEN:** We're running ahead a little.

**COMMISSIONER DOOLAN:** Just a little. Yes, at 11.20. Okay. Thank you.

**ADJOURNED**

**RESUMED**

**COMMISSIONER DOOLAN:** Okay, if we can reconvene, thank you very much. I would like to invite Ms Ann Lucas and Ms Lyndal Wilson up to the table, and if you wouldn't mind, again introduce yourself simply for the transcript. Thank you. Sit down, please.

**MS LUCAS:** Thank you.

**COMMISSIONER DOOLAN:** And the microphones are really for the reporting, so we have to speak up. They're not actually broadcasting.

**MS LUCAS:** Good. I'm Ann Lucas from Hindmarsh Island. I have just over 100 acres and about a kilometre facing the Coorong National Park.

**UNIDENTIFIED SPEAKER:** Sorry, we can't hear you.

**COMMISSIONER MADDEN:** There's a couple of chairs, it's only temporary, but feel free to bring your chair forward if you can't hear.

**COMMISSIONER DOOLAN:** Yes, there's nothing we can do. The microphones are not transmitting, and so just get closer.

**COMMISSIONER MADDEN:** So even another row. It doesn't matter if - this isn't a protected space.

**COMMISSIONER DOOLAN:** Move them up, yes. Sorry, Ann, if you continue.

**MS LUCAS:** That's all right. I'd like to introduce my friend, Lyndal Wilson, who lives on Hindmarsh Island and she's come for support.

I acknowledge the Aboriginal people who have been present on this land, especially along the River Murray and its estuary, and who traded up and down the rivers in the Murray-Darling Basin. I thank the Productivity Commission for this opportunity to address issues relating to the area of the Lower Murray and Darling Basin.

My submission sets out three major issues that should be taken into consideration if the Murray-Darling Basin Plan is to be effective. The subsidence of the islands and the lake system which must be accounted for before costly engineering works are undertaken.

Managing water flows events to a larger meeting of the waters to create the salt (fresh water) interactions that support healthy generation and sustainability of life in the delta, and recognition of the cultural and spiritual importance of the lower lakes in Coorong to the Aboriginal people.

I would like to emphasise the following. The degradation of the original vegetation of the islands and the lakes which was largely due to clearance of trees to fuel paddle steamers and for farming practices. The impact on native wildlife of the introduction of foxes and hares to the coursing and of deer farming with escaping deer and now cats, and the impact and presence of calves and seals on fish stocks. Seals, talking to a fisherman yesterday, are a major problem, and in Mulloway have just started spawning and are just keeping and of them at the moment.

Fishing. Barrages of altered flows of estuarine mix so bird habitat and fish stocks have been altered and our obligation to protect migratory birds, waders is under threat with the RAMSAR treaty under threat. These wetlands of international importance are vital to these migratory species' survival. Reference needs to be given to the latest updated Coorong and Lakes Alexandrina and Albert RAMSAR wetland boundary.

Sea level rise predictions should be updated due to changing weather patterns and factoring in subsidence of islands in the lake system. Dredging of them out is a very costly exercise and it appears now to be ongoing. Any new developments in the system north of the barrages that would entail diverting water in a way that would reduce flows needed to flush out salts and other matter in a seasonal manner should be considered carefully.

Prior to the barrages being put in place in the late 1930s, sea water went as far as just below Mannum, so if you see the meaning of Pompoota it's end or swell of tide. To summarise these points, hydrologists, geologists and also linguistic experts should be employed to piece together this very complex picture for ongoing sustainable development.

The article I've submitted from the Argos referring to the rye at Gawler may have been better referenced in the original writing of Rodney Cockburn's "What's in a Name" first published in 1908. The River Murray was called Berawi and the land Degulwa. Permission was given to me to use this reference by Stuart Cockburn but with acknowledgements to his father which I do.

According to Professor Diane Bell, I understand 2009, the South Australian Government recognised the cultural significance of the area known as the meeting of the waters and registered the site. This area of the lakes was referred to as the Picanniny Murray, so whether this was referring to a smaller race of people as in Queensland and noted by

Tindale, or whether this was because this area was a regenerative area of waters with its migratory birds, fish spawning, e.g. Mulloway species, in an estuarine delta is a topic that could be further investigated. Thank you.

**COMMISSIONER DOOLAN:** Thank you. John?

**COMMISSIONER MADDEN:** Yeah, I guess the one question that we had earlier on a bit of a discussion about the future of the system down here, and it's something we mentioned in terms of complementary measures with land measures and controlled pests and the like, is that something that's actively undertaken in an integrated way?

**MS LUCAS:** I wouldn't say it was an integrated way, no. Certainly Landcare had to do a lot of replanting because of deer that have escaped, so they tear down the plastic covers. Cats are a relatively new problem, so with the increase in development, of course, it used to be a one cat policy, but if that's one male and one female, it really hasn't worked very well. So whether we take a leaf out of Kangaroo Island and look at cat eradication in some organised way, I don't know.

**COMMISSIONER DOOLAN:** So I suppose following that up, there is an expectation that while the Basin Plan is mostly about providing better flow regimes, that state governments are still accountable to undertake that complementary work, and that if they don't then many of the ecological benefits that are expected to be seen from the Basin Plan would not eventuate. So is that something that you feel we're observing now, is that some of the benefits that should be coming out of the change flow regime, particularly down here at the lower end, are they being compromised by those other impacting factors?

**MS LUCAS:** Certainly reduced water flows, and being on a RAMSAR breeding site. I have noticed a decline in the birds, so to me it's all integrated with the fish and the birds and it's got to be a healthy system. Probably I would say it's easier sometimes to look at it as a symbolic body and then you can start getting a better handle on things, but with the barrages in place and the various weirs, the flows are not as they used to be, so.

**COMMISSIONER DOOLAN:** Yes, and I know this will be a difficult question, but the question we sometimes get from upstream communities, so I won't say it's frequent, but we definitely get it from the upstream communities, is actually, well, what about removal of the barrages. So what would be your reaction to that, particularly with the sea level rise, you know, not immediately, but into the future, sea level rise, questions of those sorts of - it's certainly one that is asked by upstream communities.

**MS LUCAS:** It's going to be a very difficult one because you've got large boating industry in there. You've got irrigation, so how you manage this with changing weather patterns I - I really can't say.

**COMMISSIONER DOOLAN:** Yes.



**MS LUCAS:** It's - but all these factors, I think, have to be taken into account because, as Professor Bob Borland's work shows that there is an uplift from the Mount Lofty Ranges and an uplift from the Mount Gambier, and then the island subsiding in the lake, so it will find its own course whatever.

**COMMISSIONER DOOLAN:** So then following that on, I think our first speaker talked about a potential task force, South Australian Government and local governments really looking at the future of the lower end? Is that something that you would support?

**MS LUCAS:** I would support that.

**COMMISSIONER DOOLAN:** And it's broader than water. Like, it's the whole system.

**MS LUCAS:** Integrated system, yes.

**COMMISSIONER DOOLAN:** So that is something that you think is really required here?

**MS LUCAS:** Yes, because the geological research in the area has been the very last thing done in South Australia here in Bolivar, so Prof Borland came and then he then started the Murray Mount documentation and so it's something that's largely been very hard, I think.

**COMMISSIONER DOOLAN:** So such a study could look at the past and the trajectory, but for a whole range of sea level geological subsidence, flow, it really should take a very integrated approach - - -

**MS LUCAS:** Yes.

**COMMISSIONER DOOLAN:** - - - to looking at the future of this area long term, and all of the factors that need to be thought about.

**MS LUCAS:** Yes, and the whole of the river system.

**COMMISSIONER DOOLAN:** Okay. I think we all acknowledge that that's going to be an important, but probably a very difficult thing to do, and one that needs to be tackled over a long period of time, I think.

**COMMISSIONER MADDEN:** Yeah, I mean, this is much wider - - -

**COMMISSIONER DOOLAN:** Much wider.

**COMMISSIONER MADDEN:** - - - than the Basin Plan because it's a state-based issue first and foremost, and a number of different elements coming in. I guess my only comment there is that we're about to see a huge management change with the water and the resetting under the Basin Plan. So in a sense that takes time to bed down in terms of,

because it will be a change for the system down here. I assume it's quite - very likely and very probable that it'd be much for the better, but then there's other actions that would take place in terms of complementary works which we do mention in our report that this comes from the Marron Lakes right down on all the different assets that are actually, we're trying to use and improve with additional water, but actually all those locations need local experience and knowledge brought to bear on other activities that can underpin that and enhance it. Thank you.

**COMMISSIONER DOOLAN:** Well, thank you very much.

**MS LUCAS:** Thank you.

**COMMISSIONER DOOLAN:** All right. Our next participant is Paul Harvey. So Paul, if you again wouldn't mind introducing yourself for the transcript.

**MR HARVEY:** Thank you. My name's Paul Harvey. I'm a retired water resources manager, particularly in relation to the Lower Murray. Firstly I'd like to congratulate the Commissioners on their draft report and I strongly support their findings and recommendations. There are a few areas where I think there could be an expansion and on the recommendations, and I suppose particularly in relation to the supply measures and toolkit, the efficiency measures and in terms of climate change.

In terms of the supply measures, there's almost a total lack of knowledge across the community of what these projects are, and how they will deliver savings, and as a consequence there's a lack of confidence that these projects will actually deliver true savings, particularly I suppose the suite of projects that is of most, for the few that actually do have some knowledge of what's proposed, the suite of projects that probably causes greatest concern are those relating to the operation of Menindee Lakes and the use of the so-called evaporative savings that that could develop or generate as part of the offset.

We really do need a much more open approach by the states and I would also contend, and would hope that the Commission could see fit to include recommendations in relation to realistic and effective community involvement and engagement in the development and operation of these, or implementation of these projects, and that needs to start, or should have started a long time ago but it needs to start immediately so that the community can be brought along the journey of the developing of these projects.

I think in terms of the efficiency measures, again there's a lack of knowledge and understanding of what this would actually entail, and therefore a lack of confidence that these savings will be delivered. I don't know of many people who are confident that that 450 GL is going to be delivered, and again, I think it really does need realistic and effective community engagement in the development and implementation of those projects. It's the only way that you're actually going to generate community support and backing for these sorts of projects by ensuring that your community is informed so that they can debate and have an informed debate on the pros and cons of the various proposals.

In terms of water resource planning, I suppose to me there's a real need to ensure that the proposed extension of time, which I fully support, is not used as an excuse for delaying or even abandoning the commitment to developing those water resource plans, and I'll come back to that in a minute. Well, in fact I'll deal with it now.

I think that there's, with a number of these recommendations there's really a need to provide some mechanism for penalties for not implementing key elements of the Basin Plan and complementary measures within agreed timeframes. It's not that this sort of thing hasn't been tried before. It is a specific example with the withholding of competition payments as a means of encouraging the states to implement the first interstate permanent water trading process which was very effective, the states jumped to very quickly when significant sums of competition payments were being withheld, and I think that there's need to have a bottom line to some of these recommendations for extensions of time and that sort of thing.

The other couple of issues which I would like to touch on in particular is climate change, and I see it perhaps from a slightly different angle to some of that which has already been discussed. Climate change and the rise in sea level is already having a significant impact on the operation of the lower lakes. Over the last 20 years or so we've already seen a measureable increase in sea level and therefore the downstream level of water at the barrages, and that's making it more and more difficult to actually operate and deliver the sorts of environmental outcomes that are required or that could be generated from the environment flows.

As it stands at the moment, particularly with the old technology that operates at particularly Gawler Barrage, a very conservative approach is taken to ensure that we don't finish up with major sea water incursions when you have a storm event coming which finishes up with the barrages being closed for several days at a time to prevent that sea water incursion. If that happens to be over a weekend the operation is extended, or the closure is extended because of the lack of personnel available at that time, and it's an issue which is of significance now rather than into the future.

I know there was an attempt to include the barrages as one of the constraints for the constraint strategy, and they were specifically excluded, but they really are a constraint to the operation of the lakes and that constraint is increasing as the sea level rise continues.

I would also just like to make one quick comment about the suggestion that was mentioned previously about removal of the barrages. I think one issue which needs to be recognised there is that the barrages weir pool extends all the way up to lock 1 at Blanchetown, and includes the major offtakes for urban supplies to Adelaide and to the upper south-east, and as a consequence there is a need to be able to ensure that that water within that weir pool, the whole of that weir pool, is maintained at a level that is appropriate for public water supplies, and it would not be possible with removal of the barrages without there being some other major element included in the operation of that system. I'll leave it there.

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

**COMMISSIONER MADDEN:** I might just start specifically on the barrages and you were talking about the implications, you know, of them being closed for long periods, again for the sake of knowledge, what are those implications? You know, what are the actual issues in the short term that you're talking about with the barrages not operating efficiently?

**MR HARVEY:** Well, by - with the rising sea level and the fact that we're dealing with an unbelievably flat, entire river basin, it means the normal operating level of the lower lakes is something around about 0.75 metres AHD. That during winter nowadays is about 0.55 metres above mean sea level during, well, that's not taking into account the tides. It is not uncommon to have a tide on the downstream side of the barrage well in excess of 1 metre, and of course if the barrages are open that means that you will have reverse flow-through from the sea to the lower lakes. There have been a number of instances where that has occurred or during major storm events. You've even had overtopping of the barrages with the tide and wind surge, and that has resulted in issues in relation to the salinity of the water in the lakes.

Now, I would strongly support the proposals that have been talked about this morning of a significant investigation into the operation of this whole area, and it is an urgent - there is an urgent need because it is becoming more and more difficult to actually operate and to deliver those environmental outcomes with the increased flows that are coming. To be able to deliver those flows to, in a way that benefits to the greatest extent the Coorong and the Murray Mouth is becoming more and more difficult and is certainly constrained by the barrages as they stand at the moment.

**COMMISSIONER DOOLAN:** I mean, it is a really critical, albeit difficult, conversation to have.

**COMMISSIONER MADDEN:** Yes.

**COMMISSIONER DOOLAN:** But you're saying really, I suppose I didn't quite realise that it was already constraining operation to the extent that you've indicated. Yes. Okay. And therefore by constraining the operation, very much limiting some of those environment outcomes that people are expecting to see from the plan, which is not the fault of the plan.

**COMMISSIONER MADDEN:** No, that's right.

**COMMISSIONER DOOLAN:** It's a series of circumstances. Okay. That's actually very important to know. So thank you for that, Paul, and certainly your expertise and knowledge of the operation of this system is unparalleled at this end, so, can I come back to some earlier work which was both the supply and efficiency measures, and you talked about the importance of realistic and effective community engagement, and we have heard that everywhere. We have heard that from all communities, so then it comes to us is, well, it's very clear that that has not been the case. You know, there's been no

transparency. Business cases only released a couple of months ago, but moving forward, what would you want to see, what would you define as meaningful and realistic communication? What sort of standard, what elements do we need to make sure is put in place that actually the next phase, even if people have concerns and they might not agree, but there is adequate community consultation?

**MR HARVEY** I think we already have a number of community groups that are involved in looking at management and operation of the lakes and Coorong, and I think I would like to see that some of the leaders within those community groups are directly engaged in the processes of the development and implementation of these projects so that we can utilise the existing networks to disseminate that sort of information and to gradually inform the community so that, as I say, we can have an informed debate about the projects as the details are developed. It's very difficult to have that informed debate when communities has no information and no understanding of what the projects are all about.

**COMMISSIONER MADDEN:** Just to tease that out a little, let's take the Menindee project, because obviously the proponent is the New South Wales government. What expectations do South Australia have and how do they actually have meaningful engagement in a project upstream which actually affects them? I can understand if there's a project, you know, in your local system, but unfortunately as we know the river is connected, so the projects in Menindee have impacts wider than Menindee, and I get the feeling that when we say meaningful engagement, the proponents think with the local community, i.e. within 100 kilometres, or out there probably 300 kilometres, of the project, not along the whole system. So I'm just trying to tease out what's the expectation of the whole package and how do you actually get communication and not just a series of projects.

**MR HARVEY:** Well, I think, as I said, I think the way of having that or getting that engagement is to utilise the existing community groups as a mechanism for disseminating that network of people that are already engaged and have a basic understanding of the operation of the river and lakes at least in their own specific area, and I think if sort of community leaders from those groups are directly engaged, whether it's on a working group or some sort of communication group, I think it's horses for courses. But certainly a project like Menindee Project is going to impact on South Australia significantly.

The changes in operation of Menindee Lakes will impact on particularly, whilst the Darling may only generate something like 16 per cent of the total flow to South Australia, that 16 per cent punches well above its weight in terms of environment outcomes because the vast majority of that water comes in high flow periods that is very significant for the wetlands in South Australia, so we have a - South Australia has a strong vested interest in the operation and management of somewhere like Menindee Lakes and the changes that that will impact on flows to South Australia, and I think unless we actually start to get South Australian communities engaged in the process of the development of that, there's always going to be antagonism and negativity towards those projects, and we've seen in the past, you know, that can play a significant role in whether or not projects like that are successful, or get up.

**COMMISSIONER MADDEN:** So just to follow on on that, sorry, so the current arrangements, if we just look at next year, and we don't know the details of those, we've made some recommendations that they need to be in place and people aware of what they are, I guess is the obvious focus of governance is how the states and the state departments interact and look at that package of projects.

What we haven't considered is the expectations on the states of how to engage people in their local communities in that wider assessment of the package, you know, so we basically say, states will look and should understand Menindee as a project group, but we haven't talked at all about them, you know, how do they actually - what information does their communities, and what expectation do they put on, so South Australia, and you talk about the impact of flows in high periods. If there's less water stored in Menindee, you know, on average because of releases, that will have an impact, but the question is then the onus on who to bring that back to the communities. So that is right just residing with the states or is that something that the departments through the authority should kind of address. Just wondering where it's home and that obligation, where does it rest in your view?

**MR HARVEY:** Well, I think to date the states haven't shown any leadership in terms of implementing good engagement processes, and I think perhaps it's a situation where they will need to be led into that process at least, if not directed in it, so I would see a role for the Commonwealth Department or the authority to insist on the states implementing that effective engagement.

**COMMISSIONER MADDEN:** I wanted to follow on too, because I think we have concentrated actually, like, the level of engagement's been extremely poor, and so the immediately affected communities is where we've thought about, but one of our recommendations was actually to look at that whole suite of supply projects as an integrated package because their operation is integrated, and how they'll be integrated back into the running of the river is really important, and potentially how they deal with their Indigenous communities across the whole lot, but I think the point you've raised is, or a point that you've raised that's ticked off something in my head is that actually there's - that could also lead to better engagement at the communities who are absolutely involved in a project, but the communities who are further away who had interest in that project.

So they still need to understand it and need to understand that their concerns are either being met or their interests are not being compromised, and that's really probably an additional point for the planning of that integrated program that we've not captured as well as we could in the draft report, and it probably also goes to your point about the efficiency projects. Obviously the concerns in upstream states is about the socio-economic impacts taking more water out of their communities, and Wednesday we'll be in Shepparton, and we know full well that, you know, that will be their complete concern, and so they want to know and be involved in development of those projects, but you guys are signalling from here, again you might not be inextricably involved, but you need to be assured of what's happening as well and have a means of understanding it. I think we had a morning tea conversation about the myths and legends that actually evolve when

information is not around and generally communities always seek a worst case scenario for themselves in that process.

So we could potentially flesh that out a little more in terms of the immediacy of the communities involved, but the ones that are upstream or downstream having an understanding at least, and at least comes into the running of that integrated program, I think.

**COMMISSIONER DOOLAN:** Okay. Thank you. So we've had a conversation of the climate change and the standards of communication of community. Is there anything else. You mentioned toolkit. Do you want to actually talk about the toolkit?

**MR HARVEY:** Only that again I think it's one of these things that there's very little community understanding of what it actually is, what it means, and as a consequence there's little recognition of the progress that has been made and I believe there has been significant progress made, but that there will probably need to be, or there needs to be a mechanism which keeps the pressure on, and I think it's predominantly in New South Wales in terms of making sure that the full program of the toolkit measures is implemented and continues to be implemented and not just as a once-off trial as we've seen so far, and again, it's - and I recognise it's even more difficult for the toolkit measures rather than the - as they're not part of the Basin Plan directly, but there probably needs to be some mechanism to, should I say, encourage the states to implement those toolkit measures.

**COMMISSIONER MADDEN:** I've probably got a bit of a general question and you can feel free to ignore it. A number of things we've mentioned today are about transparency, so we've had reporting earlier on about assurance, about knowledge of supply projects. Given that we've got some history in the water industry, that lack of transparency, I think's, come in over the last five years and manifested itself and created a number of problems. You haven't touched on our governance recommendations which do try to address some of that. Do you think that is a structural thing or is it cultural? I'm just wondering in the very short term. Obviously we've made a strong call for transparency in processes. I'm just wondering whether there's any, with your knowledge, any history, whether you think there's anything in that relationship between the states, even in the short run that would encourage that?

**MR HARVEY:** I wish I could say that I thought there was. I just don't think - to be honest, I don't believe that it's structural or, but rather political to a very large degree, whereby senior executives within agencies these days are sort of rotated on a fairly regular basis, and we don't see the depth of knowledge and understanding at the business of the - of operational agencies, particularly in this case water agencies, that we had in the past, and I think that's led to some fairly limited decisions that perhaps would have been - in the past would have had better knowledge behind them in making those decisions, but I can't see in the short-term to me anyway, I can't really see any mechanism to change that situation, and I think it's something we're going to have to live with, and I think that comes - that emphasises one of the points I was making in that we need an informed debate, and to better inform the community is the more that the community is going to be

able to challenge an question those decisions which is one way of making sure that those things are a little better considered.

**COMMISSIONER DOOLAN:** I think we certainly take your point about capability in all of the organisations that actually manage the Basin and it's an area again we've touched on.

**MR HARVEY:** Yes, and we do see a mix. I think the environmental watering side have said in our report that it is a developing centre of knowledge but there seems to be good processes in place and a focus on that, and knowledge capture and the like, so you can see, you know, you can see the light at the end of the tunnel, or the water trickling out of the pipe.

**COMMISSIONER DOOLAN:** It's promising.

**COMMISSIONER MADDEN:** I'd support that and I think that there's mechanisms here of, you know, the consultation on the annual environmental watering plant, et cetera, is a good example of how it can be done and how you can utilise the expertise and knowledge in the community through the existing community groups.

**MR HARVEY:** So I think some of our recommendations and your comments around that transparency and getting people's input into those kind of learning process can be implied in the short, and by short term I mean five years, for things like supply projects, because it is a new - a lot of them are new. A lot of them are, not abstract, but they're new. We haven't done them before. Some of the Living Murray infrastructure works, yes, and there are lessons to be learnt that should be brought to bear.

**COMMISSIONER DOOLAN:** Definitely lessons, yes.

**MR HARVEY:** So it's almost a similar ethos and approach that has to turn quickly to these type of projects.

**COMMISSIONER DOOLAN:** Okay. Is that it for you?

**MR HARVEY:** Yes.

**COMMISSIONER DOOLAN:** That's it for me. So thank you very much, Paul.

**MR HARVEY:** Thanks.

**COMMISSIONER DOOLAN:** Our next participant is Mr Bob Newman. So Bob, again, if you would just introduce yourself for the transcript, please.

**MR NEWMAN:** Thanks. My name is Bob Newman. I'm an engineer, or a retired engineer these days, fair focus on hydrology. Had experience with state agencies, the Murray-Darling Basin arrangements and private consulting. I was involved in project managing some of the Murray projects some years ago and that led to me being involved



in heavy community consultation to environmental assessment processes which led to a life-changing perception and meeting a lot of the likes of people who are here today, so I moved to Berri. Got heavily involved in the community side of things as a state agency rep and began to appreciate the values of the river corridor. Prior to that I was an ivory tower engineer and we just sort of pushed projects and realised that we probably had sometimes the wrong answer to the wrong question.

So with that said, and I'd like to thank the scientific expedition group. I did put an explanation of that in my reference. They strongly supported my coming here and getting involved, as did the ACF through the healthy rivers program. I'd like to congratulate the Productivity Commission on a very robust report and strong language and getting down to the nitty gritty and detail of some of the issues that have kept arising, and listening to this morning. It makes me think, why do we have a Murray-Darling Basin Plan in the first place. We have it because communities got off their bum and got involved in demonstrating the degradation that was happening before their very eyes, and that was something I was not aware of, being based in Adelaide, but when you get into the region and you deal with the communities and the life-long experiences, and they're not long experiences. We're talking about 20 to 40 years of seeing the flood plain die in front of their townships and properties, and those voices created the need for the Living Murray and ultimately the Basin Plan.

And so I sort of feel that those voices are getting a little lost now, and the information, if you like, that came from the data of those observations is also being lost and Ann pushed that quite strongly in terms of her local knowledge of what's happening. So with that said, the Productivity Commission has made some pretty strong recommendations on some brave findings in relation to governance and leadership. That's coming across strongly, the idea of separating the roles within, say, the Murray-Darling Basin authority, and also I might make the suggestion that the funding agreement should be robust enough to effectively hold the Basin governments to account.

In terms of program design and delivery, I'm using your headings here, and the timelines and dates that gets associated with that, you stated that the supply measures timelines are unrealistic and the cost of failure and the need for consequent offsets is a high risk. Actually, I doubt that it is as high risk as you might say because I suspect that the measures have been under-costed and the idea of buying real water is probably the cheapest way to go. That's not - I don't have evidence for that, just a suspicion. Similarly, with the efficiency measures and easing of the constraints, I think they're likely to, or you've stated, and I think they're unlikely to facilitate meeting of the environmental targets, and certainly not in the right timeframes.

The notion of continuous improvement with adequate monitoring and reporting and evaluation, and you might note I've turned your order around on those, and I would add to that, responding and adjusting to the findings of monitoring and evaluation. It's really important to have a process whereby you just don't monitor and evaluate and sort of, it all looks good, because you add it up as a whole. You really need to bring out the, highlight the deficiencies and Ann's emphasised that.

Overall in the report, excellent report and really thorough piece of work, but it gets lost in the complexity of the findings and the complexity of the recommendations, and I do support some of the submissions that I've seen which look to aggregate things up. You've done that a little in your timeframes, in the order of priorities, that does aggregate things a bit, but I think getting a message back to governments and getting the ability of them to respond by really highlighting the important, urgent elements, and they're in there in the report. They don't leap out at you.

The one that does, you look at the first finding, the first recommendation, and it talks about under, what's the terminology, underachievement of the buy backs, and to me that was a, I'm stumbling for words here, sorry, that immediately put me a little offside to say, "Well, hang on, that's not the most deficient that we've got that we haven't bought enough water. We really don't have enough real water in the whole system. Anyway, that's a bit of a pedantic thing.

Issues that arise out of all of that, and it comes back to the way the Basin Plan was messaged in the first place, and you know, 3200 gigalitres, or 2750, all those numbers that were mooted around 2010/2011, and it eventually got rolled into the legal document for the Basin Plan. I think a number of us were somewhat surprised when the fine print came back to bite us and we realised that there was never going to be 3200, there was never going to be 2750, and we're talking about 2000 gigalitres a year of real water.

As a hydrologist, coming back to that issue, converting ecological targets into hydrological targets was perhaps a necessary simplification, but then to diminish those by having targets at particular locations at the South Australian border which, if the flow had been there, it would have been of benefit for the whole of the River Murray corridor. From Swan Hill all the way through we would have had 3000 gigalitres of water passing through the system and that would allow the flood plains to get watered throughout the system to some degree.

Now, as we diminish that, and we come back to 2000, and everything becomes back into the channel and the adjacent flood plain vegetation doesn't get a watering, and no amount of complementary measures really will assist that, so we really lose the essence of the plan by having these adjustment factors and efficiency factors that are all about not playing the main game. So where to go from there.

I want to mention water management plans. I think there's so little been done on those, there's so little consultation, it can only be effectively introduced with adequate consultation that we are going to lose the plot on those. We are going to miss achieving the right outcomes, and what will happen, no doubt, is a rather poor plan that goes through a process of so-called consultation essentially through attrition where you don't achieve the right ownership of those plans.

At a technical level within those plans, I have been quite involved in hydrologic modelling over decades, I'm somewhat suspicious of the confidence in the modelling, in particular in the upstream tributary models in the lower Murray because we built (indistinct) and human and we managed the river system of 100 years, we have incredible

information, and the models are very well validated, but as you go further upstream the data was never there to generate the models in the first place. The models are almost fictitious in a sense, there is so little data that - whereas we might have a million data points to validate the lower Murray system, we might have a few hundred in the upper river, and so to try to pretend that we can achieve all of these outcomes through hydrology is a bit of a misnomer in my view, so a little bit strong, but I'm sure the model has made a good effort to try and replicate the system over 140 years. That's a big ask when you don't have data for the first 40 years, so, except for anecdotal events and floods and the like.

And that leads me to the review of the models, and I've had quite a strong involvement with the review of models, and I'm somewhat sceptical that the process is often incestuous that we're talking about, because it's such a technical thing, you have to talk to people and have reviews done by people who intimately know the system, but there needs to be some pathway to get a little bit more impartial view, and I'm conscious of the work of the Wentworth Group in emphasising that need for increased impartiality. So within an organisation such as the Murray-Darling Basin Authority, there needs to be - I think it has been mentioned here already, that the top down approach has become a little overly political. There's been a sort of don't rock the boat attitude at the lower technical levels, and we've probably not got the level of impartiality and scrutiny and in particular emphasis on confidence and uncertainty. Those things, we appear to be more certain than we ever should have been. Yes, so a lot that's been said today that I totally agree with, so I won't dwell on those.

Just quickly noting on the supply and efficiency projects that meeting somewhat arbitrary ecological targets, surrogated by hydrological targets, without actually bringing in real water, you know, we're losing 1000 gigalitres of possible recovery, it sort of has a sense of smoke and mirrors to me, that we're being hoodwinked by this notion that we can achieve these ecological outcomes with efficiency measures way upstream. The Menindee Lakes example is a classic. I mean, how will that meet the ecological targets of the lower Darling, how will it meet the - I'm not an expert in ecology of the river system, but to me it is a whole system, and we divided it up. Probably the Living Murray using the icon site started that pattern, and then we've pursued that further by having these sort of icon locations and meeting particular hydrologic regimes which don't really result in ecological outcomes, particularly for the corridor between, let's say, Mildura and Wentworth and Wellington, it's really not part of the plan in any effective way.

Going perhaps beyond 2024, I talked about the targets being somewhat inadequate for the whole of system basin plan and from what you have been finding out we're probably not going to meet them anyway. I mentioned the lower Murray flood plains not being covered, so there's been a bit of emphasis here today on climate change and the implications. I think bringing in, you know, rather than waiting until 2026 or some other date, deferring everything, climate change is biting us hard already and Paul's emphasised that, so I think we really need to get on board those issues. I understand that the basin put climate change in the outer and it was not part of, and I agree that the issue that was urgent when the Basin Plan was signed up was over-allocation and overuse, and poor

management of the system at the time but the ecological decline is continuing and being aggravated by climate change.

So how would we communicate that in an effective way as we've been trying to get to today? We need to understand what level of protection we're trying to achieve. I don't think that's - well, a lot of people think the Basin Plan is going to bring the environment back to pre-European conditions. Well, that's a nonsense. But what are we talking about? Is it 70 per cent of the pre-existing European health or is it 20 per cent? Are we arresting the further decline or are we actually making some recovery in the environmental health, ecological health has assisted. I'll leave it at that as a statement, thanks.

**COMMISSIONER DOOLAN:** I'll follow on from that because I actually think the discussion that we've had with I think Ann and then again with Paul is exactly that. I mean, the Basin Plan is not going to be able to compensate for the worst case climate change predictions that we're hearing now, and an adjustment won't do it either, so it will be about understanding what the likely outcome is and what, from there, so that's really important. How do you go about exposing that debate? Well, it's not even a debate, but that information, in the currently charged environment that we have where people are concerned about getting the Basin Plan to its completion at least. So it is a little bit about, you know, your advice or your thoughts on when and how does that happen when we've got, you know, three-quarters of the water, but the next five years and the next phase as we've pointed out is complex, and it's difficult and people do need the commitment to complete it. So any thoughts?

**MR NEWMAN:** It's a philosophical question and it's a challenge because if you just put the timelines out to allow more time for consultation, that can well become an opportunity to further dilute the plan and to not meet targets and the like and it doesn't have a penalty, so right now the idea of a penalty at 2024, it's this next five years of effort doesn't achieve, is that somehow or other we've got to go and acquire more water. That, to me, is a preferable solution. I'd rather decide to do that today and admit that some of these things are not going to achieve, particularly as you've mentioned in an integrative way, I use terms like smoke and mirrors, it just doesn't add up to me, and I've tried to understand the complexity of it and I'm starting from a reasonable knowledge base but it's tough. I mean, when you're a bit out of the game for ten years, it's really hard to get your head back around this. We all relaxed.

All of those who were - had petitioned so hard, and I'm talking about many other people because I was kind of in the system back then, and so the community petitioned so hard to get the environmental issues on the agenda and all about the Living Murray, and actually I think it originated in the work that I got involved with on the charter flood plain back in the early 80s, recognising the need for putting water on the flood plain and protecting at least some large - some percentage of the flood plain system and you know, as an ivory tower person, I had completely ignored that, and I get the feeling we're into ivory towers right now with Federal government departments trying to resolve this and not listening to communities.

So am I getting to answer your question? I think I'm reminded of my time working in the Murray-Darling Basin Commission under a very effective leader at that time, who spent a lot of his own time outside of the office and encouraged all of the staff, because you know if you were sitting in the office, he'd come around and say, "What are you doing here? The real world's out there. Get out there and spruik your project", or whatever you were working on.

As we evolved into a Federal agency, the doors were closed, nobody could look in. It was really hard to - nobody was coming out, so I mean, everybody, all your recommendations suggest that we - you've just got to get the process, got to get the engagement back linked in, and that takes time to build the knowledge base and to - we've lost that time. We've lost that momentum and - and I don't know if I've answered your question, but.

**COMMISSIONER DOOLAN:** It's a difficult question, so that's fine. In terms of, though, losing that time, once again I think we've said as a general principle for us it's important, if it's an important project or a water resource plan, if you've got to actually extend the timeframe to have a good outcome then that's how, you know, we would recommend that you do that, clearly with checks and balances in place. So with the supply projects we've suggested a gateway project; once we've got detailed design, to go through it. Is it still operating the way people thought; and you could use that to set key milestones for credible timeframes independently validated, and then ultimately if those milestones failed, again move in to make good and water recovery. So you've talked about the urgency, but do you agree with our thrust that, look, if it's important extend it, but checks and balances.

**MR NEWMAN:** Yes, I wasn't sure how to respond to that one as I worked through the report. I certainly think you need to make the time to do the job right. I guess where I came at it from was the momentum behind the money expenditure and we're so far through the budget and they are kind of, you know, in a sense the early part of the program was spending money faster than - almost not worrying too much about the cost of effectiveness of each of the actions and you hear stories of some very high prices paid for water, and some very poor returns on investment from the point of view of ecological water recovery, so you hear those issues. So I would be sympathetic to the groups that are mentioned, put a pause on money expenditure to allow the budget to go beyond, to be extended to your extended timeframes. Otherwise money will suddenly dry up.

**COMMISSIONER DOOLAN:** Yes, for sure.

**MR NEWMAN:** So maybe that's the answer to that.

**COMMISSIONER DOOLAN:** Okay.

**COMMISSIONER MADDEN:** Just a question given we've got a hydrologist, and you mention the modelling, so obviously the modelling is quite complex. We've been told, you know, it runs in terms of the equivalence package and all this could take a couple of months and things like that, but just wondering if you - CSIRO was involved in that

environmental equivalence so there was some impartiality there to some commentary then on that, but then also just the modelling and the thing about Schedule 5 outcomes and under the new supply package what is the constraint lifting going to achieve in terms of Schedule 5 outcomes. So to cover key questions like that which, given your technical expertise, how could they improve transparency again in process and how they do things in that sphere.

**MR NEWTON:** Yeah, modelling is particularly difficult to go to a public meeting and talk about there.

**COMMISSIONER MADDEN:** Yes, I understand.

**MR NEWMAN:** And what you've actually done and what it means, and what assumptions and simplifications we necessarily had to make. So - and you mentioned the impartial component with CSIRO being involved. Just on the grapevine, I'm finding that there is a lot of time pressure that kind of reduced the impartiality to a degree. I'm not sure where to go with that bit of conversation, but - - -

**COMMISSIONER MADDEN:** I'm very much looking at how to improve the processes.

**MR NEWMAN:** Yeah, that's right. So trying just to go out there, I've actually been involved in going out there and explaining frequencies and the like, and when the Living Murray came out there was quite good communication of the natural regime at various locations. It was well illustrated and we were able to look at the seasonality of flow patterns and the like. Because it was the Living Murray was actually look at water levels. We don't see that too much in the upstream tributary models. It's very difficult for them to do that, so once again I suppose it's a matter of making time and perhaps having a hierarchy of engagement processes so that, we've talked here about the involvement of local groups for any changes that are local to them so they can understand.

Often flow is used as a surrogate for level and that is - it's been a bane of my life for much of my time and we've talked about the interfacing ground water and surface water and flushing salt out of the flood plain. All of those processes need quite intricate understanding, but if you take up the challenge to what are the real questions, I've actually come at this a lot from a salinity point of view, and I do question the salinity target. It was a simplistic add-on to a really good water quality strategy with frequencies of salinity concentrations and I'd always remind people that that target is an average over a period. It's monitored over 25 years so a lot of people talk about ten years, but it's not a load in a year. It's the nature of our hydrology. Have I got anywhere near what you're talking about?

**COMMISSIONER MADDEN:** I'm particularly, I guess, interested in the supply package and constraints that are - - -

**MR NEWMAN:** Yeah, look, I haven't - - -

**COMMISSIONER MADDEN:** And how you actually again bring community along in a technical sphere, it's actually really complicated so.

**MR NEWTON:** Yeah, that's right.

**COMMISSIONER MADDEN:** So we talked a little bit about impartiality.

**MR NEWTON:** Yeah, and I think also just having that hierarchy of consultation processes, so at least some credible person independent in a community can get their head around - the life-changing thing for me was getting involved in the Chowilla regime with a community group that was set up by the old Murray-Darling Basin Commission that met for two years for one or two days a month, working through 40 or 50 technical questions, and it was just life-changing for me to hear all these different views about what the river was about, and then for me as a hydrologist to come back and say, "Well, if we did this, then that would happen". It took time, and it took intensive involvement of individuals in the community, and they hung in there and ultimately we came out with the project that we were supposed to be promoting has been dismissed, and a multitude of other projects came out of it and I actually believe the Living Murray came out of it, but.

**COMMISSIONER MADDEN:** Yes, right. Thank you.

**COMMISSIONER DOOLAN:** Yeah, I think that's it for me too, so.

**COMMISSIONER MADDEN:** All right. Thank you.

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

**MR NEWMAN:** One last statement - - -

**COMMISSIONER DOOLAN:** Of course.

**MR NEWMAN:** - - - to a question which goes to the barrages which is not an expertise of mine at all, but the barrages have kept the lakes fresh and it's really important to emphasise that, whilst it was a natural estuary, it was a freshwater estuary, and I think there's good scientific evidence, I'm not involved in it, you might get it from other people, to say that - to change the lakes to a more saline environment, with the reduction in flows that we now have inevitably would be, it's a really important thing to take note of.

**COMMISSIONER DOOLAN:** Sure. Okay. Well, our last participant before a break for lunch is Elizabeth Tregenza from the River Lakes and Coorong Action Group, and again, Elizabeth, if you could introduce yourself for the record, please.

**MS TREGENZA:** I shall. And may I first ask if anyone from the River Lakes and Coorong Action Group Committee would like to come up and sit, you don't need to support me now. I'm very happy if you would like to come and - no? Okay. There are lots of committee members in the audience which is fantastic.

I'd like to acknowledge that we meet on Ngarrindjeri land. My name's Elizabeth Tregenza. I'm the Secretary of the River Lakes and Coorong Action Group in which I have been a participating member since 2005 or 6, and there are others here who have been members for longer. Thank you for your report. Thank you for the opportunity to make a further submission to the Productivity Commission.

I guess, and may I say that I think people far more knowledgeable than I have made some exceptionally good points which are widely supported by the community around River Lakes and Coorong under Lower River Lakes and Coorong, and I would like to just go back to the basic premise of your report to start with. There are so many points that one could make in this complex situation, and I agree you'd done an exceptional job of putting together a very complex report.

In looking, and I acknowledge also that the terms of reference were actually quite prescriptive. I used to work as a consultant for some 20 years in my life, and if I was doing reviews and reports I would try to take as wide a ranging analysis of whatever the issue was and then pull out the details.

So in looking at your report, I looked at your terms of reference and I looked at the progress to meeting - I looked at the - sorry, the legal requirements of the Basin Plan, so the aims are right up front, the little series of dot points that says this is what the Basin Plan is all about, and I note that your report, I think, discusses seven out of eight of those, but it doesn't discuss the most important one which is nowhere in that report is there an assessment of how far five years in the Murray-Darling Basin Plan has gone in achieving progress against relevant international agreements.

So nowhere do you discuss the basis of the Water Act or the importance of restoring the river and the wetlands to health. You will recall when the Water Act was passed, John Howard, in a bit of fancy footwork to get it around the states, called on Australia's international agreements as the basis to finally push the Water Act over the line, and nowhere in your report could I find a recommendation for achieving the first objective which is giving effect to relevant international agreements including the biodiversity convention and the RAMSAR convention to the extent they relate to the use and management of Basin water resources.

And I mentioned Kildare and Williams who in 2011 concluded that while some social and economic factors can be taken into account, they cannot be given such weight as would prejudice the faithful implementation of the international environmental conventions upon which the validity of the Act depends, and I think that they're fairly strong words.

Second point, sorry, that was a bit long-winded, but I feel quite strongly about that. Second point is the timeframe. While accepting and largely supporting the level of review, structural and administrative change recommended in your report in order to meet the challenges of the next five years, we're concerned that this should happen with a degree of urgency given the state of the system and the forecast of increased drying periods, and I share Dr Jenson's concern about significant under-recovery in drying times,



and I also note, not just tongue-in-cheek, that governments have shown themselves very capable of moving quickly in the case of the Wentworth Pipeline and in the case of the buy-back of Tandou Station. So I think in the eyes of the general public there is room for improvement.

Another basic point, I think, is that we cannot overstate the importance of returning the full 3,200 gigalitres to the system which is what the communities believed they were going to get. They believed they were going to get 3,200 gigalitres of real water, and they thought they were going to get a sort of reserve bank for water. They wanted the Murray-Darling Basin Authority to be like a reserve bank for water which supports your recommendation to split off part of the Authority into a statutory body which is excellent, but it also underlines, I think, the degree to which the plan has fallen short so far.

We understand that the Australian Government has an obligation to recover the volume of water mandated under the Basin Plan, a legal obligation, by mid-2019, and that it also has the legal powers to recover the balance of this volume if the Basin state decides to walk away from the plan, and in this context we would like to strongly support lifting the cap on buy-backs and lifting the 1500 gigalitre cap on buy-backs. Restoring buy-back is a means of achieving the 450 gigalitres would relieve both budget and time pressures on water recovery. We note also that the constraints packages are now - constraints projects are now an essential part of the 605 gigalitre offset package, and they are an extremely important part of the plan which need to be developed fully and should not be consigned to the too hard basket.

This is a relatively minor point, but over-recovery, the term “over-recovery”, because while I recognise that it’s evolved from the SDLs and the concept that you could over-recover against SDLs, the way it sits in the report is quite - if you’re not aware of that, is somewhat confusing and people think, given that we already compromised so much on the amount of water to be recovered for the environment, how can anybody talk about over-recovery, so perhaps that needs a little more explanation.

I think they’re the main points. I mean, I’ve made many points, but I don’t know if you would like to ask any further questions.

**COMMISSIONER MADDEN:** It’s probably more for the sake of discussion, the points are clear and well made so - and I’ll address the question on the target and the assessment of the target. For us it’s about roles and the wider process.

**MS TREGENZA:** I’m sorry, the target and assessment of which target?

**COMMISSIONER MADDEN:** In terms of whether the plan itself is actually meeting the international agreements and the like.

**MS TREGENZA:** Yes.

**COMMISSIONER MADDEN:** To me that is almost with M&E and whose role that is in in terms of the review from the Authority over time in the plan structure, so given

we're five years into not completed, that wasn't a strong focus for us, I think the important thing is, and maybe that's worth area of discussion in the M&E section of recommendations and something maybe we do need to consider making clearer which is really over the term in the monitoring and evaluation plan should be answering those questions of, is it effective over time and meeting its objectives. So we come in periodically, not to answer that question ourselves, but to actually say can those implementing the plan answer that question.

**MS TREGENZA:** Yeah, absolutely, and would it not be appropriate for you as agents of government to flag to governments if something as important as the Murray-Darling Basin Plan is falling short in meeting its international agreements?

**COMMISSIONER MADDEN:** It's difficult for us to make that assessment.

**COMMISSIONER DOOLAN:** Exactly. I mean, if there was clear evidence that that would be the case, but at the moment the plan's not even finished, and it's not up to us to take that ecological data. As John said, for us it's to look at the monitoring frameworks to see if they will be adequate and sufficient to enable that answer to be made, and currently, well, we don't think the monitoring and evaluation frameworks are sufficient at all.

**COMMISSIONER MADDEN:** No, we've called that out and I guess I'm saying, we haven't talked about the international agreements and been explicit with that objective.

**COMMISSIONER DOOLAN:** No, but we could bring that in.

**COMMISSIONER MADDEN:** It's implicit but we don't think it's in place and adequate and it should be developed as soon as possible.

**COMMISSIONER DOOLAN:** Sure, yeah.

**MS TREGENZA:** Okay, so would it perhaps be worth spelling out that one of the ramifications of this might be that - - -

**COMMISSIONER DOOLAN:** Yes, absolutely. We can take that on board.

**MS TREGENZA:** Thank you.

**COMMISSIONER DOOLAN:** I take the point that a number of people have made about the over-recovery recommendation which possibly factors as the first recommendation if people are just looking at our list rather than obviously reading the report and sequentials, so we take that point.

**COMMISSIONER MADDEN:** Oh, look, it's a factor of just how it's compiled on the report.

**COMMISSIONER DOOLAN:** Yes, rather than on any degree of priority.

**MS TREGENZA:** Sure, a huge job.

**COMMISSIONER DOOLAN:** Yes. I do want to make one point, and that is, and again, because we have gone around the Basin and listened to communities elsewhere, and we will be doing, you know, we've done one in Mildura, we'll be doing that again, you said communities believed that there's a full 3200.

**MS TREGENZA:** M'mm.

**COMMISSIONER DOOLAN:** To be frank, that is South Australian communities. That actual 3200 plan in the irrigation communities was clearly a 2750 plan, and whether that's a communication problem from 2012 from the very start, but when you say communities, that's not a whole of Basin view.

**MS TREGENZA:** Sorry, no, and that's not clear on the part of my scribing, but the communities in South Australia, the communities around the region that attend our meetings and work for these things, - - -

**COMMISSIONER DOOLAN:** But that is part of the broad figure and general issue is that even in 2012 where people thought the plan was settled, it was interesting to see how it was described by various governments as they went back to their communities, and so we are starting, or not we specifically, but the plan itself is starting with a degree of ambiguity amongst the Basin communities which is a difficult starting point anyway, but it is important to just to note, we'll go to Shepparton on Wednesday.

**MS TREGENZA:** May I, sorry, make another point here that is probably not anywhere in all of this, but in the submissions that we wrote, I think people thought they were going to get, certainly around here, and my understanding further throughout the system, is that the general feeling was that people will go - there was going to be water returned to the system to stop the over-allocation and return the river to a healthy living system, albeit nothing, there was never going to be a return to pre-Colonial times.

And then if there was water on top of that, that was going to be for the good of the system. That was all to the good. I don't think anybody foresaw the sort of open slather assault on the system that accompanied the first five years of the Basin Plan, and I think that's - like, there are really different perceptions in amongst the - between the communities about what the expectations were.

**COMMISSIONER DOOLAN:** Yes, and I think that's to a degree, we're reaping some of the legacy, if you like, of that now, and having to deal with it. Well, not we, the Productivity Commission, but we, governments and communities are having to come together with that ambiguity, but it was important to note.

So just coming back then to some of the points about the timeframes, again, as we've said, in some of it, projects like the constraints projects are acknowledged to be important, to be important for a whole range of questions, but the existing experience to

date, which is lifting some former constraints from the Hume to Yarrawonga reach which is what happened around the early 2000s. That's definitely a project that would suggest that the timelines for the larger constraint easings are highly ambitious.

Now, we have said, and our recommendation as we've said earlier, is to actually, if it's a good project, worthwhile and necessary, to extend those timeframes, but to have checks and balances in place. Is that something that your group does support or still concerned about that?

**MS TREGENZA:** It's kind of between a rock and a hard place, isn't it.

**COMMISSIONER DOOLAN:** It is, yes.

**MS TREGENZA:** Because you totally support proper process and the lack of proper process has been an ongoing issue with the implementation of Basin Plan, and at the same time I think everyone is really concerned about the amount of water that - the shortfall in the amount of water returned so far and the drying conditions, and does the river have that much time. In fact, that was the first thing I personally thought when I read your report. I thought, does the river have this much time.

Well, while recognising it's necessary, it's totally necessary to have proper management and evaluation and tendering processes in place, and to develop the water resource plans so that there's appropriate consultation and so on, and I think one of the fears is that the states could continue to push this out forever, and therefore how do you stop that happening before we're left with a concrete pipeline through the middle of eastern Australia.

**COMMISSIONER DOOLAN:** And that is the trade-off, proper process but how do we actually put governance around it, and I think we've heard suggestions today about, well, you can use the funding agreements; you can use - pardon? Sorry, I was just saying, you know, payments versus milestones, those governance arrangements to greater effect than they have been used in the past.

So again, it's a checks and balances, but we're certainly very aware of the fear of communities that if you extend, how is their confidence that Basin governments will be forced to demonstrate their commitment.

**MS TREGENZA:** Yes, okay.

**COMMISSIONER MADDEN:** I guess the only comment is, we do have the review of the budget or the allocation in the review in 2021 so you did mention potential of the cap on buy-backs and the like there, so I'm just going to look through here now. That is something that if you do have a budget deficit or shortfall in terms of the approach you're going to use that's something we'll look at to see whether that should be considered as well in that 2021 review when they look at the funding that's set aside for deficiency measures.

**COMMISSIONER DOOLAN:** Okay. I actually don't have any further questions. Do you?

**COMMISSIONER MADDEN:** No, no. Thank you.

**MS TREGENZA:** Could I just make one comment, just for the record?

**COMMISSIONER DOOLAN:** Yes, of course.

**MS TREGENZA:** I think that in, and please take this in the right spirit, I think one of the aspects of the political behaviour, and Mr Harvey said that he thinks to a certain extent there are problems which political, not structural, I agree with that very much, and I think one of the political phenomena that has occurred across the Great Artesian Basin since the Basin Plan started to be negotiated and implemented is an extraordinary departure of voters from traditional political parties, and I note that at the moment there is a campaign going in a very conservative area of New South Wales called "Anyone But NATS", and I think - I only make that point because I think it underlines the degree of desperation that country people and people in the Basin are feeling, and just how let down they are feeling, and it would be nice if that message got back to Canberra. Sorry. I know I'm being - I'm not being cheeky. I'm a student of politics and I'm interested in how political things work, and I think it's quite unprecedented.

**COMMISSIONER DOOLAN:** So it is an interesting observation, but I suppose what I'd respond with is, the Productivity Commission is an independent voice.

**MS TREGENZA:** Yes, I'm not suggesting - - -

**COMMISSIONER DOOLAN:** No, no, but we do want to make it quite clear, we're here to look with objective eyes about the effectiveness of implementation and actually to call governments to account on that, and it's important that we maintain that. Part of the reason for being, really, and it's deeply ingrained, particularly in the staff of the staff of the Commission is evidence-based, and it's really important that because any Commission inquiry will do this, but we're doing this on a five-yearly basis. It's a regular role under the Water Act, and it's important, we believe, we don't be commenting too much on that, although we note your comments. It's important that we're able to see this and call governments out in an objective way and based on evidence with what we see, and that's to a large extent what we've tried to do with this report.

There are, as you say, there's probably lessons to be learnt in this, and there's lots of observations to be made, but we have to keep it to something that - - -

**MS TREGENZA:** I'm not suggesting for a minute that you should.

**COMMISSIONER DOOLAN:** Yes. So that's an interesting point.

**MS TREGENZA:** Yes. Thank you.

**COMMISSIONER DOOLAN:** All right. Thank you very much. We'll call a break now for lunch. I think we've scheduled about 40 minutes for lunch and then we've got two speakers after that, so we're a little early. Lisa, we'll stick with the schedule, yes? Yes, so perhaps if we come back at quarter to 2, a 45-minute break. All right, so can I thank the participants to date and we'll reconvene at quarter to 2.

## **ADJOURNED**

## **RESUMED**

**[1.47 pm]**

**COMMISSIONER DOOLAN:** So now we'd like to welcome Robert McBride from Tolarno Station. Robert, just for the record, if you'd introduce yourself for the record please.

**MR McBRIDE:** Thank you very much. Firstly, I'd like to pay my respects to the Ngarrindjeri and the Barkindji nations past present and future elders. My name is Robert McBride from Tolarno Station. This is situated about 45 k's south of Menindee Lakes on the Darling River. So, can I start or?

**COMMISSIONER DOOLAN:** Please. Absolutely.

**COMMISSIONER MADDEN:** If you make your statement and then we'll talk after that.

**MR McBRIDE:** Thank you both very, very much. I guess firstly we'd like to thank the Productivity Commission for the chance to give our assessment of what - how the proceedings and how things are going. We support the draft findings and recommendations of the Commission. We also acknowledge the significant community consultation that has been undertaken, and that's something that has not been done by Federal Governments, Murray-Darling Basin Authority or the New South Wales Government in any way, shape or form to us.

As outlined, we are pastoralists on the Lower Darling. I guess we're supposedly the largest privately held land in New South Wales as a husband and wife combination. Tolarno Station got going in the 1850s. My family has been farming in Australia since - for about 162 years, so we're pretty proud of coming into the sixth and seventh generation of Australians farming in our nation.

I guess a few things that come to fruition is the fact that over the last five years we used to live on a Darling River system. We don't anymore. Come December this year we fall into the category of a third world nation. We don't have drinking water and that's a critical undertaking. Under your assessment the findings demonstrate that we'll have access to water. Clearly that's not going to be the case. Your findings demonstrate that if you work under the Water Resources Plan that everything's going to be okay. That is not

the case. By December if we have no water in the Darling River there'll be puddles. So we've got to pump out of these puddles to conceivably wash ourselves and wash our children. We've become a third world nation in one of the richest countries in the world. And this has nothing to do with drought. This is greed, corruption and total mismanagement by the bodies who are there to supposedly protect the river. They have not done so and realistically we call upon you, through the Productivity Commission, to not hand out any more money.

Let's just go through a couple of the programs that we are looking at. Obviously the closest to us, closest to our hearts is the decommissioning of the Menindee Lakes system. Now last Friday Niall Blair came out from Sydney for his first occasion to put the closing piece of pipe on the Wentworth to Broken Hill pipeline. So it's just another nail in the coffin of the Darling River and the Murray River system. Ladies and gentlemen, under the New South Wales plans and those plans undertaken by the Murray-Darling Basin Authority they're looking to save 106 gegalitres of water by effectively decommissioning the Lakes. So we've got the situation where New South Wales is instigating these plans. Evaporation is supposedly a bad thing, and our lake system that's been there 30 million years, it's been the very heart of the Darling River system and the Murray-Darling river system is being collapsed by Government policy.

So I guess that's the preamble. We're much in support of what you are doing. The thing is, critical water use and needs are not being met under any of these plans. By December the Darling River dies, only for the third time in history; 1943/44 there was a drought. Since white settlement that has never gone dry except two and a half years ago where we were run out of water for eight and a half months without water on our station. Ladies and gentlemen, nowhere else on the planet is a river system being absolutely destroyed through greed and corruption and total mismanagement and allowed to get on with it. The Amazon is being destroyed by deforestation. The Darling River is just being destroyed, and as we know 40 million people across the world depend on the Murray-Darling Basin system for food. When that collapses, and it will collapse unless we make major changes to the policies of Government and through the Productivity Commission please do not hand out any more money until these projects, these efficiency projects, that are supposed to save our river system, come forward with something worthwhile.

As I said, the Jacobs Plan report that came out, that fell into our hands last week, makes it abundantly clear that all the propositions and suppositions that the Murray-Darling Basin Authority is using to decommission Menindee Lakes (indistinct). CSIRO staff have gone to the Royal Commission and said their figures were interfered with by the Murray-Darling Basin Authority. This is serious. This is science being totally prostituted by Government policy and Government departments and people like the Murray-Darling Basin Authority who are there to protect our system. We believe in the Murray-Darling Basin Authority's integrity, that we need somebody to oversee the Murray-Darling Basin Plan because that must work, but the people involved are failing miserably and must be replaced. They must front a Royal Commission at the very least because draining the Menindee Lakes twice in four years, that is not mismanagement, that is something far deeper and must be investigated by police or a Royal Commission. Thank you for that as a little opening.

**COMMISSIONER MADDEN:** Just one clarification for us. The Jacobs report that you mentioned, just so - we're going to request a copy from the relevant people, can I get you just to say who actually that was commissioned by?

**MR McBRIDE:** This was commissioned federally and was released on the October - sorry, it was never released. It was never supposed to see the light of day. It was an internal Government document that somebody with integrity has stepped forward in Government and I found it on a park bench the other day, but somebody in Canberra has got the integrity to support your river systems. And so not a whistle blower but a lady or gentleman who's got the integrity to say this is reality. The reality is your Murray-Darling Basin system will collapse if you start collapsing something like the Royal Commission. So does that answer the question?

**COMMISSIONER MADDEN:** And it's commissioned by?

**MR McBRIDE:** Sorry, it was commissioned by the Commonwealth Government Department.

**COMMISSIONER DOOLAN:** The Department of - - -

**MR McBRIDE:** Department, yes. Department of Agriculture, Water.

**COMMISSIONER DOOLAN:** Agriculture and Water. Okay.

**COMMISSIONER MADDEN:** Just a quick follow up question.

**COMMISSIONER DOOLAN:** Sure. All right.

**COMMISSIONER MADDEN:** It's a little bit different, but just one thing on process. In the Mildura hearing, this was a raised a number of times about the impact of the management of the lakes versus obviously upstream water sharing plan rules and practices. What's been the response? Because again we talked earlier about transparency in process and operational rules.

**MR McBRIDE:** No. Thank you for the question.

**COMMISSIONER MADDEN:** Has anyone told you that there actually has been a change in the operating rules that kind of govern the operation of the lakes, to date?

**MR McBRIDE:** I guess we look at - to date, no, no, thank you for the question. I guess there's two issues. Once the northern basin but also once - the second one is the administration. So if I may just look at the administration of the Menindee Lakes system. No tangible undertaking except that clearly a lot of the aims that the New South Wales Government want to achieve on water savings under the projects, like running a \$500m pipeline, to suggest that evaporation's a bad thing, means that it puts more pressure on the Menindee Lakes. So the Murray-Darling Basin Authority and the New South Wales



Government are now saying, "Let's decommission 80 per cent of the lakes and only hold 20 per cent of the water. Let's find efficient ways of getting in and out really quickly", and you go, "Are we on the same planet?" This is the Darling River system and, you know, with global warming or any of the issues regarding, we do - the reason why the lakes system was set up by the guy upstairs, and I'm not particularly a religious man, but effectively it's small flows regularly plus massive flows means there's a lake system, it evaporates, clouds are seeded, we all win.

So, no, there has not been a policy, to our knowledge, that has been presented to us by New South Wales and the Murray-Darling Basin Authority. We've been kept in the dark very, very much. And yet the second time the Menindee Lakes were filled on a weekly basis I was ringing up Neil Andrew, who's the chairman of the Murray-Darling Basin Authority, saying, "What in God's name are you doing Neil? The Murray's all but in flood, why are you draining the Menindee Lakes so quickly?" Remember, we have eight and a half months without water and then by a chance stroke of good luck in the middle of winter, which it never rains where it does in the middle of winter, it did, it filled up the lakes. Within three months the Murray-Darling Basin Authority had drained half the Menindee Lakes. This is not bad management. This is something far more serious that needs a Royal Commission or police investigations. So, to answer the question, no, nothing's been presented to the people of the Western Division. And look at the Barkindji nation; life expectancy for a Barkindji gentleman is 36 years of age, for a lady it's 42 years of age. Water is their life. Barka was their river for the first 50,000 years and it's been taken away from them in every way, shape or form. They're not party to the whole issue of the river system and that's a national disgrace. Their members are not on any Murray-Darling Basin Authority board. Clearly that's an insult to them. They're good people, they deserve their river back and integrity in their river. So, no, we haven't had consultation.

And as far as the Northern Basin issues are concerned, New South Wales as of this week, they're still looking at plans towards looking at issues like floodplain harvesting. Now I know what the word "harvesting" means, that means when you take - sorry, you plant a seed and you look after it and a bit of wheat grows and you harvest it. They're still putting in propositions to allow people to basically bulldoze off the river system even further. So that's the degree of integrity that the New South Wales Government is undertaking with the Murray-Darling Basin Plan; they're still undermining it at every turn. We do need a Federal Royal Commission.

So I hope that answers the question both - on both levels. We haven't been consulted by the New South Wales Government. Kept in the dark. We're still waiting for the business plan for the pipeline. Given that the pipeline's already finished, Niall Blair's \$500m was spent on this pipeline for 20,000 people. Cotton Australia in their annual report last year had prided themselves on congratulating themselves on telling the New South Wales Government. That's straight out of their annual report, it's "We congratulate ourselves on telling the New South Wales Government to run a \$500m pipeline". Now you've got to kind of wonder, given there's no cotton in Broken Hill, why are they congratulating themselves and why are they doing this? It's pretty clear cut why Cotton Australia wanted a \$500m pipeline running to effectively decommission the Menindee Lakes

system because remember there's two and a half to three times the size of Sydney Harbour of water. Water is gold. Burke and Wills stepped past our place in 1860 looking for that inland sea. If they found it they would've been gods. The problem is we've got a situation where greedy capitalists with big bulldozers have basically looked at a satellite photo and worked out where is the whole integrity of the river system. So that's the thing, we have no integrity in the river system and we have no river system. So when I bought a sheep station about 30-odd years ago as a young kid, I was living on one of the most amazing river systems in the world. Today it's a creek. In two months' time it's a puddle of water. Nothing to do with drought. This is the worst corruption in our country's history. It's going to make the Fitzgerald inquiry look like a tea party. We need all parties to be facing the music. Sorry.

**COMMISSIONER MADDEN:** So just to get some picture for us. So not to ask any kind of scientific or hydro - so all your experience in terms of how the lakes have been managed into the past.

**MR McBRIDE:** In the past, yes.

**COMMISSIONER MADDEN:** So the amount of water that was there with that winter rains and the levels that the lakes were at, in the previous operation would that last a couple of years?

**MR McBRIDE:** The previous operation would have lasted between ten and 12 years at least. You have to remember the figures that New South Wales - - -

**COMMISSIONER MADDEN:** That's with some top-ups and stuff, you know. A good foundation with the level that it was at, you'd be able to manage it, so you had - - -

**MR McBRIDE:** Absolutely. Absolutely. It's interesting, for people who don't understand, you've got to understand, a key point is evaporation. The Murray-Darling Basin Authority is saying "Evaporation is the biggest enemy of the Menindee Lakes so we've got to get the water out of it quickly". And you go, "Okay, let's just think about that. On what basis are you doing that?" Now anybody who has ever been to Menindee, there's a big metal tray, it's about a metre in diameter, it's about six inches thick. There's a small amount of water. So each day they go out and measure the drop in that water level. That is the basis for the evaporation of the Menindee Lakes. Now okay, hang on, the Menindee Lakes Cawndilla is seven metres deep. So you've got a little metal tray in an asphalted area and you're working out evaporation out of a lake system that's seven metres deep? And also what about the recharge? Because the Darling River recharges, you know, hundreds of thousands, if not millions of trees and you're three to five kilometres out from the river's recharge. How does that come out of the metal tray? Don't think it does. So realistically the whole basis of the science that is taking the Menindee Lakes system apart is evaporation is a bad thing, but it could be up to 95 per cent inaccurate and, therefore, people know this, scientists know this, the CSIRO made it abundantly clear in their findings to the Royal Commission that their figures have been interfered with by the Murray-Darling Basin Authority and those in the Northern Basin who want certain outcomes to be made by the decommissioning of the Darling River

system. Because at the end of the day that's what's happened. Twice in four years a 30 million year old river system has been crucified, not by drought, it was saved twice, you know by that second event back in 2017. God only knows, you know, if you put a million to one shot, I'm a Carlton supporter, it's like the chances of us winning a premiership next year is like a million to one shot, but it happened. And then the Murray-Darling Basin Authority drained the lakes within - well, they said half of it within three to four months and the rest of it within 12 months. That's not bad management, that is - and as I said, I spoke to Neil Andrew on a weekly basis while he was doing this, on a mobile phone every time, once a week. "Neil, what are you doing? The Murray's almost in flood, it's a banker, it's running enough water down to whoever wants it, why are you doing this?" And he said, "It's in the plan". He should front a Royal Commission or a police inquiry as to telling me what particular plan, whose particular agenda and whose aims are you fulfilling, because you're certainly not fulfilling those of the Australian citizens, the members of the Barkindji nation or anybody along the Darling River system or, in fact, any South Australian or any - looking longer term. So I apologise I'm long-winded but they're some of the answers.

**COMMISSIONER MADDEN:** No, no. So I will just respond very briefly. So in our report we haven't actually said that we things are in order. What we've said is that there's a water resource plan under development and that's where stuff should be considered. The question that we need I think, to put back to the Authority and to New South Wales, and this is where we're getting some of the feedback on Friday, is how is that process going? If it's not going well in terms of addressing the issues, the core issues, and I think one of the core issues is the operation of Menindee Lakes, so where's that addressed and how do the two interact. So again, we can't go and re-do and re-prosecute every water resource plan. We've said where they don't look like they're going to be good quality they should be delayed. The obvious case is the Darling, but it's obviously the Menindee Lakes operation and the Lower Darling as well, not just above.

So we've got the message I think now from Friday and today, that it's not travelling well. I guess then the question is, beyond asking Neil Andrew, who are the players that have to actually provide the appropriate information and what are the expectations around, as we talked earlier, about what information needs to be from the business case able to be prosecuted in various forms and in technical forums as well, not just put up on the web.

**MR McBRIDE:** Five years ago the Murray-Darling Basin Authority was set up to protect the integrity of the Murray-Darling Basin. So who needs to be looked at? It wasn't a toothless tiger from the start. It had certain powers to protect the integrity of the river system, it's chosen not to do so. So the Board, it's not only Phillip Glyde, Neil Andrew, Reynolds - Andrew Reynolds. We've been asking for the figures and the facts for some years now, so it's not like this is all new to us. We said, "On what basis are you sending flows down the Darling River? Why such large amounts? Can we have some integrity into your figures?" I've got one document there, it took me four years to get, which gives me a third of the information as to what - how they're collating their figures. They refuse to give the other two-thirds.

So I would suggest that while it's a Commonwealth Government issue as well, and

remember at the end of the day the Commonwealth has allowed the total mismanagement of the river system, so who do we look for the facts? Who are potentially the bad guys? Certainly the state of New South Wales continue to undermine the integrity of the Menindee Lakes system but by this report saying "Do not touch the Menindee Lakes", seriously, it's the very heart of the whole river system. You've still got the Murray-Darling Basin Authority hawking the fact that they can save 106 gigalitres of water by allowing efficiencies in the Menindee Lakes system. So I would look at the very basis of, "On what basis do you find any efficiencies? Come December this year we run out of water, so what provisions did you actually set up to provide basic human water requirements?" I think it works out to be about \$25m worth of businesses along that little stretch of the Darling will run without water, so I've either got to watch my sheep die or move them on, and watch tens of thousands of native animals die. So where's the provisions for safety met? I'm not having a go but I think under your provisions, your findings indicate at this juncture in time, and maybe I misread them, your findings indicate that the Water Resource Plan will fix the problems in the short-term. Your report must put in place measures to endure; that they are protected in the future. That is to say, just the very, very basics. Because under the Water Act, human consumption, stock and domestic, everything else. Now as you know in New South Wales they changed the whole very basis of that, so that the classifications under Katrina Hodgkinson as New South Wales Water Minister back in about 2008/9, she pushed all the classifications up to top and they were entitled to take three years' supply of water in advance. So there's no integrity in the river. Until these dubious practices by the New South Wales Government are reversed, you can't get integrity back into the river. You've still got a situation where, as much as the Murray-Darling Basin jumps up and down and says, "Send the water down", the New South Wales Government, even today, with the floodplain harvesting says, "Actually let's find another way of banking it up. This is called floodplain harvesting. Put a few barriers in and stop even more water getting down".

We need the reversing of these policies. As you know, Katrina Hodgkinson left Parliament the day the Four Corners report came out, hell of a coincidence. We need these policies by the New South Wales Government to be looked at closely and to be reversed immediately. So that is to say, let's get some integrity back on a State level into protecting the river system, because at the moment those protections aren't there. So the Murray-Darling Basin Authority may well say "We've only got a certain amount of powers". The problem is the Federal Government and especially the New South Wales Government, those policies have to be reversed to get integrity. Small pulse down the river. As you know, the Darling River survived over the millions of years by small pulses of water through the embargo system and as you know Kevin Humphries who's, I believe, being investigated by ICAC on the basis that at junctures in time in about 2015/16 when embargoes should have been put in place he, as Water Minister of New South Wales, spoke to particular key people in the Northern Basin and said, "Look, don't worry about the embargo, I'm the Water Minister". So again I'm not trying to name names; this is fact, this is common knowledge for people on the river.

**COMMISSIONER MADDEN:** Again, I think this is just - the place for this is water resource plans so - because that's where the Authority gets to actually say "Are your

policies in line with the Basin Plan and the SDL assessment and the like". We've heard and what I can strengthen about what are the expectations on consultation and information and analysis brought to bear in these hotspots, which is obviously the Darling and the Lower Darling. We then have the supply projects which we've argued for a gateway process. Now that means a lot when you know about treasury processes and Government processes but that's a very intensive independent type assessment, not just the Department doing it but actually someone from outside bringing an independent assurance process into a business case step. So you're progressing from a business case through to feasibility, with very strong oversight. It should raise - have a forum to raise those issues.

I think it's up to us to talk more about the expectations of what a good process is, and maybe not use Government code in some of this stuff because we are trying to be strong in terms of the oversight and have those Jacob-like reports inserted into that process so people can be sure that if a project doesn't stack up it actually gets put to the wayside.

I think the other points to be made in water resource plans are things like well how do you get consulted. Are you involved in the Barwon-Darling water resource plan development?

**MR McBRIDE:** They've kept us out.

**COMMISSIONER MADDEN:** Have you been consulted?

**MR McBRIDE:** Not at all.

**COMMISSIONER MADDEN:** Like these are the kind of things that - - -

**MR McBRIDE:** No, no, it's been basically on a mushroom basis; "You live on the Darling River so you must be a mushroom, it's not quite dark but we're not going to tell you anything". So it's a need to know basis. Obviously we don't need to know. Given that the Barkindji have been there for 40,000 years, they don't need to know either. So that's it.

One other little point if I may. Just the fact that - we talk about the Lower Darling as though, okay, that's it, game end, to have water going down the Darling of some descript. You've got to kind of remember that 200 million tons of salt has to get out to sea each year, out of the Murray-Darling Basin. So it's not just out of the Darling. If you stop the Darling dead, which as of December this year it stops dead, it will be probably at least a couple of years before it gets water in it so it will totally collapse. But the salt build up in the Darling going backwards, and also in the Murray. The ramifications are the system has to collapse. It's a very inefficient system of getting salt out to sea. It's not a perfect world but the way the Murray-Darling is set up it needs to move that water. So if that water with that salt does not move it will bank up, it will kill the Murray - sorry, it will kill the Darling and the Murray will suffer as well. So just to make sure that people understand it's not just that we like a little bit of water going past our front door. We do understand, we're here for future generations, just like the Barkindji and everybody else,

we're here looking after the future generations. That water must go down the Darling, not because I like looking out at water and going fishing, because I'm the world's worst fisherman. I know that for future generations of Australians that water serves as a purpose to get that salt out to sea. Otherwise the Murray has to collapse because it puts too much pressure on the Murray system.

So, look, there's a lot of factors that you've got to look at from a productivity prospective. You've been the one organisation, the Productivity Commission, that's actually talked to people along the Darling River, and we take that with great respect, as does the Barkindji. Everybody else has treated us like second-class citizens and the fact is there's been people there for hundreds of years, if not 40,000 years. We've got pretty much a good insight into looking after and administering our river as best as we can. As far as irrigation, we believe in sustainable irrigation. But they're the first ones who are going to be crucified this year. When the Darling goes dry, it's going to be all the people in South Australia jumping up and down saying, "Where's our water?" And continually New South Wales just keeps on putting in big pipelines, like the one to Broken Hill, out of the Murray. We've got an amazing river system. The Murray-Darling is the most amazing I think in the world, but it has been in the last five years, under the administration of the Murray-Darling Basin Authority, it has been crucified. And there is no way, in my little humble view, that one more cent should go out to the Murray-Darling Basin Authority. There has to be - and I know, you know, there's a lot of levels within Government but those levels of Government have allowed \$8 billion to be released out of your pocket to save our river system in the last year or so, and it will be up to, what, \$13 billion by the end of the year. Where's that money gone? And where's our rivers? So as far as making sure we send the money, utilise the money and protect our future generations, the Federal Government needs to be asked and water ministers need to be asked, ex-water ministers need to be asked where did that eight billion go? Where did the 13 billion go? Who's administered it? Because clearly we've got no Darling River left and the Murray is being crucified.

So as much as I believe that you're saying, "Look, it's about making sure the money goes into the right pockets to do the right thing", we spent 13 billion, we haven't got anything back, so I hope - and hopefully we've learnt from that mistake. Auditors must go in now and work out who got the money. Obviously there's a number of people in the Northern Basin a little bit nervous as to that and Norman Farms might be one of them, the Harris family might be one of them, they're having been assessed, and I'm not trying to point fingers. We live in a country with due diligence and the ability to work out the facts but from my perspective, from the productivity perspective and our basis, just don't release any more money to the Murray-Darling Basin Authority. Look at their track record. Look at the fact that they're presenting to the Government today the fact that the 106 gigs of water could be saved by decommissioning 80 per cent of the very, very heart of the Darling River system, when in fact they know this is around. That is the biggest indictment because it's the next generation that we're working for. We're just travelling through, we're worm bait soon enough, but what's the disgrace is there's a large number of people working in government, certainly government authorities who appear not to really give a toss about the next generation and that's - that's my greatest fear, is that how do these people look at themselves in the mirror, and I guess I've got no solution to that.

In summation, that was supply measures and toolkits. We know the facts that there's a - the effect on the impact of the ecological loss of habitat. There's so much to be lost with the destruction of the Menindee Lakes system. It's catastrophic to the whole Murray-Darling. It's not just to the Darling River system, it's the whole project, and it really is losing - if you lose your heart, the veins won't last too much longer without the very, very heart, so we just hope that due diligence is done. There has to be a change of management without a doubt before one more cent goes to those people. They've got to turn up to a Royal Commission or a police investigation and to explain, "How in God's name did you drain the Menindee Lakes twice in four years?" And have asked certain people that question and they just said, "It's in the plan". Well, I don't know what plan that is, but unless that plan is by people who own the Northern Basin, that's the only plan that gives me any semblance of why the hell you'd do that.

**COMMISSIONER DOOLAN:** That is not in the plan because we're assessing the effectiveness of the plan.

**MR McBRIDE:** I know.

**COMMISSIONER MADDEN:** We have a line of investigation.

**COMMISSIONER DOOLAN:** But one of the things that is in the plan is that the water resource plans do provide, if you like, the minimum flows. So everywhere else in the Basin there would be a series of rules governing minimum flows. And elsewhere there's been a lot of focus by the Murray-Darling Authority on maintaining those planned environmental flows as a key base point. So are there minimum flows in the Lower Darling?

**MR McBRIDE:** No.

**COMMISSIONER DOOLAN:** And there never has been?

**MR McBRIDE:** Literally the problem is the Murray-Darling Basin Authority treats the Murray-Darling as, I think, 36 valleys, so you've all got your little valleys, so they keep water going in different directions. So the argument early on in the piece was, "We drain the Menindee Lakes because it evaporates and Dartmouth and Hume Dam water evaporates less". And you go, "Okay. Let me get this right. Water evaporates less out of a much deeper dam that's man-made. Yeah, I've got that. But that's on the Murray. This is the Darling. Two totally systems that come together". It's like, "Yeah". You go, "Well hang on, you can't". So it's flawed logic from the start. So there's no environmental water. We asked last time, there was eight and a half months without water. We rang up David Papps from the Environmental Water Holders Department and said, "David, where's the water?" He said, "New South Wales won't tell us".

**COMMISSIONER DOOLAN:** So it's the planned process. I mean in - - -

**MR McBRIDE:** Yeah, sorry, so it's - - -

**COMMISSIONER DOOLAN:** Yes, it's in terms of looking forward and basically being clear what needs to happen and contained in the Water Resource Plan.

**MR McBRIDE:** There has to be a Murray-Darling Basin Plan where every valley is encapsulated in an overall holistic approach to a Murray-Darling Basin. Not every man, every valley for himself. And at the moment it appears every man, every valley for themselves, which leads to a cataclysmic effect that, you know, there's some people who supposedly say, "If water goes past my front door then that's a catastrophe, I've got to grab as much as I can". Now that isn't a very holistic approach for the survival of a river system but to answer the question, yeah, so at the moment the thinking of the Murray-Darling Basin Authority has to change. The paradigms have to change.

**COMMISSIONER DOOLAN:** Or be consistent across the Basin.

**MR McBRIDE:** Or be consistent across the Basin. Have a holistic approach rather than 36 valleys.

**COMMISSIONER DOOLAN:** But even in other valleys there are minimum passing flows required.

**MR McBRIDE:** At the end of the day it's respect. Respect of the river, integrity of the river, integrity of the future of the river. Because if your salt builds up, it's just going to run up your valley. If your valley isn't, it's the next valley is - so it's a time bomb about to explode in your own hands, so if you're not smart enough then understand that your land will become worthless in ten years' time by ignoring the harsh realities that the water and the salt has to get through the Murray-Darling Basin system as efficiently as it can and the Menindee Lakes is one of the stages, as is the other river systems. And we respect, you know, the Murrumbidgee, the Barwon, Darling, they're all components; I think seven major river systems create the Murray-Darling and it's effectively the respect of all those in one river system.

**COMMISSIONER DOOLAN:** Okay, well your message is also consistent, as John said, with the hearings that we held in Mildura on Friday, so I think we've - have you got any other questions?

**COMMISSIONER MADDEN:** No, but I think we've got plenty of questions to ask.

**COMMISSIONER DOOLAN:** Others.

**MR McBRIDE:** Sorry for not mincing my words, it's just that we're all a bit tired, we're going to see our river die again and the environmental disaster to families and communities on the Darling River, that's one thing. I think the Prime Minister gave \$89m to the Red Cross about mental health. You can't give me mental health when you destroy our river systems and, again, again I pay my respects to the Barkinji. A lot of their traditions are passed through water, passed down - elderly women tell their young children about their country by looking to water and doing - and that sounds superficial to you and I but I guess if we're here 40,000 years we hope people will understand we've got



a lot to provide that system. So thank you both very much for your time.

**COMMISSIONER DOOLAN:** Okay, thank you Robert. All right, well we have our last formal participant, Rosa. Rosa Hillam. And again just introduce yourself for the record, thanks Rosa.

**MS HILLAM:** Hello, my name is Rosa Hillam. I live in Meningie on the Coorong. I've been there about 16 years now. I'm a visual artist and a Healthy River Ambassador. I'm originally from Orange in New South Wales and I have friends and family in every Basin state. Because of where I live you couldn't not end up in the water space, and so I've been active in that space pretty much for 14 years. The last four, roughly, I've been actively lobbying politicians for quite a long time. It was for the Barwon-Darling and underlying all of it though always for the Basin Plan and for the full Basin Plan. Unfortunately it became very apparent that the plan was being eroded in (indistinct) and that it was being extremely manipulated, and that just a few were basically open slather and so that's basically how it sort of come to pass.

Since I've been here, being last, it's been quite interesting because nearly everybody has tapped on something that I was going to talk about, and being one for talking I'm going to try and be good and just read short little bits because being Italian you will get an hour's long. My main issue when I came here today was basically I'd seen that you were looking at abolishing the salt target, and for me personally that's just something that has to stay there. Everyone's touched on it. You know, you have the other States saying, "Oh, you know, South Australia, they just let all the water go out to sea, they waste it", blah, blah, blah, but that's not the case. It needs to go out, it needs to push that salt out and those nutrients out because then that feeds - like it cleans up the system but it also feeds the environment outside now. While I agree with what Anne said and, yes, it may need revision and we all know that the MDBA has never hit the target, the only time it actually hit the target was when we had the floods, it still is a major necessity. It has to be there. And I know when I was on a hydrological tour a couple of years ago and looking at the salt inception scheme in Renmark, they were panicking because they're scared of funding, you know. And so while these targeted salt interceptions are great, there has to be support for those as well, but nothing can make up for pushing the salt out, which means we need flows to do that. And by removing those targets you're basically saying, "Oh well we can disconnect the system" because it gives no push for the Barka or the Darling, or whatever you want to call it, to be kept intact. So that's my point on the salt anyway.

The supply packages put forward according to Wentworth Group didn't meet any of the 12 points that were in the Murray-Darling Basin Plan, yet they were all accepted at the ministerial meeting. The business cases were not available for them to scrutinise, yet it was done, and as Rob said, somehow a due diligence report came to pass. Now that report was put forward, was asked for by the Department of Environment and Water and it was finished 30 October 2017. It is a scathing report on the Menindee Lakes project. About the only good thing in the whole 90 page report is that they said the name was good and that it actually explained the package. But there were no reports, there was no archaeological stuff. There was absolutely virtually no consultation with any of the local

traditional owners or land title owners. There was none of that sort of stuff, and for the majority, I think there was 13 individual pieces, most of those didn't have any conceptual plans at all. So their report was scathing. They couldn't see it being value for money at all. There'd been no soil testing or anything done, so they reckoned the costings were out.

So if you look at that, and I did double-check, they had that report a couple of months before it went through and got passed with the SDL adjustments, yet they made no attempt to look at any of the million recommendations in there and change anything. None of that has been changed at all. So it begs the question of what confidence can we have in the rest of those plans and in them being put up. And you talk about the water resource plans coming up and they'll deal with this, but all the States have known they had a deadline for these water resource plans. None of them seem to have got off their butts and done much. New South Wales has 20 of them, to my knowledge. If we can't get them to shepherd water and do the right thing, how the hell are we going to get them to do 20 individual water resource plans? It just, you know everyone says they want communities to have more confidence but there is absolutely no transparency. There is no honesty. And in that report it talks about the purchase of Tandou from Webster's. So Tandou obviously is part of this completed package for the Meningie Lakes but that opens up a whole - another kettle of fish because when you look at some other stuff that has come out recently, and in particular if you look at the Australian Institute, they put out a paper about a month ago, maybe I think, called the Trickle Out Effect and it basically states that we all knew, it was in the news everywhere, that they got \$78m for their water at Tandou. And I actually tackled one of the people responsible for that - the administrative MINCo mixer in Albury, last year I think it was, and he said, "No, going price, that's the price". But that's not the price. They got \$38m or 38.something million dollars for their actual water, but then they were given \$40m compensation for future loss. And then on top of that, old Barney gave them 20-something gigs to - for the following year to grow a \$35m cotton crop.

Now this is just ridiculous. In the whole of New South Wales there's only been \$36m spent within New South Wales for farming, for efficiencies and that sort of stuff, and from my understanding of this report basically Webster's dictated what they wanted and what they got. And apparently there was supposed to be a caveat put on because they didn't get asked to remove the infrastructure; all that infrastructure is still on that property, yet there's been no caveat put on either. So if that's the case then, you know, it should - it stands to reason that that sort of starts a precedent for people to be able to ask for compensation. Either that or you have a couple of big end people that can have a revolving door and get whatever they please, which is what we've all noticed has happened at least over the four or five years anyway between Webster's and Norman Farms. It just seems like everybody else, any grazier, any first Australian hasn't got a hope.

Sorry, I'm trying not to prattle on too much but I will. I can't help myself. Part of the Menindee project is also taking back high and medium security licences. Now in doing that there are six families with permanent plantings that apparently have been in negotiations for four years about what's going to happen to them because they're not going to have the water security for their permanent, and these are, from what I can

understand, their stone fruit and vineyards. They have been pushing for four years to try and do some sort of deal to secure their security. Every time they meet with the departments they have to sign a confidentiality clause. They can't understand why. They're only trying to sort their own lives out, and this is - this is actually fact. So, you know, and it just - if six families are going to have to give up their water licences, why is it that Webster's can be compensated but these six families can't, or they can't without secrecy.

There is no transparency. There's no transparency around the modelling. A lot of the modelling we know was flawed. Everything's been pushed and shoved since it began. You know, originally the modelling was on 2,800, then it ended up 2,750, and I didn't actually find out until - through the Royal Inquiry that the reason it went from 2,800 to 2,050 was because Queensland wouldn't come to the table unless they took the 50 off. So, you know, there's always this push shove, push shove, and everyone forgets that the Murray-Darling Basin Plan was a plan to try and restore and protect the Murray-Darling Basin. But since it was actually signed, I'm pretty sure the figure still stands at - we have now 42 per cent more consumptive use. We're not staying the same, we're not going backwards, we're going further. And with these packages, these 36 packages or whatever it's ended up, if we - if they do what they're going to do and say, "Right, the 605 can go for irrigation", blah, blah, blah, I have no confidence any of these packages are going to give the equivalent in water. So if we have this reconciliation in 2024, which the MDBA is backing away from now because apparently they don't actually have to do it, it's just a suggestion to do, you're going to have - each State is going to have to be giving water back. And, you know, to my way of thinking there are a lot of irrigators that, if they can have that 605 now, they're going to be screwed at the other end when it doesn't work and they have to reduce back. It would be better and smarter for them to stay where they are now and for the money - for the water, sorry, to be at the end of that, rather than giving - you know, rather than giving it over in July, I think it was July, why can it not be turned around and allotted as it happens, as the projects work. And the other thing too, these projects are supposed to be interdependent. They're supposed to all work together throughout the Basin to give these efficiencies. It's obvious by the Jacobs due diligence report that Menindee Lakes is not going to do it and that's 116 gigs or something - there's two figures; there's a 72 or 76 gig and then there's 116, but there's not even any supporting evidence from the MDBA to suggest that's going to happen. It's all getting talked about but the Jacobs report says there's nothing there.

**COMMISSIONER DOOLAN:** If I could. Our recommendation, and I suppose it would be good to talk about the sorts of things we've recommended to deal with some of these issues and whether they're sufficient to deal with them with confidence, is we have recommended a gateway-like process where when they're at full detailed design they're assessed against "Has there been a change in the environmental outcomes or their price", and whether they're likely to meet the deadlines or not. And that gateway process would be determined within the next 12 to 18 months whether the project goes ahead or whether it doesn't, and if it does, whether there's changes in deadlines with checks and balances.

So that's what we've recommended to deal with the concerns that people have. They don't understand what supply projects are; quite rightly because they weren't made

available. There is a lot of detailed work to be done on a number, not all, of the projects. Some of them are almost shovel-ready but not others. And so it's really I suppose from our perspective if that recommendation that we made was actually implemented, is that going to shift and change; would you have better confidence in the arrangements?

**MS HILLAM:** Look, I don't think - I think the only way that I would be confident would be if the water was adjusted at the end of each one, rather than beginning. Because the thing is, if - you have a lot of irrigators that if they can plant extra and they think they're getting extra they will do it. And that's fine, but if up the road the water's not there and they have to pull back, that's cost them more in the long run. Do you know what I mean? And it's the same for the environment. If we go up the road and wait and wait and wait, we still can't have - you know, that water's gone because it's there for the irrigators, it's not - - -

**COMMISSIONER DOOLAN:** It's not gone, - - -

**MS HILLAM:** No.

**COMMISSIONER DOOLAN:** It just hasn't been recovered. So it's actually more - it's not taken away, - - -

**MS HILLAM:** No, and - - -

**COMMISSIONER DOOLAN:** So it is actually trying to get to a point that what arrangement would give people confidence that the supply projects are being managed either to a successful outcome, or if they are turning out to be not a good investment, that that's detected early and they're not actually pursued.

**MS HILLAM:** Yeah.

**COMMISSIONER DOOLAN:** And if that happens early, if it's declared not, then it becomes clear as you go along how much water has to be recovered.

**MS HILLAM:** You probably don't want to hear my answer, but if it was me - - -

**COMMISSIONER DOOLAN:** Well it's important.

**MS HILLAM:** Well if it was me, I'd say stop the plan where we are. Take the cap off the buyback. Let willing sellers sell back. Get rid of the efficiencies. Use that money to help communities plan for a future with less water. That would be the smart thing to do but - - -

**COMMISSIONER DOOLAN:** That's a change to the nature of the plan.

**MS HILLAM:** No, it's not because then the water is there.

**COMMISSIONER DOOLAN:** Getting rid of the efficiencies is a significant change.

**MS HILLAM:** Pardon?

**COMMISSIONER DOOLAN:** Getting rid of the efficiency measures is a big change.

**MS HILLAM:** No, because people - if you - if you use that other money to help build communities for a future with less water, that's not getting rid of efficiencies. That's just using efficiencies in a different manner. Because we've found that the efficiencies and return flows actually don't seem to give as much as what people thought. We're actually losing more in efficiencies than we would have got.

**COMMISSIONER DOOLAN:** That prospect has been raised but at the moment there isn't a lot of evidence yet to support it either way, which is one of the reasons we've called to go and get the information.

**MS HILLAM:** You just asked for my opinion, - - -

**COMMISSIONER DOOLAN:** Absolutely.

**MS HILLAM:** And that's my personal opinion.

**COMMISSIONER DOOLAN:** Sure.

**MS HILLAM:** I'm not saying it's the right opinion.

**COMMISSIONER DOOLAN:** Sure.

**MS HILLAM:** But with, you know, like - we all are concerned about global warming. We're all here because we are concerned about sustainable water for the future because we all forget, if this river dies we have no drinking water, we have no way of making - growing crops or keeping feed or cattle, or whatever, you know, and me personally, I'm not anti-irrigation, I'm only anti big irrigators. I worked in the dairy industry for the last decade and a half of my working life before I hurt myself, so it's all about protecting our most important asset and if - and that's what the plan was about, and that's what the plan is still about, if people would actually follow it. It was about trying to stop over-allocation and over-consumption and bring the river back to health. When the modelling was done there was a couple of flaws in it, but one of the biggest ones was they didn't model it on a very stressed system, because at the time it was a very stressed system. And so, you know, everyone that works so hard to do things are really basically running upstream instead of downstream because they're really pushing it. And I just think that, you know, if the Government wanted to be serious about it, they would be seriously looking at why the hell we are planting so many thirsty crops in areas that don't - can't sustain it and that we really don't need, you know. And a lot of these plantings have been since the plan. And I think one of the biggest mistakes that was made was the unbuttoning or uncoupling, or whatever you want to call it, of water, because it means that people like Webster's can buy it from anywhere. I mean my thought, because I tend to think really strangely, but you know if the Government's not put a caveat on Webster's,

and Webster's has not decommissioned all their stuff, how long is it going to be before they buy another water licence and start up again? Do you know what I mean?

**COMMISSIONER DOOLAN:** Just in terms of the Tandou purchase which, as you said, was raised by the Australian Institute, we do refer to the fact that the Australian National Audit Office is doing an investigation of that purchase.

**MS HILLAM:** Yes, I understand that.

**COMMISSIONER DOOLAN:** So effectively the facts around that will come out through that process.

**MS HILLAM:** Can I just make one more point?

**COMMISSIONER MADDEN:** I was going to say - I was actually going to say are you finished going through your points.

**MS HILLAM:** No, can I make one more point just before we move off that, off the - not off Tandou so much but off the Menindee Lakes.

**COMMISSIONER DOOLAN:** Sure.

**MS HILLAM:** I'm under the understanding that there was a - I think the MDBA did an independent review of the Menindee Lakes package and it's my understanding that the same person that actually wrote the package was on the review, the independent review board. And that was Brett Tucker. Just a titbit for you.

I just want to - I think I'm nearly over most of it - look, just quickly, I've got a whole heap of points that I wrote down here. With the 450 upwater I - like I said, I believe we should take the buyback cap off anyway. I don't know why it was changed - well I do, but - but I think that cap for willing sellers should come back off. But I really believe that we need wet water, and that 450, it would be far more prudent and probably far cheaper to buy it back because then we would actually get 450 in real water. Because in efficiencies we're never going to get it. There's that much push back from the other States, they're never going to - well they're never going to do it in a great rush anyway.

I believe that we need an independent water audit because I believe there's a lot of goanna water in the water, and I just think a lot of it is on paper but is not actually usable. So I really think we need an independent water auditor.

I've heard Anne talk about it and a few others here. There really is bugger all monitoring. There's bugger all monitoring of water. I think there's supposed to be one - I was talking to somebody the other day, there's supposed to be one monitor in Lake Alex but nobody seems to think anybody's actually checking on it. Whether or not that's the case I'm not 100 per cent sure. But we need real transparency and we need true - and I know you've have put it in, I have read the report, I know you've have put it in your report - but we need true engagement and we need non-segregated engagement. I am so over the fact,

and I know that Badger would also be over the fact, that there seems to be one meeting for us and one meeting for them. And I don't see any reason why the traditional owners and whoever else can't meet together as a whole. But it seems to be in unison in every State or Federal Government thing, it always seems to be that they separate and have different meetings for different ones, and that seems to be across the board. I know that Badger said that at the Royal Commission and I agree. I've heard other friends of mine say it. We are one community; we need to be seen as one community, not one meeting for one and one meeting for another.

The other thing I wanted to say is that it would be nice if the water ministers actually understood the river and how it works. And I can say that, I'm not being nasty or mean, but one of the problems is there's a bit of a - when there's a bit of a change in water ministers, then the new one comes up and really knows nothing - do you know what I mean? And I know that the majority of times I've dealt or talked with water ministers, they're really only as good as the one page brief that they've got, and if you go beyond that they really can't help you because they really don't know.

And I also think that this argy-bargy push, pull between all the States, I really believe the only way to stop that is that ministerial - like the MINCo meetings, should be open to the public. And I think if they were open to the public then that helps hold the water ministers to account. Hopefully there's less bickering over stuff and they just do the nuts and bolts of what needs to be done, rather than all the horse trading that obviously goes on.

**COMMISSIONER MADDEN:** Just a couple of small things. I think it's a good point around the assessment of the portfolio and the like over time, but that's something that I know it should do but obviously that will change over time as climate changes and interaction with the water entitlement system may mean there are deficits in terms of certain licences not getting allocation and the like. So that's something we can look at and how they do that over time.

I guess just the point with the wet water versus efficiencies and the return flows. I will just mention that it is entitlement going back under the efficiency programs. Now there might be some others, like recycling systems in Canberra, which is on the books as in an urban recycling water systems, so where you've got to think of how that translates to entitlement. So there are some things on the edges which would be required; detailed assessment, working through the water recovery to date. It is and it's half the entitlement generally, half the nominal savings being handed back to the Commonwealth Environmental Water Holder as they are, so it is - it is wet water.

**MS HILLAM:** But the problem is, and what came up in the Royal Commission, is that because of the efficiencies you're actually not getting as much water - - -

**COMMISSIONER MADDEN:** Yes, so that's return flow issue, which is a separate thing.

**MS HILLAM:** Yeah.

**COMMISSIONER MADDEN:** So even if you did buybacks and if I sold half my water to you and then used that money to go and invest in a new irrigation system, without any Government kick-off, I mean the same impact can happen both ways. So plenty of people I know sold part of their water and then actually invested in a better system or, you know, bought water back or whatever. So that return flows on a system level is something for the whole system, not just a program, which we have talked about and assessing that as an issue is important and it's critical again.

And I think some of this shows because some of the issues you've raised are the Department's role in terms of spending money. Some are actually the Authority's role - and this is a consistent theme so I'm not trying to single you out at all - but it's unclear for many people when it's the Department's role versus the Authority's role. So who's commissioning the Jacobs report, for example, is important because the Authority has a small role in terms of starting point, and also reconciliation on environmental equivalents but not, "Is this money well spent?" and many others. So I think it's a lesson, even from these first couple of meetings in general, that we've talked about governance, but there's just a whole process, education and awareness that has to go on early in developing these projects so people understand who's responsible for what, because that's when accountability can occur. If you don't know who's responsible, then accountability is difficult and you don't know where to go. And I just hope you don't dislike big pastoralists either.

**MS HILLAM:** Oh no, no. But it's - is he picking on you Bob - but no, it's also, you know like you can talk to the people and them still not be accountable. Do you know what I mean? I know because I have multiple times, but the thing is, the biggest issue in all of this is the manipulation and the lack of transparency and the secrecy around everything. It's like, you know - one of our favourite sayings and I heard Rob mention it before was - and I'm sorry Monique if you're still here, was that the Murray-Darling Basin is a toothless tiger - the Authority - and that was true, it was. Until it had to get called up to the Royal Commission and then all of a sudden it was a tigress guarding its cubs and made a stand. But it wouldn't make a stand when we were saying all this water was getting removed. Do you know what I mean? So I think, honestly, like I said, I think things need to be more open and I think as well as the ministerial council being open to the public, BOC need to be open to the public as well. And I think that if you're going to have people in to - as independent and supposed to be non-aligned and do the right thing, then you've got to make sure those people are non-aligned. I think the MDBA board definitely needs a shake-up and - - -

**COMMISSIONER MADDEN:** Yes, so we do have some recommendations around transparency and operation of the BOC.

**COMMISSIONER DOOLAN:** But in particular, I suppose from my perspective, you raised the question of an independent water auditor, so we made the suggestion that you separate the regulatory function of the MDBA from the agent of governance. And if that was done then you'd have a straight regulator, whose only job it was to actually do that, would become your - probably the equivalent.



**MS HILLAM:** I'm talking about right now. I'm not talking about into the future. They're saying we've got 2,000, whatever it is, gigalitres of water. I'm pretty sure we don't, and I would like someone totally independent, I don't care if they've got to come from overseas, I would like somebody totally independent to actually have a look and say, "Yes, there is this actual water here, and yes it can be used", or "Yes, there's 800 gigs here but all the rest is just paper". I'm not saying that's the right figure, but I know of two purchases that will never make - well the majority of it will never make its way to where it needs to go, to be useful for anything, and that's two that I know of. So, is there more or isn't there? I don't know. But I would like to know exactly what actual real water is there and what is actually just goanna water.

**COMMISSIONER DOOLAN:** All right.

**COMMISSIONER MADDEN:** Thank you.

**COMMISSIONER DOOLAN:** So that brings us to the end of the planned participants. We do have an opportunity, if there's anybody else who would now like to make any further comments, or actually having heard participants today if they'd like to make some comments, there is an opportunity now. Yes? Sorry Bob, for the transcript you basically have to come to the table.

**MR NEWMAN:** A brief supplementary point in relation to - what's the word I'm looking for - the sort of structured adjustment and the talk around - sorry, haven't got my thoughts quite together - there's great concern upstream about the impact on communities. I suspect the impact is nowhere near as large as imputed from some of the analyses that have been made and I think that a better scrutiny of the downsides to communities - my sense is communities are evolving all the time. The irrigation industry particularly is a dynamic industry, it has ups and downs to areas and a classic example and the excuse of the impact on community to avoid the environmental recovery for the whole river system is being made too strongly. And I would like to see better scrutiny over just how harmful or what the downsides actually are. I've seen some work done by people that suggest that there's very simplistic assumptions in terms of the reduction of capacity to create yield versus the loss of water from a district and other associated jobs. That's all I really wanted to say.

**COMMISSIONER DOOLAN:** Okay. Thank you for that. And as we said we'll be in Shepparton on Wednesday and I'm sure we'll get an alternative view, but thank you. Sorry?

**COMMISSIONER MADDEN:** I think someone hasn't spoken to us.

**COMMISSIONER DOOLAN:** Someone hasn't spoken? Sorry.

**MS CAMPBELL:** Hi, Michelle Campbell, Commonwealth Environmental Water Office. I'm assuming the reason that you didn't - with reference to the water resource plans earlier and the Lower Darling issues, I'm assuming you didn't refer to the water

sharing arrangements because that's something not under your remit. Is that correct? Because I'm wondering about the draining of the lakes is normally set out under the water sharing agreement. I understood that was - - -

**COMMISSIONER DOOLAN:** The Murray-Darling Basin Agreement?

**MS CAMPBELL:** No, I understood that the process of deciding which storages to be drawn from in different times is part of the water sharing agreement, the 1901 or 1914.

**COMMISSIONER DOOLAN:** Yes, the Murray-Darling Basin Authority.

**MS CAMPBELL:** And that's not under your remit, so I'm assuming that's the reason you didn't sort of raise it earlier when we were talking about the Lower Darling issues and the - - -

**COMMISSIONER MADDEN:** No. When I say the operation of the lakes and any change thereof, that's exactly what I'm talking about.

**MS CAMPBELL:** Okay.

**COMMISSIONER MADDEN:** So the rules are those but the real question is how do you work within those rules?

**MS CAMPBELL:** Yeah, yeah.

**COMMISSIONER MADDEN:** And that was the question. And the question that I'm saying is you'd have to put back to those who are running the system and making those decisions, which is has there been any change within those rules of how they operate and how they interpret those. So again, - - -

**MS CAMPBELL:** So you can address that in - as part of your remit?

**COMMISSIONER MADDEN:** So we'll be asking if - - -

**COMMISSIONER DOOLAN:** We can raise the issue but - - -

**MS CAMPBELL:** Okay, cool. I didn't hear that, sorry, in your reply.

**COMMISSIONER DOOLAN:** Yes, but - - -

**MS CAMPBELL:** I thought you were mostly looking to water resource plans as the - - -

**COMMISSIONER MADDEN:** But then that will be an interaction then of what does that actually mean for the Water Resource Plan.

**MS CAMPBELL:** I see.

**COMMISSIONER DOOLAN:** Yes, so the operation of Menindee falls under the Murray-Darling Basin Agreement, which is how the shares are done, and therefore changes to that, other States like South Australia and Victoria would have an interest if it changed the reliability of their supply or their entitlements. But to be frank, those two States probably don't then care about the Lower Darling, it's not their responsibility, and the Water Resource Plan is the vehicle by which the Lower Darling's flow requirements should be brought into bear, and then if that happened there would be implications for the water sharing.

**MS CAMPBELL:** Sorry, I just have to raise these things because as someone who works for the community all the time it's just important they understand all of the pieces and I wasn't sure that that was made clear to them. So thank you.

**COMMISSIONER DOOLAN:** Okay, and thank you Michelle.

**COMMISSIONER MADDEN:** So when I mentioned lines of investigation, you'll actually be saying how does that interact with the Water Resource Plan, and so how do you - in the Water Resource Plan it covers this area. When you actually talk about extreme events management and/or - I think it's extreme events management there because - how do you go through the process of accreditation and taking those changes into account and the impacts then on the entitlements and their security.

**MS CAMPBELL:** Yeah, okay, gotcha.

**COMMISSIONER MADDEN:** So that's for people with entitlements. But then obviously there's the critical human water needs or extreme event provisions as well. So the Water Resource Plan should be an umbrella over all water instruments that affect that area and take, you know, and draw them in. So that's why I guess why we're asking has there been any consultation, has there been a change? Now the obvious question back is the way you have managed this within the rules, has it actually shifted over time? So that's something you can look at, and if you've got the right expertise - not me but you can at least ask the question - if someone can actually assess whether that has changed or not.

**MS CAMPBELL:** I've been closely involved in assessing Water Resource Plans and I don't remember seeing that connection between - in there, but I'm - I might go back and look again, but I didn't see it. Yeah.

**COMMISSIONER MADDEN:** I think the Lower Darling is a particularly complicated one. Most of the other Water Resource Plans in New South Wales would not have to deal with this issue.

**MS CAMPBELL:** Okay. Okay, thanks.

**MR McBRIDE:** Ladies first.

**COMMISSIONER DOOLAN:** Okay Anne.

**DR JENSEN:** Anne Jensen again. One of the points I just want to raise is in relation to the Water Resources Plan for the Upper Darling. The Healthy Rivers Ambassadors went to see Senator Ann Ruston in 2016 to raise the issue of irrigators taking environmental flows that were meant to go to the Lower Darling, and she said at the time it was legal. It was described as "sharp practice" because the regulations were changed just before the plan was signed, and she said, "Nothing can be done until the Water Resources Plans come in in 2019". So I just wanted to raise that point; that there's an expectation that the Upper Darling Water Resources Plan should address the issue of the irrigators being allowed to take larger volume pipes and being able to take and store the next year's water and to take it at low flows. All of those things need to be reviewed and adjusted to ensure that there are flows to the Lower Darling.

**COMMISSIONER DOOLAN:** So we're certainly aware of the changes that were made in 2012 to the Barwon-Darling Plan and it's again one of the reasons why we've recommended an extension to a plan where there's really significant rule changes to be negotiated through, and that is clearly one of them. Their expectation is that some of those rule changes would be reviewed in that process, but that does have third party impacts.

**COMMISSIONER MADDEN:** Just to note, and our point is to ensure the integrity of proposed rules to address those issues, not to allow it just to go off into the never-never.

**COMMISSIONER DOOLAN:** Yes, that's right. To make sure that there is enough time for good stakeholder engagement but not, as John said, to be an open cheque to keep on going.

**DR JENSEN:** Okay, thank you.

**COMMISSIONER DOOLAN:** Okay. Robert.

**MR McBRIDE:** One little point that I did forget - I apologise, Robert McBride again. You know, Murray-Darling Basin Authority is given scope until - is it 26 or 24?

**COMMISSIONER DOOLAN:** Twenty-four.

**MR McBRIDE:** So literally, I mean we can collapse a whole river system before they're audited. That really does concern me. With their track record of the first five years we've really got to heighten in what, you know, what you're doing; is tell us about the efficiencies; do proper research to make sure of the proper numbers. Because if we don't get results back until 2024, God help the Darling River, it might be gone by then, and not only the Darling but the Murray. So we can look back but, you know, that's six years away. Very little - never in business are you given six years to totally destroy something and then assessed. So I guess what you're doing is perfectly right, is really make sure every dollar spent, every litre of water saved is more finely honed so that they're not given leeway until 2024. Their track record is appalling. It needs to be heightened in so that - that every dollar spent from Government is sufficiently (indistinct).

**COMMISSIONER DOOLAN:** That is the recommendation and we'll elaborate on that to make it clearer. Okay, thank you.

**MR McBRIDE:** Thank you. That was it, thank you.

**COMMISSIONER DOOLAN:** Is there anybody else? Okay, so then could we thank you very much for your participation in this session. I know for many of you we do have your submissions but if there's any further that would like to actually put in a late one we're very happy to receive them at this point as well.

It is really important. The draft recommendations that we have in place were based a lot on the round of the Basin that we did and the submissions that we had to our Issues Paper. It's equally important that we get the feedback on the draft recommendations and findings that we have, so that we can review them, make sure they're as tight as they can be and as clear as they can be, so that we give Government a document before Christmas that reflects to a large extent what we've heard and then, on the basis of that, what we consider to be improvements that can be made going forward. So again, thank you. Thank you for your submissions, thank you for your comments today. We do thoroughly value them and use them as we complete this report.

Now as we said, we hand in before December. I think you're all registered on mailing lists and therefore will be kept in touch with how this is going as we go. So at this point I'd like to adjourn the proceedings and the Commission will resume its public hearings in Shepparton on Wednesday 17 October. So thank you very much.

**MATTER ADJOURNED AT 3.12 PM UNTIL  
WEDNESDAY, 17 OCTOBER 2018**